ProAssurance®

Treated Fairly

2021 Annual Report

Financial Highlights

	FISCAL YEARS ENDED DECEMBER 31				
	2021	2020	2019	2018	2017
Income Statement Highlights			*(in thousands)*		
Gross premiums written	**$ 960,024**	$ 854,422	$ 967,490	$ 957,311	$ 874,876
Net premiums earned	**$ 971,668**	$ 792,715	$ 847,532	$ 818,853	$ 738,531
Total revenues	**$1,124,410**	$ 874,940	$ 999,834	$ 886,030	$ 866,149
Net losses and loss adjustment expenses	**$ 752,249**	$ 661,447	$ 753,915	$ 593,210	$ 469,158
Net income (loss) (1)	**$ 144,124**	$ (175,727)	$ 1,004	$ 47,057	$ 107,264
Non-GAAP operating income (loss) (2)	**$ 75,892**	$ (27,741)	$ (43,779)	$ 79,527	$ 108,538
Balance Sheet Highlights					
Total investments	**$4,828,323**	$3,389,345	$3,390,409	$3,349,382	$3,686,528
Total assets	**$6,191,477**	$4,654,803	$4,805,599	$4,600,726	$4,929,197
Reserve for losses and loss adjustment expenses	**$3,579,940**	$2,417,179	$2,346,526	$2,119,847	$2,048,381
Debt less unamortized debt issuance costs	**$ 424,986**	$ 284,713	$ 285,821	$ 287,757	$ 411,811
Total liabilities	**$4,763,090**	$3,305,593	$3,293,686	$3,077,724	$3,334,402

(1) The 2021 Net Income includes a $74.4 million gain on bargain purchase related to closing the acquisition of NORCAL Insurance Company. The 2020 Net Loss includes a pre-tax net underwriting loss of approximately $45.7 million associated with a tail policy issued to a large national healthcare account and a pre-tax $10 million pandemic-related IBNR reserve, both of which were recorded in the second quarter of 2020, and a $161 million goodwill impairment charge recorded in the third quarter of 2020.

(2) A reconciliation of Net Income (Loss) to Non-GAAP Operating Income (Loss) is provided in Appendix A to the ProAssurance Form 10-K included with this mailing to shareholders.

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To My Fellow Shareholders

2021 was a year filled with positive forward momentum for our organization.

It was a year in which we made purposeful strides toward our long-term objectives. **We set challenging goals, and we achieved them**.

Over the past three years we have focused inward, on reorganizing our operations in response to the challenges of the marketplace and the impact of COVID-19. We have likewise focused our energy on integrating two great organizations, ProAssurance and NORCAL. All of this lays a strong foundation for what I am confident will be a successful 2022 and a very bright future.

I am pleased to outline the components that contributed to our success in 2021.

In May of 2021, we closed the NORCAL transaction, the largest acquisition in company history. It was an important strategic transaction for several reasons, and I would like to expand upon a few of them. First, we added $300 million in gross premiums and new desirable markets to our Standard Physicians line of business, a historically profitable, low-volatility book of business. Second, we added $1.6 billion to our investment portfolio, and when interest rates begin to rise, the earnings power of our investment portfolio rises with them. Finally, and most importantly, we secured exceptional talent with the addition of NORCAL team members, which is a difference maker in the market place.

Our emphasis in combining ProAssurance and NORCAL has been to identify and maintain the best practices in both organizations, and in doing so we have unlocked over $22 million in expense synergies. Ultimately, this positions us well to leverage the scope, scale and product advantages of a national healthcare professional liability business and redefine our competitive position.

As I said a year ago, the closing of the NORCAL transaction marked the beginning of a transformation at ProAssurance. With just three fiscal quarters of combined results reported as of this writing, we already can validate that statement.

Our successes in 2021 extend beyond the NORCAL acquisition and initial integration. In our legacy ProAssurance book of healthcare professional liability business, results improved substantially year-over-year as **we executed our comprehensive business strategy** to address underwriting results, operating efficiency, and expense management. In addition, we benefitted from claim frequency reductions in our physician business driven at least in part by our re-underwriting efforts and the impact of the pandemic. We secured meaningful renewal pricing increases across our Specialty Property & Casualty lines of business, accompanied by solid retention results. We were also pleased with the broad contribution across the segment as our Small Business Unit and Medical Technology business both produced an underwriting profit.

Results in our Workers' Compensation Insurance segment were pressured in 2021 and decreased from 2020 largely due to an increase in loss activity. That said, the increased loss activity experienced during the year was a natural development as workers returned to full employment with the easing of pandemic-related restrictions in our operating territories. Adding fuel to the fire, widespread labor shortages resulted in increased overtime hours by existing employees, reduced skilled job training, and increased alternative work arrangement risks. In short, despite the reduced results in the Workers' Compensation Insurance segment for the year, we're pleased with the work accomplished to date in mitigating effects of an increase in claims activity that could have been felt more keenly otherwise. The decisive actions we took in restructuring our workers' compensation operations in 2020 enabled us to recognize expense efficiencies, partly offsetting the increase in loss activity.

Trends in our Segregated Portfolio Cell Reinsurance segment were consistent with those of the Workers' Compensation Insurance and Specialty Property & Casualty segments, the lines of business which cede premium to the captive cell programs. Our captive cells offer attractive flexibility and controllable expenses to our customers seeking alternative market solutions.

Finally, as we support and grow our core insurance operations and seek to reduce volatility in our underlying performance, we reduced our participation in Lloyd's Syndicate 1729 from 29% to 5% for the 2021 underwriting year and ceased underwriting through Syndicate 6131 for the 2022 underwriting year. Since we began scaling down our participation at Lloyd's, we've reduced volatility inherent to the business during years of elevated natural catastrophe losses and pandemic-related risks, while also delivering profitable results for the year. The returns of cash we've received to date from our funds at Lloyd's will be reinvested through our investment portfolio and contribute to our investment income going forward.

As a result of everything we accomplished in 2021, our consolidated results have improved meaningfully year-over-year. With the closure of the NORCAL transaction, and the excellent progress made to date integrating the companies, we have achieved a truly national platform that will enhance the services we can deliver to our customers and distribution partners, while creating significant long-term value for ProAssurance shareholders.

Of course, none of this would be possible without the phenomenal team members here at ProAssurance. The linear nature of the narrative above fails to capture that everything I've described was taking place simultaneously, and amid the uncertainty of an evolving concept of what it means to "go to work" each day. The pandemic conditions of 2020 and 2021 required the majority of our team members to work remotely. I am proud of each and every team member here at ProAssurance for their individual contributions to our collective success, not just for what they did, but how they did it – with dedication and enthusiasm.

As of March 2022, we have begun returning to our respective offices as part of a steady, measured process. Relationships are one of our core values, and we believe relationships develop better in person.

It is fundamental to the development of successful relationships that we understand one another and show appreciation not only for how we are alike but also for how we are different. To that end, we deepened our commitment to **Diversity, Equity and Inclusion** in 2021 with the identification of various strategic priorities that will enhance our hiring practices, provide learning and development opportunities for all team members and enable us to attract and retain the diverse talent that will be absolutely essential for our future success.

Our mission has been clear from the beginning – **we exist to Protect Others**. Long before it was formalized in the ProAssurance Way, this simple yet powerful declaration guided every decision we made, and does so to this day.

Our duty of protection extends to our employees, shareholders, and communities. Therefore, we recognize that being a "successful" company depends upon more than just what we report in our financial statements.

Building upon our history of excellence, ProAssurance is committed to being a company that is successful by any definition – and we know the best is yet to come.

Sincerely,

Ned Rand
President & Chief Executive Officer

Board of Directors

Board of Directors	Independence	Audit	Compensation	Executive	Nominating & Corporate Governance
		COMMITTEES			
W. Stancil Starnes, Esq. Executive Chairman ProAssurance	N			C	
Kedrick D. Adkins, Jr. Retired Chief Financial Officer, Mayo Clinic	I	M			
Bruce D. Angiolillo Retired Partner, Simpson Thacher & Bartlett LLP	I	M	C		
Fabiola Cobarrubias, M.D. Practicing Physician Founder & CEO, Pacific Inpatient Medical Group	I	M			
Samuel A. Di Piazza, Jr. Mayo Clinic Board of Trustees, Retired CEO, PricewaterhouseCoopers	I	C,E			
Maye Head Frei Retired Chairman, Ram Tool Construction Supply Company	I		M		
M. James Gorrie President & CEO, Brasfield & Gorrie	I				M
Ziad R. Haydar, M.D. Independent Healthcare Consultant, Retired Chief Clinical Officer, Ascension Health	I		M		
Edward L. Rand, Jr. President & CEO, ProAssurance	N			M	
Frank A. Spinosa, D.P.M. Practicing Podiatrist Retired President, American Podiatric Medical Association	I				M
Scott C. Syphax President, Syphax Strategic Solutions Former Chairman & CEO, Nehemiah Companies	I		M		
Katisha T. Vance, M.D. Practicing Physician	I				C
Thomas A. S. Wilson, Jr., M.D. Retired Physician	I			M	M

Management, Non-Independent = N Independent = I Member = M Chairman = C Financial Expert = E

Executive Officers

Edward L. Rand, Jr.
President and Chief Executive Officer
ProAssurance Corporation

Michael L. Boguski
President, Specialty P&C segment

Noreen L. Dishart
Executive Vice President and
Chief Human Resources Officer
ProAssurance Corporation

Dana S. Hendricks
Executive Vice President and
Chief Financial Officer
ProAssurance Corporation

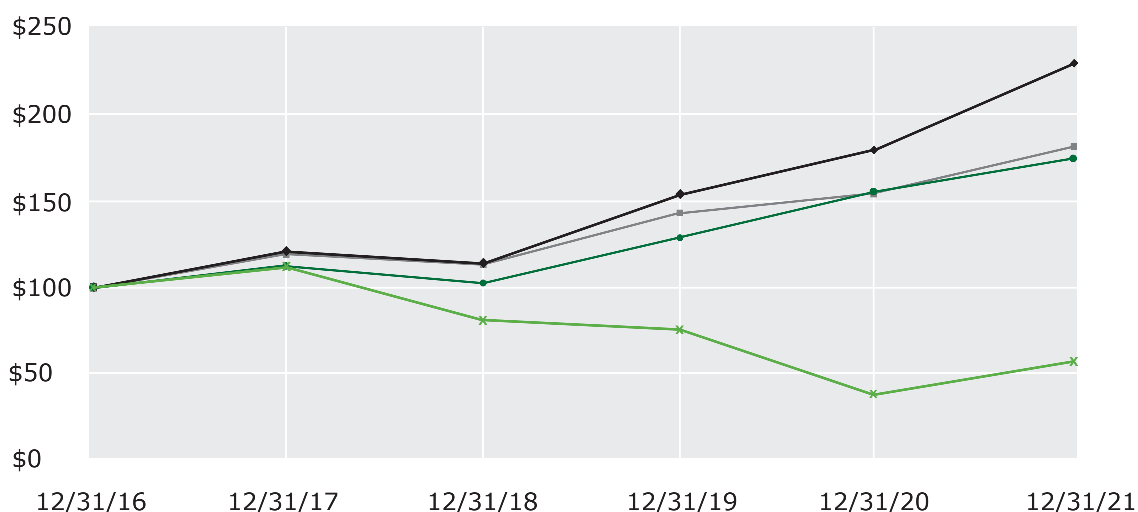
Jeffrey P. Lisenby
Executive Vice President, Corporate
Secretary, and General Counsel
ProAssurance Corporation

Kevin M. Shook
President, Workers' Compensation
Insurance and Segregated Portfolio
Cell Reinsurance segments

Stock Price Performance

You may use the following information to compare the market value of our Common Stock with other public companies and public companies in the insurance industry. The graph sets forth the cumulative total shareholder return of our stock during the five years ended December 31, 2021, as well as the cumulative total shareholder return of the overall stock market index (the Russell 2000) and a peer group index (the S&P Composite 1500 Property & Casualty Index) for the five years ended December 31, 2021. We have included the Standard & Poor's 500 Index in this graph because we believe it is a more recognizable broad index and yields a more meaningful comparison for investors given our market capitalization and dividend payout ratio.

Total Return Performance



	PERIOD ENDING (IN $)					
INDEX	12/31/16	12/31/17	12/31/18	12/31/19	12/31/20	12/31/21
ProAssurance Corporation	100.00	112.42	83.28	76.70	38.58	55.33
S&P 500 Index	100.00	121.83	116.49	153.17	181.35	233.41
Russell 2000 Index	100.00	114.65	102.02	128.06	153.62	176.39
S&P 1500 P&C Index	100.00	120.37	116.34	144.66	152.46	182.30

Source: S&P Global Market Intelligence
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2021,

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from___________to__________.

Commission file number: 001-16533

ProAssurance Corporation

(Exact name of registrant as specified in its charter)

Delaware	**63-1261433**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
100 Brookwood Place, Birmingham, AL	**35209**
(Address of principal executive offices)	**(Zip Code)**

(205) 877-4400

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.01 per share	PRA	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes ☒ No ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of voting stock held by non-affiliates of the registrant at June 30, 2021 was $1,211,664,682. As of February 17, 2022, the registrant had outstanding approximately 53,986,801 shares of its common stock.

Documents incorporated by reference in this Form 10-K

(i) The definitive proxy statement for the 2022 Annual Meeting of the Stockholders of ProAssurance Corporation (File No. 001-16533) is incorporated by reference into Part III of this report.

Glossary of Terms and Acronyms

When the following terms and acronyms appear in the text of this report, they have the meanings indicated below.

Term	Meaning
AAD	Annual aggregate deductible
ALAE	Allocated loss adjustment expense
AOCI	Accumulated other comprehensive income (loss)
ASU	Accounting Standards Update
Board	Board of Directors of ProAssurance Corporation
BOLI	Business owned life insurance
CARES Act	Coronavirus Aid, Relief and Economic Security Act
CIMA	Cayman Islands Monetary Authority
Council of Lloyd's	The governing body for Lloyd's of London
CODM	Chief Operating Decision Maker
COSO	Committee of Sponsoring Organizations of the Treadway Commission
Commutation	An agreement between a ceding insurer and the reinsurer that provides for the valuation, payment, and complete discharge of all obligations between the parties under a particular reinsurance contract
COVID-19	Coronavirus Disease 2019
DDR	Death, disability and retirement
Dodd-Frank Act	The Dodd-Frank Wall Street Reform and Consumer Protection Act
DPAC	Deferred policy acquisition costs
Eastern Re	Eastern Re, LTD, S.P.C.
EBUB	Earned but unbilled premium
ECO/XPL	Extra-contractual obligations/excess of policy limit claims
EEA	European Economic Area
ERM	Enterprise Risk Management
FAL	Funds at Lloyd's
FASB	Financial Accounting Standards Board
FHLB	Federal Home Loan Bank
FHLMC	Federal Home Loan Mortgage Corporation
FIO	Federal Insurance Office
FNMA	Federal National Mortgage Association
GAAP	Generally accepted accounting principles in the United States of America
GDPR	General Data Protection Regulation
GILTI	Global intangible low-taxed income
GNMA	Government National Mortgage Association
HCPL	Healthcare professional liability
IBNR	Incurred but not reported
Inova Re	Inova Re, LTD, S.P.C.
IRS	Internal Revenue Service
LAE	Loss adjustment expense
LIBOR	London Interbank Offered Rate
LLC	Limited liability company
Lloyd's	Lloyd's of London market
LP	Limited partnership
Medical Technology Liability	Medical technology and life sciences products liability
MICRA	Medical Injury Compensation Reform Act

Term	Meaning
Model Holding Co. Law	Model Insurance and Holding Company System Regulatory Act and Regulation
Mortgage Loans	Two ten-year mortgage loans with original borrowing amounts of approximately $18 million and approximately $23 million, each entered into by a subsidiary of ProAssurance
NAIC	National Association of Insurance Commissioners
NAV	Net asset value
NFIP	National Flood Insurance Program
NOL	Net operating loss
NORCAL	NORCAL Insurance Company, formally known as NORCAL Mutual Insurance Company
NRSRO	Nationally recognized statistical rating organization
NYDFS	New York Department of Financial Services
NYSE	New York Stock Exchange
OCI	Other comprehensive income (loss)
ORSA	Risk Management and Own Risk and Solvency Assessment Model Act
PBO	Projected benefit obligations
PCAOB	Public Company Accounting Oversight Board
PDR	Premium deficiency reserve
PPM RRG	Preferred Physicians Medical Risk Retention Group, a Mutual Insurance Company
PICA	ProAssurance Insurance Company of America
PREP Act	The Public Readiness and Emergency Preparedness Act
ProAssurance Plan	Executive non-qualified excess plan
ProAssurance Savings Plan	ProAssurance group savings and retirement plan
Revolving Credit Agreement	ProAssurance's $250 million revolving credit agreement
ROE	Return on equity
ROU	Right-of-use
SAP	Statutory accounting principles
SEC	Securities and Exchange Commission
SOFR	Secured Overnight Financing Rate
SPA	Special Purpose Arrangement
SPC	Segregated portfolio cell
Specialty P&C	Specialty Property and Casualty
Syndicate 1729	Lloyd's of London Syndicate 1729
Syndicate 6131	Lloyd's of London Syndicate 6131, a Special Purpose Arrangement with Lloyd's of London Syndicate 1729
Syndicate Credit Agreement	Unconditional revolving credit agreement with the Premium Trust Fund of Syndicate 1729
TCJA	Tax Cuts and Jobs Act H.R.1 of 2017
TRIA	Federal Terrorism Risk Insurance Act
U.K.	United Kingdom of Great Britain and Northern Ireland
ULAE	Unallocated loss adjustment expense
VIE	Variable interest entity
VOBA	Value of business acquired

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General Information

Throughout this report, references to "ProAssurance," "PRA," "Company," "organization," "we," "us" and "our" refer to ProAssurance Corporation and its consolidated subsidiaries. Because ProAssurance is an insurance holding company and certain terms and phrases common to the insurance industry are used in this report that carry special and specific meanings, we encourage you to read the Glossary of Selected Insurance and Related Financial Terms posted on our website on the Investor Relations page (investor.proassurance.com) under Other Information. In addition, throughout this discussion we use certain terms and abbreviations, which can be found in the Glossary of Terms and Acronyms provided at the beginning of this report.

Caution Regarding Forward-Looking Statements

Any statements in this Form 10-K that are not historical facts are specifically identified as forward-looking statements. These statements are based upon our estimates and anticipation of future events and are subject to significant risks, assumptions and uncertainties that could cause actual results to vary materially from the expected results described in the forward-looking statements. Forward-looking statements are identified by words such as, but not limited to, "anticipate," "believe," "estimate," "expect," "hope," "hopeful," "intend," "likely," "may," "optimistic," "possible," "potential," "preliminary," "project," "should," "will" and other analogous expressions. There are numerous factors that could cause our actual results to differ materially from those in the forward-looking statements. Thus, sentences and phrases that we use to convey our view of future events and trends are expressly designated as forward-looking statements as are sections of this Form 10-K that are identified as giving our outlook on future business.

Forward-looking statements relating to our business include among other things: statements concerning future liquidity and capital requirements, investment valuation and performance, return on equity, financial ratios, net income, premiums, losses and loss reserve, premium rates and retention of current business, competition and market conditions, the expansion of product lines, the development or acquisition of business in new geographical areas, the pricing or availability of acceptable reinsurance, actions by regulators and rating agencies, court actions, legislative actions, payment or performance of obligations under indebtedness, payment of dividends and other matters.

These forward-looking statements are subject to significant risks, assumptions and uncertainties, including, among other things, the following factors that could affect the actual outcome of future events:

- changes in general economic conditions, including the impact of inflation or deflation and unemployment;
- our ability to maintain our dividend payments;
- regulatory, legislative and judicial actions or decisions that could affect our business plans or operations, including changes in interpretations of certain coverages as a result of COVID-19;
- the enactment or repeal of tort reforms;
- formation or dissolution of state-sponsored insurance entities providing coverages now offered by ProAssurance which could remove or add sizable numbers of insureds from or to the private insurance market;
- changes in the interest and tax rate environment;
- resolution of uncertain tax matters and changes in tax laws, including the impact of the CARES Act;
- changes in laws or government regulations regarding financial markets or market activity that may affect our business;
- changes in the ability, or perception thereof, of the U.S. government to meet its obligations that may affect the U.S. economy and our business;
- performance of financial markets affecting the fair value of our investments or making it difficult to determine the value of our investments;
- changes in requirements or accounting policies and practices that may be adopted by our regulatory agencies, the FASB, the SEC, the PCAOB or the NYSE that may affect our business;
- changes in laws or government regulations affecting the financial services industry, the property and casualty insurance industry or particular insurance lines underwritten by our subsidiaries or by Syndicate 1729;
- the effect on our insureds, particularly the insurance needs of our insureds, and our loss costs, of changes in the healthcare delivery system and/or changes in the U.S. political climate that may affect healthcare policy or our business;
- consolidation of our insureds into or under larger entities which may be insured by competitors, or may not have a risk profile that meets our underwriting criteria or which may not use external providers for insuring or otherwise managing substantial portions of their liability risk;

- the effect of cyclical insurance industry trends on our underwriting, including demand and pricing in the insurance and reinsurance markets in which we operate;
- uncertainties inherent in the estimate of our loss and loss adjustment expense reserve and reinsurance recoverable;
- changes in the availability, cost, quality or collectability of insurance/reinsurance;
- the results of litigation, including pre- or post-trial motions, trials and/or appeals we undertake;
- effects on our claims costs from mass tort litigation that are different from that anticipated by us;
- allegations of bad faith which may arise from our handling of any particular claim, including failure to settle;
- loss or consolidation of independent agents, agencies, brokers or brokerage firms;
- changes in our organization, compensation and benefit plans;
- changes in the business or competitive environment may limit the effectiveness of our business strategy and impact our revenues;
- our ability to retain and recruit senior management and other qualified personnel;
- the availability, integrity and security of our technology infrastructure and that of our third-party providers, including any susceptibility to cyber-attacks which might result in a loss of information, operating capability or actual monetary loss;
- the impact of a catastrophic event, including the COVID-19 pandemic, as it relates to our business and insurance operations, investment results, Lloyd's Syndicates and our insured risks;
- the impact of the ongoing COVID-19 pandemic on our premium volume, loss reserves, investment portfolio, asset valuations, business operations and workforce;
- the impact of a catastrophic man-made event, such as acts of terrorism, acts of war and civil and political unrest;
- the effects of terrorism-related insurance legislation and laws;
- guaranty funds and other state assessments;
- our ability to achieve continued growth through expansion into new markets or through acquisitions or business combinations;
- failure to successfully integrate NORCAL to achieve expected results or synergies;
- changes to the ratings assigned by rating agencies to our holding company or insurance subsidiaries, individually or as a group;
- provisions in our charter documents, Delaware law and state insurance laws may impede attempts to replace or remove management or may impede a takeover;
- state insurance restrictions may prohibit assets held by our insurance subsidiaries, including cash and investment securities, from being used for general corporate purposes;
- taxing authorities can take exception to our tax positions and cause us to incur significant amounts of legal and accounting costs and, if our defense is not successful, additional tax costs, including interest and penalties; and
- expected benefits from completed acquisitions may not be achieved or may be delayed longer than expected due to business disruption; loss of customers, employees or key agents; increased operating costs or inability to achieve cost savings and synergies; and assumption of greater than expected liabilities, among other reasons.

Additional risks, assumptions and uncertainties that could arise from our membership in the Lloyd's market and our participation in certain Lloyd's Syndicates include, but are not limited to, the following:

- members of Lloyd's are subject to levies by the Council of Lloyd's based on a percentage of the member's underwriting capacity, currently a maximum of 5%, but can be increased by Lloyd's;
- Syndicate results can be affected by decisions made by the Council of Lloyd's which the management of Syndicate 1729 has little ability to control, such as a decision to not approve the business plan of Syndicate 1729, or a decision to increase the capital required to continue operations, and by our obligation to pay levies to Lloyd's;
- Lloyd's insurance and reinsurance relationships and distribution channels could be disrupted or Lloyd's trading licenses could be revoked, making it more difficult for a Lloyd's Syndicate to distribute and market its products;
- rating agencies could downgrade their ratings of Lloyd's as a whole; and
- Syndicate operations are dependent on a small, specialized management team, and the loss of their services could adversely affect the Syndicate's business. The inability to identify, hire and retain other highly qualified personnel in the future could adversely affect the quality and profitability of Syndicate 1729's business.

Our results may differ materially from those we expect and discuss in any forward-looking statements. The principal risk factors that may cause these differences are described in "Item 1A, Risk Factors" in this report and other documents we file with the SEC, such as our quarterly reports on Form 10-Q.

We caution readers not to place undue reliance on any such forward-looking statements, which are based upon conditions existing only as of the date made, and advise readers that these factors could affect our financial performance and could cause actual results for future periods to differ materially from any opinions or statements expressed with respect to future periods in any current statements. Except as required by law or regulations, we do not undertake and specifically decline any obligation to publicly release the result of any revisions that may be made to any forward-looking statements to reflect events or circumstances after the date of such statements or to reflect the occurrence of anticipated or unanticipated events.

PART I

ITEM 1. BUSINESS

Overview

ProAssurance Corporation is a holding company for property and casualty insurance companies. For the year ended December 31, 2021, our net premiums written totaled $883 million, and at December 31, 2021 we had total assets of $6.2 billion and $1.4 billion of shareholders' equity.

Our Mission
We exist to Protect Others

Our Vision

We will be the best in the world at understanding and providing solutions for the risks our customers encounter as healers, innovators, employers and professionals. Through an integrated family of specialty companies, products and services, we will be a trusted partner enabling those we serve to focus on their vital work. As the employer of choice, we embrace every day as a singular opportunity to reach for extraordinary outcomes, build and deepen superior relationships, advance diversity, equity and inclusion, and accomplish our mission with infectious enthusiasm and unbending integrity.

Our Values
Integrity, Leadership, Relationships, Enthusiasm

ProAssurance is a U.S. based specialty property and casualty and workers' compensation insurance carrier. Our specialty property and casualty insurance products primarily include professional liability insurance and liability insurance for medical technology and life sciences risks. We also provide capital to Syndicate 1729 which writes a range of property and casualty insurance and reinsurance lines.

Our executive offices are located at 100 Brookwood Place, Birmingham, Alabama 35209 and our telephone number is (205) 877-4400. Our stock trades on the NYSE under the symbol “PRA.” Our website is www.proassurance.com, and we maintain a dedicated Investor Relations section on that website (investor.proassurance.com) to provide specialized resources for investors and others seeking to learn more about us.

As part of our disclosure, through the Investor Relations section of our website, we publish our annual report on Form 10-K, our quarterly reports on Form 10-Q and our current reports on Form 8-K and all other public SEC filings as soon as reasonably practicable after the report is electronically filed with, or furnished to, the SEC. These SEC filings can be found on our website at investor.proassurance.com/Docs. This section also includes information regarding stock trading by corporate insiders by providing access to SEC Forms 3, 4 and 5 when they are filed with the SEC. In addition to federal filings on our website, we make available other documents that provide important additional information about our financial condition and operations. Documents available on our website include the financial statements we file with state regulators (compiled under SAP as required by regulation), news releases that we issue, a listing of our investment holdings and certain investor presentations. The Governance section of our website provides copies of the charters for our governing committees and many of our governing policies. Printed copies of these documents may be obtained from our Investor Relations department, either by mail at P.O. Box 590009, Birmingham, Alabama 35259-0009, or by telephone at (205) 877-4400 or (800) 282-6242.

Our History

We were incorporated in Delaware in 2001 as the successor to Medical Assurance, Inc, in conjunction with its merger with Professionals Group, Inc. ProAssurance has a history of growth through acquisitions; the most recent and significant of which was the acquisition of NORCAL Insurance Company on May 5, 2021. We believe its contribution to our customers and culture have expanded our product capabilities with broader geographic scale and efficiencies, supporting a true nationwide platform to deliver value to our customers and stakeholders.

Our Strategy

We seek to generate an attractive total return for our shareholders while focusing on our culture and people. The basic components of our strategy for achieving this objective are as follows:

- *Pursue profitable underwriting opportunities.* We emphasize profitability, not market share, and strive to achieve a consistent level of underwriting profit over the various economic and insurance cycles. Key elements of our approach are adhering to disciplined underwriting principles, including prudent risk selection, adequate pricing and product structure, as well as adjusting our business mix as necessary to effectively utilize capital and achieve long-term profit objectives.
- *Focus on culture and people.* We strive to be the Employer of Choice by attracting, retaining and developing a diverse group of employees who embody our Mission, Vision and Values. We are committed to fostering an inclusive workplace in which variety of thought, creativity and innovation fuel employee engagement and ultimately increases shareholder return. See further discussion on our employees and culture within this section under the heading "Human Capital Resources."
- *Provide specialized healthcare-centric expertise and thought leadership to meet the evolving demands in the healthcare and medical technology markets*. We provide traditional liability products and services to both markets. We also leverage our national geographic footprint, broad product spectrum, expertise and financial strength to provide innovative and customized products to meet the risk management needs of larger healthcare organizations or groups.
- *Provide superior workers' compensation products and services.* We provide workers' compensation products and services that focus on increasing an organization's productivity while reducing costs. We do this by providing innovative programs and solutions that address the specific needs of our customers and return injured workers to wellness and the dignity of work.
- *Provide superior customer service.* Our mission statement, "We exist to Protect Others," goes hand-in-hand with our corporate brand promise, "Treated Fairly." Our goal is to deliver an exceptional service experience that is responsive and provides value to customers through a regional office business model. Our valued employees demonstrate our core values of integrity, leadership, relationships and enthusiasm every day and are focused on meeting the needs of our customers.
- *Focus on operational excellence.* We continuously endeavor to improve our competitive position through operational excellence and productivity gains through a well-designed organizational structure, data-driven efficiencies, business automation, innovative technology solutions, workflow enhancements and proactive expense management.
- *Effectively manage capital.* We carefully monitor use of our capital and consider various options for capital deployment, such as business expansion by our existing subsidiaries, opportunities that arise for mergers or acquisitions, share repurchases and payment of dividends.
- *Manage claims effectively.* Our industry leading claims professionals bring extensive industry and insurance experience, along with local jurisdictional knowledge to resolve claims in a cost effective manner.
- *Emphasize risk management.* We actively manage our enterprise risk by maintaining strong internal controls. We also emphasize the importance of risk management with our insureds and offer them training and risk reduction resources to mitigate loss exposures.
- *Maintain a conservative investment strategy.* We believe that we follow a conservative investment strategy designed to emphasize the preservation of our capital and provide adequate liquidity for the prompt payment of claims. Our investment portfolio consists primarily of investment-grade, fixed-maturity securities of short-to medium-term duration.
- *Maintain financial stability*. We are committed to maintaining financial strength and adequate capital.

Organization and Segment Information

We operate through multiple insurance organizations and report our financial results in five segments, as follows:

- Specialty P&C - This segment includes our professional liability business and medical technology liability business. Our professional liability insurance is primarily comprised of medical professional liability products offered to healthcare providers and institutions and includes the business acquired through the NORCAL transaction that closed on May 5, 2021. To a lesser extent, we also offer professional liability insurance to attorneys and their firms. Medical technology liability insurance is offered to medical technology and life sciences companies that manufacture or distribute products including entities conducting human clinical trials. We also offer custom alternative risk solutions including loss portfolio transfers, assumed reinsurance and captive cell programs

for healthcare professional liability insureds. For our alternative market captive cell programs, we cede either all or a portion of the premium to certain SPCs in our Segregated Portfolio Cell Reinsurance segment.

- *Workers' Compensation Insurance* - This segment includes our workers' compensation insurance business which is provided primarily to employers with 1,000 or fewer employees. Our workers' compensation products include guaranteed cost policies, policyholder dividend policies, retrospectively-rated policies, deductible policies and alternative market solutions. Alternative market solutions include program design, fronting, claims administration, risk management, SPC rental, asset management and SPC management services. Alternative market premiums are 100% ceded to either SPCs in our Segregated Portfolio Cell Reinsurance segment or, to a limited extent, an unaffiliated captive insurer.
- *Segregated Portfolio Cell Reinsurance* - This segment includes the results (underwriting profit or loss, plus investment results, net of U.S. federal income taxes) of SPCs at Inova Re and Eastern Re, our Cayman Islands SPC operations. Each SPC is owned, fully or in part, by an individual company, agency, group or association and the results of the SPCs are attributable to the participants of that cell. We participate to a varying degree in the results of selected SPCs and, for the SPCs in which we participate, our participation interest ranges from a low of 20% to a high of 85%. SPC results attributable to external cell participants are reflected as an SPC dividend expense (income) in our Segregated Portfolio Cell Reinsurance segment. The SPCs assume workers' compensation insurance, healthcare professional liability insurance or a combination of the two from our Workers' Compensation Insurance and Specialty P&C segments.
- *Lloyd's Syndicates* - This segment includes the results from our participation in Lloyd's of London Syndicate 1729 and Syndicate 6131. The results of this segment are normally reported on a quarter lag, except when information is available that is material to the current period. Syndicate 1729 underwrites risks over a wide range of property and casualty insurance and reinsurance lines in both the U.S. and international markets. Effective January 1, 2022, Syndicate 6131 ceased underwriting on a quota share basis with Syndicate 1729 as Syndicate 6131's business is retained within Syndicate 1729 beginning with the 2022 underwriting year. Prior to January 1, 2022, Syndicate 6131 was an SPA which focused on contingency and specialty property business.
- *Corporate* - This segment includes our investment operations, including the investment operations of NORCAL since the date of acquisition and excludes those reported in our Segregated Portfolio Cell Reinsurance and Lloyd's Syndicates segments, interest expense and U.S. income taxes. This segment also includes non-premium revenues generated outside of our insurance entities and corporate expenses.

Gross Premiums Written

Gross premiums written for the years ended December 31, 2021, 2020 and 2019 were comprised as follows:

	Year Ended December 31					
($ in thousands)	**2021**		2020		2019	
Specialty P&C [1][2]	**$681,509**	**71%**	$522,911	61%	$577,700	60%
Workers' Compensation Insurance	**240,546**	**25%**	246,791	29%	278,442	29%
Segregated Portfolio Cell Reinsurance [3]	**71,850**	**8%**	72,843	9%	87,140	9%
Lloyd's Syndicates	**37,969**	**4%**	84,718	10%	110,905	11%
Inter-segment revenues [3]	**(71,850)**	**(8%)**	(72,841)	(9%)	(86,697)	(9%)
Total	**$960,024**	**100%**	$854,422	100%	$967,490	100%

[1] Premiums in our Specialty P&C segment includes $154.1 million of premium contributed by NORCAL since the date of acquisition on May 5, 2021.

[2] Primarily comprised of twelve month term policies, but includes premium related to policies with a twenty-four month term of $8.3 million in 2020 and $26.9 million in 2019. The majority of renewed twenty-four month term policies were re-underwritten to twelve month term policies as we have ceased offering twenty-four month term policies beginning in the second quarter of 2020. In addition, our written premium includes $13.5 million of NORCAL Standard Physician policies with a three-month term.

[3] Premiums in our Segregated Portfolio Cell Reinsurance segment are predominately assumed from either our Workers' Compensation Insurance or Specialty P&C segments. We eliminate this inter-segment revenue.

Assets are not allocated to segments because investments, other than the investments that are solely allocated to the Segregated Portfolio Cell Reinsurance and Lloyd's Syndicates segments, and other assets are not managed at the segment level. Additional detailed information regarding premium by individual product type within each of our insurance segments is provided in Item 7, Management's Discussion and Analysis, in the Results of Operations section, under the headings "Premiums Written."

Our insurance exposures are primarily within the U.S. As a result of our participation in Lloyd's Syndicates 1729 and 6131, we had net written premium of $14.5 million in 2021, $22.6 million in 2020 and $32.8 million in 2019 associated with insurance exposures outside of the U.S. In addition, we had net written premium of $23.0 million in 2021, $11.1 million in 2020 and $8.8 million in 2019 associated with international insurance exposures within our Specialty P&C segment.

Specialty Property and Casualty Segment

Our Specialty P&C segment focuses on professional liability insurance and Medical Technology Liability insurance. Professional liability insurance is primarily offered to healthcare providers and institutions and, to a lesser extent, to attorneys and their firms. Our professional liability insurance also includes the business acquired through the NORCAL transaction that closed on May 5, 2021. Medical technology liability insurance is offered to medical technology and life sciences companies that manufacture or distribute products including entities conducting human clinical trials.

Professional Liability Insurance

Our professional liability business is primarily focused on providing professional liability insurance to healthcare providers. We target the full spectrum of the medical professional liability market, covering multiple categories of healthcare professionals, institutions (which includes hospitals, surgery centers and miscellaneous medical facilities) and, to a lesser extent, facilities specializing in long term residential care. While a majority of our business is written in the Standard market, we also offer professional liability insurance on an excess and surplus lines basis through our Specialty line of business; and we offer alternative risk and self-insurance products on a customized basis.

Our custom alternative risk solutions include assumed reinsurance and a loss portfolio transfer program for healthcare entities who, most commonly, are exiting a line of business, changing an insurance approach or simply looking for a more tailored solution for transferring risk. Our custom alternative risk solutions also include a turnkey captive solution whereby we cede all or a portion of the healthcare premium, net of reinsurance, to three SPCs of our wholly owned Cayman Islands reinsurance subsidiaries, Inova Re and Eastern Re, which are reported in our Segregated Portfolio Cell Reinsurance segment. Each SPC is owned, fully or in part, by an individual company, agency, group or association, and we currently have a 25% participation interest in the results of one of these three SPCs. See further discussion that follows under the heading "Segregated Portfolio Cell Reinsurance Segment." The portion not ceded to the SPCs is retained within our Specialty P&C segment. Total gross premiums written in this segment in our alternative market captive cell program were approximately $8.1 million, $7.1 million and $7.8 million during 2021, 2020 and 2019, respectively.

We utilize independent agencies and brokers as well as an internal sales force to write our HCPL business. For the year ended December 31, 2021, approximately 79% of our HCPL gross premiums written were produced through independent insurance agencies or brokers. The agencies and brokers we use typically sell through healthcare insurance specialists who are able to convey the factors that differentiate our professional liability insurance products. In 2021, our ten largest agents or brokers produced approximately 30% of our HCPL premium; individually, no one agency or broker produced more than 9% of our HCPL premium.

In marketing our professional liability products we emphasize our financial strength, product flexibility and excellent claims, underwriting and risk resource services. We market our insurance products through our direct sales force and through our agents as well as direct mailings and advertising in industry-related publications. We also are involved in professional societies and related organizations and support legislation that will have a positive effect on healthcare and legal liability issues. We maintain regional underwriting offices which permit us to consistently provide a high level of services to customers on a local basis.

We maintain claim management centers where our internal claims personnel investigate and monitor the adjudication of our professional liability claims. We engage experienced, independent litigation attorneys in each venue to assist with the claims process as we believe this practice aids us in providing a defense that is aggressive, effective and cost-efficient. We evaluate the merit of each claim and determine the appropriate strategy for resolution of the claim, either seeking a reasonable good faith settlement appropriate for the circumstances of the claim or aggressively defending the claim. As part of the evaluation and preparation process for HCPL claims, we meet regularly with medical advisory committees in our key markets to examine claims, attempt to identify potentially troubling practice patterns and make recommendations to our staff.

We also provide professional liability coverage to attorneys and their firms in select areas of practice, which is a part of our Small Business Unit. Our legal professional liability coverage is a less significant portion of our business, accounting for

approximately 3% of our 2021 gross premiums written. This business offers errors and omissions liability insurance policies for law firms engaged in the private practice of law. The program generally insures solo practitioners and smaller firms; almost all of our insured attorneys are members of a firm employing five or fewer attorneys. The areas of practice of our insured firms include plaintiff, real estate, criminal defense and general corporate law. The program does not insure firms practicing in areas that are considered high hazard such as securities and intellectual property law.

Underwriting decisions for our legal professional liability coverage consider the firm's areas of practice, the experience of the attorneys and the management controls and loss mitigation practices of the applicant. Our legal professional liability line of business operates in 34 states written through independent brokers. Brokers are appointed and must specialize in legal professional liability. The territory of appointed brokers is restricted to a state or a small number of states in order to maintain a level of exclusivity.

Medical Technology and Life Sciences Insurance

Our Medical Technology Liability business offers products-completed operations and errors and omissions liability coverage for medical technology and life sciences companies. The vast majority of these insureds and the products they manufacture and/or distribute are regulated by the U.S. Food and Drug Administration or similar regulatory authorities in foreign jurisdictions. The products we insure cover a broad array of medical devices and pharmaceuticals including, but not limited to, infusion systems, operating room surgical instruments and disposables, laboratory equipment and supplies, in vitro diagnostic test kits and instruments, patient mobility aids, respiratory and anesthesia products, cardiovascular devices, vaccines or cancer therapeutics, laser surgical instruments, and non-invasive diagnostic imaging systems, orthopedic implants and human and veterinary branded and generic drugs. We also provide coverage for commercialized products and all phases of clinical trials.

Underwriting analysis for Medical Technology Liability contemplates the product's risk profile, loss history, the amount of coverage being sought, level of the insured's retention, policy limits, applicant's management experience, regulatory compliance record and volume of sales. Almost all of our Medical Technology Liability business is written through independent brokers. In 2021, our top ten largest brokers generated approximately 45% of our Medical Technology Liability gross written premium, with no one broker representing more than 11%. We do not appoint agents for our Medical Technology Liability business. We defend our Medical Technology Liability claims vigorously, with a negotiated settlement being the most frequent means of resolution.

Workers' Compensation Insurance Segment

Our Workers' Compensation Insurance segment offers workers' compensation products primarily in 19 core states in the Mid-Atlantic, Southeast, Midwest, Gulf South and New England regions of the continental U.S. Our Workers' Compensation Insurance segment consists of two major business activities:

- Traditional workers' compensation insurance coverages provided to employers, generally those with 1,000 employees or less. Types of policies offered include guaranteed cost policies, policyholder dividend policies, retrospectively-rated policies and deductible policies.
- Alternative market workers' compensation solutions provided to individual companies, agencies, groups or associations whereby the workers' compensation premium written is 100% ceded to either the SPCs at Inova Re or Eastern Re, which are reported in our Segregated Portfolio Cell Reinsurance segment, or, to a limited extent, a captive insurer unaffiliated with ProAssurance for one program. Alternative market solutions include program design, fronting, claims administration, risk management, SPC rental, asset management and SPC management services. Of our total alternative market premiums written, approximately 95% in 2021 and 96% in 2020 was ceded to the SPCs at Inova Re and Eastern Re.

All of our workers' compensation products are distributed through a group of appointed independent agents.

We utilize an individual account underwriting strategy for our workers' compensation business that is focused on selecting quality accounts. Our goal is to underwrite a diverse book of business with respect to risk classification, hazard level and geographic location. We target accounts with strong return to wellness and safety programs in primarily low to middle hazard levels such as clerical offices, light manufacturing, healthcare, auto dealers and service industries and maintain a strong risk management unit in order to better serve our customers' needs.

We actively seek to reduce our workers' compensation loss costs by placing a concentrated focus on returning injured workers to wellness and the dignity of work as quickly as possible. We emphasize early intervention and aggressive disability management, utilizing in-house and third-party specialists for case management, including medical cost management. Strategic vendor relationships have been established to reduce medical claim costs and include preferred provider, physical therapy, prescription drug and catastrophic medical services.

Segregated Portfolio Cell Reinsurance Segment

Our Segregated Portfolio Cell Reinsurance segment includes the results (underwriting profit or loss, plus investment results, net of U.S. federal income taxes) of SPCs at Inova Re and Eastern Re, our Cayman Islands SPC operations. Each SPC is owned, fully or in part, by an individual company, agency, group or association and the results of the SPCs are attributable to the participants of that cell. We participate to a varying degree in the results of certain SPCs and, for the SPCs in which we participate, our participation interest ranges from a low of 20% to a high of 85% as of December 31, 2021. Each SPC is operated solely for the benefit of its cell participants, and the pool of assets of one SPC are statutorily protected from the creditors of any other SPC. The results of the SPCs are allocated among the cell participants in accordance with the terms of the cell agreements. SPC results attributable to external cell participants are reflected as an SPC dividend expense (income) in our Segregated Portfolio Cell Reinsurance segment. In addition, the Segregated Portfolio Cell Reinsurance segment includes the investment results of the SPCs as the investments are solely for the benefit of the cell participants. The segment results reflect our share of the results of the SPCs in which we participate. The SPCs assume workers' compensation insurance, healthcare professional liability insurance or a combination of the two from our Workers' Compensation Insurance and Specialty P&C segments.

The underwriting, marketing and distribution of policies written in alternative market programs are the same as that of the segment from which the policy was assumed: Workers' Compensation Insurance or Specialty P&C segments.

Lloyd's Syndicates Segment

Our Lloyd's Syndicates segment includes the results from our participation in Syndicates 1729 and 6131. The results of this segment are normally reported on a quarter lag, except when information is available that is material to the current period. Furthermore, investment results associated with investment assets solely allocated to Lloyd's Syndicate operations and certain U.S. paid administrative expenses are reported concurrently as that information is available on an earlier time frame. We have investments in and obligations to Syndicate 1729 and Syndicate 6131 consisting of a Syndicate Credit Agreement, FAL requirements and our participation in results. The Syndicate Credit Agreement was issued for the purpose of providing working capital to Syndicate 1729. At December 31, 2021, the maximum permitted borrowings under the Syndicate Credit Agreement were approximately £30.0 million. Effective July 1, 2022, maximum permitted borrowings will be reduced to £15.0 million from £30.0 million under an amended Syndicate Credit Agreement executed in January 2022. We provide FAL to support underwriting by Syndicate 1729 which is comprised of investment securities and cash and cash equivalents deposited with Lloyd's with a total fair value of approximately $37.8 million at December 31, 2021. See further discussion on the Syndicate Credit Agreement and our FAL in Note 4 of the Notes to Consolidated Financial Statements.

We provide capital to Syndicate 1729, which covers a range of property and casualty insurance and reinsurance lines in both the U.S. and international markets. The remaining capital for Syndicate 1729 is provided by unrelated third parties, including private names and other corporate members. Effective January 1, 2022, Syndicate 6131 ceased underwriting on a quota share basis with Syndicate 1729 as Syndicate 6131's business is retained within Syndicate 1729 beginning with the 2022 underwriting year. Premium from our participation in the results of Syndicate 6131 from open underwriting years prior to 2022 will continue to earn out pro rata over the entire policy period of the underlying business. For the 2022 underwriting year, our participation in the results of Syndicate 1729 remains unchanged at 5%. Syndicate 1729's maximum underwriting capacity for the 2022 underwriting year is £210 million (approximately $284 million at December 31, 2021), of which £11 million (approximately $15 million at December 31, 2021) is our allocated underwriting capacity.

Our Lloyd's Syndicates segment products are distributed principally through retail brokers and coverholders (i.e., only those authorized by our retail brokers to enter into a contract but only in accordance with specified terms), which consist primarily of premium written through open-market channels and delegated underwriting authority arrangements. Syndicate 1729 writes business in the Lloyd's marketplace and has access to international markets across the world.

Corporate Segment

Our Corporate segment includes our investment operations, including the investment operations of NORCAL since the date of acquisition and excludes those reported in our Segregated Portfolio Cell Reinsurance and Lloyd's Syndicates segments, interest expense and U.S. income taxes. The segment also includes non-premium revenues generated outside of our insurance entities and corporate expenses. We apply a consistent management strategy to the entire investment portfolio managed at the corporate level. Accordingly, we report those investment results and net investment gains and losses within our Corporate segment. Our overall investment strategy is to maximize current income from our investment portfolio while maintaining appropriate credit risk, liquidity, duration, portfolio diversification and capital efficiency. The portfolio is generally managed by professional third-party asset managers whose results we monitor and evaluate. The asset managers typically have the authority to make investment decisions within the asset classes they are responsible for managing, subject to our investment policy and oversight, including a requirement that available-for-sale securities in a loss position cannot be sold without specific authorization from us. See Note 4 of the Notes to Consolidated Financial Statements for more information on our investments.

Competition

The marketplace for all our lines of business is very competitive. Within the U.S. our competitors are primarily domestic insurance companies and range from large national insurers whose financial strength and resources may be greater than ours to smaller insurance entities that concentrate on a single state and as a result have an extensive knowledge of the local markets. Additionally, there are many providers, domestic and international, of alternative risk management solutions. Syndicate 1729, which is based in the U.K., faces significant competition from other Lloyd's syndicates as well as other international and domestic insurance and reinsurance firms operating in the country of the insured. Competitive distinctions include pricing, size, name recognition, service quality, market commitment, market conditions, breadth and flexibility of coverage, method of sale, financial stability, ratings assigned by rating agencies and regulatory conditions.

The healthcare environment in the U.S. is continuing to consolidate, which brings competitive challenges and opportunities to our largest segment, the Specialty P&C segment. This consolidation initially took the form of hospitals acquiring physician practices and later the growth of physician groups owned by outside investors. As these trends continue most physicians no longer practice medicine as owners of an independent practice. Healthcare delivery settings are changing with the growth of retail delivery by allied healthcare professionals as well as physicians in distributed clinics, pharmacies, large consumer stores and online. These larger commercial enterprises have differing risk management needs from those in the traditional small physician practices. As such, we have enhanced our coverage offerings to fit the needs of combined hospital/ physician entities, multi-state medical groups, telemedicine companies, miscellaneous facilities, allied healthcare professionals and self-insured entities even as we continue to service that portion of the market maintaining more traditional practice structures.

The workers' compensation industry is highly competitive in the geographic markets in which we operate. New business opportunities, renewal pricing and retention continue to be a challenge as a result of intense competition, especially from multi-line insurers that are willing to underprice their workers' compensation products in order to gain access to write other coverages that may be more lucrative and we expect this trend to continue in 2022. We believe our product offerings allow us to provide flexibility in offering workers' compensation solutions to our customers at a competitive price. In addition, we believe that our claims handling and risk management services are attractive to our customers and provide us with a competitive advantage even when our pricing is higher than our competitors.

For all of our business, we recognize the importance of providing our products at competitive rates, but we do not price our products at rates that will not permit us to meet our long-term profit targets over the life of the insurance cycle. We base our rates on current loss projections, maintaining a long-term focus even when this approach may reduce our top line growth. Such projections could also result in us not meeting profit targets during certain phases of the insurance cycle. We believe that our size, reputation for effective claims management, unique customer service focus, multi-state presence and broad spectrum of coverages offered provides us with competitive advantages, even as the needs of our insureds change.

Rating Agencies

Our claims paying ability is regularly evaluated and rated by three major rating agencies: AM Best, Fitch and Moody’s. In developing their claims paying ratings, these agencies make an independent evaluation of an insurer’s ability to meet its obligations to policyholders. See "Risk Factors" for a table presenting the claims paying ratings of our principal insurance operations.

Our ability to service current debt and potential debt is regularly evaluated and rated by four rating agencies: AM Best, S&P, Fitch and Moody’s. These financial strength ratings reflect each agency’s independent evaluation of our ability to meet our obligation to holders of our debt, if any. While financial strength ratings may be of greater interest to investors than our claims paying ratings, these ratings are not evaluations of our equity securities nor a recommendation to buy, hold or sell our equity securities. See "Risk Factors" for additional information on our senior debt ratings.

Insurance Regulatory Matters

We are subject to regulation under the insurance and insurance holding company statutes of various jurisdictions, including the domiciliary states of our insurance subsidiaries and other states in which our insurance subsidiaries do business. Our insurance subsidiaries are primarily domiciled in the U.S. Our states of domicile include Alabama, California, Florida, Illinois, Michigan, Missouri, Pennsylvania, Texas and Vermont. Our foreign jurisdictions include our reinsurance operations based in the Cayman Islands and, through our participation in Lloyd's Syndicates, our insurance and reinsurance operations based in the U.K. that we support.

United States

Our insurance subsidiaries are required to file detailed annual statements in their states of domicile with the NAIC and, in some cases, with the state insurance regulators in each of the states in which they do business. The laws of the various states establish agencies with broad authority to regulate, among other things, licenses to transact business, premium rates for certain types of coverage, trade practices, agent licensing, policy forms, underwriting and claims practices, reserve adequacy, transactions with affiliates and insurer solvency. Such regulations may hamper our ability to meet operating or profitability goals, including preventing us from establishing premium rates for some classes of insureds that adequately reflect the level of risk assumed for those classes. Many states also regulate investment activities on the basis of quality, distribution and other quantitative criteria. States have also enacted legislation, typically based in whole or in part on NAIC model laws, which regulates insurance holding company systems, including acquisitions, the payment of dividends, the terms of affiliate transactions, enterprise risk and solvency management and other related matters.

Applicable state insurance laws, rather than federal bankruptcy laws, apply to the liquidation or reorganization of insurance companies.

Insurance companies are also subject to state and federal legislative and regulatory measures and judicial decisions. These could include new or updated definitions of risk exposure and limitations on business practices.

Insurance Regulation Concerning Change or Acquisition of Control

The insurance regulatory codes in each of the domiciliary states of our operating subsidiaries contain provisions (subject to certain variations) to the effect that the acquisition of “control” of a domestic insurer or of any person that directly or indirectly controls a domestic insurer cannot be consummated without the prior approval of the domiciliary insurance regulator. In general, a presumption of “control” arises from the direct or indirect ownership, control or possession with the power to vote or possession of proxies with respect to 10% (5% in Alabama) or more of the voting securities of a domestic insurer or of a person that controls a domestic insurer. Because of these regulatory requirements, any party seeking to acquire control of ProAssurance or any other domestic insurance company, whether directly or indirectly, would usually be required to obtain such approvals.

In addition, certain state insurance laws contain provisions that require pre-acquisition notification to state agencies of a change in control of a non-domestic insurance company admitted in that state. While such pre-acquisition notification statutes do not authorize the state agency to disapprove the change of control, such statutes do authorize certain remedies, including the issuance of a cease and desist order with respect to the non-domestic admitted insurers doing business in the state if certain conditions exist, such as undue market concentration.

Insurance Regulation Concerning Cybersecurity

In March 2017, the New York Cybersecurity Regulation took effect for financial institutions, insurers and other companies regulated by the NYDFS. The intent of the regulation is to encourage the protection of consumer information, as well as the technology systems of NYDFS regulated entities. We are currently compliant with the regulation according to the transition periods as defined in the NYDFS Cybersecurity Regulation.

In October 2017, the NAIC adopted the Insurance Data Security Model Law, which created rules for insurers, agents and other licensed entities covering data security and investigation and notification of breach. In May 2018, the European Union implemented the GDPR, designed to protect data privacy of individuals within the European Union and the EEA. We are compliant with the GDPR due to the global nature of our business, including a small amount of international activity in our Specialty P&C segment. In addition, managing agents of Lloyd's syndicates are required to ensure that they meet the requirements of the GDPR and any local data protection regulation based on territories in which they operate. As of December 31, 2021, Syndicate 1729 and Syndicate 6131, including their managing agent, were compliant with the GDPR.

Each of the domiciliary states of our insurance subsidiaries, excluding Florida, Missouri, Pennsylvania and Texas, has enacted data security or data privacy acts. Alabama enacted the Alabama Data Breach Notification Act of 2018 effective June 1, 2018, California enacted California's Consumer Privacy Act of 2018 and Illinois enacted the Illinois' Personal Information Protection Act, both of which were effective January 1, 2020, Vermont enacted the Data Breach Notification law effective July 1, 2020 and Michigan enacted the Michigan's Data Security Act effective January 20, 2021. These state laws require an information security program based on an ongoing risk assessment, overseeing third-party service providers, investigating data breaches and notifying regulators of a cybersecurity event. The GDPR and the California Consumer Privacy Act of 2018 grant individuals the right to request that a company delete or de-identify their personal information. We expect other states, including our domiciliary states of Florida, Missouri, Pennsylvania and Texas, to either adopt the NAIC's Insurance Data Security Model Law or enact their own data security regulations. Moreover, we expect to see privacy laws similar to the California Consumer Privacy Act of 2018 to be enacted in other states, including our states of domicile. We do not expect compliance with the various data security or data privacy acts to have a material impact on our financial condition or results of operations, as they closely resemble the NAIC Model Law, the NYDFS Cybersecurity Regulations and the California Consumer Privacy Act of 2018.

Statutory Accounting and Reporting

Insurance companies are required to file detailed quarterly and annual reports with state insurance regulators in their state of domicile and each of the states in which they do business. Their business and accounts are subject to examination by such regulators at any time. The financial information in these reports is prepared in accordance with SAP. Insurance regulators periodically examine each insurer's adherence to SAP, financial condition and compliance with insurance department rules and regulations.

Regulation of Dividends and Other Payments from Our Operating Subsidiaries

Our U.S. operating subsidiaries are subject to various state statutory and regulatory restrictions that limit the amount of dividends or distributions an insurance company may pay to its shareholders, including our insurance holding company, without prior regulatory approval. Generally, dividends may be paid only out of unassigned earned surplus. In every case, surplus subsequent to the payment of any dividends must be reasonable in relation to an insurance company's outstanding liabilities and must be adequate to meet its financial needs.

State insurance holding company regulations generally require domestic insurers to obtain prior approval of extraordinary dividends. Insurance holding company regulations that govern our principal operating subsidiaries deem a dividend as extraordinary if the combined dividends and distributions to the parent holding company in any twelve-month period exceed prescribed thresholds. Such thresholds are statutorily prescribed by the state of domicile and currently are based on either net income for the prior fiscal year (reduced by realized capital gains in certain domiciliary states) or a percentage of unassigned surplus at the end of the prior fiscal year, depending upon the wording of the statute.

If insurance regulators determine that payment of a dividend or any other payments within a holding company group, (such as payments under a tax-sharing agreement or payments for employee or other services) would, because of the financial condition of the paying insurance company or otherwise, be a detriment to such insurance company's policyholders, the regulators may prohibit such payments that would otherwise be permitted.

Risk-Based Capital and Risk Assessment

In order to enhance the regulation of insurer solvency, each state of domicile in accordance with an NAIC-defined formula specifies risk-based capital requirements for property and casualty insurance companies. At December 31, 2021, the Company estimates that all of ProAssurance's insurance subsidiaries will exceed the minimum required risk-based capital levels.

In late 2010, the NAIC adopted the Model Holding Co. Law. The Model Holding Co. Law, as compared to previous NAIC guidance, increases regulatory oversight of and reporting by insurance holding companies, including reporting related to non-insurance entities, and requires reporting of risks affecting the holding company group. Additionally, in 2012 the NAIC adopted ORSA, which requires insurers to maintain a framework for identifying, assessing, monitoring, managing and reporting on the "material and relevant risks" associated with the insurer's (or insurance group's) current and future business plans. ORSA

requires larger insurers, generally those with annual written premium volume greater than $1 billion as a group or $500 million as an individual insurer, to file an internal assessment of solvency with insurance regulators annually beginning in 2015. Although no specific capital adequacy standard is currently articulated in ORSA, it is possible that such standard will be developed over time. The Model Holding Co. Law and ORSA will be binding only if adopted by state legislatures and/or state insurance regulatory authorities and actual regulations adopted by any state may differ from that adopted by the NAIC. As of December 31, 2021, all states have adopted the Model Holding Co. Law and 49 states have adopted ORSA. ProAssurance was not required to file an internal assessment of solvency under the ORSA criteria for the years ended December 31, 2021 or 2020. Due to the additional written premium volume from the NORCAL transaction that closed May 5, 2021, ProAssurance will likely be required to file an internal assessment in 2022.

Also, the NAIC subsequently revised the Model Holding Co. Law to include provisions which allow regulatory supervision of the holding company group through supervisory colleges and which require reporting of risk and solvency assessments for the group. Certain states in which we operate adopted these revisions early, and we began filing our risk and solvency assessment in 2014.

Investment Regulation

Our operating subsidiaries are subject to state laws and regulations that require diversification of investment portfolios and that limit the amount of investments in certain investment categories. Failure to comply with these laws and regulations may cause non-conforming investments to be treated as non-admitted assets for purposes of measuring statutory surplus and, in some instances, would require divestiture of investments. We monitor the practices used by our operating subsidiaries for compliance with applicable state investment regulations and take corrective measures when deficiencies are identified.

Assessment Funds

Admitted insurance companies are required to be members of guaranty associations which administer state guaranty funds. To fund the payment of claims (up to prescribed limits) against insurance companies that become insolvent, these associations levy assessments on all member insurers in a particular state on the basis of the proportionate share of the premiums written by member insurers in the covered lines of business in that state. Maximum assessments permitted by law in any one year generally vary between 1% and 2% of annual premiums written by a member in that state, although state regulations may permit larger assessments if insolvency losses reach specified levels. Some states permit member insurers to recover assessments paid through surcharges on policyholders or through full or partial premium tax offsets, while other states permit recovery of assessments through the rate filing process. In recent years, participation in guaranty funds has not had a material effect on our results of operations.

Certain states in which we write workers' compensation insurance have established administrative and/or second injury funds that levy assessments against insurers that write business in their state. The assessments are generally based on insurer's proportionate share of premiums or losses in a particular state, and the assessment rate can vary from year to year.

Shared Markets

State insurance regulations may force us to participate in mandatory property and casualty shared market mechanisms or pooling arrangements that provide certain insurance coverage to individuals or other entities that are otherwise unable to purchase such coverage in the commercial insurance marketplace. Our operating subsidiaries' participation in such shared markets or pooling mechanisms is not material to our business at this time.

Federal Regulation

The Dodd-Frank Act was enacted in July 2010 and established additional regulatory oversight of financial institutions. To date, the Dodd-Frank Act has not materially affected our business. However, development of regulations is not complete, and there could yet be changes in the regulatory environment that affect the way we conduct our operations or the cost of compliance, or both.

One of the federal government bodies created by the Dodd-Frank Act was the FIO which in December 2013 released a proposal on insurance modernization and improvement of the system of insurance regulation in the U.S. Although the FIO is prohibited from directly regulating the business of insurance, it has authority to represent the U.S. in international insurance matters and has limited power to preempt certain types of state insurance laws. The proposal advocates significantly greater federal involvement in insurance regulation and identifies necessary reforms by the states to preclude further consideration of direct federal regulation. While the proposal does not necessarily imply that the federal government will displace state regulation completely, it does recommend more of a hybrid approach to insurance regulation. In response to the FIO proposal, the NAIC and a number of state legislatures have considered or adopted legislative proposals that alter and, in many cases, increase the authority of state agencies to regulate insurance companies and insurance holding company systems. We cannot

predict whether the proposals will be adopted or what impact, if any, subsequently enacted laws might have on our business, financial condition or results of operations.

In June 2012, Congress passed the Biggert-Waters Bill, which provided for a five-year renewal of the NFIP and, among other things, authorized the Federal Emergency Management Agency to carry out initiatives to determine the capacity of private insurers, reinsurers, and financial markets to assume a greater portion of the flood risk exposure in the U.S. and to assess the capacity of the private reinsurance market to assume some of the program's risk. In August 2017, the President of the U.S. signed an executive order revoking the establishment of a federal flood risk management standard. In November 2017, the U.S. House of Representatives adopted a bill to reauthorize the NFIP for five years and implement several reforms, including provisions designed to spur additional private insurer involvement in covering flood risk, but the U.S. Senate has yet to vote on the measure. Due to the 2017 hurricane season, Congress adopted a short-term extension to fund the NFIP which has subsequently received multiple short-term extensions and currently expires on March 11, 2022. We cannot predict whether the proposals will be adopted or extended or what impact, if any, subsequently enacted laws might have on our business, financial condition or results of operations.

U.S. Tax Legislation

Coronavirus Aid, Relief and Economic Security Act

In response to COVID-19, the CARES Act was signed into law on March 27, 2020 and contains several provisions for corporations and eases certain deduction limitations originally imposed by the TCJA. The CARES Act, among other things, includes temporary changes regarding the prior and future utilization of NOLs, temporary changes to the prior and future limitations on interest deductions, temporary suspension of certain payment requirements for the employer portion of Social Security taxes and the creation of certain refundable employee retention credits. See further discussion of the impact of the CARES Act on our results of operations and financial position provided in Item 7, Management's Discussion and Analysis, in the Critical Accounting Estimates section under the heading "Taxes" or Note 7 of the Notes to Consolidated Financial Statements.

American Rescue Plan Act of 2021

In response to economic concerns associated with COVID-19, the American Rescue Plan Act of 2021 was signed into law on March 11, 2021 and includes an expansion of the number of employees covered by the limitation on the deductibility of compensation in excess of $1 million. This provision is effective for tax years beginning after December 31, 2026. See further discussion of the impact of the American Rescue Plan Act of 2021 on our results of operations and financial position provided in Item 7, Management's Discussion and Analysis, in the Critical Accounting Estimates section under the heading "Taxes" or Note 7 of the Notes to Consolidated Financial Statements.

Terrorism Risk Insurance Act

TRIA, initially enacted in 2002 and reauthorized in 2007, 2015 and 2019 ensures the availability of insurance coverage for certain acts of terrorism, as defined in the legislation. The 2019 reauthorization extended the program through 2027. TRIA currently provides that during 2022 and in any year thereafter a loss event must exceed $200 million to trigger coverage and that the federal government will reimburse 80% of an insurer's losses in excess of the insurer's deductible, up to the maximum annual federal liability of $100 billion. TRIA requires that we offer terrorism coverage to our commercial policyholders in our workers' compensation line of business, for which we may, when warranted, charge an additional premium. The policyholders may or may not accept such coverage.

COVID-19

In response to COVID-19, the federal government and a number of states have introduced or adopted legislation to address issues related to the pandemic. The PREP Act was amended on March 27, 2020 to extend liability immunity for activities related to medical countermeasures against COVID-19, except for claims involving "willful misconduct" as defined in the PREP Act. Certain states have also established immunities for healthcare providers. Depending on the number of states that institute such changes and the terms of the changes, as well as the impact of the amendment to the PREP Act and any related legal challenges, we may experience a reduction in claims frequency and severity for our healthcare professional liability book of business.

Furthermore, we are closely monitoring the impact of potential legislation or court decisions that could retroactively require insurers to extend certain insurance to cover COVID-19 claims, even if the original contract excluded the cover of communicable diseases as is typical in certain policies; however, to date, legislative attempts have been unsuccessful. If successful, these actions could result in an increase in claim frequency and severity due to an unintended increase in exposure for Syndicate 1729 and Syndicate 6131 which could have an effect on our financial condition, results of operations and cash flows given our participation in those Syndicates.

Medical Injury Compensation Reform Act

In 1975, California enacted the Medical Injury Compensation Reform Act (MICRA) which, among other things, established a $250,000 cap on non-economic damages in medical cases. An initiative to amend MICRA will be on California's general election ballot in November 2022 and, if passed, will substantially change many aspects of MICRA, including but not limited to an increase in the cap on non-economic damages, an increase in caps on attorney's fees, and establishing a new class of claims for so-called "catastrophic injuries," in which no caps would apply. If successful, this initiative could have a material adverse effect on our financial condition, results of operations and cash flows given our concentration in California as a result of the NORCAL acquisition.

International

Cayman Islands

Our SPC business operates through our subsidiaries, Inova Re and Eastern Re, which are organized and licensed as Cayman Islands unrestricted Class B insurance companies. Inova Re and Eastern Re are subject to regulation by the CIMA. Applicable laws and regulations govern the types of policies that Inova Re and Eastern Re can insure or reinsure, the amount of capital they must maintain and the way it can be invested, and the payment of dividends. Inova Re and Eastern Re are required to maintain minimum capital of approximately $200,000 and must receive approval from the CIMA before they can pay any dividends.

United Kingdom

Syndicate 1729 and Syndicate 6131 are regulated in the U.K. by the Prudential Regulation Authority and the Financial Conduct Authority. All Lloyd's Syndicates must also comply with the bylaws and regulations established by the Council of Lloyd's including submission and approval of an annual business plan and maintenance of stipulated capital levels. Also, the Council of Lloyd's may call or assess a percentage of a member's underwriting capacity (currently a maximum of 5%) as a contribution to Lloyd's Central Fund, which, similar to state guaranty funds in the U.S., meets policyholder obligations if a Lloyd's member is otherwise unable to do so.

Effective January 1, 2016, the European Union's executive body, the European Commission, implemented capital adequacy and risk management regulations called Solvency II that applies to businesses within the European Union. Both Syndicate 1729 and Syndicate 6131 follow the Solvency II compliance guidelines set out by the Council of Lloyd's.

Human Capital Resources

The most important contributing factor to deliver our promise to protect others is our people. As such, the commitment we extend to and the investment we make in our employees (or team members) is of the highest priority. We are determined in our goal to attract, develop, and retain a diverse group of team members who embody our Mission, Vision and Values and this goal drives the programs and resources we proudly offer.

We are committed to providing a safe and healthy working environment where all team members are treated with dignity and respect, allowing them to do their best work. Further, we seek to provide equal opportunities while fostering a diverse and inclusive workplace that promotes team member engagement. To ensure our workforce is comprised of a diverse group of highly-qualified individuals, we are committed to advertising job openings and sourcing candidates through broad-reaching techniques. We are committed to a strategy of workforce diversity and inclusion, starting with our Board and extending through all levels within our organization. Further, we seek to provide a fulfilling work experience through the creation of well-documented career paths and opportunities for advancement, robust training and development programs and the management of transparent salary administration practices. Our competitive pay and benefit programs are designed to reward, support and retain our team members. To further illustrate the significance of our commitment to our team members and being the employer of choice, the Compensation Committee of the Board regularly reviews the Company's human capital management strategies and outcomes including matters related to diversity, equity and inclusion, talent management and development, talent acquisition and team member engagement.

We are committed to facilitating and fostering team member engagement. To support those objectives, we measure team member engagement and satisfaction by conducting "Pulse" surveys that gain real-time feedback from our team members on key issues. The results are shared with all team members and the data is used to steer our continuous improvement efforts. We regularly monitor and evaluate turnover metrics to ensure we are responsive to the evolving, competitive market for top talent.

During 2021, a large focus for the organization was onboarding and integrating the team members from NORCAL into our business structure, compensation and benefits as well as our team member engagement efforts. A benefit program comparison of both companies was completed resulting in the enhancement of several programs including adding paid volunteer days, increasing the number of floating holidays, improving tuition reimbursement, adding adoption assistance and increasing the number of free visits through the Employee Assistance Program. When downsizing and lay-offs were necessary in 2021, we provided favorable severance packages that included support of re-employment.

Some examples of key programs and initiatives that are focused on attracting, developing and retaining our diverse workforce include:

- *Diversity, Equity and Inclusion* - To advance our commitment to fostering a diverse, inclusive and equitable workplace, in 2021 we formed our inaugural Diversity, Equity and Inclusion Council. This council is comprised of team members from across the organization who serve as an ongoing resource in identifying objectives and tracking achievements. The council recommended four key strategic objectives for diversity, equity and inclusion at ProAssurance over the next twenty-four months which include:
    - grow team member and management education and awareness;
    - encourage formation of additional Team Member Engagement Groups;
    - expand our recruitment practices; and
    - provide a safe workplace for all team members supported by a zero-tolerance no harassment policy.

  We continue to enhance our professional development and training programs to build knowledge, understanding and skill in support of full cultural competency. To this end, all team members completed a cultural competency training program during 2021.

- *Team Member and Leadership Development* - We invest in training and development programs that support our Mission, Vision and Values, encourage continuous learning, equip team members for advancement and encourage a long-term partnership with the Company. We provide career paths for team members to continue to advance their technical skills. To grow the skills of our current managers and plan for future succession needs, we provide a tiered leadership development program, Leadership That Works, that includes both in-person group and self-led content.

- *Team Member Health and Welfare* - We recognize the importance of a comprehensive benefits strategy to support the unique needs of all team members. We made several key changes in 2021 that address the expanding needs of our team members as a result of the ongoing pandemic and its impact on individuals and families. We expanded our virtual health management benefits further to include additional free benefits to support team member and family emotional well-being. We also completed a benefit program comparison of both companies resulting in the enhancement of several programs, as previously discussed.

- *COVID-19 Response* - As of December 31, 2021, the majority of our team members continue to work remotely as a result of the ongoing pandemic. We continue to regularly monitor the situation at the highest level of the organization, implementing changes to strategy as appropriate. When we do return to the office, the majority of our workforce will return in a hybrid work model which will allow for a combination of in-office and remote work schedules, affording team members significantly more flexibility in balancing their work/life needs.

ProAssurance Corporation and our subsidiaries are equal opportunity employers and we do not discriminate either directly or indirectly against employees or prospective employees on the basis of race, color, religion, sex, sexual preference/orientation, citizenship, marital status, veteran status, national origin, age or disability, or any other attribute protected by applicable law or regulation. At December 31, 2021, we had 1,021 employees, none of whom were represented by a labor union. We consider our employee relations to be good.

Enterprise Risk Management

As a property and casualty insurance provider, we are exposed to many risks stemming from both our insurance operations and the environments in which we operate. Since certain risks can be correlated with other risks, an event or a series of events can impact multiple areas of the Company simultaneously and have a material effect on the Company's results of operations, financial position and/or liquidity. In response to these exposures we have implemented an ERM program. Our ERM program consists of numerous processes and controls that have been designed by our senior management with oversight by our Board and implemented across our organization. We utilize our ERM program to identify potential risks from all aspects of our operations and to evaluate these risks in a manner that is both prudent and balanced. Our primary objective is to develop a risk appetite that creates and preserves value for all of our stakeholders.

Management Risk Oversight

We have a risk management framework that recognizes the risks inherent in our operating segments as well as the risks associated with the operations of our holding company that is overseen by our Chief Executive Officer. The risk management process is managed by corporate executives in each line of business who are responsible for our key risk areas, including adequacy of loss reserves; defense of claims and the litigation process; the quality of investments supporting our reserves and capital; compliance with regulatory and financial reporting requirements; concentration in our insurance lines of business; and information privacy and data security. Our Chief Executive Officer and members of executive management are responsible for identifying material risks associated with these and other risk areas and for establishing and monitoring risk management solutions that address levels of risk appetite and risk tolerance that are recommended by management and reviewed by the Board. Our internal auditing department is responsible for reviewing and testing these risk management solutions.

Board of Directors Risk Oversight

The Board is responsible for ensuring that our ERM process is in place and functioning. The Board has divided primary ERM oversight responsibility between the Audit Committee and the Nominating/Corporate Governance Committee as follows:

- The Audit Committee has the primary oversight responsibility for risks relating to financial reporting and compliance. We have established lines of communication between the Audit Committee and our independent auditor, internal auditor and management that enable the Audit Committee to perform its oversight function.
- The Nominating/Corporate Governance Committee has the primary responsibility for oversight of those risks covered by the ERM process that are not the responsibility of the Audit Committee. The Nominating/Corporate Governance Committee reviews the ERM process established by management's ERM Committee and monitors the functioning of the process. It also reviews recommendations of our ERM Committee as to materiality thresholds for risks covered in the ERM process and as to the levels of risk appetite and risk tolerance with respect to covered risks.

ITEM 1A. RISK FACTORS.

There are a number of factors, many beyond our control, which may cause results to differ significantly from our expectations. Through our ERM program, as previously discussed, we have attempted to identify and understand the nature, caliber and sensitivity of material foreseeable risks, mitigate or avoid those risks and determine a course of action necessary to address such risks. These risk factors fall under the following four categories: Insurance, Financial, Operational and General. Any factor described in this report could by itself, or together with one or more other factors, have a negative effect on our business, results of operations and/or financial condition. There may be factors not described in this report that could also cause results to differ from our expectations.

Insurance

Insurance market conditions may alter the effectiveness of our current business strategy and impact our revenues.

The property and casualty insurance business is highly competitive. We compete in a fragmented market comprised of many insurers, ranging from smaller single state monoline insurers who have an extensive knowledge of local markets to large national insurers who offer multiple product lines and whose financial strength and resources may be greater than ours. In many instances, coverage we offer is also available through mutual entities whose ROE objectives may be lower than ours. Also, there are many opportunities for self-insurance and for participation in an alternative risk transfer mechanism, such as a captive insurer or a risk retention group.

Competition in the property and casualty insurance business is based on many factors, including premiums charged and other terms and conditions of coverage, services provided, financial ratings assigned by independent rating agencies, claims services, reputation, geographic scope, local presence, agent and client relationships, financial strength and the experience of the insurance company in the line of insurance to be written. Actions of competitors could adversely affect our ability to attract and retain business at current premium levels, impact our market share and reduce the profits that would otherwise arise from operations.

The cyclicality in the property and casualty insurance industry could have a material adverse effect on our ability to improve or maintain underwriting profits or to grow or maintain premium volume.

The insurance and reinsurance markets have historically been cyclical, characterized by extended periods of intense price competition and other periods of reduced competition. The professional liability area has been particularly affected by these cycles. Underwriting cycles are generally driven by an excess of capacity available and actively pursuing business that is deemed profitable. This action drives pricing down. Since the professional liability industry has a long development period, prices typically fall too far resulting in poor underwriting results for a period of time. The reaction is then a withdrawal of

capacity, reduced availability of coverage offerings and price increases. In past cycles, these actions improve profitability over a few years inviting new capital into the market again which causes the cycle to repeat. Events other than price can also have a material effect on the duration and depth of the underwriting cycles, such as severity spikes, tort reforms, abrupt frequency changes or reinsurance availability. Changes in the frequency and severity of losses may affect the cycles of the insurance and reinsurance markets significantly. During "soft markets" where price competition is high and underwriting profits are poor, growth and retention of business become challenging which may result in reduced premium volume. During the initial stages of "hard markets", premium volumes rise for existing business and retention levels fall. As more carriers enter this action phase, underwriting profits begin to improve, although their achievement may take several years to materialize. As the cycle progresses, opportunities may then be presented to grow profitably at the higher premium levels.

The Company's results of operations could be adversely impacted by catastrophes, both natural and man-made, pandemics, severe weather conditions, climate change or closely related series of events.

Catastrophes can be caused by unpredictable natural events such as hurricanes, windstorms, severe storms, tornadoes, floods, hailstorms, severe winter weather, earthquakes, explosions and fire, and by other natural and man-made events, such as terrorist attacks, civil and political unrest, as well as pandemics and other similar outbreaks in many parts of the world, including the ongoing coronavirus pandemic referred to as COVID-19. Insurance companies are not permitted to reserve for a catastrophe until it has occurred. Although we purchase reinsurance protection for risks we believe bear a significant level of catastrophe exposure, actual losses resulting from a catastrophic event or events may exceed our reinsurance protection. Furthermore, for significant catastrophic exposure, the inability or unwillingness of the reinsurer to make timely payments under the terms of the reinsurance agreement could impact our liquidity. These events may have a material adverse effect on our workforce and business operations as well as the workforce and operations of our insureds and independent agents. Some of the assets in our investment portfolio may be adversely affected by declines in the equity markets, changes in interest rates, reduced liquidity and economic activity caused by large-scale catastrophes, pandemics, terrorist attacks or similar events which could have a material adverse effect on our financial position, results of operations and liquidity.

The incidence, frequency and severity of catastrophes are inherently unpredictable. While we use historical data and modeling tools to assess our potential exposure to catastrophic losses under various conditions and probability scenarios, such assessments do not necessarily accurately predict future losses or accurately measure our potential exposure. The extent of losses from a catastrophe is a function of both the total amount of insured exposure in the area affected by the event and the severity of the event.

Our loss exposure for a terrorist act meeting the TRIA definition is mitigated by our coverage provided by this program as described in Part I under the heading "Insurance Regulatory Matters." Congress has the ability to alter or repeal the provisions of TRIA at its discretion, and if altered or repealed, our exposure could increase and result in premium increases for those types of coverages. Workers' compensation coverages cannot exclude damages related to an act of terrorism, and if TRIA were repealed or the benefits were substantially reduced, this might affect our ability to offer these coverages at a reasonable rate. In addition, the program currently expires at the end of 2027, and the failure to extend the program could adversely affect our business through increased exposure to a catastrophic level of terrorism losses.

Our results of operations and financial condition may be affected if actual insured losses differ from our loss reserves or if actual amounts recoverable under reinsurance agreements differ from our estimated recoverables.

We establish reserves as balance sheet liabilities, representing our estimates of amounts needed to resolve reported and unreported losses and pay related loss adjustment expenses. Our largest liability is our reserve for losses and loss adjustment expenses. Due to the size of our reserve for losses and loss adjustment expenses, even a small percentage adjustment to our reserve can have a material effect on our results of operations for the period in which the change is made.

The process of estimating loss reserves is complex. Significant periods of time may elapse between the occurrence of an insured loss, the reporting of the loss by the insured and payment of that loss. Ultimate loss costs, even for claims with similar characteristics, can vary significantly depending upon many factors including but not limited to the nature of the claim, including whether the claim is an individual or a mass tort claim, the personal situation of the claimant or the claimant’s family, the outcome of jury trials, the legislative and judicial climate where the insured event occurred, general economic conditions and, for claims involving bodily injury, the trend of healthcare costs. Consequently, the loss cost estimation process requires actuarial skill and the application of judgment and such estimates require periodic revision. As part of the reserving process, we review the known facts surrounding reported claims as well as historical claims data and consider the impact of various factors such as:

- for reported claims, the nature of the claim and the jurisdiction in which the claim occurred;
- trends in paid and incurred loss development;
- trends in claim frequency and severity;
- emerging economic and social trends;

- trends in healthcare costs for claims involving bodily injury;
- inflation and levels of employment; and
- changes in the regulatory, legal and political environment.

This process assumes that past experience, adjusted for the effects of current developments and anticipated trends, is an appropriate, but not necessarily accurate, basis for predicting future events. There is no precise method for evaluating the impact of any specific factor on the adequacy of reserves, and actual results are likely to differ from original estimates. We evaluate our reserves each period and increase or decrease reserves as necessary based on our estimate of future claims payments. An increase to reserves has a negative effect on our results of operations in the period of increase; a reduction to reserves has a positive effect on our results of operations in the period of reduction.

Our loss reserves also may be affected by court decisions that expand liability of our policies after they have been issued. As previously discussed under the heading "Insurance Regulatory Matters," we are closely monitoring the impact of potential legislation or court decisions that could effectively expand workers' compensation coverage by establishing a presumption of compensability for certain types of workers which could result in an increase in claim frequency and severity for our workers' compensation book of business. As it relates to our exposures through our participation in Syndicate 1729 and Syndicate 6131, we are also monitoring the impact of potential legislation or court decisions that could retroactively require insurers to extend certain insurance to cover COVID-19 claims, even if the original contract excluded the cover of communicable diseases, which could result in an increase in claim frequency and severity for Syndicate 1729 and Syndicate 6131 due to an unintended increase in exposure. These attempts to date, however, have been unsuccessful. In addition, extension of statutes of limitations in some states could result in assertion of covered claims that otherwise would have been time-barred. We cannot predict the occurrence of such claim, the magnitude of any associated liability if such claims occur, or the effect of such claims on our financial results. Further, a significant jury award or series of awards against one or more of our insureds could require us to pay large sums of money in excess of our reserved amounts. Due to uncertainties inherent in the jury system, any case that is litigated to a jury verdict has the potential to incur a loss that has a material adverse effect on our results of operations.

We purchase reinsurance to mitigate the effect of large losses. Our receivable from reinsurers on unpaid losses and loss adjustment expenses represents our estimate of the amount of our reserve for losses that will be recoverable under our reinsurance programs. We base our estimate of funds recoverable upon our expectation of ultimate losses and the portion of those losses that we estimate to be allocable to reinsurers based upon the terms and conditions of our reinsurance agreements. Given the uncertainty of the ultimate amounts of our losses, our estimates of losses and related amounts recoverable may vary significantly from the eventual outcome. Also, for certain of our reinsurance agreements, we estimate premiums ceded to the reinsurer, subject to certain maximums and minimums, based in part on losses reimbursed or to be reimbursed under the agreement. Due to the size of our reinsurance balances, changes to our estimate of the amount of reinsurance that is due to us could have a material effect on our results of operations in the period for which the change is made.

We use analytical models to assist our decision-making in key areas such as pricing and reserving and may be adversely affected if actual results differ materially from the model outputs and related analyses.

We use various modeling techniques and data analytics to analyze and estimate exposures, loss trends and other risks associated with our assets and liabilities. This includes both proprietary and third-party modeled outputs and related analyses to assist us in decision-making (e.g., underwriting, pricing, claims, reserving, reinsurance and catastrophe risk) and to maintain a competitive advantage. Since there is no industry standard for assumptions and preparation of insured data for use in these models, our modeled losses may not be comparable to estimates made by other companies. The modeled outputs and related analyses from both proprietary and third parties are subject to various assumptions, uncertainties, model design errors and the inherent limitations of any statistical analysis, including those arising from the use of historical internal and industry data and assumptions. The loss of use of such proprietary models could impact our competitive advantage in certain aspects of our business and impact future financial performance. Changes in the social, judicial or economic environments in which we operate may make modeled outcomes less reliable or produce new, non-modeled risks. In addition, the effectiveness of any model can be degraded by operational risks including, but not limited to, the improper use of the model. Consequently, actual results may differ materially from our modeled results. If actual losses exceed assumptions that were made when our products were priced or our models fail to appropriately estimate the risks we are exposed to, our business, financial condition, results of operations or liquidity may be adversely affected. Furthermore, our results may be adversely affected if actual losses exceed assumptions that were made when pricing products that also include features such as an option to purchase extended reporting endorsement or "tail" coverage, which are offered at rates that are tied to expiring premiums charged. The profitability and financial condition of the Company substantially depends on the extent to which our actual experience is consistent with assumptions we use in our models and ultimate model outputs.

We are exposed to and may face adverse developments involving mass tort claims arising from coverages provided to our insureds.

Establishing reserves for mass tort claims is subject to uncertainties due to many factors, including expanded theories of liability, geographical location and jurisdiction of the lawsuits. Moreover, it is difficult to estimate our ultimate liability for such claims due to evolving judicial interpretations of various tort theories of liability and defense theories, such as federal preemption and joint and several liability, as well as the application of insurance coverage to these claims.

If market conditions cause reinsurance to be more costly or unavailable, we may be required to bear increased risk or reduce the level of our underwriting commitments.

As part of our overall risk and capacity management strategy, we purchase reinsurance for significant amounts of risk underwritten by our insurance subsidiaries. Market conditions beyond our control determine the availability and cost of the reinsurance. We may be unable to maintain current reinsurance coverage or to obtain other reinsurance coverage in adequate amounts and at favorable rates. If we are unable to renew our expiring coverage or to obtain new reinsurance coverage, either our net exposure to risk would increase or, if we are unwilling to bear an increase in net risk exposures, we would need to reduce the amount of our underwritten risk.

Our claims handling could result in a bad faith claim against us.

We have been sued from time to time for allegedly acting in bad faith during our handling of a claim. The damages claimed in actions for bad faith may include amounts owed by the insured in excess of the policy limits as well as consequential and punitive damages. Awards above policy limits are possible whenever a case is taken to trial. These actions have the potential to have a material and adverse effect on our financial condition and results of operations.

If we are unable to maintain favorable financial strength ratings, it may be more difficult for us to write new business or renew our existing business.

Independent rating agencies assess and rate the claims-paying ability and the financial strength of insurers based upon criteria established by the agencies. Periodically the rating agencies evaluate us to confirm that we continue to meet the criteria of previously assigned ratings. The financial strength ratings assigned by rating agencies to insurance companies represent independent opinions of financial strength and ability to meet policyholder and debt obligations and are not directed toward the protection of equity investors.

Our principal operating subsidiaries hold favorable claims paying ratings with AM Best, Fitch and Moody’s. Claims-paying ratings are used by agents, brokers and customers as an important means of assessing the financial strength and quality of insurers. If our financial position deteriorates or the rating agencies significantly change the rating criteria that are used to determine ratings, we may not maintain our favorable financial strength ratings from the rating agencies. A downgrade or involuntary withdrawal of any such rating could limit or prevent us from writing desirable business.

The following table presents the claims paying ratings of our insurance subsidiaries as of February 17, 2022.

	Rating Agency [1]		
	AM Best (www.ambest.com)	**Fitch (www.fitchratings.com)**	**Moody's (www.moodys.com)**
ProAssurance Indemnity Company, Inc.	A (Excellent)	A- (Strong)	A3
ProAssurance Casualty Company	A (Excellent)	A- (Strong)	A3
ProAssurance Specialty Insurance Company [2]	A (Excellent)	A- (Strong)	NR
ProAssurance Insurance Company of America	A (Excellent)	A- (Strong)	A3
Medmarc Casualty Insurance Company	A (Excellent)	A- (Strong)	NR
NORCAL Group [3]	A- (Excellent)	NR	NR
Allied Eastern Indemnity Company	A (Excellent)	A- (Strong)	A3
Eastern Advantage Assurance Company	A (Excellent)	A- (Strong)	NR
Eastern Alliance Insurance Company	A (Excellent)	A- (Strong)	A3
Eastern Re Ltd., SPC	NR	NR	NR
Inova Re Ltd., SPC	NR	NR	NR
Lloyd's Syndicate 1729 and Syndicate 6131 [4]	A (Excellent)	AA- (Strong)	NR

[1] NR indicates that the subsidiary has not been rated by the listed rating agency.

[2] Effective December 31, 2021, ProAssurance Specialty Insurance Company, Inc. merged with and into Noetic Specialty Insurance Company and Noetic was renamed ProAssurance Specialty Insurance Company.

[3] NORCAL Group is comprised of FD Insurance Company, Medicus Insurance Company, NORCAL Insurance Company, NORCAL Specialty Insurance Company and Preferred Physicians Medical Risk Retention Group, a Mutual Insurance Company, all of which have an individual rating of A-.

[4] Rating provided is the rating applicable to all Lloyd's syndicates.

In addition to the evaluation of our claims paying ability, four rating agencies (AM Best, S&P, Fitch and Moody's) evaluate and rate our ability to service current debt and potential debt. These financial strength ratings reflect each agency's independent evaluation of our ability to meet our obligation to holders of our debt, if any. Most recently, our senior debt is rated "BBB-" with a negative outlook, by Fitch, reflecting a one notch downgrade following the financing and closing of the NORCAL transaction. Additionally, our senior debt is rated "a+" with a negative outlook, by AM Best, "BB" with a negative outlook, by S&P and "Baa3" with a negative outlook, by Moody's. While these ratings may be of greater interest to investors than our claims-paying ratings, these are not ratings of our equity securities nor a recommendation to buy, hold or sell our equity securities.

Our business could be adversely affected by the loss or consolidation of independent agents, agencies, brokers or brokerage firms.

We heavily depend on the services of independent agents and brokers in the marketing of our insurance products. We face competition from other insurance companies for their services and allegiance. These agents and brokers may choose to direct business to competing insurance companies.

As a member of the Lloyd's market and a participant in certain Lloyd's Syndicates we are subject to certain risks which could affect us.

As a participant in Lloyd's Syndicates, we are subject to certain risks and uncertainties, including the following:

- reliance on insurance and reinsurance brokers and distribution channels to distribute and market products;
- obligation to pay levies to Lloyd's;
- obligations to maintain funds to support underwriting activities and risk-based capital requirements that are assessed periodically by Lloyd's and subject to variation;
- ability to maintain liquidity to fund claims payments, when due;
- ability to obtain reinsurance and retrocessional coverage to protect against adverse loss activity;
- reliance on ongoing approvals from Lloyd's and various regulators to conduct business, including a requirement that Annual Business Plans be approved by Lloyd's before the start of underwriting for each account year;
- financial strength ratings are derived from the rating assigned to Lloyd's, although they have limited ability to directly affect the overall Lloyd's rating; and
- reliance on Lloyd's trading licenses in order to underwrite business outside the U.K.

Financial

We cannot guarantee that our reinsurers will pay in a timely fashion or at all, and as a result, we could experience losses.

We transfer part of our risks to reinsurance companies in exchange for part of the premium we receive in connection with the risk. Although our reinsurance agreements make the reinsurer liable to us to the extent the risk is transferred, our liability to our policyholders remains our responsibility. Reinsurers may periodically dispute our demand for reimbursement from them based upon their interpretation of the terms of our agreements or may fail to pay us for financial or other reasons. If reinsurers refuse or fail to pay us or fail to pay on a timely basis, our financial results and/or cash flows could be adversely affected and could have a material effect on our results of operations in the period in which uncollectible amounts are identified.

At December 31, 2021, our receivable from reinsurers on unpaid losses and loss adjustment expenses was $452 million, our receivable from reinsurers on paid losses and loss adjustment expenses was $15 million and our expected credit losses associated with our reinsurance receivables (related to both paid and unpaid losses) were nominal in amount. As of December 31, 2021, no reinsurer, on an individual basis, had an estimated net amount due which exceeded $52 million.

The impact of the COVID-19 pandemic and related general economic conditions could have a material adverse effect on our results of operations, financial position or liquidity.

The ongoing global COVID-19 pandemic has impacted the global economy, financial markets and our results of operations. Because of the size and breadth of this pandemic, all of the direct and indirect consequences of COVID-19 are not yet known and may not emerge for years. Impacts to our results of operations could be widespread and material, including but not limited to, the following:

- increases in frequency and/or severity of compensable claims, losses litigation and related expenses;
- losses from COVID-19 related claims could be greater than our reserves for those losses;
- government mandates and/or legislative changes in response to COVID-19, including, but not limited to: actions prohibiting an insurance company from canceling insurance policies in accordance with policy terms; requiring an insurance company to cover losses when its policies specifically excluded coverage or did not provide coverage; preventing an insurance company from filing for a rate increase; ordering an insurance company to provide premium refunds;
- continued volatility and further disruption in global financial markets that could materially affect our investment portfolio valuations and returns;
- increased cybersecurity risk as criminals continually seek new ways to target shifting business models;
- increased credit risk;
- business disruption to independent insurance agents and brokers;
- negative impact on premium volume due to reduced demand and decreased insured exposures due to the impact of COVID-19 on general economic activity, especially for lines of business that are sensitive to rates of economic growth and those that are impacted by audit premium adjustments; and
- negative impact on expense ratios due to reduced premium volume.

We are taking precautions to protect the safety and well-being of our team members while providing uninterrupted service to our policyholders and claimants. It is not possible at this time to estimate the impact that COVID-19 could have on our results of operations and financial condition, as the impact will depend on future developments, which are highly uncertain and cannot be predicted. Further, to the extent the COVID-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described herein.

If our businesses do not perform well, we may be required to recognize an impairment of our goodwill or intangible assets, which could have a material adverse effect on our results of operations and financial condition.

We review our definite–lived intangible assets for impairment when events or changes in circumstances indicate that the carrying value may not be recoverable from estimated future cash flows. We test goodwill and intangible assets with indefinite lives for impairment on an annual basis or upon the occurrence of certain triggering events or substantive changes in circumstances that indicate the asset may be impaired. If we determine that such goodwill or intangible assets are impaired, we would be required to write down the goodwill or the intangible asset by the amount of the impairment, with a corresponding charge to net income (loss). Such write downs could have a material adverse effect on our results of operations or financial position.

Our investment results may be impacted by changes in interest rates, U.S. monetary and fiscal policies as well as broader economic conditions.

Changes in interest rates and U.S. fiscal, monetary and trade policies as well as broader economic conditions could have a material adverse effect on our investment results. Fluctuations in the value of our investment portfolio can occur as a result of

these changes. Our investment portfolio is primarily comprised of interest-earning assets, marked to fair value each period. Thus, prevailing economic conditions, particularly changes in market interest rates, may significantly affect our results of operations. Significant movements in interest rates potentially expose us to lower yields or lower asset values. Changes in market interest rate levels generally affect our net income (loss) to the extent that reinvestment yields are different than the yields on maturing securities. Changes in interest rates also can affect the value of our interest-earning assets, which are principally comprised of fixed and adjustable-rate investment securities. Generally, the values of fixed-rate investment securities fluctuate inversely with changes in interest rates.

Our investments are subject to credit, prepayment and other risks.

A significant portion of our total assets ($4.8 billion or 78%) at December 31, 2021 are financial instruments whose value can be significantly affected by economic and market factors beyond our control including, among others, the unemployment rate, the strength of the domestic housing market, the price of oil, changes in interest rates and spreads, consumer confidence, investor confidence regarding the economic prospects of the entities in which we invest, corrective or remedial actions taken by the entities in which we invest, including mergers, spin-offs and bankruptcy filings, the actions of the U.S. government and global perceptions regarding the stability of the U.S. economy. Adverse economic and market conditions could cause investment losses or impairment of our securities, which could affect our financial condition, results of operations or cash flows.

At December 31, 2021 approximately 24% of our investment portfolio was invested in mortgage and asset-backed securities. We utilize ratings determined by NRSROs (Moody's, Standard & Poor's and Fitch) as an element of our evaluation of the creditworthiness of our securities. The ratings are subject to error by the agencies; therefore, we may be subject to additional credit exposure should the rating be misstated.

Our asset-backed securities are also subject to prepayment risk. A prepayment is the unscheduled return of principal. When rates decline, the propensity for refinancing may increase and the period of time we hold our asset-backed securities may shorten due to prepayments. Prepayments may cause us to reinvest cash proceeds at lower yields than the retired security. Conversely, as rates increase and motivations for prepayments lessen, the period of time over which our asset-backed securities are repaid may lengthen, causing us to not reinvest cash flows at the higher available yields.

At December 31, 2021 the fair value of our state/municipal portfolio was $519.2 million (amortized cost basis of $511.8 million). While our state/municipal portfolio had a high credit rating (AA on average), which indicates a strong ability to pay, there is no assurance that there will not be a credit related event which would cause fair values to decline. An economic downturn could lessen tax receipts and other revenues in many states and their municipalities.

Our tax credit partnership interests are subject to risks related to the potential forfeiture of the tax credits and all or a portion of the previously claimed tax credits. Loss of all or a portion of the tax credits might occur if the property owner fails to meet the specified requirements of planning and constructing or, in the case of the qualified affordable housing project tax credits, fails to operate the property as required or below expected capacity. Changes to tax rates may change the expected duration of the utilization of tax credits. While this would not impact the amount of tax credits we receive, a change in duration could be impactful from an economic perspective due to the time value of money. Additionally, if tax rates were to decrease the value of losses embedded in our tax credits could decrease due to a lower deduction value, which would reduce the carrying value of the partnership interests and could result in an impairment. At December 31, 2021 the carrying value of our tax credit partnership interests was approximately $12.4 million.

In a period of market illiquidity and instability, the fair values of our investments are more difficult to assess, and our assessments may prove to be greater or less than amounts received in actual transactions.

At December 31, 2021 and in accordance with applicable GAAP, we valued 97% of our investments at fair value and the remaining 3% at cost, equity, or cash surrender value. See Notes 1, 3 and 4 of the Notes to Consolidated Financial Statements for additional information.

We determine the fair value of our investments using quoted exchange or over-the-counter prices, when available. At December 31, 2021, we valued approximately 8% of our investments in this manner. When exchange or over-the-counter quotes are not available, we estimate fair values based on broker dealer quotes and various other valuation methodologies, which may require us to choose among various input assumptions and utilize judgment. At December 31, 2021, approximately 83% of our investments were valued in this manner. When markets exhibit significant volatility, there is more risk that we may utilize a quoted market price, broker dealer quote, valuation technique or input assumption that results in a fair value estimate that is either over or understated as compared to actual amounts that would be received upon disposition of the security. At December 31, 2021, approximately 6% of our investments are investment funds which measure fund assets at fair value on a recurring basis and provide us with a NAV for our interest. As a practical expedient, we consider the NAV provided to approximate the fair value of the interest. NAV is provided by the asset managers, and in some cases, estimates are used for

valuation and are subject to variations depending on those estimates. Our funds valued at NAV have various redemption requirements and lock-up provisions (see Note 3 of the Notes to Consolidated Financial Statements for further information).

Our ability to issue additional debt or letters of credit or other types of indebtedness on terms consistent with current debt is subject to market conditions, economic conditions at the time of proposed issuance, results of ratings reviews and the inclusion in certain bond indices of past and future issues. Also, certain of our current debt agreements and loans include financial covenants, and the issuance of debt by one of our insurance subsidiaries requires regulatory approval, both of which may limit or prohibit the issuance of additional debt.

Our Revolving Credit Agreement, which expires in November 2024, permits borrowings of up $300 million. The agreement requires that our consolidated debt to capital ratio (0.23 to 1.0 at December 31, 2021) be 0.35 to 1.0 or less and that we maintain a minimum net worth of $1 billion which represented 65% of consolidated shareholders' equity, excluding AOCI, determined as of June 30, 2019.

During 2013, we issued $250 million of unsecured Senior Notes Payable due in 2023 at a 5.3% interest rate. Furthermore, on May 5, 2021, NORCAL Insurance Company, successor to NORCAL Mutual Insurance Company, issued Contribution Certificates, which are due in 2031, to certain NORCAL policyholders in the conversion at a 3.0% interest rate with a principal amount of $191 million. There is no guarantee that additional debt could be issued on similar terms in the future as rates available to us may change due to changes in the economic climate, or shifts in the yield curve may occur, or an increase in our level of debt may result in rating agencies lowering our debt rating.

The interest rates on our Revolving Credit Agreement and available-for-sale fixed maturities portfolio are priced using a spread over LIBOR, which will be phased out in the future.

LIBOR is the basic rate of interest used in lending between banks on the London interbank market and is widely used as a reference for setting interest rates on loans globally. The terms of certain of our debt agreements include interest rates which are calculated based on LIBOR.

On July 27, 2017, the United Kingdom’s Financial Conduct Authority, which regulates LIBOR, announced that it intends to phase out LIBOR by the end of 2021. On March 5, 2021, the United Kingdom's Financial Conduct Authority and Intercontinental Exchange Benchmark Administration announced that the one-week and two-month U.S. dollar LIBOR settings will cease to be published immediately after December 31, 2021 and the publication of overnight and one-, three-, six-, and twelve-month U.S. dollar LIBOR settings will be extended through June 30, 2023. In addition, the U.S. Federal Reserve announced that it intends for all contracts written with LIBOR benchmarks to end on or before June 30, 2023. The U.S. Federal Reserve, in conjunction with the Alternative Reference Rates Committee, a steering committee comprised of large U.S. financial institutions, announced the replacement of U.S. dollar LIBOR with a new index calculated by short-term repurchase agreements, backed by U.S. Treasury securities called the Secured Overnight Financing Rate. The first publication of SOFR was released in April 2018 and was subsequently codified by the FASB in October 2018. The updated codification added the overnight index swap rate ("OIS") based on the SOFR to the list of U.S. benchmark interest rates that are eligible to be hedged. During 2020, the FASB issued guidance intended to assist stakeholders during the market-wide reference rate transition period and is effective for a limited period between March 12, 2020 and December 31, 2022. The guidance provides optional expedients and exceptions for applying GAAP to contracts, hedging relationships and other transactions that reference LIBOR or another reference rate that is expected to be discontinued because of reference rate reform.

We have exposure to LIBOR-based financial instruments through our variable rate Revolving Credit Agreement; however, this agreement includes provisions for an alternative benchmark rate if LIBOR ceases to exist which does not materially change our liability exposure. Additionally, we have exposure to LIBOR in our available-for-sale fixed maturities portfolio which represented approximately 6% of our total investments, or $307 million, as of December 31, 2021; 57% of these investments with exposure to LIBOR were issued during 2021 or 2020 and include provisions for an alternative benchmark rate. Optional expedients for contract modifications include a prospective adjustment that does not require contract remeasurement or reassessment of a previous accounting determination; therefore, the modified contract is accounted for as a continuation of the existing contract. At this time, we cannot predict the overall effect of the modification or discontinuation of LIBOR or the establishment of alternative benchmark rates.

Resolution of uncertain tax matters and changes in tax laws or taxing authority interpretations of tax laws could result in actual tax benefits or deductions that are different than we have estimated, both with regard to amounts recognized and the timing of recognition. Such differences could affect our results of operations or cash flows.

Our provision for income taxes, our recorded tax liabilities and net deferred tax assets, including any valuation allowances, are recorded based on estimates. These estimates require us to make significant judgments regarding a number of factors, including, among others, the applicability of various federal and state laws, the interpretations given to those tax laws by taxing authorities, courts and the Company, the timing of future income and deductions, and our expected levels and sources

of future taxable income. We believe our tax positions are supportable under current tax laws and that our estimates are prepared in accordance with GAAP. Additionally, from time to time, due to changes in economic and/or political conditions, there are changes in tax laws and interpretations of tax laws which could significantly change our estimates of the amount of tax benefits or deductions expected to be available to us in future periods. Specifically, changes in federal tax law as a result of the TCJA included a reduction in the U.S. corporate income tax rate, changes to the cost of cross border reinsurance, changes to the overall tax base and a limitation on the deductibility of certain executive compensation in future periods. Changes to our prior estimates in these cases would be reflected in the period changed and could have a material effect on our effective tax rate, financial position, results of operations and cash flows. As the Company has reinsurance operations domiciled in the Cayman Islands, changes in the tax laws of the Cayman Islands as well as the change in U.S. federal tax law as a result of the TCJA regarding outbound cross border affiliate reinsurance could result in the loss of profitability of that business.

We are subject to U.S. federal and various state income taxes as well as U.K. related taxes. In November 2021, the U.S. House of Representatives passed the “Build Back Better Act” budget reconciliation bill and it is currently pending action in the Senate. The Build Back Better Act as currently drafted, imposes a 15% minimum tax on corporate book income for corporations with profits over $1 billion, imposes a 1% tax on corporate stock repurchases, modifies the GILTI provisions, and implements a new limitation on interest deductions. Although it is uncertain if some or all of these proposals will be enacted, a significant change in U.S. tax law may materially and adversely impact our income tax liability, provision for income taxes and effective tax rate. We are periodically under examination by federal, state and local authorities regarding income tax matters, and our tax positions could be successfully challenged; the costs of defending our tax positions could be considerable. Our estimate of our potential liability for known uncertain tax positions is reflected in our financial statements. As of December 31, 2021 we had a net deferred tax asset of approximately $117.6 million and a net federal income tax receivable of approximately $7.9 million, which included a liability for unrecognized current tax benefits of $3.0 million.

Operational

Changes due to financial reform legislation could have a material effect on our operations.

The U.S. federal government generally has not directly regulated the insurance industry except for certain areas of the market, such as insurance for flood, nuclear and terrorism risks. However, the federal government has undertaken initiatives or considered legislation in several areas that may affect the insurance industry. The Dodd-Frank Act was enacted in July 2010 and established additional regulatory oversight of financial institutions (see previous discussion under the heading "Insurance Regulatory Matters"). Our business could be affected by changes to the U.S. system of insurance regulation including legislative or regulatory requirements imposed by or promulgated in connection with the Dodd-Frank Act.

The passage of tort reform or other legislation, and the subsequent review of such laws by the courts could have a material impact on our operations.

Tort reforms generally protect the rights of a defendant by, among other limitations, eliminating certain claims that may be heard in a court, limiting the amount or types of damages, changing statutes of limitation or the period of time to make a claim, and limiting venue or court selection. A number of states in which we do business previously enacted tort reform legislation in an effort to reduce escalating loss trends.

Challenges to tort reform have been undertaken in most states where tort reforms have been enacted, and in some states the reforms have been fully or partially overturned. Additional challenges to tort reform may be undertaken, including the proposed changes to Medical Injury Compensation Reform Act which will be on California’s general election ballot in November 2022. We cannot predict with any certainty how state appellate courts will rule on these laws. While the effects of tort reform have been generally beneficial to our business in states where these laws have been enacted, there can be no assurance that such reforms will be ultimately upheld by the courts. Furthermore, if tort reforms are effective, the business of providing professional liability insurance may become more attractive, thereby causing an increase in competition. In addition, the enactment of tort reforms could be accompanied by legislation or regulatory actions that may be detrimental to our business because of expected benefits which may or may not be realized. These expectations could result in regulatory or legislative action limiting the ability of professional liability insurers to maintain rates at adequate levels.

Coverage mandates or other expanded insurance requirements could also be imposed. States may also consider state-sponsored insurance entities that could remove our potential insureds from the private insurance market.

We continue to monitor developments on a state-by-state basis and make business decisions accordingly.

Our performance is dependent on the business, economic, regulatory and legislative conditions of states where we have a significant amount of business.

Our top five states, Pennsylvania, California, Florida, Alabama and Texas represented 42% of our direct premiums written for the year ended December 31, 2021. Moreover, on a combined basis, Pennsylvania, California and Florida accounted for 30% of our direct premiums written for each of the years ended December 31, 2021. NORCAL direct premiums written are included in the previous metrics since the date of acquisition on May 5, 2021. Unfavorable business, economic or regulatory conditions in any of these states could have a disproportionately greater effect on us than they would if we were less geographically concentrated.

From time to time we may identify opportunities for growth through acquisitions. However, approval of acquisitions may not be granted or conditions of approval may adversely alter the expected value and benefits of the acquisition. In addition, expected benefits from acquisitions may not be achieved or may be delayed longer than expected.

Growth through the acquisition of other companies or books of business is opportunistic and sporadic. If we are able to identify a target for acquisition, state insurance regulation concerning change or acquisition of control could delay or prevent us from completing the acquisition. State insurance regulatory codes provide that the acquisition of "control" of a domestic insurer or of any person that directly or indirectly controls a domestic insurer cannot be consummated without the prior approval of the domiciliary insurance regulator. There is no assurance that we will receive such approval from the respective insurance regulator or that such approvals will not be conditioned in a manner that materially and adversely affects the aggregate economic value and business benefits expected to be obtained and cause us to not complete the acquisition.

The Company performs thorough due diligence before agreeing to a merger or acquisition; however, there is no guarantee that the procedures we perform will adequately identify all potential weaknesses or liabilities of the target company or potential risks to the consolidated entity.

There is also no guarantee that businesses recently acquired or acquired in the future will be successfully integrated into our business and therefore we may not be able to achieve expected synergies. Ineffective integration of our businesses and processes may result in substantial costs or delays and adversely affect our ability to compete. The process of integrating an acquired company or business can be complex and costly and may create unforeseen operating difficulties including the ineffective integration of underwriting, risk management, claims handling, finance, information technology and actuarial practices and the design and operation of internal controls over financial reporting. Difficulties integrating an acquired business may also result in the acquired business performing differently than we expected including the loss of customers or in our failure to realize anticipated growth or expense-related efficiencies. We could be adversely affected by the acquisition due to unanticipated performance issues and additional expense, unforeseen or adverse changes in liabilities, including liabilities arising from events prior to the acquisition or that were unknown to us at the time of the acquisition, transaction-related charges, diversion of management time and resources to integration challenges, loss of key employees, regulatory requirements, exposure to tax liabilities, exposure to pension liabilities, amortization of expenses related to intangibles, and charges for impairment of assets or goodwill.

Furthermore, claims may be asserted by either the policyholders or shareholders of any acquired entity related to payments or other issues associated with the acquisition and merger into the consolidated entity. Such claims may prove costly or difficult to resolve or may have unanticipated consequences.

Our success is dependent upon our ability to adequately and appropriately serve our customers.

The operations of the Company are heavily dependent upon the delivery of superior customer service across a broad customer base, by which negative feedback from agents, brokers, insureds or internal staff could result in a loss of revenue for the Company.

Provisions in our charter documents, Delaware law and state insurance law may impede attempts to replace or remove management or may impede a takeover, which could adversely affect the value of our common stock.

Our certificate of incorporation, bylaws and Delaware law contain provisions that may have the effect of inhibiting a non-negotiated merger or other business combination. As of December 31, 2021, we currently have no preferred stock outstanding. In addition, our Corporate Governance Principles provide that the Board, subject to its fiduciary duties, will not issue any series of preferred stock for any defense or anti-takeover purpose, for the purpose of implementing any stockholders rights plan, or with features intended to make any acquisition more difficult or costly without obtaining stockholder approval. However, because the rights and preferences of any series of preferred stock may be set by the Board in its sole discretion, the rights and preferences of any such preferred stock may be superior to those of our common stock and thus may adversely affect the rights of the holders of common stock.

The voting structure of common stock and other provisions of our certificate of incorporation are intended to encourage a person interested in acquiring us to negotiate with and to obtain the approval of the Board in connection with a transaction.

However, certain of these provisions may discourage our future acquisition, including an acquisition in which stockholders might otherwise receive a premium for their shares. As a result, stockholders who might desire to participate in such a transaction may not have the opportunity to do so.

In addition, state insurance laws provide that no person or entity may directly or indirectly acquire control of an insurance company unless that person or entity has received approval from the insurance regulator. An acquisition of control of ProAssurance would be presumed if any person or entity acquires 10% (5% in Alabama) or more of our outstanding common stock, unless the applicable insurance regulator determines otherwise. These provisions apply even if the offer may be considered beneficial by stockholders.

We are a holding company and are dependent on dividends and other payments from our operating subsidiaries, which may be subject to dividend restrictions.

We are a holding company whose principal source of external revenue is our investment revenues. In addition, cash dividends and other permitted payments from operating subsidiaries represent another source of funds. If our subsidiaries are unable to make payments to us, or are able to pay only limited amounts, we may be unable to make payments on our indebtedness, meet other holding company financial obligations, or pay dividends to shareholders. The payment of dividends by these operating subsidiaries is subject to restrictions set forth in the insurance laws and regulations of their respective states of domicile, as discussed in Item I under the heading "Insurance Regulatory Matters."

Regulatory requirements or changes to regulatory requirements could have a material effect on our operations.

Our insurance businesses are subject to extensive regulation by state insurance authorities in each state in which they operate. Regulation is intended for the benefit of policyholders rather than shareholders. In addition to the amount of dividends and other payments that can be made to a holding company by insurance subsidiaries, these regulatory authorities have broad administrative and supervisory power relating to:

- licensing requirements;
- trade practices;
- capital and surplus requirements;
- investment practices; and
- rates charged to insurance customers.

These regulations may impede or impose burdensome conditions on rate changes or other actions that we may desire to take in order to enhance our results of operations. In addition, we may incur significant costs in the course of complying with regulatory requirements. Most states also regulate insurance holding companies like us in a variety of matters such as acquisitions, solvency and risk assessment, changes of control and the terms of affiliated transactions.

Also, certain states sponsor insurance entities which affect the amount and type of liability coverages purchased in the sponsoring state. Changes to the number of state sponsored entities of this type could result in a large number of insureds changing the amount and type of coverage purchased from private insurance entities such as ProAssurance.

We own two subsidiaries domiciled in the Cayman Islands and subject to the laws of the Cayman Islands and regulations promulgated by the CIMA. Failure to comply with these laws, regulations and requirements could result in consequences ranging from a regulatory examination to a regulatory takeover of our Cayman Islands subsidiaries, which could potentially impact profitability of alternative market solutions offered through these subsidiaries.

Syndicate 1729 and Syndicate 6131 are regulated in the U.K. by the Prudential Regulation Authority and the Financial Conduct Authority. All Lloyd's Syndicates must also comply with the bylaws and regulations established by the Council of Lloyd's. Failure to comply with bylaws and regulations could affect our ability to underwrite as a Lloyd's Syndicate in the future and therefore affect our profitability. Changes in bylaws and regulations could also affect the profitability of the operations.

Effective January 1, 2016, the European Union's executive body, the European Commission, implemented capital adequacy and risk management regulations called Solvency II that apply to businesses within the European Union. Syndicate 1729 and Syndicate 6131 follow the Solvency II compliance guidelines set out by the Council of Lloyd's.

The assessments that we are required to pay to state associations may increase or our participation in mandatory risk retention pools could be expanded and our results of operations and financial condition could suffer as a result.

Each state in which we operate has separate insurance guaranty fund laws requiring admitted property and casualty insurance companies doing business within their respective jurisdictions to be members of their guaranty associations. These associations are organized to pay covered claims (as defined and limited by the various guaranty association statutes) under insurance policies issued by insurance companies that have become insolvent. Most guaranty association laws enable the associations to make assessments against member insurers to obtain funds to pay covered claims after a member insurer

becomes insolvent. These associations levy assessments (up to prescribed limits) on all member insurers in a particular state on the basis of the proportionate share of the premiums written by member insurers in the covered lines of business in that state. Maximum assessments generally vary between 1% and 2% of annual premiums written by a member in that state. Some states permit member insurers to recover assessments paid through surcharges on policyholders or through full or partial premium tax offsets, while other states permit recovery of assessments through the rate filing process. We had no significant guaranty fund recoupments or assessments in 2021, 2020 or 2019. Our practice is to accrue for insurance insolvencies when notified of assessments. We are not able to reasonably estimate assessments or develop a meaningful range of possible assessments prior to notice because the guaranty funds do not provide sufficient information for development of such estimates or ranges.

Certain states in which we write workers' compensation insurance have established administrative and/or second injury funds that levy assessments against insurers that write business in their state. The assessments are generally based on an insurer's proportionate share of premiums or losses in a particular state, and the assessment rate can vary from year to year.

Risk pooling mechanisms have been established in certain states that offer insurance coverage to individuals or entities who are otherwise unable to purchase coverage from private insurers. Authorized property and casualty insurers in these states are generally required to share in the underwriting results of these pooled risks, which are typically adverse. Should our mandatory participation in such pools be increased or if the assessments from such pools increased, our results of operations and financial condition would be negatively affected, although that was not the case in 2021, 2020 or 2019.

Our Board may decide that our financial condition does not allow the continued payment of a quarterly cash dividend, or requires that we reduce the amount of our quarterly cash dividend.

Our Board approved a cash dividend policy in September 2011, and we most recently paid a $0.05 per share dividend for the three months ended December 31, 2021. However, any decision to pay future cash dividends is subject to the Board's final determination after a comprehensive review of the Company's financial performance, future expectations and other factors deemed relevant by the Board.

The operations of the Company are heavily reliant upon the Company's reputation as an ethical business organization providing needed services to its customers.

The Company's positive reputation is critical to its role as an insurance provider and as a publicly traded company. The Board adopted a Code of Ethics and Conduct, and management is heavily focused on the integrity of our employees and third-party suppliers, agents or brokers. Illegal, unethical or fraudulent activities perpetrated by an employee or one of our third-party agencies or brokers for personal gain could expose the Company to a potential financial loss.

A natural disaster or pandemic event, or closely related series of events, could cause loss of lives or a substantial loss of property or operational ability at one or more of the Company's facilities.

The Company's disaster preparedness encompasses our Business Continuity Plan, Disaster Recovery Plan, Operations Plan and Pandemic Response Plan. Our disaster preparedness is focused on maintaining the continuity of the Company's data processing and telephone capabilities as well as the use of alternate and temporary facilities in the event of a natural disaster or medical event. The Company's plans are reviewed during the insurance department examinations of the statutory insurance companies. While the Company has plans in place to respond to both short- and long-term disaster scenarios, the loss of certain key operating facilities or data processing capabilities could have a significant impact on Company operations.

The operations of the Company are dependent upon the security, integrity and availability of our internal technology infrastructure and that of certain third parties. Any significant disruption of these infrastructures could result in unauthorized access to Company data, reduce our ability to conduct business effectively, or cause economic harm to the Company in the form of lost time, lost business opportunity, or actual monetary loss.

The Company is dependent upon its technology infrastructure and that of certain third parties to operate and report financial and other Company information accurately and timely. ProAssurance collects, uses, stores or transmits an increasingly large amount of confidential, proprietary, personal, legally protected, and other information in connection with the operation of our business. Therefore, the Company has focused resources on securing and preserving the integrity of its data processing systems and related data. Despite the Company's efforts to ensure the integrity of its systems, ProAssurance is increasingly exposed to the risk that its technology infrastructure could be subject to cyber-attacks and unauthorized access, such as physical and electronic break-ins or unauthorized tampering. As an example, ProAssurance is a customer of SolarWinds, and a SolarWinds software product is installed in the Company's information technology systems. Upon learning of a cybersecurity breach involving SolarWinds, ProAssurance immediately isolated the SolarWinds system and conducted an investigation which revealed no unauthorized activity and no data breach involving ProAssurance systems or data. Furthermore, upon learning of the recent Log4j vulnerability, ProAssurance immediately started a process of reviewing all applications for the java library and implemented patches to mitigate the risk. ProAssurance also conducted an investigation that revealed no unauthorized activity and no data breach involving ProAssurance systems or data. ProAssurance's IT department, with assistance from third-party

security vendors, regularly monitors the Company's systems for indicators of attack or compromise to mitigate the risk of cyberattacks.

The Company also evaluates the integrity and security of the technology infrastructure of third parties that access, process or store data that the Company considers to be sensitive, significant, or legally protected. While ProAssurance reviews and assesses its third-party providers' cybersecurity controls, as appropriate, and make changes to the Company's business processes to manage these risks, there is no guarantee that measures taken to date will completely prevent possible disruption, damage or destruction by intentional or unintentional acts or events such as cyber-attacks, viruses, sabotage, human error, system failure or the occurrence of numerous other human or natural events. A breach of IT systems operated by a vendor, customer, or other third-party with whom we conduct business could result in a breach of the Company's data belonging to a third-party for which the Company is responsible, or financial harm in the form of misdirection of payments for valid invoices or other obligations.

Disruption, damage or destruction of any of the Company's systems or data could cause its normal operations to be disrupted, or unauthorized internal or external knowledge or misuse of confidential Company data could occur, all of which could be harmful to the Company from a financial, legal and reputational perspective. The Company continually enhances its cyber and information security in order to identify and neutralize emerging threats and improve its ability to prevent, detect and respond to attempts to gain unauthorized access to the Company's data and systems. ProAssurance regularly adds additional security measures to its computer systems and network infrastructure to mitigate the possibility of cybersecurity breaches, including firewalls and penetration testing. However, it is impossible to defend against every risk being posed by changing technologies. The Company has a formal process in place for identifying, handling and disclosing of cybersecurity incidents. In addition, the Company's Board and Audit Committee are involved in the oversight of our cybersecurity policies and procedures and are continually updated on material cybersecurity risks and cybersecurity issues, if any, faced by executive management. While the Company has experienced limited and immaterial potential cyber events and is aware of system breaches involving a number of third parties with whom the Company transacts business, the Company has no knowledge as of this date of any material harm or loss relating to cyber-attacks or other security breaches at the Company or its third parties.

The Company's Code of Ethics and Conduct explicitly prohibits officers, directors, employees, or other insiders who are subject to the Code from transacting in the Company's stock during a time when such individuals have knowledge of any material undisclosed cybersecurity incident or breach.

General

We are subject to numerous NYSE and SEC regulations including insider trading regulations, Regulation FD and regulations requiring timely and accurate reporting of our operating results as well as certain events and transactions. Noncompliance with these regulations could subject us to enforcement actions by the NYSE or the SEC, and could affect the value of our shares and our ability to raise additional capital.

The Company carefully adheres to NYSE and SEC requirements as the loss of trading privileges on the NYSE or an SEC enforcement action could have a significant financial impact on the Company. Failure to comply with various SEC reporting and record keeping requirements could result in a decline in the value of our stock or a decline in investor confidence which could directly impact our ability to efficiently raise capital. Failure to adhere to NYSE requirements could result in fines, trading restrictions or delisting.

In June 2020, a putative class action lawsuit was filed against the Company in the Northern District of Alabama, alleging violations of the Securities Exchange Act of 1934 and alleging that the Company made false and misleading statements regarding its Specialty Property and Casualty segment. The Company believes the lawsuit is without merit and continues to defend it vigorously; however, there can be no assurance regarding the ultimate outcome of the matter.

If we fail to maintain proper and effective internal controls over financial reporting, our operating results and our ability to operate our business could be harmed.

We continually enhance our operating procedures and internal controls to effectively support our operations and comply with our regulatory and financial reporting requirements. As a result of the inherent limitations in all control systems, no system of controls can provide absolute assurance that all control objectives have been or will be met, and that instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of an error or mistake. Additionally, controls can be circumvented by the unauthorized and wrongful individual acts of some persons or by collusion of two or more persons. The design of any system of controls is based in part upon certain assumptions about the likelihood of future events and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or the degree of compliance with policies or procedures may deteriorate. Further, the design of a control system must reflect the fact that resource constraints exist. Accordingly, our control system can provide only reasonable, not absolute, assurance of achieving the desired control objectives.

Our success is dependent upon our ability to effectively design and execute our business strategy.

The Company depends upon the skill and work product of our officers and employees in executing our business strategy. While management and the Board monitor the strategic direction of the Company, strategic changes could be made that are not supportable by our capital base.

Our business could be affected by the loss of one or more of our senior executives or other qualified personnel.

We are heavily dependent upon our senior management, and the loss of services of our senior executives could adversely affect our business. Our success has been, and will continue to be, dependent on our ability to retain the services of existing key employees and to attract and retain additional qualified personnel in the future. The loss of the services of key employees or senior managers, or the inability to identify, hire and retain other highly qualified personnel in the future, could adversely affect the quality and profitability of our business operations. Our Board regularly reviews succession planning relating to our Chief Executive Officer as well as other senior officers.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

We own three office properties, all of which are unencumbered:

	Square Footage of Properties		
Property Location	Occupied by ProAssurance	Leased or Available for Lease	Total
Birmingham, AL*	120,000	45,000	165,000
Franklin, TN	52,000	51,000	103,000
Okemos, MI	53,000	—	53,000

* Corporate Headquarters

ITEM 3. LEGAL PROCEEDINGS.

Our insurance subsidiaries are involved in various legal actions, a substantial number of which arise from claims made under insurance policies. While the outcome of all legal actions is not presently determinable, management and its legal counsel are of the opinion that these actions will not have a material adverse effect on our financial position or results of operations. See Note 11 of the Notes to Consolidated Financial Statements included herein.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

The executive officers of ProAssurance Corporation serve at the pleasure of the Board. We have a knowledgeable and experienced management team with established track records in building and managing successful insurance operations. Following is a brief description of each executive officer of ProAssurance, including their principal occupation, and relevant background with ProAssurance and former employers.

Edward L. Rand, Jr. Mr. Rand was appointed as our Chief Executive Officer in 2019 and has served as President since 2018. Mr. Rand previously served as Chief Operating Officer, Chief Financial Officer, Executive Vice President and Senior Vice President since joining ProAssurance in 2004. Mr. Rand also has previously served as President of our Medmarc subsidiary from 2016 to 2018. Prior to joining ProAssurance, Mr. Rand was Chief Accounting Officer and Head of Corporate Finance for PartnerRe Ltd. Prior to that time, Mr. Rand served as the Chief Financial Officer of Atlantic American Corporation. (Age 55)

Michael L. Boguski Mr. Boguski was promoted to President of our Specialty P&C segment in 2019. Mr. Boguski previously served as President of our Eastern subsidiary since ProAssurance acquired Eastern in 2014. Prior to the acquisition of Eastern, Mr. Boguski served as President and Chief Executive Officer of Eastern since 2011 and had been with the Eastern organization since its inception in 1997. Mr. Boguski has almost 36 years of insurance industry experience. (Age 59)

Noreen L. Dishart Ms. Dishart was appointed as an Executive Vice President in 2020 and has served as our Chief Human Resources Officer since 2015. Ms. Dishart has previously served as Vice President of Human Resources of our Eastern subsidiary for 9 years. Ms. Dishart has over 36 years of experience in Human Resources including positions with Johnson & Johnson/Merck. (Age 58)

Dana S. Hendricks Ms. Hendricks was appointed as an Executive Vice President in 2018 and is also our Chief Financial Officer and Corporate Treasurer. Ms. Hendricks has previously served as Senior Vice President of Business Operations for our PICA subsidiary. Prior to that time, Ms. Hendricks served PICA as Vice President of Finance and Corporate Controller. Prior to joining PICA in 2001, Ms. Hendricks held various finance and data analysis positions with American General Life & Accident Insurance Company. (Age 54)

Jeffrey P. Lisenby Mr. Lisenby was appointed as an Executive Vice President in 2014 and is also our General Counsel, Corporate Secretary and head of the corporate Legal Department. Mr. Lisenby has previously served as Senior Vice President. Prior to joining ProAssurance, Mr. Lisenby practiced law privately in Birmingham, Alabama. Mr. Lisenby is a member of the Alabama State Bar and the United States Supreme Court Bar and is a Chartered Property Casualty Underwriter. (Age 53)

Kevin M. Shook Mr. Shook is President of our Eastern subsidiary. Mr. Shook previously served as Executive Vice President of our Eastern subsidiary and has been with Eastern for 18 years. Mr. Shook has over 28 years of insurance industry experience, including 10 years with PricewaterhouseCoopers where he primarily served companies within the insurance industry. (Age 52)

We have adopted a Code of Ethics and Conduct that applies to our directors and executive officers, including but not limited to our principal executive officers and principal financial officer. We also have share ownership guidelines in place to ensure that management maintains a significant portion of their personal investments in the stock of ProAssurance. Both our Code of Ethics and Conduct and our Share Ownership Guidelines are available on the Governance section of our website. Printed copies of these documents may be obtained from our Investor Relations department either by mail at P.O. Box 590009, Birmingham, Alabama 35259-0009, or by telephone at (205) 877-4400 or (800) 282-6242.

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.

At February 17, 2022, ProAssurance Corporation had 3,406 stockholders of record and 53,986,801 shares of common stock outstanding. ProAssurance's common stock currently trades on the NYSE under the symbol "PRA."

	2021		2020	
Quarter	**High**	**Low**	High	Low
First	**$ 28.50**	**$ 18.10**	$ 37.58	$ 20.27
Second	**$ 27.93**	**$ 22.66**	$ 23.31	$ 13.10
Third	**$ 25.90**	**$ 20.28**	$ 16.22	$ 13.49
Fourth	**$ 25.81**	**$ 22.20**	$ 18.76	$ 13.62

	Dividends Declared		**Dividends Paid**	
Quarter	**2021**	2020	**2021**	2020
First	**$ 0.05**	$ 0.31	**$ 0.05**	$ 0.31
Second	**$ 0.05**	$ 0.05	**$ 0.05**	$ 0.31
Third	**$ 0.05**	$ 0.05	**$ 0.05**	$ 0.05
Fourth	**$ 0.05**	$ 0.05	**$ 0.05**	$ 0.05

The Board declared a quarterly dividend in each quarter of 2021 and 2020. Each dividend was paid in the month following the quarter in which it was declared. Any decision to pay regular cash dividends in the future is subject to the Board's final determination after a comprehensive review of financial performance, future expectations and other factors deemed relevant by the Board.

ProAssurance's insurance subsidiaries are subject to restrictions on the payment of dividends to the parent. Information regarding restrictions on the ability of the insurance subsidiaries to pay dividends is incorporated herein by reference from the paragraphs under the heading "Insurance Regulatory Matters–Regulation of Dividends and Other Payments from Our Operating Subsidiaries" in Item 1 of this Form 10-K.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides information regarding ProAssurance's equity compensation plans as of December 31, 2021.

Plan Category	**Number of securities to be issued upon exercise of outstanding options, warrants and rights**	**Weighted-average exercise price of outstanding options, warrants and rights**	**Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))**
	(a)	**(b)**	**(c)**
Equity compensation plans approved by security holders	662,744	$— *	1,338,197
Equity compensation plans not approved by security holders	—	—	—

* No outstanding options as of December 31, 2021. Other outstanding share units have no exercise price.

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs* (In thousands)
October 1 - 31, 2021	—	N/A	—	$109,643
November 1 - 30, 2021	—	N/A	—	$109,643
December 1 - 31, 2021	—	N/A	—	$109,643
Total	—	$—	—	

* Under its current plan begun in November 2010, the Board has authorized $600 million for the repurchase of common shares or the retirement of outstanding debt. This is ProAssurance's only plan for the repurchase of common shares, and the plan has no expiration date.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

The following discussion generally focuses on the change in financial condition, results of operation and cash flows for the year ended December 31, 2021 as compared to the year ended December 31, 2020 and should be read in conjunction with the Consolidated Financial Statements and Notes to those statements which accompany this report. For a full discussion of the changes in the financial condition, results of operations and cash flows for the year ended December 31, 2020 as compared to the year ended December 31, 2019, please refer to Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of ProAssurance's December 31, 2020 report on Form 10-K.

Throughout the discussion we use certain terms and abbreviations, which can be found in the Glossary of Terms and Acronyms at the beginning of this report. In addition, a glossary of insurance terms and phrases is available on the investor section of our website. Throughout the discussion, references to "ProAssurance," "PRA," "Company," "organization," "we," "us" and "our" refer to ProAssurance Corporation and its consolidated subsidiaries. The discussion contains certain forward-looking information that involves significant risks, assumptions and uncertainties. As discussed under the heading "Caution Regarding Forward-Looking Statements," our actual financial condition and results of operations could differ significantly from these forward-looking statements.

ProAssurance Overview

ProAssurance Corporation is a holding company for property and casualty insurance companies. Our wholly owned insurance subsidiaries provide professional liability insurance, liability insurance for medical technology and life sciences risks and workers' compensation insurance. We also provide capital to Syndicate 1729 at Lloyd's of London.

We operate in five segments which are based on our internal management reporting structure for which financial results are regularly evaluated by our CODM to determine resource allocation and assess operating performance. Descriptions of ProAssurance's five operating and reportable segments are as follows:

- *Specialty P&C* - This segment includes our professional liability business and medical technology liability business. Our professional liability insurance is primarily comprised of medical professional liability products offered to healthcare providers and institutions and includes the business acquired through the NORCAL transaction that closed on May 5, 2021. To a lesser extent, we also offer professional liability insurance to attorneys and their firms. Medical technology liability insurance is offered to medical technology and life sciences companies that manufacture or distribute products including entities conducting human clinical trials. We also offer custom alternative risk solutions including loss portfolio transfers, assumed reinsurance and captive cell programs for healthcare professional liability insureds. For our alternative market captive cell programs, we cede either all or a portion of the premium to certain SPCs in our Segregated Portfolio Cell Reinsurance segment.
- *Workers' Compensation Insurance* - This segment includes our workers' compensation insurance business which is provided primarily to employers with 1,000 or fewer employees. Our workers' compensation products include guaranteed cost policies, policyholder dividend policies, retrospectively-rated policies, deductible policies and alternative market solutions. Alternative market program premiums are 100% ceded to either SPCs in our Segregated Portfolio Cell Reinsurance segment or, to a limited extent, an unaffiliated captive insurer.
- *Segregated Portfolio Cell Reinsurance* - This segment includes the results (underwriting profit or loss, plus investment results, net of U.S. federal income taxes) of SPCs at Inova Re and Eastern Re, our Cayman Islands SPC operations. Each SPC is owned, fully or in part, by an individual company, agency, group or association, and the results of the SPCs are attributable to the participants of that cell. We participate to a varying degree in the results of selected SPCs and, for the SPCs in which we participate, our participation interest ranges from a low of 20% to a high of 85%. SPC results attributable to external cell participants are reflected as an SPC dividend expense (income) in our Segregated Portfolio Cell Reinsurance segment. The SPCs assume workers' compensation insurance, healthcare professional liability insurance or a combination of the two from our Workers' Compensation Insurance and Specialty P&C segments.
- *Lloyd's Syndicates* - This segment includes the results from our participation in Lloyd's of London Syndicate 1729 (5% for the 2021 underwriting year) and Syndicate 6131 (50% for the 2021 underwriting year). The results of this segment are normally reported on a quarter lag, except when information is available that is material to the current period. Syndicate 1729 underwrites risks over a wide range of property and casualty insurance and reinsurance lines in both the U.S. and international markets. Effective January 1, 2022, Syndicate 6131 ceased underwriting on a quota share basis with Syndicate 1729 as Syndicate 6131's business is retained within Syndicate 1729 beginning with the 2022 underwriting year. Premium from our participation in the results of Syndicate 6131 from open underwriting years prior to 2022 will continue to earn out pro rata over the entire policy period of the underlying business. Prior to January 1, 2022, Syndicate 6131 was an SPA which focused on contingency and specialty

property business. For the 2022 underwriting year, our participation in the results of Syndicate 1729 remains unchanged at 5%.

- *Corporate* - This segment includes our investment operations, including the investment operations of NORCAL since the date of acquisition and excludes those reported in our Segregated Portfolio Cell Reinsurance and Lloyd's Syndicates segments. In addition, this segment includes corporate expenses, interest expense, U.S. income taxes and non-premium revenues generated outside of our insurance entities.

Additional information regarding our segments is included in Note 19 of the Notes to Consolidated Financial Statements, Part I and in the Segment Results sections that follow.

Growth Opportunities and Outlook

Over the long-term we expect our growth to come primarily through controlled expansion of our existing operations. In addition, we may identify opportunities for growth through the acquisition of other insurers, service providers or books of business. On May 5, 2021, we completed our acquisition of NORCAL Insurance Company. The addition of NORCAL broadens our geographic reach allowing us to create a truly national platform for our Healthcare Professional Liability Business. Through this greater scale, we believe we can create operating efficiencies and increase our product offerings that will allow us to deliver value to our customers, business partners and other stakeholders. See further discussion on the NORCAL acquisition in Note 2 of the Notes to Consolidated Financial Statements and under the heading "Business Combinations and Ventures" in the Liquidity and Capital Resources and Financial Condition section that follows. We continue to see new opportunities from each of our acquisitions and believe each will provide organic growth through expansion in their existing markets and relationships.

We operate in very competitive markets and face strong competition from other insurance companies for all of our insurance products. Our Specialty P&C segment includes our HCPL insurance which represents the largest product line in our consolidated gross premiums written (51% in 2021). The Specialty P&C segment also includes our Medical Technology Liability (4% in 2021) and Small Business Unit (11% in 2021) lines of business. The healthcare market in the U.S. is continuing to consolidate, which brings competitive challenges. This consolidation initially took the form of hospitals acquiring physician practices and later the growth of physician groups owned by outside investors. As these trends continue most physicians no longer practice medicine as owners of an independent practice. Large single and multi-specialty practices often operate in many states. Healthcare delivery settings are changing with the growth of retail delivery by allied healthcare professionals as well as physicians in distributed clinics, pharmacies, large consumer stores and online. These larger commercial enterprises have differing risk management needs from those in the traditional small physician practices. In response to these trends, we have enhanced our coverage offerings to fit the needs of combined hospital/physician entities, multi-state medical groups, telemedicine companies, miscellaneous facilities, allied healthcare professionals and self-insured entities even as we continue to service that portion of the market maintaining more traditional practice structures. Our Medical Technology Liability and Small Business Unit lines of business are less affected by these consolidation trends.

Our operations at Eastern, a provider of workers' compensation insurance, represents the second largest product line in our consolidated gross premiums written (25% in 2021, including alternative market premiums). The workers’ compensation market is highly competitive in our operating territories and multi-line insurers continue to leverage workers’ compensation in their product offerings, which has resulted in a reduction of new business writings. We believe our workers' compensation product offerings allow us to provide flexibility in offering solutions to our customers at a competitive price. In addition, we believe that our claims handling and risk management services are attractive to our customers and provide us with a competitive advantage even when our pricing is higher than our competitors, which has contributed to strong renewal retention.

Our Lloyd's Syndicates segment represents 4% of our consolidated gross premiums written in 2021. Effective January 1, 2022, Syndicate 6131 ceased underwriting on a quota share basis with Syndicate 1729 as Syndicate 6131's business is retained within Syndicate 1729 beginning with the 2022 underwriting year. Our participation in Syndicate 1729 for the 2014 through 2021 underwriting years has ranged from a low of 5% to a high of 62%. For the 2022 underwriting year, our participation in the results of Syndicate 1729 remains unchanged at 5%. Our participation in Syndicate 6131 ranged from a low of 50% to a high of 100% for the 2018 through 2021 underwriting years.

We believe our emphasis on the fair treatment of our insureds and other important stakeholders through our commitment to “Treated Fairly” has enhanced our market position and differentiated us from other insurers. We will continue to uphold our values of integrity, leadership, relationships and enthusiasm in all of our activities. We will honor these values in the execution of “Treated Fairly” to perform our Mission and realize our Vision. We believe that as we reach more customers with this message we will continue to improve retention and add new insureds.

Key Performance Measures

We are committed to disciplined underwriting, pricing and loss reserving practices as well as conservative investment practices, even during difficult market conditions. We are also committed to maintaining prudent operating and financial leverage. We recognize the importance that our customers and producers place on the financial strength of our insurance subsidiaries, and we manage our business to protect our financial security.

In evaluating our performance, we consider a number of performance measures, including the following:

- The *net loss ratio* which is calculated as net losses and loss adjustment expenses incurred divided by net premiums earned and is a component of underwriting profitability.
- The *underwriting expense ratio* which is calculated as underwriting, policy acquisition and operating expenses incurred divided by net premiums earned and is a component of underwriting profitability.
- The *combined ratio* which is the sum of the net loss ratio and the underwriting expense ratio and measures underwriting profitability.
- The *investment income ratio* which is calculated as net investment income divided by net premiums earned and measures the contribution investment earnings provide to our overall profitability.
- The *operating ratio* which is the combined ratio, less the investment income ratio. This ratio provides the combined effect of underwriting profitability and investment income.
- The *tax ratio* which is calculated as total income tax expense (benefit) divided by income (loss) before income taxes and measures our effective tax rate.
- *ROE* which is calculated as net income (loss) divided by the average of beginning and ending shareholders' equity. This ratio measures our overall after-tax profitability and shows how efficiently capital is being used.
- *Book value per share* which is calculated as total shareholders' equity at the balance sheet date divided by the total number of common shares outstanding. This ratio measures the net worth of the Company to shareholders on a per-share basis. The declaration of dividends decreases book value per share. Growth in book value per share, adjusted for dividends declared, is an indicator of overall profitability.

In particular, we focus on our combined ratio and investment returns, both of which directly affect our ROE and growth in our book value. Currently, we target a dynamic long-term ROE of 700 basis points above the 10-year U.S. Treasury rate, which at December 31, 2021 was approximately 8.5%.

To achieve our long-term ROE target, we emphasize rate adequacy, selective underwriting, effective claims management, operational efficiency gained by leveraging our enhanced scope and scale and prudent investment management. We closely monitor premium revenues, losses and loss adjustment expenses, and underwriting and policy acquisition expenses. Our overall investment strategy is to focus on maximizing current income from our investment portfolio while maintaining appropriate credit risk, liquidity, duration, portfolio diversification and capital efficiency. While we engage in activities that generate other income, these activities, such as insurance agency services, do not constitute a significant use of our resources or a significant source of revenues or profits.

Critical Accounting Estimates

Our Consolidated Financial Statements are prepared in conformity with GAAP. Preparation of these financial statements requires us to make estimates and assumptions that affect the amounts we report on those statements. We evaluate these estimates and assumptions on an ongoing basis based on current and historical developments, market conditions, industry trends and other information that we believe to be reasonable under the circumstances, including the potential impacts of the COVID-19 pandemic (see "Item 1A, Risk Factors" included in this report for additional information). We can make no assurance that actual results will conform to our estimates and assumptions; reported results of operations may be materially affected by changes in these estimates and assumptions.

Management considers the following accounting estimates to be critical because they involve significant judgment by management and those judgments could result in a material effect on our financial statements.

Reserve for Losses and Loss Adjustment Expenses

The largest component of our liabilities is our reserve for losses and loss adjustment expenses ("reserve for losses" or "reserve"), and the largest component of expense for our operations is incurred losses and loss adjustment expenses (also referred to as “losses and loss adjustment expenses,” “incurred losses,” “losses incurred” and “losses”). Incurred losses reported in any period reflect our estimate of losses incurred related to the premiums earned in that period as well as any changes to our previous estimate of the reserve required for prior periods.

As of December 31, 2021, our reserve is comprised almost entirely of long-tail exposures. The estimation of long-tailed losses is inherently difficult and is subject to significant judgment on the part of management. Due to the nature of our claims, our loss costs, even for claims with similar characteristics, can vary significantly depending upon many factors, including but not limited to the specific characteristics of the claim and the manner in which the claim is resolved. Long-tailed insurance is characterized by the extended period of time typically required both to assess the viability of a claim and potential damages, if any, and to reach a resolution of the claim. The claims resolution process may extend to more than five years. The combination of continually changing conditions and the extended time required for claim resolution results in a loss cost estimation process that requires actuarial skill and the application of significant judgment, and such estimates require periodic modification.

Our reserve is established by management after taking into consideration a variety of factors including premium rates, historical paid and incurred loss development trends and our evaluation of the current loss environment including frequency, severity, expected effect of inflation, general economic and social trends, and the legal and political environment. We also take into consideration the conclusions reached by our internal and consulting actuaries. We update and review the data underlying the estimation of our reserve for losses each reporting period and make adjustments to loss estimation assumptions that we believe best reflect emerging data. Both our internal and consulting actuaries perform an in-depth review of our reserve for losses on at least a semi-annual basis using the loss and exposure data of our insurance subsidiaries.

We partition our reserves by accident year, which is the year in which the claim becomes our liability. For claims-made policies, the insured event generally becomes a liability when the event is first reported to us. For occurrence policies, the insured event becomes a liability when the event takes place. For retroactive coverages, the insured event becomes a liability at inception of the underlying contract. As claims are incurred (reported) and claim payments are made, they are aggregated by accident year for analysis purposes. We also partition our reserves by reserve type: case reserves and IBNR reserves. Case reserves are established by our claims departments based upon the particular circumstances of each reported claim and represent our estimate of the future loss costs (often referred to as expected losses) that will be paid on reported claims. Case reserves are decremented as claim payments are made and are periodically adjusted upward or downward as estimates regarding the amount of future losses are revised; reported loss for an individual claim is the case reserve at any point in time plus the claim payments that have been made to date. IBNR reserves are estimated by accident year and represent our estimate in the aggregate of future development on losses that have been reported to us and our estimate of losses that have been incurred but not reported to us.

Our reserving process can be broadly grouped into three areas: the establishment of the reserve for the current accident year (the initial reserve), the re-estimation of the reserve for prior accident years (development of prior accident years) and the establishment of the initial reserve for risks assumed in business combinations, applicable only in periods in which acquisitions occur (the acquired reserve). A summary of the activity in our net reserve for losses during 2021 and 2020 is provided under the heading "Losses" in the Liquidity and Capital Resources and Financial Condition section that follows.

Current Accident Year - Initial Reserve

Considerable judgment is required in establishing our initial reserve for any current accident year period, as there is limited data available upon which to base our estimate (see further discussion that follows under the heading "Use of Judgment"). Our process for setting an initial reserve considers the unique characteristics of each product, but in general we rely heavily on the loss assumptions that were used to price business, as our pricing reflects our analysis of loss costs that we expect to incur relative to the insurance product being priced.

Specialty P&C Segment. Loss costs within this segment are impacted by many factors including but not limited to the nature of the claim, including whether or not the claim is an individual or a mass tort claim, the personal situation of the claimant or the claimant's family, the outcome of jury trials, the legislative and judicial climate where any potential litigation may occur, general economic and social trends and, for claims involving bodily injury, the trend of healthcare costs. Within our Specialty P&C segment, for our professional liability business (88% of our consolidated gross reserve for losses and loss adjustment expenses as of December 31, 2021; predominately comprised of our HCPL products), we set an initial reserve based upon our evaluation of the current loss environment including frequency, severity, economic inflation, social inflation and legal trends.

The current accident year net loss ratio in the Specialty P&C segment has ranged from 87% to 106% in recent years, excluding the effect of a single large national healthcare account that generated outsized losses and distorted results for 2019 and 2020. We observed a reduction in claims frequency in 2020 that continued into 2021, some of which is due to our re-underwriting efforts while some of which we believe is associated with the COVID-19 pandemic including the disruption of the court systems. Given the consistent and prolonged nature of these favorable trends, we recognized some of these favorable frequency trends in our HCPL current accident year reserve during the third and fourth quarters of 2021. We continue to remain cautious in recognizing the full impact of these favorable trends due to the long-tailed nature of our HCPL claims as well as the uncertainty surrounding the length and severity of the pandemic. See further discussion in our Segment Results - Specialty Property & Casualty section that follows under the heading "Losses and Loss Adjustment Expenses."

The risks insured in our Medical Technology Liability business (2% of our consolidated gross reserve for losses and loss adjustment expenses as of December 31, 2021) are more varied, and policies are individually priced based on the risk characteristics of the policy and the account. The insured risks range from startup operations to large multinational entities, and the larger entities often have significant deductibles or self-insured retentions. Reserves are established using our most recently developed actuarial estimates of losses expected to be incurred based on factors which include results from prior analysis of similar business, industry indications, observed trends and judgment. Claims in this line of business primarily involve bodily injury to individuals and are affected by factors similar to those of our HCPL line of business. For the Medical Technology Liability business, we also establish an initial reserve using a loss ratio approach, including a provision in consideration of historical loss volatility that this line of business has exhibited.

Workers' Compensation Insurance Segment. Many factors affect the ultimate losses incurred for our workers' compensation coverages (5% of our consolidated gross reserve for losses and loss adjustment expenses as of December 31, 2021) including but not limited to the type and severity of the injury, the age, health and occupation of the injured worker, the estimated length of disability, medical treatment and related costs, and the jurisdiction and workers' compensation laws of the state of the injury occurrence.

We use various actuarial methodologies in developing our workers’ compensation reserve, combined with a review of the payroll exposure base. For the current accident year, given the lack of seasoned information, the different actuarial methodologies produce results with significant variability; therefore, more emphasis is placed on supplementing results from the actuarial methodologies with trends in exposure base, medical expense inflation, general inflation, severity, and claim counts, among other things, to select an ultimate loss indication.

As in our Specialty P&C segment, we observed a reduction in claims frequency in 2020. Claims frequency in 2021 continues to be below pre-pandemic levels in our Workers' Compensation Insurance segment, some of which is likely associated with the COVID-19 pandemic. While claims frequency is down, we have experienced an increase in 2021 accident year reported losses through December 31, 2021, including increased severity-related claim activity, reflecting workers returning to full employment in 2021 after the lifting of pandemic-related restrictions and the labor shortage. The increase in reported claim activity is attributable to workers being out of “work shape” as they returned to employment in 2021 as well as the lack of training, alternative work arrangements and employee fatigue due to the labor shortage.

Segregated Portfolio Cell Reinsurance Segment. The factors that affect the ultimate losses incurred for the workers' compensation and HCPL coverages assumed by the SPCs at Inova Re and Eastern Re (2% of our consolidated gross reserve for losses and loss adjustment expenses as of December 31, 2021) are consistent with that of our Workers’ Compensation Insurance and Specialty P&C segments, respectively.

Lloyd's Syndicates Segment. Initial reserves for Syndicate 1729 and Syndicate 6131 are primarily recorded using the loss assumptions by risk category incorporated into each Syndicate's business plan submitted to Lloyd's with consideration given to loss experience incurred to date (3% of our consolidated gross reserve for losses and loss adjustment expenses as of December 31, 2021). The assumptions used in each business plan are consistent with loss results reflected in Lloyd's historical data for similar risks. The loss ratios may also fluctuate due to the mix of earned premium from different open underwriting years which we participate in to varying degrees, as well as the timing of earned premium adjustments. Such adjustments may be the result of premiums for certain policies and assumed reinsurance contracts being reported subsequent to the coverage period and may be subject to adjustment based on loss experience. Premium and exposure for some of Syndicate 1729's insurance policies and reinsurance contracts are initially estimated and subsequently recorded over an extended period of time

as reports are received under delegated underwriting authority programs. When reports are received, the premium, exposure and corresponding loss estimates are revised accordingly. Changes in loss estimates due to premium or exposure fluctuations are incurred in the accident year in which the premium is earned.

For significant property catastrophe exposures, Syndicate 1729 uses third-party catastrophe models to accumulate a listing of potentially affected policies. Each identified policy is given an estimate of loss severity based upon a combination of factors including the probable maximum loss of each policy, market share analytics, underwriting judgment, client/broker estimates and historical loss trends for similar events. These models are inherently uncertain, reliant upon key assumptions and management judgment and are not always a representation of actual events and ensuing potential loss exposure. Determination of actual losses may take an extended period of time until claims are reported and resolved, including coverage litigation.

Development of Prior Accident Years

In addition to setting the initial reserve for the current accident year, we reassess the amount of reserve required for prior accident years each period.

The foundation of our reserve re-estimation process is an actuarial analysis that is performed by both our internal and consulting actuaries. This very detailed analysis projects ultimate losses based on partitions which include line of business, geography, coverage layer and accident year. The procedure uses the most representative data for each partition, capturing its unique patterns of development and trends. We believe that the use of consulting actuaries provides an independent view of our loss data as well as a broader perspective on industry loss trends.

For the Specialty P&C, Workers' Compensation Insurance and Segregated Portfolio Cell Reinsurance segments, the analysis performed by the consulting actuaries analyzes each partition of our business in a variety of ways and uses multiple actuarial methodologies in performing these analyses, including:

- Bornhuetter-Ferguson (Paid and Reported) Method
- Paid Development Method
- Reported (Incurred) Development Method
- Average Paid Value Method
- Average Reported Value Method

A brief description of each method follows.

Bornhuetter-Ferguson Method. We use both the Paid and the Reported Bornhuetter-Ferguson Methods. The Paid Method assigns partial weight to initial expected losses for each accident year (initial expected losses being the first established case and IBNR reserves for a specific accident year) and partial weight to paid to date losses. The Reported Method assigns partial weight to the initial expected losses and partial weight to current expected losses. The weights assigned to the initial expected losses decrease as the accident year matures.

Paid Development and Reported (Incurred) Development Methods. These methods use historical, cumulative losses (paid losses for the Paid Development Method, reported losses for the Reported (Incurred) Development Method) by accident year and develop those actual losses to estimated ultimate losses based upon the assumption that each accident year will develop to estimated ultimate cost in a manner that is analogous to prior years, adjusted as deemed appropriate for the expected effects of known changes in the claim payment environment (and case reserving environment for the Reported (Incurred) Development Method); and to the extent necessary, supplemented by analyses of the development of broader industry data.

Average Paid Value and *Average Reported Value Methods.* In these methods, average claim cost data (paid claim cost for the Average Paid Value Method and reported claim cost for the Reported Value Method) is developed to an ultimate average cost level by report year based on historical data. Claim counts are similarly developed to an ultimate count level. The average claim cost (after rounding and adjustment, if necessary, to accommodate report year data that is not considered to be predictive) is then multiplied by the ultimate claim counts by report year to derive ultimate loss and ALAE.

Generally, methods such as the Bornhuetter-Ferguson Method are used on more recent accident years where we have less data on which to base our analysis. As time progresses and we have an increased amount of data for a given accident year, we begin to give more confidence to the development and average methods, as these methods typically rely more heavily on our own historical data. These methods emphasize different aspects of loss reserve estimation and provide a variety of perspectives for our decisions.

Certain of the methodologies utilized to estimate the ultimate losses for each partition of our reserves consider the actual amounts paid. Paid data is particularly influential when a large portion of known claims have been closed, as is the case for older accident years. In selecting a point estimate for each partition, management considers the extent to which trends are emerging consistently for all partitions and known industry trends. Thus, actual, rather than estimated severity trends are given more consideration. If actual severity trends are lower than those estimated at the time that reserves were previously

established, the recognition of favorable development is indicated. This is particularly true for older accident years where our actuarial methodologies give more weight to actual loss costs (severity).

The various actuarial methods discussed above are applied in a consistent manner from period to period. In addition, we perform statistical reviews of claims data such as claim counts, average settlement costs and severity trends when establishing our reserves.

We utilize the selected point estimates of ultimate losses to develop estimates of ultimate losses recoverable from reinsurers, based on the terms and conditions of our reinsurance agreements. An overall estimate of the amount receivable from reinsurers is determined by combining the individual estimates. Our net reserve estimate is the gross reserve point estimate less the estimated reinsurance recovery.

For our Workers' Compensation Insurance segment and for the workers' compensation exposures in our Segregated Portfolio Cell Reinsurance segment, we utilize the Reported (Incurred) Development Method, Paid Development Method and Bornhuetter-Ferguson Method, to develop our reserve for each accident year. The actuarial review includes the stratification of claims data (lost time claims, medical only claims) using different variations that allow us to identify trends that may not be readily identifiable if the data was evaluated only in the aggregate. Reported and paid loss development factors are key assumptions in the reserve estimation process and are based on our historical reported and paid loss development patterns. As accident years mature, the various actuarial methodologies produce more consistent loss estimates.

For our Lloyd's Syndicates segment we rely on the analysis of actual loss experience on the book of business written by Syndicate 1729 to determine loss development by accident year.

Acquired Reserve

The acquisition of NORCAL increased our gross reserves by $1.2 billion which was the fair value of NORCAL's gross loss reserve at the time of acquisition. The fair value estimate of NORCAL's gross reserve for losses and loss adjustment expenses was based on three components: an actuarial estimate of the expected future net cash flows, a reduction to those cash flows for the time value of money determined utilizing the U.S. Treasury Yield Curve and a risk margin adjustment to reflect the net present value of profit that an investor would demand in return for the assumption of the development risk associated with the reserve. The fair value of NORCAL's gross reserve, including the risk margin adjustment, exceeded the actuarial estimate of NORCAL's undiscounted gross loss reserve by approximately $42.2 million as of May 5, 2021. This fair value adjustment was recorded to the reserve for losses and loss adjustment expenses and will be amortized over a period utilizing loss payment patterns as a reduction to prior accident year net losses and loss adjustment expenses. We also recorded other adjustments to NORCAL's reserve as a result of purchase accounting including negative VOBA on NORCAL's assumed unearned premium and assumed DDR reserve. See further discussion on these other purchase accounting adjustments in this section under the heading "Business Combinations" or in Note 2 of the Notes to Consolidated Financial Statements for more information.

The acquisition of Eastern on January 1, 2014 increased our loss reserve by $153.2 million which represented the fair value of Eastern's loss reserve at the time of the acquisition. The fair value of the reserve for losses and loss adjustment expenses and related reinsurance recoverables was based on an actuarial estimate of the expected future net cash flows, a reduction of those cash flows for the time value of money determined utilizing the U.S. Treasury Yield Curve, and a risk adjustment to reflect the net present value of profit that an investor would demand in return for the assumption of the associated risks. Expected net cash flows were derived from the expected loss payment patterns included in an actuarial analysis of Eastern's reserve performed as of December 31, 2013. The fair value of the reserve, including the risk margin discussed above, exceeded the undiscounted loss reserve previously established by Eastern by $9.3 million; this fair value adjustment was amortized over the average expected life of the reserve of 6 years. The fair value adjustment was fully amortized as of December 31, 2019.

Use of Judgment

The process of estimating reserves involves a high degree of judgment and is subject to a number of variables. These variables can be affected by both views of internal and external events, such as changes in views of economic inflation, legal trends and legislative changes, as well as differentiating views of individuals involved in the reserve estimation process, among others. We continually refine our estimates in a regular, ongoing process as historical loss experience develops and additional claims are reported and settled. Our objective is to consider all significant facts and circumstances known at the time.

Changes in economic conditions and steps taken by the federal government and the Federal Reserve in response to COVID-19 could lead to inflation trends that are different from those we anticipated when establishing our reserves, which could in turn lead to an increase or decrease in our loss costs and the need to strengthen or reduce reserves.

We use various actuarial methods in the process of setting reserves. Each actuarial method generally returns a different value, and for the more recent accident years the variations among the various methodologies can be significant. In order to

project ultimate losses, we partition our reserves for analysis such as by line of business, geography, coverage layer or accident year. For each partition of our reserves, we evaluate the results of the various methods, along with the supplementary statistical data regarding such factors as closed with and without indemnity ratios, claim severity trends, the expected duration of such trends, changes in the legal and legislative environment and the current economic environment to develop a point estimate based upon management's judgment and past experience. The series of selected point estimates is then combined to produce an overall point estimate for ultimate losses.

HCPL. Over the past several years the most influential factor affecting the analysis of our HCPL reserves and the related development recognized has been an observed increase in claim severity for the broader medical professional liability industry as well as higher initial loss expectations on incurred claims. The severity trend is an explicit component of our pricing models and directly impacts the reserving process. Our estimate of this trend and our expectations about changes in this trend impact a variety of factors, from the selection of expected loss ratios to the ultimate point estimates established by management.

Because of the implicit and wide-ranging nature of severity trend assumptions on the loss reserving process, it is not practical to specifically isolate the impact of changing severity trends. However, because severity is an explicit component of our HCPL pricing process we can better isolate the impact that changing severity can have on our loss costs and loss ratios in regards to our pricing models for this business component. Our current HCPL pricing models assume severity trends in the range of 2% to 5% depending on state, territory and specialty. In some portions of our HCPL business we have observed and reflected higher severity trends in our estimates of losses and loss adjustment expenses.

Due to the long-tailed nature of our claims and the previously discussed historical volatility of loss costs, selection of a severity trend assumption is a subjective process that is inherently likely to prove inaccurate over time. Given the long tail and volatility, we are generally cautious in making changes to the severity assumptions within our pricing models. All open claims and accident years are generally impacted by a change in the severity trend, which compounds the effect of such a change.

Although the future degree and impact of the ultimate severity trend remains uncertain due to the long-tailed nature of our business, we have given consideration to observed loss costs in setting our rates. For our HCPL business, this practice had generally resulted in rate reductions as claim frequency declined and remained at historically low levels. However, from early 2017 to the current period, the average pricing on renewed business has steadily increased reflective of the rising loss cost environment, and we anticipate further renewal pricing increases due to increasing loss severity.

More recently, another factor affecting our analysis of our HCPL reserves and the related development recognized is the reduction in claims frequency in 2020, some of which is likely associated with the COVID-19 pandemic, as previously discussed. In 2020, we established a $10 million IBNR reserve related to COVID-19. Given the consistent and prolonged nature of the favorable claims frequency trend and the fact that early first notices have not materialized into claims, we recognized net favorable prior accident year reserve development of $1 million associated with our COVID-19 IBNR reserve during the third quarter of 2021. Similar to our views on our current accident year reserve, we continue to remain cautious in recognizing the full impact of these favorable frequency trends in our prior accident year reserve due to the long-tailed nature of our HCPL claims as well as the uncertainty surrounding the length and severity of the pandemic. At December 31, 2021, we maintain a $9 million IBNR reserve related to COVID-19 which represents our best estimate of future COVID-19 related losses not already captured by our claims process based on currently available information and reported incidents.

Workers' Compensation. The projection of changes in claim severity trend has not historically been an influential factor affecting our analysis of workers' compensation reserves, as claims are typically resolved more quickly than the industry norm. As previously mentioned, the determination and calculation of loss development factors, in particular, the selection of tail factors which are used to extend the projection of losses beyond historical data, requires considerable judgment.

Loss Development by Line of Business

Professional Liability

Our professional liability line of business includes both our HCPL and Small Business Unit lines, with our HCPL line representing the largest component of our reserve. Our HCPL line of business also includes the business acquired through the NORCAL transaction that closed on May 5, 2021. In support of our concern that the decline in frequency will result in a higher severity trend for our HCPL claims, we saw our closed-with-indemnity-payment ratio (i.e., the number of claims closed with an indemnity or loss payment as compared to the total number of closed claims) for our claims increase from 15% in 2012 to 18% in 2021 (ratios exclude NORCAL claims).

The following table presents additional information about the loss development for our professional liability line of business, excluding loss development for HCPL coverages assumed by the SPCs at Inova Re and Eastern Re. Furthermore, loss development for our professional liability line of business for the year ended December 31, 2021 includes the business acquired through the NORCAL transaction since the date of acquisition, excluding the amortization of the purchase accounting fair value adjustment:

($ in thousands)		**2021**		2020		2019	
Accident Years	**Estimated Ultimate Losses, Net of Reinsurance, December 31, 2021**	**Reserve Development (favorable) unfavorable**	**% of Known Claims Closed**	Reserve Development (favorable) unfavorable	% of Known Claims Closed	Reserve Development (favorable) unfavorable	% of Known Claims Closed
2021	**$ 397,814**	**N/A**	**25.9 %**	N/A	N/A	N/A	N/A
2020	**$ 480,001**	**$ (4,947)**	**54.1 %**	N/A	22.0 %	N/A	N/A
2019	**$ 493,573**	**$ (20,426)**	**73.7 %**	$ 1,361	48.7 %	N/A	25.3 %
2018	**$ 527,420**	**$ 9,418**	**81.0 %**	$ 1,218	65.1 %	$ 69,518	46.9 %
2017	**$ 433,764**	**$ (2,342)**	**88.4 %**	$ (2,741)	77.9 %	$ 35,591	67.8 %
2016	**$ 400,534**	**$ (2,739)**	**89.5 %**	$ (1,760)	88.8 %	$ 1,848	82.1 %
2015	**$ 369,185**	**$ 6,011**	**97.1 %**	$ (4,489)	93.7 %	$ (27,495)	89.6 %
2014	**$ 325,486**	**$ (1,017)**	**98.5 %**	$ (8,930)	96.6 %	$ (17,412)	93.9 %
2013	**$ 358,696**	**$ (260)**	**98.9 %**	$ (133)	98.0 %	$ (12,799)	96.9 %
2012	**$ 374,938**	**$ (2,999)**	**99.5 %**	$ (1,835)	99.2 %	$ (9,173)	98.7 %
Prior to 2012	**$ 8,282,412**	**$ 2,389**		$ (1,578)		$ (21,572)	

Development recognized during 2021 principally related to accident years 2015 through 2020. In addition, we recognized favorable prior year reserve development of $1 million in 2021 related to the 2020 accident year associated with our COVID-19 IBNR reserve, as previously discussed, due to the fact that early first notices have not materialized into claims. We continue to remain cautious in our evaluation of our prior accident year reserve due to the long-tailed nature of our HCPL claims as well as the uncertainty surrounding the length and severity of the pandemic. Not included in the table above, is $7.9 million of amortization of the purchase accounting fair value adjustment on NORCAL's assumed net reserve and amortization of the negative VOBA associated with NORCAL's DDR reserve which is recorded as a reduction to prior accident year net losses and loss adjustment expenses in 2021. We have not recognized any development related to NORCAL's prior accident year reserves since the date of acquisition. See Note 2 of the Notes to Consolidated Financial Statements for additional information on the NORCAL acquisition and the related purchase accounting adjustments. Development recognized during 2020 principally related to accident years 2014 through 2017. Not included in the above table, as previously discussed, is $2.5 million and $4.4 million of favorable development recognized during 2021 and 2020, respectively, in our Segregated Portfolio Cell Reinsurance segment related to the HCPL coverages assumed by the SPCs at Inova Re and Eastern Re. During 2019 the loss experience in our Specialty line of business deteriorated further, particularly in regard to the reserves we established for a large national healthcare account. This deterioration is the primary driver of the unfavorable development we recognized in 2019 for accident years 2016 through 2018.

This can also be seen in looking at both the absolute amount of reserve development recognized for the less developed accident years as well as the size of such development when compared to established ultimates for those same accident years at the end of the preceding calendar year. The following table provides this information for years ended December 31, 2021, 2020 and 2019 with respect to the three then most recent prior accident years:

($ in millions)	**2021**	2020	2019
Prior accident years	**2018-2020**	2017-2019	2016-2018
Net favorable (unfavorable) development recognized for the specified years	**$ 16.0**	$ 0.2	$ (107.0)
Development as a % of established ultimates, prior calendar year end	**1.1%**	—%	(8.5%)

Medical Technology Liability

Our Medical Technology Liability line of business has not experienced the change in claims frequency previously described for HCPL. However, the nature of the risks insured and volatility of the loss experience in this line of business has produced more variable loss development, as presented in the following table:

($ in thousands)		**2021**		2020		2019	
Accident Years	**Estimated Ultimate Losses, Net of Reinsurance, December 31, 2021**	**Reserve Development (favorable) unfavorable**	**% of Known Claims Closed**	Reserve Development (favorable) unfavorable	% of Known Claims Closed	Reserve Development (favorable) unfavorable	% of Known Claims Closed
2021	**$ 16,929**	**N/A**	**32.0 %**	N/A	N/A	N/A	N/A
2020	**$ 14,489**	**$ (248)**	**59.2 %**	N/A	41.0 %	N/A	N/A
2019	**$ 13,584**	**$ 722**	**47.5 %**	$ (1,047)	41.8 %	N/A	13.4 %
2018	**$ 8,807**	**$ (3,091)**	**85.1 %**	$ (352)	75.2 %	$ (1,856)	68.2 %
2017	**$ 6,017**	**$ (2,192)**	**94.1 %**	$ (3,854)	90.1 %	$ (2,166)	85.6 %
2016	**$ 8,611**	**$ (2,126)**	**97.3 %**	$ (486)	96.7 %	$ (1,249)	65.9 %
2015	**$ 7,983**	**$ (638)**	**97.0 %**	$ (663)	96.3 %	$ (1,548)	85.8 %
2014	**$ 9,374**	**$ (317)**	**99.6 %**	$ (458)	98.9 %	$ (1,823)	94.3 %
2013	**$ 4,600**	**$ (128)**	**100.0 %**	$ (294)	100.0 %	$ (291)	98.7 %
2012	**$ 8,423**	**$ (12)**	**99.2 %**	$ (69)	99.2 %	$ (1,362)	99.2 %
Prior to 2012	**$ 585,081**	**$ (94)**		$ (1,370)		$ (2,470)	

Approximately $7.6 million of the $8.1 million total net favorable development recognized in 2021 related to the 2015 through 2020 accident years. The development for the 2015 through 2020 accident years represents an 11.3% reduction to the ultimates established for those reserves at December 31, 2020. Approximately $5.3 million of the $8.6 million total net favorable development recognized in 2020 related to the 2017 through 2019 accident years. The development for the 2017 through 2019 accident years represents a 13.7% reduction to the ultimates established for those reserves at December 31, 2019. Approximately $6.8 million of the $12.8 million total net favorable development recognized in 2019 related to the 2014 through 2017 accident years. The development for the 2014 through 2017 accident years represents a 13.7% reduction to the ultimates established for those reserves at December 31, 2018.

In 2021, 2020 and 2019 the development was largely attributable to favorable results from claims closed during the year. As time has elapsed we have recognized that actual loss experience has on average been better than estimated. We have been cautious in recognizing the improvement, but as claims have matured and claims are closed or have become more certain for the remaining open claims, we have revised reserve estimates. We believe the need for a cautious approach is required as outcomes are uncertain and results can be significantly affected by outcomes for a small number of cases.

Workers' Compensation

Claims in our workers' compensation line of business have historically closed at a faster rate than in our HCPL or Medical Technology Liability lines of business. This faster disposition rate, along with a lower net retention after the application of reinsurance, has resulted in less volatility in loss estimates on a net basis. However, a change in the number of individually-severe claims can create volatility in a given accident year. The following table presents additional information about the loss development for our workers' compensation line of business:

($ in thousands)		2021		2020		2019	
Accident Years	**Estimated Ultimate Losses, Net of Reinsurance, December 31, 2021**	**Reserve Development (favorable) unfavorable**	**% of Known Claims Closed**	Reserve Development (favorable) unfavorable	% of Known Claims Closed	Reserve Development (favorable) unfavorable	% of Known Claims Closed
2021	**$ 145,232**	**N/A**	**45.4 %**	N/A	N/A	N/A	N/A
2020	**$ 141,076**	**$ (1,493)**	**85.1 %**	N/A	41.6 %	N/A	N/A
2019	**$ 154,166**	**$ (4,030)**	**92.1 %**	$ (6,160)	81.6 %	N/A	43.0%
2018	**$ 159,563**	**$ (1,503)**	**95.2 %**	$ 584	91.7 %	$ (2,561)	81.8 %
2017	**$ 129,533**	**$ (2,375)**	**97.3 %**	$ (3,372)	96.0 %	$ (4,349)	91.4 %
2016	**$ 110,633**	**$ (1,230)**	**97.8 %**	$ (3,048)	97.1 %	$ (8,923)	95.2 %
2015	**$ 117,792**	**$ (1,538)**	**98.4 %**	$ (3,919)	98.0 %	$ (2,128)	96.9 %
2014	**$ 117,939**	**$ (873)**	**99.3 %**	$ (2,136)	98.9 %	$ (363)	98.9 %
2013	**$ 114,460**	**$ (646)**	**99.5 %**	$ (592)	99.5 %	$ 2,405	99.4 %
2012	**$ 94,295**	**$ (383)**	**99.7 %**	$ (126)	99.7 %	$ (72)	99.7 %
Prior to 2012	**$ 563,334**	**$ (649)**		$ (403)		$ (399)	

In 2021, we recognized $7.6 million of net favorable development in our Segregated Portfolio Cell Reinsurance segment related to workers' compensation business and $7.1 million of net favorable development in our Workers' Compensation Insurance segment. In 2020, we recognized $12.1 million of net favorable development in our Segregated Portfolio Cell Reinsurance segment related to workers' compensation business and $7.0 million of net favorable development in our Workers' Compensation Insurance segment. In 2019, we recognized $10.1 million of net favorable development in our Segregated Portfolio Cell Reinsurance segment, all related to workers' compensation business, and $7.8 million of net favorable development in our Workers' Compensation Insurance segment. Not included in the table above, net favorable development in our Workers' Compensation Insurance segment in 2019 included $1.6 million related to the amortization of the purchase accounting fair value adjustment. As previously discussed, this fair value adjustment has been fully amortized as of December 31, 2019.

Variability of Loss Reserves

As previously noted, the number of data points and variables considered and the subjective process followed in establishing our loss reserve makes it impractical to isolate individual variables and demonstrate their impact on our estimate of loss reserves. However, to provide a better understanding of the potential variability in our reserves, we have modeled implied reserve ranges around our single point net reserve estimates for our various lines of business assuming different confidence levels. The ranges have been developed by aggregating the expected volatility of losses across partitions of our business to obtain a consolidated distribution of potential reserve outcomes. The aggregation of this data takes into consideration correlations among our geographic and specialty mix of business. The result of the correlation approach to aggregation is that the ranges are narrower than the sum of the ranges determined for each partition.

We have used this modeled statistical distribution to calculate an 80% and 60% confidence interval for the potential outcome of our consolidated net reserve for losses. The high and low end points of the distributions are as follows:

	Low End Point	**Carried Net Reserve**	**High End Point**
80% Confidence Level	$2.327 billion	$3.128 billion	$4.051 billion
60% Confidence Level	$2.540 billion	$3.128 billion	$3.651 billion

Any change in our estimate of net ultimate losses for prior years is reflected in net income (loss) in the period in which such changes are made.

Due to the size of our consolidated reserve for losses and the large number of claims outstanding at any point in time, even a small percentage adjustment to our total reserve estimate could have a material effect on our results of operations for the period in which the adjustment is made, as was the case in 2021, 2020 and 2019.

Reinsurance

We use insurance and reinsurance (collectively, “reinsurance”) to provide capacity to write larger limits of liability, to provide reimbursement for losses incurred under the higher limit coverages we offer, to provide protection against losses in excess of policy limits and, in the case of risk sharing arrangements, to align our objectives with those of our strategic business partners and to provide custom insurance solutions for large customer groups. The purchase of reinsurance does not relieve us from the ultimate risk on our policies; however, it does provide reimbursement for certain losses we pay.

We make a determination of the amount of insurance risk we choose to retain based upon numerous factors, including our risk tolerance and the capital we have to support it, the price and availability of reinsurance, the volume of business, our level of experience with a particular set of exposures and our analysis of the potential underwriting results. We purchase excess of loss reinsurance to limit the amount of risk we retain and we do so from a number of companies to mitigate concentrations of credit risk. As of December 31, 2021, there is no reinsurer, on an individual basis, for which our recoverables for both paid and unpaid claims (net of amounts due to the reinsurer) and our prepaid balances are more than $52 million, in aggregate. We utilize reinsurance brokers to assist us in the placement of these reinsurance programs and in the analysis of the credit quality of our reinsurers. The determination of which reinsurers we choose to do business with is based upon an evaluation of their then current financial strength, rating, stability and claims payment practices.

We evaluate each of our ceded reinsurance contracts at inception to confirm that there is sufficient risk transfer to allow the contract to be accounted for as reinsurance under current accounting guidance. At December 31, 2021, all ceded contracts were accounted for as risk transferring contracts.

Our receivable from reinsurers on unpaid losses and loss adjustment expenses represents our estimate of the amount of our reserve for losses that will be recoverable under our reinsurance programs. We base our estimate of funds recoverable upon our expectation of ultimate losses and the portion of those losses that we estimate to be allocable to reinsurers based upon the terms and conditions of our reinsurance agreements. Our assessment of the collectability of the recorded amounts receivable from reinsurers considers the payment history of the reinsurer, publicly available financial and rating agency data, our interpretation of the underlying contracts and policies and responses by reinsurers.

Given the uncertainty inherent in our estimates of losses and related amounts recoverable from reinsurers, these estimates may vary significantly from the ultimate outcome.

Under the terms of certain of our reinsurance agreements, the amount of premium that we cede to our reinsurers is based in part on the losses we recover under the agreements. Therefore, we make an estimate of premiums ceded under these reinsurance agreements subject to certain minimums and maximums. Any adjustments to our estimates of losses recoverable under our reinsurance agreements or the premiums owed under our agreements are reflected in current operations. Due to the size of our reinsurance balances, an adjustment to these estimates could have a material effect on our results of operations for the period in which the adjustment is made.

Our reinsurance receivables are exposed to credit losses but to date have not experienced any significant amount of credit losses. To partially mitigate our exposure to credit losses, reinsurance receivables totaling approximately $97.9 million were collateralized by letters of credit or funds withheld as of December 31, 2021. We measure expected credit losses on our reinsurance receivables on a collective basis when similar risk characteristics exist or on an individual basis if we determine a receivable does not share similar risk characteristics. We measure expected credit losses associated with our reinsurance receivables (related to both paid and unpaid losses) at the consolidated level as our reinsurance receivables share similar risk characteristics including type of financial asset, type of industry and similar historical and expected credit loss patterns. We measure expected credit losses over the average contractual term of our reinsurance receivables utilizing a loss rate method. Historical internal credit loss experience is the basis for our assessment of expected credit losses; however, we may also consider historical credit loss information from external sources. We also consider reasonable and supportable forecasts of future economic conditions in our estimate of expected credit losses. Expected credit losses associated with our reinsurance receivables (related to both paid and unpaid losses) were nominal in amount as of December 31, 2021 and 2020. No reinsurance balances were written off for credit reasons during the years ended December 31, 2021 or 2020. Should our expected credit loss analysis or other facts or circumstances lead us to believe that any reinsurer may not meet its obligations to us, adjustments to the allowance for expected credit losses or to reinsurance receivables would be reflected in current operations. Such an adjustment has the potential to be material to the results of operations in the period in which it is recorded; however, we would not expect such an adjustment to have a material effect on our capital position or our liquidity. For further information on our allowance for expected credit losses related to our receivables from reinsurers see Note 1 of the Notes to Consolidated Financial Statements.

Investment Valuations

We record the majority of our investments at fair value as shown in the table below. At December 31, 2021, the distribution of our investments based on GAAP fair value hierarchies (levels) was as follows:

	Distribution by GAAP Fair Value Hierarchy				
	Level 1	Level 2	Level 3	Not Categorized	Total Investments
Investments recorded at:					
Fair value	8%	82%	1%	6%	97%
Other valuations					3%
Total Investments					100%

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. All of our fixed maturity and equity investments are carried at fair value. The fair value of our short-term securities approximates the cost of the securities due to their short-term nature.

Because of the number of securities we own and the complexity of developing accurate fair values, we utilize multiple independent pricing services to assist us in establishing the fair value of individual securities. The pricing services provide fair values based on exchange-traded prices, if available. If an exchange-traded price is not available, the pricing services, if possible, provide a fair value that is based on multiple broker/dealer quotes or that has been developed using pricing models. Pricing models vary by asset class and utilize currently available market data for securities comparable to ours to estimate a fair value for our securities. The pricing services scrutinize market data for consistency with other relevant market information before including the data in the pricing models. The pricing services disclose the types of pricing models used and the inputs used for each asset class. Determining fair values using these pricing models requires the use of judgment to identify appropriate comparable securities and to choose a valuation methodology that is appropriate for the asset class and available data.

The pricing services provide a single value per instrument quoted. We review the values provided for reasonableness each quarter by comparing market yields generated by the supplied value versus market yields observed in the marketplace. We also compare yields indicated by the provided values to appropriate benchmark yields and review for values that are unchanged or that reflect an unanticipated variation as compared to prior period values. We utilize a primary pricing service for each security type and compare provided information for consistency with alternate pricing services, known market data and information from our own trades, considering both values and valuation trends. We also review weekly trades versus the prices supplied by the services. If a supplied value appears unreasonable, we discuss the valuation in question with the pricing service and make adjustments if deemed necessary. Historically our review has not resulted in any material changes to the values supplied by the pricing services. The pricing services do not provide a fair value unless an exchange-traded price or multiple observable inputs are available. As a result, the pricing services may provide a fair value for a security in some periods but not others, depending upon the level of recent market activity for the security or comparable securities.

Level 1 Investments

Fair values for a majority of our equity securities and portions of our short-term and convertible securities are determined using exchange-traded prices. There is little judgment involved when fair value is determined using an exchange-traded price. In accordance with GAAP, we classify securities valued using an exchange-traded price as Level 1 securities.

Level 2 Investments

Most fixed income securities do not trade daily; thus, exchange-traded prices are generally not available for these securities. However, market information (often referred to as observable inputs or market data, including but not limited to, last reported trade, non-binding broker quotes, bids, benchmark yield curves, issuer spreads, two-sided markets, benchmark securities, offers and recent data regarding assumed prepayment speeds, cash flow and loan performance data) is available for most of our fixed income securities. We determine fair value for a large portion of our fixed income securities using available market information. In accordance with GAAP, we classify securities valued based on multiple market observable inputs as Level 2 securities.

Level 3 Investments

When a pricing service does not provide a value for one of our fixed maturity securities, management estimates fair value using either a single non-binding broker quote or pricing models that utilize market based assumptions which have limited observable inputs. The process involves significant judgment in selecting the appropriate data and modeling techniques to use in the valuation process. In accordance with GAAP, we classify securities valued using limited observable inputs as Level 3 securities.

Fair Values Not Categorized

We hold interests in certain investment funds, primarily LPs/LLCs, which measure fund assets at fair value on a recurring basis and provide us with a NAV for our interest. As a practical expedient, we consider the NAV provided to approximate the fair value of the interest. In accordance with GAAP, we do not categorize these investments within the fair value hierarchy.

Nonrecurring Fair Value Measurements

We measure the fair value of certain assets on a nonrecurring basis when events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. These assets include investments carried principally at cost, investments in tax credit partnerships, fixed assets, goodwill and other intangible assets. These assets would also include any equity method investments that do not provide a NAV. During the third quarter of 2020, we recognized a nonrecurring fair value measurement related to the goodwill in our Specialty P&C reporting unit with a carrying value of $161.1 million prior to the fair value measurement. This nonrecurring fair value measurement resulted in the goodwill being written down to its implied fair value of zero resulting in an impairment of the goodwill of $161.1 million (see following discussion under the heading "Goodwill / Intangibles" and Note 8 of the Notes to Consolidated Financial Statements). The inputs used in the fair value measurement were non-observable and, as such, were categorized as a Level 3 valuation. We did not have any other assets or liabilities that were measured at fair value on a nonrecurring basis at December 31, 2021 or December 31, 2020.

Investments - Other Valuation Methodologies

Certain of our investments, in accordance with GAAP for the type of investment, are measured using methodologies other than fair value. At December 31, 2021, these investments represented approximately 3% of total investments, and are detailed in the following table. Additional information about these investments is provided in Note 3 and Note 4 of the Notes to Consolidated Financial Statements.

(In millions)	Carrying Value	GAAP Measurement Method
Other investments:		
Other, principally FHLB capital stock	$ 3.2	Principally Cost
Investment in unconsolidated subsidiaries:		
Investments in tax credit partnerships	12.4	Equity
Equity method investments, primarily LPs/LLCs	52.3	Equity
	64.7	
BOLI	81.8	Cash surrender value
Total investments - Other valuation methodologies	$ 149.7	

Impairments

We evaluate our available-for-sale investment securities, which at December 31, 2021 and December 31, 2020 consisted entirely of fixed maturity securities, on at least a quarterly basis for the purpose of determining whether declines in fair value below recorded cost basis represent an impairment loss. We consider a credit-related impairment loss to have occurred:

- if there is intent to sell the security;
- if it is more likely than not that the security will be required to be sold before full recovery of its amortized cost basis; or
- if the entire amortized basis of the security is not expected to be recovered.

The assessment of whether the amortized cost basis of a security is expected to be recovered requires management to make assumptions regarding various matters affecting future cash flows. The choice of assumptions is subjective and requires the use of judgment. Actual credit losses experienced in future periods may differ from management's estimates of those credit losses. Methodologies used to estimate the present value of expected cash flows are:

The estimate of expected cash flows is determined by projecting a recovery value and a recovery time frame and assessing whether further principal and interest will be received. We consider various factors in projecting recovery values and recovery time frames, including the following:

- third-party research and credit rating reports;
- the current credit standing of the issuer, including credit rating downgrades, whether before or after the balance sheet date;
- the extent to which the decline in fair value is attributable to credit risk specifically associated with the security or its issuer;

- internal assessments and the assessments of external portfolio managers regarding specific circumstances surrounding an investment, which indicate the investment is more or less likely to recover its amortized cost than other investments with a similar structure;
- for asset-backed securities, the origination date of the underlying loans, the remaining average life, the probability that credit performance of the underlying loans will deteriorate in the future and our assessment of the quality of the collateral underlying the loan;
- failure of the issuer of the security to make scheduled interest or principal payments;
- any changes to the rating of the security by a rating agency;
- recoveries or additional declines in fair value subsequent to the balance sheet date;
- adverse legal or regulatory events;
- significant deterioration in the market environment that may affect the value of collateral (e.g., decline in real estate prices);
- significant deterioration in economic conditions; and
- disruption in the business model resulting from changes in technology or new entrants to the industry.

If deemed appropriate and necessary, a discounted cash flow analysis is performed to confirm whether a credit loss exists and, if so, the amount of the credit loss. We use the single best estimate approach for available-for-sale debt securities and consider all reasonably available data points, including industry analyses, credit ratings, expected defaults and the remaining payment terms of the debt security. For fixed rate available-for-sale debt securities, cash flows are discounted at the security's effective interest rate implicit in the security at the date of acquisition. If the available-for-sale debt security’s contractual interest rate varies based on subsequent changes in an independent factor, such as an index or rate, for example, the prime rate, the LIBOR, or the U.S. Treasury bill weekly average, that security’s effective interest rate is calculated based on the factor as it changes over the life of the security. If we intend to sell a debt security or believe we will more likely than not be required to sell a debt security before the amortized cost basis is recovered, any existing allowance will be written off against the security's amortized cost basis, with any remaining difference between the debt security's amortized cost basis and fair value recognized as an impairment loss in earnings.

Exclusive of securities where there is an intent to sell or where it is not more likely than not that the security will be required to be sold before recovery of its amortized cost basis, impairment for debt securities is separated into a credit component and a non-credit component. The credit component of an impairment is the difference between the security’s amortized cost basis and the present value of its expected future cash flows, while the non-credit component is the remaining difference between the security’s fair value and the present value of expected future cash flows. An allowance for expected credit losses will be recorded for the expected credit losses through income and the non-credit component is recognized in OCI. The amount of impairment recognized is limited to the excess of the amortized cost over the fair value of the available-for-sale debt security.

Pension

As a result of our NORCAL acquisition, we sponsor a frozen qualified defined benefit pension plan which covers substantially all NORCAL employees (except those that were previous employees of Medicus Insurance Company and FD Insurance Company, employees of PPM RRG as well as new hires after December 31, 2013). Accounting for pension benefits requires the use of assumptions for the valuation of the PBO and the expected performance of the plan assets.

We use December 31 as the measurement date for calculating our obligation related to this defined benefit pension plan and for estimating net periodic benefit cost (credit) for the subsequent year. The PBO for pension benefits represents the present value of all future benefits earned as of the measurement date for vested and non-vested employees. At each measurement date, we review the various assumptions impacting the amounts recorded for the pension plan including the discount rates, which impacts the recorded value of the PBO and interest costs, and the expected return on plan assets.

To estimate the discount rate at the measurement date, we use a bond yield curve model, developed based on pricing and yield information for high quality corporate bonds. The assumption for the expected return on plan assets is based on the anticipated returns that will be earned by the portfolio over the long-term. The expected return on plan assets is influenced, but not determined, by historical portfolio performance. We assumed a 3.75% expected return on plan assets on our pension plan assets for the year ended December 31, 2021. For 2022, we increased our expected return on plan assets assumption to 4.0% based on our long-term outlook for the capital markets.

The following table summarizes the estimated changes in our projected benefit obligation and net periodic benefit cost (income) for a hypothetical change in our discount rate and expected return on plan assets:

	Shift in Basis Points		
	December 31, 2021		
($ in millions)	(100)	Current	100
Change in Discount Rate:			
Benefit Obligation	$ 124.1	$ 106.9	$ 93.1
Net periodic benefit cost (income)	$ (0.5)	$ (0.5)	$ (0.5)
Change in Expected Return on Plan Assets:			
Net periodic benefit cost (income)	$ 0.2	$ (0.5)	$ (1.2)

Accounting standards provide for the delayed recognition of differences between actual results and expected or estimated results. This delayed recognition of the differences is amortized into earnings over time. The differences between actual results and expected or estimated results are recognized in full in AOCI. Amounts recognized in AOCI are reclassified to earnings in a systematic manner over the average future service period of participants. During 2022, we expect to recognize net pension income of approximately $1.1 million and we do not expect that contributions to the pension plan will be required during 2022 nor do we anticipate making any discretionary contributions.

Deferred Policy Acquisition Costs

Policy acquisition costs (primarily commissions, premium taxes and underwriting salaries) which are directly related to the successful acquisition of new and renewal premiums are capitalized as DPAC and charged to expense, net of ceding commissions earned, as the related premium revenue is recognized. We evaluate the recoverability of our DPAC typically at the segment level each reporting period or in a manner that is consistent with the way we manage our business. Any amounts estimated to be unrecoverable are charged to expense in the current period.

As part of our evaluation of the recoverability of DPAC, we also evaluate our unearned premiums for premium deficiencies. A premium deficiency is recognized if the sum of anticipated losses and loss adjustment expenses, unamortized DPAC and maintenance costs, net of anticipated investment income, exceeds the related unearned premium. If a premium deficiency is identified, the associated DPAC is written off, and a PDR is recorded for the excess deficiency as a component of net losses and loss adjustment expenses in our Consolidated Statements of Income and Comprehensive Income and as a component of the reserve for losses and loss adjustment expenses on our Consolidated Balance Sheets. For the years ended December 31, 2021 and 2020, we did not determine any DPAC to be unrecoverable. For the year ended December 31, 2019, a nominal amount of DPAC was charged to expense as it was determined to be unrecoverable and a $9.2 million PDR was established in our Specialty P&C segment related to a large national healthcare account. The $9.2 million PDR was fully amortized during 2020.

Deferred Taxes

Deferred federal income taxes arise from the recognition of temporary differences between the basis of assets and liabilities determined for financial reporting purposes and the basis determined for income tax purposes. Our temporary differences principally relate to our loss reserves, unearned and advanced premiums, DPAC, NOL and tax credit carryforwards, compensation related items, unrealized investment gains (losses) and basis differences on fixed assets, intangible assets and operating leases. Deferred tax assets and liabilities are measured using the enacted tax rates expected to be in effect when such benefits are realized. We review our deferred tax assets quarterly for impairment. If we determine that it is more likely than not that some or all of a deferred tax asset will not be realized, a valuation allowance is recorded to reduce the carrying value of the asset. In assessing the need for a valuation allowance, management is required to make certain judgments and assumptions about our future operations based on historical experience and information as of the measurement period regarding reversal of existing temporary differences, carryback capacity, future taxable income of the appropriate character (including its capital and operating characteristics) and tax planning strategies.

A valuation allowance was established in a prior year against the deferred tax asset related to the NOL carryforwards for the U.K. operations and in 2020 against a portion of the deferred tax asset related to the U.S. state NOL carryforwards. In addition, a valuation allowance was established in 2021 against the net deferred tax asset of ProAssurance American Mutual, a Risk Retention Group. As a taxpayer separate from the consolidated group, this entity has experienced cumulative losses in recent years. Management concluded that it was more likely than not that these deferred tax assets will not be realized. We also established a valuation allowance in a prior year against the deferred tax assets of certain SPCs at our wholly owned Cayman Islands reinsurance subsidiary, Inova Re. Due to the cumulative losses incurred in recent years by these SPCs, management

concluded that a valuation allowance was required. We evaluated the realizability of the deferred tax assets acquired from NORCAL during our accounting for the acquisition and management concluded that it was more likely than not that the acquired deferred tax assets would be realized. As of December 31, 2021, management concluded that the previously recorded valuation allowances were still required against the deferred tax assets related to the NOL carryforwards for the U.K. operations, against the deferred tax assets related to the U.S. state NOL carryforwards and against the deferred tax assets of certain SPCs at Inova Re. Management's assessment of the need for these valuation allowances at December 31, 2021 included an analysis of the available sources of income, including projections of income for the consolidated group following the NORCAL acquisition. See further discussion on ProAssurance's deferred tax assets in Note 7 of the Notes to Consolidated Financial Statements.

U.S. Tax Legislation

Coronavirus Aid, Relief and Economic Security Act

In response to COVID-19, the CARES Act was signed into law on March 27, 2020 and contains several provisions for corporations and eased certain deduction limitations originally imposed by the TCJA. See further discussion in Note 7 of the Notes to Consolidated Financial Statements. Temporary changes regarding NOL carryback provisions included in the CARES Act had a favorable impact on our liquidity, as we were able to carryback our 2019 and 2020 net operating losses to claim refunds (see discussion that follows in the Liquidity and Capital Resources and Financial Condition section under the heading "Taxes"). See further discussion in Note 7 of the Notes to Consolidated Financial Statements.

American Rescue Plan Act of 2021

In response to economic concerns associated with COVID-19, the American Rescue Plan Act of 2021 was signed into law on March 11, 2021 and includes an expansion of the number of employees covered by the limitation on the deductibility of compensation in excess of $1 million. This provision is effective for tax years beginning after December 31, 2026. We have evaluated this provision as well as the other provisions of the American Rescue Plan Act of 2021 and concluded that they will not have a material impact on our financial position or results of operations as of December 31, 2021. See further discussion in Note 7 of the Notes to Consolidated Financial Statements.

Unrecognized Tax Benefits

We evaluate tax positions taken on tax returns and recognize positions in our financial statements when it is more likely than not that we will sustain the position upon resolution with a taxing authority. If recognized, the benefit is measured as the largest amount of benefit that has a greater than 50% probability of being realized. We review uncertain tax positions each quarter, considering changes in facts and circumstances, such as changes in tax law, interactions with taxing authorities and developments in case law, and make adjustments as we consider necessary. Adjustments to our unrecognized tax benefits may affect our income tax expense, and settlement of uncertain tax positions may require the use of cash. Other than differences related to timing, no significant adjustments were considered necessary during 2021 or 2020. At December 31, 2021, our liability for unrecognized tax benefits approximated $3.0 million.

Goodwill / Intangibles

Goodwill and intangible assets are tested for impairment annually or more frequently if circumstances indicate an impairment may have occurred. The date of our annual impairment testing is October 1. Impairment of goodwill is tested at the reporting unit level, which is consistent with our reportable segments identified in Note 19 of the Notes to Consolidated Financial Statements.

Interim Impairment Assessments

During the third quarter of 2020, we performed interim impairment assessments of the goodwill and definite and indefinite lived intangible assets in our Specialty P&C, Workers' Compensation Insurance and Segregated Portfolio Cell Reinsurance reporting units due to the significant market volatility impacting our actual and projected results along with a decline in our stock price. The goodwill analysis indicated an impairment of the goodwill associated with our Specialty P&C reporting unit and accordingly we recorded a $161.1 million charge to goodwill (see further discussion in Note 8 of the Notes to Consolidated Financial Statements). The analysis of our definite and indefinite lived intangible assets indicated no impairment at September 30, 2020.

Annual Impairment Assessment

When testing goodwill for impairment on our annual test date, we have the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the estimated fair value of a reporting unit is less than its carrying amount. If we elect to perform a qualitative assessment and

determine that an impairment is more likely than not, we are then required to perform a quantitative impairment test; otherwise, no further analysis is required. We also may elect not to perform the qualitative assessment and, instead, proceed directly to the quantitative impairment test.

Performance of the qualitative goodwill impairment assessment requires judgment in identifying and considering the significance of relevant key factors, events, and circumstances that affect the fair values of our reporting units. This requires consideration and assessment of external factors such as macroeconomic, industry, and market conditions, as well as entity-specific factors, such as our actual and planned financial performance. We also give consideration to the difference between each reporting unit's fair value and carrying value as of the most recent date that a fair value measurement was performed. If the results of the qualitative assessment conclude that it is not more likely than not that the fair value of a reporting unit exceeds its carrying value, additional quantitative impairment testing is performed.

The quantitative goodwill impairment test involves comparing the fair value of a reporting unit with its carrying value including goodwill. If the fair value of a reporting unit exceeds its carrying value, the reporting unit's goodwill is considered not to be impaired. However, if the carrying value of a reporting unit exceeds its fair value, an impairment loss is recorded in an amount equal to that excess. Any impairment charge recognized is limited to the amount of the respective reporting unit's allocated goodwill.

Determining the fair value of a reporting unit under the quantitative goodwill impairment test requires judgment and often involves the use of significant estimates and assumptions, including an assessment of external factors such as macroeconomic, industry, and market conditions, as well as entity-specific factors, such as actual and planned financial performance. These estimates and assumptions could have a significant impact on whether or not an impairment charge is recognized and the magnitude of any such charge. To assist management in the process of determining any potential goodwill impairment, we may review and consider appraisals from accredited independent valuation firms. Estimates of fair value are primarily determined using discounted cash flows and market comparisons. These approaches involve significant estimates and assumptions, including projected future cash flows (including timing), discount rates reflecting the risks inherent in those future cash flows, perpetual growth rates, and selection of appropriate market comparable metrics and transactions.

During 2021, we experienced an increase in accident year reported losses, including increased severity-related claim activity in our Workers' Compensation Insurance segment. We primarily attribute this increase in reported losses and severity-related claim activity to workers being out of “work shape” as they returned to employment in 2021, as well as the lack of training, alternative work arrangements and employee fatigue due to the labor shortage. As a result, we increased our 2021 current accident year loss ratio in our Workers' Compensation Insurance reporting unit during the third quarter of 2021. Due to the increase in the current accident year loss ratio, management decided to bypass the optional qualitative impairment test and proceed directly to the quantitative impairment test for both the Workers’ Compensation Insurance and Segregated Portfolio Cell Reinsurance reporting units for the most recent goodwill impairment test performed on October 1, 2021. In applying the quantitative approach, management estimated the fair value of the Workers' Compensation Insurance and Segregated Portfolio Cell Reinsurance reporting units using both an income approach and market approach using the aforementioned valuation methodologies and process for developing assumptions. To corroborate the reporting units’ valuation, we performed a reconciliation of the estimate of the aggregate fair value of the reporting units to ProAssurance's market capitalization, including consideration of a control premium. As a result of the quantitative assessments, management concluded that the fair value of each of the Workers Compensation Insurance and Segregated Portfolio Cell Reinsurance reporting units exceeded the carrying value as of the testing date; therefore, goodwill was not impaired and no further goodwill impairment testing was required. No goodwill impairment was recorded during the year ended December 31, 2021. See Note 8 of the Notes to Consolidated Financial Statements for additional information about our goodwill. The analysis of our definite and indefinite lived intangible assets indicated no impairment at December 31, 2021.

Acquired Intangibles

The acquisition of NORCAL added $14 million to identifiable intangible assets as of the acquisition date. Intangible assets acquired in the NORCAL acquisition included the following:

(In thousands)	Estimated Fair Value on Acquisition Date	Estimated Useful Life
Trade name	$ 1,000	3
Licenses	13,000	Indefinite
Total	**$ 14,000**	

See further information on the intangible assets acquired in the NORCAL acquisition in Note 2 of the Notes to Consolidated Financial Statements and additional information regarding our goodwill and intangible assets is included in Note 1 and Note 8 of the Notes to Consolidated Financial Statements.

Business Combinations

We accounted for our acquisition of NORCAL in accordance with GAAP relating to business combinations which required us to make certain estimates and assumptions including determining the fair value of the non-cash components of the acquisition consideration and the acquisition date fair values of the acquired tangible and identifiable intangible assets and assumed liabilities of NORCAL. Subsequent to the preliminary valuation of the non-cash components of the purchase consideration and net assets acquired, any adjustment identified associated with the purchase price allocation will be evaluated to determine whether the adjustment represents a measurement period adjustment in accordance with GAAP. If the adjustment is deemed to be a measurement period adjustment and is identified within one year of the acquisition, then the measurement period adjustment will be recorded in the current reporting period with a corresponding adjustment to the gain on bargain purchase.

Contingent Consideration

Contingent consideration in a business combination is recorded at fair value on the date of the acquisition and remeasured each subsequent reporting period with changes in fair value recognized in earnings. The purchase consideration in the NORCAL acquisition included contingent consideration with an acquisition date fair value of approximately $24 million. NORCAL policyholders who tendered NORCAL stock to ProAssurance are eligible for a share of contingent consideration in an amount of up to approximately $84 million depending upon the after-tax development of NORCAL's ultimate net losses between December 31, 2020 and December 31, 2023. The estimated fair value of this contingent consideration was $24 million as of December 31, 2021, which did not change from the acquisition date of May 5, 2021, and was derived utilizing a stochastic model. This estimate does not guarantee that contingent consideration will ultimately be paid. Depending on NORCAL's actual ultimate net loss development between December 31, 2020 and December 31, 2023, the actual amount due to eligible policyholders may be greater than or less than the $24 million current fair value estimate. See further discussion around the contingent consideration in Note 2 and Note 11 of the Notes to Consolidated Financial Statements.

VOBA

VOBA is an intangible asset (or liability) that reflects the estimated fair value of in-force contracts acquired in an acquisition and represents the portion of the purchase price that is allocated to the value of the right to receive future cash flows from the business in-force at the acquisition date. VOBA is based on actuarially determined projections, and in instances where the in-force business is expected to generate an underwriting loss, the value of VOBA may be negative. Negative VOBA is reported in the reserve for losses and loss adjustment expenses on the Consolidated Balance Sheets.

We recognized negative VOBA of $11.7 million in connection with our acquisition of NORCAL, representing the value of future losses expected to be recognized over the lifetime of the contracts acquired determined using a discount rate and other relevant assumptions. The negative VOBA will be amortized over a period in proportion to the earn-out of the premium as a reduction to current accident year net losses and loss adjustment expenses on the Consolidated Statements of Income and Comprehensive Income. See Note 2 of the Notes to Consolidated Financial Statements for more information.

Gain on Bargain Purchase

As a result of the NORCAL acquisition, we recognized a preliminary gain on bargain purchase of $74.4 million during the second quarter of 2021 representing the excess of the fair value of the identifiable assets acquired and liabilities assumed over the purchase consideration. A gain on bargain purchase is recognized in earnings and is considered unusual, infrequent and non-recurring in nature. We exclude gains on bargain purchases from Non-GAAP operating income (loss) as they do not reflect normal operating results. See further discussion around the gain on bargain purchase recognized in the second quarter of 2021 from the NORCAL acquisition in Note 2 of the Notes to Consolidated Financial Statements.

Accounting Changes

We did not have any change in accounting estimate or policy that had a material effect on our results of operations or financial position during 2021. We are not aware of any accounting changes not yet adopted as of December 31, 2021 that could have a material effect on our results of operations, financial position or cash flows.

Liquidity and Capital Resources and Financial Condition

Overview

ProAssurance Corporation is a holding company and is a legal entity separate and distinct from its subsidiaries. As a holding company, our principal source of external revenue is our investment revenues. In addition, dividends from our operating subsidiaries represent another source of funds for our obligations, including debt service and shareholder dividends. We also charge our operating subsidiaries within our Specialty P&C (excluding the acquired operating subsidiaries of NORCAL) and Workers' Compensation Insurance segments a management fee based on the extent to which services are provided to the subsidiary and the amount of gross premium written by the subsidiary. At December 31, 2021, we held cash and liquid investments of approximately $73 million outside our insurance subsidiaries that were available for use without regulatory approval or other restriction. We also have $250 million in permitted borrowings available under our Revolving Credit Agreement as well as the possibility of a $50 million accordion feature, if successfully subscribed. As of February 17, 2022, no borrowings were outstanding under our Revolving Credit Agreement.

During 2021, our operating subsidiaries paid dividends to us of approximately $51 million. In the aggregate, our insurance subsidiaries are permitted to pay dividends of approximately $147 million over the course of 2022 without prior approval of state insurance regulators. However, the payment of any dividend requires prior notice to the insurance regulator in the state of domicile, and the regulator may reduce or prevent the dividend if, in its judgment, payment of the dividend would have an adverse effect on the surplus of the insurance subsidiary. We make the decision to pay dividends from an insurance subsidiary based on the capital needs of that subsidiary and may pay less than the permitted dividend or may also request permission to pay an additional amount (an extraordinary dividend).

Cash Flows

Cash flows between periods compare as follows:

(In thousands)	**Year Ended December 31**		
	2021	2020	*Change*
Net cash provided (used) by:			
Operating activities	**$ 73,970**	$ 92,343	*$ (18,373)*
Investing activities	**(85,526)**	(8,484)	*(77,042)*
Financing activities	**(60,624)**	(43,446)	*(17,178)*
Increase (decrease) in cash and cash equivalents	**$ (72,180)**	$ 40,413	*$ (112,593)*

(In thousands)	Year Ended December 31		
	2020	2019	*Change*
Net cash provided (used) by:			
Operating activities	$ 92,343	$ 148,166	*$ (55,823)*
Investing activities	(8,484)	50,522	*(59,006)*
Financing activities	(43,446)	(103,790)	*60,344*
Increase (decrease) in cash and cash equivalents	$ 40,413	$ 94,898	*$ (54,485)*

The principal components of our operating cash flows are the excess of premiums collected and net investment income over losses paid and operating costs, including income taxes. Timing delays exist between the collection of premiums and the payment of losses associated with the premiums. Premiums are generally collected within the twelve-month period after the policy is written, while our claim payments are generally paid over a more extended period of time. Likewise, timing delays exist between the payment of claims and the collection of any associated reinsurance recoveries.

The decrease in operating cash flows of $18.4 million in 2021 as compared to 2020 was partially offset by additional net cash receipt from NORCAL of approximately $27.7 million primarily associated with net premium receipts, partially offset by transaction-related expenses. Excluding NORCAL, operating cash flows decreased by $46.1 million in 2021 as compared to 2020 primarily due to a decrease in net premium receipts of $61.9 million driven by our Lloyd's Syndicates and Specialty P&C segments. The decrease in premium receipts in our Lloyd's Syndicates segment reflected our decreased participation in the results of Syndicate 1729 and Syndicate 6131 for the 2021 underwriting year. The decrease in premium receipts in our Specialty P&C segment was due to our re-underwriting efforts, the dissolution of our arrangement with CAPAssurance and the effect of $14.3 million of tail premium received from a large national healthcare account during the second quarter of 2020 (see further discussion in our Segment Operating Results - Specialty Property & Casualty section that follows). Additionally, the decrease in operating cash flows was due to a decrease in cash received from investment income of $14.6 million driven by a

decrease in distributed earnings and redemptions from our portfolio of investments in LPs/LLCs. Furthermore, the decrease in operating cash flows reflected the prior year effect of an increase in net cash received of $6.8 million associated with the cash settlement of a quota share reinsurance agreement between our Specialty P&C segment and one of its reinsurers in 2020. The decrease in operating cash flows was partially offset by a decrease in paid losses of $21.8 million driven by our Specialty P&C and Segregated Portfolio Cell Reinsurance segments. The decrease in paid losses in our Specialty P&C segment was primarily due to a smaller number of claims resolved with large indemnity payments as compared to the prior year period, some of which is likely associated with the COVID-19 pandemic including the disruption of the court systems. The decrease in paid losses in our Segregated Portfolio Cell Reinsurance segment reflected the effect of the payment of a $10 million claim during the first quarter of 2020 by an SPC at Eastern Re in which we do not participate. This claim payment related to a reserve established by the SPC in 2019 related to an errors and omissions liability policy. Additionally, the decrease in operating cash flows was partially offset by a decrease in cash paid for operating expenses of $7.6 million driven by the effect of one-time expenses of $5.4 million primarily related to employee severance and early retirement benefits paid to certain employees during the third quarter of 2020 and, to a lesser extent, a decrease in premium taxes due to a lower volume of premium written. In addition, the decrease in cash paid for operating expenses was due to our decreased participation in the results of Syndicate 1729 and Syndicate 6131 for the 2021 underwriting year. The remaining variance in operating cash flows in 2021 as compared to 2020 was comprised of individually insignificant components.

The decrease in operating cash flows in 2020 as compared to 2019 of $55.8 million was primarily due to an increase in paid losses of $89.1 million driven by our Specialty P&C and Segregated Portfolio Cell Reinsurance segments. The increase in paid losses in our Specialty P&C segment was primarily due to higher average claim payments. The increase in paid losses in our Segregated Portfolio Cell Reinsurance segment reflected the aforementioned payment of a $10 million claim during the first quarter of 2020. Furthermore, the decrease in operating cash flows reflected a decrease in net cash received of $7.4 million associated with the cash settlement of the 2017 calendar year quota share reinsurance agreement between our Specialty P&C segment and Syndicate 1729 due to the reduction in premiums ceded to Syndicate 1729. The decrease in operating cash flows also reflected the aforementioned one-time expenses of $5.4 million. Additionally, the decrease in operating cash flows reflected a decrease in cash received from investment income of $3.5 million primarily due to a reduction in dividends received on our equity portfolio resulting from a decrease in our allocation to this asset category. The decrease in operating cash flows was somewhat offset by an increase in net premium receipts of $28.1 million and a decrease in 2020 net tax payments as compared to 2019 of $9.8 million. The increase in net premium receipts was driven by our Specialty P&C segment due to $14.3 million of tail premium, as previously discussed. The decrease in net tax payments was primarily due to refunds received in 2020. Furthermore, the decrease in operating cash flows was partially offset by an increase in net cash received of $6.8 million associated with the cash settlement of a quota share reinsurance agreement, as previously discussed. The remaining variance in operating cash flows in 2020 as compared to 2019 was comprised of individually insignificant components.

We manage our investing cash flows to ensure that we will have sufficient liquidity to meet our obligations, taking into consideration the timing of cash flows from our investments, including interest payments, dividends and principal payments, as well as the expected cash flows to be generated by our operations as discussed in this section under the heading "Investing Activities and Related Cash Flows."

Our financing cash flows are primarily comprised of dividend payments and borrowings and repayments under our Revolving Credit Agreement. See further discussion of our financing activities in this section under the heading "Financing Activities and Related Cash Flows."

Operating Activities and Related Cash Flows

Losses

The following table, known as the Analysis of Reserve Development, presents information over the preceding ten years regarding the payment of our losses as well as changes to (the development of) our estimates of losses during that time period. As noted in the table, we have completed various acquisitions over the ten year period which have affected original and re-estimated gross and net reserve balances as well as loss payments.

The table includes losses on both a direct and an assumed basis and is net of anticipated reinsurance recoverables. The gross liability for losses before reinsurance, as shown on the balance sheet, and the reconciliation of that gross liability to amounts net of reinsurance are reflected below the table. We do not discount our reserve for losses to present value. Information presented in the table is cumulative and, accordingly, each amount includes the effects of all changes in amounts for prior years. The table presents the development of our balance sheet reserve for losses; it does not present accident year or policy year development data. Conditions and trends that have affected the development of liabilities in the past may not necessarily occur in the future. Accordingly, it is not appropriate to extrapolate future redundancies or deficiencies based on this table.

The following may be helpful in understanding the Analysis of Reserve Development:

- The line entitled "Reserve for losses, undiscounted and net of reinsurance recoverables" reflects our reserve for losses and loss adjustment expense, less the receivables from reinsurers, each as reported in our Consolidated Balance Sheets at the end of each year (the Balance Sheet Reserves).
- The section entitled "Cumulative net paid, as of" reflects the cumulative amounts paid as of the end of each succeeding year with respect to the previously recorded Balance Sheet Reserves.
- The section entitled "Re-estimated net liability as of" reflects the re-estimated amount of the liability previously recorded as Balance Sheet Reserves that includes the cumulative amounts paid and an estimate of the remaining net liability based upon claims experience as of the end of each succeeding year (the Net Re-estimated Liability).
- The line entitled "Net cumulative redundancy (deficiency)" reflects the difference between the previously recorded Balance Sheet Reserve for each applicable year and the Net Re-estimated Liability relating thereto as of the end of the most recent fiscal year.

Analysis of Reserve Development

(In thousands)	December 31 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Reserve for losses, undiscounted and net of reinsurance recoverables	$ 2,000,114	$ 1,860,076	$ 1,825,304	$ 1,820,300	$ 1,755,976	$ 1,719,953	$ 1,712,796	$ 1,776,027	$ 1,955,818	$ 2,032,092	$ 3,128,199
Cumulative net paid, as of:											
One Year Later	300,703	311,835	343,197	390,849	383,062	369,682	412,711	458,991	501,969	499,369	
Two Years Later	526,903	563,805	571,690	646,878	633,246	644,422	704,830	787,223	839,117		
Three Years Later	682,576	704,795	732,892	804,624	818,102	824,686	900,421	1,007,970			
Four Years Later	763,703	800,189	826,384	917,236	918,403	958,735	1,041,817				
Five Years Later	821,742	852,873	891,615	971,392	994,771	1,035,280					
Six Years Later	852,119	893,529	924,334	1,012,975	1,039,669						
Seven Years Later	876,840	915,730	952,118	1,037,853							
Eight Years Later	891,820	930,375	967,945								
Nine Years Later	899,969	941,468									
Ten Years Later	911,079										
Re-estimated net liability as of:											
End of Year	2,000,114	1,860,076	1,825,304	1,820,300	1,755,976	1,719,953	1,712,796	1,776,027	1,955,818	2,032,092	
One Year Later	1,728,076	1,644,203	1,644,516	1,659,120	1,612,198	1,585,593	1,620,680	1,764,244	1,905,419	1,994,516	
Two Years Later	1,498,158	1,472,259	1,483,378	1,519,078	1,485,357	1,481,292	1,541,237	1,716,096	1,882,368		
Three Years Later	1,342,996	1,331,828	1,358,560	1,396,130	1,380,687	1,373,145	1,501,138	1,706,893			
Four Years Later	1,224,597	1,231,337	1,252,605	1,296,074	1,279,877	1,340,191	1,488,345				
Five Years Later	1,148,793	1,157,493	1,173,975	1,228,480	1,253,245	1,333,861					
Six Years Later	1,091,646	1,108,716	1,126,308	1,211,706	1,252,096						
Seven Years Later	1,056,053	1,078,057	1,121,087	1,206,875							
Eight Years Later	1,034,690	1,075,277	1,119,984								
Nine Years Later	1,033,435	1,070,161									
Ten Years Later	1,031,800										
Net cumulative redundancy (deficiency)	$ 968,314	$ 789,915	$ 705,320	$ 613,425	$ 503,880	$ 386,092	$ 224,451	$ 69,134	$ 73,450	$ 37,576	
Original gross liability - end of year	$ 2,247,772	$ 2,051,428	$ 2,072,822	$ 2,058,266	$ 2,005,326	$ 1,993,428	$ 2,048,381	$ 2,119,847	$ 2,346,526	$ 2,417,179	
Reinsurance recoverables	(247,658)	(191,352)	(247,518)	(237,966)	(249,350)	(273,475)	(335,585)	(343,820)	(390,708)	(385,087)	
Original net liability - end of year	$ 2,000,114	$ 1,860,076	$ 1,825,304	$ 1,820,300	$ 1,755,976	$ 1,719,953	$ 1,712,796	$ 1,776,027	$ 1,955,818	$ 2,032,092	
Gross re-estimated liability - latest	$ 1,158,598	$ 1,191,990	$ 1,262,035	$ 1,365,348	$ 1,449,275	$ 1,573,230	$ 1,800,829	$ 2,021,075	$ 2,212,946	$ 2,346,497	
Re-estimated reinsurance recoverables	(126,798)	(121,829)	(142,051)	(158,473)	(197,179)	(239,369)	(312,484)	(314,182)	(330,578)	(351,981)	
Net re-estimated liability - latest	$ 1,031,800	$ 1,070,161	$ 1,119,984	$ 1,206,875	$ 1,252,096	$ 1,333,861	$ 1,488,345	$ 1,706,893	$ 1,882,368	$ 1,994,516	
Gross cumulative redundancy (deficiency)	$ 1,089,174	$ 859,438	$ 810,787	$ 692,918	$ 556,051	$ 420,198	$ 247,552	$ 98,772	$ 133,580	$ 70,682	

See table notes on following page.

Table Notes

- We have elected to present reserve history for acquired entities on a prospective basis in the table above; therefore, certain items will not agree to the following table which details activity in our net reserve for losses.
- Reserves for 2012 and thereafter include gross and net reserves acquired in 2012 business combinations of $21.8 million and $19.2 million, respectively, which considers reductions of $3.6 million and $3.3 million, respectively, recorded in 2013 due to the re-estimation of the fair value of the acquired reserves.
- Reserves for 2013 include gross and net reserves acquired in 2013 business combinations of $201.1 million and $126.0 million, respectively.
- Reserves for 2014 include gross and net reserves acquired in 2014 business combinations of $153.2 million and $139.5 million, respectively.
- Reserves for 2021 include gross and net reserves acquired in 2021 business combinations of $1.2 billion and $1.1 billion, respectively.

In each year reflected in the table, we have estimated our reserve for losses utilizing the management and actuarial processes discussed under the heading "Reserve for Losses and Loss Adjustment Expenses" in the Critical Accounting Estimates section. Factors that have contributed to the variation in loss development are primarily related to the extended period of time required to resolve professional liability claims and include the following:

- The HCPL legal environment deteriorated in the late 1990's and severity began to increase at a greater pace than anticipated in our rates and reserve estimates. We addressed the adverse severity trends through increased rates, stricter underwriting and modifications to claims handling procedures, and reflected this adverse severity trend when we established our initial reserves for subsequent years.
- These adverse severity trends later moderated, with that moderation becoming more pronounced beginning in 2009. We were cautious in giving full recognition to indications that the pace of severity increase had slowed, however we gave measured recognition of the improved trend in our reserve estimates. The favorable development was most pronounced for years 2004 to 2008, as the initial reserves for these accident years were established prior to substantial indication that severity trends were moderating. We gave stronger recognition to the lower severity trend as time elapsed and a greater percentage of claims were closed.
- A general decline in claims frequency has also been a contributor to favorable loss development. A significant portion of our policies through 2003 were issued on an occurrence basis, and a smaller portion of our ongoing business results from the issuance of extended reporting endorsements which have occurrence-like exposure. As claims frequency declined, the number of reported claims related to these coverages was less than originally expected.
- Beginning in 2017, we identified potential higher severity trends in the broader HCPL industry. These trends were also reflected in increases in estimates of ultimate losses for open HCPL claims for earlier accident years, which resulted in a lower amount of favorable development recognized in 2018 and 2017 as compared to prior years.
- During 2019 the loss experience in our Specialty line of business deteriorated further, particularly in regard to the reserves we established for a large national healthcare account that experienced losses far exceeding the assumptions we made when underwriting the account, beginning in 2016. As a result, we strengthened our Specialty reserves through the recognition of net unfavorable development on prior accident years and a higher current accident year net loss ratio in our Specialty P&C segment in 2019.

Activity in our net reserve for losses during 2021, 2020 and 2019 is summarized below:

(In thousands)	Year Ended December 31		
	2021	2020	2019
Balance, beginning of year	**$ 2,417,179**	$ 2,346,526	$ 2,119,847
Less reinsurance recoverables on unpaid losses and loss adjustment expenses	**385,087**	390,708	343,820
Net balance, beginning of year	**2,032,092**	1,955,818	1,776,027
Net reserves acquired from acquisitions	**1,089,103**	—	—
Net losses:			
Current year[1][2][3]	**797,732**	711,846	765,698
Favorable development of reserves established in prior years, net[3]	**(45,483)**	(50,399)	(11,783)
Total	**752,249**	661,447	753,915
Paid related to:			
Current year	**(109,925)**	(83,204)	(115,133)
Prior years	**(635,320)**	(501,969)	(458,991)
Total paid	**(745,245)**	(585,173)	(574,124)
Net balance, end of year	**3,128,199**	2,032,092	1,955,818
Plus reinsurance recoverables on unpaid losses and loss adjustment expenses	**451,741**	385,087	390,708
Balance, end of year	**$ 3,579,940**	$ 2,417,179	$ 2,346,526

(1) Current year net losses for the year ended December 31, 2019 included incurred losses of $2.1 million related to a loss portfolio transfer entered into during 2019 in the Specialty P&C segment. In addition, current year net losses for the year ended December 31, 2019 included a PDR of $9.2 million associated with the unearned premium of a large national healthcare account's claims-made policy in the Specialty P&C segment. Current year net losses for the year ended December 31, 2020 included the amortization of the aforementioned $9.2 million PDR which offsets the impact of the losses incurred associated with the premium earned related to the large national healthcare account's claims-made policy.

(2) During 2020, the aforementioned large national healthcare account did not renew on terms offered by the Company and exercised its contractual option to purchase extended reporting endorsement or "tail" coverage. As a result, we recognized total current year losses of $60.0 million (assumes a full limit loss) within the Specialty P&C segment for the year ended December 31, 2021.

(3) Current year net losses and prior accident year development for the year ended December 31, 2021 includes certain purchase accounting adjustments associated with our acquisition of NORCAL. See Note 10 of the Notes to Consolidated Financial Statements for additional information.

At December 31, 2021 our gross reserve for losses included case reserves of approximately $2.1 billion and IBNR reserves of approximately $1.4 billion. Our consolidated gross reserve for losses on a GAAP basis exceeds the combined gross reserves of our insurance subsidiaries on a statutory basis by approximately $0.3 billion, which is principally due to the portion of the GAAP reserve for losses that is reflected for statutory accounting purposes as unearned premiums. These unearned premiums are applicable to extended reporting endorsements ("tail" coverage) issued without a premium charge upon death, disability or retirement of an insured who meets certain qualifications.

Reinsurance

Within our Specialty P&C segment, we use insurance and reinsurance (collectively, "reinsurance") to provide capacity to write larger limits of liability, to provide reimbursement for losses incurred under the higher limit coverages we offer and to provide protection against losses in excess of policy limits. Within our Workers' Compensation Insurance segment, we use reinsurance to reduce our net liability on individual risks, to mitigate the effect of significant loss occurrences (including catastrophic events), to stabilize underwriting results and to increase underwriting capacity by decreasing leverage. In both our Specialty P&C and Workers' Compensation Insurance segments, we use reinsurance in risk sharing arrangements to align our objectives with those of our strategic business partners and to provide custom insurance solutions for large customer groups. Within our Lloyd's Syndicates segment, Syndicate 1729 utilizes reinsurance to provide capacity to write larger limits of liability on individual risks, to provide protection against catastrophic loss and to provide protection against losses in excess of policy limits. The purchase of reinsurance does not relieve us from the ultimate risk on our policies; however, it does provide reimbursement for certain losses we pay. We pay our reinsurers a premium in exchange for reinsurance of the risk. In certain of our excess of loss arrangements, the premium due to the reinsurer is determined by the loss experience of the business

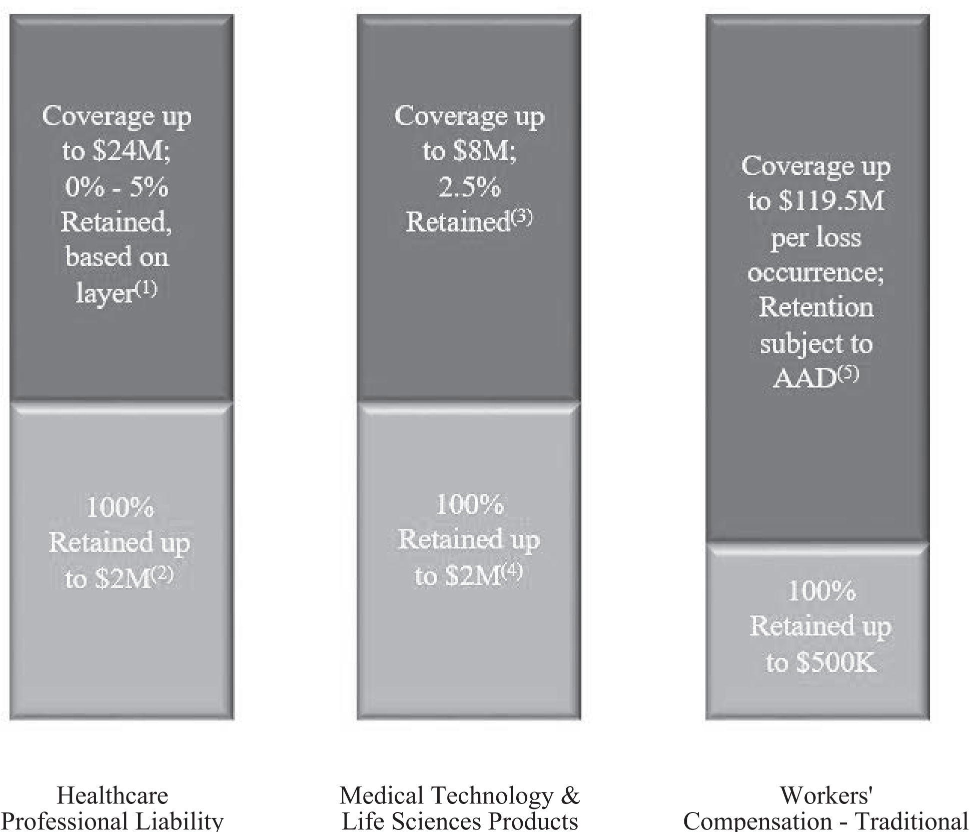
reinsured, subject to certain minimum and maximum amounts. Until all loss amounts are known, we estimate the premium due to the reinsurer. Changes to the estimate of premium owed under reinsurance agreements related to prior periods are recorded in the period in which the change in estimate occurs and can have a significant effect on net premiums earned.

We offer alternative market solutions whereby we cede certain premiums from our Workers' Compensation Insurance and Specialty P&C segments to either the SPCs at Inova Re or Eastern Re, our Cayman Islands reinsurance subsidiaries which are reported in our Segregated Portfolio Cell Reinsurance segment or, to a limited extent, an unaffiliated captive insurer for one program. The majority of these policies are reinsured to the SPCs at Inova Re or Eastern Re, net of a ceding commission. Each SPC at Inova Re and Eastern Re is owned, fully or in part, by an individual company, agency, group or association and the results of the SPCs are due to the participants of that cell. We participate to a varying degree in the results of selected SPCs and, for the SPCs in which we participate, our participation interest ranges from a low of 20% to a high of 85%. SPC results attributable to external cell participants are reported as an SPC dividend expense (income) in our Segregated Portfolio Cell Reinsurance segment. See further discussion on our SPC operations in the Segment Results - Segregated Portfolio Cell Reinsurance section that follows. The alternative market workers' compensation policies are ceded from our Workers' Compensation Insurance segment to the SPCs under 100% quota share reinsurance agreements. The alternative market healthcare professional liability policies are ceded from our Specialty P&C segment to the SPCs under either excess of loss or quota share reinsurance agreements, depending on the structure of the individual program. The portion of the risk that is not ceded to an SPC is retained in our Specialty P&C segment and may also be reinsured under our standard healthcare professional liability reinsurance program, depending on the policy limits provided. The remaining premium written in our alternative market business is 100% ceded to an unaffiliated captive insurer.

Excess of Loss Reinsurance Agreements

We generally reinsure risks under treaties (our excess of loss reinsurance agreements) pursuant to which the reinsurers agree to assume all or a portion of all risks that we insure above our individual risk retention levels, up to the maximum individual limits offered. Generally, these agreements are negotiated and renewed annually. Our HCPL and Medical Technology Liability treaties renew annually on October 1. As of October 1, 2021, our HCPL treaty renewed with a lower gross rate and also incorporated NORCAL policies. For the NORCAL excess of loss reinsurance arrangement in effect prior to October 1, 2021, NORCAL policies were reinsured under separate reinsurance agreements, primarily excess of loss, which have historically renewed annually on January 1. For the NORCAL excess of loss reinsurance arrangement that renewed on January 1, 2021, retention was generally the first $2 million in risk and coverages in excess of this amount are ceded up to $24 million. There were no significant changes in the cost or structure of our Medical Technology Liability treaty upon the latest renewal on October 1, 2021. Our Workers' Compensation treaty renews annually on May 1. Our traditional workers' compensation treaty renewed May 1, 2021 at a higher rate than the previous agreement, with an increase in the AAD to 3.50% from 3.16% of ceded earned premium, in excess of the $0.5 million retention per loss occurrence; all other material treaty terms were consistent with the expiring agreement. The significant coverages provided by our current excess of loss reinsurance agreements are detailed in the following table.

Excess of Loss Reinsurance Agreements



(1) Effective October 1, 2020, one prepaid limit reinstatement of $21M and a second limit reinstatement of up to $21M for the second layer, subject to reinstatement premium, which attaches after the first reinstatement has been completely exhausted. All limit reinstatements thereafter require no additional premium. Effective October 1, 2021, limits can be reinstated a maximum of four times.

(2) Prior to October 1, 2020, retention was $1M.

(3) Historically, retention has ranged from 2.5% to 32.5%.

(4) Historically, retention has ranged from $1M to $2M.

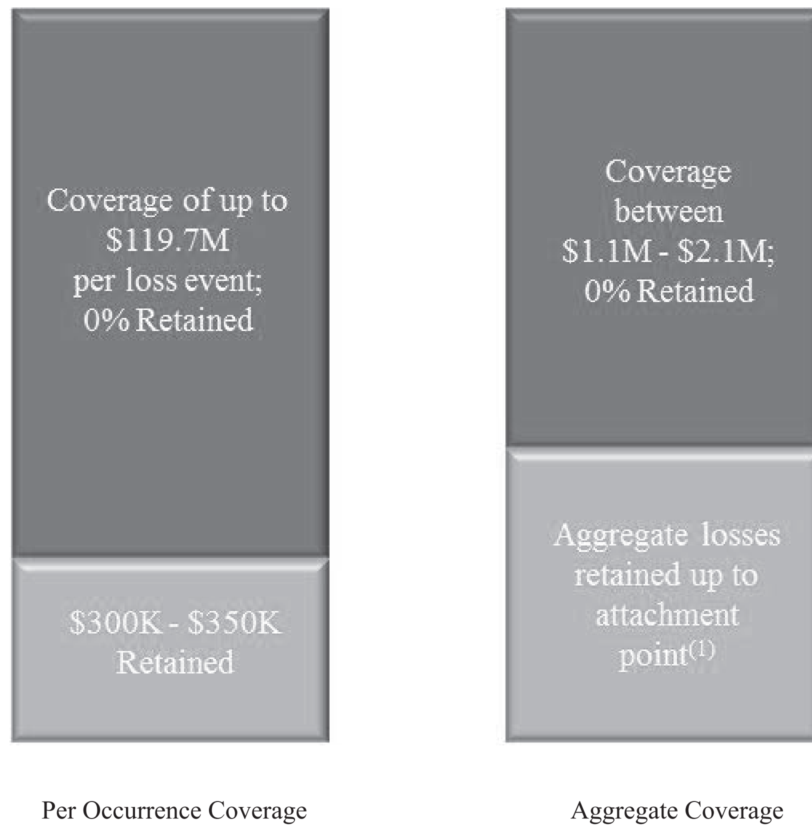
(5) Includes an AAD where retention is 3.5% of subject earned premium in annual losses otherwise recoverable in excess of the $500K retention per loss occurrence.

Large HCPL risks that are above the limits of our basic reinsurance treaties may be reinsured on a facultative basis, whereby the reinsurer agrees to insure a particular risk up to a designated limit. We also have in place a number of risk sharing arrangements that apply to the first $1 million of losses for certain large healthcare systems and other insurance entities, as well as with certain insurance agencies that produce business for us.

Other Reinsurance Arrangements

For the workers' compensation business ceded to Inova Re and Eastern Re, each SPC has in place its own reinsurance arrangements; which are illustrated in the following table.

Segregated Portfolio Cell Reinsurance



Per Occurrence Coverage Aggregate Coverage

(1) The attachment point is based on a percentage of written premium within individual cells, ranges from 85% to 94%, and varies by cell.

Each SPC has participants and the profit or loss of each cell accrues fully to these cell participants. As previously discussed, we participate in certain SPCs to a varying degree. Each SPC maintains a loss fund initially equal to the difference between premium assumed by the cell and the ceding commission. The external participants of each cell provide collateral to us, typically in the form of a letter of credit that is initially equal to the difference between the loss fund of the SPC (amount of funds available to pay losses after deduction of ceding commission) and the aggregate attachment point of the reinsurance. Over time, an SPC's retained profits are considered in the determination of the collateral amount required to be provided by the cell's external participants.

Within our Lloyd's Syndicates segment, Syndicate 1729 utilizes reinsurance to provide capacity to write larger limits of liability on individual risks, to provide protection against catastrophic loss and to provide protection against losses in excess of policy limits. The level of reinsurance that Syndicate 1729 purchases is dependent on a number of factors, including its underwriting risk appetite for catastrophic exposure, the specific risks inherent in each line or class of business written and the pricing, coverage and terms and conditions available from the reinsurance market. Reinsurance protection by line of business is as follows:

- Reinsurance is utilized on a per risk basis for the property insurance and casualty coverages in order to mitigate risk volatility.
- Catastrophic protection is utilized on both our property insurance and casualty coverages to protect against losses in excess of policy limits as well as natural catastrophes.
- Both quota share reinsurance and excess of loss reinsurance are utilized to manage the net loss exposure on our property reinsurance coverages.
- Property umbrella excess of loss reinsurance is utilized for peak catastrophe and frequency of catastrophe exposures.

- Prior to January 1, 2022, external excess of loss reinsurance was utilized by Syndicate 1729 to manage the net loss exposure on the specialty property and contingency coverages ceded to Syndicate 6131; Syndicate 6131 ceased underwriting on a quota share basis with Syndicate 1729 as Syndicate 6131's business was incorporated into Syndicate 1729 beginning with the 2022 year of account. For the second half of 2020, external quota share reinsurance was utilized by Syndicate 6131 to manage the net loss exposure on the specialty property and contingency coverages it assumed from Syndicate 1729 by ceding essentially half of the premium assumed to an unaffiliated insurer; this agreement was non-renewed on January 1, 2021 (see further discussion in the Segment Results - Lloyd's Syndicates section that follows).

Syndicate 1729 may still be exposed to losses that exceed the level of reinsurance purchased as well as to reinstatement premiums triggered by losses exceeding specified levels. Cash demands on Syndicate 1729 can vary significantly depending on the nature and intensity of a loss event. For significant reinsured catastrophe losses, the inability or unwillingness of the reinsurer to make timely payments under the terms of the reinsurance agreement could have an adverse effect on Syndicate 1729's liquidity.

Taxes

We are subject to the tax laws and regulations of the U.S., Cayman Islands and U.K. We file a consolidated U.S. federal income tax return that includes the parent company and its U.S. subsidiaries, except for ProAssurance American Mutual, a Risk Retention Group. Our filing obligations include a requirement to make quarterly payments of estimated taxes to the IRS using the corporate tax rate effective for the tax year. We did not make any quarterly estimated tax payments during the year ended December 31, 2021 or 2020.

As a result of the CARES Act that was signed into law on March 27, 2020, as previously discussed, we were permitted to carryback NOLs generated in tax years 2019 and 2020 for up to five years. See further discussion in Note 7 of the Notes to Consolidated Financial Statements. We generated an NOL of approximately $33.3 million from the 2020 tax year that was carried back to the 2015 tax year that resulted in a claim for a refund of approximately $11.7 million, which we anticipate to receive during the first half of 2022. Additionally, we had an NOL of approximately $25.6 million from the 2019 tax year which was carried back to the 2014 tax year and generated a tax refund of approximately $9.0 million which we received in February 2021. Furthermore, we received a tax refund of $1.3 million during the second quarter of 2021 due to the repeal of a previous election we made under the TCJA related to discounted loss reserves.

As a result of our acquisition of NORCAL, we recorded $46.8 million of net deferred tax assets reflecting the remeasurement of NORCAL's historical net deferred tax assets. The net deferred tax assets acquired from NORCAL were subject to recalculation following application of all purchase accounting adjustments and our assessment of the realizability of NORCAL's deferred tax assets. As a result of the NORCAL acquisition, we have U.S. federal NOL carryforwards which as of December 31, 2021 were approximately $43.0 million. These NOL carryforwards are subject to limitation by Internal Revenue Code Section 382 and will begin to expire in 2035.

Investing Activities and Related Cash Flows

Our investments at December 31, 2021 and December 31, 2020 are comprised as follows:

($ in thousands)	December 31, 2021		December 31, 2020	
	Carrying Value	**% of Total Investment**	Carrying Value	% of Total Investment
Fixed maturities, available for sale:				
U.S. Treasury obligations	**$ 238,507**	**5 %**	$ 107,059	3 %
U.S. Government-sponsored enterprise obligations	**20,234**	**1 %**	12,261	1 %
State and municipal bonds	**519,196**	**11 %**	332,920	10 %
Corporate debt	**1,898,556**	**39 %**	1,329,342	39 %
Residential mortgage-backed securities	**453,941**	**9 %**	276,541	8 %
Commercial mortgage-backed securities	**245,624**	**5 %**	126,402	4 %
Other asset-backed securities	**457,664**	**9 %**	273,006	8 %
Total fixed maturities, available-for-sale	**3,833,722**	**79 %**	2,457,531	73 %
Fixed maturities, trading	**43,670**	**1 %**	48,456	1 %
Total fixed maturities	**3,877,392**	**80 %**	2,505,987	74 %
Equity investments[(1)]	**214,807**	**4 %**	120,101	4 %
Short-term investments	**216,987**	**4 %**	337,813	10 %
BOLI	**81,767**	**2 %**	67,847	2 %
Investment in unconsolidated subsidiaries	**335,576**	**7 %**	310,529	9 %
Other investments	**101,794**	**3 %**	47,068	1 %
Total investments	**$ 4,828,323**	**100 %**	$ 3,389,345	100 %

[(1)]Includes $187.1 million and $69.5 million of investment grade bond funds which are not subject to significant equity price risk for the years ended December 31, 2021 and 2020, respectively.

At December 31, 2021, 100% of our investments in available-for-sale fixed maturity securities were rated and the average rating was A+. The distribution of our investments in available-for-sale fixed maturity securities by rating were as follows:

($ in thousands)	December 31, 2021		December 31, 2020	
	Carrying Value	**% of Total Investment**	Carrying Value	% of Total Investment
Rating*				
AAA	**$ 1,129,136**	**29 %**	$ 717,187	29 %
AA+	**130,077**	**3 %**	103,996	4 %
AA	**254,570**	**7 %**	168,452	7 %
AA-	**194,661**	**5 %**	122,733	5 %
A+	**221,473**	**6 %**	197,274	8 %
A	**521,598**	**14 %**	323,044	13 %
A-	**364,147**	**9 %**	245,464	10 %
BBB+	**292,984**	**8 %**	189,971	8 %
BBB	**300,650**	**8 %**	190,385	8 %
BBB-	**127,982**	**3 %**	59,847	2 %
Below investment grade	**296,444**	**8 %**	133,607	5 %
Not rated	**—**	**— %**	5,571	1 %
Total	**$ 3,833,722**	**100 %**	$ 2,457,531	100 %

*Average of three NRSRO sources, presented as an S&P equivalent. Source: S&P, Copyright ©2021, S&P Global Market Intelligence

Our acquisition of NORCAL added the following to our investment holdings as of May 5, 2021, the date of acquisition:

(In thousands)		
Fixed maturities, available for sale	$	1,100,058
Equity investments		374,484
Short-term investments		61,289
BOLI		12,581
Investment in unconsolidated subsidiaries		26,948
Other investments		32,461
Total investments	$	1,607,821

A detailed listing of our investment holdings as of December 31, 2021 is located under the Financial Information heading on the Investor Relations page of our website which can be reached directly at https://investor.proassurance.com/financial-information/quarterly-investment-supplements/default.aspx or through links from the Investor Relations section of our website, investor.proassurance.com.

We manage our investments to ensure that we will have sufficient liquidity to meet our obligations, taking into consideration the timing of cash flows from our investments, including interest payments, dividends and principal payments, as well as the expected cash flows to be generated by our operations. Furthermore, we managed our investments as part of our capital planning in anticipation of closing our acquisition of NORCAL. In addition to the interest and dividends we will receive from our investments, we anticipate that between $70 million and $130 million of our portfolio will mature (or be paid down) each quarter over the next twelve months and become available, if needed, to meet our cash flow requirements. The primary outflow of cash at our insurance subsidiaries is related to paid losses and operating costs, including income taxes. The payment of individual claims cannot be predicted with certainty; therefore, we rely upon the history of paid claims in estimating the timing of future claims payments with consideration to current and anticipated industry trends and macroeconomic conditions. To the extent that we may have an unanticipated shortfall in cash, we may either liquidate securities or borrow funds under existing borrowing arrangements through our Revolving Credit Agreement and the FHLB system. Permitted borrowings under our Revolving Credit Agreement are $250 million with the possibility of an additional $50 million accordion feature, if successfully subscribed. Given the duration of our investments, we do not foresee a shortfall that would require us to meet operating cash needs through additional borrowings. Additional information regarding our Revolving Credit Agreement is detailed in Note 13 of the Notes to Consolidated Financial Statements.

At December 31, 2021, our FAL was comprised of fixed maturity securities with a fair value of $36.6 million and cash and cash equivalents of $1.2 million deposited with Lloyd's. See further discussion in Note 4 of the Notes to Consolidated Financial Statements. During the second and fourth quarters of 2021, we received a return of approximately $24.5 million and $8.0 million, respectively, of cash from our FAL balances given the reduction in our participation in the results of Syndicate 1729 and Syndicate 6131 for the 2021 underwriting year. Further, during the fourth quarter of 2021, ProAssurance received a return of approximately $26.6 million of cash from our FAL balances given Syndicate 6131 ceased underwriting on a quota share basis with Syndicate 1729 as Syndicate 6131's business is retained within Syndicate 1729 beginning with the 2022 underwriting year. See further discussion on the return of FAL in the Segment Results - Lloyd's Syndicates section that follows.

Our investment portfolio continues to be primarily composed of high quality fixed income securities with approximately 92% of our fixed maturities being investment grade securities as determined by national rating agencies. The weighted average effective duration of our fixed maturity securities at December 31, 2021 was 3.71 years; the weighted average effective duration of our fixed maturity securities combined with our short-term securities was 3.51 years.

The carrying value and unfunded commitments for certain of our investments were as follows:

	Carrying Value				**December 31, 2021**		
($ in thousands, except expected funding period)	**December 31, 2021**		December 31, 2020		**Unfunded Commitment**		**Expected funding period in years**
Qualified affordable housing project tax credit partnerships [1]	**$**	**12,424**	$	27,719	**$**	**581**	**5**
All other investments, primarily investment fund LPs/LLCs		**323,152**		282,810		**168,379**	**4**
Total	**$**	**335,576**	$	310,529	**$**	**168,960**	

[1] The carrying value reflects our total commitments (both funded and unfunded) to the partnerships, less any amortization, since our initial investment. We fund these investments based on funding schedules maintained by the partnerships.

Investment fund LPs/LLCs are by nature less liquid and may involve more risk than other investments. We manage our risk through diversification of asset class and geographic location. At December 31, 2021, we had investments in 34 separate investment funds with a total carrying value of $323.2 million which represented approximately 7% of our total investments. Our investment fund LPs/LLCs generate earnings from trading portfolios, secured debt, debt securities, multi-strategy funds and private equity investments, and the performance of these LPs/LLCs is affected by the volatility of equity and credit markets. For our investments in LPs/LLCs, we record our allocable portion of the partnership operating income or loss as the results of the LPs/LLCs become available, typically following the end of a reporting period.

Business Combinations and Ventures

On May 5, 2021, we completed the acquisition of NORCAL by purchasing 98.8% of the converted company stock in exchange for total consideration transferred of $449 million. On September 16, 2021, we acquired the remaining 1.2% interest in NORCAL for $3 million of cash. On May 5, 2021, ProAssurance funded the transaction with $248 million of cash on hand and NORCAL paid $2 million to policyholders who elected to receive the discounted cash option for their allocated share of the converted company's equity. Additional consideration with a principal amount of $191 million and a fair value of $175 million, is in the form of Contribution Certificates issued to certain NORCAL policyholders in the conversion, and those instruments are an obligation of NORCAL Insurance Company, the successor of NORCAL Mutual Insurance Company (see Note 13 of the Notes to Consolidated Financial Statements for further discussion of the terms of the Contribution Certificates). Policyholders who tendered NORCAL stock to ProAssurance are also eligible for a share of contingent consideration in an amount of up to approximately $84 million depending upon the after-tax development of NORCAL's ultimate net losses between December 31, 2020 and December 31, 2023. The estimated fair value of this contingent consideration was $24 million as of May 5, 2021 and December 31, 2021. The Agreement and Plan of Acquisition is included as Exhibit 2.1 of this report. Additional information regarding our acquisition of NORCAL is included in Note 2 of the Notes to Consolidated Financial Statements. There were no business combinations during the year ended December 31, 2020.

Financing Activities and Related Cash Flows

Treasury Shares

Treasury share activity for 2021, 2020 and 2019 was as follows:

(In thousands)	**2021**	2020	2019
Treasury shares at the beginning of the period	**9,325**	9,325	9,352
Shares reissued, primarily those reissued pursuant to the ProAssurance 2011 Employee Stock Ownership Plan, had a fair value of approximately $1 million in 2019	**—**	—	(27)
Treasury shares at the end of the period	**9,325**	9,325	9,325

We did not repurchase any common shares subsequent to December 31, 2021 and as of February 17, 2022 our remaining Board authorization was approximately $110 million.

ProAssurance Shareholder Dividends

Our Board declared cash dividends during 2021, 2020 and 2019 as follows:

	Quarterly Cash Dividends Declared, per Share		
	2021	2020	2019
First Quarter	**$ 0.05**	$ 0.31	$ 0.31
Second Quarter	**$ 0.05**	$ 0.05	$ 0.31
Third Quarter	**$ 0.05**	$ 0.05	$ 0.31
Fourth Quarter	**$ 0.05**	$ 0.05	$ 0.31

Each dividend was paid in the month following the quarter in which it was declared. Cash dividends totaling $11 million, $39 million and $93 million were paid during the years ended December 31, 2021, 2020 and 2019, respectively. Any decision to pay future cash dividends is subject to the Board's final determination after a comprehensive review of financial performance, future expectations and other factors deemed relevant by the Board.

Debt

At December 31, 2021, our debt included $250 million of outstanding unsecured senior notes. The notes bear interest at 5.3% annually and are due in 2023 although they may be redeemed in whole or part prior to maturity. There are no financial covenants associated with these notes.

NORCAL Insurance Company, successor to NORCAL Mutual Insurance Company, issued Contribution Certificates, which bear interest at 3.0% annually and are due in 2031, to certain NORCAL policyholders in the conversion. The Contribution Certificates have a principal amount of $191 million and were recorded at their fair value of $175 million at the date of the NORCAL acquisition. The difference of $16 million between the recorded acquisition date fair value and the principal balance of the Contribution Certificates will be accreted utilizing the effective interest method over the term of the certificates of ten years as an increase to interest expense. Furthermore, interest payments, which begin in April 2022, are subject to deferral if we do not receive permission from the California Department of Insurance prior to payment. See Note 2 and Note 13 of the Notes to Consolidated Financial Statements for additional information on the Contribution Certificates issued in the NORCAL acquisition. There are no financial covenants associated with these certificates.

We have a Revolving Credit Agreement, which expires in November 2024, that may be used for general corporate purposes, including, but not limited to, short-term working capital, share repurchases as authorized by the Board and support for other activities. Our Revolving Credit Agreement permits borrowings of up to $250 million as well as the possibility of a $50 million accordion feature, if successfully subscribed. At December 31, 2021, there were no outstanding borrowings on our Revolving Credit Agreement; we are in compliance with the financial covenants of the Revolving Credit Agreement.

Two of our subsidiaries, ProAssurance Indemnity Company, Inc. and ProAssurance Insurance Company of America, had Mortgage Loans with one lender in connection with the recapitalization of two office buildings, with scheduled maturities in December 2027. The Mortgage Loans accrued interest at three-month LIBOR plus 1.325% with principal and interest payable on a quarterly basis. During 2021, we repaid the balance outstanding on the Mortgage Loans of approximately $35.3 million. Interest expense on the Mortgage Loans during the year ended December 31, 2021 included the write-off of the unamortized debt issuance costs which were nominal in amount.

Additional information regarding our debt is provided in Note 13 of the Notes to Consolidated Financial Statements.

Three of our insurance subsidiaries are members of an FHLB. Through membership, those subsidiaries have access to secured cash advances which can be used for liquidity purposes or other operational needs. In order for us to use FHLB proceeds, regulatory approvals may be required depending on the nature of the transaction. To date, those subsidiaries have not materially utilized their membership for borrowing purposes.

Results of Operations - Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Selected consolidated financial data for each period is summarized in the table below.

($ in thousands, except per share data)	**Year Ended December 31**		
	2021	2020	*Change*
Revenues:			
Net premiums written	**$ 882,721**	$ 747,701	*$ 135,020*
Net premiums earned	**$ 971,668**	$ 792,715	*$ 178,953*
Net investment result	**119,496**	60,077	*59,419*
Net investment gains (losses)	**24,310**	15,678	*8,632*
Other income	**8,936**	6,470	*2,466*
Total revenues	**1,124,410**	874,940	*249,470*
Expenses:			
Net losses and loss adjustment expenses	**752,249**	661,447	*90,802*
Underwriting, policy acquisition and operating expenses	**268,246**	237,881	*30,365*
SPC U.S. federal income tax expense	**1,947**	1,746	*201*
SPC dividend expense (income)	**10,050**	14,304	*(4,254)*
Interest expense	**19,719**	15,503	*4,216*
Goodwill impairment	**—**	161,115	*(161,115)*
Total expenses	**1,052,211**	1,091,996	*(39,785)*
Gain on bargain purchase	**74,408**	—	*74,408*
Income (loss) before income taxes	**146,607**	(217,056)	*363,663*
Income tax expense (benefit)	**2,483**	(41,329)	*43,812*
Net income (loss)	**$ 144,124**	$ (175,727)	*$ 319,851*
Non-GAAP operating income (loss)	**$ 75,892**	$ (27,741)	*$ 103,633*
Earnings (loss) per share:			
Basic	**$ 2.67**	$ (3.26)	*$ 5.93*
Diluted	**$ 2.67**	$ (3.26)	*$ 5.93*
Non-GAAP operating income (loss) per share:			
Basic	**$ 1.41**	$ (0.52)	*$ 1.93*
Diluted	**$ 1.40**	$ (0.52)	*$ 1.92*
Net loss ratio	**77.4%**	83.4%	*(6.0 pts)*
Underwriting expense ratio	**27.6%**	30.0%	*(2.4 pts)*
Combined ratio	**105.0%**	113.4%	*(8.4 pts)*
Operating ratio	**97.7%**	104.3%	*(6.6 pts)*
Effective tax rate	**1.7%**	19.0%	*(17.3 pts)*
Return on equity*	**5.3%**	(12.3%)	*17.6 pts*

*See further discussion on this calculation in the Executive Summary of Operations section under the heading "ROE."

In all tables that follow, the abbreviation "*nm*" indicates that the information or the percentage change is not meaningful.

Executive Summary of Operations

The following sections provide an overview of our consolidated and segment results of operations for the year ended December 31, 2021 as compared to the year ended December 31, 2020. See the Segment Results sections that follow for additional information regarding each segment's results. For a full discussion of the changes in the financial condition, results of operations and cash flows for the year ended December 31, 2020 as compared to the year ended December 31, 2019, please refer to Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of ProAssurance's December 31, 2020 report on Form 10-K.

Revenues

The following table shows our consolidated and segment net premiums earned:

($ in thousands)	Year Ended December 31			
	2021	2020	*Change*	
Net Premiums Earned				
Specialty P&C	**$ 695,008**	$ 477,365	*$ 217,643*	*45.6%*
Workers' Compensation Insurance	**164,600**	171,772	*(7,172)*	*(4.2%)*
Segregated Portfolio Cell Reinsurance	**63,688**	66,352	*(2,664)*	*(4.0%)*
Lloyd's Syndicates	**48,372**	77,226	*(28,854)*	*(37.4%)*
Consolidated total	**$ 971,668**	$ 792,715	*$ 178,953*	*22.6%*

For the year ended December 31, 2021, consolidated net premiums earned included additional earned premiums of $214.6 million in our Specialty P&C segment from our acquisition of NORCAL. Excluding NORCAL, consolidated net premiums earned decreased $35.6 million in 2021 as compared to 2020 driven by a decrease in net premiums earned in our Lloyd's Syndicates and Workers' Compensation Insurance segments, partially offset by an increase in net premiums earned in our Specialty P&C segment. The decrease in our Lloyd's Syndicates segment was due to our decreased participation in the results of Syndicate 1729 and Syndicate 6131 for the 2021 underwriting year. For both our Workers' Compensation Insurance and Segregated Portfolio Cell Reinsurance segments, the decrease in net premiums earned reflected the competitive workers' compensation market conditions and, for our Workers' Compensation Insurance segment, the impact of audit premium returned to policyholders. Net premiums earned in our Specialty P&C segment, excluding NORCAL, increased in 2021 due to the beneficial impacts of our re-underwriting efforts and focus on rate adequacy, partially offset by the prior year effect of a tail policy associated with a large national healthcare account which resulted in $14.3 million of one-time premium written and fully earned during the second quarter of 2020.

The following table shows our consolidated net investment result:

($ in thousands)	Year Ended December 31			
	2021	2020	*Change*	
Net investment income	**$ 70,522**	$ 71,998	*$ (1,476)*	*(2.1%)*
Equity in earnings (loss) of unconsolidated subsidiaries*	**48,974**	(11,921)	*60,895*	*510.8%*
Net investment result	**$ 119,496**	$ 60,077	*$ 59,419*	*98.9%*

*Equity in earnings (loss) of unconsolidated subsidiaries includes our share of the operating results of interests we hold in certain LPs/LLCs as well as operating losses associated with our tax credit partnership investments, which are designed to generate returns in the form of tax credits and tax-deductible project operating losses.

Our consolidated net investment result for the year ended December 31, 2021 included additional net investment income of $13.1 million from NORCAL. Excluding NORCAL, consolidated net investment income decreased $14.6 million for the year ended December 31, 2021 as compared to 2020 driven by lower yields on our corporate debt securities and short-term investments given the continued low interest rate environment and, to a lesser extent, lower income from our equity portfolio due to a decrease in our allocation to this asset category during the first half of 2021. Furthermore, the decline in net investment income during 2021 reflected the impact of capital planning in anticipation of closing the NORCAL acquisition. The increase in our investment results from our portfolio of investments in LPs/LLCs for 2021 as compared to 2020 was due to higher earnings from several of our LPs/LLCs and the prior year effect of the volatility in the global financial markets related to COVID-19. Our consolidated net investment result for 2021 also included additional earnings from our acquired interests in four LPs from NORCAL of approximately $1.4 million; given the results of our investments in LPs/LLCs are often reported to us on a one quarter lag, the earnings from these investments were not reflected in our results until the third quarter of 2021.

Expenses

The following table shows our consolidated and segment net loss ratios and net prior accident year reserve development.

($ in millions)	**Year Ended December 31**		
	2021	2020	*Change*
Current accident year net loss ratio			
Consolidated ratio	**82.1%**	89.8%	*(7.7 pts)*
Specialty P&C	**87.5%**	104.2%	*(16.7 pts)*
Workers' Compensation Insurance	**74.0%**	69.0%	*5.0 pts*
Segregated Portfolio Cell Reinsurance	**67.1%**	69.6%	*(2.5 pts)*
Lloyd's Syndicates	**51.9%**	64.2%	*(12.3 pts)*
Calendar year net loss ratio			
Consolidated ratio	**77.4%**	83.4%	*(6.0 pts)*
Specialty P&C	**82.8%**	98.5%	*(15.7 pts)*
Workers' Compensation Insurance	**69.7%**	64.9%	*4.8 pts*
Segregated Portfolio Cell Reinsurance	**51.1%**	44.6%	*6.5 pts*
Lloyd's Syndicates	**61.6%**	65.0%	*(3.4 pts)*
Favorable (unfavorable) net loss development, prior accident years			
Consolidated	**$ 45.5**	$ 50.4	*$ (4.9)*
Specialty P&C	**$ 32.9**	$ 27.5	*$ 5.4*
Workers' Compensation Insurance	**$ 7.1**	$ 7.0	*$ 0.1*
Segregated Portfolio Cell Reinsurance	**$ 10.2**	$ 16.5	*$ (6.3)*
Lloyd's Syndicates	**$ (4.7)**	$ (0.6)	*$ (4.1)*

The primary drivers of the change in our consolidated current accident year net loss ratio for the year ended December 31, 2021 as compared to 2020 were as follows:

(In percentage points)	**Increase (Decrease) 2021 versus 2020**
Estimated ratio increase (decrease) attributable to:	
Large National Healthcare Account	*(5.9 pts)*
COVID-19 IBNR Reserve	*(1.3 pts)*
NORCAL Operations	*2.7 pts*
NORCAL Acquisition - Purchase Accounting Adjustment	*(0.9 pts)*
All other, net	*(2.3 pts)*
Decrease in the consolidated current accident year net loss ratio	***(7.7 pts)***

Excluding the impact of the items specifically identified in the table above, our consolidated current accident year net loss ratio for the year ended December 31, 2021 decreased 2.3 percentage points driven by our Specialty P&C and Lloyd's Syndicates segments, somewhat offset by a higher ratio in our Workers' Compensation Insurance segment. The improvement in the current accident year net loss ratio in our Specialty P&C segment was driven by decreases to certain loss ratios during the first quarter of 2021 in our Standard Physician and Specialty lines of business as we continue to recognize the beneficial impacts of our re-underwriting efforts and focus on rate adequacy. In addition, we observed a reduction in claims frequency in 2020 in our Specialty P&C segment that continued into 2021, some of which is due to our re-underwriting efforts while some of which we believe is associated with the COVID-19 pandemic including the disruption of the court systems. Given the consistent and prolonged nature of this favorable claims frequency trend, we further reduced certain loss ratios in our Standard Physician line of business during the third and fourth quarters of 2021. For our Lloyd's Syndicates segment, the lower current accident year net loss ratio reflected higher reinsurance recoveries as a proportion of gross losses as compared to the prior year period, partially offset by certain catastrophe related losses. In our Workers' Compensation Insurance segment, the increase in the current accident year loss ratio primarily reflects workers returning to full employment after the lifting of pandemic-related restrictions and the labor shortage. We have experienced an increase in reported claim activity in 2021, including increased severity-related claim activity, which we attribute to workers being out of “work shape” as they returned to employment in 2021 as well as the lack of training, alternative work arrangements and employee fatigue due to the labor shortage.

Initial loss ratios associated with NORCAL policies were higher than the average for the other books of business in our Specialty P&C segment; however, we reduced certain NORCAL loss ratios during the fourth quarter of 2021 due to favorable frequency trends, as previously discussed. The net impact of NORCAL operations resulted in a 2.7 percentage point increase in our consolidated current accident year net loss ratio in 2021. Also as a result of our acquisition of NORCAL, our consolidated current accident year loss ratio during 2021 was impacted by amortization of the negative VOBA associated with NORCAL's assumed unearned premium which is recorded as a reduction to current accident year net losses and accounted for a 0.9 percentage point decrease in our consolidated current period ratio. See Note 2 of the Notes to Consolidated Financial Statements for additional information on the NORCAL acquisition and the related purchase accounting adjustments. During 2020, our consolidated current accident year loss ratio was higher due to the effect of a large national healthcare account, net of the impact of related PDR amortization, which accounted for 5.9 percentage points of the decrease in the current period ratio as compared to the prior year period. In addition, our consolidated current accident year loss ratio for 2020 was impacted by a $10 million IBNR reserve we recorded during the second quarter of 2020 for COVID-19 which accounted for 1.3 percentage points of the decrease in the ratio as compared to the prior year period.

In both 2021 and 2020, our consolidated calendar year net loss ratio was lower than our consolidated current accident year net loss ratio due to the recognition of net favorable prior year reserve development, as shown in the previous table. The net favorable loss development recognized in 2021 primarily reflected a lower than anticipated claims severity trend (i.e., the average size of a claim) in our Specialty P&C segment, primarily related to the 2015 through 2020 accident years. For our Workers' Compensation Insurance and Segregated Portfolio Cell Reinsurance segments, the net favorable development in 2021 reflected overall favorable trends in claim closing patterns. Further, favorable development recognized in 2021 included $7.9 million related to the amortization of the purchase accounting fair value adjustment on NORCAL's assumed net reserve and amortization of the negative VOBA associated with NORCAL's DDR reserve which is recorded as a reduction to prior accident year net losses and loss adjustment expenses. We have not recognized any development related to NORCAL's prior accident year reserves since the date of acquisition in 2021. See Note 2 of the Notes to Consolidated Financial Statements for additional information on the NORCAL acquisition and the related purchase accounting adjustments. We also recognized favorable prior year reserve development of $1 million during the third quarter of 2021 in our Specialty P&C segment associated with our COVID-19 IBNR reserve due to the fact that early first notices have not materialized into claims. We continue to remain cautious in our evaluation of our reserves our Specialty P&C segment due to the uncertainty surrounding the length and severity of the pandemic. See additional discussion on our COVID-19 IBNR reserve in the Critical Accounting Estimates section under the heading "Reserve for Losses and Loss Adjustment Expenses".

Our consolidated and segment underwriting expense ratios were as follows:

	Year Ended December 31		
	2021	2020	*Change*
Underwriting Expense Ratio			
Consolidated [(1)]	**27.6%**	30.0%	*(2.4 pts)*
Specialty P&C	**18.4%**	23.0%	*(4.6 pts)*
Workers' Compensation Insurance	**31.8%**	32.9%	*(1.1 pts)*
Segregated Portfolio Cell Reinsurance	**34.0%**	31.2%	*2.8 pts*
Lloyd's Syndicates	**37.1%**	39.0%	*(1.9 pts)*
Corporate [(2)]	**2.7%**	3.0%	*(0.3 pts)*

[(1)] Includes transaction-related costs associated with our acquisition of NORCAL that are not included in a segment as we do not consider these costs in assessing the financial performance of any of our operating or reportable segments. See Note 18 of the Notes to Consolidated Financial Statements for a reconciliation of our segment results to our consolidated results.

[(2)] There are no net premiums earned associated with the Corporate segment. Ratios shown are the contribution of the Corporate segment to the consolidated ratio (Corporate operating expenses divided by consolidated net premiums earned).

The change in our consolidated underwriting expense ratio for the year ended December 31, 2021 as compared to 2020 was primarily attributable to the following:

(In percentage points)	**Increase (Decrease) 2021 versus 2020**
Estimated ratio increase (decrease) attributable to:	
Decrease in Net Premiums Earned and DPAC amortization[(1)]	*(0.4 pts)*
NORCAL Operations	*(5.3 pts)*
Transaction-related Costs	*2.6 pts*
Large National Healthcare Account Tail Premium[(2)]	*0.6 pts*
All other, net	*0.1 pts*
Decrease in the consolidated underwriting expense ratio	***(2.4 pts)***

[(1)] Excludes earned premium and DPAC amortization contributed by NORCAL since the date of acquisition as well as $14.3 million of earned premium 2020 associated with a large national healthcare account tail policy. See further discussion in Segment Results - Specialty Property & Casualty section that follows.

[(2)] See previous discussion under the heading "Revenues"

Our consolidated underwriting expense ratio for 2021 was impacted by our acquisition of NORCAL. The additional expenses of NORCAL of $19.3 million had only a nominal effect on the consolidated underwriting expense ratio as they were more than offset by the favorable effect on the ratio of NORCAL net premiums earned of $214.6 million, as previously discussed. The impact of NORCAL decreased our consolidated underwriting expense ratio for 2021 by 5.3 percentage points. Included in NORCAL's expenses for 2021 was approximately $9.4 million of DPAC amortization associated with NORCAL policies written subsequent to our acquisition; however, this level of DPAC amortization is approximately $13.4 million lower than would be considered normal for the period of time post-acquisition due to the application of GAAP purchase accounting rules whereby the capitalized policy acquisition costs for policies written prior to the acquisition date were written off through purchase accounting rather than being expensed pro rata over the remaining term of the associated policies. Normalizing this amortization would have increased our consolidated expense ratio in 2021 by an estimated 1.4 percentage points. Please see Note 2 of the Notes to Consolidated Financial Statements for additional information on the NORCAL acquisition. For 2021, our consolidated underwriting expense ratio was also impacted by transaction-related costs of $25.0 million associated with our acquisition of NORCAL which accounted for an increase of 2.6 percentage points in our current period ratio. We do not consider transaction-related costs in assessing the financial performance of our segments, and thus these costs are only included in our consolidated operating expenses. Please see Note 18 of the Notes to Consolidated Financial Statements for a reconciliation of our segment results to our consolidated results. Excluding the impact of NORCAL and the other items specifically identified in the table above, our consolidated underwriting expense ratio remained relatively unchanged in 2021 as compared to 2020.

For the year ended December 31, 2021, the underwriting expense ratios in our Specialty P&C and Corporate segments also reflected the impact of a reduction to the management fee charged to the operating subsidiaries of our Specialty P&C segment (excluding the acquired operating subsidiaries of NORCAL) by our Corporate segment effective January 1, 2021 (see further discussion in our Segment Results - Specialty Property & Casualty and Segment Results - Corporate sections that follow). This change had no impact to our consolidated underwriting expense ratio.

Gain on Bargain Purchase

As a result of the NORCAL acquisition, we recognized a non-taxable preliminary gain on bargain purchase of $74.4 million during the second quarter of 2021 representing the excess of the fair value of the identifiable assets acquired and liabilities assumed over the purchase consideration. We do not consider this gain in assessing the financial performance of any of our operating or reportable segments and therefore, we have excluded it from the Segment Results sections that follow. See further discussion around the gain on bargain purchase recognized from the NORCAL acquisition in Note 2 of the Notes to Consolidated Financial Statements.

Taxes

Our effective tax rates for the years ended December 31, 2021 and 2020 were as follows:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
Income (loss) before income taxes	**$ 146,607**	$ (217,056)	*$ 363,663*	*167.5%*
Income tax expense (benefit)	**2,483**	(41,329)	*43,812*	*106.0%*
Net income (loss)	**$ 144,124**	$ (175,727)	*$ 319,851*	*182.0%*
Effective tax rate	**1.7%**	19.0%	*(17.3 pts)*	

We recognized income tax expense in 2021 of $2.5 million and an income tax benefit of $41.3 million in 2020. The most significant item impacting our effective tax rate for the year ended December 31, 2021, which caused it to be lower than the statutory federal income tax rate of 21%, was the aforementioned non-taxable $74.4 million gain on bargain purchase related to the NORCAL acquisition. Additionally, our effective tax rates for the years ended December 31, 2021 and 2020 include the benefit recognized from the tax credits transferred to us from our tax credit partnership investments. Our effective tax rate in 2020 was also impacted by the non-deductible portion of the goodwill impairment related to the Specialty P&C reporting unit recognized during the third quarter of 2020. See further discussion of the goodwill impairment in the Critical Accounting Estimates section under the heading "Goodwill / Intangibles" and Note 8 of the Notes to Consolidated Financial Statements and further information on other notable items impacting our effective tax rates for the years ended December 31, 2021 and 2020 in the Segment Results - Corporate section that follows under the heading "Taxes."

Operating Ratio

Our operating ratio is our combined ratio, less our investment income ratio. This ratio provides the combined effect of underwriting profitability and investment income. Our operating ratio for the years ended December 31, 2021 and 2020 was as follows:

	Year Ended December 31		
	2021	2020	*Change*
Combined ratio	**105.0%**	113.4%	*(8.4 pts)*
Less: investment income ratio	**7.3%**	9.1%	*(1.8 pts)*
Operating ratio	**97.7%**	104.3%	*(6.6 pts)*
Combined ratio, excluding transaction-related costs*	**102.4%**	113.4%	*(11.0 pts)*

*Our consolidated combined ratio as reported in 2021 includes $25.0 million of transaction-related costs included in consolidated operating expenses associated with our acquisition of NORCAL. Given these costs do not reflect normal operating expenses we have excluded their impact from our calculation of the consolidated combined ratio in the table above. See previous discussion under the heading "Expenses."

The primary drivers of the change in our operating ratio were as follows:

(In percentage points)	**Increase (Decrease) 2021 versus 2020**
Estimated ratio increase (decrease) attributable to:	
NORCAL Underwriting Results	*1.0 pts*
NORCAL Acquisition - Purchase Accounting Adjustments	*(1.5 pts)*
NORCAL Investment Results	*(1.3 pts)*
Transaction-related Costs	*2.6 pts*
Large National Healthcare Account [(1)]	*(5.6 pts)*
COVID IBNR Reserve [(1)]	*(1.4 pts)*
Investment Results [(2)]	*3.1 pts*
All other, net	*(3.5 pts)*
Decrease in the operating ratio	***(6.6 pts)***

[(1)] See previous discussion under the heading "Revenues" and "Expenses."

[(2)] Excludes net investment income contributed by NORCAL since the date of acquisition. See previous discussion under the heading "Revenues."

Excluding the impact of the items specifically identified in the table above, our operating ratio for 2021 decreased by 3.5 percentage points as compared to 2020 primarily due to an improvement in the net loss ratio in our Specialty P&C segment, partially offset by a higher net loss ratio in our Workers' Compensation Insurance segment. See previous discussion in this section under the heading "Expenses" and further discussion in our Segment Operating Results sections that follow.

ROE

ROE is calculated as net income (loss) divided by the average of beginning and ending shareholders' equity. This ratio measures our overall after-tax profitability and shows how efficiently capital is being used. The $74.4 million gain on bargain purchase recognized during the second quarter of 2021 was excluded in our calculation of ROE for 2021 consistent with our treatment of gains on bargain purchases from previous acquisitions. ROE for the years ended December 31, 2021 and 2020 was as follows:

	Year Ended December 31		
	2021	2020	*Change*
ROE	**5.3%**	(12.3%)	*17.6 pts*

Our ROE in 2021 was impacted by our acquisition of NORCAL. NORCAL operations since the date of acquisition, excluding purchase accounting adjustments, decreased our ROE in 2021 by 0.6 percentage points largely due to the fact that loss ratios associated with NORCAL policies are higher than the average for the other books of business in our Specialty P&C segment, partially offset by a lower than normal amount of DPAC amortization due to the application of GAAP purchase

accounting rules (see previous discussion under the heading "Expenses"). Furthermore, the remaining purchase accounting adjustments associated with the acquisition increased our ROE by 1.1 percentage points. See Note 2 of the Notes to Consolidated Financial Statements for additional information on the NORCAL acquisition and the related purchase accounting adjustments. Excluding the NORCAL acquisition, ROE for 2021 increased 17.1 percentage points driven by the prior year effect of a $161.1 million pre-tax goodwill impairment recognized related to the Specialty P&C reporting unit during the third quarter of 2020. Additionally, the increase in our ROE for 2021 as compared to 2020, excluding NORCAL, reflected higher earnings from certain LPs/LLCs, realized gains from the sale of certain available-for-sale fixed maturity securities and other investments as well as improved underwriting results.

Book Value per Share

Book value per share is calculated as total shareholders' equity at the balance sheet date divided by the total number of common shares outstanding. This ratio measures the net worth of the Company to shareholders on a per share basis. Our book value per share at December 31, 2021 as compared to December 31, 2020 is shown in the following table.

	Book Value Per Share	
Book Value Per Share at December 31, 2020	$	25.04
Increase (decrease) to book value per share during the year ended December 31, 2021 attributable to:		
Dividends declared		(0.20)
Net income (loss) [1]		2.67
OCI [2]		(1.09)
Other		0.04
Book Value Per Share at December 31, 2021	$	26.46

[1] Includes the $74.4 million gain on bargain purchase as a result of our acquisition of NORCAL, which accounted for $1.38 of the increase in book value per share. See further discussion in Note 2 of the Notes to Consolidated Financial Statements.

[2] Primarily the impact of unrealized investment gains (losses) on our available-for-sale fixed maturity investments. See Note 14 of the Notes to Consolidated Financial Statements for additional information.

Non-GAAP Financial Measures

Non-GAAP operating income (loss) is a financial measure that is widely used to evaluate performance within the insurance sector. In calculating Non-GAAP operating income (loss), we have excluded the effects of the items listed in the following table that do not reflect normal results. We believe Non-GAAP operating income (loss) presents a useful view of the performance of our insurance operations, however it should be considered in conjunction with net income (loss) computed in accordance with GAAP.

The following table is a reconciliation of net income (loss) to Non-GAAP operating income (loss):

	Year Ended December 31	
(In thousands, except per share data)	**2021**	2020
Net income (loss)	**$ 144,124**	$ (175,727)
Items excluded in the calculation of Non-GAAP operating income (loss):		
Net investment (gains) losses	**(24,310)**	(15,678)
Net investment gains (losses) attributable to SPCs which no profit/loss is retained [1]	**3,253**	2,436
Transaction-related costs [2]	**24,977**	—
Goodwill impairment	**—**	161,115
Guaranty fund assessments (recoupments)	**228**	97
Gain on bargain purchase [3]	**(74,408)**	—
Pre-tax effect of exclusions	**(70,260)**	147,970
Tax effect, at 21% [4]	**2,028**	16
After-tax effect of exclusions	**(68,232)**	147,986
Non-GAAP operating income (loss)	**$ 75,892**	$ (27,741)
Per diluted common share:		
Net income (loss)	**$ 2.67**	$ (3.26)
Effect of exclusions	**(1.27)**	2.74
Non-GAAP operating income (loss) per diluted common share	**$ 1.40**	$ (0.52)

[1] Net investment gains (losses) on investments related to SPCs are recognized in our Segregated Portfolio Cell Reinsurance segment. SPC results, including any net investment gain or loss, that are attributable to external cell participants are reflected in the SPC dividend expense (income). To be consistent with our exclusion of net investment gains (losses) recognized in earnings, we are excluding the portion of net investment gains (losses) that is included in the SPC dividend expense (income) which is attributable to the external cell participants.

[2] Transaction-related costs associated with our acquisition of NORCAL. We are excluding these costs as they do not reflect normal operating results and are unique and non-recurring in nature.

[3] Gain on bargain purchase associated with our acquisition of NORCAL which is considered unusual, infrequent and non-recurring in nature. As such, we have excluded the gain on bargain purchase from Non-GAAP operating income (loss) as it does not reflect normal operating results.

[4] The 21% rate is the statutory tax rate associated with the taxable or tax deductible items listed above. The taxes associated with the net investment gains (losses) related to SPCs in our Segregated Portfolio Cell Reinsurance segment are paid by the individual SPCs and are not included in our consolidated tax provision or net income (loss); therefore, both the net investment gains (losses) from our Segregated Portfolio Cell Reinsurance segment and the adjustment to exclude the portion of net investment gains (losses) included in the SPC dividend expense (income) in the table above are not tax effected. The 2021 gain on bargain purchase is non-taxable and therefore had no associated income tax impact. The portion of 2020 goodwill impairment loss that is tax deductible was tax effected at the statutory tax rate (21%). The remaining portion of the 2020 goodwill impairment loss is not tax deductible and therefore had no associated income tax benefit.

Segment Results - Specialty Property & Casualty

Our Specialty P&C segment focuses on professional liability insurance and medical technology liability insurance as discussed in Note 19 of the Notes to Consolidated Financial Statements. On May 5, 2021, we completed our acquisition of NORCAL, an underwriter of healthcare professional liability insurance (Note 2 of the Notes to Consolidated Financial Statements provides additional information regarding this acquisition). Segment results reflected pre-tax underwriting profit or loss from these insurance lines, including the pre-tax underwriting results of NORCAL since the date of acquisition as well as certain purchase accounting adjustments. Segment results for the year ended December 31, 2021 exclude transaction-related costs and a $74.4 million gain on bargain purchase related to the NORCAL acquisition as we do not consider these items in assessing the financial performance of the segment. Segment results included the following:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
Net premiums written	**$ 626,147**	$ 451,019	*$ 175,128*	*38.8%*
Net premiums earned	**$ 695,008**	$ 477,365	*$ 217,643*	*45.6%*
Other income	**3,370**	3,908	*(538)*	*(13.8%)*
Net losses and loss adjustment expenses	**(575,164)**	(470,074)	*(105,090)*	*22.4%*
Underwriting, policy acquisition and operating expenses	**(127,709)**	(109,599)	*(18,110)*	*16.5%*
Segment results	**$ (4,495)**	$ (98,400)	*$ 93,905*	*95.4%*
Net loss ratio	**82.8 %**	98.5 %	*(15.7 pts)*	
Underwriting expense ratio	**18.4 %**	23.0 %	*(4.6 pts)*	

Premiums Written

Changes in our premium volume within our Specialty P&C segment are generally driven by four primary factors: (1) the amount of new business written, (2) our retention of existing business, (3) the premium charged for business that is renewed, which is affected by rates charged and by the amount and type of coverage an insured chooses to purchase and (4) the timing of premium written through multi-period policies. In addition, premium volume may periodically be affected by shifts in the timing of renewals between periods. For the year ended December 31, 2021, our premium volume was primarily affected by our acquisition of NORCAL (see Note 2 of the Notes to Consolidated Financial Statements).

The professional liability market, which accounts for a majority of the revenues in this segment, remains challenging as physicians continue joining hospitals or larger group practices and are thus no longer purchasing individual or group policies in the standard market. In addition, some competitors have chosen to compete primarily on price; both factors may impact our ability to write new business and retain existing business. Furthermore, the insurance and reinsurance markets have historically been cyclical, characterized by extended periods of intense price competition and other periods of reduced competition. The professional liability area has been particularly affected by these cycles. Underwriting cycles are generally driven by an excess of capacity available and actively pursuing business that is deemed profitable. Changes in the frequency and severity of losses may affect the cycles of the insurance and reinsurance markets significantly. During "soft markets" where price competition is high and underwriting profits are poor, growth and retention of business become challenging which may result in reduced premium volumes.

Gross, ceded and net premiums written were as follows:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
Gross premiums written	**$ 681,509**	$ 522,911	*$ 158,598*	*30.3%*
Less: Ceded premiums written	**55,362**	71,892	*(16,530)*	*(23.0%)*
Net premiums written	**$ 626,147**	$ 451,019	*$ 175,128*	*38.8%*

Gross Premiums Written

Gross premiums written by component were as follows:

($ in thousands)	Year Ended December 31			
	2021	2020	*Change*	
Professional Liability				
HCPL				
Standard Physician[1][14]				
Twelve month term	**$ 209,938**	$ 208,993	*$ 945*	*0.5%*
Twenty-four month term	**—**	8,314	*(8,314)*	*nm*
NORCAL Standard Physician[2]	**111,673**	—	*111,673*	*nm*
Total Standard Physician	**321,611**	217,307	*104,304*	*48.0%*
Specialty				
Custom Physician[3][14]	**46,210**	64,367	*(18,157)*	*(28.2%)*
NORCAL Custom Physician[4]	**16,394**	—	*16,394*	*nm*
Hospitals and Facilities[5][14]	**51,310**	49,244	*2,066*	*4.2%*
NORCAL Hospitals and Facilities[6]	**9,955**	—	*9,955*	*nm*
Senior Care[7][14]	**6,708**	6,300	*408*	*6.5%*
Reinsurance assumed[8]	**37,755**	14,467	*23,288*	*161.0%*
Total Specialty	**168,332**	134,378	*33,954*	*25.3%*
Total HCPL	**489,943**	351,685	*138,258*	*39.3%*
Small Business Unit[9]	**103,083**	100,061	*3,022*	*3.0%*
Tail Coverages[10][14]	**30,637**	34,767	*(4,130)*	*(11.9%)*
NORCAL Tail Coverages[11]	**16,092**	—	*16,092*	*nm*
Total Professional Liability	**639,755**	486,513	*153,242*	*31.5%*
Medical Technology Liability[12]	**40,997**	35,563	*5,434*	*15.3%*
Other[13]	**757**	835	*(78)*	*(9.3%)*
Total	**$ 681,509**	$ 522,911	*$ 158,598*	*30.3%*

[1] Standard Physician premium was our greatest source of premium revenues in both 2021 and 2020 and is predominantly comprised of twelve month term policies. The increase in twelve month term policies in 2021 as compared to 2020 was driven by an increase in renewal pricing, the conversion of twenty-four month term policies and, to a lesser extent, new business written, partially offset by retention losses. In addition, twelve month term policies in 2020 included the impact of premium credits granted as a result of the COVID-19 pandemic. Renewal pricing increases during 2021 reflect the rising loss cost environment and new business written reflects general market conditions. Retention losses in 2021 were largely attributable to the loss of two large policies totaling $5.9 million during the third quarter of 2021 due to the insureds' decision to enter into captive arrangements and the loss of two large policies totaling $1.4 million during the first quarter of 2021 due to price competition. Retention losses in 2021 also reflected our targeted state strategy to reassess our underwriting appetite in certain unprofitable states. We will continue to perform a detailed evaluation of venues, specialties and other areas to improve our underwriting results. We also continue to focus on underwriting discipline as we emphasize careful risk selection, rate adequacy, improved contract terms and a willingness to walk away from business that does not fit our goal of achieving a long-term underwriting profit. While retention for 2021 has recovered somewhat from the impact of our re-underwriting efforts over the past two years, it remains lower than our historical average for this line of business as we continue to reevaluate certain states and set our rates to reflect our observations of higher severity trends. Standard Physician premium in 2020 also included twenty-four month term policies that were offered to physician insureds in one selected jurisdiction. We ceased offering twenty-four month term policies beginning in the second quarter of 2020, and the majority of the policies that were up for renewal in 2021 were renewed to twelve month term policies; however, a portion of the premium from 2020 related to policies that will be subject to renewal and conversion in 2022.

[2] NORCAL Standard Physician premium represents premium contributed by NORCAL since the date of acquisition and is comprised of three and twelve month term policies. NORCAL Standard Physician premium in 2021 was

impacted by an increase in renewal pricing and, to a lesser extent, new business written, partially offset by retention losses, including the loss of one large policy during the second quarter of 2021.

(3) Custom Physician premium includes large complex physician groups, multi-state physician groups and non-standard physicians and is written primarily on an excess and surplus lines basis. The decrease in Custom Physician premium in 2021 was driven by retention losses, including the loss of a $10.4 million policy due to price competition and the non-renewal of two large policies totaling $7.3 million due to our focus on underwriting discipline. The decrease in Custom Physician premium in 2021 also reflected the impact of the dissolution of our arrangement with CAPAssurance as a result of our acquisition of NORCAL, which also resulted in the loss of a large program and two large policies in California totaling $10.2 million during the first quarter of 2021. Partially offsetting the decrease in Custom Physician premium in 2021 was new business written, including the addition of four large policies totaling $5.6 million, and, to a lesser extent, an increase in renewal pricing. Renewal pricing increases for 2021 reflect the rising loss cost environment and new business written reflects general market conditions. The retention rate in our Custom Physician book in 2021 was lower than 2020 which also reflects the impact of the aforementioned dissolution of our arrangement with CAPAssurance as well as the loss of the $10.4 million policy due to price competition, which resulted in a decrease to our Specialty retention rate of 13.6 percentage points. While retention for 2021 has recovered somewhat from the impact of our re-underwriting efforts over the past two years, it remains lower than our historical average for this line of business as our rates are set to reflect our observations of higher severity trends.

(4) NORCAL Custom Physician premium represents premium contributed by NORCAL since the date of acquisition and includes large complex physician groups, multi-state physician groups and non-standard physicians and is written primarily on an excess and surplus lines basis. NORCAL Custom Physician premium in 2021 was impacted by retention losses, including the loss of a $9.0 million policy during the fourth quarter of 2021 due to price competition, partially offset by an increase in renewal pricing and, to a lesser extent, new business written.

(5) Hospitals and Facilities premium (which includes hospitals, surgery centers and miscellaneous medical facilities) increased in 2021 as compared to 2020 driven by new business written, primarily miscellaneous medical facilities, and, to a lesser extent, an increase in renewal pricing, partially offset by retention losses. Renewal pricing increases in 2021 reflect rate increases and contract modifications that we believe are appropriate given the current loss environment and new business written reflects general market conditions. Retention losses in 2021 were driven by the loss of a $2.3 million policy due to price competition, the loss of a $2.0 million policy due to an insured's decision to enter into a captive arrangement, and our decision not to renew certain products. As we substantially completed our re-underwriting efforts on this book of business as of the end of the third quarter of 2020, retention rates have started to normalize.

(6) NORCAL Hospitals and Facilities premium represents premium contributed by NORCAL since the date of acquisition and includes hospitals, surgery centers and miscellaneous medical facilities. NORCAL Hospitals and Facilities premium in 2021 was impacted by retention losses, partially offset by new business written and, to a lesser extent, an increase in renewal pricing.

(7) Senior Care premium includes facilities specializing in long term residential care primarily for the elderly ranging from independent living through skilled nursing. Our Senior Care premium remained relatively unchanged in 2021 as compared to 2020 as retention losses were offset by new business written and renewal pricing increases. The increase in renewal pricing in 2021 was primarily the result of an increase in the rate charged for certain renewed policies in select states. Retention losses in 2021 were driven by our decision not to renew certain classes of Senior Care business based on our expectations of poor loss performance. As we completed our re-underwriting efforts on this book of business during the third quarter of 2020, retention rates have started to normalize.

(8) We offer custom alternative risk solutions including assumed reinsurance. The increase in premium in 2021 primarily reflected an increase premiums assumed on a quota share basis through a strategic partnership since 2016 with an international medical professional liability insurer. For 2021, we increased our participation in the original program and entered into another program with this insurer in a new international territory. We anticipate the volume of premium assumed through this partnership will continue to grow going forward. Our custom alternative risk solutions in 2021 also include an assumed reinsurance arrangement with a regional hospital group entered into during the first quarter of 2021, which resulted in $4.5 million of premium written, comprised of $2.3 million of retroactive premium written and fully earned and $2.2 million of prospective premium written. Furthermore, the increase in premium in 2021 reflected the annual renewal of this arrangement during the third quarter of 2021. See Note 5 of the Notes to Consolidated Financial Statements for further information on this transaction.

[9] Our Small Business Unit is primarily comprised of premium associated with podiatrists, legal professionals, dentists and chiropractors. Our Small Business Unit premium increased in 2021 as compared to 2020 driven by an increase in renewal pricing and, to a lesser extent, new business written, partially offset by retention losses. The increase in renewal pricing in 2021 was primarily the result of an increase in the rate charged for certain renewed policies in select states.

[10] We offer extended reporting endorsement or "tail" coverage to insureds who discontinue their claims-made coverage with us, and we also periodically offer tail coverage through stand-alone policies. Tail coverage premiums are generally 100% earned in the period written because the policies insure only incidents that occurred in prior periods and are not cancellable. The amount of tail coverage premium written can vary significantly from period to period. The decrease in 2021 as compared to 2020 was primarily due to the prior year effect of a large national healthcare account that exercised its contractual option to purchase tail coverage which resulted in $14.3 million of one-time premiums written and fully earned in the second quarter of 2020. This impact was largely offset by $7.8 million of tail premium written and fully earned during the second quarter of 2021 associated with a Custom Physician policy and two large tail policies totaling $2.1 million written and fully earned during the first quarter of 2021.

[11] NORCAL Tail Coverages represent premium contributed by NORCAL since the date of acquisition and include endorsement coverages to insureds who discontinue their claims-made coverage and may also periodically include tail coverage offered through stand-alone policies. As detailed in the previous footnote, tail coverage premiums are generally 100% earned in the period written and the amount of tail coverage premium written can vary significantly from period to period. NORCAL Tail Coverages in 2021 included five large tail policies totaling $4.5 million written and fully earned.

[12] Our Medical Technology Liability business is marketed throughout the U.S.; coverage is typically offered on a primary basis, within specified limits, to manufacturers and distributors of medical technology and life sciences products including entities conducting human clinical trials. In addition to the previously listed factors that affect our premium volume, our Medical Technology Liability premium is also impacted by the sales volume of insureds. Our Medical Technology Liability premium increased in 2021 as compared to 2020 due to new business written and, to a lesser extent, an increase in renewal pricing, partially offset by retention losses. Renewal pricing increases in 2021 are primarily due to changes in the sales volume of certain insureds, including changes in exposure. Retention losses in 2021 are primarily attributable to an increase in competition on terms and pricing, as well as merger activity within the industry.

[13] This component of gross premiums written includes all other product lines within our Specialty P&C segment.

[14] Certain components of our gross premiums written include alternative market premiums. We currently cede either all or a portion of the alternative market premium, net of reinsurance, to three SPCs of our wholly owned Cayman Islands reinsurance subsidiaries, Inova Re and Eastern Re, which are reported in our Segregated Portfolio Cell Reinsurance segment (see further discussion in the Ceded Premiums Written section that follows). The portion not ceded to the SPCs is retained within our Specialty P&C segment.

	Year Ended December 31			
($ in millions)	**2021**	2020	*Change*	
Standard Physician	**$ 2.0**	$ 1.6	*$ 0.4*	*25.0%*
Custom Physician	**—**	0.1	*(0.1)*	*nm*
Hospitals and Facilities	**0.1**	0.2	*(0.1)*	*(50.0%)*
Senior Care	**5.2**	5.2	—	*—%*
Tail Coverages	**0.8**	—	*0.8*	*nm*
Total	**$ 8.1**	$ 7.1	*$ 1.0*	*14.1%*

The increase in alternative market gross premiums written in 2021 as compared to 2020 was driven by renewal pricing increases, primarily due to an increase in the rate charged for one program and, to a lesser extent, the impact of tail coverages.

We are committed to a rate structure that will allow us to fulfill our obligations to our insureds, while generating competitive long-term returns for our shareholders. Our pricing continues to be based on expected losses as indicated by our historical loss data and available industry loss data. In recent years, this practice has resulted in gradual rate increases and we anticipate further rate increases due to indications of increasing loss severity. Additionally, the pricing of our business includes the effects of filed rates, surcharges and discounts. Renewal pricing also reflects changes in our exposure base, deductibles,

self-insurance retention limits and other policy terms and conditions. See Gross Premiums Written section for further explanation of changes in renewal pricing.

The change in renewal pricing for our Specialty P&C segment, including by major component, was as follows:

	Year Ended December 31
	2021
Specialty P&C segment	**8 %**
HCPL	
Standard Physician[1]	**8 %**
Specialty[1]	**12 %**
Total HCPL	**9 %**
Small Business Unit	**6 %**
Medical Technology Liability	**5%**

[1] Includes policies renewed by NORCAL since the date of acquisition.

New business written by major component on a direct basis was as follows:

	Year Ended December 31	
(In millions)	**2021**	2020
HCPL		
Standard Physician[1]	**$ 4.7**	$ 2.9
Specialty[1]	**28.2**	9.0
Total HCPL	**32.9**	11.9
Small Business Unit	**3.9**	4.6
Medical Technology Liability	**6.5**	6.5
Total	**$ 43.3**	$ 23.0

[1] Includes premium contributed by NORCAL since the date of acquisition.

For our Specialty P&C segment, we calculate retention as annualized renewed premium divided by all annualized premium subject to renewal. Retention is affected by a number of factors. We may lose insureds to competitors or to alternative insurance mechanisms such as risk retention groups, captive arrangements or self-insurance entities (often when physicians join hospitals or large group practices) or due to pricing or other issues. We may choose not to renew an insured as a result of our underwriting evaluation. Insureds may also terminate coverage because they have left the practice of medicine for various reasons, principally for retirement, death or disability, but also for personal reasons.

Retention for our Specialty P&C segment, including by major component, was as follows:

	Year Ended December 31	
	2021	2020
Specialty P&C segment	**80 %**	79 %
HCPL		
Standard Physician[1]	**86 %**	82 %
Specialty[1]	**58 %**	65 %
Total HCPL	**77 %**	76 %
Small Business Unit	**91 %**	90 %
Medical Technology Liability	**90 %**	85 %

[1] Includes premium contributed by NORCAL since the date of acquisition. We are currently in the process of evaluating the NORCAL book of business and implementing ProAssurance's underwriting strategies, which will likely impact retention in future quarters.

Ceded Premiums Written

Ceded premiums represent the amounts owed to our reinsurers for their assumption of a portion of our losses. Our HCPL and Medical Technology Liability excess of loss reinsurance arrangements renew annually on October 1. For those excess of loss reinsurance arrangements in effect prior to October 1, 2021, we generally retained the first $2 million in risk insured by us and ceded coverages in excess of this amount. Effective October 1, 2021, our HCPL treaty renewed at a lower gross rate and we generally retain from 0% to 5% of the next $24 million of risk for our HCPL coverages in excess of $2 million. Our HCPL excess of loss reinsurance arrangement that renewed on October 1, 2021 also incorporated NORCAL policies. Prior to October 1, 2021, NORCAL policies were reinsured under separate reinsurance agreements, primarily excess of loss, which have historically renewed annually on January 1. For the NORCAL excess of loss reinsurance arrangement that renewed on January 1, 2021, retention was generally the first $2 million in risk and coverages in excess of this amount are ceded up to $24 million. For our Medical Technology Liability treaty which also renewed effective October 1, 2021, we also retain 2.5% of the next $8 million of risk for coverages in excess of $2 million. There were no significant changes in the cost or structure of our Medical Technology Liability treaty upon the October 2021 renewal.

We pay our reinsurers a ceding premium in exchange for their accepting the risk, and in certain of our excess of loss arrangements, the ultimate amount of which is determined by the loss experience of the business ceded, subject to certain minimum and maximum amounts. Given the length of time that it takes to resolve our claims, many years may elapse before all losses recoverable under a reinsurance arrangement are known. As a part of the process of estimating our loss reserve we also make estimates regarding the amounts recoverable under our reinsurance arrangements. As a result, we may have an adjustment to our estimate of expected losses and associated recoveries for prior year ceded losses under certain loss sensitive reinsurance agreements. Any changes to estimates of premiums ceded related to prior accident years are fully earned in the period the changes in estimates occur.

Ceded premiums written were as follows:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
Excess of loss reinsurance arrangements [1]	**$ 30,622**	$ 33,070	*$ (2,448)*	*(7.4%)*
Other shared risk arrangements [2]	**16,112**	28,765	*(12,653)*	*(44.0%)*
Premium ceded to SPCs [3]	**7,211**	6,118	*1,093*	*17.9%*
NORCAL premiums ceded under separate reinsurance agreements since acquisition [4]	**2,253**	—	*2,253*	*nm*
Other ceded premiums written	**3,100**	3,227	*(127)*	*(3.9%)*
Adjustment to premiums owed under reinsurance agreements, prior accident years, net [5]	**(3,936)**	712	*(4,648)*	*(652.8%)*
Total ceded premiums written	**$ 55,362**	$ 71,892	*$ (16,530)*	*(23.0%)*

(1) We generally reinsure risks under our excess of loss reinsurance arrangements pursuant to which the reinsurers agree to assume all or a portion of all risks that we insure above our individual risk retention levels, up to the maximum individual limits offered. Premium due to reinsurers also fluctuates with the volume of written premium subject to cession under the arrangement. In certain of our excess of loss reinsurance arrangements, the premium due to the reinsurer is determined by the loss experience of that business reinsured, subject to certain minimum and maximum amounts. The decrease in ceded premiums written under our excess of loss reinsurance arrangements in 2021 as compared to 2020 primarily reflected the reduced rate on the treaty year effective October 1, 2020 and, to a lesser extent, a decrease in the overall volume of gross premiums written subject to cession. The decrease in ceded premiums written under our excess of loss reinsurance arrangements in 2021 was partially offset by additional ceded premiums of $1.9 million as a result of incorporating NORCAL policies into our existing HCPL excess of loss reinsurance arrangements with the October 1, 2021 renewal (see further discussion in footnote 4 below).

(2) We have entered into various shared risk arrangements, including quota share, fronting and captive arrangements, with certain large healthcare systems and other insurance entities. While we cede a large portion of the premium written under these arrangements, they provide us an opportunity to grow net premium through strategic partnerships. These arrangements primarily include our Ascension Health program and, prior to the fourth quarter of 2020, our CAPAssurance program. Our CAPAssurance program was mutually dissolved on October 1, 2020. During the first quarter of 2021, we entered into a new shared risk arrangement with a regional hospital group. The decrease in ceded premiums written under our shared risk arrangements in 2021 as compared to 2020 was primarily due to the aforementioned dissolution of our arrangement with CAPAssurance and, to a lesser extent, a decrease in premium ceded to our Ascension Health Program, somewhat offset by the premium ceded under our new shared risk arrangement, as previously discussed.

[3] As previously discussed, as a part of our alternative market solutions, all or a portion of certain healthcare premium written is ceded to SPCs in our Segregated Portfolio Cell Reinsurance segment under either excess of loss or quota share reinsurance agreements, depending on the structure of the individual program. See the Segment Results - Segregated Portfolio Cell Reinsurance section for further discussion on the cession to the SPCs from our Specialty P&C segment. The increase in premiums ceded to SPCs in 2021 as compared to 2020 was driven by renewal pricing increases (see discussion in footnote 14 under the heading "Gross Premiums Written").

[4] NORCAL policies written prior to September 30, 2021 were reinsured under separate reinsurance agreements, primarily excess of loss; however, these policies were incorporated into our existing HCPL excess of loss reinsurance arrangements with the October 1, 2021 renewal, as previously discussed. For NORCAL's previous excess of loss agreement, deposit ceded premium, as defined in the contract, was initially estimated and recorded at the inception date of the treaty, generally January 1, as an estimate of ceded premiums written for the full contract year based on information provided by brokers and reinsurers. As a result, the majority of ceded premiums for NORCAL's excess of loss reinsurance arrangement was recorded by NORCAL before the acquisition in their first quarter 2021 results and were expensed pro rata throughout the contract year. However, these initial estimates of ceded premiums may be periodically adjusted as new information is received and are fully earned in the period the changes in estimates occur. NORCAL's ceded premiums written since acquisition in 2021 under these reinsurance arrangements related almost entirely to an increase in the estimate of premiums owed in excess of the deposit ceded premium initially recorded by NORCAL prior to acquisition and, to a lesser extent, premium related to cyber liability coverages. Effective October 1, 2021, we incorporated NORCAL policies into our existing HCPL excess of loss reinsurance arrangement, as previously discussed.

[5] Given the length of time that it takes to resolve our claims, many years may elapse before all losses recoverable under a reinsurance arrangement are known. As a part of the process of estimating our loss reserve we also make estimates regarding the amounts recoverable under our reinsurance arrangements. As previously discussed, the premiums ultimately ceded under certain of our excess of loss reinsurance arrangements are subject to the losses ceded under the arrangements. As part of the review of our reserves for 2021, we decreased our estimate of expected losses and associated recoveries for prior year ceded losses, as well as our estimate of ceded premiums owed to reinsurers. In 2020, we increased our estimate of expected losses and associated recoveries for prior year ceded losses, as well as our estimate of ceded premiums owed to reinsurers due to reaching the maximum level of premium due under certain prior year excess of loss arrangements. Changes to estimates of premiums ceded related to prior accident years are fully earned in the period the changes in estimates occur.

Ceded Premiums Ratio

As shown in the table below, our ceded premiums ratio was affected in both 2021 and 2020 by revisions to our estimate of premiums owed to reinsurers related to coverages provided in prior accident years.

	Year Ended December 31		
	2021	2020	*Change*
Ceded premiums ratio, as reported	**8.1%**	13.7%	*(5.6 pts)*
Less the effect of adjustments in premiums owed under reinsurance agreements, prior accident years (as previously discussed)	**(0.6%)**	0.1%	*(0.7 pts)*
Ratio, current accident year	**8.7%**	13.6%	*(4.9 pts)*

The above table reflects ceded premiums written, excluding the effect of prior year ceded premium adjustments, as a percent of gross premiums written. Our current accident year ceded premiums ratio for 2021 was impacted by the inclusion of NORCAL ceded and written premiums since the date of acquisition, which accounted for 1.7 percentage points of the decrease in the ratio as the majority of ceded premiums for NORCAL's excess of loss reinsurance arrangements were recorded before the acquisition, as previously discussed. Excluding the impact of the NORCAL acquisition, our current accident year ceded premium ratio for 2021 decreased 3.2 percentage points as compared to 2020. This decrease was driven by a decrease in premiums ceded under our shared risk arrangements, partially offset by the effect of a large national healthcare account tail policy premium written during the second quarter of 2020. See further discussion on NORCAL ceded premiums and our shared risk arrangements above under the heading "Ceded Premiums Written."

Net Premiums Earned

Net premiums earned consist of gross premiums earned less the portion of earned premiums that we cede to our reinsurers for their assumption of a portion of our losses. Because premiums are generally earned pro rata over the entire policy period, fluctuations in premiums earned tend to lag those of premiums written. The majority of our policies carry a term of one year; however, some of our Medical Technology Liability policies have a multi-year term and some of our NORCAL Standard Physician policies have a three-month term. In addition, prior to the third quarter of 2020, we wrote certain Standard Physician policies with a twenty-four month term. Tail coverage premiums are generally 100% earned in the period written because the policies insure only incidents that occurred in prior periods and are not cancellable. Retroactive coverage premiums are 100% earned at the inception of the contract, as all of the associated underlying loss events occurred in the past. Additionally, any ceded premium changes due to changes to estimates of premiums owed under reinsurance agreements for prior accident years are fully earned in the period of change.

Net premiums earned were as follows:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
Gross premiums earned	**$ 761,411**	$ 551,822	*$ 209,589*	*38.0%*
Less: Ceded premiums earned	**66,403**	74,457	*(8,054)*	*(10.8%)*
Net premiums earned	**$ 695,008**	$ 477,365	*$ 217,643*	*45.6%*

Gross premiums earned in 2021 included additional earned premiums of approximately $226.0 million from our acquisition of NORCAL. Of that amount of earned premium, approximately $155.1 million was associated with NORCAL policies written prior to our acquisition. Excluding premiums associated with the NORCAL acquisition, gross premiums earned decreased $16.4 million in 2021 as compared to 2020 driven by the pro rata effect of a decrease in the volume of written premium during the preceding twelve months, predominantly in our Specialty line of business, due to our re-underwriting efforts and, to a lesser extent, the dissolution of our arrangement with CAPAssurance. The decrease in gross premiums earned in 2021 also reflected premium adjustments related to loss sensitive policies which decreased earned premium by $2.1 million and increased earned premium by $2.9 million in 2020. In addition, the decrease in gross premiums earned during 2021 reflected the prior year effect of a large national healthcare account that exercised its contractual option to purchase tail coverage which resulted in $14.3 million of one-time premiums written and fully earned during the second quarter of 2020 (see previous discussion in footnote 10 under the heading "Gross Premiums Written"). The decrease in gross premiums earned in 2021 was partially offset by tail premium associated with a Custom Physician policy, which resulted in $7.8 million of one-time written and fully earned during the second quarter of 2021 (see previous discussion in footnote 10 under the heading "Gross Premiums Written") and $2.3 million of retroactive premium written and fully earned associated with an assumed reinsurance program (see previous discussion in footnote 8 under the heading "Gross Premiums Written").

Ceded premiums earned during 2021 included additional ceded premium of approximately $11.4 million from our acquisition of NORCAL, which is primarily attributable to subsequent adjustments made to initial deposit ceded premium recorded under NORCAL's excess of loss reinsurance arrangement (see previous discussion in footnote 4 under the heading "Ceded Premiums Written"). Excluding ceded premiums from our NORCAL acquisition, ceded premiums earned decreased $19.5 million in 2021 as compared to 2020 driven by the pro rata effect of a decrease in premium ceded under our shared risk and excess of loss arrangements during the preceding twelve months and, to a lesser extent, the effect of the decrease in our estimate of ceded premiums owed to reinsurers for expected recoveries on prior year ceded losses in 2021 as compared to an increase in our estimate in 2020.

Losses and Loss Adjustment Expenses

The determination of calendar year losses involves the actuarial evaluation of incurred losses for the current accident year and the actuarial re-evaluation of incurred losses for prior accident years, including an evaluation of the reserve amounts required for ECO/XPL losses.

Accident year refers to the accounting period in which the insured event becomes a liability of the insurer. For claims-made policies, which represent the majority of the premiums written in our Specialty P&C segment, the insured event generally becomes a liability when the event is first reported to us. For occurrence policies, the insured event becomes a liability when the event takes place. For retroactive coverages, the insured event becomes a liability at inception of the underlying contract. We believe that measuring losses on an accident year basis is the best measure of the underlying profitability of the premiums earned in that period, since it associates policy premiums earned with the estimate of the losses incurred related to those policy premiums.

The following table summarizes calendar year net loss ratios for our Specialty P&C segment by separating losses between the current accident year and all prior accident years. Additionally, the table shows our current accident year net loss ratios were affected by revisions to our estimate of premiums owed to reinsurers related to coverages provided in prior accident years. Furthermore, net loss ratios in the following table include the impact of NORCAL since the date of acquisition.

	Net Loss Ratios [(1)]		
	Year Ended December 31		
	2021	2020	*Change*
Calendar year net loss ratio	**82.8%**	98.5%	*(15.7 pts)*
Less impact of prior accident years on the net loss ratio	**(4.7%)**	(5.7%)	*1.0 pts*
Current accident year net loss ratio	**87.5 %**	104.2 %	*(16.7 pts)*
Less estimated ratio increase (decrease) attributable to:			
Ceded premium adjustments, prior accident years [(2)]	**(0.5%)**	0.2%	*(0.7 pts)*
Current accident year net loss ratio, excluding the effect of prior year ceded premium [(3)]	**88.0 %**	104.0 %	*(16.0 pts)*

(1) Net losses, as specified, divided by net premiums earned.

(2) During 2021, we decreased our estimates of premiums owed under reinsurance agreements related to prior accident years which increased net premiums earned (the denominator of the current accident net loss year ratio). During 2020, we increased our estimates of premiums owed under reinsurance agreements related to prior accident years which decreased net premiums earned. See the discussion in the Premiums section for our Specialty P&C segment under the heading "Ceded Premiums Written" for additional information.

(3) Our current accident year net loss ratio, excluding the effect of prior year ceded premium adjustments (as shown in the table above), decreased 16.0 percentage points as compared to 2020. The change in our current accident year net loss ratio was primarily attributable to the following:

(In percentage points)	**Increase (Decrease) 2021 versus 2020**
Estimated ratio increase (decrease) attributable to:	
Large National Healthcare Account	*(9.5 pts)*
COVID-19 IBNR Reserve	*(2.2 pts)*
Premium adjustments on loss sensitive policies	*1.0 pts*
NORCAL Operations	*2.0 pts*
NORCAL Acquisition - Purchase Accounting Adjustment	*(1.4 pts)*
All other, net	*(5.9 pts)*
Decrease in current accident year net loss ratio, excluding the effect of prior year ceded premium	***(16.0 pts)***

Excluding the impact of the items specifically identified in the table above, our current accident year net loss ratio during 2021 improved 5.9 percentage points driven by decreases to certain loss ratios during the first quarter of 2021 in our Standard Physician and Specialty lines of business as we continue to recognize the beneficial impacts of our re-underwriting efforts and focus on rate adequacy. In addition, we observed a reduction in claims frequency that continued into 2021, some of which is due to our re-underwriting efforts while some of which we believe is

associated with the COVID-19 pandemic including the disruption of the court systems. Given the consistent and prolonged nature of this favorable claims frequency trend, we further reduced certain loss ratios in our Standard Physician line of business during the third and fourth quarters of 2021.

Initial loss ratios associated with NORCAL policies were higher than the average for our other books of business in this segment; however, we reduced certain NORCAL loss ratios during the fourth quarter of 2021 due to favorable frequency trends, as previously discussed. The net impact of NORCAL operations resulted in a 2.0 percentage point increase in our current accident year net loss ratio in 2021. We are currently in the process of evaluating the NORCAL book of business and implementing ProAssurance's underwriting strategies. Also as a result of our acquisition of NORCAL, our current accident year net loss ratio in 2021 was impacted by amortization of the negative VOBA associated with NORCAL's assumed unearned premium which is recorded as a reduction to current accident year net losses and accounted for a 1.4 percentage point decrease in our current period ratio. See Note 2 of the Notes to Consolidated Financial Statements for additional information on the NORCAL acquisition and the related purchase accounting adjustments. In addition, our current accident year net loss ratio in 2021 was impacted by changes in premium adjustments related to loss sensitive policies which increased the current period ratio as compared to 2020 by 1.0 percentage point (see previous discussion under the heading "Net Premiums Earned"). Our 2020 current accident year net loss ratio was higher due to the effect of a large national healthcare account, net of the impact of related PDR amortization, which accounted for 9.5 percentage points of the decrease in the 2021 ratio as compared to 2020. In addition, our current accident year net loss ratio in 2020 was impacted by a $10 million IBNR reserve we recorded during the second quarter of 2020 for COVID-19 which accounted for 2.2 percentage points of the decrease in the 2021 ratio as compared to 2020.

We re-evaluate our previously established reserve each quarter based upon the most recently completed actuarial analysis supplemented by any new analysis, information or trends that have emerged since the date of that study. We also take into account currently available industry trend information.

We recognized net favorable prior year accident reserve development of $32.9 million for the year ended December 31, 2021 as compared to $27.5 million for the year ended December 31, 2020. Development recognized during 2021 primarily reflected a lower than anticipated loss emergence, principally related to accident years 2015 through 2020. Development recognized in 2020 principally related to accident years 2014 through 2017. Net favorable prior accident year reserve development recognized in 2021 included a $1.0 million reduction in our IBNR reserve for COVID-19 during the third quarter of 2021 due to the fact that early first notices have not materialized into claims. See additional discussion on the COVID-19 IBNR reserve in the Critical Accounting Estimates section under the heading "Reserve for Losses and Loss Adjustment Expenses". In addition, net favorable prior accident year reserve development recognized in 2021 included an increase for potential ECO/XPL claims of $1.0 million in 2021 as compared to a reduction in the same reserve of $4.0 million in 2020. Furthermore, favorable development recognized in 2021 included $7.9 million related to the amortization of the purchase accounting fair value adjustment on NORCAL's assumed net reserve and amortization of the negative VOBA associated with NORCAL's DDR reserve which is recorded as a reduction to prior accident year net losses and loss adjustment expenses. We have not recognized any development related to NORCAL's prior accident year reserves since the date of acquisition.

A detailed discussion of factors influencing our recognition of loss development is included in our Critical Accounting Estimates section under the heading "Reserve for Losses and Loss Adjustment Expenses." Assumptions used in establishing our reserve are regularly reviewed and updated by management as new data becomes available. Any adjustments necessary are reflected in the then current operations. Due to the size of our reserve, even a small percentage adjustment to the assumptions can have a material effect on our results of operations for the period in which the change is made, as was the case in both 2021 and 2020.

Underwriting, Policy Acquisition and Operating Expenses

Our Specialty P&C segment underwriting, policy acquisition and operating expenses, including NORCAL expenses since the date of acquisition, were comprised as follows:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
DPAC amortization	**$ 61,662**	$ 53,562	*$ 8,100*	*15.1%*
Management fees	**3,781**	6,136	*(2,355)*	*(38.4%)*
Other underwriting and operating expenses	**62,266**	49,901	*12,365*	*24.8%*
Total	**$ 127,709**	$ 109,599	*$ 18,110*	*16.5%*

DPAC amortization for 2021 included approximately $9.4 million of DPAC amortization associated with NORCAL policies written subsequent to our acquisition; however, this level of DPAC amortization is approximately $13.4 million lower than would be considered normal for the period of time post-acquisition due to the application of GAAP purchase accounting rules whereby the capitalized policy acquisition costs for policies written prior to the acquisition date were written off through purchase accounting rather than being expensed pro rata over the remaining term of the associated policies (see Note 2 of the Notes to Consolidated Financial Statements for more information). Excluding NORCAL, DPAC amortization decreased for 2021 as compared to 2020 driven by a lower volume of premium written and a decrease in compensation-related expenses driven by a reduction in headcount as a result of the 2020 organizational restructuring. Partially offsetting the decrease in DPAC amortization for 2021 was a decrease in ceding commission income, which is an offset to expense, from certain of our shared risk arrangements.

Management fees are charged pursuant to a management agreement by the Corporate segment to the operating subsidiaries within our Specialty P&C segment, excluding the acquired operating subsidiaries of NORCAL, for services provided based on the extent to which services are provided to the subsidiary and the amount of premium written by the subsidiary. Fluctuations in the amount of premium written by each subsidiary can result in corresponding variations in the management fee charged to each subsidiary during a particular period. Due to organizational structure enhancements in our Specialty P&C segment during 2020, the extent to which services are provided by the Corporate segment to the operating subsidiaries within the segment decreased effective January 1, 2021. Accordingly, we reduced the fee charged to the operating subsidiaries in 2021.

Other underwriting and operating expenses increased in 2021 primarily due to the addition of approximately $10.0 million of expenses contributed by NORCAL since the date of acquisition and an increase in amortization related to new software placed into service during the second quarter of 2020. In addition, the increase in 2021 reflected higher amounts accrued for performance-related incentive plans due to our improved combined ratio and other performance metrics. These increases in expenses during 2021 were partially offset by lower operating expenses in 2021 resulting from the operational and structural changes implemented over the past two years as well as the effect of $3.4 million of one-time expenses incurred during the prior year. One-time expenses in 2020 were mainly comprised of early retirement benefits granted to certain employees during the third quarter of 2020 as well as expenses associated with the restructuring of our HCPL field office organization, largely during the first half of 2020, consisting of employee severance charges and lease exit costs due to a reduction in physical office locations. The remaining variance in other underwriting and operating expenses for 2021 as compared to 2020 was comprised of individually insignificant components.

Underwriting Expense Ratio (the Expense Ratio)

Our expense ratio for the Specialty P&C segment was as follows:

	Year Ended December 31		
	2021	2020	*Change*
Underwriting expense ratio	**18.4%**	23.0%	*(4.6 pts)*

The change in our expense ratio in 2021 as compared to 2020 was primarily attributable to the following:

(In percentage points)	**Increase (Decrease) 2021 versus 2020**
Estimated ratio increase (decrease) attributable to:	
Change in Net Premiums Earned and DPAC amortization[(1)]	*(0.9 pts)*
NORCAL Operations	*(4.2 pts)*
One-time Expenses	*(0.8 pts)*
Large National Healthcare Account Tail Premium[(2)]	*0.7 pts*
All other, net	*0.6 pts*
Decrease in the underwriting expense ratio	***(4.6 pts)***

[(1)] Excludes premium and DPAC amortization contributed by NORCAL since the date of acquisition (see Note 2 of the Notes to Consolidated Financial Statements for additional information) as well as $14.3 million of premium in 2020 associated with a large national healthcare account tail policy. In addition, excludes certain one-time expenses included in DPAC amortization in 2020 of $0.6 million.

[(2)] See previous discussion under the heading "Gross Premiums Written."

Our underwriting expense ratio for 2021 was impacted by our acquisition of NORCAL. The additional expenses of NORCAL of $19.3 million for 2021 had only a nominal effect on the underwriting expense ratio as it was more than offset by the favorable effect on the ratio of net premiums earned of $214.6 million contributed by NORCAL which decreased our

Specialty P&C segment expense ratio for 2021 by 4.2 percentage points. However, as previously discussed, DPAC amortization associated with NORCAL recorded during 2021 was lower than would be considered normal due to the application of GAAP purchase accounting rules. Normalizing this amortization would have increased our expense ratio for 2021 by an estimated 1.9 percentage points. Excluding the impact of NORCAL and the remaining items identified in the table above, our expense ratio for 2021 increased by 0.6 percentage points primarily due to the impact of an increase in amortization related to new software placed into service during the second quarter of 2020 and higher amounts accrued for performance-related incentive plans. These increases in 2021 as compared to 2020 were partially offset by decreased operating expenses resulting from the operational and structural changes implemented over the past two years, as well as the aforementioned reduction to the management fee charged by the Corporate segment.

Segment Results - Workers' Compensation Insurance

Our Workers' Compensation Insurance segment includes workers' compensation products provided to employers generally with 1,000 or fewer employees, as discussed in Note 19 of the Notes to Consolidated Financial Statements. Workers' compensation products offered include guaranteed cost policies, policyholder dividend policies, retrospectively-rated policies, deductible policies and alternative market programs. Alternative market programs include program design, fronting, claims administration, risk management, SPC rental, asset management and SPC management services. Alternative market program premiums are 100% ceded to either the SPCs within our Segregated Portfolio Cell Reinsurance segment or, to a limited extent, an unaffiliated captive insurer for one program. Our Workers' Compensation Insurance segment results reflect pre-tax underwriting profit or loss from these workers' compensation products, exclusive of investment results, which are included in our Corporate segment. Segment results included the following:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
Net premiums written	**$ 161,865**	$ 164,871	*$ (3,006)*	*(1.8%)*
Net premiums earned	**$ 164,600**	$ 171,772	*$ (7,172)*	*(4.2%)*
Other income	**2,211**	2,216	*(5)*	*(0.2%)*
Net losses and loss adjustment expenses	**(114,704)**	(111,552)	*(3,152)*	*2.8%*
Underwriting, policy acquisition and operating expenses	**(52,418)**	(56,449)	*4,031*	*(7.1%)*
Segment results	**$ (311)**	$ 5,987	*$ (6,298)*	*(105.2%)*
Net loss ratio	**69.7%**	64.9%	*4.8 pts*	
Underwriting expense ratio	**31.8%**	32.9%	*(1.1 pts)*	

Premiums Written

Our workers’ compensation premium volume is driven by five primary factors: (1) the amount of new business written, (2) retention of our existing book of business, (3) premium rates charged on our renewal book of business, (4) changes in payroll exposure and (5) audit premium.

Gross, ceded and net premiums written were as follows:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
Gross premiums written	**$ 240,546**	$ 246,791	*$ (6,245)*	*(2.5%)*
Less: Ceded premiums written	**78,681**	81,920	*(3,239)*	*(4.0%)*
Net premiums written	**$ 161,865**	$ 164,871	*$ (3,006)*	*(1.8%)*

Gross Premiums Written

Gross premiums written by product were as follows:

($ in thousands)	Year Ended December 31			
	2021	2020	*Change*	
Traditional business:				
Guaranteed cost	**$ 138,756**	$ 145,546	*$ (6,790)*	*(4.7%)*
Policyholder dividend	**21,468**	20,464	*1,004*	*4.9%*
Deductible	**4,613**	4,581	*32*	*0.7%*
Retrospective[1]	**2,741**	909	*1,832*	*201.5%*
Other	**6,357**	7,094	*(737)*	*(10.4%)*
Alternative market business[2]	**67,821**	69,487	*(1,666)*	*(2.4%)*
Change in EBUB estimate	**(1,210)**	(1,290)	*80*	*(6.2%)*
Total	**$ 240,546**	$ 246,791	*$ (6,245)*	*(2.5%)*

[1] The change in retrospectively-rated policies included an adjustment that decreased premium by $1.1 million and $2.5 million during the years ended December 31, 2021 and 2020, respectively.

[2] A majority of alternative market premiums are ceded to SPCs in our Segregated Portfolio Cell Reinsurance segment. See further discussion on alternative market gross premiums written in our Segment Operating Results - Segregated Portfolio Cell Reinsurance section under the heading "Gross Premiums Written" that follows.

Gross premiums written decreased during the year ended December 31, 2021 as compared to 2020, reflecting a decrease in audit premium and new business, partially offset by improvement in both renewal retention and renewal rate changes. Policy audits processed during 2021 resulted in audit premium returned to policyholders totaling $0.8 million as compared to audit premium billed to policyholders of $0.6 million during 2020. We reduced our EBUB estimate by $1.2 million in 2021 as compared to $1.3 million in 2020. The decrease in audit premium processed as well as the reduction of our EBUB estimate in 2021 primarily reflected the impact of COVID-19 on actual and expected final payroll audits for policies written prior to the onset of the pandemic in 2020. Renewal retention was 87% in 2021 as compared to 84% for 2020. The 2020 renewal retention was impacted by the reduction in premium funding for a large alternative market program. Renewal rate decreased 2% in 2021 as compared to 4% in 2020. New business written decreased $6.3 million during 2021 as compared to 2020, reflecting the competitive workers' compensation market conditions and a decrease in new business submissions in 2021, which were 18% lower than 2020.

We retained 23 of the 24 workers' compensation alternative market programs up for renewal during the year ended December 31, 2021. During the fourth quarter of 2021, we placed one program into run-off due to continued unfavorable underwriting results. The program had gross written premium of $1.8 million for the year ended December 31, 2021.

New business, audit premium, renewal retention and renewal price changes for our traditional business and the alternative market business are shown in the table below:

	Year Ended December 31					
	2021			2020		
($ in millions)	**Traditional Business**	**Alternative Market Business**	**Segment Results**	Traditional Business	Alternative Market Business	Segment Results
New business	**$ 17.8**	**$ 3.3**	**$ 21.1**	$ 23.7	$ 3.7	$ 27.4
Audit premium (excluding EBUB)	**$ (1.9)**	**$ 1.1**	**$ (0.8)**	$ 0.7	$ (0.1)	$ 0.6
Retention rate [1]	**86%**	**89%**	**87%**	84%	84%	84%
Change in renewal pricing [2]	**(1%)**	**(4%)**	**(2%)**	(4%)	(4%)	(4%)

[1] We calculate our workers' compensation retention rate as annualized expiring renewed premium divided by all annualized expiring premium subject to renewal. Our retention rate can be impacted by various factors, including price or other competitive issues, insureds being acquired, or a decision not to renew based on our underwriting evaluation.

[2] The pricing of our business includes an assessment of the underlying policy exposure and market conditions. We continue to base our pricing on expected losses, as indicated by our historical loss data.

Ceded Premiums Written

Ceded premiums written were as follows:

($ in thousands)	Year Ended December 31			
	2021	2020	*Change*	
Premiums ceded to SPCs	**$ 64,639**	$ 66,725	*$ (2,086)*	*(3.1%)*
Premiums ceded to external reinsurers	**12,768**	12,795	*(27)*	*(0.2%)*
Premiums ceded to unaffiliated captive insurer	**3,182**	2,762	*420*	*15.2%*
Change in return premium estimate under external reinsurance	**(605)**	(39)	*(566)*	*1,451.3%*
Estimated revenue share under external reinsurance	**(1,303)**	(323)	*(980)*	*303.4%*
Total ceded premiums written	**$ 78,681**	$ 81,920	*$ (3,239)*	*(4.0%)*

Premiums ceded to SPCs represent alternative market business that is ceded under 100% quota share agreements to the SPCs in our Segregated Portfolio Cell Reinsurance segment. Premiums ceded to unaffiliated captive insurer represent alternative market business for one program that is ceded under a 100% quota share reinsurance agreement. Alternative market premiums written decreased in 2021, which resulted in lower premium ceded to SPCs. See further discussion on alternative market gross premiums written in our Segment Operating Results - Segregated Portfolio Cell Reinsurance section under the heading "Gross Premiums Written" that follows.

Under our external reinsurance agreement for traditional business, we retain the first $0.5 million in risk insured by us and cede losses in excess of this amount on each loss occurrence under our primary external reinsurance treaty, subject to an AAD equal to 3.5% of ceded earned premium for the treaty year effective May 1, 2021. Per our reinsurance agreements, we cede premiums related to our traditional business on an earned premium basis. The decrease in premiums ceded to external reinsurers during the year ended December 31, 2021 primarily reflected lower earned premium, partially offset by an increase in reinsurance rates effective May 1, 2021.

Changes in the return premium estimate reflected adjustments to our estimate of expected future recovery of ceded premium based on the underlying loss experience of our reinsurance contracts that include a provision for return premium. We increased our estimate of return premium by $0.6 million for the year ended December 31, 2021 as compared to a nominal amount in 2020. The change in estimated return premium for the year ended December 31, 2021 primarily reflected favorable prior year loss development on previously reported reinsured claims.

Ceded Premiums Ratio

Ceded premiums ratio was as follows:

	Year Ended December 31		
	2021	2020	*Change*
Ceded premiums ratio, as reported	**32.4%**	32.8%	*(0.4 pts)*
Less the effect of:			
Premiums ceded to SPCs (100%)	**24.6%**	24.6%	*— pts*
Retrospective premium adjustments	**—%**	0.1%	*(0.1 pts)*
Premiums ceded to unaffiliated captive insurers (100%)	**1.7%**	1.4%	*0.3 pts*
Change in EBUB	**0.1%**	0.1%	*— pts*
Change in return premium estimate under external reinsurance	**(0.4%)**	—%	*(0.4 pts)*
Estimated revenue share	**(0.7%)**	(0.2%)	*(0.5 pts)*
Assumed premiums earned (not ceded to external reinsurers)	**(0.2%)**	(0.3%)	*0.1 pts*
Ceded premiums ratio (related to external reinsurance), less the effects of above	**7.3%**	7.1%	*0.2 pts*

The above table reflects traditional ceded premiums earned as a percent of traditional gross premiums earned. As discussed above, we cede premiums in our traditional business to external reinsurers on an earned premium basis. The increase in the ceded premiums ratio in 2021 as compared to 2020 primarily reflected the increase in reinsurance rates.

Net Premiums Earned

Net premiums earned consist of gross premiums earned less the portion of earned premiums that we cede to SPCs in our Segregated Portfolio Cell Reinsurance segment, external reinsurers (including changes related to the return premium and revenue share estimates) and the unaffiliated captive insurer. Because premiums are earned pro rata over the entire policy period, fluctuations in premiums earned tend to lag those of premiums written. Our workers' compensation policies are twelve month term policies, and premiums are earned on a pro rata basis over the policy period. Net premiums earned also include premium adjustments related to the audit of our insureds' payrolls, changes in our EBUB estimate and premium adjustments related to retrospectively-rated policies. Payroll audits are conducted subsequent to the end of the policy period and any related premium adjustments processed are recorded as fully earned in the current period. In addition, we record an estimate for EBUB and evaluate the estimate on a quarterly basis.

Net premiums earned were as follows:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
Gross premiums earned	**$ 243,665**	$ 255,484	*$ (11,819)*	*(4.6%)*
Less: Ceded premiums earned	**79,065**	83,712	*(4,647)*	*(5.6%)*
Net premiums earned	**$ 164,600**	$ 171,772	*$ (7,172)*	*(4.2%)*

The decrease in net premiums earned during the year ended December 31, 2021 as compared to 2020 primarily reflected the pro rata effect of a reduction in net premiums written during the preceding twelve months and the impact of audit premium returned to policyholders. The decrease in net premiums earned during the year ended December 31, 2021 was partially offset by a decrease in negative premium adjustments under retrospectively-rated policies and a decrease in ceded earned premium, which reflected the increased revenue share and return premium estimates.

Losses and Loss Adjustment Expenses

We estimate our current accident year loss and loss adjustment expenses by developing actual reported losses using historical loss development factors, adjusted to reflect current and expected trends based on various internal analyses and supplemental information. The following table summarizes calendar year net loss ratios by separating losses between the current accident year and all prior accident years. Calendar year and current accident year net loss ratios by component were as follows:

	Year Ended December 31		
	2021	2020	*Change*
Calendar year net loss ratio	**69.7%**	64.9%	*4.8 pts*
Less impact of prior accident years on the net loss ratio	**(4.3%)**	(4.1%)	*(0.2 pts)*
Current accident year net loss ratio	**74.0%**	69.0%	*5.0 pts*

The current accident year loss ratio increased in 2021 as compared to 2020, reflecting workers returning to full employment in 2021 after the lifting of pandemic-related restrictions and the labor shortage. We experienced an increase in reported claim activity in 2021, including an increase in severity-related claim activity. The increase in reported claim activity is attributable to workers being out of "work shape" as they returned to employment in 2021 as well as the lack of training, alternative work arrangements and employee fatigue due to the labor shortage. The current accident year loss ratio in 2021 was also impacted by the continuation of intense price competition and the resulting renewal rate decreases as well as the reduction in net premiums earned related to negative audit premium, as previously discussed.

Calendar year incurred losses (excluding IBNR) in excess of our per occurrence reinsurance retention, before consideration of the AAD (see previous discussion under the heading "Ceded Premiums Written"), increased $11.3 million in 2021 as compared to 2020. Current accident year ceded incurred losses totaled $6.9 million in 2021 as compared to $2.8 million in 2020. We retained calendar year incurred losses in excess of our per occurrence retention totaling $6.6 million for the year ended December 31, 2021 which reflected losses within the AAD.

We recognized net favorable prior year development related to our previously established reserve of $7.1 million for the year ended December 31, 2021 as compared to $7.0 million for 2020. The net favorable prior year reserve development for the years ended December 31, 2021 and 2020 reflected overall favorable trends in claim closing patterns. Net favorable development for the year ended December 31, 2021 primarily related to accident years 2012 through 2017. Net favorable development for the year ended December 31, 2020 primarily related to accident years 2014 through 2017.

Underwriting, Policy Acquisition and Operating Expenses

Underwriting, policy acquisition and operating expenses include the amortization of commissions, premium taxes and underwriting salaries, which are capitalized and deferred over the related workers' compensation policy period, net of ceding commissions earned. The capitalization of underwriting salaries can vary as they are subject to the success rate of our contract acquisition efforts. These expenses also include a management fee charged by our Corporate segment, which represents intercompany charges pursuant to a management agreement, and the amortization of intangible assets, primarily related to the acquisition of Eastern by ProAssurance. The management fee is based on the extent to which services are provided to the subsidiary and the amount of premium written by the subsidiary.

Our Workers' Compensation Insurance segment underwriting, policy acquisition and operating expenses were comprised as follows:

($ in thousands)	**Year Ended December 31**			
	2021	2020	*Change*	
DPAC amortization	**$ 29,092**	$ 31,547	*$ (2,455)*	*(7.8%)*
Management fees	**1,804**	1,861	*(57)*	*(3.1%)*
Other underwriting and operating expenses	**34,359**	37,642	*(3,283)*	*(8.7%)*
Policyholder dividend expense	**1,155**	1,051	*104*	*9.9%*
SPC ceding commission offset	**(13,992)**	(15,652)	*1,660*	*(10.6%)*
Total	**$ 52,418**	$ 56,449	*$ (4,031)*	*(7.1%)*

The decrease in DPAC amortization for the year ended December 31, 2021 as compared to 2020 primarily reflected the decrease in net premiums earned.

The decrease in other underwriting and operating expenses for the year ended December 31, 2021 as compared to 2020 primarily reflected a decrease in compensation-related costs driven by a reduction in headcount as a result of the third quarter of 2020 restructuring and a reduction in our allowance for expected credit losses, partially offset by an increase in expenses related to our policy administration and claim system implementation project. Additionally, the decrease in other underwriting and operating expenses in 2021 as compared to 2020 reflected the prior year effect of one-time costs of $0.9 million primarily comprised of employee severance costs associated with the 2020 restructuring.

As previously discussed, alternative market premiums written by our Workers' Compensation Insurance segment unit are 100% ceded, less a ceding commission, to either the SPCs in our Segregated Portfolio Cell Reinsurance segment or, to a limited extent, an unaffiliated captive insurer. The ceding commission charged to the SPCs consists of an amount for fronting fees, cell rental fees, commissions, premium taxes and risk management fees. The fronting fees, commissions, premium taxes and risk management fees are recorded as an offset to underwriting, policy acquisition and operating expenses. Cell rental fees are recorded as a component of other income and claims administration fees are recorded as ceded ULAE. The decrease in SPC ceding commissions earned for the year ended December 31, 2021 as compared to 2020, primarily reflected the decrease in alternative market ceded earned premium.

Underwriting Expense Ratio (the Expense Ratio)

The underwriting expense ratio included the impact of the following:

	Year Ended December 31		
	2021	2020	*Change*
Underwriting expense ratio, as reported	**31.8%**	32.9%	*(1.1 pts)*
Less estimated ratio increase (decrease) attributable to:			
Impact of ceding commissions received from SPCs	**3.3%**	3.2%	*0.1 pts*
Retrospective premium adjustment	**0.1%**	0.3%	*(0.2 pts)*
Impact of audit premium	**0.4%**	0.1%	*0.3 pts*
Change in return premium estimate under external reinsurance	**(0.1%)**	—%	*(0.1 pts)*
Estimated revenue share	**(0.2%)**	—%	*(0.2 pts)*
Underwriting expense ratio, less listed effects	**28.3%**	29.3%	*(1.0 pts)*

Excluding the items noted in the table above, the expense ratio decreased for the year ended December 31, 2021, primarily reflecting the reduction in compensation-related costs and the allowance for credit losses noted above, partially offset by the decrease in net premiums earned.

Segment Results - Segregated Portfolio Cell Reinsurance

The Segregated Portfolio Cell Reinsurance segment includes the results (underwriting profit or loss, plus investment results, net of U.S. federal income taxes) of SPCs at Inova Re and Eastern Re, our Cayman Islands SPC operations, as discussed in Note 19 of the Notes to Consolidated Financial Statements. SPCs are segregated pools of assets and liabilities that provide an insurance facility for a defined set of risks. Assets of each SPC are solely for the benefit of that individual cell and each SPC is solely responsible for the liabilities of that individual cell. Assets of one SPC are statutorily protected from the creditors of the others. Each SPC is owned, fully or in part, by an individual company, agency, group or association and the results of the SPCs are attributable to the participants of that cell. We participate to a varying degree in the results of selected SPCs and, for the SPCs in which we participate, our participation interest ranges from a low of 20% to a high of 85%. SPC results attributable to external cell participants are reported as an SPC dividend (expense) income in our Segregated Portfolio Cell Reinsurance segment. In addition, our Segregated Portfolio Cell Reinsurance segment includes the investment results of the SPCs as the investments are solely for the benefit of the cell participants and investment results attributable to external cell participants are reflected in the SPC dividend (expense) income. As of December 31, 2021, there were 27 (4 inactive) SPCs. The SPCs assume workers' compensation insurance, healthcare professional liability insurance or a combination of the two from our Workers' Compensation Insurance and Specialty P&C segments. As of December 31, 2021, there were two SPCs that assumed both workers' compensation insurance and healthcare professional liability insurance and one SPC that assumed only healthcare professional liability insurance.

Segment results reflects our share of the underwriting and investment results of the SPCs in which we participate, and included the following:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
Net premiums written	**$ 63,042**	$ 64,159	*$ (1,117)*	*(1.7%)*
Net premiums earned	**$ 63,688**	$ 66,352	*$ (2,664)*	*(4.0%)*
Net investment income	**814**	1,084	*(270)*	*(24.9%)*
Net investment gains (losses)	**4,080**	3,085	*995*	*32.3%*
Other income	**3**	205	*(202)*	*(98.5%)*
Net losses and loss adjustment expenses	**(32,569)**	(29,605)	*(2,964)*	*10.0%*
Underwriting, policy acquisition and operating expenses	**(21,635)**	(20,709)	*(926)*	*4.5%*
SPC U.S. federal income tax expense [(1)]	**(1,947)**	(1,746)	*(201)*	*11.5%*
SPC net results	**12,434**	18,666	*(6,232)*	*(33.4%)*
SPC dividend (expense) income [(2)]	**(10,050)**	(14,304)	*4,254*	*(29.7%)*
Segment results [(3)]	**$ 2,384**	$ 4,362	*$ (1,978)*	*(45.3%)*
Net loss ratio	**51.1%**	44.6%	*6.5 pts*	
Underwriting expense ratio	**34.0%**	31.2%	*2.8 pts*	

(1) Represents the provision for U.S. federal income taxes for SPCs at Inova Re, which have elected to be taxed as a U.S. corporation under Section 953(d) of the Internal Revenue Code. U.S. federal income taxes are included in the total SPC net results and are paid by the individual SPCs.

(2) Represents the net (profit) loss attributable to external cell participants.

(3) Represents our share of the net profit (loss) of the SPCs in which we participate.

Premiums Written

Premiums in our Segregated Portfolio Cell Reinsurance segment are assumed from either our Workers' Compensation Insurance or Specialty P&C segments. Premium volume is driven by five primary factors: (1) the amount of new business written, (2) retention of the existing book of business, (3) premium rates charged on the renewal book of business and, for workers' compensation business, (4) changes in payroll exposure and (5) audit premium.

Gross, ceded and net premiums written were as follows:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
Gross premiums written	**$ 71,850**	$ 72,843	*$ (993)*	*(1.4%)*
Less: Ceded premiums written	**8,808**	8,684	*124*	*1.4%*
Net premiums written	**$ 63,042**	$ 64,159	*$ (1,117)*	*(1.7%)*

Gross Premiums Written

Gross premiums written reflected reinsurance premiums assumed by component as follows:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
Workers' compensation	**$ 64,639**	$ 66,725	*$ (2,086)*	*(3.1%)*
Healthcare professional liability	**7,211**	6,118	*1,093*	*17.9%*
Gross Premiums Written	**$ 71,850**	$ 72,843	*$ (993)*	*(1.4%)*

Gross premiums written for the years ended December 31, 2021 and 2020 were primarily comprised of workers' compensation coverages assumed from our Workers' Compensation Insurance segment. Workers' compensation gross premiums written decreased during the year ended December 31, 2021 as compared to 2020, which primarily reflected the competitive workers’ compensation market conditions and the resulting renewal rate decreases of 4%, partially offset by an improvement in renewal retention. The renewal retention rate during 2020 includes the impact of a reduction in premium funding for a large workers' compensation program. We do not participate in this program; therefore, the reduction in premium funding had no effect on the segment results for the year ended December 31, 2021. The increase in healthcare professional liability gross premiums written in 2021 as compared to 2020 primarily reflected higher renewal pricing and exposure increases in two programs. We retained 22 of the 23 workers' compensation alternative market programs up for renewal for the year ended December 31, 2021. During the fourth quarter, we placed one program into run-off due to continued unfavorable underwriting results. The program had gross written premium of $1.8 million for the year ended December 31, 2021. We retained 100% of the 3 healthcare professional liability programs up for renewal during 2021.

New business, audit premium, retention and renewal price changes for the assumed workers' compensation premium is shown in the table below:

	Year Ended December 31	
($ in millions)	**2021**	2020
New business	**$ 3.3**	$ 3.7
Audit premium (including EBUB)	**$ 1.1**	$ (0.1)
Retention rate [1]	**89%**	84%
Change in renewal pricing [2]	**(4%)**	(4%)

[1] We calculate our workers' compensation retention rate as annualized expiring renewed premium divided by all annualized expiring premium subject to renewal. Our retention rate can be impacted by various factors, including price or other competitive issues, insureds being acquired, or a decision not to renew based on our underwriting evaluation.

[2] The pricing of our business includes an assessment of the underlying policy exposure and market conditions. We continue to base our pricing on expected losses, as indicated by our historical loss data.

Ceded Premiums Written

Ceded premiums written were as follows:

($ in thousands)	Year Ended December 31			
	2021	2020	*Change*	
Ceded premiums written	**$ 8,808**	$ 8,684	*$ 124*	*1.4%*

For the workers' compensation business, each SPC has in place its own external reinsurance arrangements. The healthcare professional liability business is assumed net of reinsurance from our Specialty P&C segment; therefore, there are no ceded premiums related to the healthcare professional liability business reflected in the table above. The risk retention for each loss occurrence for the workers' compensation business ranges from $0.3 million to $0.4 million based on the program, with limits up to $119.7 million. In addition, each program has aggregate reinsurance coverage between $1.1 million and $2.1 million on a program year basis. Per the SPC external reinsurance agreements, premiums are ceded on a written premium basis. The change in ceded premiums written in 2021 as compared to 2020 primarily reflected the impact of rate increases under the external reinsurance contract, partially offset by the decrease in workers' compensation gross premiums written. External reinsurance rates vary based on the alternative market program.

Ceded Premiums Ratio

Ceded premiums ratio was as follows:

	Year Ended December 31		
	2021	2020	*Change*
Ceded premiums ratio	**13.6%**	13.0%	*0.6 pts*

The above table reflects ceded premiums as a percent of gross premiums written for the workers' compensation business only; healthcare professional liability business is assumed net of reinsurance, as discussed above. The ceded premiums ratio reflects the weighted average reinsurance rates of all SPC programs. The increase in the ceded premiums ratio for the year ended December 31, 2021 reflects an increase in reinsurance rates.

Net Premiums Earned

Net premiums earned consist of gross premiums earned less the portion of earned premiums that the SPCs cede to external reinsurers. Because premiums are generally earned pro rata over the entire policy period, fluctuations in premiums earned tend to lag those of premiums written. Policies ceded to the SPCs are twelve month term policies and premiums are earned on a pro rata basis over the policy period. Net premiums earned also include premium adjustments related to the audit of workers' compensation insureds' payrolls. Payroll audits are conducted subsequent to the end of the policy period and any related adjustments processed are recorded as fully earned in the current period.

Gross, ceded and net premiums earned were as follows:

($ in thousands)	Year Ended December 31			
	2021	2020	*Change*	
Gross premiums earned	**$ 72,359**	$ 75,112	*$ (2,753)*	*(3.7%)*
Less: Ceded premiums earned	**8,671**	8,760	*(89)*	*(1.0%)*
Net premiums earned	**$ 63,688**	$ 66,352	*$ (2,664)*	*(4.0%)*

The decrease in net premiums earned during the year ended December 31, 2021 primarily reflected the pro rata effect of a reduction in net premiums written during the preceding twelve months.

Net Investment Income and Net Investment Gains (Losses)

Net investment income for the years ended December 31, 2021 and 2020 was primarily attributable to interest earned on available-for-sale fixed maturity investments, which primarily include investment-grade corporate debt securities. We recognized $4.1 million and $3.1 million of net investment gains for the years ended December 31, 2021 and 2020, respectively, which primarily reflected an increase in the fair value of our equity portfolio.

Losses and Loss Adjustment Expenses

The following table summarizes the calendar year net loss ratios by separating losses between the current accident year and all prior accident years. The current accident year net loss ratio reflects the aggregate loss ratio for all programs. Loss reserves are estimated for each program on a quarterly basis. Due to the size of some of the programs, quarterly loss results can create volatility in the current accident year net loss ratio from period to period.

Calendar year and current accident year net loss ratios for the years ended December 31, 2021 and 2020 were as follows:

	Year Ended December 31		
	2021	2020	*Change*
Calendar year net loss ratio	**51.1%**	44.6%	*6.5 pts*
Less impact of prior accident years on the net loss ratio	**(16.0%)**	(25.0%)	*9.0 pts*
Current accident year net loss ratio	**67.1%**	69.6%	*(2.5 pts)*

The current accident year net loss ratio decreased in 2021 as compared to 2020, primarily reflecting favorable trends in the prior accident year claim results and their impact on our analysis of the current accident year loss estimate. The decrease was partially offset by the continuation of intense price competition and the resulting renewal rate decreases in the workers' compensation business as well as the impact of higher claim activity related to workers returning to full employment in 2021 after the lifting of pandemic-related restrictions and the labor shortage.

Calendar year incurred losses (excluding IBNR) ceded to our external reinsurers increased $5.2 million for the year ended December 31, 2021 as compared to 2020. Current accident year ceded incurred losses (excluding IBNR) increased $2.3 million for the year ended December 31, 2021 as compared to 2020.

We recognized net favorable prior year reserve development of $10.2 million and $16.5 million for the years ended December 31, 2021 and 2020, respectively.

Net favorable prior year reserve development in the workers' compensation business totaled $7.6 million in 2021 as compared to $12.1 million in 2020. The 2021 net favorable prior year reserve development related primarily to accident year 2015 and accident years 2018 through 2020. The 2020 net favorable development related primarily to accident years 2018 and 2019.

Net favorable prior year reserve development in the healthcare professional liability business totaled $2.5 million in 2021 as compared to $4.4 million in 2020. The 2021 net favorable prior year reserve development related primarily to accident years 2018 through 2020, while the 2020 net favorable prior year reserve development related primarily to accident years 2017 through 2019.

Underwriting, Policy Acquisition and Operating Expenses

Our Segregated Portfolio Cell Reinsurance segment underwriting, policy acquisition and operating expenses were comprised as follows:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
DPAC amortization	**$ 18,730**	$ 19,636	*$ (906)*	*(4.6%)*
Policyholder dividend expense	**508**	72	*436*	*605.6%*
Other underwriting and operating expenses	**2,397**	1,001	*1,396*	*139.5%*
Total	**$ 21,635**	$ 20,709	*$ 926*	*4.5%*

DPAC amortization primarily represents ceding commissions, which vary by program and are paid to our Workers' Compensation Insurance and Specialty P&C segments for premiums assumed. Ceding commissions include an amount for fronting fees, commissions, premium taxes and risk management fees, which are reported as an offset to underwriting, policy acquisition and operating expenses within our Workers' Compensation Insurance and Specialty P&C segments. In addition, ceding commissions paid to our Workers' Compensation Insurance segment include cell rental fees which are recorded as other income and claims administration fees which are recorded as ceded ULAE within our Workers' Compensation Insurance segment.

Other underwriting and operating expenses primarily include bank fees, professional fees and changes in the allowance for expected credit losses. The increase in other underwriting and operating expenses for the year ended December 31, 2021 as

compared to 2020 primarily reflected the change in our allowance for expected credit losses related to one program in which we do not participate, partially offset by a decrease in professional fees.

The increase in policyholder dividend expense for the year ended December 31, 2021 as compared to 2020, related primarily to one SPC program, in which we do not participate.

Underwriting Expense Ratio (the Expense Ratio)

The underwriting expense ratio included the impact of the following:

	Year Ended December 31		
	2021	2020	*Change*
Underwriting expense ratio, as reported	**34.0%**	31.2%	*2.8 pts*
Less: impact of audit premium on expense ratio	**(0.5%)**	0.1%	*(0.6 pts)*
Underwriting expense ratio, excluding the effect of audit premium	**34.5%**	31.1%	*3.4 pts*

Excluding the effect of audit premium, the underwriting expense ratio increased for the year ended December 31, 2021. The increase primarily reflected the change in the allowance for expected credit losses and policyholder dividend expense, as discussed above, as well as the decrease in net premiums earned.

SPC U.S. Federal Income Tax Expense

The SPCs at Inova Re have made a 953(d) election under the U.S. Internal Revenue Code and are subject to U.S. federal income tax. U.S. federal income taxes incurred totaled $1.9 million and $1.7 million for the years ended December 31, 2021 and 2020, respectively. U.S. federal income taxes are included in the total SPC net results and are paid by the individual SPCs.

Segment Results - Lloyd's Syndicates

Our Lloyd's Syndicates segment includes the results from our participation in certain Syndicates at Lloyd's of London. In addition to our participation in Syndicate results, we have investments in and other obligations to our Lloyd's Syndicates consisting of a Syndicate Credit Agreement and FAL requirements. For the 2021 underwriting year, our FAL was comprised of investment securities and cash and cash equivalents deposited with Lloyd's which at December 31, 2021 had a fair value of approximately $37.8 million, as discussed in Note 4 of the Notes to Consolidated Financial Statements. During the second and fourth quarters of 2021, we received a return of approximately $24.5 million and $8.0 million, respectively, of cash from our FAL balances given the reduction in our participation in the results of Syndicate 1729, to 5% from 29%, and Syndicate 6131, to 50% from 100%, for the 2021 underwriting year. Further, during the fourth quarter of 2021, we received a return of approximately $26.6 million of cash from our FAL balances given Syndicate 6131 ceased underwriting on a quota share basis with Syndicate 1729 as Syndicate 6131's business is retained within Syndicate 1729 beginning with the 2022 underwriting year.

We normally report results from our involvement in Lloyd's Syndicates on a quarter lag, except when information is available that is material to the current period. Furthermore, the investment results associated with our FAL investments and certain U.S. paid administrative expenses are reported concurrently as that information is available on an earlier time frame.

Lloyd's Syndicate 1729. We provide capital to Syndicate 1729, which covers a range of property and casualty insurance and reinsurance lines in both the U.S. and international markets. The remaining capital for Syndicate 1729 is provided by unrelated third parties, including private names and other corporate members. As previously discussed, we decreased our participation in the results of Syndicate 1729 for the 2021 underwriting year to 5% to support and grow our core insurance operations. Due to the quarter lag, this reduced participation was not reflected in our results until the second quarter of 2021. Syndicate 1729 had a maximum underwriting capacity of £185 million (approximately $250 million based on December 31, 2021 exchange rates) for the 2021 underwriting year, of which £9 million (approximately $13 million based on December 31, 2021 exchange rates) was our allocated underwriting capacity. For the 2022 underwriting year, our participation in the results of Syndicate 1729 remains unchanged at 5%. Syndicate 1729's maximum underwriting capacity for the 2022 underwriting year is £210 million (approximately $284 million at December 31, 2021), of which £11 million (approximately $15 million at December 31, 2021) is our allocated underwriting capacity.

Lloyd's Syndicate 6131. Prior to January 1, 2022, we provided capital to an SPA, Syndicate 6131, which focused on contingency and specialty property business. Effective July 1, 2020, Syndicate 6131 entered into a six-month quota share reinsurance agreement with an unaffiliated insurer. Under this agreement, Syndicate 6131 ceded essentially half of the premium assumed from Syndicate 1729 to the unaffiliated insurer; the agreement was non-renewed on January 1, 2021 and we decreased our participation in the results of Syndicate 6131 to 50% from 100% for the 2021 underwriting year, as previously discussed. Due to the quarter lag, this reduced participation was not reflected in our results until the second quarter of 2021. Syndicate 6131 had a maximum underwriting capacity for the 2021 underwriting year of £20 million (approximately $27 million based on December 31, 2021 exchange rates), of which £10 million (approximately $14 million based on December 31, 2021 exchange rates) was our allocated underwriting capacity. Effective January 1, 2022, Syndicate 6131 ceased underwriting on a quota share basis with Syndicate 1729 as Syndicate 6131's business is retained within Syndicate 1729 beginning with the 2022 underwriting year, as previously discussed. Premium from our participation in the results of Syndicate 6131 from open underwriting years prior to 2022 will continue to earn out pro rata over the entire policy period of the underlying business.

In addition to the results of our participation in Lloyd's Syndicates, as discussed above, our Lloyd's Syndicates segment also includes 100% of the results of our wholly owned subsidiaries that support our operations at Lloyd's. For the years ended December 31, 2021 and 2020, the results of our Lloyd's Syndicates segment were as follows:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
Net premiums written	**$ 31,667**	$ 67,652	*$ (35,985)*	*(53.2%)*
Net premiums earned	**$ 48,372**	$ 77,226	*$ (28,854)*	*(37.4%)*
Net investment income	**1,961**	4,128	*(2,167)*	*(52.5%)*
Net investment gains (losses)	**249**	988	*(739)*	*(74.8%)*
Other income	**912**	51	*861*	*1,688.2%*
Net losses and loss adjustment expenses	**(29,812)**	(50,216)	*20,404*	*(40.6%)*
Underwriting, policy acquisition and operating expenses	**(17,957)**	(30,136)	*12,179*	*(40.4%)*
Income tax benefit (expense)	**—**	29	*(29)*	*nm*
Segment results	**$ 3,725**	$ 2,070	$ 1,655	*80.0%*
Net loss ratio	**61.6 %**	65.0 %	*(3.4 pts)*	
Underwriting expense ratio	**37.1 %**	39.0 %	*(1.9 pts)*	

Premiums Written

Changes in premium volume within our Lloyd's Syndicates segment are driven by five primary factors: (1) changes in our participation in the Syndicates, (2) the amount of new business and the channels in which the business is written, (3) the retention of existing business, (4) the premium charged for business that is renewed, which is affected by rates charged and by the amount and type of coverage an insured chooses to purchase and (5) the timing of premium written through multi-period policies.

Gross, ceded and net premiums written were as follows:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
Gross premiums written	**$ 37,969**	$ 84,718	*$ (46,749)*	*(55.2%)*
Less: Ceded premiums written	**6,302**	17,066	*(10,764)*	*(63.1%)*
Net premiums written	**$ 31,667**	$ 67,652	*$ (35,985)*	*(53.2%)*

Gross Premiums Written

Gross premiums written in 2021 consisted of specialty property coverages (31% of total gross premiums written), property insurance coverages (27%), casualty coverages (26%), contingency coverages (9%), catastrophe reinsurance coverages (5%) and property reinsurance coverages (2%). The decrease in gross premiums written in 2021 as compared to 2020 was primarily driven by our decreased participation in the results of Syndicates 1729 and 6131, partially offset by volume increases on renewal business and renewal pricing increases, primarily on property insurance and casualty coverages and new business written, primarily on specialty property and property insurance coverages.

Ceded Premiums Written

Syndicate 1729 utilizes reinsurance to provide the capacity to write larger limits of liability on individual risks, to provide protection against catastrophic loss and to provide protection against losses in excess of policy limits. As previously discussed, for the second half of 2020 Syndicate 6131 utilized external quota share reinsurance to manage the net loss exposure on the specialty property and contingency coverages it assumed from Syndicate 1729 by ceding essentially half of the premium assumed to an unaffiliated insurer; this agreement was non-renewed on January 1, 2021. Due to the quarter lag, the effect of this six-month reinsurance arrangement began to be reflected in our results in the fourth quarter of 2020. Ceded premiums written decreased for the year ended December 31, 2021 as compared to 2020 primarily driven by our decreased participation in the results of Syndicates 1729 and 6131 and, to a lesser extent, the impact of an increase in estimated reinsurance reinstatement premiums of $1.2 million during the fourth quarter of 2020 triggered by certain property and catastrophe related losses exceeding specified levels in the reinsurance agreement.

Net Premiums Earned

Net premiums earned consist of gross premiums earned less the portion of earned premiums that the Syndicates cede to reinsurers for their assumption of a portion of losses. Premiums written through open-market channels are generally earned pro rata over the entire policy period, which is predominantly twelve months, whereas premiums written through delegated underwriting authority arrangements are generally earned over the policy period plus twelve months. Therefore, net premiums earned is affected by shifts in the mix of policies written between the open-market and delegated underwriting authority arrangements. Additionally, net premiums earned consists of a mix of policies earned from different open underwriting years. As previously discussed, we participate to a varying degree in each open underwriting year which may cause fluctuations in premiums earned. Furthermore, fluctuations in premiums earned tend to lag those of premiums written. Premiums for certain policies and assumed reinsurance contracts are reported subsequent to the coverage period and/or may be subject to adjustment based on loss experience. These premium adjustments are earned when reported, which can result in further fluctuation in earned premium.

Gross, ceded and net premiums earned were as follows:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
Gross premiums earned	**$ 60,590**	$ 98,990	*$ (38,400)*	*(38.8%)*
Less: Ceded premiums earned	**12,218**	21,764	*(9,546)*	*(43.9%)*
Net premiums earned	**$ 48,372**	$ 77,226	*$ (28,854)*	*(37.4%)*

The decrease in net premiums earned for the year ended December 31, 2021 as compared to 2020 was driven by our decreased participation in Syndicates 1729 and 6131, partially offset by the effect of the aforementioned reinstatement premiums earned of $1.2 million during the fourth quarter of 2020.

Net Losses and Loss Adjustment Expenses

Losses for the year were primarily recorded using the loss assumptions by risk category incorporated into the business plans submitted to Lloyd's for Syndicate 1729 and Syndicate 6131 with consideration given to loss experience incurred to date. The assumptions used in each business plan were consistent with loss results reflected in Lloyd's historical data for similar risks. The loss ratios may fluctuate due to the mix of earned premium and the timing of earned premium adjustments (see discussion in this section under the heading "Net Premiums Earned"). Premium and exposure for some of Syndicate 1729's insurance policies and reinsurance contracts are initially estimated and subsequently adjusted over an extended period of time as underlying premium reports are received from cedents and insureds. When reports are received, the premium, exposure and corresponding loss estimates are revised accordingly. Changes in loss estimates due to premium or exposure fluctuations are incurred in the accident year in which the premium is earned.

The following table summarizes calendar year net loss ratios by separating losses between the current accident year and all prior accident years. Net loss ratios for the period were as follows:

	Year Ended December 31		
	2021	2020	*Change*
Calendar year net loss ratio	**61.6%**	65.0%	*(3.4 pts)*
Less impact of prior accident years on the net loss ratio	**9.7%**	0.8%	*8.9 pts*
Current accident year net loss ratio	**51.9%**	64.2%	*(12.3 pts)*

For the year ended December 31, 2021, the current accident year net loss ratio decreased 12.3 percentage points as compared to 2020. The decrease in the current accident year net loss ratio was primarily driven by higher reinsurance recoveries as a proportion of gross losses as compared to the prior year period, partially offset by certain catastrophe related losses.

We recognized $4.7 million and $0.6 million of unfavorable prior year development for the years ended December 31, 2021 and 2020, respectively. The unfavorable prior year development for the year ended December 31, 2021 was driven by higher than expected losses and development on certain large claims, primarily catastrophe related losses.

We have exposures to potential COVID-19 claims through our participation in Syndicates 1729 and 6131. During 2021, we recognized losses related to COVID-19 of approximately $1.6 million, net of reinsurance, as compared to $3.6 million during 2020, primarily in Syndicate 6131's contingency and Syndicate 1729's casualty books of business. See previous discussion in Part I, Item 1 under the heading "Insurance Regulatory Matters- COVID-19."

Underwriting, Policy Acquisition and Operating Expenses

Underwriting, policy acquisition and operating expenses decreased by $12.2 million for the year ended December 31, 2021 as compared to 2020 and reflected our decreased participation in Syndicate 1729 and Syndicate 6131.

For the year ended December 31, 2021, the underwriting expense ratio decreased by 1.9 percentage points as compared to 2020 which primarily reflected the impact of our reduced participation in Syndicate 1729 and Syndicate 6131. Operating expenses incurred during 2021 primarily were related to the 2021 underwriting year for which our participation is 5% and 50% in Syndicate 1729 and Syndicate 6131, respectively, whereas the net premiums earned during the same period also includes premium from other open underwriting years in which we participate at a higher degree.

Investments

Syndicate 1729's fixed maturity portfolio includes certain debt securities classified as trading securities. Investment results associated with these fixed maturity trading securities are reported on the same quarter lag. The decrease in net investment income in 2021 as compared to 2020 was primarily attributable to lower average investment balances and lower yields, primarily from investment-grade corporate debt securities. The lower average investment balance in 2021 was driven by the return of approximately $32.3 million of cash and cash equivalents from our FAL balances during the third quarter of 2020 given the reduction in our participation in the results of Syndicate 1729 to 29% from 61% for the 2020 underwriting year. In addition, we received a return of approximately $24.5 million and $8.0 million of cash from our FAL balances during the second and fourth quarters of 2021, respectively, given the additional reduction in our participation in the results of Syndicate 1729 and Syndicate 6131 for the 2021 underwriting year, as previously discussed. Further, during the fourth quarter of 2021, we received a return of approximately $26.6 million of cash from our FAL balances given the decision to incorporate Syndicate 6131's business into Syndicate 1729 for the 2022 underwriting year, as previously discussed. Our lower FAL balances will continue to impact the segment's net investment income in future periods.

Taxes

The results of this segment are subject to U.K. income tax law.

Segment Results - Corporate

Our Corporate segment includes our investment operations, including the investment operations of NORCAL since the date of acquisition and excludes those reported in our Segregated Portfolio Cell Reinsurance and Lloyd's Syndicates segments as discussed in Note 18 of the Notes to Consolidated Financial Statements. In addition, this segment includes corporate expenses, interest expense, U.S. income taxes and non-premium revenues generated outside of our insurance entities. Segment results for the year ended December 31, 2021 exclude transaction-related costs and the associated income tax benefit related to the NORCAL acquisition as we do not consider these items in assessing the financial performance of the segment (Note 2 of the Notes to Consolidated Financial Statements provides additional information regarding this acquisition). Segment results for our Corporate segment were net earnings of $91.2 million and $71.4 million for the years ended December 31, 2021 and 2020, respectively, and included the following:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
Net investment income	**$ 67,747**	$ 66,786	*$ 961*	*1.4%*
Equity in earnings (loss) of unconsolidated subsidiaries	**$ 48,974**	$ (11,921)	*$ 60,895*	*510.8%*
Net investment gains (losses)	**$ 19,981**	$ 11,605	*$ 8,376*	*72.2%*
Other income	**$ 5,531**	$ 2,531	*$ 3,000*	*118.5%*
Operating expense	**$ 26,641**	$ 23,429	*$ 3,212*	*13.7%*
Interest expense	**$ 19,719**	$ 15,503	*$ 4,216*	*27.2%*
Income tax expense (benefit)	**$ 4,651**	$ (41,300)	*$ 45,951*	*111.3%*

Net Investment Income, Equity in Earnings (Loss) of Unconsolidated Subsidiaries, Net Investment Gains (Losses)

Net Investment Income

Net investment income is primarily derived from the income earned by our fixed maturity securities and also includes dividend income from equity securities, income from our short-term and cash equivalent investments, earnings from other investments and increases in the cash surrender value of BOLI contracts, net of investment fees and expenses. Net investment income in 2021 also includes income earned, net of investment fees and expenses, since the date of acquisition from investments acquired from NORCAL .

Net investment income by investment category was as follows:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
Fixed maturities	**$ 71,451**	$ 64,338	*$ 7,113*	*11.1%*
Equities	**2,539**	4,369	*(1,830)*	*(41.9%)*
Short-term investments, including Other	**1,860**	2,209	*(349)*	*(15.8%)*
BOLI	**2,699**	2,023	*676*	*33.4%*
Investment fees and expenses	**(10,802)**	(6,153)	*(4,649)*	*75.6%*
Net investment income	**$ 67,747**	$ 66,786	*$ 961*	*1.4%*

Fixed Maturities

Income from our fixed maturities increased in 2021 as compared to 2020 driven by higher average investment balances primarily attributable to the addition of fixed maturity securities valued at $1.1 billion to our portfolio on May 5, 2021 as a result of the NORCAL acquisition (see Note 2 of the Notes to Consolidated Financial Statements for additional information). The increase in income from our fixed maturities in 2021 was partially offset by lower yields from our corporate debt securities and the impact of capital planning in anticipation of closing the NORCAL acquisition. As a result of the NORCAL acquisition, average investment balances were approximately 51% higher for 2021 as compared to 2020; excluding the impact of the acquisition, average investment balances were approximately 10% higher.

Average yields for our fixed maturity portfolio were as follows:

	Year Ended December 31	
	2021	2020
Average income yield	**2.3%**	3.1%
Average tax equivalent income yield	**2.3%**	3.1%

Yields on fixed maturity securities decreased in 2021 as compared to 2020. The decrease in 2021 was primarily driven by the application of GAAP purchase accounting rules whereby all NORCAL fixed maturity securities acquired were valued at fair value on the date of acquisition resulting in lower average yields on those securities as compared to the average yields on our other securities.

Equities

Income from our equity portfolio decreased in 2021 as compared to 2020 due to a decrease in our allocation to this asset category during the first half of 2021 and, to a lesser extent, the reallocation in our mix of securities within this asset category.

Short-term Investments and Other Investments

Short-term investments, which have a maturity at purchase of one year or less are carried at fair value, which approximates their cost basis, and are primarily composed of investments in U.S. treasury obligations, commercial paper and money market funds. Income from our short-term and other investments decreased during 2021 primarily attributable to lower yields given the actions taken by the Federal Reserve to aggressively reduce interest rates in response to COVID-19, partially offset by income contributed by investments acquired from NORCAL.

BOLI

We hold BOLI policies that are carried at the current cash surrender value of the policies, which includes the BOLI policies acquired from NORCAL. All insured individuals were members of ProAssurance or NORCAL management at the time the policies were acquired. Income from our BOLI policies increased in 2021 as compared to 2020 primarily attributable to the addition of BOLI policies valued at $10 million to our portfolio on May 5, 2021 as a result of the NORCAL acquisition.

Investment Fees and Expenses

Investment fees and expenses increased in 2021 as compared to 2020 driven by additional costs associated with our investments acquired from NORCAL since the date of acquisition.

Equity in Earnings (Loss) of Unconsolidated Subsidiaries

Equity in earnings (loss) of unconsolidated subsidiaries was comprised as follows:

	Year Ended December 31			
($ in thousands)	**2021**	2020	*Change*	
All other investments, primarily investment fund LPs/LLCs	**$ 64,031**	$ 7,855	*$ 56,176*	*715.2%*
Tax credit partnerships	**(15,057)**	(19,776)	*4,719*	*(23.9%)*
Equity in earnings (loss) of unconsolidated subsidiaries	**$ 48,974**	$ (11,921)	*$ 60,895*	*510.8%*

We hold interests in certain LPs/LLCs that generate earnings from trading portfolios, secured debt, debt securities, multi-strategy funds and private equity investments. The performance of the LPs/LLCs is affected by the volatility of equity and credit markets. For our investments in LPs/LLCs, we record our allocable portion of the partnership operating income or loss as the results of the LPs/LLCs become available, typically following the end of a reporting period. The increase in our investment results from our portfolio of investments in LPs/LLCs for 2021 as compared to 2020 was due to higher earnings from several LPs/LLCs and the prior year effect of the volatility in global financial markets related to COVID-19. Our investment results from our portfolio of investments in LPs/LLCs in 2021 included additional earnings of approximately $1.4 million from acquired interests in four LPs as a result of the NORCAL acquisition; given the results of our investments in LPs/LLCs are often reported to us on a one quarter lag, the earnings from these investments were not reflected in our results until the third quarter of 2021.

Our tax credit partnership investments are designed to generate returns in the form of tax credits and tax-deductible project operating losses and are comprised of qualified affordable housing project tax credit partnerships and a historic tax credit partnership. We account for our tax credit partnership investments under the equity method and record our allocable portion of the operating losses of the underlying properties based on estimates provided by the partnerships. For our qualified affordable housing project tax credit partnerships, we adjust our estimates of our allocable portion of operating losses

periodically as actual operating results of the underlying properties become available. The primary benefits of tax credits and tax-deductible operating losses from the historic tax credit partnerships are earned in a short period with potential for additional cash flows extending over several years. The results from our tax credit partnership investments for the year ended December 31, 2021 reflected lower partnership operating losses as compared to 2020. In addition, based on results received, we increased our estimate of operating losses by $1.9 million and $4.3 million for the years ended December 31, 2021 and 2020, respectively.

The tax benefits received from our tax credit partnerships, which are not reflected in our investment results, reduced our tax expense in 2021 and 2020 as follows:

	Year Ended December 31	
(In millions)	**2021**	2020
Tax credits recognized during the period	**$ 13.2**	$ 17.9
Tax benefit of tax credit partnership operating losses	**$ 3.2**	$ 4.2

The tax credits generated from our tax credit partnership investments of $13.2 million for 2021 were deferred for use in future periods due to the utilization of NOLs available to us following our acquisition of NORCAL. For the year ended December 31, 2020, due to our consolidated pre-tax loss, the tax credits generated from our tax credit partnership investments of $17.9 million were deferred to be utilized in future periods. For the year ended December 31, 2021, we utilized approximately $2.0 million of tax credits carried forward from 2019 and, as of December 31, 2021, we had approximately $46.7 million of available tax credit carryforwards generated from our investments in tax credit partnerships which we expect to utilize in future years. See further discussion in Note 7 of the Notes to Consolidated Financial Statements.

Tax credits provided by the underlying projects of our historic tax credit partnership are typically available in the tax year in which the project is put into active service, whereas the tax credits provided by qualified affordable housing project tax credit partnerships are provided over approximately a ten year period.

Non-GAAP Financial Measure – Tax Equivalent Investment Result

We believe that to fully understand our investment returns it is important to consider the current tax benefits associated with certain investments as the tax benefit received represents a portion of the return provided by our tax-exempt bonds, BOLI, common and preferred stocks, and tax credit partnership investments (collectively, our tax-preferred investments). We impute a pro forma tax-equivalent result by estimating the amount of fully-taxable income needed to achieve the same after-tax result as is currently provided by our tax-preferred investments. We believe this better reflects the economics behind our decision to invest in certain asset classes that are either taxed at lower rates and/or result in reductions to our current federal income tax expense. Our pro forma tax-equivalent investment result is shown in the table that follows as well as a reconciliation of our GAAP net investment result to our tax equivalent result.

	Year Ended December 31	
(In thousands)	**2021**	2020
GAAP net investment result:		
Net investment income	**$ 67,747**	$ 66,786
Equity in earnings (loss) of unconsolidated subsidiaries	**48,974**	(11,921)
GAAP net investment result	**$ 116,721**	$ 54,865
Pro forma tax-equivalent investment result	**$ 120,450**	$ 56,088
Reconciliation of pro forma and GAAP tax-equivalent investment result:		
GAAP net investment result	**$ 116,721**	$ 54,865
Taxable equivalent adjustments, calculated using the 21% federal statutory tax rate		
State and municipal bonds	**522**	595
BOLI	**717**	538
Dividends received	**12**	90
Tax credit partnerships*	**2,478**	—
Pro forma tax-equivalent investment result	**$ 120,450**	$ 56,088

* Due to the realized NOL for the years ended December 31, 2021 and December 31, 2020, the tax credits recognized from our tax credit partnership investments, during each of those respective years, were deferred to be utilized in future periods, however during the year ended December 31, 2021, we utilized a portion of the tax credits carried forward from the 2019 tax year.

Net Investment Gains (Losses)

The following table provides detailed information regarding our net investment gains (losses).

(In thousands)	Year Ended December 31 2021	2020
Total impairment losses		
Corporate debt	**$ —**	$ (1,745)
Portion of impairment losses recognized in other comprehensive income before taxes:		
Corporate debt	**—**	237
Net impairment losses recognized in earnings	**—**	(1,508)
Gross realized gains, available-for-sale fixed maturities	**13,047**	13,436
Gross realized (losses), available-for-sale fixed maturities	**(1,133)**	(2,499)
Net realized gains (losses), equity investments	**5,394**	12,965
Net realized gains (losses), other investments	**8,660**	3,883
Change in unrealized holding gains (losses), equity investments	**(4,697)**	(18,926)
Change in unrealized holding gains (losses), convertible securities, carried at fair value as a part of other investments	**(1,701)**	3,850
Other	**411**	404
Net investment gains (losses)	**$ 19,981**	$ 11,605

We did not recognize any credit-related impairment losses in earnings or non-credit impairment losses in OCI for the year ended December 31, 2021. For the year ended December 31, 2020, we recognized $1.5 million of credit-related impairment losses in earnings and a nominal amount of non-credit impairment losses in OCI. The credit-related impairment losses recognized in 2020 primarily related to corporate bonds in the energy and consumer sectors. Additionally, 2020 included credit-related impairment losses related to four corporate bonds in various sectors, which were sold during 2020. The non-credit impairment losses recognized during 2020 related to three corporate bonds in the energy and consumer sectors.

We recognized $20.0 million of net investment gains for the year ended December 31, 2021 which include approximately $1.9 million of net investment gains related to investments acquired from NORCAL. Net investment gains in 2021 were driven by realized gains on the sale of certain available-for-sale fixed maturities and other investments, partially offset by unrealized holding losses resulting from decreases in the fair value on our equity portfolio. We recognized $11.6 million of net investment gains for the year ended December 31, 2020, driven primarily by realized gains on the sale of certain available-for-sale fixed maturities and equity investments, partially offset by unrealized holding losses resulting from decreases in the fair value on our equity portfolio due to the volatility in the global financial markets related to COVID-19.

Operating Expenses

Corporate segment operating expenses were comprised as follows:

($ in thousands)	Year Ended December 31			
	2021	2020	*Change*	
Operating expenses	**$ 36,007**	$ 37,562	*$ (1,555)*	*(4.1%)*
Management fee offset	**(9,366)**	(14,133)	*4,767*	*(33.7%)*
Total	**$ 26,641**	$ 23,429	*$ 3,212*	*13.7%*

Operating expenses decreased during the year ended December 31, 2021 as compared to 2020 primarily due to a decrease in professional fees and, to a lesser extent, the prior year effect of $0.5 million of one-time expenses incurred in 2020, partially offset by an increase in compensation-related costs. The decrease in professional fees in 2021 was driven by a decrease in corporate legal expenses. One-time expenses in 2020 were primarily comprised of employee severance and early retirement benefits granted to certain employees. The increase in compensation-related costs during 2021 was driven by higher amounts accrued for performance-related incentive plans due to our improved performance metrics and, to a lesser extent, an increase in share-based compensation expenses attributable to the effect of an increase in the value of projected awards in 2021 based upon the improvement of the associated performance metrics.

Operating subsidiaries within our Specialty P&C segment (excluding the acquired operating subsidiaries of NORCAL) and our Workers' Compensation Insurance segment are charged a management fee by the Corporate segment for services provided to these subsidiaries. The management fee is based on the extent to which services are provided to the subsidiary and the amount of premium written by the subsidiary. Under the arrangement, the expenses associated with such services are reported as expenses of the Corporate segment, and the management fees charged are reported as an offset to Corporate operating expenses. Fluctuations in the amount of premium written by each subsidiary can result in corresponding variations in the management fee charged to each subsidiary during a particular period. Due to organizational structure enhancements in our Specialty P&C segment during 2020, the extent to which services are provided by the Corporate segment to the operating subsidiaries within that segment decreased effective January 1, 2021. Accordingly, we reduced the fee charged to the operating subsidiaries within the Specialty P&C segment during 2021. There were no changes to the extent to which services are provided by the Corporate segment to the operating subsidiaries within our Workers' Compensation Insurance segment in 2021.

Interest Expense

Consolidated interest expense for the years ended December 31, 2021 and 2020 was comprised as follows:

($ in thousands)	Year Ended December 31			
	2021	2020	*Change*	
Senior Notes due 2023	**$ 13,429**	$ 13,429	*$ —*	*—%*
Contribution Certificates (including accretion)*	**5,046**	—	*5,046*	*nm*
Revolving Credit Agreement (including fees and amortization)	**1,120**	831	*289*	*34.8%*
Mortgage Loans (including amortization)	**444**	812	*(368)*	*(45.3%)*
(Gain)/loss on interest rate cap	**(320)**	431	*(751)*	*(174.2%)*
Interest expense	**$ 19,719**	$ 15,503	*$ 4,216*	*27.2%*

*Includes accretion of approximately $1.2 million for the year ended December 31, 2021 which is recorded as an increase to interest expense as a result of the difference between the recorded acquisition date fair value and the principal balance of the Contribution Certificates associated with our acquisition of NORCAL.

Consolidated interest expense increased during 2021 as compared to 2020 driven by the addition of interest expense on the Contribution Certificates associated with our acquisition of NORCAL (See Note 2 and Note 13 of the Notes to Consolidated Financial Statements) and, to a lesser extent, an increase in the borrowings on our Revolving Credit Agreement. During the third quarter of 2021, we repaid the balance outstanding on the Revolving Credit Agreement of $15.0 million and there were no outstanding borrowings on this agreement during 2020; interest expense on the Revolving Credit Agreement in both 2021 and 2020 primarily reflected unused commitment fees. The increase in consolidated interest expense for 2021 was partially offset by lower interest expense on our Mortgage Loans. In 2021, we repaid the balance outstanding on our Mortgage Loans of $35.3 million; interest expense on the Mortgage Loans during the current period included the write-off of the related unamortized debt issuance costs which were nominal in amount. In addition, consolidated interest expense during 2021 was impacted by the change in the fair value of our interest rate cap.

See further discussion of our interest rate cap agreement in Note 3 and further discussion on our outstanding debt in Note 13 of the Notes to Consolidated Financial Statements.

Taxes

Tax expense allocated to our Corporate segment includes U.S. tax only, which would include U.S. tax expense incurred from our corporate membership in Lloyd's of London. The U.K. tax expense incurred by the U.K. based subsidiaries of our Lloyd's Syndicates segment is allocated to that segment. The SPCs at Inova Re, one of our Cayman Islands reinsurance subsidiaries, have each made a 953(d) election under the U.S. Internal Revenue Code and are subject to U.S. federal income tax; therefore, tax expense allocated to our Corporate segment also includes tax expense incurred from any SPC at Inova Re in which we have a participation interest of 80% or greater as those SPCs are required to be included in our consolidated tax return. Consolidated tax expense (benefit) reflects the tax expense (benefit) of both segments and the tax impact of items excluded from segment reporting, as shown in the table below:

	Year Ended December 31	
(In thousands)	**2021**	2020
Corporate segment income tax expense (benefit)	**$ 4,651**	$ (41,300)
Lloyd's Syndicates segment income tax expense (benefit)	**—**	(29)
Income tax expense (benefit) - transaction-related costs*	**(2,168)**	—
Consolidated income tax expense (benefit)	**$ 2,483**	$ (41,329)

*Represents the income tax benefit associated with the transaction-related costs related to our acquisition of NORCAL that are not included in a segment as we do not consider these costs in assessing the financial performance of any of our operating or reportable segments. See Note 18 of the Notes to Consolidated Financial Statements for a reconciliation of our segment results to our consolidated results.

Listed below are the primary factors affecting our consolidated effective tax rate for the years ended December 31, 2021 and 2020. The comparability of each factor's impact on our effective tax rate is affected by the consolidated pre-tax income recognized during 2021 as compared to the consolidated pre-tax loss recognized during 2020. Factors that have the same directional impact on income tax expense (benefit) in each period have an opposite impact on our effective tax rate due to the effective tax rate being calculated based upon a pre-tax income during the year ended December 31, 2021 versus the pre-tax loss during the year ended December 31, 2020. These factors include the following:

	Year Ended December 31			
	2021		2020	
($ in thousands)	**Income tax (benefit) expense**	**Rate Impact**	Income tax (benefit) expense	Rate Impact
Computed "expected" tax expense (benefit) at statutory rate	**$ 30,787**	**21.0%**	$ (45,582)	21.0%
Tax-exempt income [(1)]	**(1,298)**	**(0.9%)**	(976)	0.4%
Tax credits	**(13,160)**	**(9.0%)**	(17,876)	8.2%
Non-U.S. operating results	**(1,322)**	**(0.9%)**	(1,307)	0.6%
Tax deficiency (excess tax benefit) on share-based compensation	**286**	**0.2%**	457	(0.2%)
Tax rate differential on loss carryback	**—**	**—%**	(7,758)	3.6%
Goodwill impairment [(2)]	**—**	**—%**	31,413	(14.5%)
Non-taxable gain on bargain purchase [(3)]	**(15,626)**	**(10.7%)**	—	—%
Provision-to-return and other differences	**3,574**	**2.4%**	1,217	(0.5%)
Change in uncertain tax positions	**(1,909)**	**(1.3%)**	(1,674)	0.8%
State income taxes	**460**	**0.3%**	(561)	0.3%
Other	**691**	**0.6%**	1,318	(0.7%)
Total income tax expense (benefit)	**$ 2,483**	**1.7%**	$ (41,329)	19.0%

(1) Includes tax-exempt interest, dividends received deduction and change in cash surrender value of BOLI.

(2) Represents the tax impact of the impairment of non-deductible goodwill in relation to the Specialty P&C reporting unit during the third quarter of 2020 (see further discussion on the impairment charge in the Critical Accounting Estimates section under the heading "Goodwill / Intangibles" and in Note 8 of the Notes to Consolidated Financial Statements).

(3) Represents the tax impact of the non-taxable gain on bargain purchase as a result of our acquisition of NORCAL on May 5, 2021. See further discussion on the gain on bargain purchase in Note 2 of the Notes to Consolidated Financial Statements.

Our effective tax rates for 2021 and 2020, as shown in the table above, differed from the statutory federal income tax rate of 21% in each respective year. The most significant item impacting our effective tax rate for 2021 was the gain on bargain purchase of $74.4 million related to the NORCAL acquisition, all of which was non-taxable. See further discussion on the gain on bargain purchase in Note 2 of the Notes to Consolidated Financial Statements. Additionally, our effective tax rates for both 2021 and 2020 include the benefit recognized from the tax credits transferred to us from our tax credit partnership investments. Tax credits recognized for the year ended December 31, 2021 were $13.2 million as compared to $17.9 million in 2020. While projected tax credits for 2021 are less than 2020, they continue to have a significant impact on the effective tax rate for 2021. For 2020, our effective tax rate was also affected by the additional statutory tax rate differential of 14% on the carryback of our 2020 and 2019 NOLs to the 2015 and 2014 tax years, respectively, as a result of changes made by the CARES Act to the NOL provisions of the tax law. Furthermore, our pre-tax loss in 2020 included a $161.1 million goodwill impairment recognized in relation to the Specialty P&C reporting unit during the third quarter of 2020. Of the $161.1 million goodwill impairment, $149.6 million was non-deductible for which no tax benefit was recognized, while the remaining $11.5 million was deductible for which a 21% tax benefit was recognized on the related income tax amortization. Consequently, the total impact of the goodwill impairment on the effective tax rate in 2020 was approximately 14.5%. See further discussion on this goodwill impairment in Notes 1 and 8 of the Notes to Consolidated Financial Statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

We believe that we are principally exposed to two types of market risk: interest rate risk and credit risk. We have limited exposure to foreign currency risk as we issue few insurance contracts denominated in currencies other than the U.S. dollar and we have few monetary assets or obligations denominated in foreign currencies.

Interest Rate Risk

Investments

Our fixed maturities portfolio is exposed to interest rate risk. Fluctuations in interest rates have a direct impact on the market valuation of these securities. As interest rates rise, market values of fixed income portfolios fall and vice versa. Certain of the securities are held in an unrealized loss position; we do not intend to sell and believe we will not be required to sell any debt security held in an unrealized loss position before its anticipated recovery.

The following tables summarize estimated changes in the fair value of our available-for-sale fixed maturity securities for specific hypothetical changes in interest rates by asset class at December 31, 2021 and December 31, 2020. There are principally two factors that determine interest rates on a given security: changes in the level of yield curves and credit spreads. As different asset classes can be affected in different ways by movements in those two factors, we have separated our portfolio by asset class in the following tables.

	Interest Rate Shift in Basis Points				
	December 31, 2021				
($ in millions)	(200)	(100)	Current	100	200
Fair Value:					
Fixed maturities, available-for-sale:					
U.S. Treasury obligations	**$ 260**	**$ 249**	**$ 239**	**$ 229**	**$ 219**
U.S. Government-sponsored enterprise obligations	**21**	**21**	**20**	**20**	**19**
State and municipal bonds	**564**	**541**	**519**	**498**	**478**
Corporate debt	**2,063**	**1,979**	**1,899**	**1,821**	**1,748**
Asset-backed securities	**1,211**	**1,186**	**1,157**	**1,123**	**1,087**
Total fixed maturities, available-for-sale	**$ 4,119**	**$ 3,976**	**$ 3,834**	**$ 3,691**	**$ 3,551**
Duration:					
Fixed maturities, available-for-sale:					
U.S. Treasury obligations	***4.42***	***4.33***	***4.25***	***4.18***	***4.10***
U.S. Government-sponsored enterprise obligations	***1.58***	***1.63***	***2.64***	***2.84***	***2.85***
State and municipal bonds	***4.22***	***4.20***	***4.26***	***4.36***	***4.49***
Corporate debt	***4.17***	***4.13***	***4.13***	***4.14***	***4.11***
Asset-backed securities	***2.33***	***2.25***	***2.67***	***3.13***	***3.39***
Total fixed maturities, available-for-sale	***3.64***	***3.58***	***3.71***	***3.86***	***3.93***

($ in millions)	Interest Rate Shift in Basis Points				
	December 31, 2020				
	(200)	(100)	Current	100	200
Fair Value:					
Fixed maturities, available-for-sale:					
U.S. Treasury obligations	$ 113	$ 110	$ 107	$ 104	$ 102
U.S. Government-sponsored enterprise obligations	13	13	12	12	12
State and municipal bonds	361	347	333	320	308
Corporate debt	1,427	1,377	1,329	1,284	1,241
Asset-backed securities	704	690	677	659	639
Total fixed maturities, available-for-sale	$ 2,618	$ 2,537	$ 2,458	$ 2,379	$ 2,302
Duration:					
Fixed maturities, available-for-sale:					
U.S. Treasury obligations	*2.65*	*2.60*	*2.56*	*2.51*	*2.46*
U.S. Government-sponsored enterprise obligations	*1.80*	*1.77*	*2.11*	*2.99*	*3.14*
State and municipal bonds	*4.07*	*4.01*	*3.96*	*3.91*	*3.88*
Corporate debt	*3.62*	*3.52*	*3.44*	*3.40*	*3.35*
Asset-backed securities	*2.29*	*2.23*	*2.34*	*2.86*	*3.21*
Total fixed maturities, available-for-sale	*3.27*	*3.19*	*3.16*	*3.28*	*3.34*

Computations of prospective effects of hypothetical interest rate changes are based on numerous assumptions, including the maintenance of the existing level and composition of fixed income security assets, and should not be relied on as indicative of future results.

Certain shortcomings are inherent in the method of analysis presented in the computation of the fair value of fixed rate instruments. Actual values may differ from the projections presented should market conditions vary from assumptions used in the calculation of the fair value of individual securities, including non-parallel shifts in the term structure of interest rates and changing individual issuer credit spreads.

At December 31, 2021, our fixed maturities portfolio includes fixed maturities classified as trading securities which do not have a significant amount of exposure to market interest rates or credit spreads.

Our cash and short-term investments at December 31, 2021 were carried at fair value which approximates their cost basis due to their short-term nature. Our cash and short-term investments lack significant interest rate sensitivity due to their short duration.

Debt

Our Revolving Credit Agreement is exposed to interest rate risk as it is LIBOR based and a 1% change in LIBOR will impact annual interest expense only to the extent that there is an outstanding balance. For every $100 million drawn on our Revolving Credit Agreement, a 1% change in interest rates will change our annual interest expense by $1 million. Any outstanding balances on the Revolving Credit Agreement can be repaid on each maturity date, which has typically ranged from one to three months. As of December 31, 2021, no borrowings were outstanding under our Revolving Credit Agreement.

Defined Benefit Pension Plan

We are exposed to certain economic risks related to the costs of our defined benefit pension plan, including changes in discount rates for high quality corporate bonds and changes in the expected return on plan assets. See further discussion in Item 7, Management's Discussion and Analysis, in the Critical Accounting Estimates section under the heading "Pension".

Credit Risk

We have exposure to credit risk primarily as a holder of fixed income securities. We control this exposure by emphasizing investment grade credit quality in the fixed income securities we purchase.

As of December 31, 2021, 92% of our fixed maturity securities were rated investment grade as determined by NRSROs, such as Fitch, Moody’s and Standard & Poor’s. We believe that this concentration in investment grade securities reduces our exposure to credit risk on our fixed income investments to an acceptable level. However, investment grade securities, in spite of

their rating, can rapidly deteriorate and result in significant losses. Ratings published by the NRSROs are one of the tools used to evaluate the creditworthiness of our securities. The ratings reflect the subjective opinion of the rating agencies as to the creditworthiness of the securities; therefore, we may be subject to additional credit exposure should the ratings prove to be unreliable.

We also have exposure to credit risk related to our premiums receivable and receivables from reinsurers; however, to-date we have not experienced any significant amount of credit losses. At December 31, 2021, our premiums receivable was approximately $241 million, including receivables acquired in the acquisition of NORCAL, and net of an allowance for expected credit losses of approximately $7 million. See Note 1 of the Notes to Consolidated Financial Statements for further information on our allowance for expected credit losses related to our premiums receivable. Our receivables from reinsurers (with regard to both paid and unpaid losses) approximated $466 million at December 31, 2021, including receivables acquired in the acquisition of NORCAL, and $399 million at December 31, 2020. We monitor the credit risk associated with our reinsurers using publicly available financial and rating agency data. We have not historically experienced material credit losses due to the financial condition of a reinsurer, and as of December 31, 2021 our expected credit losses associated with our receivables from reinsurers were nominal in amount.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

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ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

Not Applicable.

ITEM 9A. CONTROLS AND PROCEDURES.

Disclosure Controls

Under the supervision and with the participation of management, including the principal executive and principal financial officers, the Company has evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the fiscal year ended December 31, 2021. Based on that evaluation, the principal executive and principal financial officers have concluded that these controls and procedures are effective.

Disclosure controls and procedures are defined in Exchange Act Rule 13a-15(e) and include the Company's controls and other procedures that are designed to ensure that information, required to be disclosed by the Company in the reports that it files or submits under the Exchange Act, is accumulated and communicated to management, including the principal executive and principal financial officers, as appropriate, 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 such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including our principal executive and principal financial officers, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2021 based on the framework in Internal Control–Integrated Framework issued by the COSO (2013 Framework). Based on that evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2021 and that there was no change in the Company's internal controls during the fiscal year then ended that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

The Company completed its acquisition of NORCAL on May 5, 2021 and has not yet included NORCAL in management's assessment of the effectiveness of our internal controls over financial reporting. We are currently integrating NORCAL into our operations, compliance programs and internal control processes. Accordingly, pursuant to the SEC's general guidance that an assessment of a recently acquired business may be omitted from the scope of an assessment for one year following the acquisition, the scope of management's assessment of the effectiveness of the Company's disclosure controls and procedures does not include NORCAL. NORCAL constituted approximately 31.1% of ProAssurance's total assets (inclusive of acquired intangible assets) as of December 31, 2021 and approximately 20.5% of ProAssurance's total revenue for the year ended December 31, 2021. NORCAL will be included in management's assessment of the effectiveness of the Company's internal controls over financial reporting as of December 31, 2022.

Ernst & Young LLP, an independent registered public accounting firm, has audited the effectiveness of our internal controls over financial reporting as of December 31, 2021 as stated in their report which is included elsewhere herein.

ITEM 9B. OTHER INFORMATION

None.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of ProAssurance Corporation

Opinion on Internal Control Over Financial Reporting

We have audited ProAssurance Corporation and subsidiaries' internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework) (the COSO criteria). In our opinion, ProAssurance Corporation and subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets as of December 31, 2021 and 2020, the related consolidated statements of changes in capital, income and comprehensive income and cash flows for each of the three years in the period ended December 31, 2021, and the related notes and financial statement schedules listed in the Index at Item 15(c) (collectively referred to as the "financial statements") of the Company and our report dated February 22, 2022, expressed an unqualified opinion thereon.

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 included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and 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.

/s/ Ernst & Young LLP

Birmingham, Alabama
February 22, 2022

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE OF THE REGISTRANT.

The information required by this Item regarding executive officers is included in Part I of the Form 10-K in accordance with Instruction 3 of the Instructions to Paragraph (b) of Item 401 of Regulation S-K.

The information required by this Item regarding directors is incorporated by reference pursuant to General Instruction G (3) of Form 10-K from ProAssurance's definitive proxy statement for the 2022 Annual Meeting of its Stockholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A on or about April 8, 2022.

ITEM 11. EXECUTIVE COMPENSATION.

The information required by this Item is incorporated by reference pursuant to General Instruction G (3) of Form 10-K from ProAssurance's definitive proxy statement for the 2022 Annual Meeting of its Stockholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A on or about April 8, 2022.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

The information required by this Item is incorporated by reference pursuant to General Instruction G (3) of Form 10-K from ProAssurance's definitive proxy statement for the 2022 Annual Meeting of its Stockholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A on or about April 8, 2022.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

The information required by this Item is incorporated by reference pursuant to General Instruction G (3) of Form 10-K from ProAssurance's definitive proxy statement for the 2022 Annual Meeting of its Stockholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A on or about April 8, 2022.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

The information required by this Item is incorporated by reference pursuant to General Instruction G (3) of Form 10-K from ProAssurance's definitive proxy statement for the 2022 Annual Meeting of its Stockholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A on or about April 8, 2022.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) Financial Statements. The following consolidated financial statements of ProAssurance Corporation and subsidiaries are included herein in accordance with Item 8 of Part II of this report.

Report of Registered Public Accounting Firm

Consolidated Balance Sheets – December 31, 2021 and 2020

Consolidated Statements of Changes in Capital – years ended December 31, 2021, 2020 and 2019

Consolidated Statements of Income and Comprehensive Income – years ended December 31, 2021, 2020 and 2019

Consolidated Statements of Cash Flows – years ended December 31, 2021, 2020 and 2019

Notes to Consolidated Financial Statements

(b) The exhibits required to be filed by Item 15(b) are listed herein in the Exhibit Index.

(c) Financial Statement Schedules. The following consolidated financial statement schedules of ProAssurance Corporation and subsidiaries are included herein in accordance with Rule 14a-3(b):

Schedule I – Summary of Investments – Other than Investments in Related Parties

Schedule II – Condensed Financial Information of ProAssurance Corporation (Registrant Only)

Schedule III – Supplementary Insurance Information

Schedule IV – Reinsurance

All other schedules to the consolidated financial statements required by Article 7 of Regulation S-X are not required under the related instructions or are inapplicable and therefore have been omitted.

SIGNATURES

Pursuant to the requirements of Section 13 of 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, on this the 22th day of February 2021.

PROASSURANCE CORPORATION

By: /S/ EDWARD L. RAND, JR.
Edward L. Rand, Jr.

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

Name	Title	Date
/S/ EDWARD L. RAND, JR. **Edward L. Rand, Jr.**	President and Chief Executive Officer (Principal Executive Officer)	February 22, 2022
/S/ DANA S. HENDRICKS **Dana S. Hendricks**	Chief Financial Officer (Principal Financial and Accounting Officer)	February 22, 2022
/S/ SAMUEL A. DI PIAZZA, JR. **Samuel A. Di Piazza, Jr.**	Director	February 22, 2022
/S/ M. JAMES GORRIE **M. James Gorrie**	Director	February 22, 2022
/S/ BRUCE D. ANGIOLILLO, J.D. **Bruce D. Angiolillo, J.D.**	Director	February 22, 2022
/S/ MAYE HEAD FREI **Maye Head Frei**	Director	February 22, 2022
/S/ KATISHA T. VANCE, M.D. **Katisha T. Vance, M.D.**	Director	February 22, 2022
/S/ FRANK A. SPINOSA, D.P.M. **Frank A. Spinosa, D.P.M.**	Director	February 22, 2022
/S/ ZIAD R. HAYDAR, M.D. **Ziad R. Haydar, M.D.**	Director	February 22, 2022
/S/ THOMAS A.S. WILSON, JR., M.D. **Thomas A. S. Wilson, Jr., M.D.**	Director	February 22, 2022
/S/ KEDRICK D. ADKINS, JR. **Kedrick D. Adkins, Jr.**	Director	February 22, 2022
/S/ FABIOLA COBARRUBIAS, M.D. **Fabiola Cobarrubias, M.D.**	Director	February 22, 2022
/S/ SCOTT C. SYPHAX **Scott C. Syphax**	Director	February 22, 2022

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of ProAssurance Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of ProAssurance Corporation and subsidiaries (the Company) as of December 31, 2021 and 2020, the related consolidated statements of changes in capital, income and comprehensive income, and cash flows for each of the three years in the period ended December 31, 2021, and the related notes and the financial statement schedules listed in the Index at Item 15(c) (collectively referred to as the "(consolidated) financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, 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, 2021, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework) and our report dated February 22, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's 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 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 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters 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 matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Valuation of reserve for losses and loss adjustment expenses

Description of the Matter

At December 31, 2021, the Company's gross reserve for losses and loss adjustment expenses was $3.6 billion. As explained in Notes 1 and 10 to the financial statements, the reserve for losses and loss adjustment expenses represents the estimated ultimate costs of all reported and unreported losses and loss adjustment expenses incurred and unpaid as of the reporting date. The reserve for losses and loss adjustment expenses is determined based on individual claims and payments thereon as well as actuarially determined estimates of ultimate losses. The Company updates the data underlying the estimation of the reserve for losses each reporting period and adjusts loss estimation assumptions that best reflect emerging data. Both internal and consulting actuaries perform an in-depth review of the reserve for losses on at least a semi-annual basis using the Company's loss and exposure data. The actuarial process is highly judgmental, both as to the selection of the various actuarial methodologies, and the significant assumptions within those methodologies, which are based on historical paid and incurred development trends, and in the interpretation of the output of the various methods used.

Auditing management's reserve for losses and loss adjustment expenses required the involvement of our actuarial specialists and was complex and highly judgmental due to sensitivity of the significant assumptions supporting the valuation of the reserve for losses and loss adjustment expenses.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested controls that address the risks of material misstatement related to the valuation of the reserve for losses and loss adjustment expenses. This included testing management's controls over the review and approval processes that management has in place for the methods and significant assumptions used in estimating the reserve.

To test the reserve for losses and loss adjustment expenses, we performed audit procedures that included, among others, evaluating, with the assistance of our actuarial specialists, the Company's selection of methods against those used in prior periods and used in the industry for similar types of insurance. We evaluated significant assumptions, based on historical paid and incurred loss development trends, relative to the Company's historical experience and to the extent required compared to industry experience. We involved our actuarial specialists to independently calculate a range of reasonable losses and loss adjustment expense reserve estimates and compared this range to the Company's recorded reserve for losses and loss adjustment expenses. We also performed a review of the development of prior years' reserve estimates.

Valuation of reserve for losses and loss adjustment expenses and deferred tax assets acquired in a business combination

Description of the Matter

As described in Notes 1, 2, 7, and 10 to the consolidated financial statements, the Company completed its acquisition of NORCAL Insurance Company on May 5, 2021 for total consideration transferred of $448.8 million. The transaction was accounted for as a business combination under ASC No. 805, Business Combinations, which resulted in a $74.4 million gain on bargain purchase. The Company's accounting for its acquisition of NORCAL included multiple elements including the estimation of the fair value of the reserve for losses and loss adjustment expenses which was based on an actuarial estimate of the expected future net cash flows and a reduction to those cash flows for the time value of money including a risk margin adjustment to reflect the net present value of profit that an investor would demand in return for the assumption of the development risk associated with the reserve. An additional element included the Company's assessment of the realizability of the consolidated deferred tax asset which required evaluating assumptions about the future operations of the Company based on information as of the measurement period regarding future taxable income.

Auditing management's reserve for losses and loss adjustment expenses required the involvement of our actuarial specialists and was complex and highly judgmental due to sensitivity of the significant assumptions supporting the valuation of the reserve for losses and loss adjustment expenses. Auditing management's assessment of the realizability of the consolidated deferred tax asset was complex and highly judgmental due to the reliance on projected financial information.

How We Addressed the Matter in Our Audit	We obtained an understanding, evaluated the design, and tested the operating effectiveness of the controls addressing the accounting for the business combination. This included testing management's controls over the estimated fair values of the reserve for losses and loss adjustment expenses and the assessment regarding the realizability of the consolidated deferred tax asset. To test the business combination, we performed audit procedures that included, among others, evaluating, with the assistance of our actuarial specialists, the Company's selection of methods and the significant assumptions utilized in developing the fair value of the reserve for losses and loss adjustment expenses compared to those used for similar transactions within the industry. We involved our actuarial specialists to independently calculate a range of reasonable fair value estimates for losses and loss adjustment expense reserve estimates and compared the independent range to the Company's recorded balances. We also evaluated management's assessment regarding the realizability of the consolidated deferred tax asset including an evaluation of the significant assumptions impacting future taxable income to the Company's historical performance as well as industry and economic trends. We also assessed the historical accuracy of management's projections and compared the projections of future taxable income with other forecasted financial information prepared by the Company.

/s/ Ernst & Young, LLP

We have served as the Company's auditor since 1977.
Birmingham, Alabama
February 22, 2022

ProAssurance Corporation and Subsidiaries
Consolidated Balance Sheets
(In thousands, except share data)

	December 31, 2021	December 31, 2020
Assets		
Investments		
Fixed maturities, available-for-sale, at fair value (amortized cost, $3,814,847 and $2,361,575, respectively; allowance for expected credit losses, none as of December 31, 2021 and $552 as of December 31, 2020)	**$ 3,833,722**	$ 2,457,531
Fixed maturities, trading, at fair value (cost, $43,914 and $47,907, respectively)	**43,670**	48,456
Equity investments, at fair value (cost, $211,356 and $113,709, respectively)	**214,807**	120,101
Short-term investments	**216,987**	337,813
Business owned life insurance	**81,767**	67,847
Investment in unconsolidated subsidiaries	**335,576**	310,529
Other investments (at fair value, $98,611 and $44,116, respectively, otherwise at cost or amortized cost)	**101,794**	47,068
Total Investments	**4,828,323**	3,389,345
Cash and cash equivalents	**143,602**	215,782
Premiums receivable, net	**241,095**	201,395
Receivable from reinsurers on paid losses and loss adjustment expenses	**14,599**	14,370
Receivable from reinsurers on unpaid losses and loss adjustment expenses	**451,741**	385,087
Prepaid reinsurance premiums	**24,571**	35,885
Deferred policy acquisition costs	**58,940**	47,196
Deferred tax asset, net	**117,613**	57,105
Real estate, net	**30,342**	30,529
Operating lease ROU assets	**19,595**	19,013
Intangible assets, net	**73,336**	65,720
Goodwill	**49,610**	49,610
Other assets	**138,110**	143,766
Total Assets	**$ 6,191,477**	$ 4,654,803
Liabilities and Shareholders' Equity		
Liabilities		
Policy liabilities and accruals		
Reserve for losses and loss adjustment expenses	**$ 3,579,940**	$ 2,417,179
Unearned premiums	**433,961**	361,547
Reinsurance premiums payable	**22,627**	39,998
Total Policy Liabilities	**4,036,528**	2,818,725
Operating lease liabilities	**20,844**	20,116
Other liabilities	**280,732**	182,039
Debt less unamortized debt issuance costs	**424,986**	284,713
Total Liabilities	**4,763,090**	3,305,593
Shareholders' Equity		
Common shares (par value $0.01 per share, 100,000,000 shares authorized, 63,308,741 and 63,217,708 shares issued, respectively)	**633**	632
Additional paid-in capital	**392,941**	388,150
Accumulated other comprehensive income (loss) (net of deferred tax expense (benefit) of $4,423 and $19,386, respectively)	**16,284**	75,227
Retained earnings	**1,434,491**	1,301,163
Treasury shares, at cost (9,325,180 shares as of each respective period end)	**(415,962)**	(415,962)
Total Shareholders' Equity	**1,428,387**	1,349,210
Total Liabilities and Shareholders' Equity	**$ 6,191,477**	$ 4,654,803

See accompanying notes.

ProAssurance Corporation and Subsidiaries
Consolidated Statements of Changes in Capital
(In thousands)

	ProAssurance Shareholders' Equity					
	Common Stock	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Treasury Stock	Total
Balance at January 1, 2019	$ 630	$ 384,713	$ (16,911)	$ 1,571,847	$ (417,277)	$ 1,523,002
Cumulative-effect adjustment-ASU 2018-07 adoption	—	—	—	(444)	—	(444)
Common shares issued for compensation and effect of shares reissued to stock purchase plan	—	(965)	—	—	1,315	350
Share-based compensation	—	3,512	—	—	—	3,512
Net effect of restricted and performance shares issued	1	(2,709)	—	—	—	(2,708)
Dividends to shareholders	—	—	—	(66,669)	—	(66,669)
Other comprehensive income (loss)	—	—	53,866	—	—	53,866
Net income (loss)	—	—	—	1,004	—	1,004
Balance at December 31, 2019	631	384,551	36,955	1,505,738	(415,962)	1,511,913
Cumulative-effect adjustment-ASU 2016-13 adoption	—	—	—	(4,076)	—	(4,076)
Common shares issued for compensation and effect of shares reissued to stock purchase plan	—	691	—	—	—	691
Share-based compensation	—	3,845	—	—	—	3,845
Net effect of restricted and performance shares issued	1	(937)	—	—	—	(936)
Dividends to shareholders	—	—	—	(24,772)	—	(24,772)
Other comprehensive income (loss)	—	—	38,272	—	—	38,272
Net income (loss)	—	—	—	(175,727)	—	(175,727)
Balance at December 31, 2020	632	388,150	75,227	1,301,163	(415,962)	1,349,210
Common shares issued for compensation and effect of shares reissued to stock purchase plan	**—**	**700**	**—**	**—**	**—**	**700**
Share-based compensation	**—**	**4,379**	**—**	**—**	**—**	**4,379**
Net effect of restricted and performance shares issued	**1**	**(288)**	**—**	**—**	**—**	**(287)**
Dividends to shareholders	**—**	**—**	**—**	**(10,796)**	**—**	**(10,796)**
Other comprehensive income (loss)	**—**	**—**	**(58,943)**	**—**	**—**	**(58,943)**
Net income (loss)	**—**	**—**	**—**	**144,124**	**—**	**144,124**
Balance at December 31, 2021	**$ 633**	**$ 392,941**	**$ 16,284**	**$ 1,434,491**	**$ (415,962)**	**$ 1,428,387**

See accompanying notes.

ProAssurance Corporation and Subsidiaries
Consolidated Statements of Income and Comprehensive Income
(In thousands, except per share data)

	Year Ended December 31		
	2021	2020	2019
Revenues			
Net premiums earned	**$ 971,668**	$ 792,715	$ 847,532
Net investment income	**70,522**	71,998	93,269
Equity in earnings (loss) of unconsolidated subsidiaries	**48,974**	(11,921)	(10,061)
Net investment gains (losses):			
Impairment losses	**—**	(1,745)	(978)
Portion of impairment losses recognized in other comprehensive income (loss) before taxes	**—**	237	227
Net impairment losses recognized in earnings	**—**	(1,508)	(751)
Other net investment gains (losses)	**24,310**	17,186	60,625
Total net investment gains (losses)	**24,310**	15,678	59,874
Other income	**8,936**	6,470	9,220
Total revenues	**1,124,410**	874,940	999,834
Expenses			
Net losses and loss adjustment expenses	**752,249**	661,447	753,915
Underwriting, policy acquisition and operating expenses:			
Operating expense	**157,641**	127,316	137,119
DPAC amortization	**110,605**	110,565	115,330
SPC U.S. federal income tax expense	**1,947**	1,746	1,059
SPC dividend expense (income)	**10,050**	14,304	4,579
Interest expense	**19,719**	15,503	16,636
Goodwill impairment	**—**	161,115	—
Total expenses	**1,052,211**	1,091,996	1,028,638
Gain on bargain purchase	**74,408**	—	—
Income (loss) before income taxes	**146,607**	(217,056)	(28,804)
Provision for income taxes:			
Current expense (benefit)	**1,164**	(20,181)	(1,165)
Deferred expense (benefit)	**1,319**	(21,148)	(28,643)
Total income tax expense (benefit)	**2,483**	(41,329)	(29,808)
Net income (loss)	**144,124**	(175,727)	1,004
Other comprehensive income (loss), after tax, net of reclassification adjustments	**(58,943)**	38,272	53,866
Comprehensive income (loss)	**$ 85,181**	$ (137,455)	$ 54,870
Earnings (loss) per share:			
Basic	**$ 2.67**	$ (3.26)	$ 0.02
Diluted	**$ 2.67**	$ (3.26)	$ 0.02
Weighted average number of common shares outstanding:			
Basic	**53,962**	53,863	53,740
Diluted	**54,058**	53,906	53,841
Cash dividends declared per common share	**$ 0.20**	$ 0.46	$ 1.24

See accompanying notes.

ProAssurance Corporation and Subsidiaries
Consolidated Statements of Cash Flows
(In thousands)

	Year Ended December 31		
	2021	2020	2019
Operating Activities			
Net income (loss)	**$ 144,124**	$ (175,727)	$ 1,004
Adjustments to reconcile income (loss) to net cash provided by operating activities:			
Goodwill impairment	**—**	161,115	—
Gain on bargain purchase	**(74,408)**	—	—
Depreciation and amortization, net of accretion	**37,247**	21,375	18,665
(Increase) decrease in cash surrender value of BOLI	**(1,339)**	(1,735)	(2,016)
Net investment (gains) losses	**(24,310)**	(15,678)	(59,874)
Share-based compensation	**4,390**	3,840	3,527
Deferred income tax expense (benefit)	**1,319**	(21,148)	(28,643)
Policy acquisition costs, net of amortization (net deferral)	**(11,744)**	8,371	(1,451)
Equity in (earnings) loss of unconsolidated subsidiaries	**(48,974)**	11,921	10,061
Distributed earnings from unconsolidated subsidiaries	**35,164**	36,672	25,849
Other, net	**(401)**	2,409	2,175
Change in:			
Premiums receivable	**71,205**	42,985	11,926
Reinsurance related assets and liabilities	**16,925**	(2,047)	(52,902)
Other assets	**12,713**	(13,721)	(13,481)
Reserve for losses and loss adjustment expenses	**(19,684)**	70,653	226,679
Unearned premiums	**(105,986)**	(51,539)	(2,125)
Other liabilities	**37,729**	14,597	8,772
Net cash provided (used) by operating activities	**73,970**	92,343	148,166
Investing Activities			
Purchases of:			
Fixed maturities, available-for-sale	**(1,438,169)**	(917,037)	(695,552)
Equity investments	**(156,747)**	(69,406)	(116,092)
Other investments	**(73,957)**	(35,616)	(28,851)
Investment in unconsolidated subsidiaries	**(49,650)**	(40,093)	(69,411)
Proceeds from sales or maturities of:			
Fixed maturities, available-for-sale	**1,077,379**	801,580	568,572
Equity investments	**440,921**	196,762	359,727
Other investments	**59,055**	35,524	29,017
Net sales or (purchases) of fixed maturities, trading	**4,236**	(383)	(8,254)
Return of invested capital from unconsolidated subsidiaries	**65,362**	40,068	42,478
Net sales or maturities (purchases) of short-term investments	**181,619**	2,361	(30,718)
Unsettled security transactions, net change	**29,841**	(12,756)	(6,812)
Purchases of capital assets	**(3,840)**	(7,478)	(9,586)
Repayments (advances) under Syndicate Credit Agreement	**—**	—	16,009
Cash paid for acquisitions, net of cash acquired	**(221,576)**	—	—
Other	**—**	(2,010)	(5)
Net cash provided (used) by investing activities	**(85,526)**	(8,484)	50,522

Continued on the following page.

	Year Ended December 31		
	2021	2020	2019
Continued from the previous page.			
Financing Activities			
Repayments of Mortgage Loans	**(36,113)**	(1,502)	(1,447)
Dividends to shareholders	**(10,758)**	(38,664)	(93,204)
Capital contribution received from (return of capital to) external segregated portfolio cell participants	**(10,376)**	(2,345)	(5,024)
Purchase of non-controlling interest	**(3,089)**	—	—
Other	**(288)**	(935)	(4,115)
Net cash provided (used) by financing activities	**(60,624)**	(43,446)	(103,790)
Increase (decrease) in cash and cash equivalents	**(72,180)**	40,413	94,898
Cash and cash equivalents at beginning of period	**215,782**	175,369	80,471
Cash and cash equivalents at end of period	**$ 143,602**	$ 215,782	$ 175,369
Supplemental Disclosure of Cash Flow Information			
Cash paid (refunded) during the year for income taxes, net	**$ (9,512)**	$ (8,832)	$ 2,748
Cash paid during the year for interest	**$ 14,502**	$ 14,712	$ 14,294
Significant Non-Cash Transactions			
Operating ROU assets obtained in exchange for operating lease liabilities	**$ 5,687**	$ 1,351	$ 5,436
Dividends declared and not yet paid	**$ 2,698**	$ 2,694	$ 16,676
Fair value of Contribution Certificates issued in NORCAL acquisition	**$ 174,999**	$ —	$ —
Fair value of contingent consideration in NORCAL acquisition	**$ 24,000**	$ —	$ —

See accompanying notes.

1. Accounting Policies

Organization and Nature of Business

ProAssurance Corporation (ProAssurance, PRA or the Company), a Delaware corporation, is an insurance holding company primarily for wholly owned specialty property and casualty and workers' compensation insurance entities including an entity that provides capital to Syndicate 1729 at Lloyd's. Risks insured are primarily liability risks located within the U.S.

ProAssurance operates in five reportable segments as follows: Specialty P&C, Workers' Compensation Insurance, Segregated Portfolio Cell Reinsurance, Lloyd's Syndicates and Corporate. For more information on the Company's segment reporting, including the nature of products and services provided and financial information by segment, refer to Note 18.

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of ProAssurance Corporation, its wholly owned subsidiaries and VIEs in which ProAssurance is the primary beneficiary. See Note 16 for more information on ProAssurance's VIE interests. Investments in entities where ProAssurance holds a greater than minor interest but does not hold a controlling interest are accounted for using the equity method. All significant intercompany accounts and transactions are eliminated in consolidation. ProAssurance subsidiaries located in the U.K. are normally reported on a quarter lag due to timing issues regarding the availability of information, except when information is available that is material to the current period. Furthermore, investment results associated with ProAssurance's FAL investments and certain U.S. paid administrative expenses are reported concurrently as that information is available on an earlier time frame.

Reclassifications

Certain insignificant prior year amounts have been reclassified to conform to the current year presentation.

Basis of Presentation

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, revenues and expenses, and disclosures related to these amounts at the date of the financial statements.

Accounting Policies

The significant accounting policies followed by ProAssurance in making estimates that materially affect financial reporting are summarized in these Notes to Consolidated Financial Statements. The Company evaluates these estimates and assumptions on an ongoing basis based on current and historical developments, market conditions, industry trends and other information that the Company believes to be reasonable under the circumstances, including the potential impacts of the COVID-19 pandemic (see "Item 1A, Risk Factors" included in this report for additional information). The Company can make no assurance that actual results will conform to its estimates and assumptions; reported results of operations may be materially affected by changes in these estimates and assumptions.

Recognition of Revenues

Insurance premiums are recognized as revenues pro rata over the terms of the policies, which are principally one year in duration.

Losses and Loss Adjustment Expenses

ProAssurance establishes its reserve for losses and LAE ("reserve for losses" or "reserve") based on estimates of the future amounts necessary to pay claims and expenses associated with the investigation and settlement of claims. The reserve for losses is determined on the basis of individual claims and payments thereon as well as actuarially determined estimates of future losses based on past loss experience, available industry data and projections as to future claims frequency, severity, inflationary trends, judicial trends, legislative changes and settlement patterns.

Management establishes the reserve for losses after taking into consideration a variety of factors including premium rates, historical paid and incurred loss development trends, and management's evaluation of the current loss environment including frequency, severity, expected effect of inflation, general economic and social trends, and the legal and political environment.

Management also takes into consideration the conclusions reached by internal and consulting actuaries. Management updates and reviews the data underlying the estimation of the reserve for losses each reporting period and makes adjustments to loss estimation assumptions that best reflect emerging data. Both internal and consulting actuaries perform an in-depth review of the reserve for losses on at least a semi-annual basis using the loss and exposure data of ProAssurance's subsidiaries. Consulting actuaries provide reports to management regarding the adequacy of reserves.

Estimating casualty insurance reserves, and particularly long-tailed insurance reserves, is a complex process. Long-tailed insurance is characterized by the extended period of time typically required both to assess the viability of a claim and potential damages, if any, and to reach a resolution of the claim. For a high proportion of the risks insured or reinsured by ProAssurance, the period of time required to resolve a claim is often five years or more, and claims may be subject to litigation. Estimating losses for these long-tailed claims requires ProAssurance to make and revise judgments and assessments regarding multiple uncertainties over an extended period of time. As a result, reserve estimates may vary significantly from the eventual outcome. Reserve estimates and the assumptions on which these estimates are predicated are regularly reviewed and updated as new information becomes available. Any adjustments necessary are reflected in current operations. Due to the size of ProAssurance’s reserve for losses, even a small percentage adjustment to these estimates could have a material effect on earnings in the period in which the adjustment is made, as was the case in 2021, 2020 and 2019. See Note 10 for additional information on ProAssurance's reserve for losses and LAE.

The effect of adjustments made to reinsured losses is mitigated by the corresponding adjustment that is made to reinsurance recoveries. Thus, in any given year, ProAssurance may make significant adjustments to gross losses that have little effect on its net losses.

Reinsurance Receivables

ProAssurance enters into reinsurance agreements whereby other insurance entities agree to assume a portion of the risk associated with certain policies issued by ProAssurance. In return, ProAssurance agrees to pay a premium to the reinsurer. ProAssurance uses reinsurance to provide capacity to write larger limits of liability, to provide reimbursement for losses incurred under the higher limit coverages the Company offers, to provide protection against losses in excess of policy limits, and, in the case of risk sharing arrangements, to align the Company's objectives with those of its strategic business partners and to provide custom insurance solutions for large customer groups.

Receivable from reinsurers on paid losses and LAE is the estimated amount of losses already paid that will be recoverable from reinsurers. Receivable from reinsurers on unpaid losses and LAE is the estimated amount of future loss payments that will be recoverable from reinsurers. Reinsurance recoveries are the portion of losses incurred during the period that are estimated to be allocable to reinsurers. Premiums ceded are the estimated premiums that will be due to reinsurers with respect to premiums earned and losses incurred during the period.

These estimates are based upon management’s estimates of ultimate losses and the portion of those losses that are allocable to reinsurers under the terms of the related reinsurance agreements. Given the uncertainty inherent in management's estimate of the ultimate amounts of losses, these estimates may vary significantly from the ultimate outcome. Management regularly reviews these estimates and any adjustments necessary are reflected in the period in which the estimate is changed. Due to the size of the receivable from reinsurers, an adjustment to these estimates could have a material effect on ProAssurance's results of operations for the period in which the adjustment is made.

Reinsurance contracts do not relieve ProAssurance from its obligations to policyholders. ProAssurance continually monitors its reinsurers to minimize its exposure to significant credit losses from reinsurer insolvencies (see additional discussion below under the heading "Credit Losses"). Any amount determined to be uncollectible is written off in the period in which the uncollectible amount is identified. See Note 6 for further information.

Credit Losses

ProAssurance's premiums receivable and reinsurance receivables are exposed to credit losses but to-date have not experienced any significant amount of credit losses. ProAssurance measures expected credit losses on its premiums receivables and reinsurance receivables on a collective (pool) basis when similar risk characteristics exist, and the Company will reassess its pools each reporting period to ensure all receivables within the pool continue to share similar risk characteristics. If the Company determines that a receivable does not share risk characteristics with its other receivables within a pool, it will evaluate that receivable for expected credit losses on an individual basis. ProAssurance measures expected credit losses associated with its premium receivables at the segment level as each segment’s premium receivables share similar risk characteristics including term, type of financial asset and similar historical and expected credit loss patterns. ProAssurance measures expected credit losses associated with its reinsurance receivables (related to both paid and unpaid losses) at the consolidated level as its

reinsurance receivables share similar risk characteristics including type of financial asset, type of industry and similar historical and expected credit loss patterns.

ProAssurance measures expected credit losses over the contractual term of each pool utilizing a loss rate method. Historical internal credit loss experience for each pool is the basis for the Company's assessment of expected credit losses; however, the Company may also consider historical credit loss information from external sources. In addition to historical credit loss data, the Company also considers reasonable and supportable forecasts of future economic conditions in its estimate of expected credit losses by utilizing industry and macroeconomic factors that it believes most relevant to the collectability of each pool.

ProAssurance's available-for-sale fixed maturity investments are also exposed to credit losses. See Note 4 for information on ProAssurance's allowance for expected credit losses on its available-for-sale fixed maturities.

ProAssurance's premiums receivable on its Consolidated Balance Sheet as of December 31, 2021 and 2020 is reported net of the related allowance for expected credit losses of $7.4 million and $6.1 million, respectively. The following tables present a roll forward of the allowance for expected credit losses related to the Company's premiums receivable for the years ended December 31, 2021 and 2020.

(In thousands)	**Premiums Receivable, Net**	**Allowance for Expected Credit Losses**
Balance, December 31, 2020	**$ 201,395**	**$ 6,131**
Initial allowance recognized in the period for NORCAL premiums receivable[1]		**2,137**
Provision for expected credit losses		**439**
Write offs charged against the allowance		**(1,533)**
Recoveries of amounts previously written off		**262**
Balance, December 31, 2021	**$ 241,095**	**$ 7,436**

(In thousands)	Premiums Receivable, Net	Allowance for Expected Credit Losses
Balance, December 31, 2019	$ 249,540	$ 1,590
Cumulative-effect adjustment, before tax[2]		5,160
Provision for expected credit losses		827
Write offs charged against the allowance		(2,019)
Recoveries of amounts previously written off		573
Balance, December 31, 2020	$ 201,395	$ 6,131

[1] Represents an initial allowance for expected credit losses recognized during the second quarter of 2021 for NORCAL's premiums receivable to conform NORCAL to ProAssurance's accounting policies. See Note 2 for more information.

[2] Due to the adoption of ASU 2016-13, ProAssurance recorded a cumulative-effect adjustment to beginning retained earnings as of January 1, 2020 to increase its consolidated allowance for expected credit losses related to its premiums receivable.

ProAssurance's expected credit losses associated with its reinsurance receivables (related to both paid and unpaid losses) were nominal in amount as of December 31, 2021 and 2020. ProAssurance has other financial assets and off-balance-sheet commitments that are exposed to credit losses; however, expected credit losses associated with these assets and commitments were nominal in amount as of December 31, 2021 and 2020.

Retroactive Insurance Contracts

In certain instances, ProAssurance's insurance contracts cover losses both on a prospective basis and retroactive basis, and accordingly, ProAssurance bifurcates the prospective and retroactive provisions of these contracts and accounts for each component separately, where practicable.

Under the retroactive provisions of a contract, all premiums received and losses assumed are recognized immediately in earnings at the inception of the contract as all of the underlying loss events occurred in the past. If the estimated losses assumed differ from the premium received related to the retroactive provision of a contract, the resulting difference is deferred and recognized over the estimated claim payment period with the periodic amortization reflected in earnings as a component of net losses and LAE. Deferred gains are included as a component of the reserve for losses and LAE, and deferred losses are included

as a component of other assets on the Consolidated Balance Sheets. Subsequent changes to the estimated timing or amount of future loss payments in relation to the losses assumed under retroactive provisions also produce changes in deferred balances. Changes in such estimates are applied retrospectively, and the resulting changes in deferred balances, together with periodic amortization, are included in earnings in the period of change. See Note 5 for more information.

Investments

Recurring Fair Value Measurements

Fair values of investment securities are primarily provided by independent pricing services. The pricing services provide an exchange-traded price, if available, or provide an estimated price determined using multiple observable inputs, including exchange-traded prices for similar assets. Management reviews valuations of securities obtained from the pricing services for accuracy based upon the specifics of the security, including class, maturity, credit rating, durations, collateral and comparable markets for similar securities. Multiple observable inputs are not available for certain of the Company's investments, including corporate debt not actively traded, certain asset-backed securities and investments in LPs/LLCs. Management values the corporate debt not actively traded and the other asset-backed securities either using dealer quotes for similar securities or discounted cash flow models using yields currently available for similar securities. Management values certain investment funds, primarily LPs/LLCs, based on the NAV of the interest held, as provided by the fund.

Nonrecurring Fair Value Measurements

Management measures the fair value of certain assets on a nonrecurring basis when events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. These assets include investments carried principally at cost, investments in tax credit partnerships, fixed assets, goodwill and other intangible assets. These assets would also include any equity method investments that do not provide a NAV.

Fixed Maturities

Fixed maturities are considered as either available-for-sale or trading securities.

Available-for-sale securities are carried at fair value, determined as described above and in Note 3. Exclusive of impairment losses, discussed in a separate section that follows, unrealized holding gains and losses on available-for-sale securities are included, net of related tax effects, as a component of OCI in the Consolidated Statement of Income and Comprehensive Income during the period of change and as a component AOCI in shareholders' equity on the Consolidated Balance Sheet.

Investment income includes amortization of premium and accretion of discount related to available-for-sale debt securities acquired at other than par value. Debt securities and mandatorily redeemable preferred stock with maturities beyond one year when purchased are classified as fixed maturities.

Trading securities are carried at fair value, determined as described above, with the unrealized holding gains and losses included as a component of net investment gains (losses) in the Consolidated Statement of Income and Comprehensive Income during the period of change.

Equity Investments

Equity investments are carried at fair value, as described above, with the holding gains and losses included as a component of net investment gains (losses) in the Consolidated Statement of Income and Comprehensive Income during the period of change. Equity investments are primarily comprised of stocks, bond funds and investment funds.

Short-term Investments

Short-term investments, which have a maturity at purchase of one year or less, are primarily comprised of investments in U.S. Treasury obligations, commercial paper and money market funds. All balances are carried at fair value which approximates the cost of the securities due to their short-term nature.

Other Investments

Investments in convertible bond securities are carried at fair value as permitted by the accounting guidance for hybrid financial instruments, with changes in fair value recognized in income as a component of net investment gains (losses) during

the period of change. Interest on convertible bond securities is recorded on an accrual basis based on contractual interest rates and is included in net investment income.

Investment in Unconsolidated Subsidiaries

Equity investments, primarily investments in LPs/LLCs, where ProAssurance is deemed to have influence because it holds a greater than a minor interest are accounted for using the equity method. Under the equity method, the recorded basis of the investment is adjusted each period for the investor's pro rata share of the investee's income or loss. Investments in unconsolidated subsidiaries include tax credit partnerships accounted for using the equity method, whereby ProAssurance's proportionate share of income or loss is included in equity in earnings (loss) of unconsolidated subsidiaries. Tax credits received from the partnerships are recognized in the period received in the Consolidated Statements of Income and Comprehensive Income as either a reduction to current tax expense or as a component of deferred tax expense if they cannot be utilized in the period received.

Business Owned Life Insurance

ProAssurance owns life insurance contracts on certain management employees, which includes policies acquired from NORCAL. The life insurance contracts are carried at their current cash surrender value. Changes in the cash surrender value are included in income in the current period as investment income. Death proceeds from the contracts are recorded when the proceeds become payable under the policy terms.

Realized Gains and Losses

Realized investment gains and losses are recognized on the first-in, first-out basis for GAAP purposes and on the specific identification basis for tax purposes.

Impairments

ProAssurance evaluates its available-for-sale investment securities, which at December 31, 2021 and 2020 consisted entirely of fixed maturity securities, on at least a quarterly basis for the purpose of determining whether declines in fair value below recorded cost basis represent a credit loss. The Company considers a credit loss to have occurred:

- if there is intent to sell the security;
- if it is more likely than not that the security will be required to be sold before full recovery of its amortized cost basis; or
- if the entire amortized basis of the security is not expected to be recovered.

The assessment of whether the amortized cost basis of a security is expected to be recovered requires the Company to make assumptions regarding various matters affecting future cash flows. The choice of assumptions is subjective and requires the use of judgment. Actual credit losses experienced in future periods may differ from the Company's estimates of those credit losses. Methodologies used to estimate the present value of expected cash flows are:

The estimate of expected cash flows is determined by projecting a recovery value and a recovery time frame and assessing whether further principal and interest will be received. ProAssurance considers various factors in projecting recovery values and recovery time frames, including the following:

- third-party research and credit rating reports;
- the current credit standing of the issuer, including credit rating downgrades, whether before or after the balance sheet date;
- the extent to which the decline in fair value is attributable to credit risk specifically associated with the security or its issuer;
- internal assessments and the assessments of external portfolio managers regarding specific circumstances surrounding an investment, which indicate the investment is more or less likely to recover its amortized cost than other investments with a similar structure;
- for asset-backed securities, the origination date of the underlying loans, the remaining average life, the probability that credit performance of the underlying loans will deteriorate in the future and ProAssurance's assessment of the quality of the collateral underlying the loan;
- failure of the issuer of the security to make scheduled interest or principal payments;
- any changes to the rating of the security by a rating agency;
- recoveries or additional declines in fair value subsequent to the balance sheet date;
- adverse legal or regulatory events;

- significant deterioration in the market environment that may affect the value of collateral (e.g., decline in real estate prices);
- significant deterioration in economic conditions; and
- disruption in the business model resulting from changes in technology or new entrants to the industry.

If deemed appropriate and necessary, a discounted cash flow analysis is performed to confirm whether a credit loss exists and, if so, the amount of the credit loss. ProAssurance uses the single best estimate approach for available-for-sale debt securities and considers all reasonably available data points, including industry analyses, credit ratings, expected defaults and the remaining payment terms of the debt security. For fixed rate available-for-sale debt securities, cash flows are discounted at the security's effective interest rate implicit in the security at the date of acquisition. If the available-for-sale debt security's contractual interest rate varies based on subsequent changes in an independent factor, such as an index or rate, for example, the prime rate, the LIBOR, or the U.S. Treasury bill weekly average, that security's effective interest rate is calculated based on the factor as it changes over the life of the security.

If ProAssurance intends to sell a debt security or believes it will more likely than not be required to sell a debt security before the amortized cost basis is recovered, any existing allowance will be written off against the security's amortized cost basis, with any remaining difference between the debt security's amortized cost basis and fair value recognized as an impairment loss in earnings.

Exclusive of securities where there is an intent to sell or where it is not more likely than not that the security will be required to be sold before recovery of its amortized cost basis, impairment for debt securities is separated into a credit component and a non-credit component. The credit component of an impairment is the difference between the security's amortized cost basis and the present value of its expected future cash flows, while the non-credit component is the remaining difference between the security's fair value and the present value of expected future cash flows. An allowance for expected credit losses will be recorded for the expected credit losses through income and the non-credit component is recognized in OCI. The amount of impairment recognized is limited to the excess of the amortized cost over the fair value of the available-for-sale debt security.

Derivatives

ProAssurance records derivative instruments at fair value in the Consolidated Balance Sheets. ProAssurance accounts for the changes in fair value of derivatives depending on whether the derivative is designated as a hedging instrument and if so, the type of hedging relationship. For derivative instruments not designated as hedging instruments, ProAssurance recognizes the change in fair value of the derivative in earnings during the period of change. As of December 31, 2021 and 2020, ProAssurance has not designated any derivative instruments as hedging instruments and does not use derivative instruments for trading purposes.

Cash and Cash Equivalents

For purposes of the Consolidated Balance Sheets and Consolidated Statements of Cash Flows, ProAssurance considers all demand deposits and overnight investments to be cash equivalents.

Foreign Currency

The functional currency of all ProAssurance foreign subsidiaries is the U.S. dollar. In recording foreign currency transactions, revenue and expense items are converted to U.S. dollars at the exchange rate prevailing at the transaction date. Monetary assets and liabilities originating in currencies other than the U.S. dollar are remeasured to U.S. dollars at the rates of exchange in effect as of the balance sheet date. The resulting foreign currency gains or losses are recognized in the Consolidated Statements of Income and Comprehensive Income as a component of other income. Monetary assets and liabilities include investments, cash and cash equivalents, accrued expenses and other liabilities. In addition, monetary assets and liabilities include certain premiums receivable and reserve for losses and LAE as a result of reinsurance transactions conducted with foreign cedents denominated in their local functional currencies.

Pension

As a result of the NORCAL acquisition, the Company sponsors a frozen qualified defined benefit pension plan which covers substantially all NORCAL employees (except those that were previous employees of Medicus Insurance Company and

FD Insurance Company, employees of PPM RRG as well as new hires after December 31, 2013). Accounting for pension benefits requires the use of assumptions for the valuation of the PBO and the expected performance of the plan assets.

The Company uses December 31 as the measurement date for calculating its obligation related to this defined benefit pension plan and for estimating net periodic benefit cost (credit) for the subsequent year. The PBO for pension benefits represents the present value of all future benefits earned as of the measurement date for vested and non-vested employees. At each measurement date, the Company reviews the various assumptions impacting the amounts recorded for the pension plan including the discount rates, which impacts the recorded value of the PBO and interest costs, and the expected return on plan assets.

To estimate the discount rate at the measurement date, the Company uses a bond yield curve model, developed based on pricing and yield information for high quality corporate bonds. The assumption for the expected return on plan assets is based on the anticipated returns that will be earned by the portfolio over the long term. The expected return is influenced, but not determined, by historical portfolio performance.

Accounting standards provide for the delayed recognition of differences between actual results and expected or estimated results. This delayed recognition of the differences is amortized into earnings over time. The differences between actual results and expected or estimated results are recognized in full in AOCI. Amounts recognized in AOCI are reclassified to earnings in a systematic manner over the average future service period of participants.

Deferred Policy Acquisition Costs; Ceding Commission Income

Costs that vary with and are directly related to the successful production of new and renewal premiums (primarily premium taxes, commissions and underwriting salaries) are deferred to the extent they are recoverable against unearned premiums and are amortized as related premiums are earned. Unearned ceding commission income is reported as an offset to DPAC, and ceding commission earned is reported as an offset to DPAC amortization.

ProAssurance evaluates the recoverability of DPAC typically at the segment level each reporting period, or in a manner that is consistent with the way the Company manages its business. Any amounts estimated to be unrecoverable are charged to expense in the current period. As part of the evaluation of the recoverability of DPAC, ProAssurance also evaluates unearned premium for premium deficiencies. A premium deficiency is recognized if the sum of anticipated losses and loss adjustment expenses, unamortized DPAC and maintenance costs, net of anticipated investment income, exceeds the related unearned premium. If a premium deficiency is identified, the associated DPAC is written off, and a PDR is recorded for the excess deficiency as a component of net losses and loss adjustment expenses in the Consolidated Statements of Income and Comprehensive Income and as a component of the reserve for losses on the Consolidated Balance Sheets.

Income Taxes/Deferred Taxes

ProAssurance files a consolidated federal income tax return. Tax-related interest and penalties are recognized as components of tax expense.

ProAssurance evaluates tax positions taken on tax returns and recognizes positions in the financial statements when it is more likely than not that the position will be sustained upon resolution with a taxing authority. If recognized, the benefit is measured as the largest amount of benefit that has a greater than fifty percent probability of being realized. Uncertain tax positions are reviewed each period by considering changes in facts and circumstances, such as changes in tax law, interactions with taxing authorities and developments in case law, and adjustments would be made if considered necessary. Adjustments to unrecognized tax benefits may affect income tax expense, and the settlement of uncertain tax positions may require the use of cash. Other than differences related to timing, no significant adjustments were considered necessary during the years ended December 31, 2021 or 2020.

Deferred federal income taxes arise from the recognition of temporary differences between the basis of assets and liabilities determined for financial reporting purposes and the basis determined for income tax purposes. ProAssurance's temporary differences principally relate to loss reserves, unearned and advanced premiums, DPAC, NOL and tax credit carryforwards, compensation related items, unrealized investment gains (losses) and basis differentials in fixed assets, intangible assets and operating leases. Deferred tax assets and liabilities are measured using the enacted tax rates expected to be in effect when such benefits are realized. ProAssurance reviews its deferred tax assets quarterly for impairment. If management determines that it is more likely than not that some or all of a deferred tax asset will not be realized, a valuation allowance is recorded to reduce the carrying value of the asset. In assessing the need for a valuation allowance, management is required to make certain judgments and assumptions about the future operations of ProAssurance based on historical experience and information as of the measurement period regarding reversal of existing temporary differences, carryback capacity, future taxable income of the appropriate character (including its capital and operating characteristics) and tax planning strategies.

Goodwill/Intangibles

Intangible Assets

Intangible assets with definite lives are amortized over the estimated useful life of the asset. Amortizable intangible assets primarily consist of policyholder relationships, renewal rights and trade names. Intangible assets with an indefinite life, primarily state licenses, are not amortized. Indefinite lived intangible assets are evaluated for impairment on an annual basis or upon the occurrence of certain triggering events or substantive changes in circumstances that indicate the intangible asset may be impaired. Amortizable intangible assets and other long-lived assets are tested for impairment at the asset group level upon the occurrence of certain triggering events or substantive changes in circumstances that indicate the carrying amount of the asset group may not be recoverable. An impairment loss is recognized when estimated undiscounted future cash flows expected to result from the use of the asset group are less than the carrying amounts of the related asset group. Impairment losses are measured as the amount by which the carrying amount of the asset groups exceed their fair values. The Company's asset groups generally correspond to the same level at which goodwill is tested for impairment. The following table provides additional information regarding ProAssurance's intangible assets.

	Gross Carrying Value		Accumulated Amortization		Amortization Expense		
	December 31		December 31		Year Ended December 31		
(In millions)	**2021**	2020	**2021**	2020	**2021**	2020	2019
Intangible Assets							
Non-amortizable	**$ 38.2**	$ 25.8					
Amortizable	**100.3**	98.8	**$ 65.2**	$ 58.9	**$ 6.4**	$ 6.2	$ 6.1
Total Intangible Assets	**$ 138.5**	$ 124.6					

Aggregate amortization expense for intangible assets is estimated to be $6.5 million for each of the years ended December 31, 2022 and 2023, $6.1 million for the year ended December 31, 2024, $5.7 million for the year ended December 31, 2025 and $3.7 million for the year ended December 31, 2026.

Goodwill

Goodwill is tested for impairment annually or more frequently if circumstances indicate an impairment may have occurred. The date of the Company's annual goodwill impairment testing is October 1.

Impairment of goodwill is tested at the reporting unit level, which is consistent with the Company's reportable segments identified in Note 18. Of the Company's five reporting units, two have net goodwill: Workers' Compensation Insurance and Segregated Portfolio Cell Reinsurance. See Note 8 for additional information about the Company's assessment of goodwill.

Annual Impairment Assessment

When testing goodwill for impairment on the Company's annual test date, it has the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the estimated fair value of a reporting unit is less than its carrying amount. If the Company elects to perform a qualitative assessment and determine that an impairment is more likely than not, the Company is then required to perform a quantitative impairment test; otherwise, no further analysis is required. The Company also may elect not to perform the qualitative assessment and, instead, proceed directly to the quantitative impairment test.

Performance of the qualitative goodwill impairment assessment requires judgment in identifying and considering the significance of relevant key factors, events, and circumstances that affect the fair values of the Company's reporting units. This requires consideration and assessment of external factors such as macroeconomic, industry, and market conditions, as well as entity-specific factors, such as the Company's actual and planned financial performance. The Company also gives consideration to the difference between each reporting unit's fair value and carrying value as of the most recent date that a fair value measurement was performed. If the results of the qualitative assessment conclude that it is not more likely than not that the fair value of a reporting unit exceeds its carrying value, additional quantitative impairment testing is performed.

The quantitative goodwill impairment test involves comparing the fair value of a reporting unit with its carrying value including goodwill. If the fair value of a reporting unit exceeds its carrying value, the reporting unit's goodwill is considered not to be impaired. However, if the carrying value of a reporting unit exceeds its fair value, an impairment loss is recorded in an amount equal to that excess. Any impairment charge recognized is limited to the amount of the respective reporting unit's allocated goodwill.

Determining the fair value of a reporting unit under the quantitative goodwill impairment test requires judgment and often involves the use of significant estimates and assumptions, including an assessment of external factors such as macroeconomic, industry, and market conditions, as well as entity-specific factors, such as actual and planned financial performance. These estimates and assumptions could have a significant impact on whether or not an impairment charge is recognized and the magnitude of any such charge. To assist management in the process of determining any potential goodwill impairment, the Company may review and consider appraisals from accredited independent valuation firms. Estimates of fair value are primarily determined using discounted cash flows and market comparisons. These approaches involve significant estimates and assumptions, including projected future cash flows (including timing), discount rates reflecting the risks inherent in those future cash flows, perpetual growth rates, and selection of appropriate market comparable metrics and transactions.

Business Combinations

The Company accounted for its acquisition of NORCAL in accordance with GAAP relating to business combinations which required management to make certain estimates and assumptions including determining the fair value of the non-cash components of the acquisition consideration and the acquisition date fair values of the acquired tangible and identifiable intangible assets and assumed liabilities of NORCAL. Subsequent to the preliminary valuation of the non-cash components of the purchase consideration and net assets acquired, any adjustment identified associated with the purchase price allocation will be evaluated to determine whether the adjustment represents a measurement period adjustment in accordance with GAAP. If the adjustment is deemed to be a measurement period adjustment and is identified within one year of the acquisition, then the measurement period adjustment will be recorded in the current reporting period with a corresponding adjustment to the gain on bargain purchase.

Contingent Consideration

Contingent consideration in a business combination that is classified as a liability is measured at fair value on the date of acquisition and remeasured to fair value each subsequent reporting period with changes in the fair value recognized in earnings.

VOBA

VOBA is based on actuarially determined projections and reflects the estimated fair value of in-force contracts acquired in a business combination. VOBA is recorded as an asset when the in-force contracts acquired are expected to generate underwriting income and is recorded as a liability when the in-force contracts acquired are expected to generate an underwriting loss. VOBA liabilities (negative VOBA) are recorded as a component of the reserve for losses and loss adjustment expenses on the Consolidated Balance Sheets. To the extent negative VOBA relates to unearned premium, it is amortized over a period in proportion to the earn-out of the premium as a reduction to current accident year net losses and loss adjustment expenses. To the extent negative VOBA relates to the DDR reserve, it is amortized over a period in proportion to the approximate consumption of losses as a reduction to prior accident year net losses and loss adjustment expenses. See Note 2 for more information.

Leases

ProAssurance is involved in a number of leases, primarily for office facilities. The Company determines if an arrangement is a lease at the inception date of the contract and classifies all leases as either financing or operating. Operating leases are included in operating lease ROU assets and operating lease liabilities on the Consolidated Balance Sheets. The ROU asset represents the right to use the underlying asset for the lease term. As of December 31, 2021, ProAssurance has no leases that are classified as financing leases.

Operating ROU assets and operating lease liabilities are initially recognized as of the lease commencement date based on the present value of the remaining lease payments, discounted over the term of the lease using a discount rate determined based on information available as of the commencement date. As the majority of ProAssurance's lessors do not provide an implicit discount rate, the Company uses its collateralized incremental borrowing rate in determining the present value of remaining lease payments. Due to the adoption of ASU 2016-02, the Company used its collateralized incremental borrowing rate as of January 1, 2019 for operating leases that commenced prior to that date. Subsequent to the initial recognition, the operating ROU asset and operating lease liability are amortized and accreted, respectively, over the lease term in a manner that results in a straight-line operating lease expense. Operating lease expense is included as a component of operating expense on the Consolidated Statements of Income and Comprehensive Income for the years ended December 31, 2021, 2020 and 2019. Leases with an initial term of twelve months or less are considered short-term and are not recorded on the Consolidated Balance Sheet; lease expense for these leases is also recognized on a straight-line basis over the lease term. Additionally, for leases entered into or reassessed after the adoption of ASU 2016-02 on January 1, 2019, ProAssurance accounts for lease and non-lease components of a contract as a single lease component.

Operating lease ROU assets are evaluated for impairment at the asset group level whenever events or changes in circumstances indicate that the carrying amount of the asset group may not be recoverable. The carrying amount of an asset group, which includes the operating lease ROU asset and the related operating lease liability, is not recoverable if the carrying amount exceeds the sum of the undiscounted cash flows expected to result from the use of the asset group over the life of the primary asset in the asset group. That assessment is based on the carrying amount of the asset group, including the operating lease ROU asset and the related operating lease liability, at the date it is tested for recoverability and an impairment loss is measured and recognized as the amount by which the carrying amount of the asset group exceeds its fair value. Any impairment loss is allocated to each asset in the asset group, including the operating ROU asset.

When a lease of an office facility is to be abandoned and will not be subleased, the Company first evaluates whether or not the operating lease ROU asset's inclusion in an existing asset group continues to be appropriate and if the commitment to abandon the lease constitutes a change in circumstances requiring the operating lease ROU asset, or the larger asset group, to be tested for impairment. If an impairment test is required, it is performed in the same manner as discussed above. Any remaining carrying value of the operating lease ROU asset is amortized from the date the Company commits to a plan to abandon the lease to the expected date that the Company will cease to use the leased property. Leases to be abandoned in which the Company has the intent or practical ability to sublease continue to be accounted for under a held and use model, with no change to the amortization period of the operating lease ROU asset, and are evaluated for impairment as a separate asset group at the date the sublease is executed.

Real Estate

Real Estate balances are reported at cost or, for properties acquired in business combinations, estimated fair value on the date of acquisition, less accumulated depreciation. Real estate principally consists of properties in use as corporate offices. Depreciation is computed over the estimated useful lives of the related property using the straight-line method. Excess office capacity is leased or made available for lease; rental income is included in other income, and real estate expenses are included in operating expense.

Real estate accumulated depreciation was approximately $27.4 million and $26.5 million at December 31, 2021 and 2020, respectively. Real estate depreciation expense was $0.9 million for each of the years ended December 31, 2021 and 2020 and $1.0 million for the year ended December 31, 2019.

Earned But Unbilled Premiums

Workers' compensation premiums are determined based upon the payroll of the insured, the applicable premium rates and an experience-based modification factor, where applicable. An audit of the policyholders' records is conducted after policy expiration to make a final determination of applicable premiums. Audit premium due from or due to a policyholder as a result of an audit is reflected in net premiums written and earned when billed. ProAssurance tracks, by policy, the amount of additional premium billed in final audit invoices as a percentage of payroll exposure and uses this information to estimate the probable additional amount of EBUB as of the balance sheet date. Changes to the EBUB estimate are included in net premiums written and earned in the period recognized. As of December 31, 2021 and 2020, ProAssurance carried EBUB of $1.8 million and $3.0 million, respectively, as a part of premiums receivable. As a result of the economic impact of COVID-19, the Company recognized reductions in payroll exposure related to in-force policies that resulted in a significant decrease in audit premium and a reduction in our EBUB estimate during 2021 and 2020. ProAssurance will continue to monitor and adjust the estimate, if necessary, based on changes in insured payrolls and economic conditions, as experience develops or new information becomes known; however, the length and magnitude of such changes depends on future developments, which are highly uncertain and cannot be predicted.

Lloyd's Premium Estimates

For certain insurance policies and reinsurance contracts written in the Lloyd's Syndicates segment, premiums are initially recognized based upon estimates of ultimate premium. Estimated ultimate premium consists primarily of premium written under delegated underwriting authority arrangements, which consist primarily of binding authorities, and certain assumed reinsurance agreements. These estimates of ultimate premium are judgmental and are dependent upon certain assumptions, including historical premium trends for similar agreements. As reports are received from programs, ultimate premium estimates are revised, if necessary, with changes reflected in current operations.

Other Assets and Liabilities

Other assets include the acquired NORCAL investments in a deferred compensation rabbi trust which are carried at fair value. These rabbi trust assets are related to other liabilities associated with funded deferred compensation agreements with NORCAL employees and previous members of NORCAL's Board of Directors.

Other liabilities include the assumed NORCAL liability for deferred compensation balances associated with the rabbi trust assets and the reported balance is determined based on the amount of elective deferrals and employer contributions adjusted for periodic changes in fair value of the participant balances based on the performance of the funds selected by the participants.

ProAssurance recognizes the net change in the fair value of the rabbi trust assets and associated deferred compensation liabilities as a component of net investment income during the period of change.

Other liabilities at December 31, 2021 and 2020 consisted of the following:

(In thousands)	**2021**	2020
SPC dividends payable	**$ 66,456**	$ 68,865
Deferred compensation liabilities	**52,332**	30,334
Contingent consideration	**24,000**	—
All other	**137,944**	82,840
Total other liabilities	**$ 280,732**	$ 182,039

SPC dividends payable represents the undistributed equity contractually payable to the external cell participants of SPCs operated by ProAssurance's Cayman Islands subsidiaries, Inova Re and Eastern Re.

Deferred compensation liabilities represent the amount of elective deferrals and employer contributions adjusted for periodic changes in the fair value of the participant balances based on the performance of the funds selected by the participants. See additional information on the deferred compensation liabilities in Note 3.

Contingent consideration represents a portion of the purchase consideration for the NORCAL acquisition and depends on the after-tax development of NORCAL's ultimate net losses over a three year period beginning on December 31, 2020. See additional information on the contingent consideration in Note 2.

Treasury Shares

Treasury shares are reported at cost and are reflected on the Consolidated Balance Sheets as an unallocated reduction of total equity.

Share-Based Payments

Compensation cost for share-based payments is measured based on the grant-date fair value of the award, recognized over the period in which the employee is required to provide service in exchange for the award. Excess tax benefits (tax deductions realized in excess of the compensation costs recognized for the exercise of the awards, multiplied by the incremental tax rate) are reported as operating cash inflows.

Subsequent Events

ProAssurance evaluates events that occurred subsequent to December 31, 2021 for recognition or disclosure in its Consolidated Financial Statements.

Accounting Changes Adopted

Clarifying the Interactions between Investments - Equity Securities, Investments - Equity Method and Joint Ventures, and Derivatives and Hedging (ASU 2020-01)

Effective for fiscal years beginning after December 15, 2020 and interim periods within those fiscal years, the FASB amended guidance that clarifies the accounting for the transition into and out of the equity method and measuring certain purchased options and forward contracts to acquire investments. ProAssurance adopted the guidance beginning January 1, 2021, and adoption had no material effect on ProAssurance's results of operations, financial position or cash flows.

Accounting Changes Not Yet Adopted

ProAssurance is not aware of any accounting changes not yet adopted as of December 31, 2021 that could have a material impact on its results of operations, financial position or cash flows.

2. Business Combination

On May 5, 2021, ProAssurance completed its acquisition of NORCAL by purchasing 98.8% of its stock in exchange for total consideration transferred of $448.8 million. On September 16, 2021, ProAssurance acquired the remaining 1.2% interest in NORCAL for $3.1 million of cash. The NORCAL transaction provides strategic and financial benefits including additional scale and geographic diversification in the physician professional liability market. On May 5, 2021, ProAssurance funded the acquisition with $248.0 million of cash on hand, and NORCAL paid $1.8 million to policyholders who elected to receive a discounted cash option for their allocated share of the converted company's equity. Additional consideration transferred, with a principal amount of $191.0 million and a fair value of $175.0 million, is in the form of Contribution Certificates issued to certain NORCAL policyholders in the conversion, and those instruments are an obligation of NORCAL Insurance Company, the successor of NORCAL Mutual Insurance Company (see Note 13 for further discussion of the terms of the Contribution Certificates). Policyholders who tendered NORCAL stock to ProAssurance are also eligible for a share of contingent consideration in an amount of up to approximately $84.0 million depending upon the after-tax development of NORCAL's ultimate net losses between December 31, 2020 and December 31, 2023. The estimated fair value of this contingent consideration was $24.0 million as of May 5, 2021 and December 31, 2021.

ProAssurance's results for the year ended December 31, 2021 included NORCAL's results since the date of acquisition (revenue of $230.3 million and net income of $9.7 million). ProAssurance incurred expenses related to the acquisition of approximately $25.0 million during the year ended December 31, 2021 and approximately $1.8 million during the year ended December 31, 2020. These expenses were included as a component of operating expenses in the period incurred in ProAssurance's Consolidated Statements of Income and Comprehensive Income.

ProAssurance accounted for its acquisition of NORCAL in accordance with GAAP relating to business combinations. The total acquisition consideration was allocated to the acquired tangible and identifiable intangible assets and assumed liabilities of NORCAL based on their preliminary estimated fair values on the acquisition date, as shown in the following table. The amounts reflect preliminary allocation of assets acquired and liabilities assumed. The acquisition date fair value of certain assets acquired and liabilities assumed, including intangible assets, deferred income tax assets and liabilities and reserves for losses and loss adjustment expenses are preliminary estimates and are subject to revisions within one year of acquisition date. Subsequent to the preliminary valuation of net assets acquired, any adjustment identified associated with the purchase price allocation will be evaluated to determine whether the adjustment represents a measurement period adjustment in accordance with GAAP. If the adjustment is deemed to be a measurement period adjustment and is identified within one year of the acquisition, then the measurement period adjustment will be recorded in the current reporting period with a corresponding adjustment to the gain on bargain purchase.

A $74.4 million gain on bargain purchase was recognized on the date of the acquisition as the fair value of the consideration transferred was less than the fair value of the net assets acquired. This gain is presented as a separate line item in ProAssurance's Consolidated Statements of Income and Comprehensive Income for the year ended December 31, 2021. ProAssurance believes it was able to acquire NORCAL for less than the fair value of its net assets due to several contributing factors including the soft medical professional liability market at the time the transaction was initially announced and the value attributed to certain assets. Before the acquisition, NORCAL had recorded a valuation allowance against the full value of its net deferred tax assets. In conjunction with acquisition accounting, ProAssurance recorded $46.8 million of net deferred tax assets reflecting the remeasurement of NORCAL's historical net deferred tax assets, as such deferred taxes were subject to recalculation following application of all purchase accounting adjustments, and its assessment of the realizability of NORCAL's historical deferred tax assets. Based upon the assessment of the realizability of NORCAL's historical deferred tax assets, ProAssurance management concluded that these deferred tax assets are now realizable, which increased the net assets acquired. In addition, based upon the historical performance of NORCAL, ProAssurance did not attribute any value to intangible assets in determining the initial base consideration of $450.0 million per the acquisition agreement, whereas ProAssurance identified $14.0 million of intangible assets as a part of its estimated allocation of final acquisition consideration. Other changes in the fair values of NORCAL's assets and liabilities from the time ProAssurance entered into the definitive acquisition agreement in February 2020 to the close of the transaction in May 2021 also contributed to the increase in net assets acquired and gain on bargain purchase.

The preliminary allocation of acquisition consideration is shown in the table below.

(In thousands)		
Fixed maturities, available for sale	$	1,100,058
Equity investments, available for sale		374,484
Short-term investments		61,289
Business owned life insurance		12,581
Investment in unconsolidated subsidiaries		26,948
Other investments		32,461
Cash and cash equivalents		28,233
Premiums receivable		110,905
Receivable from reinsurers on paid losses and loss adjustment expenses		266
Receivable from reinsurers on unpaid losses and loss adjustment expenses		93,342
Prepaid reinsurance premiums		9,238
Deferred tax asset, net		46,759
Operating lease ROU assets		4,385
Intangible assets		14,000
Other assets		38,648
Reserve for losses and loss adjustment expenses		(1,182,445)
Unearned premiums		(178,400)
Reinsurance premiums payable		(12,981)
Operating lease liabilities		(5,275)
Other liabilities		(51,279)
Total identifiable net assets acquired	**$**	**523,217**
Gain on bargain purchase		(74,408)
Total acquisition consideration	**$**	**448,809**

The estimated fair values of intangible assets were determined based on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Intangible assets were identified that met either the separability criterion or the contractual-legal criterion under the acquisition method of accounting. Intangible assets acquired included the following:

(In thousands)		Estimated Fair Value on Acquisition Date	Estimated Useful Life
Trade name	$	1,000	3
Licenses		13,000	Indefinite
Total	**$**	**14,000**	

The estimated fair value of the reserve for losses and loss adjustment expenses and related reinsurance recoverables was based on three components: an actuarial estimate of the expected future net cash flows, a reduction to those cash flows for the time value of money determined utilizing the U.S. Treasury Yield Curve and a risk margin adjustment to reflect the net present value of profit that an investor would demand in return for the assumption of the development risk associated with the reserve. The fair value of the net reserve, including the risk margin adjustment and related reinsurance receivables, exceeded the actuarial estimate of NORCAL's undiscounted loss reserve as of May 5, 2021. On May 5, 2021, the fair value adjustment on the gross reserve of approximately $42.2 million was recorded to the reserve for losses and loss adjustment expenses and the fair value adjustment on the related reinsurance recoverables of approximately $3.5 million was recorded to the receivable from reinsurers on unpaid losses and loss adjustment expenses on the Consolidated Balance Sheets. These net fair value adjustments of $38.7 million will be amortized over a period utilizing loss payment patterns as a net reduction to prior accident year net losses and loss adjustment expenses.

The estimated fair value of VOBA was determined based on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date estimated using the income approach. The estimated negative VOBA recorded on the assumed unearned premium of $12.4 million was recorded to the

reserve for losses and loss adjustment expenses and the fair value adjustment on the related reinsurance recoverables of $0.7 million was recorded to receivable from reinsurers on unpaid losses and loss adjustment expenses on the Consolidated Balance Sheets. The net VOBA on unearned premium of $11.7 million will be amortized over a period in proportion to the earn-out of the premium as a reduction to current accident year net losses and loss adjustment expenses. The estimated negative VOBA recorded on the assumed DDR reserve totaling $3.5 million was also recorded to the reserve for losses and loss adjustment expenses on the Consolidated Balance Sheets and will be amortized over a period in proportion to the approximate consumption of losses as a reduction to prior accident year net losses and loss adjustment expenses.

ProAssurance recognized a total of approximately $14.6 million during the year ended December 31, 2021 related to the amortization of the fair value adjustment on the net reserve for losses and loss adjustment expenses, the negative net VOBA recorded on the assumed unearned premium and negative VOBA recorded on the DDR reserve. The following table details the remaining expected amortization of these adjustments for the four years following the acquisition and thereafter.

(In thousands)	Amount at May 5, 2021	Estimated amortization period (years)	Expected pre-tax amortization for year following the acquisition				
			2022	2023	2024	2025	Thereafter
Fair value adjustment on reserves, net [1]	$ 38,701	7	$ 10,595	$ 8,090	$ 5,083	$ 3,107	$ 4,058
Unearned premium VOBA, net [2]	11,676	1	4,939	—	—	—	—
DDR reserve VOBA [1]	3,467	15	224	243	243	243	2,375
Total	**$ 53,844**		**$ 15,758**	**$ 8,333**	**$ 5,326**	**$ 3,350**	**$ 6,433**

[1] Amortization will be recorded as a reduction to prior accident year net losses and loss adjustment expenses.
[2] Amortization will be recorded as a reduction to current accident year net losses and loss adjustment expenses.

Unaudited Supplemental Pro Forma Information

The following table provides Pro Forma Consolidated Results and Actual Consolidated Results for the years ended December 31, 2021 and 2020 as if the NORCAL transaction had occurred on January 1, 2020.

The pro forma financial information is presented for comparative purposes only and is not necessarily indicative of the operating results that may have actually occurred had the acquisition of NORCAL been completed on January 1, 2020. In addition, the unaudited pro forma financial information does not give effect to any anticipated cost savings, operating efficiencies or other synergies that may be associated with the acquisition, or any estimated costs that have been or will be incurred to integrate the assets and operations of NORCAL.

(In thousands)	Year Ended December 31	
	2021	2020
Revenue:		
ProAssurance Pro Forma Consolidated Results	**$ 1,247,272**	$ 1,275,459
ProAssurance Actual Consolidated Results	**$ 1,124,410**	$ 874,940
Net income (loss):		
ProAssurance Pro Forma Consolidated Results	**$ 88,223**	$ (113,557)
ProAssurance Actual Consolidated Results	**$ 144,124**	$ (175,727)

The ProAssurance Pro Forma Consolidated Results reflect pro forma adjustments, net of related tax effects, to give effect to certain events that are directly attributable to the acquisition. These pro forma adjustments primarily include:

- The addition of NORCAL's operating results prior to the acquisition to ProAssurance's Actual Consolidated Results in all periods shown.
- A reduction in expenses for the year ended December 31, 2021 and a corresponding increase for the year ended December 31, 2020 for transaction-related costs, including other costs associated with the acquisition such as compensation costs related to change in control payments.
- The effect of the amortization of intangible assets, VOBA and the fair value adjustment on the reserve. See previous amortization schedules for reference.
- The non-taxable gain on bargain purchase of $74.4 million that was included in ProAssurance's Actual Consolidated Results for the year ended December 31, 2021 has been reported in the Pro Forma Consolidated Results as being recognized during the year ended December 31, 2020.

- An adjustment to net investment income for the amortization of the fair value adjustment to NORCAL's investments.
- An increase to interest expense for the interest on the Contribution Certificates (see Note 13 for further discussion of the terms of the Contribution Certificates).

3. Fair Value Measurement

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. A three level hierarchy has been established for valuing assets and liabilities based on how transparent (observable) the inputs are that are used to determine fair value, with the inputs considered most observable categorized as Level 1 and those that are the least observable categorized as Level 3. Hierarchy levels are defined as follows:

Level 1: quoted (unadjusted) market prices in active markets for identical assets and liabilities. For ProAssurance, Level 1 inputs are generally quotes for securities actively traded in exchange or over-the-counter markets.

Level 2: market data obtained from sources independent of the reporting entity (observable inputs). For ProAssurance, Level 2 inputs generally include quoted prices in markets that are not active, quoted prices for similar assets or liabilities, and results from pricing models that use observable inputs such as interest rates and yield curves that are generally available at commonly quoted intervals.

Level 3: the reporting entity's own assumptions about market participant assumptions based on the best information available in the circumstances (non-observable inputs). For ProAssurance, Level 3 inputs are used in situations where little or no Level 1 or 2 inputs are available or are inappropriate given the particular circumstances. Level 3 inputs include results from pricing models for which some or all of the inputs are not observable, discounted cash flow methodologies, single non-binding broker quotes and adjustments to externally quoted prices that are based on management judgment or estimation.

Fair values of assets measured at fair value on a recurring basis as of December 31, 2021 and December 31, 2020 are shown in the following tables. Where applicable, the tables also indicate the fair value hierarchy of the valuation techniques utilized to determine those fair values. For some assets, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. When this is the case, the asset is categorized based on the level of the most significant input to the fair value measurement. Assessments of the significance of a particular input to the fair value measurement require judgment and consideration of factors specific to the assets being valued.

	December 31, 2021			
	Fair Value Measurements Using			Total
(In thousands)	Level 1	Level 2	Level 3	Fair Value
Assets:				
Fixed maturities, available-for-sale				
U.S. Treasury obligations	$ —	$ 238,507	$ —	$ 238,507
U.S. Government-sponsored enterprise obligations	—	20,234	—	20,234
State and municipal bonds	—	519,196	—	519,196
Corporate debt, multiple observable inputs	—	1,851,427	—	1,851,427
Corporate debt, limited observable inputs	—	—	47,129	47,129
Residential mortgage-backed securities	—	453,644	297	453,941
Agency commercial mortgage-backed securities	—	14,141	—	14,141
Other commercial mortgage-backed securities	—	231,483	—	231,483
Other asset-backed securities	—	451,459	6,205	457,664
Fixed maturities, trading	—	43,670	—	43,670
Equity investments				
Financial	6,615	855	—	7,470
Industrial	—	—	2,500	2,500
Bond funds	187,059	—	—	187,059
All other	17,778	—	—	17,778
Short-term investments	174,944	42,043	—	216,987
Other investments	1,889	95,288	1,434	98,611
Other assets	—	649	—	649
Total assets categorized within the fair value hierarchy	$ 388,285	$ 3,962,596	$ 57,565	4,408,446
Assets carried at NAV, which approximates fair value and which are not categorized within the fair value hierarchy, reported as a part of:				
Investment in unconsolidated subsidiaries				270,816
Total assets at fair value				$ 4,679,262
Liabilities:				
Other liabilities	$ —	$ —	$ 24,000	$ 24,000
Total liabilities categorized within the fair value hierarchy	$ —	$ —	$ 24,000	$ 24,000

	December 31, 2020			
	Fair Value Measurements Using			Total
(In thousands)	Level 1	Level 2	Level 3	Fair Value
Assets:				
Fixed maturities, available-for-sale				
U.S. Treasury obligations	$ —	$ 107,059	$ —	$ 107,059
U.S. Government-sponsored enterprise obligations	—	12,261	—	12,261
State and municipal bonds	—	332,920	—	332,920
Corporate debt, multiple observable inputs	—	1,326,077	—	1,326,077
Corporate debt, limited observable inputs	—	—	3,265	3,265
Residential mortgage-backed securities	—	274,509	2,032	276,541
Agency commercial mortgage-backed securities	—	13,310	—	13,310
Other commercial mortgage-backed securities	—	113,092	—	113,092
Other asset-backed securities	—	266,345	6,661	273,006
Fixed maturities, trading	—	48,456	—	48,456
Equity investments				
Financial	13,810	—	—	13,810
Utilities/Energy	564	—	—	564
Consumer oriented	1,262	—	—	1,262
Industrial	2,240	—	—	2,240
Bond funds	69,475	—	—	69,475
All other	20,202	—	—	20,202
Short-term investments	307,695	30,118	—	337,813
Other investments	1,509	42,607	—	44,116
Other assets	—	329	—	329
Total assets categorized within the fair value hierarchy	$ 416,757	$ 2,567,083	$ 11,958	2,995,798
Assets carried at NAV, which approximates fair value and which are not categorized within the fair value hierarchy, reported as a part of:				
Equity investments				12,548
Investment in unconsolidated subsidiaries				233,711
Total assets at fair value				$ 3,242,057

The fair values for securities included in the Level 2 category, with the few exceptions described below, were developed by one of several third-party, nationally recognized pricing services, including services that price only certain types of securities. Each service uses complex methodologies to determine values for securities and subject the values they develop to quality control reviews. Management selected a primary source for each type of security in the portfolio and reviewed the values provided for reasonableness by comparing data to alternate pricing services and to available market and trade data. Values that appeared inconsistent were further reviewed for appropriateness. Any value that did not appear reasonable was discussed with the service that provided the value and adjusted, if necessary. There were no material changes to the values supplied by the pricing services during the years ended December 31, 2021 and 2020.

Level 2 Valuations

Below is a summary description of the valuation methodologies primarily used by the pricing services for securities in the Level 2 category, by security type:

U.S. Treasury obligations were valued based on quoted prices for identical assets, or, in markets that are not active, quotes for similar assets, taking into consideration adjustments for variations in contractual cash flows and yields to maturity.

U.S. Government-sponsored enterprise obligations were valued using pricing models that consider current and historical market data, normal trading conventions, credit ratings and the particular structure and characteristics of the security being valued, such as yield to maturity, redemption options, and contractual cash flows. Adjustments to model inputs or model results were included in the valuation process when necessary to reflect recent regulatory, government or corporate actions or significant economic, industry or geographic events affecting the security's fair value.

State and municipal bonds were valued using a series of matrices that considered credit ratings, the structure of the security, the sector in which the security falls, yields and contractual cash flows. Valuations were further adjusted, when necessary, to reflect the expected effect on fair value of recent significant economic or geographic events or ratings changes.

Corporate debt, multiple observable inputs consisted primarily of corporate bonds. The methodology used to value Level 2 corporate bonds was the same as the methodology previously described for U.S. Government-sponsored enterprise obligations. Bank loans were valued based on an average of broker quotes for the loans in question, if available. If quotes were not available, the loans were valued based on quoted prices for comparable loans or, if the loan was newly issued, by comparison to similar seasoned issues. Broker quotes were compared to actual trade prices to permit assessment of the reliability of the quotes; unreliable quotes were not considered in quoted averages.

Residential and commercial mortgage-backed securities were valued using a pricing matrix which considers the issuer type, coupon rate and longest cash flows outstanding. The matrix used was based on the most recently available market information. Agency and non-agency collateralized mortgage obligations were both valued using models that consider the structure of the security, current and historical information regarding prepayment speeds, ratings and ratings updates, and current and historical interest rate and interest rate spread data.

Other asset-backed securities were valued using models that consider the structure of the security, monthly payment information, current and historical information regarding prepayment speeds, ratings and ratings updates, and current and historical interest rate and interest rate spread data. Spreads and prepayment speeds consider collateral type.

Fixed maturities, trading are held by the Lloyd's Syndicates segment and include U.S. Treasury obligations, corporate debt with multiple observable inputs and other asset-backed securities. These securities were valued using the respective valuation methodologies discussed above for each security type.

Equity investments were securities not traded on an exchange on the valuation date. The securities were valued using the most recently available quotes for the securities.

Short-term investments were securities maturing within one year, carried at fair value which approximated the cost of the securities due to their short-term nature.

Other investments consisted primarily of convertible bonds valued using a pricing model that incorporated selected dealer quotes as well as current market data regarding equity prices and risk free rates. If dealer quotes were unavailable for the security being valued, quotes for securities with similar terms and credit status were used in the pricing model. Dealer quotes selected for use were those considered most accurate based on parameters such as underwriter status and historical reliability.

Other assets consisted of an interest rate cap derivative instrument valued using a model which considers the volatilities from other instruments with similar maturities, strike prices, durations and forward yield curves. Under the terms of the interest rate cap agreement, ProAssurance paid a premium of $2 million for the right to receive cash payments based upon a notional amount of $35 million if and when the three-month LIBOR rises above 2.35%.

Level 3 Valuations

Below is a summary description of the valuation methodologies used as well as quantitative information regarding securities in the Level 3 category, by security type:

Level 3 Valuation Methodologies

Corporate debt, limited observable inputs consisted of corporate bonds valued using dealer quotes for similar securities or discounted cash flow models using yields currently available for similar securities. Similar securities are defined as securities of

comparable credit quality that have like terms and payment features. Assessments of credit quality were based on NRSRO ratings, if available, or were determined by management if not available. At December 31, 2021, 100% of the securities were rated and the average rating was BBB. At December 31, 2020, 100% of the securities were rated and the average rating was BB+.

Residential mortgage-backed and other asset-backed securities consisted of securitizations of receivables valued using dealer quotes for similar securities or discounted cash flow models using yields currently available for similar securities. Similar securities are defined as securities of comparable credit quality that have like terms and payment features. Assessments of credit quality were based on NRSRO ratings, if available, or were subjectively determined by management if not available. At December 31, 2021, 100% of the securities were rated and the average rating was BBB+. At December 31, 2020, 51% of the securities were rated and the average rating was AA-.

Equity investments consisted of preferred stock for which limited observable inputs were available at December 31, 2021. The equity securities were primarily priced using broker/dealer quotes and internal models with some inputs that are unobservable.

Other investments consisted of one convertible security for which limited observable inputs were available at December 31, 2021. The security was valued internally based on expected cash flows, including the expected final recovery, discounted at a yield that considered the lack of liquidity and the financial status of the issuer.

Other liabilities consisted of the contingent consideration which is a portion of the purchase price for the NORCAL acquisition and is recorded at fair value each reporting period. The ultimate payout under the contingent consideration is dependent on the after-tax development of NORCAL's ultimate net losses over a three-year period beginning December 31, 2020 and may total up to $84 million. See further discussion around the contingent consideration in Note 2 and Note 11.

Quantitative Information Regarding Level 3 Valuations

	Fair Value at				
($ in thousands)	**December 31, 2021**	December 31, 2020	**Valuation Technique**	**Unobservable Input**	**Range (Weighted Average)**
Assets:					
Corporate debt, limited observable inputs	**$47,129**	$3,265	Market Comparable Securities	Comparability Adjustment	0% - 5% (2.5%)
			Discounted Cash Flows	Comparability Adjustment	0% - 5% (2.5%)
Residential mortgage-backed securities	**$297**	$2,032	Market Comparable Securities	Comparability Adjustment	0% - 5% (2.5%)
			Discounted Cash Flows	Comparability Adjustment	0% - 5% (2.5%)
Other asset-backed securities	**$6,205**	$6,661	Market Comparable Securities	Comparability Adjustment	0% - 5% (2.5%)
			Discounted Cash Flows	Comparability Adjustment	0% - 5% (2.5%)
Equity investments	**$2,500**	$—	Discounted Cash Flows	Comparability Adjustment	0% - 10% (5%)
Other investments	**$1,434**	$—	Discounted Cash Flows	Comparability Adjustment	0% - 10% (5%)
Liabilities:					
Other liabilities	**$24,000**	$—	Stochastic Model/ Discounted Cash Flows	N/A	0% - 10% (8%)

The significant unobservable inputs used in the fair value measurement of the above listed securities were the valuations of comparable securities with similar issuers, credit quality and maturity. Changes in the availability of comparable securities could result in changes in the fair value measurements.

Fair Value Measurements - Level 3 Assets

The following tables present summary information regarding changes in the fair value of assets measured using Level 3 inputs.

	December 31, 2021				
	Level 3 Fair Value Measurements – Assets				
(In thousands)	Corporate Debt	Asset-backed Securities	Equity Investments	Other Investments	Total
Balance, December 31, 2020	**$ 3,265**	**$ 8,693**	**$ —**	**$ —**	**$ 11,958**
Total gains (losses) realized and unrealized:					
Included in earnings, as a part of:					
Net investment income	**1**	**(3)**	**—**	**—**	**(2)**
Net investment gains (losses)	**(14)**	**(11)**	**15**	**(774)**	**(784)**
Included in other comprehensive income	**27**	**(403)**	**—**	**—**	**(376)**
Purchases	**57,586**	**31,204**	**9,083**	**205**	**98,078**
Sales	**(3,277)**	**(800)**	**(5,799)**	**—**	**(9,876)**
Transfers in	**858**	**—**	**69**	**3,586**	**4,513**
Transfers out	**(11,317)**	**(32,178)**	**(868)**	**(1,583)**	**(45,946)**
Balance, December 31, 2021	**$ 47,129**	**$ 6,502**	**$ 2,500**	**$ 1,434**	**$ 57,565**
Change in unrealized gains (losses) included in earnings for the above period for Level 3 assets held at period-end	**$ —**	**$ —**	**$ 10**	**$ (774)**	**$ (764)**

	December 31, 2020			
	Level 3 Fair Value Measurements – Assets			
(In thousands)	Corporate Debt	Asset-backed Securities	Other Investments	Total
Balance, December 31, 2019	$ 5,079	$ 2,992	$ 3,086	$ 11,157
Total gains (losses) realized and unrealized:				
Included in earnings, as a part of:				
Net investment income	(2)	(18)	—	(20)
Net investment gains (losses)	—	(8)	151	143
Included in other comprehensive income	216	109	—	325
Purchases	2,869	20,490	—	23,359
Sales	(2,178)	(4,346)	—	(6,524)
Transfers in	945	605	—	1,550
Transfers out	(3,664)	(11,131)	(3,237)	(18,032)
Balance, December 31, 2020	$ 3,265	$ 8,693	$ —	$ 11,958
Change in unrealized gains (losses) included in earnings for the above period for Level 3 assets held at period-end	$ —	$ —	$ 151	$ 151

Fair Value Measurements - Level 3 Liabilities

There was no change in the fair value of the contingent consideration from the date of the NORCAL acquisition on May 5, 2021 to December 31, 2021.

Transfers

Transfers shown in the preceding Level 3 tables were as of the end of the period in which the transfer occurred. All transfers were to or from Level 2.

All transfers in and out of Level 3 during 2021 and 2020 related to securities held for which the level of market activity for identical or nearly identical securities varies from period to period. The securities were valued using multiple observable inputs when those inputs were available; otherwise the securities were valued using limited observable inputs.

Fair Values Not Categorized

At December 31, 2021 and 2020, certain LPs/LLCs and investment funds measure fund assets at fair value on a recurring basis and provide a NAV for ProAssurance's interest. The carrying value of these interests is based on the NAV provided and was considered to approximate the fair value of the interests. For investment in unconsolidated subsidiaries, ProAssurance recognizes any changes in the NAV of its interests in equity in earnings (loss) of unconsolidated subsidiaries during the period of change. In accordance with GAAP, the fair value of these investments was not classified within the fair value hierarchy. The amount of ProAssurance's unfunded commitments related to these investments as of December 31, 2021 and fair values of these investments as of December 31, 2021 and 2020 were as follows:

	Unfunded Commitments	**Fair Value**	
(In thousands)	**December 31, 2021**	**December 31, 2021**	December 31, 2020
Equity investments:			
Mortgage fund [1]	**None**	**$ —**	$ 12,548
Investment in unconsolidated subsidiaries:			
Private debt funds [2]	**$8,817**	**18,465**	16,387
Long/short equity funds [3]	**None**	**655**	596
Non-public equity funds [4]	**$52,938**	**160,219**	138,357
Credit funds [5]	**$55,237**	**47,300**	34,848
Strategy focused funds [6]	**$31,939**	**44,177**	43,523
		270,816	233,711
Total investments carried at NAV		**$ 270,816**	$ 246,259

Below is additional information regarding each of the investments listed in the table above as of December 31, 2021.

[1] This investment fund was focused on the structured mortgage market. The fund primarily invested in U.S. Agency mortgage-backed securities. Redemptions are allowed at the end of any calendar quarter with a prior notice requirement of 65 days and are paid within 45 days at the end of the redemption dealing day.

[2] This investment is comprised of interests in two unrelated LP funds that are structured to provide interest distributions primarily through diversified portfolios of private debt instruments. One LP allows redemption by special consent, while the other does not permit redemption. Income and capital are to be periodically distributed at the discretion of the LPs over an anticipated time frame that spans from three to eight years.

[3] This investment holds primarily long and short North American equities and targets absolute returns using strategies designed to take advantage of market opportunities. Redemptions are permitted; however, redemptions above specified thresholds (lowest threshold is 90%) may be only partially payable until after a fund audit is completed and are then payable within 30 days.

[4] This investment is comprised of interests in multiple unrelated LP funds, each structured to provide capital appreciation through diversified investments in private equity, which can include investments in buyout, venture capital, debt including senior, second lien and mezzanine, distressed debt, collateralized loan obligations and other private equity-oriented LPs. Two of the LPs allow redemption by terms set forth in the LP agreements; the others do not permit redemption. Income and capital are to be periodically distributed at the discretion of the LP over time frames that are anticipated to span up to ten years.

[5] This investment is comprised of multiple unrelated LP funds. Two funds seek to obtain superior risk-adjusted absolute returns through a diversified portfolio of debt securities, including bonds, loans and other asset-backed instruments. The remaining funds focus on private middle market company mezzanine and senior secured loans, opportunities across the credit spectrum, mortgage backed-loans, as well as various types of loan-backed investments. Three of the funds allow redemptions at any quarter-end with prior notice requirements that vary from 90 to 180 days while two other funds allow for redemptions with consent of the General Partner. The remaining funds do not allow redemptions. For the funds that do not allow redemptions, income and capital are to be periodically distributed at the discretion of the LP over time frames throughout the remaining life of the funds.

(6) This investment is comprised of multiple unrelated LPs/LLCs funds. One fund is an LLC focused on investing in North American consumer products companies, comprised of equity and equity-related securities, as well as debt instruments. A second fund is focused on aircraft investments, along with components and assets related to aircrafts. For both funds, redemptions are not permitted. Another fund is an LP focused on North American energy infrastructure assets that allows redemption with consent of the General Partner. The remaining funds are real estate focused LPs, one of which allows for redemption with prior notice.

ProAssurance may not sell, transfer or assign its interest in any of the above LPs/LLCs without special consent from the LPs/LLCs.

Nonrecurring Fair Value Measurement

During the third quarter of 2020, ProAssurance recognized a nonrecurring fair value measurement related to the goodwill in its Specialty P&C reporting unit with a carrying value of $161.1 million prior to the fair value measurement. This nonrecurring fair value measurement resulted in the goodwill being written down to its implied fair value of zero resulting in an impairment of goodwill of $161.1 million. The inputs used in the fair value measurement were non-observable and, as such, were categorized as a Level 3 valuation. ProAssurance did not have any other assets or liabilities that were measured at fair value on a nonrecurring basis at December 31, 2021 or 2020.

Financial Instruments - Methodologies Other Than Fair Value

The following table provides the estimated fair value of the Company's financial instruments that, in accordance with GAAP for the type of investment, are measured using a methodology other than fair value. Fair values provided primarily fall within the Level 3 fair value category.

	December 31, 2021		December 31, 2020	
(In thousands)	**Carrying Value**	**Fair Value**	Carrying Value	Fair Value
Financial assets:				
BOLI	**$ 81,767**	**$ 81,767**	$ 67,847	$ 67,847
Other investments	**$ 3,183**	**$ 3,183**	$ 2,952	$ 2,952
Other assets	**$ 40,581**	**$ 40,583**	$ 31,128	$ 31,141
Financial liabilities:				
Senior notes due 2023*	**$ 250,000**	**$ 264,000**	$ 250,000	$ 269,160
Mortgage Loans*	**$ —**	**$ —**	$ 36,113	$ 36,113
Contribution Certificates	**$ 175,900**	**$ 179,892**	$ —	$ —
Other liabilities	**$ 52,332**	**$ 52,332**	$ 30,334	$ 30,334

* Carrying value excludes unamortized debt issuance costs.

The fair value of the BOLI was equal to the cash surrender value associated with the policies on the valuation date.

Other investments listed in the table above include FHLB common stock carried at cost and an annuity investment carried at amortized cost. Three of ProAssurance's insurance subsidiaries are members of an FHLB. The estimated fair value of the FHLB common stock was based on the amount the subsidiaries would receive if their memberships were canceled, as the memberships cannot be sold. The fair value of the annuity represents the present value of the expected future cash flows discounted using a rate available in active markets for similarly structured instruments.

Other assets and other liabilities primarily consisted of related investment assets and liabilities associated with funded deferred compensation agreements. The fair value of the funded deferred compensation assets was based upon quoted market prices, which is categorized as a Level 1 valuation, and had a fair value of $39.5 million and $30.6 million at December 31, 2021 and 2020, respectively. The fair value of the funded deferred compensation assets as of December 31, 2021 included rabbi trust assets acquired as a result of the NORCAL acquisition, which consists entirely of cash equivalents and mutual funds with a total fair value of $5.2 million (see Note 2 for additional information on NORCAL acquisition). Other assets also included an unsecured note receivable under a separate line of credit agreement. The fair value of the note receivable was based on the present value of expected cash flows from the note receivable, discounted at market rates on the valuation date for receivables with similar credit standings and similar payment structures. Other liabilities primarily consisted of liabilities associated with funded deferred compensation agreements. The reported balance is determined based on the amount of elective deferrals and

employer contributions adjusted for periodic changes in the fair value of the participant balances based on the performance of the funds selected by the participants and had a fair value of $52.3 million and $30.3 million at December 31, 2021 and December 31, 2020, respectively. The fair value of the funded deferred compensation liabilities as of December 31, 2021 included liabilities assumed as a result of the NORCAL acquisition, with a total fair value of $18.4 million (see Note 2 for additional information).

The fair value of the debt, excluding the Contribution Certificates, was estimated based on the present value of expected future cash outflows, discounted at rates available on the valuation date for similar debt issued by entities with a similar credit standing to ProAssurance.

The fair value of the Contribution Certificates was estimated based on a binomial option pricing model. The Contribution Certificates is a portion of the purchase consideration for the NORCAL acquisition and are issued to certain NORCAL policyholders in the conversion, and those instruments are an obligation of NORCAL Insurance Company, the successor of NORCAL Mutual Insurance Company (see Note 2 and 13 for further discussion of the terms of the Contribution Certificates).

4. Investments

Available-for-sale fixed maturities at December 31, 2021 and December 31, 2020 included the following:

(In thousands)	December 31, 2021			
	Amortized Cost	**Gross Unrealized Gains**	**Gross Unrealized Losses**	**Estimated Fair Value**
Fixed maturities, available-for-sale				
U.S. Treasury obligations	**$ 239,765**	**$ 1,166**	**$ 2,424**	**$ 238,507**
U.S. Government-sponsored enterprise obligations	**20,467**	**29**	**262**	**$ 20,234**
State and municipal bonds	**511,750**	**9,620**	**2,174**	**$ 519,196**
Corporate debt	**1,884,455**	**29,050**	**14,949**	**$ 1,898,556**
Residential mortgage-backed securities	**455,438**	**4,254**	**5,751**	**$ 453,941**
Agency commercial mortgage-backed securities	**13,909**	**294**	**62**	**$ 14,141**
Other commercial mortgage-backed securities	**231,226**	**2,530**	**2,273**	**$ 231,483**
Other asset-backed securities	**457,837**	**2,747**	**2,920**	**$ 457,664**
	$ 3,814,847	**$ 49,690**	**$ 30,815**	**$ 3,833,722**

(In thousands)	December 31, 2020				
	Amortized Cost	Allowance for Expected Credit Losses	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Fixed maturities, available-for-sale					
U.S. Treasury obligations	$ 104,097	$ —	$ 2,985	$ 23	$ 107,059
U.S. Government-sponsored enterprise obligations	12,103	—	158	—	12,261
State and municipal bonds	316,022	—	16,937	39	332,920
Corporate debt	1,267,992	552	63,204	1,302	1,329,342
Residential mortgage-backed securities	269,752	—	7,171	382	276,541
Agency commercial mortgage-backed securities	12,623	—	687	—	13,310
Other commercial mortgage-backed securities	109,244	—	4,788	940	113,092
Other asset-backed securities	269,742	—	4,006	742	273,006
	$2,361,575	$ 552	$ 99,936	$ 3,428	$2,457,531

The recorded cost basis and estimated fair value of available-for-sale fixed maturities at December 31, 2021, by contractual maturity, are shown below. Actual maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

(In thousands)	Amortized Cost	Due in one year or less	Due after one year through five years	Due after five years through ten years	Due after ten years	Total Fair Value
Fixed maturities, available-for-sale						
U.S. Treasury obligations	**$ 239,765**	**$ 20,327**	**$ 131,030**	**$ 85,457**	**$ 1,693**	**$ 238,507**
U.S. Government-sponsored enterprise obligations	**20,467**	**4,412**	**11,646**	**4,033**	**143**	**20,234**
State and municipal bonds	**511,750**	**21,480**	**166,434**	**194,053**	**137,229**	**519,196**
Corporate debt	**1,884,455**	**94,395**	**864,520**	**821,209**	**118,432**	**1,898,556**
Residential mortgage-backed securities	**455,438**					**453,941**
Agency commercial mortgage-backed securities	**13,909**					**14,141**
Other commercial mortgage-backed securities	**231,226**					**231,483**
Other asset-backed securities	**457,837**					**457,664**
	$ 3,814,847					**$ 3,833,722**

Excluding obligations of the U.S. Government, U.S. Government-sponsored enterprises and a U.S. Government obligations money market fund, no investment in any entity or its affiliates exceeded 10% of shareholders' equity at December 31, 2021.

Cash and securities with a carrying value of $56.7 million at December 31, 2021 were on deposit with various state insurance departments to meet regulatory requirements.

As a member of Lloyd's, ProAssurance is required to maintain capital at Lloyd's, referred to as FAL, to support underwriting by Syndicate 1729. At December 31, 2021, ProAssurance's FAL investments were comprised of available-for-sale fixed maturities with a fair value of $36.6 million and cash and cash equivalents of $1.2 million on deposit with Lloyd's in order to satisfy these FAL requirements. During the second and fourth quarters of 2021, ProAssurance received a return of approximately $24.5 million and $8.0 million, respectively, of cash from its FAL balances given the reduction in the Company's participation in the results of Syndicate 1729, to 5% from 29%, and Syndicate 6131, to 50% from 100%, for the 2021 underwriting year. Further, during the fourth quarter of 2021, ProAssurance received a return of approximately $26.6 million of cash from its FAL balances given Syndicate 6131 ceased underwriting on a quota share basis with Syndicate 1729 as Syndicate 6131's business is retained within Syndicate 1729 beginning with the 2022 underwriting year (see Note 18 for additional information).

Investments Held in a Loss Position

The following tables provide summarized information with respect to investments held in an unrealized loss position at December 31, 2021 and December 31, 2020, including the length of time the investment had been held in a continuous unrealized loss position.

	December 31, 2021					
	Total		**Less than 12 months**		**12 months or longer**	
(In thousands)	**Fair Value**	**Unrealized Loss**	**Fair Value**	**Unrealized Loss**	**Fair Value**	**Unrealized Loss**
Fixed maturities, available-for-sale						
U.S. Treasury obligations	**$ 190,054**	**$ 2,424**	**$ 181,689**	**$ 2,206**	**$ 8,365**	**$ 218**
U.S. Government-sponsored enterprise obligations	**16,287**	**262**	**16,287**	**262**	**—**	**—**
State and municipal bonds	**175,442**	**2,174**	**171,930**	**2,039**	**3,512**	**135**
Corporate debt	**945,196**	**14,949**	**866,731**	**11,828**	**78,465**	**3,121**
Residential mortgage-backed securities	**326,248**	**5,751**	**290,019**	**4,320**	**36,229**	**1,431**
Agency commercial mortgage-backed securities	**4,529**	**62**	**4,355**	**54**	**174**	**8**
Other commercial mortgage-backed securities	**151,827**	**2,273**	**145,467**	**1,884**	**6,360**	**389**
Other asset-backed securities	**278,915**	**2,920**	**271,463**	**2,796**	**7,452**	**124**
	$ 2,088,498	**$ 30,815**	**$ 1,947,941**	**$ 25,389**	**$ 140,557**	**$ 5,426**

	December 31, 2020					
	Total		Less than 12 months		12 months or longer	
(In thousands)	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
Fixed maturities, available-for-sale						
U.S. Treasury obligations	$ 14,390	$ 23	$ 14,390	$ 23	$ —	$ —
State and municipal bonds	6,416	39	6,416	39	—	—
Corporate debt	94,695	1,302	79,436	1,020	15,259	282
Residential mortgage-backed securities	34,928	382	34,509	381	419	1
Other commercial mortgage-backed securities	18,766	940	18,480	935	286	5
Other asset-backed securities	43,739	742	37,850	701	5,889	41
	$ 212,934	$ 3,428	$ 191,081	$ 3,099	$ 21,853	$ 329

As of December 31, 2021, excluding U.S. Government or U.S. Government-sponsored enterprise obligations, there were 1,766 debt securities (45.8% of all available-for-sale fixed maturity securities held) in an unrealized loss position representing 998 issuers. The greatest and second greatest unrealized loss positions among those securities were each approximately $0.4 million. The securities were evaluated for impairment as of December 31, 2021.

As of December 31, 2020, excluding U.S. Government or U.S. Government-sponsored enterprise obligations, there were 292 debt securities (11.1% of all available-for-sale fixed maturity securities held) in an unrealized loss position representing 229 issuers. The greatest and second greatest unrealized loss positions among those securities were approximately $0.4 million and $0.2 million, respectively. The securities were evaluated for impairment as of December 31, 2020.

Each quarter, ProAssurance performs a detailed analysis for the purpose of assessing whether any of the securities it holds in an unrealized loss position has suffered an impairment due to credit or non-credit factors. A detailed discussion of the factors considered in the assessment is included in Note 1.

Fixed maturity securities held in an unrealized loss position at December 31, 2021, excluding asset-backed securities, have paid all scheduled contractual payments and are expected to continue. Expected future cash flows of asset-backed securities, excluding those issued by GNMA, FNMA and FHLMC, held in an unrealized loss position were estimated as part of the December 31, 2021 impairment evaluation using the most recently available six-month historical performance data for the collateral (loans) underlying the security or, if historical data was not available, sector based assumptions, and equaled or exceeded the current amortized cost basis of the security.

The following tables present a roll forward of the allowance for expected credit losses on available-for-sale fixed maturities for the years ended December 31, 2021 and 2020.

	Year Ended December 31, 2021	
(In thousands)	**Corporate Debt**	**Total**
Balance, at December 31, 2020	**$ 552**	**$ 552**
Reductions related to:		
Securities sold during the period	**(552)**	**(552)**
Balance, at December 31, 2021	**$ —**	**$ —**

	Year Ended December 31, 2020	
(In thousands)	Corporate Debt	Total
Balance, at December 31, 2019	$ —	$ —
Additional credit losses related to securities for which:		
No allowance for credit losses has been previously recognized	1,508	1,508
Reductions related to:		
Securities sold during the period	(956)	(956)
Balance, at December 31, 2020	$ 552	$ 552

Other information regarding sales and purchases of fixed maturity available-for-sale securities is as follows:

	Year Ended December 31		
(In millions)	**2021**	2020	2019
Proceeds from sales (exclusive of maturities and paydowns)	**$ 504.0**	$ 354.4	$ 177.1
Purchases	**$ 1,438.2**	$ 917.0	$ 695.6

Equity Investments

ProAssurance's equity investments are carried at fair value with changes in fair value recognized in income as a component of net investment gains (losses) during the period of change. Equity investments on the Consolidated Balance Sheets as of December 31, 2021 and 2020 primarily included stocks, bond funds and investment funds.

Short-term Investments

ProAssurance's short-term investments, which have a maturity at purchase of one year or less, are primarily comprised of investments in U.S. treasury obligations, commercial paper and money market funds. Short-term investments are carried at fair value which approximates the cost of the securities due to their short-term nature.

BOLI

ProAssurance holds BOLI policies that are carried at the current cash surrender value of the policies (original cost $43 million), which includes the BOLI policies acquired from NORCAL (original cost $10 million). All insured individuals were members of ProAssurance or NORCAL management at the time the policies were acquired. The primary purpose of the

program is to offset future employee benefit expenses through earnings on the cash value of the policies. ProAssurance is the owner and beneficiary of these policies.

Net Investment Income

Net investment income by investment category was as follows:

(In thousands)	Year Ended December 31 2021	2020	2019
Fixed maturities	**$ 74,437**	$ 69,308	$ 72,593
Equities	**2,539**	4,369	17,650
Short-term investments, including Other	**1,969**	2,683	7,493
BOLI	**2,698**	2,023	2,017
Investment fees and expenses	**(11,121)**	(6,385)	(6,484)
Net investment income	**$ 70,522**	$ 71,998	$ 93,269

Investment in Unconsolidated Subsidiaries

ProAssurance's investment in unconsolidated subsidiaries were as follows:

	December 31, 2021	Carrying Value	
(In thousands)	Percentage Ownership	December 31, 2021	December 31, 2020
Qualified affordable housing project tax credit partnerships	**See below**	**$ 12,424**	$ 27,719
All other investments, primarily investment fund LPs/LLCs	**See below**	**323,152**	282,810
		$ 335,576	$ 310,529

Qualified affordable housing project tax credit partnership interests held by ProAssurance generate investment returns by providing tax benefits to fund investors in the form of tax credits and project operating losses. The carrying value of these investments reflects ProAssurance's total commitments (both funded and unfunded) to the partnerships, less any amortization. ProAssurance's ownership percentage relative to two of the tax credit partnership interests is almost 100%; these interests had a carrying value of $3.2 million and $9.4 million at December 31, 2021 and 2020, respectively. ProAssurance's ownership percentage relative to the remaining tax credit partnership interests is less than 20%; these interests had a carrying value of $9.2 million and $18.3 million at December 31, 2021 and 2020, respectively. Since ProAssurance has the ability to exert influence over the partnerships but does not control them, all are accounted for using the equity method. See further discussion of the entities in which ProAssurance holds passive interests in Note 16.

ProAssurance holds interests in investment fund LPs/LLCs and other equity method investments and LPs/LLCs which are not considered to be investment funds. ProAssurance's ownership percentage relative to four of the LPs/LLCs is greater than 25%, which is expected to be reduced as the funds mature and other investors participate in the funds; these investments had a carrying value of $49.0 million and $46.2 million at December 31, 2021 and 2020, respectively. ProAssurance's ownership percentage relative to the remaining investments and LPs/LLCs is less than 25%; these interests had a carrying value of $274.2 million and $236.6 million at December 31, 2021 and 2020, respectively. ProAssurance does not have the ability to exert control over any of these funds.

Equity in Earnings (Loss) of Unconsolidated Subsidiaries

Equity in earnings (loss) of unconsolidated subsidiaries included losses from qualified affordable housing project tax credit partnerships and a historic tax credit partnership. Investment results recorded reflect ProAssurance's allocable portion of partnership operating results. Tax credits reduce income tax expense in the period they are recognized. The results recorded and tax credits recognized related to ProAssurance's tax credit partnership investments were as follows:

	Year Ended December 31		
(In thousands)	**2021**	2020	2019
Qualified affordable housing project tax credit partnerships			
Losses recorded	**$ 15,239**	$ 18,684	$ 19,231
Tax credits recognized	**$ 13,160**	$ 17,465	$ 21,933
Historic tax credit partnership*			
Losses (gains) recorded	**$ (182)**	$ 1,092	$ 1,672
Tax credits recognized	**$ —**	$ 412	$ —

*ProAssurance holds a historic tax credit partnership which was fully amortized in 2020. This partnership generated investment returns by providing benefits to fund investors in the form of tax credits, tax deductible project operating losses and positive cash flows. ProAssurance received a distribution associated with this investment during the first quarter of 2021, as a result of positive cash flows from a completed project, which was recognized as an operating gain.

The tax credits generated from the Company's tax credit partnership investments of $13.2 million, $17.9 million and $18.2 million for the years ended December 31, 2021, 2020 and 2019, respectively, were deferred and are expected to be utilized in future periods. For the year ended December 31, 2021, ProAssurance utilized approximately $2.0 million of tax credits carried forward from 2019 and, as of December 31, 2021, the Company had approximately $46.7 million of available tax credit carryforwards generated from its investments in tax credit partnerships which we expect to utilize in future years (see further discussion in Note 7).

Tax credits provided by the underlying projects of the Company's historic tax credit partnership are typically available in the tax year in which the project is put into active service, whereas the tax credits provided by qualified affordable housing project tax credit partnerships are provided over approximately a ten year period.

Net Investment Gains (Losses)

Realized investment gains and losses are recognized on the first-in, first-out basis. The following table provides detailed information regarding net investment gains (losses):

(In thousands)	Year Ended December 31		
	2021	2020	2019
Total impairment losses:			
Corporate debt	**$ —**	$ (1,745)	$ (978)
Portion of impairment losses recognized in other comprehensive income before taxes:			
Corporate debt	**—**	237	227
Net impairment losses recognized in earnings	**—**	(1,508)	(751)
Gross realized gains, available-for-sale fixed maturities	**14,311**	13,855	3,786
Gross realized (losses), available-for-sale fixed maturities	**(1,218)**	(2,501)	(538)
Net realized gains (losses), trading fixed maturities	**(20)**	288	74
Net realized gains (losses), equity investments	**7,337**	13,192	20,577
Net realized gains (losses), other investments	**8,660**	3,883	1,626
Change in unrealized holding gains (losses), trading fixed maturities	**(529)**	501	705
Change in unrealized holding gains (losses), equity investments	**(2,941)**	(16,287)	30,674
Change in unrealized holding gains (losses), convertible securities, carried at fair value	**(1,701)**	3,850	3,653
Other	**411**	405	68
Net investment gains (losses)	**$ 24,310**	$ 15,678	$ 59,874

For the year ended December 31, 2021, ProAssurance did not recognize any credit-related impairment losses in earnings or non-credit impairment losses in OCI. For the year ended December 31, 2020, ProAssurance recognized credit-related impairment losses in earnings of $1.5 million and a nominal amount of non-credit impairment losses in OCI. The credit-related impairment losses recognized in 2020 primarily related to corporate bonds in the energy and consumer sectors. Additionally, 2020 included credit-related impairment losses related to four corporate bonds in various sectors, which were sold during 2020. The non-credit impairment losses recognized in 2020 related to three corporate bonds in the energy and consumer sectors. For the year ended December 31, 2019, ProAssurance recognized credit-related impairment losses in earnings of $0.8 million and nominal amount of non-credit impairment losses in OCI, both of which related to three corporate bonds in the energy and consumer sectors.

ProAssurance recognized $24.3 million of net investment gains during 2021, driven primarily by realized gains on the sale of certain available-for-sale fixed maturities and other investments. ProAssurance recognized $15.7 million of net investment gains during 2020, driven primarily by realized gains on the sale of available-for-sale fixed maturities and equity investments, partially offset by unrealized holding losses resulting from decreases in the fair value on the Company's equity portfolio due to the volatility in the global financial markets related to COVID-19. ProAssurance recognized $59.9 million of net investment gains during 2019 driven by both realized gains from the sale of equity investments and unrealized holding gains on the Company's equity portfolio due to the improvement in the market, which caused the Company's equity securities to increase in value. The most significant sectors that benefited from the improvement in the market in 2019 were the financial and energy sectors.

The following table presents a roll forward of cumulative credit losses recorded in earnings related to impaired debt securities for which a portion of the impairment was recorded in OCI.

(In thousands)	Year Ended December 31		
	2021	2020	2019
Balance beginning of period	**$ 552**	$ 470	$ 93
Additional credit losses recognized during the period, related to securities for which:			
No impairment has been previously recognized	**—**	1,064	377
Impairment has been previously recognized	**—**	258	—
Reductions due to:			
Securities sold during the period (realized)	**(552)**	(1,240)	—
Balance December 31	**$ —**	$ 552	$ 470

5. Retroactive Insurance Contracts

ProAssurance offers custom alternative risk solutions which include assumed reinsurance. In the first quarter of 2021, ProAssurance entered into an assumed reinsurance arrangement with a regional hospital group. As the contract included both prospective coverage and retroactive coverage, ProAssurance bifurcated the provisions of the contract and accounted for each component separately. In the first quarter of 2021, ProAssurance recognized total net premiums written of $4.5 million, comprised of $2.2 million of prospective coverage and $2.3 million of retroactive coverage, total net premiums earned of $3.0 million, comprised of $0.7 million of prospective coverage and $2.3 million of retroactive coverage and total net losses and loss adjustment expenses of $2.9 million in the Consolidated Statements of Income and Comprehensive Income. See Note 1 for additional information regarding ProAssurance's accounting policy for retroactive insurance contracts.

6. Reinsurance

ProAssurance purchases reinsurance from third-party reinsurers and insurance enterprises in order to reduce its net exposure to losses, to provide capacity to write larger limits of liability, to provide reimbursement for losses incurred under the higher limit coverages the Company offers and as a mechanism for providing custom insurance solutions. ProAssurance also uses reinsurance arrangements as a mechanism for sharing risk with insureds or their affiliates.

The effects of reinsurance for the years ended December 31, 2021, 2020 and 2019 were as follows:

	Year Ended December 31		
(In thousands)	**2021**	2020	2019
Direct	**$ 912,387**	$ 814,298	$ 919,799
Assumed	**47,637**	40,124	47,691
Ceded	**(77,303)**	(106,721)	(124,765)
Net premiums written	**$ 882,721**	$ 747,701	$ 842,725
Direct	**$ 1,020,107**	$ 862,742	$ 926,035
Assumed	**45,559**	43,555	45,668
Ceded	**(93,998)**	(113,582)	(124,171)
Net premiums earned	**$ 971,668**	$ 792,715	$ 847,532
Losses and loss adjustment expenses	**$ 798,893**	$ 741,719	$ 871,780
Reinsurance recoveries	**(46,644)**	(80,272)	(117,865)
Net losses and loss adjustment expenses	**$ 752,249**	$ 661,447	$ 753,915

The receivable from reinsurers on unpaid losses and LAE represents management’s estimated amount of future loss payments that will be recoverable under ProAssurance reinsurance agreements. Certain of the Company's reinsurance agreements base the amount of premium that is due to the reinsurer in part on losses reimbursed or to be reimbursed under the agreement, and terms may also include minimum and maximum amounts of ceded premium. Ceded premium amounts are estimated based on management’s expectation of ultimate losses and the portion of those losses that are allocable to reinsurers according to the terms of the agreements, including any minimums or maximums. Given the uncertainty of the ultimate amounts of losses, management’s estimates of losses and related amounts recoverable may vary significantly from the eventual outcome. Due to changes in management’s estimates of amounts due to reinsurers related to prior accident year loss recoveries, ProAssurance decreased premiums ceded in its Specialty P&C segment by $3.9 million during the year ended December 31, 2021 and increased premiums ceded by $0.7 million and $2.8 million during the years ended December 31,2020 and 2019, respectively.

Reinsurance contracts do not relieve ProAssurance from its obligations to policyholders, and ProAssurance remains liable to its policyholders whether or not reinsurers honor their contractual obligations. ProAssurance continually monitors its reinsurers to minimize its exposure to significant losses from reinsurer insolvencies.

At December 31, 2021, the net total amounts due from reinsurers was $468.3 million (receivables related to paid and unpaid losses and LAE and prepaid reinsurance premiums, less reinsurance premiums payable). No single reinsurer had an individual balance which exceeded $51.7 million.

At December 31, 2021 reinsurance recoverables totaling approximately $97.9 million were collateralized by letters of credit or funds withheld. Expected credit losses associated with the Company's reinsurance receivables (related to both paid and unpaid losses) were nominal in amount as of December 31, 2021 and 2020. ProAssurance had no allowance for expected credit

losses related to our reinsurance receivables at December 31, 2019. During the years ended December 31, 2021, 2020 or 2019, no reinsurance balances were written off for credit reasons. For further information on our allowance for expected credit losses related to our receivables from reinsurers see Note 1.

During the fourth quarter of 2020, ProAssurance commuted a quota share reinsurance agreement with one of its reinsurers which resulted in a net cash receipt of approximately $6.8 million and reduced its receivable from reinsurers on unpaid losses and LAE by approximately $7.0 million.

During the fourth quarter of 2018, ProAssurance commuted the 2017 calendar year quota share reinsurance arrangement, between the Specialty P&C segment and Syndicate 1729. Due to the quarter lag, the effect of the 2017 commutation was reported in both the Specialty P&C and Lloyd's Syndicates segments results during the first quarter of 2019, which resulted in a net cash receipt of approximately $3.1 million. The commutation reduced the receivable from reinsurers on unpaid losses and LAE, combined, by approximately $3.8 million during the year ended December 31, 2019.

7. Income Taxes

Deferred income taxes reflect the net tax effects of temporary differences between the amount of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of ProAssurance's deferred tax assets and liabilities were as follows:

(In thousands)	December 31 2021	December 31 2020
Deferred tax assets		
Unpaid loss discount	**$ 51,562**	$ 36,452
Unearned premium adjustment	**22,846**	14,835
Compensation related	**18,575**	10,935
Basis differentials-investments	**—**	2,595
Intangibles	**13,915**	522
Operating lease liabilities	**4,290**	4,224
Tax credit carryforward	**48,701**	36,155
Net operating loss carryforward	**18,596**	9,244
Other	**909**	1,700
Total gross deferred tax assets	**179,394**	116,662
Valuation allowance	**(8,945)**	(8,581)
Total deferred tax assets, net of valuation allowance	**170,449**	108,081
Deferred tax liabilities		
Deferred policy acquisition costs	**(12,284)**	(8,929)
Unpaid loss discount-transition	**(7,276)**	(6,297)
Unrealized gains on investments, net	**(4,100)**	(19,351)
Fixed assets	**(4,013)**	(4,441)
Operating lease ROU assets	**(4,030)**	(4,015)
Basis differentials-investments	**(11,277)**	—
Basis differentials-foreign operations	**(828)**	(790)
Intangibles	**(9,028)**	(7,153)
Total deferred tax liabilities	**(52,836)**	(50,976)
Net deferred tax assets (liabilities)	**$ 117,613**	$ 57,105

As of December 31, 2021, ProAssurance had U.S. federal, U.S. state and U.K. income tax NOL carryforwards of approximately $43.6 million, $74.2 million and $26.6 million, respectively. The U.K. NOL carryforwards do not expire while the U.S. federal and state NOL carryforwards will begin to expire in 2035 and 2031, respectively.

As a result of the NORCAL acquisition, the Company has U.S. federal NOL carryforwards which as of December 31, 2021 were approximately $43.0 million. These NOL carryforwards are subject to limitation by Internal Revenue Code Section 382 and will begin to expire in 2035. See Note 2 for more information on the NORCAL acquisition.

ProAssurance had $48.7 million of available tax credit carryforwards generated from the Company's investments in tax credit partnerships, of which $46.7 million may be carried forward until they begin to expire in December 31, 2039. Approximately $2.0 million of the tax credits earned in the current year were utilized during 2021. The remaining tax credits have been deferred and carried forward due to the utilization of NOLs available to ProAssurance following its acquisition of NORCAL.

The Company's total valuation allowance increased by $0.4 million and $3.1 million for the years ended December 31, 2021 and 2020, respectively.

In 2021, management evaluated the realizability of the deferred tax assets of ProAssurance American Mutual, a Risk Retention Group, and concluded that it was more likely than not that the net deferred tax assets will not be realized; therefore a nominal valuation allowance was recorded in 2021. ProAssurance American Mutual, a Risk Retention Group, is a taxpayer separate from the consolidated group and this entity has experienced cumulative losses in recent years.

In 2021 and 2020, management evaluated the realizability of the deferred tax asset related to the U.K. NOL carryforwards and concluded that it was more likely than not that the deferred tax asset will not be realized; therefore, a valuation allowance was recorded against the full value of the deferred tax asset related to the U.K. NOL carryforwards in both 2021 and 2020 of $5.0 million and $6.2 million, respectively. The decrease in the valuation allowance related to the U.K. NOL carryforward in 2021 as compared to 2020 was primarily due to current year activity.

In 2021 and 2020, management evaluated the realizability of the deferred tax asset related to the U.S. state NOL carryforwards and concluded that it was more likely than not that a portion of the deferred tax asset will not be realized; therefore, a valuation allowance was recorded against a portion of the deferred tax asset related to the U.S. state NOL carryforwards in 2021 and 2020 of $3.2 million and $1.9 million, respectively. The increase in the valuation allowance related to the U.S. state NOL carryforwards in 2021 as compared to 2020 was primarily due to current year activity.

Deferred tax assets and liabilities include SPCs the Company participates in at Inova Re, net of a valuation allowance of $0.6 million and $0.5 million at December 31, 2021 and 2020, respectively. Due to the limited operations of these SPCs as of December 31, 2021 and 2020, management concluded that a valuation allowance was required against the DTAs of certain SPCs. The nominal increase in the valuation allowance related to the SPCs at Inova Re is due to current year activity.

As a result of ProAssurance's acquisition of NORCAL, the Company recorded $46.8 million of net deferred tax assets at the acquisition date reflecting the remeasurement of NORCAL's historical net deferred tax assets. The Company evaluated the realizability of the deferred tax assets acquired from NORCAL during the Company's accounting for the acquisition and management concluded that it was more likely than not that the acquired deferred tax assets would be realized. Management’s assessment of the need for the aforementioned valuation allowances at December 31, 2021 included an analysis of the available sources of income, including projections of income for the consolidated group following the NORCAL acquisition.

ProAssurance files income tax returns in various states, the U.S. federal jurisdiction and the U.K. ProAssurance had a receivable for U.S. federal and U.K. income taxes of $7.9 million at December 31, 2021 and $18.9 million at December 31, 2020, both carried as a part of other assets.

The statute of limitations is now closed for all tax years prior to 2018.

A reconciliation of the beginning and ending amounts of unrecognized tax benefits for 2021, 2020 and 2019, were as follows:

(In thousands)	**2021**	2020	2019
Balance at January 1	**$ 5,199**	$ 5,070	$ 3,601
Increases for tax positions taken during the current year	**—**	—	1,749
Decreases for tax positions taken during the current year	**(1,630)**	(4,853)	—
Increases for tax positions taken during prior years	**—**	5,342	—
Decreases relating to a lapse of the applicable statute of limitations	**(549)**	(360)	(280)
Balance at December 31	**$ 3,020**	$ 5,199	$ 5,070

At December 31, 2021 and 2020, approximately $0.3 million and $0.8 million, respectively, of ProAssurance's uncertain tax positions, if recognized, would affect the effective tax rate. As with any uncertain tax position, there is a possibility that the

ultimate benefit realized could differ from the estimate management has established. Management believes that it is reasonably possible that a portion of unrecognized tax benefits at December 31, 2021 may change during the next twelve months. However, an estimate of the change cannot be made at this time.

ProAssurance recognizes interest and/or penalties related to income tax matters as a component of income tax expense. Interest and penalties recognized in the Consolidated Statements of Income and Comprehensive Income were nominal for each of the years ended December 31, 2021, 2020 and 2019. The accrued liability for interest was approximately $0.4 million and $0.5 million at December 31, 2021 and 2020, respectively.

Income tax expense (benefit) for each of the years ended December 31, 2021, 2020 and 2019 consisted of the following:

(In thousands)	**2021**	2020	2019
Provision for income taxes:			
Current expense (benefit)			
Federal and foreign	**$ 885**	$ (19,885)	$ (2,147)
State	**279**	(296)	982
Total current expense (benefit)	**1,164**	(20,181)	(1,165)
Deferred expense (benefit)			
Federal and foreign	**1,290**	(20,476)	(27,404)
State	**29**	(672)	(1,239)
Total deferred expense (benefit)	**1,319**	(21,148)	(28,643)
Total income tax expense (benefit)	**$ 2,483**	$ (41,329)	$ (29,808)

A reconciliation of "expected" federal income tax expense (benefit) to actual income tax expense (benefit) for each of the years ended December 31, 2021, 2020 and 2019 were as follows:

(In thousands)	**2021**	2020	2019
Computed "expected" tax expense (benefit)	**$ 30,787**	$ (45,582)	$ (6,049)
Tax-exempt income [(1)]	**(1,298)**	(976)	(1,528)
Tax credits	**(13,160)**	(17,876)	(21,933)
Non-U.S. operating results	**(1,322)**	(1,307)	(1,447)
Tax deficiency (excess tax benefit) on share-based compensation	**286**	457	99
Tax rate differential on loss carryback	**—**	(7,758)	(3,400)
Goodwill impairment[(2)]	**—**	31,413	—
Non-taxable gain on bargain purchase[(3)]	**(15,626)**	—	—
Provision-to-return and other differences	**3,574**	1,217	3,595
Change in uncertain tax positions	**(1,909)**	(1,674)	1,956
State income taxes	**460**	(561)	(376)
Benefit from amended returns	**—**	—	(550)
Other	**691**	1,318	(175)
Total income tax expense (benefit)	**$ 2,483**	$ (41,329)	$ (29,808)

(1) Includes tax-exempt interest, dividends received deduction and change in cash surrender value of BOLI.

(2) Represents the tax impact of the impairment of non-deductible goodwill in relation to the Specialty P&C reporting unit during the third quarter of 2020 (see further discussion on the impairment charge in Note 8).

(3) Represents the tax impact of the non-taxable gain on bargain purchase as a result of the Company's acquisition of NORCAL on May 5, 2021. See further discussion on the gain on bargain purchase in Note 2.

The Company's pre-tax income in 2021 included a gain on bargain purchase of $74.4 million as a result of the Company's acquisition of NORCAL, all of which was non-taxable. See further discussion on the gain on bargain purchase in Note 2. The Company's pre-tax loss in 2020 included a $161.1 million goodwill impairment recognized in relation to the Specialty P&C reporting unit during the third quarter of 2020. Of the $161.1 million goodwill impairment, $149.6 million was non-deductible for which no tax benefit was recognized while the remaining $11.5 million was deductible for which a 21% tax benefit was recognized on the related tax amortization. See further discussion on this goodwill impairment in Note 8. The tax rate differential on loss carryback for the year ended December 31, 2020 represents the additional tax rate differential of 14% on the carryback of the 2020 and 2019 NOLs to the 2015 and 2014 tax years, respectively, as a result of changes made by the CARES Act to the NOL provisions of the tax law (see further discussion in this section under the heading "Coronavirus Aid, Relief and Economic Security Act").

Coronavirus Aid, Relief and Economic Security Act

In response to COVID-19, the CARES Act was signed into law on March 27, 2020 and contains several provisions for corporations and eased certain deduction limitations originally imposed by the TCJA. The CARES Act, among other things, includes temporary changes regarding the prior and future utilization of NOLs, temporary changes to the prior and future limitations on interest deductions, temporary suspension of certain payment requirements for the employer portion of Social Security taxes and the creation of certain refundable employee retention credits. As a result of the CARES Act, ProAssurance was permitted to carryback NOLs generated in tax years 2019 and 2020 for up to five years. ProAssurance generated an NOL of approximately $33.3 million from the 2020 tax year that was carried back to the 2015 tax year which resulted in a claim for a refund of approximately $11.7 million. Additionally, ProAssurance had an NOL of approximately $25.6 million from the 2019 tax year that was carried back to the 2014 tax year and generated a tax refund of approximately $9.0 million which the Company received in February 2021. ProAssurance has evaluated the other provisions of the CARES Act and has concluded that they will not have a material impact on the Company's financial position or results of operations.

American Rescue Plan Act of 2021

In response to economic concerns associated with COVID-19, the American Rescue Plan Act of 2021 was signed into law on March 11, 2021 and includes an expansion of the number of employees covered by the limitation on the deductibility of compensation in excess of $1 million. This provision is effective for tax years beginning after December 31, 2026. The Company has evaluated this provision as well as the other provisions of the American Rescue Plan Act of 2021 and concluded that they will not have a material impact on ProAssurance's financial position or results of operations as of December 31, 2021.

8. Goodwill

Goodwill is recognized in conjunction with business acquisitions as the excess of the purchase consideration for the business acquisition over the fair value of identifiable assets acquired and liabilities assumed. The fair value of identifiable assets acquired and liabilities assumed, and thus goodwill, is subject to redetermination within a measurement period of up to one year following completion of a business acquisition.

Goodwill is tested for impairment annually or more frequently if circumstances indicate an impairment may have occurred. The date of the Company's annual goodwill impairment test is October 1. Impairment of goodwill is tested at the reporting unit level, which is consistent with the Company's reportable segments identified in Note 18. Of the Company's five reporting units, two have net goodwill: Workers' Compensation Insurance and Segregated Portfolio Cell Reinsurance.

Interim Impairment Assessments

During the third quarter of 2020, management performed interim impairment assessments of the goodwill in our Specialty P&C, Workers' Compensation Insurance and Segregated Portfolio Cell Reinsurance reporting units due to the significant market volatility impacting our actual and projected results along with a decline in our stock price. The goodwill analysis indicated an impairment of the goodwill associated with the Company's Specialty P&C reporting unit and accordingly it recorded a $161.1 million charge to goodwill.

Annual Impairment Assessment

Subsequent to performing the interim impairment assessments, the Company performed its annual goodwill impairment assessment as of October 1, 2020. As of the goodwill impairment test performed on October 1, 2020, the Company elected to perform a qualitative goodwill impairment test for its Workers' Compensation Insurance and Segregated Portfolio Cell Reinsurance reporting units. These reporting units have historically had an excess of fair value over book value and based on current operations are expected to continue to do so; therefore, the Company's annual impairment test for these reporting units was performed qualitatively. In applying the qualitative approach, management considered macroeconomic factors, industry

and market conditions, cost factors that could have a negative impact on the reporting units, actual financial performance of the reporting units versus expectations and management's future business expectations. As a result of the qualitative assessments, management concluded that it was not more likely than not that the fair value of each of the Company's two reporting units that have net goodwill was less than the carrying value of each reporting unit as of the testing date; therefore, no further impairment testing was required.

During 2021, ProAssurance experienced an increase in accident year reported losses, including increased severity-related claim activity in the Company's Workers' Compensation Insurance and Segregated Portfolio Cell Reinsurance segments. ProAssurance primarily attributes this increase in reported losses and severity-related claim activity to workers being out of “work shape” as they returned to employment in 2021, as well as the lack of training, alternative work arrangements and employee fatigue due to the labor shortage. As a result, ProAssurance increased their 2021 current accident year loss ratio in the Workers' Compensation Insurance reporting unit during the third quarter of 2021. Due to the increase in the current accident year loss ratio, management decided to bypass the optional qualitative impairment test and proceed directly to the quantitative impairment test for both the Workers' Compensation Insurance and Segregated Portfolio Cell Reinsurance reporting units for the most recent goodwill impairment test performed October 1, 2021. In applying the quantitative approach, management estimated the fair value of the Workers' Compensation Insurance and Segregated Portfolio Cell Reinsurance reporting units using both an income approach and market approach using the aforementioned valuation methodologies and process for developing assumptions. To corroborate the reporting units’ valuation, the Company performed a reconciliation of the estimate of the aggregate fair value of the reporting units to ProAssurance's market capitalization, including consideration of a control premium. As a result of the quantitative assessments, management concluded that the fair value of each of the Workers' Compensation Insurance and Segregated Portfolio Cell Reinsurance reporting units exceeded the carrying value as of the testing date; therefore, goodwill was not impaired and no further goodwill impairment testing was required. No goodwill impairment was recorded during the years ended December 31, 2021 or 2019. See Note 1 for further information on how the Company tests goodwill for impairment.

The table below presents the carrying amount of goodwill and accumulated impairment losses by reporting unit at December 31, 2021 and 2020:

	Reporting Unit			
(In thousands)	**Specialty P&C**	**Workers' Compensation Insurance**	**Segregated Portfolio Cell Reinsurance**	**Total**
Goodwill, gross as of January 1, 2020	$ 161,115	$ 44,110	$ 5,500	$ 210,725
Accumulated impairment losses*	(161,115)	—	—	(161,115)
Goodwill, net as of December 31, 2020	$ —	$ 44,110	$ 5,500	$ 49,610
Accumulated impairment losses	—	—	—	—
Goodwill, net as of December 31, 2021	**$ —**	**$ 44,110**	**$ 5,500**	**$ 49,610**

*Accumulated impairment losses in 2020 represent the pre-tax impairment loss of $161.1 million recognized during the third quarter of 2020 in relation to the Specialty P&C reporting unit. There were no other impairment losses taken prior to 2020.

9. Deferred Policy Acquisition Costs

Policy acquisition costs that are incremental and directly related to the successful production of new and renewal insurance contracts, most significantly agent commissions, premium taxes, and underwriting salaries and benefits, are capitalized as policy acquisition costs and amortized to expense, net of ceding commissions earned, as the related premium revenues are earned. Amortization of DPAC was $110.6 million for each of the years ended December 31, 2021 and 2020 and $115.3 million for the year ended December 31, 2019.

ProAssurance evaluates the recoverability of DPAC typically at the segment level each reporting period, or in a manner that is consistent with the way the Company manages its business. Any amounts estimated to be unrecoverable are charged to expense in the current period as a component of DPAC amortization in the Consolidated Statements of Income and Comprehensive Income.

As part of the evaluation of the recoverability of DPAC, ProAssurance also evaluates its unearned premiums for premium deficiencies. A premium deficiency is recognized if the sum of anticipated losses and loss adjustment expenses, unamortized DPAC and maintenance costs, net of anticipated investment income, exceeds the related unearned premium. If a premium deficiency is identified, the associated DPAC is charged to expense as a component of DPAC amortization in the Consolidated Statements of Income and Comprehensive Income, and a PDR is recorded for the excess deficiency as a component of net losses and loss adjustment expenses in the Consolidated Statements of Income and Comprehensive Income and as a component of the reserve for losses on the Consolidated Balance Sheets. For the years ended December 31, 2021 and 2020, ProAssurance did not determine any DPAC to be unrecoverable. For the year ended December 31, 2019, a nominal amount of DPAC was charged to expense as it was determined to be unrecoverable and a $9.2 million PDR was established in our Specialty P&C segment related to a large national healthcare account. The $9.2 million PDR was fully amortized during 2020.

10. Reserve for Losses and Loss Adjustment Expenses

The reserve for losses is established based on estimates of individual claims and actuarially determined estimates of future losses based on ProAssurance’s past loss experience, available industry data and projections as to future claims frequency, severity, inflationary trends and settlement patterns. Estimating the reserve, particularly the reserve appropriate for liability exposures, is a complex process. For a high proportion of the risks insured or reinsured by ProAssurance, claims may be resolved over an extended period of time, often five years or more, and may be subject to litigation. Estimating losses requires ProAssurance to make and revise judgments and assessments regarding multiple uncertainties over an extended period of time. As a result, the reserve estimate may vary considerably from the eventual outcome. The assumptions used in establishing ProAssurance’s reserve are regularly reviewed and updated by management as new data becomes available. Changes to estimates of previously established reserves are included in earnings in the period in which the estimate is changed.

ProAssurance believes that the methods it uses to establish reserves are reasonable and appropriate. Each year, ProAssurance uses internal actuaries to review the reserve for losses of each insurance subsidiary. ProAssurance also engages consulting actuaries to review ProAssurance claims data and provide observations regarding cost trends, rate adequacy and ultimate loss costs. The statutory filings of each insurance company with the insurance regulators must be accompanied by a consulting actuary's certification as to their respective reserves. ProAssurance considers the views of the actuaries as well as other factors, such as premium rates, historical paid and incurred loss development trends and an evaluation of the current loss environment including frequency, severity, expected effect of inflation, general economic and social trends, and the legal and political environment in establishing the amount of its reserve for losses. The Company expects there will be impacts to these factors as well as to the timing of loss emergence and ultimate loss ratios for certain coverages it underwrites as a result of COVID-19 and the related economic shutdown; however, the extent to which COVID-19 impacts these factors is highly uncertain and cannot be predicted (see "Item 1A, Risk Factors" included in this report for additional information). As a result of COVID-19, the industry is experiencing new conditions, including the postponement of court cases, changes in settlement trends and a significant reduction in economic activity and insured exposure in some classes. ProAssurance's booked reserves as of December 31, 2021 include consideration of these factors, but the duration and degree to which these issues persist, along with potential legislative, regulatory or judicial actions, could result in significant changes to the Company's reserve estimates in future periods.

ProAssurance partitions its reserve by accident year, which is the year in which the claim becomes its liability. For claims-made policies, the insured event generally becomes a liability when the event is first reported to the Company. For occurrence policies, the insured event becomes a liability when the event takes place. For retroactive coverages, the insured event becomes a liability at inception of the underlying contract. As claims are incurred (reported) and claim payments are made, they are aggregated by accident year for analysis purposes. ProAssurance also partitions its reserve by reserve type: case reserves and IBNR reserves. Case reserves are established by the claims department based upon the particular circumstances of each reported claim and represent ProAssurance’s estimate of the future loss costs (often referred to as expected losses) that will be

paid on reported claims. Case reserves are decremented as claim payments are made and are periodically adjusted upward or downward as estimates regarding the amount of future losses are revised; a reported loss for an individual claim equates to the case reserve at any point in time plus the claim payments that have been made to date. IBNR reserves represent an estimate, in the aggregate, of future development on losses that have been reported to ProAssurance plus an estimate of losses that have been incurred but not reported.

Acquired Reserve

The acquisition of NORCAL increased ProAssurance's net reserves by $1.1 billion which represented the fair value of NORCAL's reserve, net of the fair value of related reinsurance recoverables, at the time of acquisition including a fair value adjustment on the reserve as well as negative VOBA recorded on NORCAL's unearned premium and DDR reserve. The reserve fair value adjustment will be amortized utilizing loss payment patterns and the negative VOBAs will be amortized over a period in proportion to the earn-out of the premium or in-line with the approximate consumption of losses. Such amortization is recorded as a reduction to net losses and loss adjustment expenses. See Note 2 for more information.

Development of Prior Accident Years

In addition to setting the initial reserve for the current accident year, each period ProAssurance reassesses the amount of reserve required for prior accident years. The foundation of ProAssurance's reserve re-estimation process is an actuarial analysis that is performed by both the internal and consulting actuaries. This detailed analysis projects ultimate losses based on partitions which include line of business, geography, coverage layer and accident year. The procedure uses the most representative data for each partition, capturing its unique patterns of development and trends. ProAssurance believes that the use of consulting actuaries provides an independent view of the loss data as well as a broader perspective on industry loss trends.

Reserving Methodologies

For the HCPL, Medical Technology Liability and Workers' Compensation lines of business, the analysis performed by the consulting actuaries analyzes each partition of the business in a variety of ways and uses multiple actuarial methodologies in performing these analyses, including: Bornhuetter-Ferguson (Paid and Reported) Method, Paid Development Method, Reported (Incurred) Development Method, Average Paid Value Method and Average Reported Value Method. Generally, methods such as the Bornhuetter-Ferguson Method are used on more recent accident years where there is less data available on which to base the analysis. As time progresses and an increased amount of data is available for a given accident year, management gives more confidence to the development and average methods, as these methods typically rely more heavily on ProAssurance's own historical data. These methods emphasize different aspects of loss reserve estimation and provide a variety of perspectives for ProAssurance's decisions.

For the Workers' Compensation line of business in both the Workers' Compensation Insurance and Segregated Portfolio Cell Reinsurance segments, ProAssurance utilizes the Reported (Incurred) Development Method, Paid Loss Development Method and Bornhuetter-Ferguson Method, to develop the reserve for each accident year. The actuarial review includes the stratification of claims data (lost time claims and medical only claims) using different variations that allow for identification of trends that may not be readily identifiable if the data was evaluated only in the aggregate. Reported and paid loss development factors are key assumptions in the reserve estimation process and are based on ProAssurance's historical reported and paid loss development patterns. As accident years mature, the various actuarial methodologies produce more consistent loss estimates.

For the Lloyd's Syndicates segment business, losses are initially estimated using the loss assumptions by risk category incorporated into the business plan submitted to Lloyd's with consideration given to loss experience incurred to date. These assumptions were influenced by loss results reflected in Lloyd's historical data for similar risks. As losses are reported and resolved and loss experience becomes more credible from a statistical perspective, actual loss experience is incorporated into the estimates.

Certain of the methodologies utilized to estimate the ultimate losses for each partition of the reserve consider the actual amounts paid. Paid data is particularly influential when a large portion of known claims have been closed, as is the case for older accident years. In selecting a point estimate for each partition, management considers the extent to which trends are emerging consistently for all partitions and known industry trends. Thus, actual, rather than estimated severity trends are given more consideration. If actual severity trends are lower than those estimated at the time that reserves were previously established, the recognition of favorable development is indicated. This is particularly true for older accident years where actuarial methodologies give more weight to actual loss costs (severity).

The various actuarial methods discussed above are applied in a consistent manner from period to period. In addition, ProAssurance performs statistical reviews of claims data such as claim counts, average settlement costs and severity trends when establishing the reserve.

Selected point estimates of ultimate losses are utilized to develop estimates of ultimate losses recoverable from reinsurers, based on the terms and conditions of ProAssurance's reinsurance agreements. An overall estimate of the amount receivable from reinsurers is determined by combining the individual estimates. ProAssurance's net reserve estimate is the gross reserve point estimate less the estimated reinsurance recovery.

Activity in the reserve for losses and loss adjustment expenses is summarized as follows:

(In thousands)	**2021**	2020	2019
Balance, beginning of year	**$ 2,417,179**	$ 2,346,526	$ 2,119,847
Less reinsurance recoverables on unpaid losses and loss adjustment expenses	**385,087**	390,708	343,820
Net balance, beginning of year	**2,032,092**	1,955,818	1,776,027
Net reserves acquired from acquisitions	**1,089,103**	—	—
Net losses:			
Current year[1][2][3]	**797,732**	711,846	765,698
Favorable development of reserves established in prior years, net	**(45,483)**	(50,399)	(11,783)
Total	**752,249**	661,447	753,915
Paid related to:			
Current year[4]	**(109,925)**	(83,204)	(115,133)
Prior years[4]	**(635,320)**	(501,969)	(458,991)
Total paid	**(745,245)**	(585,173)	(574,124)
Net balance, end of year	**3,128,199**	2,032,092	1,955,818
Plus reinsurance recoverables on unpaid losses and loss adjustment expenses	**451,741**	385,087	390,708
Balance, end of year	**$ 3,579,940**	$ 2,417,179	$ 2,346,526

(1) Current year net losses for the year ended December 31, 2019 included incurred losses of $2.1 million related to a loss portfolio transfer entered into during 2019 in the Specialty P&C segment. In addition, current year net losses in 2019 included a PDR of $9.2 million associated with the unearned premium of a large national healthcare account's claims-made policy in the Specialty P&C segment. Current year net losses for the year ended December 31, 2020 included the amortization of the aforementioned $9.2 million PDR which offsets the impact of the losses incurred associated with the premium earned related to the large national healthcare account's claims-made policy.

(2) During 2020, the aforementioned large national healthcare account did not renew on terms offered by the Company and exercised its contractual option to purchase extended reporting endorsement or "tail" coverage. As a result, ProAssurance recognized total current year losses of $60.0 million (assumes a full limit loss) within the Specialty P&C segment for the year ended December 31, 2020.

(3) Current year net losses for the year ended December 31, 2021 included $6.7 million of amortization of the negative VOBA associated with NORCAL's assumed unearned premium, which is being amortized over a period in proportion to the earn-out of the associated premium as a reduction to current accident year net losses (see Note 2).

(4) Paid losses for the year ended December 31, 2021 included prior year paid losses of $136.0 million and current year paid losses of $22.3 million related to reserves acquired from NORCAL since May 5, 2021.

As discussed in Note 1, estimating liability reserves is complex and requires the use of many assumptions. As time passes and ultimate losses for prior years are either known or become subject to a more precise estimation, ProAssurance increases or decreases the reserve estimates established in prior periods. The net favorable loss development recognized for the year ended December 31, 2021 primarily reflected a lower than anticipated loss emergence in the Specialty P&C segment, primarily related to the 2015 through 2020 accident years. The net favorable development recognized in the Specialty P&C segment also included $7.9 million related to the amortization of the purchase accounting fair value adjustment on NORCAL's assumed net reserve and amortization of the negative VOBA associated with NORCAL's DDR reserve which is recorded as a reduction to prior accident year net losses and loss adjustment expenses (see Note 2). ProAssurance did not recognize any development related to NORCAL's prior accident year reserves since the date of acquisition. Net favorable prior accident year reserve development recognized in the Specialty P&C segment also included a $1.0 million reduction in our IBNR reserve for COVID-19 during the third quarter of 2021. The net favorable development also reflected overall favorable trends in claim closing patterns in the Workers' Compensation Insurance and Segregated Portfolio Cell Reinsurance segments. The net favorable loss development recognized in the Workers' Compensation Insurance segment is primarily related to the 2012

through 2017 accident years. The net favorable loss development recognized in the Segregated Portfolio Cell Reinsurance segment is primarily related to accident year 2015 and accident years 2018 through 2020. Consolidated net favorable loss development recognized in 2021 was partially offset by unfavorable reserve development recognized in the Lloyd's Syndicates segment driven by certain catastrophe related losses.

The net favorable loss development recognized for the year ended December 31, 2020 primarily reflected a lower than anticipated claims severity trend (i.e., the average size of a claim) in the Specialty P&C segment, primarily related to the 2014 through 2017 accident years. The net favorable development also reflected overall favorable trends in claim closing patterns in the Segregated Portfolio Cell Reinsurance and Workers' Compensation Insurance segments. The net favorable loss development recognized in the Segregated Portfolio Cell Reinsurance segment primarily related to the 2014 through 2019 accident years and the net favorable loss development recognized in the Workers' Compensation Insurance segment primarily related to the 2014 through 2017 accident years.

The net favorable loss development recognized for the year ended December 31, 2019 primarily reflected overall favorable trends in claim closing patterns in the Workers' Compensation Insurance and Segregated Portfolio Cell Reinsurance segments, largely offset by net unfavorable loss development recognized in the Specialty P&C segment. The net favorable loss development recognized in the Workers' Compensation Insurance segment primarily related to the 2015 and 2016 accident years and the net favorable loss development recognized in the Segregated Portfolio Cell Reinsurance segment primarily related to the 2015 through 2018 accident years. The net unfavorable loss development recognized in the Specialty P&C segment primarily related to accident years 2016 through 2018. The favorable loss development recognized in 2018 primarily reflected a lower than anticipated claims severity trend for accident years 2011 through 2015.

Claims Development

ProAssurance establishes its reserve and manages claims activity by coverage, product or line of business and various categories of reserves have similar characteristics. Therefore, ProAssurance has aggregated these reserve categories into several reserve groups in the following disclosures and tables that provide a more meaningful view of the amount, timing and uncertainty of cash flows arising from the liability. At the same time, these reserve groups present a disaggregated view of the major elements of the overall loss reserve liability. The reserve groups include HCPL claims-made reserve, HCPL occurrence reserve, Medical Technology Liability claims-made reserve, Workers’ Compensation Insurance reserve and Segregated Portfolio Cell Reinsurance - workers' compensation reserve. All other loss reserve categories are deemed to be less homogeneous or relatively small on a standalone basis and are included in other short-duration lines in the claims development reconciliation.

The composition of the reserve groups is based on similar characteristics with respect to the risks being insured and the reporting and payout pattern of the underlying claims. In most instances the groups follow the coverage categorizations used in statutory financial reporting for U.S.-domiciled property-casualty insurance companies.

HCPL claims are disaggregated into those claims covered by claims-made policies and those claims covered by occurrence policies. For claims-made policies, the insured event generally becomes a liability when the event is first reported to the insurer. For occurrence policies, the insured event becomes a liability when the event takes place, even if unknown at that time. Claims-made coverage has a short reporting pattern, with virtually all claims known shortly after the end of the policy period. Occurrence coverage claims can have an extended reporting pattern, with the time from the loss event until the filing of the claim often measured in years, at which point the claims resolution process begins. Although the resolution process and time frame is similar once a claim is reported, combining claims from claims-made and occurrence coverage types would result in distortion due to the difference in reporting lag. Medical Technology Liability reserves are grouped separately due to the nature of the risk, including the potential for mass torts and multiple claims arising out of the same product or service. The small amount of Medical Technology Liability occurrence reserves are included in other short-duration lines.

Workers' compensation reserves in the Workers' Compensation Insurance and the Segregated Portfolio Cell Reinsurance segments are each grouped separately due to the difference in the type of coverage provided and the differences in the claims resolution process as compared to other liability insurance. The small amount of HCPL reserves in the Segregated Portfolio Cell Reinsurance segment are included in other short-duration lines.

ProAssurance has elected to present reserve history for acquired entities in all periods shown in the tables below, including periods prior to acquisition. With the exception of the Workers' Compensation Insurance and Segregated Portfolio Cell Reinsurance - workers' compensation lines of business, virtually all other acquired entities are captured within the HCPL line of business.

All information prior to 2021 disclosed in the Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance, Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance and Average Annual

Percentage Payout of Incurred Claims by Age, Net of Reinsurance tables that follow is presented as supplementary information. The "Cumulative Number of Reported Claims" in the tables that follow includes the combined number of claims for an accident year and excludes projected unreported IBNR claims. A claim is considered reported when ProAssurance becomes aware of and accepts it for coverage under the terms of the Company's insurance contracts.

Healthcare Professional Liability Reserve

HCPL loss costs are impacted by many factors, including but not limited to the nature of the claim, including whether or not the claim is an individual or a mass tort claim, the personal situation of the claimant or the claimant's family, the outcome of jury trials, the legislative and judicial climate where any potential litigation may occur, general economic and social conditions and, for claims involving bodily injury, the trend of healthcare costs. ProAssurance sets an initial reserve based upon the evaluation of the current loss environment including frequency, severity, the expected effect of inflation, general economic and social trends, and the legal and political environment. The initial loss ratio for HCPL business has ranged from 87% to 106% in recent years and has recently trended towards the higher end of this range due to increased reserve estimates for a large national healthcare account as well as increases in loss severity in the broader HCPL industry, including our Specialty line of business.

ProAssurance has elected to present reserve history for NORCAL in all periods shown in the Healthcare Professional Liability tables below, including periods prior to acquisition.

Healthcare Professional Liability Claims-Made

($ in thousands)	Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance — Year Ended December 31,										December 31, 2021	
	2012	2013	2014	2015	2016	2017	2018	2019	2020	**2021**		Cumulative Number of Reported Claims
Accident Year	Unaudited										IBNR*	
2012	$555,440	$528,799	$510,085	$490,981	$474,631	$468,956	$458,826	$453,625	$451,152	**$ 448,782**	$ 402	7,103
2013	—	$527,520	$513,937	$501,580	$489,378	$480,036	$466,798	$451,182	$455,346	**457,038**	$ (1,284)	7,697
2014	—	—	$509,774	$494,024	$491,403	$488,185	$474,317	$468,153	$470,189	**466,554**	$ (373)	7,523
2015	—	—	—	$503,412	$486,760	$492,824	$491,180	$500,336	$500,550	**503,600**	$ (4,798)	7,402
2016	—	—	—	—	$484,153	$488,349	$507,586	$555,416	$554,395	**560,840**	$ (11,854)	7,993
2017	—	—	—	—	—	$508,072	$506,207	$577,401	$569,737	**573,570**	$ (16,923)	8,054
2018	—	—	—	—	—	—	$544,617	$643,864	$630,169	**636,023**	$ (53,325)	8,575
2019	—	—	—	—	—	—	—	$670,958	$664,934	**642,370**	$ 4,919	8,443
2020	—	—	—	—	—	—	—	—	$593,994	**574,274**	$ 127,489	6,563
2021	—	—	—	—	—	—	—	—	—	**525,363**	$ 345,154	4,799
Total										**$ 5,388,414**		

* Includes expected development on reported claims

(In thousands)	Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance — Year Ended December 31,									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	**2021**
Accident Year	Unaudited									
2012	$ 25,864	$136,883	$257,697	$331,521	$374,537	$401,604	$424,987	$434,141	$440,872	**$ 441,417**
2013	—	$ 30,214	$142,759	$255,605	$328,982	$376,930	$398,549	$415,012	$430,916	**435,158**
2014	—	—	$ 30,483	$125,078	$246,510	$325,782	$389,983	$416,150	$434,540	**439,575**
2015	—	—	—	$ 26,664	$125,234	$256,791	$351,703	$410,506	$446,069	**463,224**
2016	—	—	—	—	$ 27,442	$137,338	$276,548	$378,828	$440,163	**472,441**
2017	—	—	—	—	—	$ 32,342	$147,515	$288,695	$351,548	**419,180**
2018	—	—	—	—	—	—	$ 34,238	$159,657	$279,204	**367,522**
2019	—	—	—	—	—	—	—	$ 37,755	$144,225	**259,889**
2020	—	—	—	—	—	—	—	—	$ 32,270	**117,153**
2021	—	—	—	—	—	—	—	—	—	**23,494**
Total										**3,439,053**
All outstanding liabilities before 2012, net of reinsurance										**22,023**
Liabilities for losses and loss adjustment expenses, net of reinsurance										**$ 1,971,384**

Healthcare Professional Liability Occurrence

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

($ in thousands)	Year Ended December 31,										December 31, 2021	
	2012	2013	2014	2015	2016	2017	2018	2019	2020	**2021**		Cumulative Number of Reported Claims
Accident Year	Unaudited										IBNR*	
2012	$ 62,214	$ 61,719	$ 58,234	$ 51,382	$ 45,602	$ 44,575	$ 40,676	$ 36,946	$ 37,300	**$ 37,553**	$ 660	597
2013	—	$ 51,996	$ 54,143	$ 49,970	$ 53,905	$ 56,640	$ 50,632	$ 49,270	$ 47,550	**48,116**	$ 1,640	636
2014	—	—	$ 45,975	$ 43,606	$ 44,075	$ 40,699	$ 37,653	$ 34,428	$ 33,353	**35,139**	$ 1,290	540
2015	—	—	—	$ 52,531	$ 54,890	$ 56,621	$ 57,606	$ 52,455	$ 51,276	**56,468**	$ (2,578)	614
2016	—	—	—	—	$ 56,089	$ 49,795	$ 53,358	$ 56,345	$ 66,886	**64,122**	$ (240)	684
2017	—	—	—	—	—	$ 45,463	$ 42,338	$ 40,983	$ 44,449	**46,865**	$ 4,381	731
2018	—	—	—	—	—	—	$ 59,351	$ 61,880	$ 63,576	**73,599**	$ 7,977	692
2019	—	—	—	—	—	—	—	$ 63,548	$ 58,555	**70,926**	$ 21,587	752
2020	—	—	—	—	—	—	—	—	$165,955	**178,804**	$140,975	992
2021	—	—	—	—	—	—	—	—	—	**82,590**	$ 76,228	166
Total										**$ 694,182**		

* Includes expected development on reported claims

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

(In thousands)	Year Ended December 31,									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	**2021**
Accident Year	Unaudited									
2012	$ 480	$ 3,635	$ 11,445	$ 17,797	$ 26,830	$ 30,469	$ 32,384	$ 33,144	$ 34,373	**$ 34,398**
2013	—	$ 539	$ 4,620	$ 12,130	$ 25,131	$ 30,474	$ 37,778	$ 40,775	$ 42,455	**43,254**
2014	—	—	$ 512	$ 4,674	$ 11,192	$ 17,349	$ 22,649	$ 25,671	$ 27,753	**30,407**
2015	—	—	—	$ (180)	$ 2,617	$ 9,953	$ 20,627	$ 28,482	$ 36,413	**41,800**
2016	—	—	—	—	$ 44	$ 2,750	$ 15,433	$ 28,362	$ 40,766	**48,691**
2017	—	—	—	—	—	$ (6,631)	$ (3,385)	$ 3,592	$ 11,051	**19,696**
2018	—	—	—	—	—	—	$ 444	$ 6,193	$ 15,229	**26,932**
2019	—	—	—	—	—	—	—	$ 628	$ 4,575	**10,399**
2020	—	—	—	—	—	—	—	—	$ 397	**6,194**
2021	—	—	—	—	—	—	—	—	—	**762**
Total										**262,533**
All outstanding liabilities before 2012, net of reinsurance										**5,202**
Liabilities for losses and loss adjustment expenses, net of reinsurance										**$ 436,851**

Average Annual Percentage Payout of Incurred Claims by Age, Net of Reinsurance

Years	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
	Unaudited									
Healthcare Professional Liability Claims-Made	5.6%	20.0%	23.7%	15.9%	11.4%	5.8%	4.0%	2.2%	1.2%	0.1%
Healthcare Professional Liability Occurrence	(0.8%)	6.8%	15.4%	18.9%	17.0%	12.0%	6.7%	4.4%	2.5%	0.1%

Medical Technology Liability Reserve

The risks insured in the Medical Technology Liability line of business are more varied, and policies are individually priced based on the risk characteristics of the policy and the account. These policies often have substantial deductibles or self-insured retentions, and the insured risks range from startup operations to large multinational entities. Premiums are established using the most recently developed actuarial estimates of losses expected to be incurred based on factors which include: results from prior analysis of similar business, industry indications, observed trends and judgment. Claims in this line of business primarily involve bodily injury to individuals and are affected by factors similar to those of the HCPL line of business. For the Medical Technology Liability line of business, ProAssurance also establishes an initial reserve using a loss ratio approach, including a provision in consideration of historical loss volatility that this line of business has exhibited.

Medical Technology Liability Claims-Made

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

($ in thousands)	Year Ended December 31,										December 31, 2021	
	2012	2013	2014	2015	2016	2017	2018	2019	2020	**2021**		Cumulative Number of Reported Claims
Accident Year	Unaudited										IBNR*	
2012	$ 11,162	$ 9,989	$ 8,906	$ 7,441	$ 5,824	$ 4,797	$ 5,051	$ 3,889	$ 3,868	**$ 3,864**	$ 48	223
2013	—	$ 9,807	$ 9,955	$ 9,536	$ 7,226	$ 4,697	$ 3,566	$ 3,504	$ 3,305	**3,199**	$ 96	218
2014	—	—	$ 9,989	$ 10,306	$ 9,012	$ 8,984	$ 7,679	$ 6,194	$ 5,888	**5,636**	$ 406	272
2015	—	—	—	$ 9,376	$ 8,757	$ 7,193	$ 5,929	$ 5,081	$ 4,664	**4,192**	$ 771	156
2016	—	—	—	—	$ 9,200	$ 8,467	$ 7,413	$ 6,422	$ 6,241	**4,491**	$ 35	182
2017	—	—	—	—	—	$ 11,049	$ 10,143	$ 8,306	$ 4,919	**3,381**	$ 505	100
2018	—	—	—	—	—	—	$ 10,141	$ 8,108	$ 7,506	**4,961**	$ 1,847	218
2019	—	—	—	—	—	—	—	$ 10,072	$ 8,324	**9,588**	$ 4,660	359
2020	—	—	—	—	—	—	—	—	$ 11,082	**10,671**	$ 9,279	177
2021	—	—	—	—	—	—	—	—	—	**13,914**	$ 13,787	141
Total										**$ 63,897**		

* Includes expected development on reported claims

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

(In thousands)	Year Ended December 31,									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	**2021**
Accident Year	Unaudited									
2012	$ 568	$ 1,520	$ 2,805	$ 3,247	$ 3,366	$ 3,676	$ 3,800	$ 3,817	$ 3,817	**$ 3,816**
2013	—	$ 102	$ 1,029	$ 1,967	$ 2,599	$ 3,092	$ 3,102	$ 3,102	$ 3,102	**3,101**
2014	—	—	$ 388	$ 1,527	$ 2,564	$ 3,046	$ 3,724	$ 3,776	$ 4,074	**4,076**
2015	—	—	—	$ 25	$ 440	$ 1,625	$ 2,097	$ 2,567	$ 2,911	**2,987**
2016	—	—	—	—	$ 53	$ 1,690	$ 2,365	$ 2,959	$ 4,295	**4,342**
2017	—	—	—	—	—	$ 56	$ 1,681	$ 2,017	$ 2,360	**2,867**
2018	—	—	—	—	—	—	$ 6	$ 191	$ 1,850	**2,651**
2019	—	—	—	—	—	—	—	$ 584	$ 2,552	**3,902**
2020	—	—	—	—	—	—	—	—	$ 40	**526**
2021	—	—	—	—	—	—	—	—	—	**4**
Total										**28,272**
All outstanding liabilities before 2012, net of reinsurance										**99**
Liabilities for losses and loss adjustment expenses, net of reinsurance										**$ 35,724**

Average Annual Percentage Payout of Incurred Claims by Age, Net of Reinsurance

Years	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
	Unaudited									
Medical Technology Liability	3.5%	21.9%	22.7%	12.9%	14.4%	3.7%	2.6%	0.2%	—%	—%

Workers' Compensation Insurance Reserve

Many factors affect the ultimate losses incurred for the workers' compensation coverages in the Workers' Compensation Insurance segment including, but not limited to, the type and severity of the injury, the age and occupation of the injured worker, the estimated length of disability, medical treatment and related costs, and the jurisdiction and workers' compensation laws of the injury occurrence. ProAssurance uses various actuarial methodologies in developing the workers' compensation reserve combined with a review of the exposure base generally based upon payroll of the insured. For the current accident year, given the lack of seasoned information, the different actuarial methodologies produce results with considerable variability; therefore, more emphasis is placed on supplementing results from the actuarial methodologies with trends in exposure base, medical expense inflation, general inflation, severity, and claim counts, among other things, to select an expected loss ratio.

Workers' Compensation Insurance

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

($ in thousands)	Year Ended December 31,										December 31, 2021	
	2012	2013	2014	2015	2016	2017	2018	2019	2020	**2021**		Cumulative Number of Reported Claims
Accident Year	Unaudited										IBNR*	
2012	$ 80,285	$ 76,551	$ 75,848	$ 76,357	$ 75,836	$ 75,576	$ 75,076	$ 75,076	$ 75,076	**$ 74,776**	$ 236	16,205
2013	—	$ 86,973	$ 85,935	$ 86,928	$ 88,010	$ 87,260	$ 87,260	$ 89,760	$ 89,560	**89,010**	$ 409	16,429
2014	—	—	$ 93,019	$ 93,529	$ 93,029	$ 93,029	$ 93,029	$ 93,029	$ 91,329	**90,579**	$ 782	16,210
2015	—	—	—	$100,101	$100,454	$ 98,454	$ 97,654	$ 96,354	$ 93,054	**92,072**	$ 1,140	16,550
2016	—	—	—	—	$101,348	$ 97,348	$ 92,148	$ 84,799	$ 82,799	**81,599**	$ 1,182	15,978
2017	—	—	—	—	—	$ 99,874	$ 99,874	$ 99,874	$ 97,874	**95,674**	$ 2,897	16,084
2018	—	—	—	—	—	—	$118,095	$118,095	$120,095	**120,095**	$ 327	18,013
2019	—	—	—	—	—	—	—	$119,752	$119,752	**115,352**	$ 4,251	17,528
2020	—	—	—	—	—	—	—	—	$106,145	**102,475**	$ 5,438	14,512
2021	—	—	—	—	—	—	—	—	—	**105,722**	$ 30,379	14,982
Total										**$ 967,354**		

* Includes expected development on reported claims

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

(In thousands)	Year Ended December 31,									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	**2021**
Accident Year	Unaudited									
2012	$ 27,448	$ 56,122	$ 65,908	$ 70,558	$ 72,766	$ 73,662	$ 73,676	$ 73,768	$ 73,851	**$ 73,976**
2013	—	$ 30,554	$ 63,825	$ 76,813	$ 82,369	$ 85,689	$ 86,783	$ 87,466	$ 87,772	**88,033**
2014	—	—	$ 30,368	$ 65,922	$ 77,631	$ 85,022	$ 87,314	$ 87,998	$ 88,487	**88,977**
2015	—	—	—	$ 32,078	$ 65,070	$ 78,947	$ 83,483	$ 86,528	$ 87,884	**88,476**
2016	—	—	—	—	$ 28,377	$ 58,192	$ 69,237	$ 74,886	$ 76,954	**77,546**
2017	—	—	—	—	—	$ 31,586	$ 70,333	$ 82,289	$ 87,129	**88,504**
2018	—	—	—	—	—	—	$ 41,619	$ 86,063	$104,216	**110,928**
2019	—	—	—	—	—	—	—	$ 40,994	$ 88,008	**100,373**
2020	—	—	—	—	—	—	—	—	$ 33,431	**74,532**
2021	—	—	—	—	—	—	—	—	—	**39,634**
Total										**830,979**
All outstanding liabilities before 2012, net of reinsurance										**12,631**
Liabilities for losses and loss adjustment expenses, net of reinsurance										**$ 149,006**

Average Annual Percentage Payout of Incurred Claims by Age, Net of Reinsurance

Years	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
	Unaudited									
Workers' Compensation Insurance	34.7 %	38.1 %	13.9 %	6.2 %	2.7 %	1.1 %	0.5 %	0.3 %	0.2 %	0.2 %

Segregated Portfolio Cell Reinsurance - Workers' Compensation Reserve

The Company estimates and reserves for the workers' compensation business assumed by the Segregated Portfolio Cell Reinsurance segment in the same manner as for its workers' compensation business in the Workers' Compensation Insurance segment, as previously discussed.

Segregated Portfolio Cell Reinsurance - Workers' Compensation

($ in thousands)	Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance — Year Ended December 31,										December 31, 2021	
	2012	2013	2014	2015	2016	2017	2018	2019	2020	**2021**		Cumulative Number of Reported Claims
Accident Year	Unaudited										IBNR*	
2012	$ 22,940	$ 21,513	$ 21,048	$ 20,028	$ 19,972	$ 19,864	$ 19,799	$ 19,727	$ 19,602	**$ 19,519**	$ 68	3,454
2013	—	$ 23,809	$ 25,310	$ 26,758	$ 26,619	$ 26,260	$ 26,033	$ 25,938	$ 25,546	**25,450**	$ 9	3,723
2014	—	—	$ 28,248	$ 28,423	$ 29,000	$ 28,373	$ 28,281	$ 27,919	$ 27,482	**27,360**	$ 78	4,433
2015	—	—	—	$ 36,423	$ 32,519	$ 28,746	$ 27,548	$ 26,720	$ 26,121	**25,566**	$ 144	4,949
2016	—	—	—	—	$ 37,601	$ 34,055	$ 30,998	$ 29,424	$ 28,437	**28,411**	$ 208	5,328
2017	—	—	—	—	—	$ 42,725	$ 38,594	$ 34,246	$ 32,879	**32,763**	$ 389	5,707
2018	—	—	—	—	—	—	$ 43,654	$ 41,283	$ 40,017	**38,569**	$ 1,402	6,341
2019	—	—	—	—	—	—	—	$ 48,505	$ 42,345	**38,815**	$ 2,670	6,153
2020	—	—	—	—	—	—	—	—	$ 40,094	**38,602**	$ 5,642	5,789
2021	—	—	—	—	—	—	—	—	—	**39,510**	$ 15,591	5,062
Total										**$ 314,565**		

* Includes expected development on reported claims

(In thousands)	Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance — Year Ended December 31,									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	**2021**
Accident Year	Unaudited									
2012	$ 7,808	$ 14,740	$ 17,728	$ 18,474	$ 19,208	$ 19,402	$ 19,328	$ 19,311	$ 19,340	**$ 19,391**
2013	—	$ 8,131	$ 19,054	$ 24,268	$ 25,209	$ 25,366	$ 25,489	$ 25,440	$ 25,442	**25,442**
2014	—	—	$ 9,933	$ 21,880	$ 26,173	$ 26,810	$ 26,959	$ 27,083	$ 27,110	**27,119**
2015	—	—	—	$ 11,257	$ 21,706	$ 23,977	$ 24,781	$ 25,033	$ 25,125	**25,144**
2016	—	—	—	—	$ 10,980	$ 23,003	$ 26,285	$ 27,162	$ 27,211	**27,585**
2017	—	—	—	—	—	$ 12,404	$ 24,791	$ 28,853	$ 31,140	**31,631**
2018	—	—	—	—	—	—	$ 12,517	$ 27,501	$ 33,236	**35,575**
2019	—	—	—	—	—	—	—	$ 15,100	$ 29,604	**33,314**
2020	—	—	—	—	—	—	—	—	$ 11,238	**26,626**
2021	—	—	—	—	—	—	—	—	—	**12,465**
Total										**264,292**
All outstanding liabilities before 2012, net of reinsurance										**377**
Liabilities for losses and loss adjustment expenses, net of reinsurance										**$ 50,650**

Average Annual Percentage Payout of Incurred Claims by Age, Net of Reinsurance

Years	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
	Unaudited									
Segregated Portfolio Cell Reinsurance - workers' compensation	36.1%	39.9%	13.6%	4.2%	1.3%	0.7%	(0.1%)	—%	0.1%	0.3%

Below is a reconciliation of the claims development information to the Consolidated Balance Sheet:

(In thousands)	December 31, 2021
Net outstanding liabilities	
Healthcare Professional Liability claims-made	$ 1,971,384
Healthcare Professional Liability occurrence	436,851
Medical Technology Liability claims-made	35,724
Workers' Compensation Insurance	149,006
Segregated Portfolio Cell Reinsurance - workers' compensation	50,650
Other short-duration lines	163,375
Liabilities for losses and loss adjustment expenses, net of reinsurance	2,806,990
Reinsurance recoverable on unpaid losses	
Healthcare Professional Liability claims-made	258,528
Healthcare Professional Liability occurrence	35,324
Medical Technology Liability claims-made	31,036
Workers' Compensation Insurance	47,963
Segregated Portfolio Cell Reinsurance - Workers' Compensation	22,455
Other short-duration lines	56,435
Total reinsurance recoverable on unpaid losses and loss adjustment expenses	451,741
Reserve for the future utilization of the DDR benefit	113,246
Unallocated loss adjustment expenses	152,209
Loss portfolio transfer [1]	16,610
Purchase accounting adjustments [2]	39,186
Other	(42)
	321,209
Gross liability for losses and loss adjustment expenses	$ 3,579,940

[1] Represents the reserve for retroactive coverages, net of any applicable deferred gains, related to the loss portfolio transfer entered into during 2019.

[2] Represents the remaining unamortized fair value adjustment on the net reserve for losses and loss adjustment expenses, the negative net VOBA recorded on the assumed unearned premium and negative VOBA recorded on the DDR reserve associated with our acquisition of NORCAL (see Note 2 for additional information).

11. Commitments and Contingencies

ProAssurance is involved in various legal actions related to insurance policies and claims handling including, but not limited to, claims asserted by policyholders. These types of legal actions arise in the Company's ordinary course of business and, in accordance with GAAP for insurance entities, are considered as a part of the Company's loss reserving process, which is described in detail under the heading "Losses and Loss Adjustment Expenses" in the Accounting Policies section in Note 1. ProAssurance also has other direct actions against the Company unrelated to its claims activity which are evaluated and accounted for as a part of other liabilities. For these corporate legal actions, the Company evaluates each case separately and establishes what it believes is an appropriate reserve based on GAAP guidance related to contingent liabilities. As of December 31, 2021 there were no material reserves established for corporate legal actions.

As a member of Lloyd's, ProAssurance has obligations to Syndicate 1729 including a Syndicate Credit Agreement and FAL requirements. The Syndicate Credit Agreement is an unconditional revolving credit agreement to the Premium Trust Fund of Syndicate 1729 for the purpose of providing working capital. At December 31, 2021, the maximum permitted borrowings under the Syndicate Credit Agreement were approximately £30.0 million (approximately $40.6 million at December 31, 2021). Effective July 1, 2022, maximum permitted borrowings will be reduced to £15.0 million (approximately $20.3 million at

December 31, 2021) from £30.0 million under an amended Syndicate Credit Agreement executed in January 2022. The amended Syndicate Credit Agreement has a maturity date of June 30, 2023 and contains an annual auto-renewal feature which allows for ProAssurance to elect to non-renew if notice is given at least 30 days prior to the next auto-renewal date, which is one year prior to the maturity date. Under the Syndicate Credit Agreement, advances bear interest at 3.8% annually and may be repaid at any time but are repayable upon demand after June 30, 2023, subject to extension through the auto-renewal feature. As of December 31, 2021, there were no outstanding borrowings under the Syndicate Credit Agreement. ProAssurance provides FAL to support underwriting by Syndicate 1729 which is comprised of investment securities and cash and cash equivalents deposited with Lloyd's with a total fair value of approximately $37.8 million at December 31, 2021 (see Note 4). During the second and fourth quarters of 2021, ProAssurance received a return of approximately $24.5 million and $8.0 million, respectively, of cash from its FAL balances given the reduction in the Company's participation in the results of Syndicate 1729, to 5% from 29%, and Syndicate 6131, to 50% from 100%, for the 2021 underwriting year. Further, during the fourth quarter of 2021, ProAssurance received a return of approximately $26.6 million of cash from its FAL balances given Syndicate 6131 ceased underwriting on a quota share basis with Syndicate 1729 as Syndicate 6131's business is retained within Syndicate 1729 beginning with the 2022 underwriting year (see Note 18 for additional information).

ProAssurance has entered into financial instrument transactions that may present off-balance sheet credit risk or market risk. These transactions include a short-term loan commitment and commitments to provide funding to non-public investment entities. Under the short-term loan commitment, ProAssurance has agreed to advance funds on a 30 day basis to a counterparty provided there is no violation of any condition established in the contract. As of December 31, 2021, ProAssurance had total funding commitments related to non-public investment entities as well as the short-term loan commitment of approximately $244.0 million which included the amount at risk if the full short-term loan is extended and the counterparties default. However, the credit risk associated with the short-term loan commitment is minimal as the counterparties to the contract are highly rated commercial institutions and to-date have been performing in accordance with their contractual obligations. Of these total funding commitments, $0.6 million is related to qualified affordable housing project tax credit investments and is expected to be paid as follows: $0.4 million in 2022, $0.1 million in 2023 and 2024 combined and $0.1 million in 2025 and 2026 combined. ProAssurance’s expected credit losses associated with this short-term loan commitment were nominal in amount as of December 31, 2021.

ProAssurance has previously entered into a services agreement with a company to provide data analytics services for certain product lines within the Company's HCPL book of business. In November 2021, ProAssurance executed an amendment to this services agreement which extended the Company's commitment an additional three years for an annual fee of approximately $3.5 million. In addition, the amended services agreement contains an annual one-year auto-extension feature unless either party elects to non-renew the services agreement by providing notice at least six-months prior to the end of the contract. ProAssurance incurred operating expenses associated with this services agreement of $2.6 million, $4.3 million and $4.9 million for the years ended December 31, 2021, 2020 and 2019, respectively. As of December 31, 2021, the remaining commitment under this agreement was estimated to be approximately $9.9 million.

The purchase consideration in the NORCAL acquisition included contingent consideration. NORCAL policyholders who elected to receive NORCAL stock and tender it to ProAssurance are eligible for a share of contingent consideration in an amount of up to approximately $84 million depending upon the after-tax development of NORCAL's ultimate net losses between December 31, 2020 and December 31, 2023. The estimated fair value of this contingent consideration was $24 million as of December 31, 2021, which did not change from the acquisition date of May 5, 2021, and was derived utilizing a stochastic model. This estimate does not guarantee that contingent consideration will ultimately be paid. Depending on NORCAL's actual ultimate net loss development between December 31, 2020 and December 31, 2023, the actual amount due to eligible policyholders may be greater than or less than the $24 million current fair value estimate. See further discussion around the contingent consideration in Note 2 and Note 3.

12. Leases

ProAssurance is involved in a number of operating leases that are primarily for office facilities. Office facility leases have remaining lease terms ranging from one year to ten years; some of which include options to extend the leases for up to fifteen years, and some of which include an option to terminate the lease within one year. ProAssurance subleases certain office facilities to third parties and classifies these leases as operating leases. As a result of ProAssurance's acquisition of NORCAL on May 5, 2021, the Company recorded $4.4 million of additional operating lease ROU assets and $5.3 million of additional operating lease liabilities during the second quarter of 2021. See Note 2 for more information.

The following table provides a summary of the components of net lease expense as well as the reporting location in the Consolidated Statements of Income and Comprehensive Income for the years ended December 31, 2021, 2020 and 2019.

(In thousands)	**Location in the Consolidated Statements of Income and Comprehensive Income**	**Year Ended December 31**		
		2021	2020	2019
Operating lease expense [1]	Operating expense	**$ 5,047**	$ 4,355	$ 4,485
Sublease income [2]	Other income	**(263)**	(143)	(152)
Net lease expense		**$ 4,784**	$ 4,212	$ 4,333

[1] Includes short-term lease costs and variable lease costs, if applicable. For the years ended December 31, 2021, 2020 and 2019, no short-term lease costs were recognized and variable lease costs were nominal in amount.

[2] Sublease income excludes rental income from owned properties of $2.5 million during each of the years ended December 31, 2021, 2020 and 2019 which is included in other income. See "Item 2. Properties" for a listing of currently owned properties.

The following table provides supplemental lease information for operating leases on the Consolidated Balance Sheet as of December 31, 2021 and December 31, 2020.

($ in thousands)	**Year Ended December 31**	
	2021	2020
Operating lease ROU assets	**$ 19,595**	$ 19,013
Operating lease liabilities	**$ 20,844**	$ 20,116
Weighted-average remaining lease term	**7.05 years**	8.31 years
Weighted-average discount rate	**2.84 %**	2.97 %

The following table provides supplemental lease information for the Consolidated Statements of Cash Flows for the years ended December 31, 2021, 2020 and 2019.

(In thousands)	**Year Ended December 31**		
	2021	2020	2019
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows from operating leases	**$ 5,775**	$ 4,221	$ 4,767

The following table is a schedule of remaining future minimum lease payments for operating leases that had an initial or remaining non-cancellable lease term in excess of one year as of December 31, 2021.

(In thousands)		
2022	**$**	**5,396**
2023		**3,958**
2024		**2,525**
2025		**2,019**
2026		**1,748**
Thereafter		**7,378**
Total future minimum lease payments		**23,024**
Less: Imputed interest		**2,180**
Total operating lease liabilities	**$**	**20,844**

13. Debt

ProAssurance's outstanding debt consisted of the following:

($ in thousands)	**December 31, 2021**	December 31, 2020
Senior Notes due 2023, unsecured, interest at 5.3% annually	**$ 250,000**	$ 250,000
Contribution Certificates due 2031, interest at 3.0% (effective interest rate at 4.35%) paid annually beginning April 2022	**175,900**	—
Mortgage Loans, outstanding borrowings were secured by first priority liens on two office buildings, and bore an interest rate of three-month LIBOR plus 1.325% (1.58% at December 31, 2020) determined quarterly	**—**	36,113
Total principal	**425,900**	286,113
Less unamortized debt issuance costs	**914**	1,400
Debt less unamortized debt issuance costs	**$ 424,986**	$ 284,713

Senior Notes due 2023 (the Senior Notes)

The Senior Notes are the unsecured obligations of ProAssurance Corporation, due in full in November 2023, unless redeemed sooner, with interest payable semiannually. Redemptions may be made prior to maturity, in whole or part, at the greater of par or the sum of the present values of the outstanding principal and remaining interest payments calculated at 0.4% above the then current rate for U.S. Treasury Notes with a term comparable to the remaining term of the Senior Notes. There are no financial covenants associated with the Senior Notes.

Contribution Certificates

On May 5, 2021, NORCAL Insurance Company, successor to NORCAL Mutual Insurance Company, issued Contribution Certificates, which are due in 2031, to certain NORCAL policyholders in the conversion. The Contribution Certificates have a principal amount of $191 million and were recorded at their fair value of $175 million at the date of the NORCAL acquisition. The difference of $16 million between the recorded acquisition date fair value and the principal balance of the Contribution Certificates will be accreted utilizing the effective interest method over the term of the certificates of ten years as an increase to interest expense. In addition, interest payments are subject to deferral if ProAssurance does not receive permission from the California Department of Insurance prior to payment. There are no financial covenants associated with the Contribution Certificates. See Note 2 for additional information on the Contribution Certificates assumed in the NORCAL acquisition.

Mortgage Loans

During 2017, two of ProAssurance's subsidiaries, ProAssurance Indemnity Company, Inc. and ProAssurance Insurance Company of America, each entered into ten-year mortgage loans ("Mortgage Loans") with principal amounts of $17.9 million and $22.6 million, respectively, with one lender in connection with the recapitalization of two office buildings. In June 2021, ProAssurance repaid the balance outstanding on the ProAssurance Indemnity Company, Inc. Mortgage Loan of $15.6 million. In July 2021, ProAssurance repaid the balance outstanding on the ProAssurance Insurance Company of America Mortgage Loan of $19.7 million. Interest expense on the Mortgage Loans during the year ended December 31, 2021 included the write-off of the unamortized debt issuance costs, which were nominal in amount.

Revolving Credit Agreement

ProAssurance has a Revolving Credit Agreement with seven participating lenders. The Revolving Credit Agreement, which expires November 2024, may be used for general corporate purposes, including, but not limited to, short-term working capital, share repurchases as authorized by the Board and support for other activities. ProAssurance's Revolving Credit Agreement permits borrowings up to $250 million, and has available a $50 million accordion feature which, if successfully subscribed, would expand the permitted borrowings to a maximum of $300 million. In August 2021, ProAssurance repaid the balance outstanding on the Revolving Credit Agreement of $15 million. As of December 31, 2021 and 2020, there were no outstanding borrowings on the Revolving Credit Agreement. The Revolving Credit Agreement permits ProAssurance to borrow, repay and reborrow from the lenders during the term of the Revolving Credit Agreement. All borrowings are required to be repaid prior to the expiration date of the Revolving Credit Agreement. ProAssurance is required to pay a commitment fee, ranging from 0.15% to 0.30% based on ProAssurance's credit ratings, on the average unused portion of the credit line during the term of the Revolving Credit Agreement. Borrowings under the Revolving Credit Agreement may be secured or unsecured and accrue interest at a selected base rate, adjusted by a margin, which can vary from 0% to 1.88%, based on ProAssurance's credit ratings and whether the borrowing is secured or unsecured. The base rate selected may either be the current one-, three- or six-month LIBOR, with the LIBOR term selected fixing the interest period for which the rate is effective. If no selection is made, the base rate defaults to the highest of (1) the Prime rate, (2) the Federal Funds rate plus 0.5% or (3) the one-month LIBOR plus 1.0%, determined daily. Rates are reset each successive interest period until the borrowing is repaid.

The Revolving Credit Agreement contains customary representations, covenants and events constituting default, and remedies for default. Additionally, the Revolving Credit Agreement carries the following financial covenants:

(1) In April 2021, ProAssurance amended and restated its Revolving Credit Agreement to allow for additional indebtedness of a subsidiary in preparation of the close of the NORCAL acquisition. This amendment to the Revolving Credit Agreement is included as Exhibit 10.8(g) of this report. ProAssurance is not permitted to have a leverage ratio of consolidated funded indebtedness (principally, obligations for borrowed money, obligations evidenced by instruments such as notes or acceptances, standby and commercial letters of credit, and contingent obligations) to consolidated total capitalization (principally, total non-trade liabilities on a consolidated basis plus consolidated shareholders' equity, exclusive of AOCI) greater than 0.35 to 1.0, determined at the end of each fiscal quarter.

(2) ProAssurance is required to maintain a minimum net worth, excluding AOCI, of at least $1.0 billion.

ProAssurance is currently in compliance with all covenants of the Revolving Credit Agreement.

14. Shareholders' Equity

At December 31, 2021 and 2020, ProAssurance had 100 million shares of authorized common stock and 50 million shares of authorized preferred stock. The Board has the authority to determine provisions for the issuance of preferred shares, including the number of shares to be issued, the designations, powers, preferences and rights, and the qualifications, limitations or restrictions of such shares.

The following is a summary of changes in common shares issued and outstanding during the years ended December 31, 2021, 2020 and 2019:

(In thousands)	**2021**	2020	2019
Issued and outstanding shares - January 1	**53,893**	53,792	53,637
Shares issued due to vesting of share-based compensation awards	**46**	54	132
Other shares issued for compensation and shares reissued to stock purchase plan*	**45**	47	23
Issued and outstanding shares - December 31	**53,984**	53,893	53,792

* Shares issued were valued at fair value (the market price of a ProAssurance common share on the date of issue).

As of December 31, 2021, approximately 1.3 million of ProAssurance's authorized common shares were reserved by the Board for award or issuance under the incentive compensation plans described in Note 15 and an additional 0.7 million of authorized common shares were reserved for the issuance of currently outstanding restricted share and performance share unit awards.

ProAssurance declared cash dividends during 2021, 2020 and 2019 as follows:

	Cash Dividends Declared, per Share		
	2021	2020	2019
First Quarter	**$ 0.05**	$ 0.31	$ 0.31
Second Quarter	**$ 0.05**	$ 0.05	$ 0.31
Third Quarter	**$ 0.05**	$ 0.05	$ 0.31
Fourth Quarter	**$ 0.05**	$ 0.05	$ 0.31

Quarterly dividends were paid in the month following the quarter in which they were declared. Dividends declared during 2021, 2020 and 2019 totaled $10.8 million, $24.8 million and $66.7 million, respectively.

ProAssurance's ability to pay dividends to its shareholders is limited by its holding company structure, to the extent of the net assets held by its insurance subsidiaries, as discussed in Note 20. Otherwise, there are no other regulatory restrictions on ProAssurance's retained earnings or net income that materially impact its ability to pay dividends. Based on shareholders' equity at December 31, 2021, total equity of $404.7 million was free of debt covenant restrictions regarding the payment of dividends. However, any decision to pay future cash dividends is subject to the Board's final determination after a comprehensive review of financial performance, future expectations and other factors deemed relevant by the Board.

As of December 31, 2021, Board authorizations for the repurchase of common shares or the retirement of outstanding debt of $109.6 million remained available for use. The timing and quantity of purchases depends upon market conditions and changes in ProAssurance's capital requirements and is subject to limitations that may be imposed on such purchases by applicable securities laws and regulations as well as the rules of the NYSE.

Other Comprehensive Income (Loss) and Accumulated Other Comprehensive Income (Loss)

The following tables provide a detailed breakout of the components of AOCI and the amounts reclassified from AOCI to net income (loss). The tax effects of all amounts in the tables below, except for an immaterial amount of unrealized gains and losses on available-for-sale securities held at the Company's U.K. subsidiary, were computed using the enacted U.S. federal corporate tax rate of 21%. OCI included a deferred tax benefit of $15.0 million for the year ended December 31, 2021 and a deferred tax expense of $9.6 million and $14.2 million for the years ended December 31, 2020 and 2019, respectively.

The changes in the balance of each component of AOCI for the years ended December 31, 2021, 2020 and 2019 were as follows:

(In thousands)	Unrealized Investment Gains (Losses)	Non-credit Impairments	Unrecognized Change in Defined Benefit Plan Liabilities[(1)(2)]	Accumulated Other Comprehensive Income (Loss)
Balance, December 31, 2020	$ 75,388	$ (57)	$ (104)	$ 75,227
OCI, before reclassifications, net of tax	(50,242)	—	1,406	(48,836)
Amounts reclassified from AOCI, net of tax	(10,217)	57	53	(10,107)
Net OCI, current period	**(60,459)**	**57**	**1,459**	**(58,943)**
Balance, December 31, 2021	**$ 14,929**	**$ —**	**$ 1,355**	**$ 16,284**

(In thousands)	Unrealized Investment Gains (Losses)	Non-credit Impairments	Unrecognized Change in Defined Benefit Plan Liabilities[(1)]	Accumulated Other Comprehensive Income (Loss)
Balance, December 31, 2019	$ 37,333	$ (300)	$ (78)	$ 36,955
OCI, before reclassifications, net of tax	46,383	(187)	(26)	46,170
Amounts reclassified from AOCI, net of tax	(8,328)	430	—	(7,898)
Net OCI, current period	38,055	243	(26)	38,272
Balance, December 31, 2020	$ 75,388	$ (57)	$ (104)	$ 75,227

(In thousands)	Unrealized Investment Gains (Losses)	Non-credit Impairments	Unrecognized Change in Defined Benefit Plan Liabilities[(1)]	Accumulated Other Comprehensive Income (Loss)
Balance December 31, 2018	$ (16,733)	$ (121)	$ (57)	$ (16,911)
OCI, before reclassifications, net of tax	56,041	(179)	(21)	55,841
Amounts reclassified from AOCI, net of tax	(1,975)	—	—	(1,975)
Net OCI, current period	54,066	(179)	(21)	53,866
Balance, December 31, 2019	$ 37,333	$ (300)	$ (78)	$ 36,955

(1) The Company terminated Eastern's defined benefit plan, effective September 30, 2021, resulting in a settlement of the liabilities under the plan and the net loss previously reflected in AOCI being recognized in earnings for the year ended December 31, 2021. For the years ended December 31, 2020 and 2019, the unrecognized change in defined benefit plan liabilities represents the reestimation of the defined benefit plan liability assumed in the Eastern acquisition. The defined benefit plan was frozen as to the earnings of additional benefits and the benefit plan liability was reestimated annually.

(2) As a result of the NORCAL acquisition, the Company sponsors another frozen defined benefit plan and recorded a net actuarial gain of $1.2 million, net of tax, in AOCI for the year ended December 31, 2021 (see Note 19).

15. Share-Based Payments

Share-based compensation costs are primarily classified as a component of operating expense.

During 2021, 2020 and 2019, ProAssurance provided share-based compensation to employees utilizing two types of awards: restricted share units and performance share units. During 2019, ProAssurance also provided share-based compensation to employees utilizing purchase match units. The restricted share and performance share awards were made under either the ProAssurance Corporation Amended and Restated 2014 Equity Incentive Plan or the ProAssurance Corporation 2008 Equity Incentive Plan. The Compensation Committee of the Board is responsible for the administration of both plans.

The following table provides a summary of compensation expense and the total related tax benefit recognized during each period as well as estimated compensation cost that will be charged to expense in future periods.

	Share-Based Compensation Expense			Unrecognized Compensation Cost	
	Year Ended December 31			December 31, 2021	
($ in millions, except remaining recognition period)	**2021**	2020	2019	**Amount**	**Weighted Average Remaining Recognition Period**
Total share-based compensation expense	**$ 4.4**	$ 3.8	$ 3.5	**$ 5.3**	1.9
Tax benefit recognized	**$ 0.9**	$ 0.8	$ 0.7		

The majority of awards are equity classified awards and are charged to expense as an increase to additional paid-in capital over the service period (generally the vesting period) associated with the award. However, a nominal amount of awards are liability classified awards and are recorded as a liability as they are structured to be settled in cash. As of December 31, 2021, the majority of share-based compensation expense related to restricted share units. Restricted share and performance share units vest in their entirety generally at the end of a three-year period, except for certain restricted share units granted in 2019 which will vest at the end of a five-year period, following the grant date based on a continuous service requirement and, for performance share units, achievement of a performance objective. Partial vesting is permitted for retirees. All non-vested purchase match units at December 31, 2018 were fully vested in the fourth quarter of 2019; previously, units vested over a three-year period based on a service requirement with partial vesting permitted for all participants. For the restricted share and purchase match units, a single share of ProAssurance common stock is issued per vested unit. For performance share units, the number of shares of ProAssurance common stock issued per vested unit varies based on performance goals achieved. For equity classified awards, units sufficient to satisfy required tax withholdings are paid in cash rather than in shares of ProAssurance common stock. Liability classified awards, which are nominal in amount, are settled in cash at the end of the vesting period.

Restricted Share Units

Activity for restricted share units during 2021, 2020 and 2019 is summarized below. Grant date fair values are based on the market value of a share of ProAssurance common stock on the date of grant less the estimated net present value of expected dividends during the vesting period.

	2021		2020		2019	
	Units	**Weighted Average Grant Date Fair Value**	Units	Weighted Average Grant Date Fair Value	Units	Weighted Average Grant Date Fair Value
Beginning non-vested balance	**339,804**	**$ 36.09**	320,625	$ 43.99	267,323	$ 49.16
Granted	**131,521**	**$ 24.16**	111,758	$ 29.18	164,196	$ 36.96
Forfeited	**(11,131)**	**$ 35.49**	(9,054)	$ 40.13	(3,832)	$ 45.09
Vested and released	**(73,012)**	**$ 44.45**	(83,525)	$ 56.74	(107,062)	$ 46.06
Ending non-vested balance	**387,182**	**$ 30.78**	339,804	$ 36.09	320,625	$ 43.99

The aggregate grant date fair value of restricted share units vested and released in 2021, 2020 and 2019 totaled $3.2 million, $4.7 million and $4.9 million, respectively. The aggregate intrinsic value of restricted share units vested and released in 2021, 2020 and 2019 (including units paid in cash to cover tax withholdings) totaled $1.8 million, $2.6 million and $4.6 million, respectively.

Performance Share Units

Performance share units vest only if minimum performance objectives are met, and the number of units earned varies from 50% to 200% of a base award depending upon the degree to which stated performance objectives are achieved. Performance share unit activity for 2021, 2020 and 2019 is summarized below. The table reflects the base number of units; actual awards that vest depend upon the extent to which performance objectives are achieved. Grant date fair values are based on the market value of a share of ProAssurance common stock on the date of grant less the estimated net present value of expected dividends during the vesting period.

	2021		2020		2019	
	Base Units	**Weighted Average Grant Date Fair Value**	Base Units	Weighted Average Grant Date Fair Value	Base Units	Weighted Average Grant Date Fair Value
Beginning non-vested balance	**90,979**	**$ 36.87**	100,370	$ 50.10	135,202	$ 49.95
Granted	**74,004**	**$ 24.04**	38,609	$ 29.18	25,168	$ 40.18
Forfeited	**—**	**$ —**	—	$ —	—	$ —
Expired*	**(27,202)**	**$ 44.73**	(48,000)	$ 58.35	—	$ —
Vested and released	**—**	**$ —**	—	$ —	(60,000)	$ 45.59
Ending non-vested balance	**137,781**	**$ 28.43**	90,979	$ 36.87	100,370	$ 50.10

*Represents performance share units that did not vest as minimum performance objectives were not achieved.

The aggregate grant date fair value of performance share units (base level) vested and released in 2019 totaled $2.7 million; there were no performance share units vested and released in 2021 and 2020 as minimum performance objectives were not achieved. The aggregate intrinsic value of performance share units (base level) vested and released in 2019 (including units paid in cash to cover tax withholdings) totaled $2.6 million. The weighted average level at which the vested units were issued was 95% during 2019, based on performance levels achieved.

Purchase Match Units

The ProAssurance Corporation 2011 Employee Stock Ownership Plan provided a purchase match unit for each share of ProAssurance common stock purchased with contributions by eligible plan participants, with participant contributions subject to a $5,000 annual limit per participant. During 2017, the ProAssurance Corporation 2011 Employee Stock Ownership Plan was discontinued and the existing non-vested purchase match units were fully vested in the fourth quarter of 2019. Purchase match unit activity during 2019 is summarized below. Grant date fair values are based on the market value of a ProAssurance common share on the date of grant less the estimated net present value of expected dividends during the vesting period.

	2021		2020		2019	
	Units	**Weighted Average Grant Date Fair Value**	Units	Weighted Average Grant Date Fair Value	Units	Weighted Average Grant Date Fair Value
Beginning non-vested balance	**—**	**$ —**	—	$ —	44,682	$ 51.05
Granted	**—**	**$ —**	—	$ —	—	$ —
Forfeited	**—**	**$ —**	—	$ —	(1,400)	$ 51.47
Vested and released	**—**	**$ —**	—	$ —	(43,282)	$ 51.03
Ending non-vested balance	**—**	**$ —**	—	$ —	—	$ —

The aggregate grant date fair value of purchase match units vested and released in 2019 totaled $2.2 million. The aggregate intrinsic value of purchase match share units vested and released in 2019 (including units paid in cash to cover tax withholdings) totaled $1.7 million.

16. Variable Interest Entities

ProAssurance holds passive interests in a number of entities that are considered to be VIEs under GAAP guidance. ProAssurance's VIE interests principally consist of interests in LPs/LLCs formed for the purpose of achieving diversified equity and debt returns. ProAssurance's VIE interests, carried as a part of investment in unconsolidated subsidiaries, totaled $303.7 million at December 31, 2021 and $282.2 million at December 31, 2020. ProAssurance does not have power over the activities that most significantly impact the economic performance of these VIEs and thus is not the primary beneficiary. Investments in entities where ProAssurance holds a greater than minor interest but does not hold a controlling interest are accounted for using the equity method. Therefore, ProAssurance has not consolidated these VIEs. ProAssurance's involvement with each of these VIEs is limited to its direct ownership interest in the VIE. Except for the funding commitments disclosed in Note 11, ProAssurance has no arrangements with any of these VIEs to provide other financial support to or on behalf of the VIE. At December 31, 2021, ProAssurance's maximum loss exposure relative to these investments was limited to the carrying value of ProAssurance's investment in the VIE.

As a result of the Company's acquisition of NORCAL (see Note 2), ProAssurance is the primary beneficiary of PPM RRG. While there is no direct ownership of PPM RRG by ProAssurance, it manages the business operations of PPM RRG through its management services agreement and has effective control of the PPM RRG's Board of Directors through an irrevocable voting proxy. The management services agreement allows ProAssurance to provide management and oversight services to the RRG, which includes the ability to make business decisions impacting the operations of PPM RRG. PPM RRG has a $5 million surplus note to NORCAL which is its only source of capital. ProAssurance has consolidated the account balances and transactions of PPM RRG beginning on the NORCAL acquisition date of May 5, 2021. At December 31, 2021, approximately $140 million of ProAssurance's assets and approximately $140 million of its liabilities included on the Consolidated Balance Sheets were related to PPM RRG.

17. Earnings (Loss) Per Share

Diluted weighted average shares is calculated as basic weighted average shares plus the effect, calculated using the treasury stock method, of assuming that restricted share units, performance share units and purchase match units have vested. The following table provides a reconciliation between the Company's basic weighted average number of common shares outstanding to its diluted weighted average number of common shares outstanding:

	Year Ended December 31		
(In thousands, except per share data)	**2021**	2020	2019
Weighted average number of common shares outstanding, basic	**53,962**	53,863	53,740
Dilutive effect of securities:			
Restricted Share Units	**92**	42	75
Performance Share Units	**4**	1	10
Purchase Match Units	**—**	—	16
Weighted average number of common shares outstanding, diluted	**54,058**	53,906	53,841
Effect of dilutive shares on earnings (loss) per share	**$ —**	$ —	$ —

The diluted weighted average number of common shares outstanding for the years ended December 31, 2021 and 2020 excludes approximately 28,000 and 114,000, respectively, of common share equivalents issuable under the Company's stock compensation plans, as their effect would have been antidilutive. There were no antidilutive common share equivalents for the year ended December 31, 2019.

Dilutive common share equivalents are reflected in the earnings (loss) per share calculation while antidilutive common share equivalents are not reflected in the earnings (loss) per share calculation. For the year ended December 31, 2020, all incremental common share equivalents were not included in the computation of diluted earnings (loss) per share because to do so would have been antidilutive.

18. Segment Information

ProAssurance's segments are based on the Company's internal management reporting structure for which financial results are regularly evaluated by the Company's CODM to determine resource allocation and assess operating performance. The Company operates in five segments that are organized around the nature of the products and services provided: Specialty P&C, Workers' Compensation Insurance, Segregated Portfolio Cell Reinsurance, Lloyd's Syndicates and Corporate. The Company continually assesses its internal management reporting structure and information evaluated by its CODM to determine whether any changes have occurred that would impact its segment reporting structure. During the second quarter of 2021, the Company reevaluated its segment reporting structure due to the acquisition of NORCAL (see Note 2) and concluded no changes in the Company's segments were required as a result of the acquisition as there was no change to the Company's internal management reporting structure. As NORCAL is an underwriter of healthcare professional liability insurance, NORCAL's underwriting results, since the date of acquisition, are included in the Specialty P&C segment while NORCAL's investment results, since the date of acquisition, are included in the Corporate segment. A description of each of ProAssurance's five operating and reportable segments follows.

Specialty P&C includes professional liability insurance and medical technology liability insurance. Professional liability insurance is primarily comprised of medical professional liability products offered to healthcare providers and institutions. The Specialty P&C segment's professional liability insurance also includes the business acquired through the NORCAL transaction that closed on May 5, 2021, as previously discussed. The Company also offers, to a lesser extent, professional liability insurance to attorneys and their firms. Medical technology liability insurance is offered to medical technology and life sciences companies that manufacture or distribute products including entities conducting human clinical trials. In addition, the Company also offers custom alternative risk solutions including loss portfolio transfers, assumed reinsurance and captive cell programs for healthcare professional liability insureds. For the alternative market captive cell programs, the Specialty P&C segment cedes either all or a portion of the premium to certain SPCs in the Company's Segregated Portfolio Cell Reinsurance segment.

Workers' Compensation Insurance includes workers' compensation insurance products which are provided primarily to employers with 1,000 or fewer employees. The segment's products include guaranteed cost policies, policyholder dividend policies, retrospectively-rated policies, deductible policies and alternative market solutions. Alternative market program premiums include program design, fronting, claims administration, risk management, SPC rental, asset management and SPC management services. Alternative market program premiums are 100% ceded to either SPCs in the Company's Segregated Portfolio Cell Reinsurance segment or, to a limited extent, to a captive insurer unaffiliated with ProAssurance.

Segregated Portfolio Cell Reinsurance includes the results (underwriting profit or loss, plus investment results, net of U.S. federal income taxes) of SPCs at Inova Re and Eastern Re, the Company's Cayman Islands SPC operations. Each SPC is owned, fully or in part, by an individual company, agency, group or association, and the results of the SPCs are attributable to the participants of that cell. ProAssurance participates to a varying degree in the results of selected SPCs. SPC results attributable to external cell participants are reflected as SPC dividend expense (income) in the Segregated Portfolio Cell Reinsurance segment and in ProAssurance's Consolidated Statements of Income and Comprehensive Income. In addition, the Segregated Portfolio Cell Reinsurance segment includes the investment results of the SPCs as the investments are solely for the benefit of the cell participants, and investment results attributable to external cell participants are reflected in SPC dividend expense (income). The SPCs assume workers' compensation insurance, healthcare professional liability insurance or a combination of the two from the Company's Workers' Compensation Insurance and Specialty P&C segments.

Lloyd's Syndicates includes the results from ProAssurance's participation in Lloyd's of London Syndicate 1729 and Syndicate 6131. The results of this segment are normally reported on a quarter lag, except when information is available that is material to the current period. Furthermore, investment results associated with the majority of investment assets solely allocated to Lloyd's Syndicate operations and certain U.S. paid administrative expenses are reported concurrently as that information is available on an earlier time frame. Syndicate 1729 underwrites risks over a wide range of property and casualty insurance and reinsurance lines in both the U.S. and international markets. Effective January 1, 2022, Syndicate 6131 ceased underwriting on a quota share basis with Syndicate 1729 as Syndicate 6131's business is retained within Syndicate 1729 beginning with the 2022 year of account. Prior to January 1, 2022, Syndicate 6131 was an SPA which focused on contingency and specialty property business. To support and grow the Company's core insurance operations, ProAssurance decreased its participation in the results of Syndicate 1729 for the 2021 underwriting year to 5% from 29%. Effective July 1, 2020, Syndicate 6131 entered into a six-month quota share reinsurance agreement with an unaffiliated insurer. Under this agreement, Syndicate 6131 ceded essentially half of the premium assumed from Syndicate 1729 to the unaffiliated insurer; the agreement was non-renewed on January 1, 2021 and the Company decreased its participation in the results of Syndicate 6131 to 50% from 100% for the 2021 underwriting year. Due to the quarter lag, the change in the Company's participation in the results of Syndicates 1729 and 6131 was not reflected in its results until the second quarter of 2021.

Corporate includes ProAssurance's investment operations, including the investment operations of NORCAL since the date of acquisition and excludes those reported in the Company's Segregated Portfolio Cell Reinsurance and Lloyd's Syndicates segments. In addition, this segment includes corporate expenses, interest expense, U.S. income taxes and non-premium revenues generated outside of the Company's insurance entities.

The accounting policies of the segments are described in Note 1. ProAssurance evaluates the performance of its Specialty P&C and Workers' Compensation Insurance segments based on before tax underwriting profit or loss. ProAssurance evaluates the performance of its Segregated Portfolio Cell Reinsurance segment based on operating profit or loss, which includes investment results of investment assets solely allocated to SPC operations, net of U.S. federal income taxes. Performance of the Lloyd's Syndicates segment is evaluated based on operating profit or loss, which includes investment results of investment assets solely allocated to Lloyd's Syndicate operations, net of U.K. income tax expense. Performance of the Corporate segment is evaluated based on the contribution made to consolidated after-tax results. ProAssurance accounts for inter-segment transactions as if the transactions were to third parties at current market prices. Assets are not allocated to segments because investments, other than the investments discussed above that are solely allocated to the Segregated Portfolio Cell Reinsurance and Lloyd's Syndicates segments, and other assets are not managed at the segment level. The tabular information that follows shows the financial results of the Company's reportable segments reconciled to results reflected in the Consolidated Statements of Income and Comprehensive Income. ProAssurance does not consider goodwill or intangible asset impairments, a gain on bargain purchase or transaction-related costs for completed business combinations, including any related tax impacts, in assessing the financial performance of its operating and reportable segments, and thus are included in the reconciliation of segment results to consolidated results.

Financial results by segment were as follows:

	Year Ended December 31, 2021						
(In thousands)	**Specialty P&C**	**Workers' Compensation Insurance**	**Segregated Portfolio Cell Reinsurance**	**Lloyd's Syndicates**	**Corporate**	**Inter-segment Eliminations**	**Consolidated**
Net premiums earned	$ 695,008	$ 164,600	$ 63,688	$ 48,372	$ —	$ —	$ 971,668
Net investment income	—	—	814	1,961	67,747	—	70,522
Equity in earnings (loss) of unconsolidated subsidiaries	—	—	—	—	48,974	—	48,974
Net investment gains (losses)	—	—	4,080	249	19,981	—	24,310
Other income (expense)[1]	3,370	2,211	3	912	5,531	(3,091)	8,936
Net losses and loss adjustment expenses	(575,164)	(114,704)	(32,569)	(29,812)	—	—	(752,249)
Underwriting, policy acquisition and operating expenses[1]	(127,709)	(52,418)	(21,635)	(17,957)	(26,641)	3,091	(243,269)
SPC U.S. federal income tax expense[2]	—	—	(1,947)	—	—	—	(1,947)
SPC dividend (expense) income	—	—	(10,050)	—	—	—	(10,050)
Interest expense	—	—	—	—	(19,719)	—	(19,719)
Income tax benefit (expense)	—	—	—	—	(4,651)	—	(4,651)
Segment results	$ (4,495)	$ (311)	$ 2,384	$ 3,725	$ 91,222	$ —	$ 92,525
Reconciliation of segments to consolidated results:							
Gain on bargain purchase							74,408
Transaction-related costs, net[3]							(22,809)
Net income (loss)							$ 144,124
Significant non-cash items:							
Gain on bargain purchase							$ 74,408
Depreciation and amortization, net of accretion	$ 9,915	$ 3,583	$ 1,475	$ 66	$ 22,208	$ —	$ 37,247

	Year Ended December 31, 2020						
(In thousands)	Specialty P&C	Workers' Compensation Insurance	Segregated Portfolio Cell Reinsurance	Lloyd's Syndicates	Corporate	Inter-segment Eliminations	Consolidated
Net premiums earned	$ 477,365	$ 171,772	$ 66,352	$ 77,226	$ —	$ —	$ 792,715
Net investment income	—	—	1,084	4,128	66,786	—	71,998
Equity in earnings (loss) of unconsolidated subsidiaries	—	—	—	—	(11,921)	—	(11,921)
Net investment gains (losses)	—	—	3,085	988	11,605	—	15,678
Other income (expense)[1]	3,908	2,216	205	51	2,531	(2,441)	6,470
Net losses and loss adjustment expenses	(470,074)	(111,552)	(29,605)	(50,216)	—	—	(661,447)
Underwriting, policy acquisition and operating expenses[1]	(109,599)	(56,449)	(20,709)	(30,136)	(23,429)	2,441	(237,881)
SPC U.S. federal income tax expense[2]	—	—	(1,746)	—	—	—	(1,746)
SPC dividend (expense) income	—	—	(14,304)	—	—	—	(14,304)
Interest expense	—	—	—	—	(15,503)	—	(15,503)
Income tax benefit (expense)	—	—	—	29	41,300	—	41,329
Segment results	$ (98,400)	$ 5,987	$ 4,362	$ 2,070	$ 71,369	$ —	$ (14,612)
Reconciliation of segments to consolidated results:							
Goodwill impairment							(161,115)
Net income (loss)							$ (175,727)
Significant non-cash items:							
Goodwill impairment							$ 161,115
Depreciation and amortization, net of accretion	$ 7,747	$ 3,690	$ 676	$ (4)	$ 9,266	$ —	$ 21,375

	Year Ended December 31, 2019						
(In thousands)	Specialty P&C	Workers' Compensation Insurance	Segregated Portfolio Cell Reinsurance	Lloyd's Syndicates	Corporate	Inter-segment Eliminations	Consolidated
Net premiums earned	$ 499,058	$ 189,240	$ 78,563	$ 80,671	$ —	$ —	$ 847,532
Net investment income	—	—	1,578	4,551	87,140	—	93,269
Equity in earnings (loss) of unconsolidated subsidiaries	—	—	—	—	(10,061)	—	(10,061)
Net investment gains (losses)	—	—	4,020	768	55,086	—	59,874
Other income (expense)[1]	5,796	2,399	559	(573)	3,478	(2,439)	9,220
Net losses and loss adjustment expenses	(532,485)	(121,649)	(52,412)	(47,369)	—	—	(753,915)
Underwriting, policy acquisition and operating expenses[1]	(120,310)	(57,520)	(23,201)	(34,711)	(19,146)	2,439	(252,449)
SPC U.S. federal income tax expense[2]	—	—	(1,059)	—	—	—	(1,059)
SPC dividend (expense) income	—	—	(4,579)	—	—	—	(4,579)
Interest expense	—	—	—	—	(16,636)	—	(16,636)
Income tax benefit (expense)	—	—	—	—	29,808	—	29,808
Segment results	$ (147,941)	$ 12,470	$ 3,469	$ 3,337	$ 129,669	$ —	$ 1,004
Net income (loss)							$ 1,004
Significant non-cash items:							
Depreciation and amortization, net of accretion	$ 6,586	$ 3,825	$ (41)	$ (7)	$ 8,302	$ —	$ 18,665

[1] Certain fees for services provided to the SPCs at Inova Re and Eastern Re are recorded as expenses within the Segregated Portfolio Cell Reinsurance segment and as other income within the Workers' Compensation Insurance segment. These fees are primarily SPC rental fees and are eliminated between segments in consolidation.

[2] Represents the provision for U.S. federal income taxes for SPCs at Inova Re, which have elected to be taxed as a U.S. corporation under Section 953(d) of the Internal Revenue Code. U.S. federal income taxes are included in the total SPC net results and are paid by the individual SPCs.

[3] Represents the transaction-related costs, after-tax, associated with the acquisition of NORCAL. Pre-tax transaction-related costs of $25.0 million were included as a component of consolidated operating expense and the associated income tax benefit of $2.2 million was included as a component of consolidated income tax benefit (expense) on the Consolidated Statements of Income and Comprehensive Income for year ended December 31, 2021.

The following table provides detailed information regarding ProAssurance's gross premiums earned by product as well as a reconciliation to net premiums earned. All gross premiums earned are from external customers except as noted. ProAssurance's insured risks are primarily within the U.S.

(In thousands)	Year Ended December 31		
	2021	2020	2019
Specialty P&C Segment			
Gross premiums earned:			
HCPL	**$ 616,614**	$ 411,716	$ 434,867
Small business unit	**105,605**	104,376	109,876
Medical technology liability	**38,508**	34,909	33,957
Other	**684**	821	2,096
Ceded premiums earned	**(66,403)**	(74,457)	(81,738)
Segment net premiums earned	**695,008**	477,365	499,058
Workers' Compensation Insurance Segment			
Gross premiums earned:			
Traditional business	**175,459**	184,204	203,195
Alternative market business	**68,206**	71,280	84,214
Ceded premiums earned	**(79,065)**	(83,712)	(98,169)
Segment net premiums earned	**164,600**	171,772	189,240
Segregated Portfolio Cell Reinsurance Segment			
Gross premiums earned:			
Workers' compensation [(1)]	**65,023**	68,518	81,765
HCPL [(2)]	**7,336**	6,594	6,059
Other	**—**	—	480
Ceded premiums earned	**(8,671)**	(8,760)	(9,741)
Segment net premiums earned	**63,688**	66,352	78,563
Lloyd's Syndicates Segment			
Gross premiums earned:			
Property and casualty [(3)]	**60,590**	98,990	101,222
Ceded premiums earned	**(12,218)**	(21,764)	(20,551)
Segment net premiums earned	**48,372**	77,226	80,671
Consolidated net premiums earned	**$ 971,668**	$ 792,715	$ 847,532

[(1)] Premium for all periods is assumed from the Workers' Compensation Insurance segment.
[(2)] Premium for all periods is assumed from the Specialty P&C segment.
[(3)] Includes a nominal amount of premium assumed from the Specialty P&C segment for the year ended December 31, 2019.

19. Benefit Plans

ProAssurance maintains the ProAssurance Savings Plan that provides a vehicle for eligible employees to build retirement income. For the year ended December 31, 2021 and for the second half of 2020, ProAssurance provided employer contributions to the plan of up to 5% of eligible contributions for qualified employees. For the first half of 2020 and for the year ended December 31, 2019, ProAssurance provided employer contributions to the plan of up to 10% of eligible contributions for qualified employees. ProAssurance also maintained a similar plan as a result of its acquisition of NORCAL on May 5, 2021 (see Note 2 for additional information), which was merged into the ProAssurance Savings Plan effective January 1, 2022. ProAssurance incurred expenses related to these savings plans of $4.1 million, $5.5 million and $7.2 million during the years ended December 31, 2021, 2020 and 2019, respectively.

ProAssurance also maintains the ProAssurance Plan that allows eligible management employees to defer a portion of their current salary. ProAssurance incurred nominal expense related to the ProAssurance Plan in each of the years ended December 31, 2021, 2020 and 2019. ProAssurance's deferred compensation liabilities totaled $52.3 million and $30.3 million at December 31, 2021 and 2020, respectively. As a result of ProAssurance's acquisition of NORCAL, the Company's deferred compensation liabilities at December 31, 2021 included $18.4 million associated with the NORCAL Non-Qualified Deferred Compensation Plan and incurred nominal expense related to this plan for the year ended December 31, 2021. The NORCAL Non-Qualified Deferred Compensation Plan was terminated as of December 31, 2021. The liabilities included amounts due under the ProAssurance Plan and amounts due under individual agreements with current or former employees.

Pension

ProAssurance assumed a frozen defined benefit pension plan on May 5, 2021 as a result of its acquisition of NORCAL, which covers substantially all NORCAL employees (except those that were previous employees of Medicus Insurance Company and FD Insurance Company, employees of PPM RRG as well as new hires after December 31, 2013). Benefits are based on years of service and the employee’s average of the highest five years of annual compensation. Annual contributions to the defined benefit pension plan are above the minimum funding standards outlined in the Employee Retirement Income Security Act of 1974, as amended. ProAssurance makes contributions to the defined benefit pension plan with the goal of ensuring that it is adequately funded to meet its future obligations. ProAssurance did not make any contributions to NORCAL's defined benefit pension plan during the period from May 5, 2021 to December 31, 2021 and does not anticipate making any contributions in 2022. The defined benefit pension plan no longer has future service accruals or compensation increases because this plan was frozen effective December 31, 2015.

The PBO for pension benefits represents the present value of benefits earned as of December 31 for vested and non-vested employees. The following table provides a reconciliation of the changes in the PBO and fair value of plan assets for the year ended December 31, 2021:

($ in thousands)		
Change in benefit obligation:		
PBO at January 1, 2021	$	—
Acquired PBO from NORCAL acquisition		107,895
Interest cost		2,030
Actuarial (gain) loss		2,872
Benefits paid		(1,149)
Settlement payments		(4,749)
PBO at December 31, 2021	**$**	**106,899**
Change in fair value of plan assets:		
Fair value of plan assets at January 1, 2021	$	—
Fair value of plan assets acquired from NORCAL		109,443
Actual return on plan assets		6,899
Benefits paid		(1,149)
Settlement payments		(4,749)
Fair value of plan assets at December 31, 2021	**$**	**110,444**
Funded (underfunded) status of the plan		**3,545**
Amount recognized in Consolidated Balance Sheets at December 31, 2021*		**3,545**
Net actuarial (gain) loss recognized in AOCI and not yet reflected in net periodic benefit cost (income)		**(1,468)**

*The funded balance is included as a component of other assets on the Consolidated Balance Sheets for the year ended December 31, 2021.

As of December 31, 2021, the pension plan was remeasured to reflect settlement accounting primarily due to lump sum payments elected by covered employees that were terminated.

The components of the net periodic benefit cost (income) for the year ended December 31, 2021 were as follows:

($ in thousands)		Year Ended December 31, 2021
Components of net periodic benefit cost (income):		
Interest cost	$	2,030
Expected return on plan assets		(2,494)
Gain on settlement		(65)
Total net periodic benefit cost (income)*	$	(529)
Other changes recognized in OCI:		
Net actuarial (gain) loss		(1,533)
Reclassification of gain on settlement		65
(Gain) loss recognized in OCI		(1,468)
Total recognized in net periodic benefit cost (income) and OCI	$	(1,997)

*Net periodic benefit cost (income) is included as a component of operating expense on the Consolidated Statements of Income and Comprehensive Income for the year ended December 31, 2021.

The components of the change in amounts not yet recognized as components of the net periodic benefit cost (income) were as follows:

		December 31, 2021
Items not yet recognized as a component of net periodic benefit cost (income) at January 1, 2021	$	—
Net actuarial (gain) loss		(1,533)
Reclassification of gain (loss) on settlement		65
Items not yet recognized as a component of net periodic benefit cost (income) at December 31, 2021	$	(1,468)
Amounts recognized in AOCI	$	(1,468)

The weighted average discount rate used to determine the projected benefit obligation of the defined benefit pension plan for the year ended December 31, 2021 and as of the date of the NORCAL acquisition on May 5, 2021 were as follows:

	December 31, 2021	May 5, 2021
Weighted average discount rate	2.78 %	2.95 %

The weighted average discount rate and the weighted average expected return on plan assets used to determine net periodic benefit cost (credit) for the year ended December 31, 2021 were as follows:

	December 31, 2021
Weighted average discount rate	2.95 %
Weighted average expected return on plan assets	3.75 %

The long-term rate of return is based on the anticipated returns that will be earned by the portfolio over the long term. The weighted average expected return on plan assets is influenced, but not determined, by historical portfolio performance.

ProAssurance has engaged a certified investment adviser to manage the defined benefit pension plan’s assets. The investment strategy is to build an efficient, well diversified portfolio based on a long-term strategic outlook of the investment markets. The investment markets outlook utilizes both historically based and forward-looking return forecasts to establish future return expectations for various asset classes. These return expectations are used to develop a core asset allocation based

on the specific needs of the pension plan. The core asset allocation utilizes investment portfolios of various asset classes and multiple investment managers to help maximize the defined benefit pension plan's return, while providing multiple layers of diversification to help minimize risk. The defined benefit pension plan's target allocations, by asset category as of December 31, 2021, were as follows:

	December 31, 2021
Equity investments	**18 %**
Fixed maturities	**79 %**
Real estate	**3 %**
	100 %

The pension plan's assets consist of investments in pooled separate accounts that invest in mutual funds, equity investments, debt securities or real estate investments. The fair values of the assets in the defined benefit pension plan, by asset category as of December 31, 2021, were as follows:

	December 31, 2021			
(In thousands)	Level 1	Level 2	Level 3	Total*
Pooled separate account investments:				
Large cap equity investments[1]	**$ 13,703**	**$ —**	**$ —**	**$ 13,703**
Mid cap equity investments[1]	**586**	**—**	**—**	**586**
Small cap equity investments[1]	**229**	**—**	**—**	**229**
International equity investments[2]	**—**	**5,581**	**—**	**5,581**
Corporate and government debt[3]	**—**	**86,728**	**—**	**86,728**
Real estate[4]	**—**	**—**	**3,617**	**3,617**
Total	**$ 14,518**	**$ 92,309**	**$ 3,617**	**$ 110,444**

*For some assets, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. When this is the case, the asset is categorized based on the level of the most significant input to the fair value measurement. Assessments of the significance of a particular input to the fair value measurement require judgement and consideration of factors specific to the assets being valued.

Management has determined that the NAV of the pooled separate accounts represents fair value because the NAV is published and available to current investors and is the basis for current transactions. Consequently, the pooled separate accounts are classified in the fair value hierarchy discussed in Note 3 based upon the ending NAV. The fair values of the underlying investments used to determine the NAV of the pooled separate accounts are primarily publicly quoted prices or quoted prices for similar assets in active or non-active markets, however other inputs may also be used as described below. Below is a description of the inputs and valuation methodologies used to determine the fair value of our defined benefit pension plan assets:

[1] The portfolios invest primarily in publicly traded equity securities of large, mid-sized and small U.S. companies that are priced using the closing price of the applicable U.S. nationally recognized stock exchange.

[2] The portfolios invest primarily in publicly traded equity securities of non-U.S. companies that are priced using the closing price of the applicable foreign stock exchange, which may require certain liquidity adjustments for non-active markets.

[3] The portfolios invest in various fixed income securities, primarily of U.S. origin. These include, but are not limited to corporate bonds and U.S. Treasury obligations. The underlying securities are priced by industry standards vendors, using inputs such as benchmark yields, reported trades, broker/dealer quotes or issuer spreads.

[4] The portfolios invest primarily in commercial real estate and includes mortgage loans which are collateralized by the associated properties. Real estate values are determined based upon annual appraisals with daily updates that are based on changes in factors such as occupancy levels, lease rates, overall market conditions and capital changes, among others.

The following tables present summary information regarding changes in the fair value of the defined benefit pension plan assets measured using Level 3 inputs:

	Level 3 Fair Value Measurements	
(In thousands)	Real Estate	Total
Balance, January 1, 2021	$ —	$ —
Acquired balance, May 5, 2021	3,383	3,383
Actual return on plan assets:		
Relating to assets still held at the reporting date:		
Investment return	613	613
Transfers out	(379)	(379)
Balance, December 31, 2021	$ 3,617	$ 3,617

Based on current data and assumptions as of December 31, 2021, the following benefit payments are expected to be paid in future periods:

2022	$ 6,240
2023	6,030
2024	5,430
2025	5,740
2026	6,270
Thereafter	31,070
Total	$ 60,780

20. Statutory Accounting and Dividend Restrictions

ProAssurance's domestic U.S. insurance subsidiaries are required to file statutory financial statements with state insurance regulatory authorities, prepared based upon SAP prescribed or permitted by regulatory authorities. ProAssurance did not use any prescribed or permitted SAP that differed from the NAIC's SAP at December 31, 2021, 2020 or 2019. The most significant differences between net income (loss) prepared in accordance with GAAP and statutory net income (loss) are generally due to: (a) policy acquisition and certain software and equipment costs which are deferred under GAAP but expensed for statutory purposes, (b) certain deferred income taxes which are recognized under GAAP but are not recognized for statutory purposes, (c) net unrealized gains or losses which are included in shareholders' equity related to available-for-sale fixed maturity securities carried at fair value under GAAP but are principally carried at amortized cost for statutory purposes and (d) accounting for goodwill and intangible assets.

The NAIC specifies risk-based capital requirements for property and casualty insurance providers. At December 31, 2021, the Company estimates that actual statutory capital and surplus for each of ProAssurance's insurance subsidiaries will exceed the minimum regulatory requirements. Statutory net income (loss) and capital and surplus of ProAssurance's insurance subsidiaries are estimates and could differ from actual results upon completion and filing of statutory financial statements with state insurance regulatory authorities subsequent to filing this report on Form 10-K. Net income (loss) and capital and surplus of ProAssurance's insurance subsidiaries on a statutory basis are shown in the following table.

(In millions)

Statutory Net Income (Loss)			Statutory Capital and Surplus	
2021	2020	2019	2021	2020
$73	$81	($22)	$1,452	$831

At December 31, 2021, $1.5 billion of ProAssurance's consolidated net assets were held at its domestic insurance subsidiaries, of which approximately $147 million are permitted to be paid as dividends over the course of 2022 without prior approval of state insurance regulators. However, the payment of any dividend requires prior notice to the insurance regulator in

the state of domicile and the regulator may prevent the dividend if, in its judgment, payment of the dividend would have an adverse effect on the capital and surplus of the insurance subsidiary. In addition, ProAssurance makes the decision to pay dividends from an insurance subsidiary based on the capital needs of that subsidiary and may pay less than the permitted dividend or may also request permission to pay an additional amount (an extraordinary dividend).

ProAssurance Corporation and Subsidiaries
Schedule I -- Summary of Investments -- Other than Investments in Related Parties
(In thousands)

Type of Investment	December 31, 2021		
	Recorded Cost Basis	Fair Value	Amount Which is Presented in the Balance Sheet
Fixed maturities			
Bonds:			
U.S. Government or government agencies and authorities	$ 277,161	$ 275,583	$ 275,583
States, municipalities and political subdivisions	511,750	519,196	519,196
Foreign governments	35,303	35,971	35,971
Public utilities	93,561	94,683	94,683
All other corporate bonds	1,782,282	1,794,438	1,794,438
Asset-backed securities	1,158,704	1,157,521	1,157,521
Total Fixed Maturities	3,858,761	3,877,392	3,877,392
Equity Securities			
Common Stocks:			
Banks, trusts and insurance companies	7,388	7,470	7,470
Industrial, miscellaneous and all other	203,968	207,337	207,337
Total Equity Securities, trading	211,356	214,807	214,807
Other long-term investments	376,726	519,137	519,137
Short-term investments	217,114	216,987	216,987
Total Investments	$ 4,663,957	$ 4,828,323	$ 4,828,323

ProAssurance Corporation and Subsidiaries
Schedule II – Condensed Financial Information of Registrant
Condensed Balance Sheet
(In thousands)

	December 31, 2021	December 31, 2020
Assets		
Investment in subsidiaries, at equity	**$ 1,605,892**	$ 1,383,527
Fixed maturities available for sale, at fair value	**—**	33,824
Short-term investments	**43,270**	115,198
Investment in unconsolidated subsidiaries	**915**	915
Cash and cash equivalents	**18,115**	55,469
Due from subsidiaries	**2,166**	—
Other assets	**14,584**	28,778
Total Assets	**$ 1,684,942**	$ 1,617,711
Liabilities and Shareholders' Equity		
Liabilities:		
Due to subsidiaries	**$ —**	$ 10,696
Dividends payable	**2,698**	2,694
Other liabilities	**4,771**	6,361
Debt less debt issuance costs	**249,086**	248,750
Total Liabilities	**256,555**	268,501
Shareholders' Equity:		
Common stock	**633**	632
Other shareholders' equity, including unrealized gains (losses) on securities of subsidiaries	**1,427,754**	1,348,578
Total Shareholders' Equity	**1,428,387**	1,349,210
Total Liabilities and Shareholders' Equity	**$ 1,684,942**	$ 1,617,711

ProAssurance Corporation and Subsidiaries
Schedule II – Condensed Financial Information of Registrant
Condensed Statements of Income
(In thousands)

	Year Ended December 31		
	2021	2020	2019
Revenues			
Net investment income (loss)	**$ (1,470)**	$ 331	$ 2,694
Equity in earnings (loss) of unconsolidated subsidiaries	**—**	—	40
Net investment gains (losses)	**1,159**	2,194	19
Other income (loss)	**2,359**	12	795
Total revenues	**2,048**	2,537	3,548
Expenses			
Interest expense	**14,549**	14,260	14,074
Other expenses	**29,094**	21,458	16,653
Total expenses	**43,643**	35,718	30,727
Income (loss) before income tax expense (benefit) and equity in net income (loss) of consolidated subsidiaries	**(41,595)**	(33,181)	(27,179)
Income tax expense (benefit)	**(9,833)**	11,404	(28,455)
Income (loss) before equity in net income (loss) of consolidated subsidiaries	**(31,762)**	(44,585)	1,276
Equity in net income (loss) of consolidated subsidiaries	**175,886**	(131,142)	(272)
Net income (loss)	**144,124**	(175,727)	1,004
Other comprehensive income (loss)	**(58,943)**	38,272	53,866
Comprehensive income (loss)	**$ 85,181**	$ (137,455)	$ 54,870

ProAssurance Corporation and Subsidiaries
Schedule II – Condensed Financial Information of Registrant
Condensed Statements of Cash Flow
(In thousands)

	Year Ended December 31		
	2021	2020	2019
Net cash provided (used) by operating activities	**$ 2,589**	$ (21,450)	$ 20,055
Investing activities			
Proceeds from sales or maturities of:			
Fixed maturities, available for sale	**33,443**	87,101	27,974
Net decrease (increase) in short-term investments	**71,928**	(51,206)	12,603
Dividends from subsidiaries	**21,464**	79,486	52,499
Contribution of capital to subsidiaries	**(214,237)**	(97,541)	—
Funds (advanced) repaid for Lloyd's FAL deposit	**59,012**	32,256	(4,894)
Funds (advanced) repaid under Syndicate Credit Agreement	**—**	—	30,296
Other	**(151)**	(2,206)	(936)
Net cash provided (used) by investing activities	**(28,541)**	47,890	117,542
Financing activities			
Subsidiary payments for common shares and share-based compensation awarded to subsidiary employees	**(307)**	2,846	344
Dividends to shareholders	**(10,758)**	(38,664)	(93,204)
Other	**(337)**	(1,109)	(4,538)
Net cash provided (used) by financing activities	**(11,402)**	(36,927)	(97,398)
Increase (decrease) in cash and cash equivalents	**(37,354)**	(10,487)	40,199
Cash and cash equivalents at beginning of period	**55,469**	65,956	25,757
Cash and cash equivalents at end of period	**$ 18,115**	$ 55,469	$ 65,956
Supplemental disclosure of cash flow information:			
Cash paid (refunded) during the year for income taxes, net	**$ (7,943)**	$ (9,117)	$ 2,053
Cash paid during the year for interest	**$ 14,176**	$ 13,888	$ 13,699
Significant non-cash transactions:			
Dividends declared and not yet paid	**$ 2,698**	$ 2,694	$ 16,676
Securities transferred at fair value as dividends from subsidiaries	**$ —**	$ 34,915	$ 34,897
Operating ROU assets obtained in exchange for operating lease liabilities	**$ 412**	$ —	$ —

Basis of Presentation

The registrant-only financial statements should be read in conjunction with ProAssurance Corporation's Consolidated Financial Statements and Notes thereto.

At December 31, 2021 and 2020, PRA investment in subsidiaries is stated at the initial consolidation value plus equity in the undistributed earnings of subsidiaries since the date of acquisition.

ProAssurance Corporation has a management agreement with several of its insurance subsidiaries whereby ProAssurance Corporation charges the subsidiaries a management fee for various management services provided to the subsidiary. Under the arrangement, the expenses associated with such services remain as expenses of ProAssurance Corporation and the management fee charged is reported as an offset to ProAssurance Corporation expenses.

ProAssurance Corporation and Subsidiaries
Schedule III – Supplementary Insurance Information
(In thousands)

	2021	2020	2019
Net premiums earned			
Specialty P&C	**$ 695,008**	$ 477,365	$ 499,058
Workers' Compensation Insurance	**164,600**	171,772	189,240
Segregated Portfolio Cell Reinsurance	**63,688**	66,352	78,563
Lloyd's Syndicates	**48,372**	77,226	80,671
Consolidated	**$ 971,668**	$ 792,715	$ 847,532
Net investment income [1]			
Segregated Portfolio Cell Reinsurance	**$ 814**	$ 1,084	$ 1,578
Lloyd's Syndicates	**1,961**	4,128	4,551
Corporate	**67,747**	66,786	87,140
Consolidated	**$ 70,522**	$ 71,998	$ 93,269
Losses and loss adjustment expenses incurred related to current year, net of reinsurance			
Specialty P&C	**$ 608,106**	$ 497,554	$ 526,744
Workers' Compensation Insurance	**121,804**	118,523	129,450
Segregated Portfolio Cell Reinsurance	**42,721**	46,200	62,546
Lloyd's Syndicates	**25,101**	49,569	46,958
Consolidated	**$ 797,732**	$ 711,846	$ 765,698
Losses and loss adjustment expenses incurred related to prior year, net of reinsurance			
Specialty P&C	**$ (32,942)**	$ (27,480)	$ 5,741
Workers' Compensation Insurance	**(7,100)**	(6,971)	(7,801)
Segregated Portfolio Cell Reinsurance	**(10,152)**	(16,595)	(10,134)
Lloyd's Syndicates	**4,711**	647	411
Consolidated	**$ (45,483)**	$ (50,399)	$ (11,783)
Paid losses and loss adjustment expenses, net of reinsurance			
Specialty P&C [2]	**$ 538,885**	$ 379,656	$ 382,845
Workers' Compensation Insurance	**121,302**	118,496	117,848
Segregated Portfolio Cell Reinsurance	**37,127**	46,267	37,034
Lloyd's Syndicates	**47,931**	40,897	36,593
Inter-segment eliminations	**—**	(143)	(196)
Consolidated	**$ 745,245**	$ 585,173	$ 574,124
Amortization of DPAC			
Specialty P&C	**$ 61,662**	$ 53,562	$ 56,605
Workers' Compensation Insurance	**15,100**	15,895	17,144
Segregated Portfolio Cell Reinsurance	**18,730**	19,636	21,717
Lloyd's Syndicate	**14,973**	21,597	21,392
Inter-segment eliminations	**140**	(125)	(1,528)
Consolidated	**$ 110,605**	$ 110,565	$ 115,330

Continued on the following page.

ProAssurance Corporation and Subsidiaries
Schedule III – Supplementary Insurance Information
(In thousands)

	2021	2020	2019
Continued from previous page			
Other underwriting, policy acquisition and operating expenses			
Specialty P&C	**$ 66,047**	$ 56,037	$ 63,705
Workers' Compensation Insurance	**37,318**	40,554	40,376
Segregated Portfolio Cell Reinsurance	**2,905**	1,073	1,484
Lloyd's Syndicates	**2,984**	8,539	13,319
Corporate	**26,641**	23,429	19,146
Non-segmented items[3]	**24,977**	—	—
Inter-segment eliminations	**(3,231)**	(2,316)	(911)
Consolidated	**$ 157,641**	$ 127,316	$ 137,119
Net premiums written			
Specialty P&C	**$ 626,147**	$ 451,019	$ 495,750
Workers' Compensation Insurance	**161,865**	164,871	182,233
Segregated Portfolio Cell Reinsurance	**63,042**	64,159	77,639
Lloyd's Syndicates	**31,667**	67,652	87,103
Consolidated	**$ 882,721**	$ 747,701	$ 842,725
Deferred policy acquisition costs [1]	**$ 58,940**	$ 47,196	$ 55,567
Reserve for losses and loss adjustment expenses [1]	**$ 3,579,940**	$ 2,417,179	$ 2,346,526
Unearned premiums [1]	**$ 433,961**	$ 361,547	$ 413,086

[1] Assets are not allocated to segments because investments, other than the investments that are solely allocated to the Segregated Portfolio Cell Reinsurance and Lloyd's Syndicates segments, and other assets are not managed at the segment level. See Note 18 of the Notes to Consolidated Financial Statements for additional information.

[2] Paid losses for the year ended December 31, 2021 included paid losses of $158.3 million related to reserves acquired from NORCAL since May 5, 2021. See Note 10 of the Notes to Consolidated Financial Statements for additional information.

[3] Represents pre-tax transaction-related costs associated with the acquisition of NORCAL that are not included in a segment as we do not consider these costs in assessing the financial performance of any of our operating or reportable segments. See Note 18 of the Notes to Consolidated Financial Statements for a reconciliation of our segment results to our consolidated results.

ProAssurance Corporation and Subsidiaries
Schedule IV - Reinsurance
($ in thousands)

	2021	2020	2019
Property and Liability *			
Premiums earned	$ 1,020,107	$ 862,742	$ 926,035
Premiums ceded	(93,998)	(113,582)	(124,171)
Premiums assumed	45,559	43,555	45,668
Net premiums earned	$ 971,668	$ 792,715	$ 847,532
Percentage of amount assumed to net	4.69%	5.49%	5.39%

* All of ProAssurance's premiums are related to property and liability coverages.

EXHIBIT INDEX

Exhibit Number	Description
2.1	Agreement and Plan of Acquisition by and among ProAssurance Corporation, PRA Professional Liability Group, Inc. and NORCAL Mutual Insurance Company dated as of February 20, 2020 filed as an Exhibit to ProAssurance's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.
3.1(a)	Certificate of Incorporation of ProAssurance, filed as an Exhibit to ProAssurance’s Registration Statement on Form S-4 (File No. 333-49378) and incorporated herein by reference pursuant to SEC Rule 12b-32.
3.1(b)	Certificate of Amendment to Certificate of Incorporation of ProAssurance, filed as an Exhibit to ProAssurance’s Annual Report on Form 10-K for the year ended December 31, 2001 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.
3.2	Fourth Restatement of the Bylaws of ProAssurance, effective December 2, 2015, filed as an Exhibit to ProAssurance’s Annual Report on Form 10-K for the year ended December 31, 2015 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.
4.1	Indenture, dated November 21, 2013, between ProAssurance and Wilmington Trust Company, filed as an Exhibit to ProAssurance's Current Report on Form 8-K for the event occurring November 21, 2013 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.
4.2	First Supplemental Indenture, dated November 21, 2013, between ProAssurance and Wilmington Trust Company relating to the $250,000 5.30% Senior Notes due 2023, filed as an Exhibit to ProAssurance's Current Report on Form 8-K for the event occurring November 21, 2013 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.
	ProAssurance will file with the Commission upon request pursuant to the requirements of Item 601 (b)(4) of Regulation S-K documents defining rights of holders of ProAssurance’s long-term indebtedness that has not been registered. See also the documents related to long-term indebtedness filed as material contracts under Exhibits 10.8(a), (b), (c), (d), (e), (f) and (g) to this Form 10-K.
10.1	Form of Release and Severance Compensation Agreement dated as of January 1, 2008 between ProAssurance and each of the following named executive officers*: Jeffrey P. Lisenby Edward L. Rand Jr. Filed as an Exhibit to ProAssurance’s Annual Report on Form 10-K for the year ended December 31, 2007 (File No. 001-16533) and incorporated herein by this reference pursuant to SEC Rule 12b-32.
10.1(a)	Employment Agreement between ProAssurance and Edward L. Rand, Jr. dated as of July 1, 2019, filed as an Exhibit to ProAssurance's Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32, which supersedes the Release and Severance Compensation Agreement referenced in Exhibit 10.1.*
10.2	Employment Agreement between ProAssurance and W. Stancil Starnes dated as of May 1, 2007, filed as an Exhibit to ProAssurance’s Current Report on Form 8-K for the event occurring May 12, 2007 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.*
10.2(a)	Amendment to Employment Agreement with W. Stancil Starnes (May 1, 2007), effective as of January 1, 2008, filed as an Exhibit to ProAssurance’s Annual Report on Form 10-K for the year ended December 31, 2007 (File No. 001-16533) and incorporated herein by this reference pursuant to SEC Rule 12b-32.*
10.2(b)	Amendment to Employment Agreement with W. Stancil Starnes (May 1, 2007), effective as of June 1, 2015, filed as an Exhibit to ProAssurance's Current Report on Form 8-K dated May 27, 2015 (File No. 001-16533) and incorporated herein by this reference pursuant to SEC Rule 12b-32.*
10.2(c)	Amendment to Employment Agreement with W. Stancil Starnes (May 1, 2007), effective as of June 1, 2017, filed as an Exhibit to ProAssurance's Current Report on Form 8-K dated May 31, 2017 (File No. 001-16533) and incorporated herein by this reference pursuant to SEC Rule 12b-32.* Effective July 1, 2019, W. Stancil Starnes voluntarily terminated the referenced agreement to accept his new position as Executive Chairman.

10.3	Form of Release and Severance Compensation Agreement dated as of September 1, 2011 between ProAssurance and Ross E. Taubman, filed as an Exhibit to ProAssurance's Definitive Proxy Statement (File No. 001-16533) on April 11, 2008 and incorporated herein by reference pursuant to SEC Rule 12b-32.*
10.4	Form of Indemnification Agreement between ProAssurance and each of the following named executive officers and directors of ProAssurance*: Robert E. Flowers Howard H. Friedman M. James Gorrie Ziad R. Haydar Jeffrey P. Lisenby Frank B. O'Neil Edward L. Rand, Jr. Frank A. Spinosa W. Stancil Starnes Ross E. Taubman Thomas A. S. Wilson, Jr. Filed as an Exhibit to ProAssurance's Definitive Proxy Statement (File No. 001-16533) on April 11, 2008 and incorporated herein by reference pursuant to SEC Rule 12b-32.
10.5	ProAssurance Group Employee Benefit Plan which includes the Executive Supplemental Life Insurance Program (Article VIII), filed as an Exhibit to ProAssurance's Annual Report on Form 10-K for the year ended December 31, 2004 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.*
10.6	Amendment and Restatement of the Executive Non-Qualified Excess Plan and Trust effective January 1, 2008, filed as an Exhibit to ProAssurance's Annual Report on Form 10-K for the year ended December 31, 2007 (File No. 001-16533) and incorporated herein by this reference pursuant to SEC Rule 12b-32.*
10.7	Director Deferred Compensation Plan as amended and restated December 7, 2011, filed as an Exhibit to ProAssurance's Annual Report on Form 10-K for the year ended December 31, 2011 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.*
10.7(a)	Amendment No. 1 to the Amended and Restated Director Deferred Compensation Plan dated May 22, 2013, filed as an Exhibit to ProAssurance's Quarterly Report on Form 10-Q for the quarter ended June 30, 2013 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.*
10.7(b)	Amendment No. 2 to the Amended and Restated Director Deferred Compensation Plan effective June 22, 2017, filed as an Exhibit to ProAssurance's Annual Report on Form 10-K for the year ended December 31, 2019 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.*
10.7(c)	Amendment No. 3 to the Amended and Restated Director Deferred Compensation Plan effective March 6, 2019, filed as an Exhibit to ProAssurance's Annual Report on Form 10-K for the year ended December 31, 2019 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.*
10.8	Revolving Credit Agreement, dated April 15, 2011, between ProAssurance and U.S. Bank National Association, Wells Fargo Bank, National Association, Branch Banking and Trust Company, First Tennessee Bank, N.A., and JP Morgan Chase Bank N.A., filed as an Exhibit to ProAssurance's Quarterly Report on Form 10-Q for the quarter ended June 30, 2011 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.
10.8(a)	Amendment No. 1 to Revolving Credit Agreement between ProAssurance and U.S. Bank National Association, Wells Fargo Bank, National Association, Branch Banking and Trust Company, First Tennessee Bank, N.A., and JP Morgan Chase Bank N.A., filed as an Exhibit to ProAssurance's Quarterly Report on Form 10-Q for the quarter ended September 30, 2012 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.
10.8(b)	Amendment No. 2 to Revolving Credit Agreement between ProAssurance and U.S. Bank National Association, Wells Fargo Bank, National Association, Branch Banking and Trust Company, First Tennessee Bank, N.A., and JP Morgan Chase Bank N.A., filed as an Exhibit to ProAssurance's Current Report on Form 8-K for the event occurring November 8, 2013 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.

10.8(c)	Form of the Augmenting Lender Supplement to Revolving Credit Agreement between ProAssurance and U.S. Bank National Association, Wells Fargo Bank, National Association, Branch Banking and Trust Company, First Tennessee Bank, N.A., and JP Morgan Chase Bank N.A., filed as an Exhibit to ProAssurance's Quarterly Report on Form 10-Q for the quarter ended June 30, 2014 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.
10.8(d)	Amendment No. 4 to Revolving Credit Agreement between ProAssurance and U.S. Bank National Association., Wells Fargo Bank, National Association, Branch Banking and Trust Company, First Tennessee Bank, N.A., KeyBank N.A., Cadence Bank, N.A., and Regions Bank, N.A., dated June 19, 2015, filed as an Exhibit to ProAssurance’s Annual Report on Form 10-K for the year ended December 31, 2015 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.
10.8(e)	Amendment No. 5 to Revolving Credit Agreement between ProAssurance and U.S. Bank National Association, Wells Fargo Bank, National Association, Branch Banking and Trust Company, First Tennessee Bank, N.A., KeyBank N.A., Cadence Bank N.A. and Regions Bank, filed as an Exhibit to ProAssurance's Annual Report on Form 10-K for the year ended December 31, 2017 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.
10.8(f)	Amended and restated Revolving Credit Agreement between ProAssurance and U.S. Bank N.A., Wells Fargo Bank, National Association, Branch Banking and Trust Company, First Tennessee Bank, N.A., KeyBank N.A., Cadence Bank, N.A. and Regions Bank, filed as an Exhibit to ProAssurance's Annual Report on Form 10-K for the year ended December 31, 2019 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.
10.8(g)	Amendment No. 1 to amended and restated Revolving Credit Agreement, dated as of April 19, 2021, between ProAssurance and U.S. Bank N.A., Wells Fargo Bank N.A., KeyBank N.A., Regions Bank, Trust Bank, Cadence Bank N.A., and First Horizon Bank, filed as an Exhibit to ProAssurance's Quarterly Report on Form 10-Q for the quarter ended March 31, 2021 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.
10.9	Pledge and Security Agreement between ProAssurance and U.S. Bank National Association, filed as an Exhibit to ProAssurance’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2011 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.
10.10	ProAssurance Corporation Amended and Restated 2014 Equity Incentive Plan, filed as an Exhibit to ProAssurance’s Current Report on Form 8-K for event occurring May 14, 2013 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.*
10.11	ProAssurance Corporation 2014 Annual Incentive Plan, filed as an Exhibit to ProAssurance’s Definitive Proxy Statement (File No. 001-16533) filed on May 22, 2013 and incorporated herein by reference pursuant to SEC Rule 12b-32.*
10.12	Facility Agreement between ProAssurance and the Premiums Trust Fund of Syndicate 1729, filed as an Exhibit to ProAssurance's Annual Report on Form 10-K for the year ended December 31, 2013 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.
10.12(a)	Amendment to Facility Agreement effective April 6, 2016, between ProAssurance and the Premiums Trust Fund of Syndicate 1729 filed as an Exhibit to ProAssurance's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.
10.13	Retention and Severance Compensation Agreement effective January 1, 2014, between ProAssurance and Michael L. Boguski, filed as an Exhibit to ProAssurance's Annual Report on Form 10-K for the year ended December 31, 2013 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.*
10.13(a)	Employment Agreement between ProAssurance and Michael Boguski dated as of May 1, 2019, filed as an Exhibit to ProAssurance's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32, which supersedes the Retention and Severance Compensation Agreement referenced in Exhibit 10.14.*
10.14	Mortgage Agreement, dated December 11, 2017, between ProAssurance Indemnity Company, Inc. and First Tennessee Bank National Association, filed as an Exhibit to ProAssurance’s Annual Report on Form 10-K for the year ended December 31, 2017 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.
10.15	Mortgage Agreement, dated December 11, 2017, between Podiatry Insurance Company of America and First Tennessee Bank National Association, filed as an Exhibit to ProAssurance’s Annual Report on Form 10-K for the year ended December 31, 2017 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.

10.16	Interest Rate Cap Agreement, dated October 23, 2017, between Professional Liability Group and First Tennessee Bank National Association, filed as an Exhibit to ProAssurance’s Annual Report on Form 10-K for the year ended December 31, 2017 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.
10.17	Form of Release and Severance Compensation Agreement dated as of May 13, 2019 between ProAssurance and Dana S. Hendricks, filed as an Exhibit to ProAssurance's Annual Report on Form 10-K for the year ended December 31, 2019 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.*
10.18	Form of Release and Severance Compensation Agreement dated as of May 13, 2019 between ProAssurance and Kevin M. Shook, filed as an Exhibit to ProAssurance's Annual Report on Form 10-K for the year ended December 31, 2019 (File No. 001-16533) and incorporated herein by reference pursuant to SEC Rule 12b-32.*
21.1	Subsidiaries of ProAssurance Corporation
23.1	Consent of Ernst & Young LLP
31.1	Certification of Principal Executive Officer of ProAssurance as required under SEC Rule 13a-14(a)
31.2	Certification of Principal Financial Officer of ProAssurance as required under SEC Rule 13a-14(a)
32.1	Certification of Principal Executive Officer of ProAssurance as required under SEC Rule 13a-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code, as amended (18 U.S.C. 1350)
32.2	Certification of Principal Financial Officer of ProAssurance as required under SEC Rule 13a-14(b) and 18 U.S.C. 1350
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

* Denotes a management contract or compensatory plan, contract or arrangement required to be filed as an Exhibit to this report.

Non-GAAP Financial Measures

Non-GAAP operating income (loss) is a financial measure that is widely used to evaluate performance within the insurance sector. In calculating Non-GAAP operating income (loss), we have excluded the effects of the items listed in the following table that do not reflect normal results. We believe Non-GAAP operating income (loss) presents a useful view of the performance of our insurance operations, however it should be considered in conjunction with net income (loss) computed in accordance with GAAP.

Reconciliation of net income (loss) to Non-GAAP operating income (loss):

	Year Ended December 31,				
(In thousands, except per share data)	**2021**	2020	2019	2018	2017
Net income (loss)	**$ 144,124**	$ (175,727)	$ 1,004	$ 47,057	$ 107,264
Items excluded in the calculation of Non-GAAP operating income (loss):					
Net investment (gains) losses	**(24,310)**	(15,678)	(59,874)	43,488	(16,409)
Net investment gains (losses) attributable to SPCs which no profit/loss is retained [1]	**3,253**	2,436	3,144	(2,535)	3,083
Transaction-related costs [2]	**24,977**	—	—	—	—
Goodwill impairment	—	161,115	—	—	—
Guaranty fund assessments (recoupments)	**228**	97	43	148	(157)
Gain on acquisition [3]	**(74,408)**	—	—	—	—
Pre-tax effect of exclusions	**(70,260)**	147,970	(56,687)	41,101	(13,483)
Tax effect [4]	**2,028**	16	11,904	(8,631)	4,719
After-tax effect of exclusions	**(68,232)**	147,986	(44,783)	32,470	(8,764)
Non-GAAP operating income (loss), before tax reform adjustments	**75,892**	(27,741)	(43,779)	79,527	98,500
Tax reform adjustments on our deferred tax balances excluded in the calculation of Non-GAAP operating income (loss):					
Adjustment of deferred taxes upon the change in corporate tax rate [5]	—	—	—	—	6,541
Adjustment of deferred taxes upon the change in limitation of future deductibility of certain executive compensation [5]	—	—	—	—	3,497
Non-GAAP operating income (loss)	**$ 75,892**	$ (27,741)	$ (43,779)	$ 79,527	$ 108,538
Per diluted common share:					
Net income (loss)	**$ 2.67**	$ (3.26)	$ 0.02	$ 0.88	$ 2.00
Effect of exclusions	**(1.27)**	2.74	(0.83)	0.60	0.02
Non-GAAP operating income (loss) per diluted common share	**$ 1.40**	$ (0.52)	$ (0.81)	$ 1.48	$ 2.02

[1] Net investment gains (losses) on investments related to SPCs are recognized in our Segregated Portfolio Cell Reinsurance segment. SPC results, including any net investment gain or loss, that are attributable to external cell participants are reflected in the SPC dividend expense (income). To be consistent with our exclusion of net investment gains (losses) recognized in earnings, we are excluding the portion of net investment gains (losses) that is included in the SPC dividend expense (income) which is attributable to the external cell participants.

[2] Transaction-related costs associated with our acquisition of NORCAL. We are excluding these costs as they do not reflect normal operating results and are unique and non-recurring in nature.

[3] Gain on bargain purchase associated with our acquisition of NORCAL which is considered unusual, infrequent and non-recurring in nature. As such, we have excluded the gain on bargain purchase from Non-GAAP operating income (loss) as it does not reflect normal operating results.

[4] The statutory tax rate for 2018 through 2021 is 21% as compared to 35% for 2017, associated with the taxable or tax deductible items listed above. The taxes associated with the net investment gains (losses) related to SPCs in our Segregated Portfolio Cell Reinsurance segment are paid by the individual SPCs and are not included in our consolidated tax provision or net income (loss); therefore, both the net investment gains (losses) from our Segregated Portfolio Cell Reinsurance segment and the adjustment to exclude the portion of net investment gains (losses) included in the SPC dividend expense (income) in the table above are not tax effected. The 2021 gain on bargain purchase is non-taxable and therefore had no associated income tax impact. The portion of 2020 goodwill impairment loss that is tax deductible was tax affected at the statutory tax rate (21%). The remaining portion of the 2020 goodwill impairment loss is not tax deductible and therefore had no associated income tax benefit.

[5] Due to tax reform enacted by the TCJA, we remeasured our deferred tax assets and liabilities based on the newly enacted tax rate of 21% and recognized a charge of $6.5 million, which is included as a component of income tax expense from continuing operations for the year ended December 31, 2017. In addition, we made a reasonable estimate of the effects on our deferred tax asset balances at December 31, 2017 as it related to the limitation on the future deductibility on certain executive compensation and recorded a provisional charge to income tax expense of $3.5 million for the year ended December 31, 2017. During 2018, we were able to complete our accounting for the impact of the TCJA on our December 31, 2017 deferred tax asset balances related to executive compensation; no measurement period adjustment was recorded in 2018 as a result.

This page is not a part of ProAssurance's Annual Report on Form 10-K, and was not filed with the Securities & Exchange Commission.

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INVESTOR INFORMATION

There were 54,043,838 shares of ProAssurance Corporation common stock outstanding at March 15, 2022. On that date, we had 2,431 shareholders of record. Our common stock trades on The New York Stock Exchange under the symbol PRA. The price of our stock is available from any website that provides stock quotes. We also post the price of our stock on our website, Proassurance.com.

YOUR SHARES

If you hold your shares through a brokerage account, your broker or a customer service representative at that firm should be able to answer questions about your holdings. If you hold your shares in certificate form, or have shares held in direct registration (DRS), you are a "registered holder." Registered holders may contact our transfer agent, Computershare, for address changes, transfer of certificates, and replacement of share certificates that have been lost or stolen. You may reach Computershare in a variety of ways:

By Phone

(800) 851-4218 or (201) 680-6578

By Internet

Information about your account including share transfer, direct deposit of dividends and your dividend payment history: www-us.computershare.com/Investor/.

For immediate access to tax forms:
www-us.computershare.com/Investor/#QuickTax.

For technical assistance with the Computershare website, please phone (800) 942-5909.

By Mail

Computershare
P. O. Box 30170
College Station, TX 77842

Computershare
211 Quality Circle, Suite 210
College Station, TX 77845

DIRECT DEPOSIT OF DIVIDENDS FOR REGISTERED HOLDERS

We encourage registered holders to have dividends deposited directly into a designated account to ensure prompt, secure delivery of your funds. You may arrange for Direct Deposit by updating your banking details with Computershare (www-us.computershare.com/Investor/myProfile) once you have established online access to your account with Computershare.

CORPORATE GOVERNANCE AND COMPLIANCE WITH REGULATORY AND NEW YORK STOCK EXCHANGE REQUIREMENTS

We invite you to visit the Investor Relations and Corporate Governance sections of our website, http://investor.proassurance.com. There you will find important information about our Company, including our Corporate Governance Principles and Code of Ethics and Conduct, which were developed and adopted by our Board of Directors. The Governance section of our website (http://investor.proassurance.com/govdocs) also provides copies of the Board-adopted charters for our Audit, Compensation, and Nominating/Corporate Governance Committees and our Internal Audit Charter. Our Corporate Governance section also provides information such as stock ownership guidelines, committee composition and leadership, and director independence, including categorical standards to assist in determining independence. Our Corporate Responsibility section provides information such as our Human Rights policy, our Environmental Commitment, and diversity within ProAssurance.

Our filings with the Securities and Exchange Commission (SEC) are available in the Investor Relations section of our website (http://investor.proassurance.com/Docs). Our SEC filings are also available in the EDGAR section of the SEC's website (www.sec.gov/edgar.shtml).

Edward L. Rand, Jr., our President and Chief Executive Officer, submitted the required Section 12(a) CEO Certification to the New York Stock Exchange on May 26, 2021. Additionally, we have been timely in the filing of CEO/CFO certifications as required in Section 302 of the Sarbanes-Oxley Act. These certifications are published as exhibits in our Form 10-K filed with the SEC on February 22, 2022.

INVESTOR RELATIONS

The Investor Relations section of our website (http://investor.proassurance.com) also contains detailed financial information, a dividend payment history, SEC filings, the latest news releases about the Company and our latest presentation materials. We also maintain an archive of presentation materials, although you should realize that archived information, by its very nature, may no longer be accurate.

OBTAINING INFORMATION DIRECTLY FROM PROASSURANCE

Any of the documents mentioned above may be obtained from our Communications and Investor Relations Department using one of the contact methods below:

By Email

Investor@ProAssurance.com

By U. S. Postal Service

ProAssurance Corporation
Investor Relations
P. O. Box 590009
Birmingham, AL 35259-0009

By Phone or Fax

Phone: (205) 877-4400 / (800) 282-6242
Fax: (205) 802-4799

ANNUAL MEETING

The 2022 Annual Meeting is scheduled for 9:00 AM CDT on Tuesday, May 24, 2022 at the headquarters of ProAssurance Corporation, 100 Brookwood Place, Birmingham, Alabama 35209.

100 Brookwood Place
Birmingham, Alabama 35209
205-877-4400 • 800-282-6242

www.ProAssurance.com