

THE PROGRESSIVE CORPORATION
2022 ANNUAL REPORT TO SHAREHOLDERS

The Progressive Corporation and Subsidiaries
Consolidated Statements of Comprehensive Income

For the years ended December 31,

(millions - except per share amounts)	2022	2021	2020
Revenues			
Net premiums earned	\$ 49,241.2	\$ 44,368.7	\$ 39,261.6
Investment income	1,260.3	860.9	936.6
Net realized gains (losses) on securities:			
Net realized gains (losses) on security sales	196.5	614.3	914.7
Net holding period gains (losses) on securities	(2,100.1)	899.9	715.3
Net impairment losses recognized in earnings	(8.6)	(5.0)	0
Total net realized gains (losses) on securities	(1,912.2)	1,509.2	1,630.0
Fees and other revenues	722.1	691.8	603.5
Service revenues	299.3	271.4	226.4
Total revenues	49,610.7	47,702.0	42,658.1
Expenses			
Losses and loss adjustment expenses	38,122.7	33,627.6	25,121.8
Policy acquisition costs	3,917.0	3,712.8	3,273.2
Other underwriting expenses	5,859.6	5,654.7	5,570.0
Policyholder credit expense	0	0	1,077.4
Investment expenses	24.3	25.5	20.0
Service expenses	296.7	252.8	205.5
Interest expense	243.5	218.6	217.0
Goodwill impairment ¹	224.8	0	0
Total expenses	48,688.6	43,492.0	35,484.9
Net Income			
Income before income taxes	922.1	4,210.0	7,173.2
Provision for income taxes	200.6	859.1	1,468.6
Net income	721.5	3,350.9	5,704.6
Other Comprehensive Income (Loss)			
Changes in:			
Total net unrealized gains (losses) on fixed-maturity securities	(2,842.5)	(891.1)	586.5
Net unrealized losses on forecasted transactions	0.4	0.7	0.8
Foreign currency translation adjustment	(0.6)	(0.6)	0
Other comprehensive income (loss)	(2,842.7)	(891.0)	587.3
Comprehensive income (loss)	\$ (2,121.2)	\$ 2,459.9	\$ 6,291.9
Computation of Earnings Per Common Share			
Net income	\$ 721.5	\$ 3,350.9	\$ 5,704.6
Less: Preferred share dividends	26.9	26.9	26.9
Net income available to common shareholders	\$ 694.6	\$ 3,324.0	\$ 5,677.7
Average common shares outstanding—Basic	584.4	584.5	584.9
Net effect of dilutive stock-based compensation	2.7	2.6	2.7
Total average equivalent common shares—Diluted	587.1	587.1	587.6
Basic: Earnings per common share	\$ 1.19	\$ 5.69	\$ 9.71
Diluted: Earnings per common share	\$ 1.18	\$ 5.66	\$ 9.66

¹See Note 15 – Goodwill and Intangible Assets for further discussion.

See notes to consolidated financial statements.

The Progressive Corporation and Subsidiaries
Consolidated Balance Sheets

December 31,

(millions - except per share amounts)	2022	2021
Assets		
Available-for-sale securities, at fair value:		
Fixed maturities (amortized cost: \$50,264.0 and \$43,794.2)	\$ 46,651.9	\$ 43,873.1
Short-term investments (amortized cost: \$2,861.7 and \$942.6)	2,861.7	942.6
Total available-for-sale securities	49,513.6	44,815.7
Equity securities, at fair value:		
Nonredeemable preferred stocks (cost: \$1,364.2 and \$1,571.8)	1,213.2	1,639.9
Common equities (cost: \$826.1 and \$1,264.1)	2,821.5	5,058.5
Total equity securities	4,034.7	6,698.4
Total investments	53,548.3	51,514.1
Cash and cash equivalents	203.5	187.1
Restricted cash and cash equivalents	17.4	15.0
Total cash, cash equivalents, restricted cash, and restricted cash equivalents	220.9	202.1
Accrued investment income	282.5	181.7
Premiums receivable, net of allowance for credit losses of \$343.3 and \$280.4	10,416.9	9,399.5
Reinsurance recoverables	5,832.1	4,980.5
Prepaid reinsurance premiums	295.5	457.6
Deferred acquisition costs	1,544.4	1,355.6
Property and equipment, net of accumulated depreciation of \$1,551.1 and \$1,407.4	1,034.0	1,137.3
Goodwill ¹	227.9	452.7
Intangible assets, net of accumulated amortization of \$158.6 and \$383.8	86.3	117.3
Net federal deferred income taxes	1,131.5	0
Other assets	844.7	1,333.9
Total assets	\$ 75,465.0	\$ 71,132.3
Liabilities and Shareholders' Equity		
Unearned premiums	\$ 17,293.6	\$ 15,615.8
Loss and loss adjustment expense reserves	30,359.3	26,164.1
Net federal deferred income taxes	0	152.9
Accounts payable, accrued expenses, and other liabilities ²	5,532.8	6,069.1
Debt ³	6,388.3	4,898.8
Total liabilities	59,574.0	52,900.7
Serial Preferred Shares (authorized 20.0)		
Serial Preferred Shares, Series B, no par value (cumulative, liquidation preference of \$1,000 per share) (authorized, issued, and outstanding 0.5)	493.9	493.9
Common shares, \$1.00 par value (authorized 900.0; issued 797.6, including treasury shares of 212.7 and 213.2)	584.9	584.4
Paid-in capital	1,893.0	1,772.9
Retained earnings	15,721.2	15,339.7
Accumulated other comprehensive income (loss):		
Net unrealized gains (losses) on fixed-maturity securities	(2,786.3)	56.2
Net unrealized losses on forecasted transactions	(14.5)	(14.9)
Foreign currency translation adjustment	(1.2)	(0.6)
Total accumulated other comprehensive income (loss)	(2,802.0)	40.7
Total shareholders' equity	15,891.0	18,231.6
Total liabilities and shareholders' equity	\$ 75,465.0	\$ 71,132.3

¹See Note 15 – Goodwill and Intangible Assets for further discussion.

²See Note 1 – Reporting and Accounting Policies for Commitments and Contingencies and Note 12 – Litigation for further discussion.

³Consists of long-term debt. See Note 4 – Debt for further discussion.

See notes to consolidated financial statements.

The Progressive Corporation and Subsidiaries
Consolidated Statements of Changes in Shareholders' Equity

For the years ended December 31,

(millions - except per share amounts)	2022	2021	2020
Serial Preferred Shares, No Par Value			
Balance, beginning of year	\$ 493.9	\$ 493.9	\$ 493.9
Balance, end of year	493.9	493.9	493.9
Common Shares, \$1.00 Par Value			
Balance, beginning of year	584.4	585.2	584.6
Treasury shares purchased	(0.9)	(2.4)	(1.3)
Net restricted equity awards issued/vested	1.4	1.6	1.9
Balance, end of year	584.9	584.4	585.2
Paid-In Capital			
Balance, beginning of year	1,772.9	1,672.9	1,573.4
Amortization of equity-based compensation	122.7	100.7	89.4
Treasury shares purchased	(2.6)	(7.1)	(3.6)
Net restricted equity awards issued/vested	(1.4)	(1.6)	(1.9)
Reinvested dividends on restricted stock units	1.4	8.0	18.2
Adjustment to carrying amount of redeemable noncontrolling interest	0	0	(2.6)
Balance, end of year	1,893.0	1,772.9	1,672.9
Retained Earnings			
Balance, beginning of year	15,339.7	13,354.9	10,679.6
Net income	721.5	3,350.9	5,704.6
Treasury shares purchased	(95.5)	(213.5)	(106.7)
Cash dividends declared on common shares (\$0.40, \$1.90, and \$4.90 per share) ¹	(233.7)	(1,109.0)	(2,865.9)
Cash dividends declared on Serial Preferred Shares, Series B (\$53.75, \$53.75, and \$80.625 per share) ¹	(26.8)	(26.8)	(40.2)
Reinvested dividends on restricted stock units	(1.4)	(8.0)	(18.2)
Other, net	17.4	(8.8)	1.7
Balance, end of year	15,721.2	15,339.7	13,354.9
Accumulated Other Comprehensive Income (Loss)			
Balance, beginning of year	40.7	931.7	341.7
Attributable to noncontrolling interest	0	0	2.7
Other comprehensive income (loss)	(2,842.7)	(891.0)	587.3
Balance, end of year	(2,802.0)	40.7	931.7
Total shareholders' equity	\$15,891.0	\$18,231.6	\$17,038.6

¹See Note 14 – Dividends for further discussion.

There are 5.0 million Voting Preference Shares authorized; no such shares have been issued.

See notes to consolidated financial statements.

The Progressive Corporation and Subsidiaries
Consolidated Statements of Cash Flows

For the years ended December 31,

(millions)	2022	2021	2020
Cash Flows From Operating Activities			
Net income	\$ 721.5	\$ 3,350.9	\$ 5,704.6
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation	305.6	279.7	274.9
Amortization of intangible assets	31.0	57.7	56.9
Net amortization (accretion) of fixed-income securities	(25.2)	130.3	100.9
Amortization of equity-based compensation	122.7	100.7	89.4
Net realized (gains) losses on securities	1,912.2	(1,509.2)	(1,630.0)
Net (gains) losses on disposition of property and equipment	(0.6)	(3.6)	12.5
Goodwill impairment ¹	224.8	0	0
Changes in:			
Premiums receivable	(1,017.4)	(1,146.8)	(652.8)
Reinsurance recoverables	(851.6)	(508.7)	(640.5)
Prepaid reinsurance premiums	162.1	(74.9)	258.4
Deferred acquisition costs	(188.8)	(118.4)	(180.7)
Income taxes	(515.3)	(86.0)	(23.1)
Unearned premiums	1,677.8	2,111.4	1,048.7
Loss and loss adjustment expense reserves	4,195.2	4,752.8	2,160.4
Accounts payable, accrued expenses, and other liabilities	199.5	399.7	328.9
Other, net	(104.7)	26.1	(2.9)
Net cash provided by operating activities	6,848.8	7,761.7	6,905.6
Cash Flows From Investing Activities			
Purchases:			
Fixed maturities	(26,510.4)	(33,177.5)	(32,037.5)
Equity securities	(158.1)	(838.1)	(951.2)
Sales:			
Fixed maturities	14,055.2	18,965.2	22,727.2
Equity securities	1,496.1	780.6	431.8
Maturities, paydowns, calls, and other:			
Fixed maturities	5,380.3	7,013.8	7,109.4
Equity securities	83.6	223.1	113.8
Net (purchases) sales of short-term investments	(1,868.2)	4,355.7	(3,393.2)
Net change in unsettled security transactions	(177.8)	47.9	83.6
Acquisition of Protective Insurance Corporation, net of cash, cash equivalents, and restricted cash equivalents acquired	0	(313.2)	0
Purchases of property and equipment	(292.0)	(243.5)	(223.5)
Sales of property and equipment	35.1	66.2	21.9
Net cash used in investing activities	(7,956.2)	(3,119.8)	(6,117.7)
Cash Flows From Financing Activities			
Dividends paid to common shareholders ²	(234.0)	(3,746.5)	(1,551.0)
Dividends paid to preferred shareholders ²	(26.8)	(26.8)	(26.8)
Acquisition of treasury shares for restricted stock tax liabilities	(76.7)	(67.2)	(68.7)
Acquisition of treasury shares acquired in open market	(22.3)	(155.8)	(42.9)
Net proceeds from debt issuance	1,486.0	0	986.3
Payment of acquired company debt	0	(20.0)	0
Payments of debt	0	(500.0)	0
Acquisition of additional shares of ARX Holding Corp.	0	0	(243.0)
Proceeds from exercise of equity options	0	0	7.3
Net cash provided by (used in) financing activities	1,126.2	(4,516.3)	(938.8)
Increase (decrease) in cash, cash equivalents, restricted cash, and restricted cash equivalents	18.8	125.6	(150.9)
Cash, cash equivalents, restricted cash, and restricted cash equivalents - beginning of year	202.1	76.5	227.4
Cash, cash equivalents, restricted cash, and restricted cash equivalents - end of year	\$ 220.9	\$ 202.1	\$ 76.5

¹See Note 15 – Goodwill and Intangible Assets for further discussion.

²See Note 14 – Dividends for further discussion.

See notes to consolidated financial statements.

1. REPORTING AND ACCOUNTING POLICIES

Nature of Operations The Progressive insurance organization began business in 1937. The financial results of The Progressive Corporation include its subsidiaries and affiliates (references to “subsidiaries” in these notes include affiliates as well). Our insurance subsidiaries provide personal and commercial auto insurance, personal residential and commercial property insurance, workers’ compensation insurance primarily for the transportation industry, business-related general liability insurance, and other specialty property-casualty insurance and related services.

We report three operating segments. Our Personal Lines segment writes insurance for personal autos and recreational vehicles, which we refer to as our special lines products. Our Commercial Lines segment writes auto-related liability and physical damage insurance, business-related general liability and property insurance predominately for small businesses, and workers’ compensation insurance primarily for the transportation industry. Our Property segment writes residential property insurance for homeowners, other property owners, and renters. We operate our businesses throughout the United States through both the independent agency and direct channels.

Basis of Consolidation and Reporting The accompanying consolidated financial statements include the accounts of The Progressive Corporation, our wholly owned insurance and non-insurance subsidiaries, and affiliates, in which we have a controlling financial interest. All intercompany accounts and transactions are eliminated in consolidation. All revenues are generated from external customers and we do not have a reliance on any major customer.

Estimates We are required to make estimates and assumptions when preparing our financial statements and accompanying notes in conformity with accounting principles generally accepted in the United States of America (GAAP). As estimates develop into fact, results may, and will likely, differ from those estimates.

Investments Our fixed-maturity securities and short-term investments are accounted for on an available-for-sale basis. Fixed-maturity securities include debt securities and redeemable preferred

stocks, which may have fixed or variable principal payment schedules, may be held for indefinite periods of time, and may be used as a part of our asset/liability strategy or sold in response to changes in interest rates, anticipated prepayments, risk/reward characteristics, liquidity needs, or other economic factors. These securities are carried at fair value with the corresponding unrealized gains (losses), net of deferred income taxes, reported in accumulated other comprehensive income.

Short-term investments may include commercial paper, repurchase transactions, and other securities expected to mature within one year. From time to time, we may also invest in municipal bonds that have maturity dates that are longer than one year but have either liquidity facilities or mandatory put features within one year.

Equity securities include common stocks, nonredeemable preferred stocks, and other risk investments. Common stocks and nonredeemable preferred stocks are carried at fair value, with the changes in fair value reported as a component of net holding period gains (losses) on securities on the consolidated statements of comprehensive income. The other risk investments are accounted for under the equity method of accounting. These securities are carried at cost and adjusted for our share of the investee’s earnings or losses, with the changes in carrying value reported in investment income.

Derivative instruments may include futures, options, forward positions, interest rate swap agreements, and credit default swaps and may be used in the portfolio for general investment purposes or to hedge the exposure to variable cash flows of a forecasted transaction (cash flow hedge).

To the extent we have derivatives held for general investment purposes, these derivative instruments would be recognized as either assets or liabilities and measured at fair value, with changes in fair value recognized in net income as a component of net holding period gains (losses) on securities.

Derivatives designated as hedges are required to be evaluated on established criteria to determine the

effectiveness of their correlation to, and ability to reduce the designated risk of, specific securities or transactions. Effectiveness is required to be reassessed regularly. For cash flow hedges that are deemed to be effective, the changes in fair value of the hedge would be reported as a component of accumulated other comprehensive income and subsequently amortized into earnings over the life of the hedged transaction. If a hedge is deemed to become ineffective or discontinued, changes in fair value of the derivative instrument would be reported in income for the current period.

For derivatives settled through a clearinghouse, collateral is required to post initial margin and is subject to increases in margin beyond changes in fair value. Exposure to credit risk is limited to the carrying value; collateral may be required to limit credit risk. For bi-lateral derivative positions, net cash requirements are limited to changes in fair values, which may vary as a result of changes in interest rates, currency exchange rates, and other factors. We have elected not to offset fair value amounts that arise from derivative positions with the same counterparty under a master netting arrangement.

Investment securities are exposed to various risks such as interest rate, market, credit, and liquidity risk. Fair values of securities fluctuate based on the nature and magnitude of changing market conditions; significant changes in market conditions could materially affect the portfolio's value in the near term. We routinely monitor our fixed-maturity portfolio for pricing changes that might indicate potential credit losses exist and perform detailed reviews of securities with unrealized losses. For an unrealized loss that we determined to be related to current market conditions, we will not record an allowance for credit losses or a write-off of the fair value for securities we do not intend to sell. We will continue to monitor these securities to determine if the unrealized loss is due to credit deterioration. If we believe that a potential credit loss exists, we will record an allowance for the credit loss and recognize the realized loss as a component of realized gains and losses in the income statement. Once a credit loss allowance has been established, we will continue to evaluate the security, at least quarterly, to determine if changes in conditions have created the need to either increase, or decrease, the allowance recorded. If we determine that a security with a credit loss allowance previously recorded is likely to be sold prior to the potential recovery of the credit loss, or if we determine that the loss is uncollectible, we will reverse the allowance and write down the security to its fair value.

Investment income consists of interest, dividends, and accretion (net of amortization). Interest is recognized on an accrual basis using the effective yield method, except for asset-backed securities, discussed below. Depending on the nature of the equity instruments, dividends are recorded at either the ex-dividend date or on an accrual basis.

Asset-backed securities, which are included in our fixed-maturity portfolio, are generally accounted for under the retrospective method. The retrospective method recalculates yield assumptions (based on changes in interest rates or cash flow expectations) historically to the inception of the investment holding period, and applies the required adjustment, if any, to the cost basis, with the offset recorded to investment income on a quarterly basis. The prospective method is used primarily for interest-only securities, asset-backed securities below high investment-grade status (i.e., below AA-), and certain asset-backed securities with sub-prime loan exposure or where there is a greater risk of non-performance and where it is possible the initial investment may not be substantially recovered. The prospective method requires a calculation of expected future repayments and resets the yield to allow for future period adjustments; no current period impact to investment income or the security's cost is made based on the cash flow update. Prepayment assumptions are updated quarterly.

Realized gains (losses) on securities are computed based on the first-in first-out method. Realized gains (losses) also include holding period valuation changes on equity securities, hybrid instruments (e.g., securities with embedded options, where the option is a feature of the overall change in the value of the instrument), and derivatives, as well as initial, and subsequent changes in, credit allowance losses, and write-offs for losses deemed uncollectible or securities in a loss position that are expected to be sold prior to the recovery of the credit loss.

Insurance Premiums and Receivables Insurance premiums written are earned into income on a pro rata basis over the period of risk, based on a daily earnings convention. Accordingly, unearned premiums represent the portion of premiums written with unexpired risk. We provide insurance and related services to individuals and commercial accounts and offer a variety of payment plans. Generally, premiums are collected prior to providing risk coverage, minimizing our exposure to credit risk.

For our Personal Lines and Commercial Lines businesses, we perform a policy-level evaluation to determine the extent to which the premiums receivable balance exceeds the unearned premiums balance. We then age this exposure to establish an allowance for credit losses based on prior experience, as well as counterparty credit risks.

For our Property business, the risk of uncollectibility is relatively low. If premiums are unpaid by the policy due date, we provide advance notice of cancellation in accordance with each state's requirements and, if the premiums remain unpaid after receipt of notice, we cancel the policy and write off any remaining balance.

To determine an allowance for credit losses, we evaluate the collectibility of premiums receivables based on historical and current collections experience using actuarial analysis. Our estimate of the future recoverability of our projected ultimate at-risk exposures also takes into consideration any unusual circumstances that we may encounter, such as moratoriums or other programs that may suspend collections.

The following table summarizes changes in our allowance for credit loss exposure on our premiums receivable:

(millions)	2022	2021
Balance at January 1	\$ 280.4	\$ 356.2
Allowance for credit losses acquired ¹	0	3.5
Increase in allowance ²	471.1	357.2
Write-offs ³	(408.2)	(436.5)
Balance at December 31	\$ 343.3	\$ 280.4

¹ Allowance acquired in the Protective Insurance Corporation and subsidiaries (Protective Insurance) acquisition.

² Represents the incremental increase in other underwriting expenses.

³ Represents the portion of allowance that is reversed when premiums receivables are written off. Premiums receivable balances are written off once we have exhausted our collection efforts.

The increase in the allowance for credit losses during 2022 in part reflects a higher amount of premiums receivables determined to be at risk of being uncollectible, driven by the growth in our premiums receivable balance, receivables being outstanding for longer periods of time before collection, and an increased collections risk related to moratoriums in place for Hurricane Ian.

Deferred Acquisition Costs Deferred acquisition costs include commissions, premium taxes, and other variable underwriting and direct sales costs incurred in connection with the successful acquisition or renewal of insurance

contracts. These acquisition costs, net of ceding allowances, are deferred and amortized over the policy period in which the related premiums are earned. We consider anticipated investment income in determining recoverability of these costs. Management believes these costs will be fully recoverable in the near term.

We do not defer any advertising costs. Total advertising costs, which are expensed as incurred, for the years ended December 31, were:

(millions)	Advertising Costs
2022	\$ 2,032.5
2021	2,139.5
2020	2,175.7

Loss and Loss Adjustment Expense Reserves Loss reserves represent the estimated liability on claims reported to us, plus reserves for losses incurred but not recorded (IBNR). These estimates are reported net of amounts estimated to be recoverable from salvage and subrogation. Loss adjustment expense reserves represent the estimated expenses required to settle these claims. The methods of making estimates and establishing these reserves are reviewed regularly and resulting adjustments are reflected in income in the current period. Such loss and loss adjustment expense reserves are susceptible to change.

Reinsurance Our reinsurance activity includes transactions which are categorized as Regulated and Non-Regulated. Regulated refers to plans in which we participate that are governed by insurance regulations and include state-provided reinsurance facilities (e.g., Michigan Catastrophic Claims Association (MCCA), North Carolina Reinsurance Facility, Florida Hurricane Catastrophe Fund), as well as state-mandated involuntary plans for commercial vehicles (Commercial Automobile Insurance Procedures/Plans – CAIP) and federally regulated plans for flood (National Flood Insurance Program – NFIP); we act as a participant in the “Write Your Own” program for the NFIP. In 2022, our service contract to act as a servicing agent for CAIP expired and we did not renew the contract.

Non-Regulated includes voluntary contractual arrangements primarily related to our Property business and to the transportation network company (TNC) business written by our Commercial Lines segment. Prepaid reinsurance premiums are earned on a pro rata basis over the period of risk, based on a daily earnings convention, which is consistent with premiums earned. See *Note 7 – Reinsurance* for further discussion.

We routinely monitor changes in the credit quality and concentration risks of the reinsurers who are counterparties to our reinsurance recoverables to determine if an allowance for credit losses should be established.

Income Taxes The income tax provision is calculated under the balance sheet approach. Deferred tax assets and liabilities are recorded based on the difference between the financial statement and tax bases of assets and liabilities at the enacted tax rates. The principal items giving rise to such differences include:

- investment securities (e.g., net unrealized gains (losses), net holding period gains (losses) on securities, write-downs on securities determined to be other-than-temporarily impaired);
- loss and loss adjustment expense reserves;
- unearned premiums reserves;

- deferred acquisition costs;
- property and equipment;
- intangible assets; and
- non-deductible accruals.

We review our deferred tax assets regularly for recoverability. See *Note 5 – Income Taxes* for further discussion.

Property and Equipment Property and equipment are recorded at cost, less accumulated depreciation. Depreciation is recognized over the estimated useful lives of the assets using accelerated methods for computer equipment and the straight-line method for all other fixed assets. We evaluate impairment whenever events or circumstances warrant such a review and write-off the impaired assets if appropriate.

The cost and useful lives for property and equipment at December 31, were:

(\$ in millions)	2022	2021	Useful Lives
Land	\$ 123.1	\$ 154.1	NA
Buildings, improvements, and integrated components	844.1	904.5	7-40 years
Capitalized software	475.4	441.2	3-10 years
Software licenses (internal use)	427.6	393.6	1-6 years
Computer equipment	318.1	261.3	3 years
All other property and equipment	396.8	390.0	3-10 years
Total cost	2,585.1	2,544.7	
Accumulated depreciation	(1,551.1)	(1,407.4)	
Balance at end of year	\$ 1,034.0	\$ 1,137.3	

NA = Not applicable; land is not a depreciable asset.

Included in other assets in the consolidated balance sheets are “held for sale” property, which, when transferred, are written down to their fair values less the estimated costs to sell, of \$48.7 million and \$10.8 million at December 31, 2022 and 2021, respectively, and capitalized cloud computing arrangement implementation costs, net of amortization, of \$63.4 million and \$47.7 million at December 31, 2022 and 2021, respectively.

Goodwill and Intangible Assets Goodwill is the excess of the purchase price over the estimated fair value of the assets and liabilities acquired and represents the future economic benefits arising from other assets acquired that could not be individually identified and separately recognized.

Intangible assets are non-financial assets lacking physical substance, such as customer and agency relationships and software rights, and represent the future economic benefit of those acquired assets.

We evaluate our goodwill for impairment at least annually using a qualitative approach. If events or

changes in circumstances indicate that the carrying value of goodwill or intangible assets may not be recoverable, we will evaluate such items for impairment using a quantitative approach. See *Note 15 – Goodwill and Intangible Assets* for further discussion.

Guaranty Fund Assessments We are subject to state guaranty fund assessments, which provide for the payment of covered claims or other insurance obligations of insurance companies deemed insolvent. These assessments are accrued after a determination of insolvency has occurred, and we have written the premiums on which the assessments will be based. Assessments are expensed when incurred except for

assessments that are available for recoupment from policyholders or are eligible to offset premiums taxes payable, which are capitalized to the extent allowable.

Fees and Other Revenues Fees and other revenues primarily represent fees collected from policyholders relating to installment charges in accordance with our bill plans, as well as late payment and insufficient funds fees and revenue from ceding commissions. Fees and other revenues are generally earned when invoiced, except for excess ceding commissions, which are earned over the policy period.

Service Revenues and Expenses Our service businesses provide insurance-related services. Service revenues and expenses from our commission-based businesses are recorded in the period in which they are earned or incurred.

Equity-Based Compensation We issue time-based and performance-based restricted stock unit awards to key members of management as our form of equity compensation and time-based restricted stock awards to non-employee directors. Collectively, we refer to these awards as restricted equity awards.

Compensation expense for time-based restricted equity awards with installment vesting is recognized over each respective vesting period, based on the market value of the awards at the time of grant, with accelerated expense for participants who satisfy qualified retirement eligibility. For performance-based restricted equity awards, compensation expense is recognized over the estimated vesting periods. Dividend equivalent units, which are based on the amount of common share dividends declared by the Board of Directors, are credited to outstanding restricted stock unit awards, both time-based and performance-based, at the time a dividend is paid to shareholders and are distributed upon or after vesting of the underlying award. We record an estimate for expected forfeitures of restricted equity awards based on our historical forfeiture rates.

The total compensation expense recognized for equity-based compensation for the years ended December 31, was:

(millions)	2022	2021	2020
Pretax expense	\$ 122.7	\$ 100.7	\$ 89.4
Tax benefit ¹	16.0	14.1	12.1

¹ Differs from statutory rate of 21% due to the expected disallowance of certain executive compensation deductions.

Earnings Per Common Share Net income is reduced by preferred share dividends to determine net income available to common shareholders, and is used in our calculation of the per common share amounts. Basic earnings per common share is computed using the weighted average number of common shares outstanding during the reporting period, excluding unvested time-based restricted stock awards. Diluted earnings per common share includes common stock equivalents assumed outstanding during the period. Our common stock equivalents include the incremental shares assumed to be issued for:

- earned but unvested time-based restricted equity awards, and
- performance-based restricted equity awards that satisfied certain contingency conditions for unvested common stock equivalents during the period and are highly likely to continue to satisfy the conditions until the date of vesting.

For periods when a net loss is reported, earnings per common share are calculated using basic average equivalent shares since diluted earnings per share would be antidilutive.

Supplemental Cash Flow Information Cash and cash equivalents include bank demand deposits and daily overnight reverse repurchase commitments of funds held in bank demand deposit accounts by certain subsidiaries. The amount of reverse repurchase commitments, which are not considered part of the investment portfolio, held by these subsidiaries at December 31, 2022, 2021, and 2020, were \$125.9 million, \$137.1 million, and \$93.5 million, respectively. Restricted cash and cash equivalents include collateral held against unpaid deductibles and cash that is restricted to pay flood claims under the National Flood Insurance Program's "Write Your Own" program, for which certain subsidiaries are participants.

For the years ended December 31, non-cash activity included the following:

(millions)	2022	2021	2020
Common share dividends ¹	\$ 58.5	\$ 58.5	\$ 2,694.5
Preferred share dividends ¹	13.4	13.4	13.4
Operating lease liabilities ²	36.2	86.7	60.3

¹ Declared but unpaid. See Note 14 – Dividends for further discussion.

² From obtaining right-of-use assets. See Note 13 – Leases for further discussion.

For the years ended December 31, we paid the following:

(millions)	2022	2021	2020
Income taxes	\$ 719.0	\$ 842.4	\$ 1,446.3
Interest	228.9	224.0	206.0
Operating lease liabilities	82.5	88.6	86.5

Included in other assets in our consolidated balance sheet at December 31, 2021, is a \$541.5 million receivable from the MCCA, with a corresponding payable to policyholders included in accounts payable, accrued expenses, and other liabilities, related to a refund from the surplus of the MCCA to its member insurance companies. After funds were received from the MCCA, we were required to pass through the refund to the applicable Michigan policyholders. This transaction had no effect on our liquidity, financial condition, cash flows, or results of operations.

Commitments and Contingencies We have certain noncancelable purchase obligations for goods and services with minimum commitments of \$1,036.9 million at December 31, 2022, primarily consisting of software licenses, maintenance on information technology equipment, and media placements. Aggregate payments on these obligations for the years ended December 31, were as follows:

(millions)	Payments
2023	\$ 918.6
2024	81.2
2025	33.1
2026	2.5
2027	1.5
Thereafter	0
Total	\$ 1,036.9

We have several multiple-layer property catastrophe reinsurance contracts with various reinsurers with terms ranging from one to three years; the minimum commitment under these agreements at December 31, 2022, was \$205.4 million. In addition, we have funding commitments of \$15.7 million at December 31, 2022, related to limited partnership investments.

New Accounting Standards We did not adopt any new accounting standards during the year ended December 31, 2022. We assessed the adoption impacts of recently issued accounting standards by the Financial Accounting Standards Board on our consolidated financial statements as well as material updates to previous assessments, if any. There were no recently issued accounting standards that are expected to materially impact The Progressive Corporation or its subsidiaries.

2. INVESTMENTS

The following tables present the composition of our investment portfolio by major security type. Our securities are reported in our consolidated balance sheets at fair value. The changes in fair value for our fixed-maturity securities (other than hybrid securities) are reported as a component of accumulated other comprehensive income (loss), net of deferred income

taxes, in our consolidated balance sheets. The net holding period gains (losses) reported below represent the inception-to-date changes in fair value for the hybrid and equity securities. The changes in the net holding period gains (losses) between periods are recorded as a component of net realized gains (losses) on securities in our consolidated statements of comprehensive income.

(\$ in millions)	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Net Holding Period Gains (Losses)	Fair Value	% of Total Fair Value
December 31, 2022						
Available-for-sale securities:						
Fixed maturities:						
U.S. government obligations	\$ 26,770.7	\$ 1.4	\$ (1,604.7)	\$ 0	\$ 25,167.4	47.0%
State and local government obligations	2,180.0	0	(202.9)	0	1,977.1	3.7
Foreign government obligations	16.8	0	(1.3)	0	15.5	0.1
Corporate debt securities	10,125.8	9.8	(676.1)	(46.8)	9,412.7	17.6
Residential mortgage-backed securities	696.1	0.3	(17.5)	(12.1)	666.8	1.2
Commercial mortgage-backed securities	5,446.0	1.5	(784.0)	0	4,663.5	8.7
Other asset-backed securities	4,826.0	0.9	(260.5)	(1.8)	4,564.6	8.5
Redeemable preferred stocks	202.6	0	(4.5)	(13.8)	184.3	0.3
Total fixed maturities	50,264.0	13.9	(3,551.5)	(74.5)	46,651.9	87.1
Short-term investments	2,861.7	0	0	0	2,861.7	5.4
Total available-for-sale securities	53,125.7	13.9	(3,551.5)	(74.5)	49,513.6	92.5
Equity securities:						
Nonredeemable preferred stocks	1,364.2	0	0	(151.0)	1,213.2	2.3
Common equities	826.1	0	0	1,995.4	2,821.5	5.2
Total equity securities	2,190.3	0	0	1,844.4	4,034.7	7.5
Total portfolio ¹	\$ 55,316.0	\$ 13.9	\$ (3,551.5)	\$ 1,769.9	\$ 53,548.3	100.0%

(\$ in millions)	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Net Holding Period Gains (Losses)	Fair Value	% of Total Fair Value
December 31, 2021						
Available-for-sale securities:						
Fixed maturities:						
U.S. government obligations	\$ 18,586.1	\$ 92.9	\$ (190.8)	\$ 0	\$ 18,488.2	35.9%
State and local government obligations	2,162.6	36.7	(14.0)	0	2,185.3	4.2
Foreign government obligations	17.9	0	0	0	17.9	0.1
Corporate debt securities	10,526.2	202.6	(33.4)	(3.3)	10,692.1	20.7
Residential mortgage-backed securities	787.7	2.3	(0.6)	0.6	790.0	1.5
Commercial mortgage-backed securities	6,561.0	38.9	(64.3)	0	6,535.6	12.7
Other asset-backed securities	4,981.8	13.3	(12.4)	(0.4)	4,982.3	9.7
Redeemable preferred stocks	170.9	0.7	(0.5)	10.6	181.7	0.4
Total fixed maturities	43,794.2	387.4	(316.0)	7.5	43,873.1	85.2
Short-term investments	942.6	0	0	0	942.6	1.8
Total available-for-sale securities	44,736.8	387.4	(316.0)	7.5	44,815.7	87.0
Equity securities:						
Nonredeemable preferred stocks	1,571.8	0	0	68.1	1,639.9	3.2
Common equities	1,264.1	0	0	3,794.4	5,058.5	9.8
Total equity securities	2,835.9	0	0	3,862.5	6,698.4	13.0
Total portfolio ¹	\$ 47,572.7	\$ 387.4	\$ (316.0)	\$ 3,870.0	\$ 51,514.1	100.0%

¹At December 31, 2022, we had \$34.4 million of net unsettled security transactions included in other assets, compared to \$143.4 million included in other liabilities at December 31, 2021.

The total fair value of the portfolio at December 31, 2022 and 2021 included \$4.4 billion and \$4.2 billion, respectively, of securities held in a consolidated, non-insurance subsidiary of the holding company, net of any unsettled security transactions.

At December 31, 2022, bonds and certificates of deposit in the principal amount of \$601.7 million were on deposit to meet state insurance regulatory requirements. We did not hold any securities of any one issuer, excluding U.S. government obligations, with an aggregate cost or fair value exceeding 10% of total shareholders' equity at December 31, 2022 or 2021. At December 31, 2022, we did not hold any debt securities that were non-income producing during the preceding 12 months.

Short-Term Investments Our short-term investments may include commercial paper and other investments that are expected to mature or are redeemable within one year.

We invested in repurchase and reverse repurchase transactions during 2022 and 2021, but did not have any open positions at December 31, 2022 or 2021. To the extent we enter into repurchase or reverse repurchase transactions, consistent with past practice, we would elect not to offset these transactions and would report them on a gross basis on our consolidated balance sheets, despite the option to elect to offset these transactions as long as they were with the same counterparty and subject to an enforceable master netting arrangement.

Hybrid Securities Certain securities in our fixed-maturity portfolio are accounted for as hybrid securities because they contain embedded derivatives that are not

deemed to be clearly and closely related to the host investments. These securities are reported at fair value at December 31:

(millions)	2022	2021
Fixed Maturities:		
Corporate debt securities	\$ 535.4	\$ 479.1
Residential mortgage-backed securities	509.6	536.2
Other asset-backed securities	42.0	89.2
Redeemable preferred stocks	134.7	130.8
Total hybrid securities	\$ 1,221.7	\$ 1,235.3

Since the embedded derivatives (e.g., change-in-control put option, debt-to-equity conversion, or any other feature unrelated to the credit quality or risk of default of the issuer that could impact the amount or timing of our expected future cash flows) do not have observable intrinsic values, we use the fair value option to record

the changes in fair value of these securities through income as a component of net realized gains or losses.

Fixed Maturities The composition of fixed maturities by maturity at December 31, 2022, was:

(millions)	Cost	Fair Value
Less than one year	\$ 6,047.1	\$ 5,871.6
One to five years	30,121.9	28,366.7
Five to ten years	14,030.8	12,357.0
Ten years or greater	64.2	56.6
Total	\$ 50,264.0	\$ 46,651.9

Asset-backed securities are classified in the maturity distribution table based upon their projected cash flows. All other securities that do not have a single maturity date are reported based upon expected average maturity. Contractual maturities may differ from expected maturities because the issuers of the securities may have the right to call or prepay obligations.

Gross Unrealized Losses The following tables show the composition of gross unrealized losses by major security type and by the length of time that individual securities have been in a continuous unrealized loss position:

(\$ in millions)	Total No. of Sec.	Total Fair Value	Gross Unrealized Losses	Less than 12 Months			12 Months or Greater		
				No. of Sec.	Fair Value	Gross Unrealized Losses	No. of Sec.	Fair Value	Gross Unrealized Losses
December 31, 2022									
U.S. government obligations	160	\$ 24,802.5	\$ (1,604.7)	90	\$ 17,327.2	\$ (699.2)	70	\$ 7,475.3	\$ (905.5)
State and local government obligations	348	1,948.8	(202.9)	239	1,124.2	(76.8)	109	824.6	(126.1)
Foreign government obligations	1	15.5	(1.3)	0	0	0	1	15.5	(1.3)
Corporate debt securities	422	8,449.6	(676.1)	285	5,717.6	(426.1)	137	2,732.0	(250.0)
Residential mortgage-backed securities	45	151.0	(17.5)	27	65.1	(6.8)	18	85.9	(10.7)
Commercial mortgage-backed securities	226	4,651.1	(784.0)	99	1,702.0	(192.1)	127	2,949.1	(591.9)
Other asset-backed securities	262	4,247.8	(260.5)	130	2,144.8	(100.9)	132	2,103.0	(159.6)
Redeemable preferred stocks	4	49.6	(4.5)	3	38.5	(3.1)	1	11.1	(1.4)
Total fixed maturities	1,468	\$ 44,315.9	\$ (3,551.5)	873	\$ 28,119.4	\$ (1,505.0)	595	\$ 16,196.5	\$ (2,046.5)

(\$ in millions)	Total No. of Sec.	Total Fair Value	Gross Unrealized Losses	Less than 12 Months		12 Months or Greater		Gross Fair Value	Gross Unrealized Losses
				No. of Sec.	Fair Value	No. of Sec.	Fair Value		
December 31, 2021									
U.S. government obligations	92	\$ 14,745.8	\$ (190.8)	85	\$ 13,790.8	\$ (158.5)	7	\$ 955.0	\$ (32.3)
State and local government obligations	127	954.2	(14.0)	122	927.3	(13.1)	5	26.9	(0.9)
Corporate debt securities	220	3,496.6	(33.4)	219	3,491.7	(33.3)	1	4.9	(0.1)
Residential mortgage-backed securities	20	138.6	(0.6)	14	135.4	(0.5)	6	3.2	(0.1)
Commercial mortgage-backed securities	168	4,315.4	(64.3)	165	4,295.0	(63.9)	3	20.4	(0.4)
Other asset-backed securities	178	3,204.7	(12.4)	176	3,200.6	(12.3)	2	4.1	(0.1)
Redeemable preferred stocks	1	12.0	(0.5)	0	0	0	1	12.0	(0.5)
Total fixed maturities	806	\$ 26,867.3	\$ (316.0)	781	\$ 25,840.8	\$ (281.6)	25	\$ 1,026.5	\$ (34.4)

The increase in the number of securities in an unrealized loss position since December 31, 2021, was primarily the result of an increase in interest rates. As of December 31, 2022, we had 19 securities that had their credit ratings downgraded during the year, with a combined fair value of \$186.3 million and an unrealized loss of \$33.4 million.

A review of the securities in an unrealized loss position indicated that the issuers were current with respect to their interest obligations and that there was no evidence of deterioration of the current cash flow projections that would indicate we would not receive the remaining principal at maturity.

Allowance For Credit and Uncollectible Losses We are required to measure the amount of potential credit losses for all fixed-maturity securities in an unrealized loss position. We did not record any allowances for credit losses or any write-offs for amounts deemed to be uncollectible during 2022 or 2021 and did not have a material credit loss allowance balance as of December 31, 2022 or 2021. We considered several factors and inputs related to the individual securities as part of our analysis. The methodology and significant inputs used to measure the amount of credit losses in our portfolio included:

- current performance indicators on the business model or underlying assets (e.g., delinquency rates, foreclosure rates, and default rates);
- credit support (via current levels of subordination);
- historical credit ratings; and
- updated cash flow expectations based upon these performance indicators.

In order to determine the amount of credit loss, if any, we initially reviewed securities in a loss position to determine whether it was likely that we would be required, or intended, to sell any of the securities prior to the recovery of their respective cost bases (which could be maturity). If we were likely to, or intended to, sell prior to a potential recovery, we would write off the unrealized loss. For those securities that we determined we were not likely to, or did not intend to, sell prior to a potential recovery, we performed additional analysis to

determine if the loss was credit related. For securities subject to credit related loss, we calculated the net present value (NPV) of the cash flows expected (i.e., expected recovery value) using the current book yield for each security. The NPV was then compared to the security's current amortized value to determine if a credit loss existed. In the event that the NPV was below the amortized value, and the amount was determined to be material individually, or in aggregate, a credit loss would be deemed to exist, and either an allowance for credit losses would be created, or if an allowance currently existed, either a recovery of the previous allowance, or an incremental loss, would be recorded to net realized gains (losses) on securities.

As of December 31, 2022 and 2021, we believe that none of the unrealized losses were related to material credit losses on any specific securities, or in the aggregate. We continue to expect all the securities in our portfolio to pay their principal and interest obligations.

In addition, we reviewed our accrued investment income outstanding on those securities in an unrealized loss position at December 31, 2022 and 2021, to determine if the accrued interest amounts were determined to be uncollectible. Based on our analysis, we believe the issuers have sufficient liquidity and capital reserves to meet their current interest, and future principal, obligations and, therefore, did not write off any accrued income as uncollectible at December 31, 2022 or 2021.

Realized Gains (Losses) The components of net realized gains (losses) for the years ended December 31, were:

(millions)	2022	2021	2020
Gross realized gains on security sales			
Available-for-sale securities:			
U.S. government obligations	\$ 10.8	\$ 105.8	\$ 612.5
State and local government obligations	0	51.2	102.4
Corporate and other debt securities	8.7	104.0	161.9
Residential mortgage-backed securities	0.7	0.3	0
Commercial mortgage-backed securities	0	41.9	23.7
Other asset-backed securities	0.2	1.2	0.2
Redeemable preferred stocks	0	1.5	0
Total available-for-sale securities	20.4	305.9	900.7
Equity securities:			
Nonredeemable preferred stocks	17.6	28.0	24.4
Common equities	846.1	369.6	88.6
Total equity securities	863.7	397.6	113.0
Subtotal gross realized gains on security sales	884.1	703.5	1,013.7
Gross realized losses on security sales			
Available-for-sale securities:			
U.S. government obligations	(433.3)	(52.0)	(9.6)
State and local government obligations	(1.0)	(3.4)	(0.7)
Foreign government obligations	0	(0.1)	0
Corporate and other debt securities	(88.3)	(8.3)	(6.5)
Residential mortgage-backed securities	0	(1.1)	0
Commercial mortgage-backed securities	(72.4)	(1.9)	(12.8)
Other asset-backed securities	(4.4)	(0.6)	0
Short-term investments	(0.4)	0	0
Total available-for-sale securities	(599.8)	(67.4)	(29.6)
Equity securities:			
Nonredeemable preferred stocks	(9.8)	(1.7)	(8.7)
Common equities	(78.0)	(20.1)	(60.7)
Total equity securities	(87.8)	(21.8)	(69.4)
Subtotal gross realized losses on security sales	(687.6)	(89.2)	(99.0)
Net realized gains (losses) on security sales			
Available-for-sale securities:			
U.S. government obligations	(422.5)	53.8	602.9
State and local government obligations	(1.0)	47.8	101.7
Foreign government obligations	0	(0.1)	0
Corporate and other debt securities	(79.6)	95.7	155.4
Residential mortgage-backed securities	0.7	(0.8)	0
Commercial mortgage-backed securities	(72.4)	40.0	10.9
Other asset-backed securities	(4.2)	0.6	0.2
Redeemable preferred stocks	0	1.5	0
Short-term investments	(0.4)	0	0
Total available-for-sale securities	(579.4)	238.5	871.1
Equity securities:			
Nonredeemable preferred stocks	7.8	26.3	15.7
Common equities	768.1	349.5	27.9
Total equity securities	775.9	375.8	43.6
Subtotal net realized gains (losses) on security sales	196.5	614.3	914.7
Net holding period gains (losses)			
Hybrid securities	(82.0)	(7.7)	7.4
Equity securities	(2,018.1)	907.6	706.5
Derivatives	0	0	1.4
Subtotal net holding period gains (losses)	(2,100.1)	899.9	715.3
Other-than-temporary impairment losses			
Other asset impairment	(8.6)	(5.0)	0
Subtotal other-than-temporary impairment losses	(8.6)	(5.0)	0
Total net realized gains (losses) on securities	\$ (1,912.2)	\$ 1,509.2	\$ 1,630.0

Realized gains (losses) on security sales are computed using the first-in-first-out method. The majority of the sales in the fixed-maturity portfolio during the year were from U.S. Treasury Notes, which were sold to shorten duration and for tax planning purposes. The loss from the fixed-maturity sales reflected the continued rise in interest rates throughout 2022, which resulted in valuation declines for most of our available-for-sale securities. During 2020, the significant gains recognized on our fixed-income portfolio were the result of selling U.S. Treasury Notes for opportunistic investments. During 2022, we sold common equity securities, which

were in a realized gain position, as part of our plan to incrementally reduce risk in the portfolio in response to the likelihood of a more difficult economic environment over the near term. During 2021, the gain in common equities primarily reflected the sale of common stocks held outside of our indexed portfolio. The other asset impairment losses in 2022 and 2021 were recorded as a result of our investment in a federal new markets tax credit fund, which was entered into during the second quarter 2021 and reported in other assets in the consolidated balance sheets.

The following table reflects our holding period realized gains (losses) recognized on equity securities held at the respective year end for the years ended December 31:

(millions)	2022	2021	2020
Total net gains (losses) recognized during the period on equity securities	\$ (1,242.2)	\$ 1,283.4	\$ 750.1
Less: Net gains (losses) recognized on equity securities sold during the period	775.9	375.8	43.6
Net holding period gains (losses) recognized during the period on equity securities held at period end	\$ (2,018.1)	\$ 907.6	\$ 706.5

Net Investment Income The components of net investment income for the years ended December 31, were:

(millions)	2022	2021	2020
Available-for-sale securities:			
Fixed maturities:			
U.S. government obligations	\$ 339.1	\$ 149.5	\$ 166.3
State and local government obligations	39.7	44.1	62.7
Foreign government obligations	0.2	0.1	0
Corporate debt securities	288.8	301.1	284.0
Residential mortgage-backed securities	31.6	11.9	11.8
Commercial mortgage-backed securities	190.6	143.0	152.9
Other asset-backed securities	174.6	64.1	96.7
Redeemable preferred stocks	11.4	9.5	14.9
Total fixed maturities	1,076.0	723.3	789.3
Short-term investments	53.6	3.1	29.0
Total available-for-sale securities	1,129.6	726.4	818.3
Equity securities:			
Nonredeemable preferred stocks	70.2	70.3	60.6
Common equities	60.5	64.2	57.7
Total equity securities	130.7	134.5	118.3
Investment income	1,260.3	860.9	936.6
Investment expenses	(24.3)	(25.5)	(20.0)
Net investment income	\$1,236.0	\$835.4	\$916.6

On a year-over-year basis, investment income (interest and dividends) increased 46%, compared to 2021, primarily due to an increase in interest rates on floating-rate securities in our portfolio and purchases of new investments with higher coupon rates. Investment income decreased 8% in 2021, compared to 2020, due to a decrease in the portfolio yield, which was partially offset by an increase in average assets. The recurring investment book yield increased 26% in 2022, compared to 2021, reflecting investing new cash, and cash from maturities in higher interest rate securities given the rising interest rate environment. The recurring investment book yield decreased 20% in 2021, compared to 2020, as a result of investing at market yields that were lower than the portfolio's overall yield.

3. FAIR VALUE

We have categorized our financial instruments, based on the degree of subjectivity inherent in the method by which they are valued, into a fair value hierarchy of three levels, as follows:

- *Level 1:* Inputs are unadjusted, quoted prices in active markets for identical instruments at the measurement date (e.g., U.S. government obligations, which are continually priced on a daily basis, active exchange-traded equity securities, and certain short-term securities).
- *Level 2:* Inputs (other than quoted prices included within Level 1) that are observable for the instrument either directly or indirectly (e.g., certain corporate and municipal bonds and certain preferred stocks). This includes: (i) quoted prices for similar instruments in active markets, (ii) quoted prices for identical or similar instruments in markets that are not active, (iii) inputs other than quoted prices that are observable for the instruments, and

The decrease in investment expenses in 2022, compared to 2021, primarily reflects lower management fees attributable to the Protective Insurance portfolio. The increase in 2021, compared to 2020, reflected an increase in staffing and related employee expenses, in addition to the Protective Insurance management fees.

Derivative Instruments We did not have any derivative activity during 2022 or 2021. During 2020, we opened and closed U.S. Treasury Note futures to manage the portfolio duration and recorded a net realized gain of \$1.4 million. The maximum notional value held at one time during 2020 was \$114.6 million. At December 31, 2022, 2021, and 2020, we had no open derivative positions.

(iv) inputs that are derived principally from or corroborated by observable market data by correlation or other means.

- *Level 3:* Inputs that are unobservable. Unobservable inputs reflect our subjective evaluation about the assumptions market participants would use in pricing the financial instrument (e.g., certain structured securities and privately held investments).

Determining the fair value of the investment portfolio is the responsibility of management. As part of the responsibility, we evaluate whether a market is distressed or inactive in determining the fair value for our portfolio. We review certain market level inputs to evaluate whether sufficient activity, volume, and new issuances exist to create an active market. Based on this evaluation, we concluded that there was sufficient activity related to the sectors and securities for which we obtained valuations.

The composition of the investment portfolio by major security type and our outstanding debt was:

(millions)	Fair Value			Total	Cost
	Level 1	Level 2	Level 3		
<u>December 31, 2022</u>					
Fixed maturities:					
U.S. government obligations	\$ 25,167.4	\$ 0	\$ 0	\$ 25,167.4	\$ 26,770.7
State and local government obligations	0	1,977.1	0	1,977.1	2,180.0
Foreign government obligations	0	15.5	0	15.5	16.8
Corporate debt securities	0	9,412.7	0	9,412.7	10,125.8
Subtotal	25,167.4	11,405.3	0	36,572.7	39,093.3
Asset-backed securities:					
Residential mortgage-backed	0	666.8	0	666.8	696.1
Commercial mortgage-backed	0	4,663.5	0	4,663.5	5,446.0
Other asset-backed	0	4,564.6	0	4,564.6	4,826.0
Subtotal asset-backed securities	0	9,894.9	0	9,894.9	10,968.1
Redeemable preferred stocks:					
Financials	0	40.5	0	40.5	43.6
Utilities	0	9.1	0	9.1	10.5
Industrials	9.2	125.5	0	134.7	148.5
Subtotal redeemable preferred stocks	9.2	175.1	0	184.3	202.6
Total fixed maturities	25,176.6	21,475.3	0	46,651.9	50,264.0
Short-term investments	2,800.7	61.0	0	2,861.7	2,861.7
Total available-for-sale securities	27,977.3	21,536.3	0	49,513.6	53,125.7
Equity securities:					
Nonredeemable preferred stocks:					
Financials	39.0	994.4	67.4	1,100.8	1,244.2
Utilities	0	71.2	0	71.2	79.9
Industrials	0	24.8	16.4	41.2	40.1
Subtotal nonredeemable preferred stocks	39.0	1,090.4	83.8	1,213.2	1,364.2
Common equities:					
Common stocks	2,783.4	0	18.3	2,801.7	806.3
Other risk investments	0	0	19.8	19.8	19.8
Subtotal common equities	2,783.4	0	38.1	2,821.5	826.1
Total equity securities	2,822.4	1,090.4	121.9	4,034.7	2,190.3
Total portfolio	\$ 30,799.7	\$ 22,626.7	\$ 121.9	\$ 53,548.3	\$ 55,316.0
Debt	\$ 0	\$ 5,717.9	\$ 0	\$ 5,717.9	\$ 6,388.3

(millions)	Fair Value				Cost
	Level 1	Level 2	Level 3	Total	
December 31, 2021					
Fixed maturities:					
U.S. government obligations	\$ 18,488.2	\$ 0	\$ 0	\$ 18,488.2	\$ 18,586.1
State and local government obligations	0	2,185.3	0	2,185.3	2,162.6
Foreign government obligations	0	17.9	0	17.9	17.9
Corporate debt securities	0	10,692.1	0	10,692.1	10,526.2
Subtotal	18,488.2	12,895.3	0	31,383.5	31,292.8
Asset-backed securities:					
Residential mortgage-backed	0	790.0	0	790.0	787.7
Commercial mortgage-backed	0	6,535.6	0	6,535.6	6,561.0
Other asset-backed	0	4,982.3	0	4,982.3	4,981.8
Subtotal asset-backed securities	0	12,307.9	0	12,307.9	12,330.5
Redeemable preferred stocks:					
Financials	0	50.9	0	50.9	50.7
Utilities	0	0	0	0	0
Industrials	10.7	120.1	0	130.8	120.2
Subtotal redeemable preferred stocks	10.7	171.0	0	181.7	170.9
Total fixed maturities	18,498.9	25,374.2	0	43,873.1	43,794.2
Short-term investments	942.4	0.2	0	942.6	942.6
Total available-for-sale securities	19,441.3	25,374.4	0	44,815.7	44,736.8
Equity securities:					
Nonredeemable preferred stocks:					
Financials	115.3	1,305.7	76.4	1,497.4	1,451.7
Utilities	0	82.9	0	82.9	80.0
Industrials	0	25.2	34.4	59.6	40.1
Subtotal nonredeemable preferred stocks	115.3	1,413.8	110.8	1,639.9	1,571.8
Common equities:					
Common stocks	4,991.6	50.0	0	5,041.6	1,247.2
Other risk investments	0	0	16.9	16.9	16.9
Subtotal common equities	4,991.6	50.0	16.9	5,058.5	1,264.1
Total equity securities	5,106.9	1,463.8	127.7	6,698.4	2,835.9
Total portfolio	\$ 24,548.2	\$ 26,838.2	\$ 127.7	\$ 51,514.1	\$ 47,572.7
Debt	\$ 0	\$ 5,857.4	\$ 0	\$ 5,857.4	\$ 4,898.8

Our portfolio valuations, excluding short-term investments, classified as either Level 1 or Level 2 in the above tables are priced exclusively by external sources, including pricing vendors, dealers/market makers, and exchange-quoted prices.

Our short-term investments classified as Level 1 are highly liquid, actively marketed, and have a very short duration, primarily 90 days or less to redemption. These securities are held at their original cost, adjusted for any accretion of discount, since that value very closely

approximates what an active market participant would be willing to pay for such securities. The remainder of our short-term investments are classified as Level 2 and are not priced externally since these securities continually trade at par value. These securities are classified as Level 2 since they are primarily longer-dated securities issued by municipalities that contain either liquidity facilities or mandatory put features within one year.

At December 31, 2022, vendor-quoted prices represented 90% of our Level 1 classifications (excluding short-term

investments), compared to 79% at December 31, 2021. The securities quoted by vendors in Level 1 primarily represent our holdings in U.S. Treasury Notes, which are frequently traded and the quotes are considered similar to exchange-traded quotes. The balance of our Level 1 pricing comes from quotes obtained directly from trades made on active exchanges. The higher vendor-quoted percentage at December 31, 2022 is due to an increase in U.S. Treasury Note holdings, which are vendor-quoted, and a decrease in our common stock holdings, which are exchange-quoted, compared to such holdings at December 31, 2021.

At both December 31, 2022 and 2021 vendor-quoted prices comprised 98% of our Level 2 classifications (excluding short-term investments and common stock), while dealer-quoted prices represented 2%. In our process for selecting a source (e.g., dealer or pricing service) to provide pricing for securities in our portfolio, we reviewed documentation from the sources that detailed the pricing techniques and methodologies used by these sources and determined if their policies adequately considered market activity, either based on specific transactions for the particular security type or based on modeling of securities with similar credit quality, duration, yield, and structure that were recently transacted. Once a source is chosen, we continue to monitor any changes or modifications to their processes by reviewing their documentation on internal controls for pricing and market reviews. We review quality control measures of our sources as they become available to determine if any significant changes have occurred from period to period that might indicate issues or concerns regarding their evaluation or market coverage.

As part of our pricing procedures, we obtain quotes from more than one source to help us fully evaluate the market price of securities. However, our internal pricing policy is to use a consistent source for individual securities in order to maintain the integrity of our valuation process. Quotes obtained from the sources are not considered binding offers to transact. Under our policy, when a review of the valuation received from our selected source appears to be outside of what is considered market level activity (which is defined as trading at spreads or yields significantly different than those of comparable securities or outside the general sector level movement without a reasonable explanation), we may use an alternate source's price. To the extent we determine that it may be prudent to substitute one source's price for another, we will contact the initial source to obtain an understanding of the factors that may be contributing to the significant price variance.

To allow us to determine if our initial source is providing a price that is outside of a reasonable range, we review our portfolio pricing on a weekly basis. When necessary, we challenge prices from our sources when a price provided does not match our expectations based on our evaluation of market trends and activity. Initially, we perform a review of our portfolio by sector to identify securities whose prices appear outside of a reasonable range. We then perform a more detailed review of fair values for securities disclosed as Level 2. We review dealer bids and quotes for these and/or similar securities to determine the market level context for our valuations. We then evaluate inputs relevant for each class of securities disclosed in the preceding hierarchy tables.

For our structured debt securities, including commercial, residential, and other asset-backed securities, we evaluate available market-related data for these and similar securities related to collateral, delinquencies, and defaults for historical trends and reasonably estimable projections, as well as historical prepayment rates and current prepayment assumptions and cash flow estimates. We further stratify each class of our structured debt securities into more finite sectors (e.g., planned amortization class, first pay, second pay, senior, subordinated, etc.) and use duration, credit quality, and coupon to determine if the fair value is appropriate.

For our corporate debt and preferred stock (redeemable and nonredeemable) portfolios, as well as the notes issued by The Progressive Corporation (see *Note 4 – Debt*), we review securities by duration, coupon, and credit quality, as well as changes in interest rate and credit spread movements within that stratification. The review also includes recent trades, including: volume traded at various levels that establish a market; issuer specific fundamentals; and industry specific economic news as it comes to light.

For our municipal securities (e.g., general obligations, revenue, and housing), we stratify the portfolio to evaluate securities by type, coupon, credit quality, and duration to review price changes relative to credit spread and interest rate changes. Additionally, we look at economic data as it relates to geographic location as an indication of price-to-call or maturity predictors. For municipal housing securities, we look at changes in cash flow projections, both historical and reasonably estimable projections, to understand yield changes and their effect on valuation.

For short-term securities, we look at acquisition price relative to the coupon or yield. Since our short-term securities are typically 90 days or less to maturity, with the majority listed in Level 2 being 30 days or less to redemption, we believe that acquisition price is the best estimate of fair value.

We also review data assumptions as supplied by our sources to determine if that data is relevant to current market conditions. In addition, we independently review each sector for transaction volumes, new issuances, and changes in spreads, as well as the overall movement of interest rates along the yield curve to determine if sufficient activity and liquidity exists to provide a credible source for our market valuations.

During each valuation period, we create internal estimations of portfolio valuation (performance returns), based on current market-related activity (i.e., interest rate and credit spread movements and other credit-related factors) within each major sector of our portfolio. We compare our internally generated portfolio results with those generated based on quotes we receive externally and research material valuation differences. We compare our results to index returns for each major sector adjusting for duration and credit quality differences to better understand our portfolio's results. Additionally, we review on a monthly basis our external sales transactions and compare the actual final market sales prices to previous market valuation prices. This review provides us further validation that our pricing sources are providing market level prices, since we are able to explain significant price changes (i.e., greater than 2%) as known events occur in the marketplace and affect a particular security's price at sale.

This analysis provides us with additional comfort regarding the source's process, the quality of its review, and its willingness to improve its analysis based on feedback from clients. We believe this effort helps ensure that we are reporting the most representative fair values for our securities.

After all the valuations are received and our review of Level 2 securities is complete, if the inputs used by vendors are determined to not contain sufficient observable market information, we will reclassify the affected securities to Level 3.

Except as described below, our Level 3 securities are priced externally; however, due to several factors (e.g., nature of the securities, level of activity, and lack of similar

securities trading to obtain observable market level inputs), these valuations are more subjective in nature.

To the extent we receive prices from external sources (e.g., broker, valuation firm) for the Level 3 securities, we review those prices for reasonableness using internally developed assumptions and then compare our derived prices to the prices received from the external sources. Based on our review, all prices received from external sources for 2022 remained unadjusted.

If we do not receive prices from an external source, we perform an internal fair value comparison, which includes a review and analysis of market comparable securities, to determine if fair value changes are needed. Based on this analysis, certain private equity investments included in the Level 3 category remain valued at cost or were priced using a recent transaction as the basis for fair value. At least annually, these private equity investments are priced by an external source.

Our Level 3 other risk investments include securities accounted for under the equity method of accounting and, therefore, are not subject to fair value reporting. Since these securities represent less than 0.1% of our total portfolio, we will continue to include them in our Level 3 disclosures and report the activity from these investments as "other" changes in the summary of changes in fair value table and categorize these securities as "pricing exemption securities" in the quantitative information table.

The Level 2 common stock held at December 31, 2021 was transferred to Level 3 at December 31, 2022. At December 31, 2022 and 2021, we did not have any securities in our fixed-maturity portfolio listed as Level 3.

Other than goodwill, during 2022 and 2021, there were no material assets or liabilities measured at fair value on a nonrecurring basis. During the second quarter 2022, we determined that the fair value of the goodwill related to our ARX Holding Corp. and its subsidiaries (ARX) reporting unit was less than the carrying value and we wrote down \$224.8 million of our total goodwill asset. See *Note 15 – Goodwill and Intangible Assets* for further discussion.

Due to the relative size of the Level 3 securities' fair values compared to the total portfolio's fair value, any changes in pricing methodology would not have a significant change in valuation that would materially impact net or comprehensive income.

The following tables provide a summary of changes in fair value associated with Level 3 assets for the years ended December 31, 2022 and 2021:

Level 3 Fair Value										
(millions)	Fair Value at Dec. 31, 2021	Calls/ Maturities/ Paydowns/ Other	Purchases	Sales	Net Realized (Gain)/Loss on Sales	Change in Valuation	Net Transfers In (Out) ¹	Fair Value at Dec. 31, 2022		
Equity securities:										
Nonredeemable preferred stocks:										
Financials	\$ 76.4	\$ 0	\$ 2.5	\$ (15.0)	\$ (17.2)	\$ 20.7	\$ 0	\$ 67.4		
Industrials	34.4	(0.5)	0	0	0	(17.5)	0	16.4		
Common equities:										
Common stocks	0	0	0	0	0	0	18.3	18.3		
Other risk investments	16.9	2.9	0	0	0	0	0	19.8		
Total Level 3 securities	\$ 127.7	\$ 2.4	\$ 2.5	\$ (15.0)	\$ (17.2)	\$ 3.2	\$ 18.3	\$ 121.9		

¹The security was transferred into Level 3 due to a lack of observable market level inputs.

Level 3 Fair Value										
(millions)	Fair Value at Dec. 31, 2020	Calls/ Maturities/ Paydowns/ Other	Purchases	Sales	Net Realized (Gain)/Loss on Sales	Change in Valuation	Net Transfers In (Out) ¹	Fair Value at Dec. 31, 2021		
Equity securities:										
Nonredeemable preferred stocks:										
Financials	\$ 10.0	\$ 0	\$ 60.2	\$ 0	\$ 0	\$ 6.2	\$ 0	\$ 76.4		
Industrials	16.7	0	5.0	(5.0)	(4.5)	22.2	0	34.4		
Common equities:										
Common stocks	25.0	0	2.0	(6.0)	(8.7)	37.7	(50.0)	0		
Other risk investments	3.1	13.8	0	0	0	0	0	16.9		
Total Level 3 securities	\$ 54.8	\$ 13.8	\$ 67.2	\$ (11.0)	\$ (13.2)	\$ 66.1	\$ (50.0)	\$ 127.7		

¹The security was transferred into Level 2 since the price was deemed to be an observable market sale price as the result of the then-recent sale of this security at a consistent price.

The following tables provide a summary of the quantitative information about Level 3 fair value measurements for our applicable securities at December 31:

Quantitative Information about Level 3 Fair Value Measurements						
(\$ in millions)	Fair Value at Dec. 31, 2022	Valuation Technique	Unobservable Input	Range of Input Values Increase (Decrease)	Weighted Average Increase (Decrease)	
Equity securities:						
Nonredeemable preferred stocks	\$ 83.8	Market market comparables	Weighted average market capitalization price change %	(0.6)% to 19.9%	10.5%	
Common stocks	18.3	Market market comparables	Weighted average market capitalization price change %	(42.5)% to 59.1%	0.3%	
Subtotal Level 3 securities	102.1					
Pricing exemption securities	19.8					
Total Level 3 securities	\$ 121.9					

Quantitative Information about Level 3 Fair Value Measurements

(\$ in millions)	Fair Value at Dec. 31, 2021	Valuation Technique	Unobservable Input	Range of Input Values Increase (Decrease)	Weighted Average Increase (Decrease)
Equity securities:					
Nonredeemable preferred stocks	\$ 110.8	Market comparables	Weighted average market capitalization price change %	(20.2)% to (2.3)%	(7.7%)
Subtotal Level 3 securities	110.8				
Pricing exemption securities	16.9				
Total Level 3 securities	\$ 127.7				

4. DEBT

Debt at December 31, consisted of:

(millions)	2022		2021	
	Carrying Value	Fair Value	Carrying Value	Fair Value
2.45% Senior Notes due 2027 (issued: \$500.0, August 2016)	\$ 498.2	\$ 457.7	\$ 497.7	\$ 517.9
2.50% Senior Notes due 2027 (issued: \$500.0, March 2022)	497.5	460.3	0	0
6 5/8% Senior Notes due 2029 (issued: \$300.0, March 1999)	297.5	326.8	297.2	388.2
4.00% Senior Notes due 2029 (issued: \$550.0, October 2018)	546.4	527.8	545.9	621.0
3.20% Senior Notes due 2030 (issued: \$500.0, March 2020)	496.9	448.6	496.5	536.3
3.00% Senior Notes due 2032 (issued: \$500.0, March 2022)	495.9	438.1	0	0
6.25% Senior Notes due 2032 (issued: \$400.0, November 2002)	396.4	435.4	396.2	547.9
4.35% Senior Notes due 2044 (issued: \$350.0, April 2014)	346.9	298.4	346.8	428.4
3.70% Senior Notes due 2045 (issued: \$400.0, January 2015)	395.7	310.2	395.6	447.1
4.125% Senior Notes due 2047 (issued: \$850.0, April 2017)	842.1	716.2	841.9	1,029.3
4.20% Senior Notes due 2048 (issued: \$600.0, March 2018)	590.4	507.0	590.2	741.3
3.95% Senior Notes due 2050 (issued: \$500.0, March 2020)	490.9	404.9	490.8	600.0
3.70% Senior Notes due 2052 (issued: \$500.0, March 2022)	493.5	386.5	0	0
Total	\$6,388.3	\$5,717.9	\$4,898.8	\$5,857.4

All of the outstanding debt was issued by The Progressive Corporation and includes amounts that were borrowed for general corporate purposes, which may include contributions to capital of its insurance subsidiaries, payments of debt at maturity, or may be used, or made available for use, for other business purposes. Fair values for these debt instruments are obtained from external sources. There are no restrictive financial covenants or credit rating triggers on the outstanding debt.

Interest on all debt is payable semiannually at the stated rates. All principal is due at the stated maturity. Each note is redeemable, in whole or in part, at any time; however, the redemption price will equal the greater of

the principal amount of the note or a “make whole” amount calculated by reference to the present values of remaining scheduled principal and interest payments under the note. There was no short-term debt outstanding at December 31, 2022 or 2021.

We issued \$500 million of 2.50% Senior Notes due 2027, \$500 million of 3.00% Senior Notes due 2032, and \$500 million of 3.70% Senior Notes due 2052 in March 2022, in an underwritten public offering. The net proceeds from these issuances, after deducting underwriters’ discounts, commissions, and other issuance costs, were approximately \$1,486.0 million in aggregate.

Aggregate required principal payments on debt outstanding at December 31, 2022, were as follows:

(millions)	Payments
2023	\$ 0
2024	0
2025	0
2026	0
2027	1,000
Thereafter	5,450
Total	\$ 6,450

Prior to certain issuances of our debt securities, we entered into forecasted transactions to hedge against possible rises in interest rates. When the contracts were closed upon the issuance of the applicable debt securities, we recognized the unrealized gains (losses) on these contracts as part of accumulated other comprehensive income (see *Note 1 – Reporting and Accounting Policies* for further discussion). These unrealized gains (losses) are being amortized as adjustments to interest expense over the life of the related notes.

The following table shows the original gain (loss) recognized at debt issuance and the unamortized balance at December 31, 2022, on a pretax basis:

(millions)	Unrealized Gain (Loss) at Debt Issuance	Unamortized Balance at December 31, 2022
6 5/8% Senior Notes	\$ (4.2)	\$ (1.8)
6.25% Senior Notes	5.1	2.8
4.35% Senior Notes	(1.6)	(1.3)
3.70% Senior Notes	(12.9)	(10.8)
4.125% Senior Notes	(8.0)	(7.2)

5. INCOME TAXES

The components of our income tax provision for the years ended December 31, were as follows:

(millions)	2022	2021	2020
Current tax provision			
Federal	\$ 733.2	\$ 739.5	\$ 1,395.7
State	12.7	20.7	35.6
Deferred tax expense (benefit)			
Federal	(528.7)	98.6	35.8
State	(16.6)	0.3	1.5
Total income tax provision	\$ 200.6	\$ 859.1	\$ 1,468.6

We reclassified \$0.5 million in 2022, \$0.9 million in 2021, and \$1.1 million in 2020, of net unrealized losses from accumulated other comprehensive income to interest expense on our closed debt issuance cash flow hedges.

During 2022 and 2021, we had a line of credit with PNC Bank, National Association (PNC), in the maximum principal amount of \$250 million. Subject to the terms and conditions of the line of credit documents, advances under the line of credit (if any) will bear interest at a variable rate equal to the higher of PNC's Prime Rate or the sum of the Federal Funds Open Rate plus 175 basis points. Each advance must be repaid on the 30th day after the advance or, if earlier, on April 30, 2023, the expiration date of the line of credit. Prepayments are permitted without penalty. The line of credit is uncommitted and, as such, all advances are subject to PNC's discretion. We had no borrowings under the line of credit in 2022 or 2021.

The provision for income taxes in the consolidated statements of comprehensive income differed from the statutory rate for the years ended December 31, as follows:

(millions)	2022		2021		2020	
	Expense (Benefit)	Rate Impact	Expense (Benefit)	Rate Impact	Expense (Benefit)	Rate Impact
Income before income taxes	\$922.1		\$4,210.0		\$7,173.2	
Tax at statutory federal rate	\$193.6	21%	\$ 884.1	21%	\$1,506.4	21%
Tax effect of:						
Goodwill impairment ¹	47.2	5	0	0	0	0
Stock-based compensation	(18.1)	(2)	(19.4)	(1)	(22.7)	(1)
Tax credits	(14.8)	(2)	(9.9)	0	(5.4)	0
Tax-preferenced investment income	(12.7)	(1)	(13.2)	0	(15.2)	0
Nondeductible compensation expense	11.1	1	8.4	0	6.4	0
Tax-deductible dividends	(1.8)	0	(9.4)	0	(25.1)	(1)
State income taxes, net of federal taxes	(3.1)	0	16.6	0	29.3	1
Other items, net	(0.8)	0	1.9	0	(5.1)	0
Total income tax provision	\$200.6	22%	\$ 859.1	20%	\$1,468.6	20%

¹The ARX acquisition did not create goodwill for income tax purposes. As a result, the impairment is not deductible for income tax purposes.

Deferred income taxes reflect the tax effects of temporary differences between the financial statement carrying amounts and the tax bases of assets and liabilities. The following table shows the components of the net deferred tax assets and liabilities at December 31:

(millions)	2022	2021
Federal deferred income tax assets:		
Net unrealized losses on fixed-maturity securities	\$ 742.9	\$ 0
Unearned premiums reserve	719.2	642.7
Loss and loss adjustment expense reserves	239.9	224.3
Non-deductible accruals	225.9	220.8
Software development costs	37.8	0
Operating lease liabilities	28.8	37.9
Investment basis differences	17.0	19.1
Hedges on forecasted transactions	3.8	4.0
Other	12.7	7.2
Federal deferred income tax liabilities:		
Net holding period gains on equity securities	(387.3)	(811.1)
Deferred acquisition costs	(324.3)	(284.7)
Property and equipment	(97.0)	(94.6)
Operating lease assets	(28.8)	(37.9)
Loss and loss adjustment expense reserve transition adjustment	(24.1)	(32.3)
Intangible assets	(11.1)	(16.9)
Prepaid expenses	(6.5)	(6.8)
Net unrealized gains on fixed-maturity securities	0	(15.0)
Other	(17.4)	(9.6)
Net federal deferred income taxes	1,131.5	(152.9)
State deferred income tax assets ¹	42.2	16.3
State deferred income tax liabilities ¹	0	(1.5)
Total	\$ 1,173.7	\$ (138.1)

¹State deferred assets and liabilities are recorded in other assets and accounts payable, accrued expenses, and other liabilities, respectively, on the consolidated balance sheets.

Although realization of the deferred tax assets is not assured, management believes that it is more likely than not that the deferred tax assets will be realized based on our expectation that we will be able to fully utilize the deductions that are ultimately recognized for tax purposes and, therefore, no valuation allowance was needed at December 31, 2022 or 2021. We believe our deferred tax asset related to net unrealized losses on fixed-maturity securities will be realized based on the existence of prior year capital gains, current temporary differences related to unrealized gains in our equity portfolio, and other tax planning strategies.

At December 31, 2022, we had \$10.9 million of net taxes payable (included in accounts payable, accrued expenses, and other liabilities on our consolidated balance sheets), compared to \$19.2 million of net taxes recoverable (included in other assets on our consolidated balance sheets) at December 31, 2021.

The Progressive Corporation and its subsidiaries file a consolidated federal income tax return. As a result of the acquisition of Protective Insurance in 2021,

Protective Insurance was included in The Progressive Corporation consolidated federal income tax return for the period from June 2, 2021 to December 31, 2021. We filed a final consolidated federal income tax return for Protective Insurance for the period from January 1, 2021 to June 1, 2021.

All federal income tax years prior to 2019 are generally closed to examination; however, for The Progressive Corporation, 2016 remains open for a tax credit partnership investment. The statute of limitations for state income tax purposes generally remains open for three to four years from the return filing date, depending upon the jurisdiction. There has been no significant state income tax audit activity.

We recognize interest and penalties, if any, as a component of income tax expense. For the years ended December 31, 2022, 2021, and 2020, \$0.1 million, \$0.1 million, and \$0, respectively, of interest and penalties expense has been recorded in the tax provision. We have not recorded any unrecognized tax benefits, or related interest and penalties, as of December 31, 2022 and 2021.

6. LOSS AND LOSS ADJUSTMENT EXPENSE RESERVES

We write personal and commercial auto insurance, residential property insurance, and other specialty property-casualty insurance and related services throughout the United States. As a property-casualty insurance company, we are exposed to hurricanes or other catastrophes. We are unable to predict the frequency or severity of any such events that may occur in the near term or thereafter. To help mitigate this risk in our Property business, we currently maintain excess of loss reinsurance coverage, both on an aggregate and a per occurrence basis.

As we are primarily an insurer of motor vehicles and residential property, we have limited exposure to environmental, asbestos, workers' compensation, and general liability claims. We have established reserves for such exposures, which represented about 2% of our total loss and loss adjustment expense reserves. We believe these reserves to be adequate based on information currently known. These claims are not expected to have a material effect on our liquidity, financial condition, cash flows, or results of operations.

Loss and Loss Adjustment Expense Reserves

Loss and loss adjustment expense (LAE) reserves represent our best estimate of our ultimate liability for losses and LAE relating to events that occurred prior to

the end of any given accounting period but have not yet been paid. For our Personal and Commercial Lines vehicle businesses, which represented about 90% of our total carried reserves, we establish loss and LAE reserves after completing reviews at a disaggregated level of grouping. Progressive's actuarial staff reviews approximately 400 subsets of business data, which are at a combined state, product, and line coverage level, to calculate the needed loss and LAE reserves. During a reserve review, ultimate loss amounts are estimated using several industry standard actuarial projection methods. These methods take into account historical comparable loss data at the subset level and estimate the impact of various loss development factors, such as the frequency (number of losses per exposure), severity (dollars of loss per each claim), and average premium (dollars of premium per earned car year), as well as the frequency and severity of loss adjustment expense costs.

We begin our review of a set of data by producing multiple estimates of needed reserves, using both paid and incurred data, to determine if a reserve change is required. In the event of a wide variation among results generated by the different projections, our actuarial group will further analyze the data using additional quantitative analysis. Each review develops a point estimate for a relatively small subset of the business,

which allows us to establish meaningful reserve levels for that subset. We believe our comprehensive process of reviewing at a subset level provides us more meaningful estimates of our aggregate loss reserves.

The actuarial staff completes separate projections of needed case and incurred but not recorded (IBNR) reserves. Since a large majority of the parties involved in an accident report their claims within a short time period after the occurrence, we do not carry a significant amount of IBNR reserves for older accident years. Based on the methodology we use to estimate case reserves for our vehicle businesses, we generally do not have expected development on reported claims included in our IBNR reserves. We do, however, include anticipated salvage and subrogation recoveries in our IBNR reserves, which could result in negative carried IBNR reserves, primarily in our physical damage reserves.

Changes from historical data may reduce the predictiveness of our projected future loss costs. Internal considerations that are process-related, which generally result from changes in our claims

organization's activities, include claim closure rates, the number of claims that are closed without payment, and the level of the claims representatives' estimates of the needed case reserve for each claim. These changes and their effect on the historical data are studied at the state level versus on a larger, less indicative, countrywide basis. External items considered include the litigation atmosphere, state-by-state changes in medical costs, and the availability of services to resolve claims. These also are better understood at the state level versus at a more macro, countrywide level. The actuarial staff takes these changes into consideration when making their assumptions to determine needed reserve levels.

Similar to our vehicle businesses, our actuarial staff analyzes loss and LAE data for our Commercial Lines non-vehicle business and our Property business on an accident period basis. Many of the methodologies and key parameters reviewed are similar. In addition, for Protective Insurance and our Property business, since claims adjusters primarily establish the case reserves, the actuarial staff includes expected development on case reserves as a component of the overall IBNR reserves.

Activity in the loss and LAE reserves is summarized as follows:

(millions)	2022	2021	2020
Balance at January 1	\$ 26,164.1	\$ 20,265.8	\$ 18,105.4
Less reinsurance recoverables on unpaid losses	4,733.6	3,798.2	3,212.2
Net balance at January 1	21,430.5	16,467.6	14,893.2
Net loss and loss adjustment expense reserves acquired ¹	0	729.2	0
Total beginning reserves	21,430.5	17,196.8	14,893.2
Incurred related to:			
Current year	38,209.0	33,632.3	24,926.5
Prior years	(86.3)	(4.7)	195.3
Total incurred	38,122.7	33,627.6	25,121.8
Paid related to:			
Current year	23,542.9	20,561.1	15,584.4
Prior years	11,210.2	8,832.8	7,963.0
Total paid	34,753.1	29,393.9	23,547.4
Net balance at December 31	24,800.1	21,430.5	16,467.6
Plus reinsurance recoverables on unpaid losses	5,559.2	4,733.6	3,798.2
Balance at December 31	\$ 30,359.3	\$ 26,164.1	\$ 20,265.8

¹Net reserves acquired in Protective Insurance acquisition.

We experienced favorable reserve development of \$86.3 million and \$4.7 million in 2022 and 2021, respectively, and unfavorable development of \$195.3 million in 2020, which is reflected as "Incurred related to prior years" in the table above.

2022

- The favorable reserve development for 2022, reflected approximately \$22 million of favorable prior year reserve development that was attributable to accident year 2021, \$47 million to accident year 2020, and the remainder to accident years 2019 and prior.
- Our personal auto products incurred \$157 million of favorable loss and LAE reserve development, with the Agency and Direct auto businesses each contributing about half. The favorable development was primarily attributable to more subrogation and salvage recoveries and lower LAE than originally anticipated, partially offset by higher than anticipated severity and frequency of auto property damage payments on previously closed claims and late reported injury claims.
- Our Commercial Lines business experienced \$82 million of unfavorable development, primarily driven by our TNC business, due to higher than anticipated severity of injury case reserves and higher than anticipated severity and frequency of late reported claims.

2021

- The slightly favorable reserve development for 2021, reflected approximately \$140 million of favorable prior year reserve development that was attributable to accident year 2020, offset by \$87 million of unfavorable development attributable to accident year 2019, with the remainder of the unfavorable development attributable to 2018 and prior accident years.
- Our personal auto products incurred \$113 million of favorable loss and LAE reserve development, with about \$80 million attributable to the Direct auto business, primarily attributable to revised estimates of our per claim settlement costs and fewer late reports than originally anticipated, partially offset by higher than anticipated bodily injury severity.
- Our Commercial Lines business experienced \$87 million of unfavorable development, primarily due to increased injury severity and the emergence of large injury claims at rates higher than originally anticipated, primarily in Texas and Florida.
- Our Property business experienced \$36 million of unfavorable development primarily due to higher than anticipated severity and claims that were previously closed being reopened in Florida.
- Our special lines products experienced \$14 million of favorable development.

2020

- Approximately \$59 million of the unfavorable prior year reserve development was attributable to accident year 2019, \$107 million to accident year 2018, and the remainder to 2017 and prior accident years.
- Our personal auto products incurred about \$136 million of unfavorable loss and LAE reserve development, with the Agency and Direct auto businesses each contributing about half, primarily attributable to higher than anticipated frequency of reopened personal injury protection (PIP) claims, primarily in Florida, updated estimates of our per claim settlement costs, and late reported losses occurring toward the end of 2019 but not reported until 2020, which was partially offset by higher than anticipated salvage and subrogation recoveries.
- Our Commercial Lines business experienced about \$98 million of unfavorable development, primarily due to increased injury severity and the emergence of large injury claims at rates higher than originally anticipated.
- Our special lines products and Property business experienced about \$25 million and \$14 million, respectively, of favorable development driven by favorable case development across all products, as severity was lower than expected.

Incurred and Paid Claims Development by Accident Year

The following tables present our incurred, net of reinsurance, and paid claims development by accident year for the number of years that generally have historically represented the maximum development period for claims in any of our segment categories. The tables below include inception-to-date information for companies acquired and wholly exclude companies disposed of, rather than including information from the date of acquisition, or until the date of disposition. We believe the most meaningful presentation of claims development is through the retrospective approach by presenting all relevant historical information for all periods presented.

We have elected to present our incurred and paid claims development consistent with our GAAP reportable segments (see *Note 10 – Segment Information* for a discussion of our segment reporting), with a further disaggregation of our Personal Lines and Commercial Lines auto business claims development between liability and physical damage, since the loss patterns are significantly different between them. The

Commercial Lines other business includes Protective Insurance coverages other than liability and physical damage. Reserves for our run-off products are not considered material and, therefore, are not included in a separate claims development table.

Only 2022 is audited; all prior years are considered required supplementary information and, therefore, are unaudited. Expected development on our case reserves is excluded from the IBNR reserves on our vehicle businesses, as discussed above. For the Property business and the Commercial Lines other business, the IBNR reserves include expected case development based on the methodology used in establishing the case reserves for that segment. The cumulative number of incurred claims are based on accident coverages (e.g., bodily injury, collision, comprehensive, personal injury protection, property damage) related to opened claims. Coverage counts related to claims closed without payment are excluded from the cumulative number of incurred claims.

Personal Lines - Agency - Liability

(\$ in millions)

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

As of
December 31, 2022

Accident Year	For the years ended December 31,					Total of IBNR Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Incurred Claim Counts
	2018 ¹	2019 ¹	2020 ¹	2021 ¹	2022		
2018	\$ 5,141.8	\$ 5,182.1	\$ 5,192.7	\$ 5,238.7	\$ 5,180.2	\$ 0.4	856,575
2019		5,885.0	5,886.9	5,918.2	5,959.9	115.3	916,390
2020			5,433.8	5,405.4	5,385.7	135.8	756,738
2021				6,716.4	6,861.8	327.1	882,143
2022					7,076.9	1,172.6	821,852
				Total	\$ 30,464.5		

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

For the years ended December 31,

Accident Year	2018 ¹	2019 ¹	2020 ¹	2021 ¹	2022
2018	\$ 2,378.0	\$ 4,028.7	\$ 4,635.0	\$ 4,940.6	\$ 5,084.1
2019		2,715.2	4,533.2	5,272.8	5,626.6
2020			2,383.0	4,112.2	4,796.8
2021				2,855.4	5,239.4
2022					3,018.8
				Total	\$ 23,765.7
				All outstanding liabilities before 2018, net of reinsurance ¹	92.4
				Liabilities for claims and claim adjustment expenses, net of reinsurance	\$ 6,791.2

¹ Required supplementary information (unaudited)

Personal Lines - Agency - Physical Damage

(\$ in millions)

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

As of
December 31, 2022

Accident Year	For the years ended December 31,					Total of IBNR Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Incurred Claim Counts
	2018 ¹	2019 ¹	2020 ¹	2021 ¹	2022		
2018	\$ 2,819.0	\$ 2,822.6	\$ 2,821.7	\$ 2,818.9	\$ 2,824.2	\$ (0.5)	1,695,512
2019		3,277.9	3,254.7	3,261.1	3,259.0	(9.8)	1,878,833
2020			3,328.5	3,319.8	3,327.3	(4.5)	1,784,348
2021				4,708.3	4,624.3	(12.0)	2,103,531
2022					5,429.4	(254.6)	2,006,468
				Total	\$ 19,464.2		

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

For the years ended December 31,

Accident Year	2018 ¹	2019 ¹	2020 ¹	2021 ¹	2022
2018	\$ 2,769.1	\$ 2,827.4	\$ 2,819.9	\$ 2,819.5	\$ 2,821.2
2019		3,242.5	3,259.2	3,255.9	3,260.9
2020			3,250.1	3,322.5	3,323.0
2021				4,438.1	4,620.9
2022					5,176.2
				Total	\$ 19,202.2
				All outstanding liabilities before 2018, net of reinsurance ¹	(0.5)
				Liabilities for claims and claim adjustment expenses, net of reinsurance	\$ 261.5

¹ Required supplementary information (unaudited)

Personal Lines - Direct - Liability

(\$ in millions)

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

As of
December 31, 2022

Accident Year	For the years ended December 31,					Total of IBNR Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Incurred Claim Counts
	2018 ¹	2019 ¹	2020 ¹	2021 ¹	2022		
2018	\$ 4,904.8	\$ 4,980.9	\$ 5,003.2	\$ 5,052.5	\$ 5,003.2	\$ 0.5	871,247
2019		5,756.5	5,811.7	5,837.9	5,870.0	95.6	957,707
2020			5,356.9	5,322.7	5,301.5	125.5	789,775
2021				6,964.7	7,180.3	318.2	976,925
2022					7,563.4	1,173.0	951,894
				Total	\$ 30,918.4		

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

For the years ended December 31,

Accident Year	2018 ¹	2019 ¹	2020 ¹	2021 ¹	2022
2018	\$ 2,235.1	\$ 3,863.5	\$ 4,481.7	\$ 4,787.7	\$ 4,919.5
2019		2,630.3	4,452.5	5,218.8	5,568.8
2020			2,301.3	4,018.7	4,721.4
2021				2,915.0	5,460.5
2022					3,131.8
				Total	\$ 23,802.0
				All outstanding liabilities before 2018, net of reinsurance ¹	70.8
				Liabilities for claims and claim adjustment expenses, net of reinsurance	\$ 7,187.2

¹ Required supplementary information (unaudited)

Personal Lines - Direct - Physical Damage

(\$ in millions)

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

As of
December 31, 2022

Accident Year	For the years ended December 31,					Total of IBNR Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Incurred Claim Counts
	2018 ¹	2019 ¹	2020 ¹	2021 ¹	2022		
2018	\$ 3,202.3	\$ 3,181.9	\$ 3,182.0	\$ 3,179.3	\$ 3,186.4	\$ 0.9	2,070,287
2019		3,787.9	3,737.8	3,749.6	3,747.9	(9.8)	2,272,135
2020			3,775.6	3,753.3	3,765.9	(6.8)	2,138,359
2021				5,752.3	5,568.2	(30.1)	2,600,641
2022					6,613.3	(398.9)	2,602,301
				Total	\$ 22,881.7		

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

For the years ended December 31,

Accident Year	2018 ¹	2019 ¹	2020 ¹	2021 ¹	2022
2018	\$ 3,170.0	\$ 3,193.8	\$ 3,183.0	\$ 3,182.6	\$ 3,183.1
2019		3,782.6	3,751.3	3,746.8	3,750.9
2020			3,720.0	3,765.9	3,762.2
2021				5,421.9	5,578.7
2022					6,325.7
				Total	\$ 22,600.6
				All outstanding liabilities before 2018, net of reinsurance ¹	3.6
				Liabilities for claims and claim adjustment expenses, net of reinsurance	\$ 284.7

¹ Required supplementary information (unaudited)

Commercial Lines - Liability

(\$ in millions)

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance						As of December 31, 2022	
Accident Year	For the years ended December 31,					Total of IBNR Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Incurred Claim Counts
	2018 ¹	2019 ¹	2020 ¹	2021 ¹	2022		
2018	\$ 1,880.4	\$ 1,913.7	\$ 1,976.2	\$ 1,971.4	\$ 1,966.0	\$ 6.1	119,869
2019		2,301.1	2,370.9	2,426.3	2,434.4	50.9	136,232
2020			2,335.7	2,388.8	2,418.9	91.6	117,890
2021				3,446.6	3,527.3	268.2	155,226
2022					4,526.1	892.9	186,665
				Total	\$ 14,872.7		

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

For the years ended December 31,					
Accident Year	2018 ¹	2019 ¹	2020 ¹	2021 ¹	2022
2018	\$ 401.4	\$ 979.9	\$ 1,392.3	\$ 1,666.8	\$ 1,818.0
2019		474.8	1,184.4	1,684.5	2,037.5
2020			440.8	1,110.4	1,628.9
2021				573.6	1,545.9
2022					749.2
				Total	\$ 7,779.5
				All outstanding liabilities before 2018, net of reinsurance ¹	83.8
				Liabilities for claims and claim adjustment expenses, net of reinsurance	\$ 7,177.0

¹ Required supplementary information (unaudited)

Commercial Lines - Physical Damage

(\$ in millions)

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance						As of December 31, 2022	
Accident Year	For the years ended December 31,					Total of IBNR Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Incurred Claim Counts
	2018 ¹	2019 ¹	2020 ¹	2021 ¹	2022		
2018	\$ 528.7	\$ 528.3	\$ 526.3	\$ 525.6	\$ 525.6	\$ 0	93,304
2019		633.1	628.3	626.6	625.9	(1.4)	99,494
2020			631.8	624.9	622.0	(1.6)	99,578
2021				920.9	909.8	(5.5)	121,853
2022					1,314.9	(13.8)	152,929
				Total	\$ 3,998.2		

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

For the years ended December 31,					
Accident Year	2018 ¹	2019 ¹	2020 ¹	2021 ¹	2022
2018	\$ 467.6	\$ 524.8	\$ 524.9	\$ 525.4	\$ 525.0
2019		561.1	625.1	624.8	625.3
2020			540.6	621.8	620.4
2021				764.2	903.1
2022					1,114.0
				Total	\$ 3,787.8
				All outstanding liabilities before 2018, net of reinsurance ¹	0.8
				Liabilities for claims and claim adjustment expenses, net of reinsurance	\$ 211.2

¹ Required supplementary information (unaudited)

Commercial Lines - Other

(\$ in millions)

Accident Year	Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance										As of December 31, 2022		
	For the years ended December 31,										Total of IBNR Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Incurred Claim Counts	
	2013 ¹	2014 ¹	2015 ¹	2016 ¹	2017 ¹	2018 ¹	2019 ¹	2020 ¹	2021 ¹	2022			
2013	\$66.4	\$68.1	\$65.3	\$75.4	\$81.6	\$77.9	\$78.9	\$78.9	\$78.9	\$79.4	\$	4.3	8,981
2014		74.9	70.0	68.3	70.5	70.7	69.4	70.7	70.9	70.4		3.5	9,226
2015			51.2	45.4	46.1	48.3	47.0	44.8	45.1	44.6		3.5	9,525
2016				51.8	43.3	41.0	41.5	40.2	40.1	40.0		3.0	7,647
2017					62.6	54.6	51.1	48.8	46.2	48.0		4.6	17,675
2018						81.5	81.3	76.7	77.0	76.5		7.6	15,440
2019							80.7	83.1	85.4	88.3		12.8	10,664
2020								75.0	80.7	81.9		17.7	9,437
2021									84.1	87.3		30.6	9,264
2022										84.0		43.0	6,974
										Total	\$	700.4	

Accident Year	Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance											
	For the years ended December 31,											
	2013 ¹	2014 ¹	2015 ¹	2016 ¹	2017 ¹	2018 ¹	2019 ¹	2020 ¹	2021 ¹	2022		
2013	\$13.7	\$30.6	\$43.6	\$55.6	\$61.9	\$66.9	\$68.9	\$70.8	\$71.7	\$72.9		
2014		18.6	33.9	44.3	51.1	56.9	59.0	61.1	64.2	65.0		
2015			6.5	18.1	26.5	30.9	33.9	36.1	37.1	37.8		
2016				8.5	20.9	27.0	30.6	32.7	33.8	35.0		
2017					9.6	24.4	30.8	34.5	36.9	39.7		
2018						17.6	39.6	49.5	56.7	61.7		
2019							20.0	42.4	56.0	64.6		
2020								15.8	38.6	52.2		
2021									16.9	39.6		
2022										18.4		
									Total	\$	486.9	
										All outstanding liabilities before 2013, net of reinsurance ¹	29.0	
										Liabilities for claims and claim adjustment expenses, net of reinsurance	\$	242.5

¹ Required supplementary information (unaudited)

Property Business

(\$ in millions)

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

As of
December 31, 2022

Accident Year	For the years ended December 31,					Total of IBNR Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Incurred Claim Counts
	2018 ¹	2019 ¹	2020 ¹	2021 ¹	2022		
2018	\$ 839.0	\$ 845.2	\$ 845.4	\$ 846.5	\$ 848.0	\$ 9.4	63,814
2019		971.7	965.2	962.8	965.8	0.6	73,056
2020			1,223.5	1,246.8	1,260.9	23.6	88,680
2021				1,539.6	1,516.3	77.9	89,348
2022					1,664.6	403.8	82,748
				Total	\$ 6,255.6		

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance

Accident Year	For the years ended December 31,				
	2018 ¹	2019 ¹	2020 ¹	2021 ¹	2022
2018	\$ 595.9	\$ 781.2	\$ 812.6	\$ 826.6	\$ 834.1
2019		708.0	930.4	950.5	959.3
2020			832.5	1,141.2	1,210.7
2021				1,035.4	1,374.5
2022					1,041.7
				Total	\$ 5,420.3
				All outstanding liabilities before 2018, net of reinsurance ¹	4.4
				Liabilities for claims and claim adjustment expenses, net of reinsurance	\$ 839.7

¹ Required supplementary information (unaudited)

The following table reconciles the net incurred and paid claims development tables to the liability for claims and claim adjustment expenses:

(millions)	2022	2021
Net outstanding liabilities		
Personal Lines		
Agency, Liability	\$ 6,791.2	\$ 6,274.3
Agency, Physical Damage	261.5	277.6
Direct, Liability	7,187.2	6,373.2
Direct, Physical Damage	284.7	322.3
Commercial Lines		
Liability	7,177.0	5,381.1
Physical Damage	211.2	163.5
Other	242.5	229.8
Property	839.7	650.5
Other business	108.9	62.6
Liabilities for unpaid claims and claim adjustment expenses, net of reinsurance	23,103.9	19,734.9
Reinsurance recoverables on unpaid claims		
Personal Lines		
Agency, Liability	894.1	916.9
Agency, Physical Damage	0	0
Direct, Liability	1,485.4	1,472.7
Direct, Physical Damage	0	0
Commercial Lines		
Liability	1,273.7	1,266.4
Physical Damage	0.5	2.4
Other	204.6	202.0
Property	1,068.1	370.0
Other business	559.0	463.8
Total reinsurance recoverables on unpaid claims	5,485.4	4,694.2
Unallocated claims adjustment expense related to:		
Liabilities for unpaid claims and claim adjustment expenses, net of reinsurance	1,696.2	1,695.6
Reinsurance recoverables on unpaid claims	73.8	39.4
Total gross liability for unpaid claims and claim adjustment expense	\$ 30,359.3	\$ 26,164.1

The following table shows the average historical claims duration as of December 31, 2022:

(Required Supplementary Information - Unaudited)

Average Annual Percentage Payout of Incurred Claims by Age, Net of Reinsurance	Years				
	1	2	3	4	5
Personal Lines					
Agency, Liability	43.8%	32.4%	12.3%	5.9%	2.8%
Agency, Physical Damage	97.0	2.4	(0.1)	0.1	0.1
Direct, Liability	42.7	33.0	12.9	6.0	2.6
Direct, Physical Damage	98.0	1.2	(0.2)	0.1	0
Commercial Lines					
Liability	17.7	28.3	21.0	14.3	7.7
Physical Damage	86.2	12.7	(0.1)	0.1	(0.1)
Other	20.8	26.1	15.4	10.4	6.9
Property	67.4	23.0	3.9	1.3	0.9

7. REINSURANCE

The effect of reinsurance on premiums written and earned for the years ended December 31, was as follows:

(millions)	2022		2021		2020	
	Written	Earned	Written	Earned	Written	Earned
Direct premiums	\$ 52,335.6	\$ 50,650.2	\$ 48,129.6	\$ 46,018.6	\$ 41,736.4	\$ 40,687.7
Ceded premiums:						
Regulated	(621.5)	(674.8)	(674.5)	(650.2)	(648.2)	(686.5)
Non-Regulated	(633.0)	(734.2)	(1,049.9)	(999.7)	(519.5)	(739.6)
Total ceded premiums	(1,254.5)	(1,409.0)	(1,724.4)	(1,649.9)	(1,167.7)	(1,426.1)
Net premiums	\$ 51,081.1	\$ 49,241.2	\$ 46,405.2	\$ 44,368.7	\$ 40,568.7	\$ 39,261.6

Regulated refers to federal or state run plans and primarily includes the following:

- Federal reinsurance plan
 - National Flood Insurance Program (NFIP)
- State-provided reinsurance facilities
 - Michigan Catastrophic Claims Association (MCCA)
 - North Carolina Reinsurance Facility (NCRF)
 - Florida Hurricane Catastrophe Fund (FHCF)
- State-mandated involuntary plans
 - Commercial Automobile Insurance Procedures/Plans (CAIP)

Non-Regulated represents voluntary external reinsurance contracts entered into by the company. These include amounts ceded on our Commercial Lines business primarily related to the TNC business, workers' compensation, and fleet trucking, which are all ceded under quota-share reinsurance agreements.

Amounts ceded on our Property business are primarily multi-year catastrophic excess of loss and aggregate excess of loss agreements.

Non-Regulated ceded written and earned premiums decreased in 2022, primarily resulting from changes in the reinsurance structure of certain TNC products during the year, under which we wrote less direct premiums and ceded less premiums than in the prior year. The increased ceded written and earned premiums in 2021 was primarily due to an increase in the number of miles driven (the basis for TNC premiums) resulting from the lifting of pandemic-related restrictions that were in place in 2020, and the acquisition of Protective Insurance, which cedes premiums on its workers' compensation and fleet trucking policies.

Our reinsurance recoverables and prepaid reinsurance premiums were comprised of the following at December 31:

(\$ in millions)	Reinsurance Recoverables				Prepaid Reinsurance Premiums			
	2022		2021		2022		2021	
Regulated:								
MCCA	\$ 2,332.3	40%	\$ 2,364.0	47%	\$ 26.4	9%	\$ 26.7	6%
CAIP	626.8	11	529.0	11	50.4	17	111.2	24
FHCF	437.3	7	81.3	2	0	0	0	0
NFIP	215.4	4	13.9	0	60.1	20	62.4	14
NCRF	143.2	2	118.7	2	54.5	18	44.4	10
Other	2.9	0	2.2	0	1.5	1	1.4	0
Total Regulated	3,757.9	64	3,109.1	62	192.9	65	246.1	54
Non-Regulated:								
Commercial Lines	1,544.3	27	1,518.4	31	91.0	31	198.2	43
Property	524.4	9	345.8	7	11.6	4	13.3	3
Other	5.5	0	7.2	0	0	0	0	0
Total Non-Regulated	2,074.2	36	1,871.4	38	102.6	35	211.5	46
Total	\$ 5,832.1	100%	\$ 4,980.5	100%	\$ 295.5	100%	\$ 457.6	100%

Reinsurance contracts do not relieve us from our obligations to policyholders. Failure of reinsurers to honor their obligations could result in losses to us. Our exposure to losses from the failure of Regulated plans is minimal, since these plans are funded by the federal government or by mechanisms supported by insurance companies in applicable states. We evaluate the financial condition of our other reinsurers and monitor concentrations of credit risk to minimize our exposure to significant losses from reinsurer insolvencies.

As a result of Hurricane Ian, we incurred losses and allocated loss adjustment expenses that were in excess of the retention layer under our Property excess of loss per occurrence reinsurance program, which were the primary contributors to the increase in the FHCF, NFIP, and Property business reinsurance recoverables in 2022.

The decrease in our prepaid reinsurance premiums in 2022 primarily reflects the decrease in TNC ceded

8. STATUTORY FINANCIAL INFORMATION

Consolidated statutory surplus was \$17,879.9 million and \$16,423.7 million at December 31, 2022 and 2021, respectively. Statutory net income was \$2,763.5 million, \$2,283.9 million, and \$4,911.4 million for the years ended December 31, 2022, 2021, and 2020, respectively.

At December 31, 2022, \$1,426.0 million of consolidated statutory surplus represented net admitted assets of our insurance subsidiaries and affiliates that are required to meet minimum statutory surplus requirements in such entities' states of domicile. The companies may be licensed in states other than their states of domicile, which may have higher minimum statutory surplus requirements. Generally, the net admitted assets of insurance companies

9. EMPLOYEE BENEFIT PLANS

Retirement Plans Progressive has a defined contribution pension plan (401(k) Plan) that covers employees who have been employed with the company for at least 30 days. Under Progressive's 401(k) Plan, we match up to a maximum of 6% of an employee's eligible compensation contributed to the plan, with employees vesting in the company match after providing two years of service. Employee and company matching contributions are invested, at the direction of the employee, in a number of investment options available under the plan, including various mutual funds, a self-directed brokerage option, and a Progressive common stock fund.

Progressive's common stock fund is an employee stock ownership program (ESOP) within the 401(k) Plan. At

premiums, as discussed above, and the expiration of our service contract to act as a servicing agent for CAIP, which we did not renew.

We routinely monitor changes in the credit quality and concentration risks of the reinsurers who are counterparties to our reinsurance recoverables to determine if an allowance for credit losses should be established. For at-risk uncollateralized recoverable balances, we evaluate a number of reinsurer specific factors, including reinsurer credit quality rating, credit rating outlook, historical experience, reinsurer surplus, recoverable duration, and collateralization composition in respect to our net exposure (i.e., the reinsurance recoverable amount less premiums payable to the reinsurer, where the right to offset exists). At December 31, 2022 and 2021, the allowance for credit losses related to these contracts was not material to our financial condition or results of operations.

that, subject to other applicable insurance laws and regulations, are available for transfer to the parent company cannot include the net admitted assets required to meet the minimum statutory surplus requirements of the states where the companies are licensed.

During 2022, the insurance subsidiaries paid aggregate cash dividends of \$541.7 million to their parent company. Based on the dividend laws currently in effect, the insurance subsidiaries could pay aggregate dividends of \$2,948.7 million in 2023 without prior approval from regulatory authorities, provided the dividend payments are not made within 12 months of previous dividends paid by the applicable subsidiary.

December 31, 2022, the ESOP held 19.3 million of our common shares, all of which are included in shares outstanding. Dividends on these shares are reinvested in common shares or paid out in cash, at the election of the participant, and the related tax benefit is recorded as part of our tax provision. Matching contributions to the 401(k) Plan for the years ended December 31, 2022, 2021, and 2020 were \$179.9 million, \$159.2 million, and \$131.2 million, respectively.

Postemployment Benefits Progressive provides various postemployment benefits to former or inactive employees who meet eligibility requirements and to their beneficiaries and covered dependents. Postemployment benefits include salary continuation and disability-related

benefits, including workers' compensation and, if elected, continuation of health-care benefits for specified limited periods. The liability for these benefits was \$19.6 million and \$22.3 million at December 31, 2022 and 2021, respectively.

Incentive Compensation Plans – Employees

Progressive's incentive compensation programs include

both non-equity incentive plans (cash) and equity incentive plans. Progressive's cash incentive compensation includes an annual cash incentive program (i.e., Gainshare Program) for virtually all employees. Progressive's equity incentive compensation plans provide for the granting of restricted stock unit awards to key members of management.

The amounts charged to expense for incentive compensation plans for the years ended December 31, were:

(millions)	2022		2021		2020	
	Pretax	After Tax	Pretax	After Tax	Pretax	After Tax
Non-equity incentive plans – cash	\$ 380.8	\$ 300.8	\$ 619.3	\$ 489.2	\$ 688.8	\$ 544.2
Equity incentive plans ¹	122.7	106.7	100.7	86.6	89.4	77.3

¹ After-tax amounts differ from the statutory rate of 21% due to the expected disallowance of certain executive compensation deductions.

Under Progressive's 2015 Equity Incentive Plan, which provides for the granting of equity-based compensation to officers and other key employees, 17.0 million shares, in the aggregate, were authorized for issuance.

The restricted equity awards are issued as either time-based or performance-based awards. Generally, equity awards are expensed pro rata over their respective vesting periods, based on the market value of the awards at the time of grant, with accelerated expense for participants who satisfy qualified retirement eligibility. The time-based awards vest in equal installments upon the lapse of specified periods of time, typically three, four, and five years, subject to the retirement provisions of the applicable award agreements.

Performance-based awards that contain variable vesting criteria are expensed based on management's expectation of the percentage of the award, if any, that will ultimately vest. These estimates can change periodically throughout the measurement period. Vesting of performance-based awards is contingent upon the achievement of predetermined performance goals within specified time periods.

The performance-based awards were granted to executives and other senior managers in 2022, in addition to their time-based awards, to provide additional incentive to achieve pre-established profitability and growth targets or relative investment performance. The targets for the performance-based awards, as well as the number of units that ultimately may vest, vary by grant.

The following performance-based equity awards were outstanding at December 31, 2022:

Performance Measurement	Year(s) of Grant	Vesting range (as a percentage of target)
Growth of our personal auto and commercial auto businesses and homeowners multi-peril business, each compared to its respective market	2020-2022	0-250%
Investment results relative to peer group	2020-2022	0-200%

All restricted equity awards are settled at or after vesting in Progressive common shares from existing treasury shares on a one-to-one basis.

A summary of all employee restricted equity award activity during the years ended December 31, follows:

Restricted Equity Awards	2022		2021		2020	
	Number of Shares ¹	Weighted Average Grant Date Fair Value	Number of Shares ¹	Weighted Average Grant Date Fair Value	Number of Shares ¹	Weighted Average Grant Date Fair Value
Beginning of year	3,539,022	\$ 67.24	3,570,271	\$ 57.68	3,879,077	\$ 48.28
Add (deduct):						
Granted ²	1,154,838	96.54	1,476,802	70.11	1,629,534	55.28
Vested	(1,378,070)	57.79	(1,452,353)	46.88	(1,861,442)	36.19
Forfeited	(117,640)	72.44	(55,698)	60.81	(76,898)	52.79
End of year ^{3,4}	3,198,150	\$ 81.71	3,539,022	\$ 67.24	3,570,271	\$ 57.68

¹ Includes restricted stock units. All performance-based awards are included at their target amounts.

² We reinvest dividend equivalents on restricted stock units. For 2022, 2021, and 2020, the number of units "granted" shown in the table above includes 44,327, 237,582, and 144,389 of dividend equivalent units, respectively, at a weighted average grant date fair value of \$0, since the dividends were factored into the grant date fair value of the original grant.

³ At December 31, 2022, the number of shares included 669,797 performance-based units at their target amounts. We expect 1,495,627 units to vest based upon our current estimates of the likelihood of achieving the predetermined performance goals applicable to each award.

⁴ At December 31, 2022, the total unrecognized compensation cost related to unvested equity awards was \$92.2 million, which includes performance-based awards at their currently estimated vesting value. This compensation expense will be recognized into the consolidated statements of comprehensive income over the weighted average vesting period of 2.2 years.

The aggregate fair value of the restricted equity awards that vested during the years ended December 31, 2022, 2021, and 2020, was \$154.4 million, \$139.1 million, and \$148.9 million, respectively, based on the actual stock price on the applicable vesting date.

Incentive Compensation Plans – Directors

Progressive's Amended and Restated 2017 Directors Equity Incentive Plan, which was approved by shareholders in 2022, provides for the granting of equity-based awards, including restricted stock awards, to non-employee directors. Under the amended and restated plan, an additional 150,000 shares are eligible to be granted, bringing the total authorized shares under the directors plan to 650,000 shares.

The Progressive Corporation permits each non-employee director to indicate a preference to receive either 100% of their compensation in the form of

a restricted stock award or 60% in the form of a restricted stock award and 40% in the form of cash. If the director does not state a preference, it is presumed that they preferred to receive 100% of their compensation in the form of restricted stock. After considering such preferences, the Compensation Committee of the Board of Directors determines the awards (restricted stock, or restricted stock and cash) for each non-employee director.

The restricted stock awards are issued as time-based awards. The vesting period (i.e., requisite service period) is typically 11 months from the date of each grant. To the extent a director is newly appointed during the year, or a director's committee assignments change, the vesting period may be shorter. Both the restricted stock awards and cash, if elected, are expensed pro rata over their respective vesting periods based on the market value of the awards at the time of grant.

A summary of all directors' restricted stock activity during the years ended December 31, follows:

Restricted Stock	2022		2021		2020	
	Number of Shares	Weighted Average Grant Date Fair Value	Number of Shares	Weighted Average Grant Date Fair Value	Number of Shares	Weighted Average Grant Date Fair Value
Beginning of year	29,206	\$ 105.16	39,403	\$ 74.77	38,451	\$ 73.43
Add (deduct):						
Granted	30,439	109.75	29,206	105.16	39,403	74.77
Vested	(29,206)	105.16	(39,403)	74.77	(38,451)	73.43
End of year ¹	30,439	\$ 109.75	29,206	\$ 105.16	39,403	\$ 74.77

¹At December 31, 2022, 2021, and 2020, the remaining unrecognized compensation cost related to restricted stock awards was \$1.0 million, \$0.9 million, and \$0.9 million, respectively.

The aggregate fair value of the restricted stock vested during the years ended December 31, 2022, 2021, and 2020, was \$3.4 million, \$3.8 million, and \$3.0 million, respectively, based on the actual stock price at time of vesting.

Deferred Compensation The Progressive Corporation Executive Deferred Compensation Plan (Deferral Plan) permits eligible Progressive executives to defer receipt of some or all of their annual cash incentive payments and all of their annual equity awards. Deferred cash compensation is deemed invested in one or more investment funds, including Progressive common shares, offered under the Deferral Plan and elected by the participant. All Deferral Plan distributions attributable to deferred cash compensation will be paid in cash.

For all equity awards granted in or after March 2005, and deferred pursuant to the Deferral Plan, the deferred amounts are deemed invested in our common shares and are ineligible for transfer to other investment funds in the Deferral Plan; distributions of these deferred awards will be made in Progressive common shares.

10. SEGMENT INFORMATION

We write personal and commercial auto insurance, personal residential and commercial property insurance, workers' compensation insurance, general liability insurance, and other specialty property-casualty insurance and provide related services.

We report our operating segments based on product. Our segments include Personal Lines, Commercial Lines, and Property.

Our Personal Lines segment writes insurance for personal autos and recreational vehicles (our special lines products). The Personal Lines segment is comprised of both the Agency and Direct businesses. The Agency business includes business written by our network of more than 40,000 independent insurance agencies, including brokerages in New York and California, and strategic alliance business relationships (including other insurance companies, financial institutions, and national agencies). The Direct business includes business written directly by us online, through the Progressive mobile app, or by phone. We operate our Personal Lines segment throughout the United States.

Our Commercial Lines segment writes auto-related liability and physical damage insurance, business-related general liability and property insurance predominately for small businesses, and workers' compensation insurance primarily for the transportation industry.

For all restricted stock awards granted prior to that date, the deferred amounts are eligible to be transferred to any of the investment funds in the Deferral Plan; distributions of these deferred awards will be made in cash. We reserved 11.1 million of our common shares for issuance under the Deferral Plan.

An irrevocable grantor trust has been established to provide a source of funds to assist us in meeting our liabilities under the Deferral Plan. The Deferral Plan Irrevocable Grantor Trust account held the following assets at December 31:

(millions)	2022	2021
Progressive common shares ¹	\$ 131.0	\$ 137.1
Other investment funds ²	150.4	189.1
Total	\$ 281.4	\$ 326.2

¹Included 2.0 million and 2.4 million common shares as of December 31, 2022 and 2021, respectively, to be distributed in common shares, and are reported at grant date fair value.

²Amount is included in other assets on the consolidated balance sheets.

This segment operates throughout the United States and is distributed through both the independent agency, including brokerages, and direct channels.

Our Property segment writes residential property insurance for homeowners, other property owners, and renters through both the independent agency and direct channel, and writes flood insurance through the "Write Your Own" program for the National Flood Insurance Program, through the agency channel. Our Property segment operates throughout the majority of the United States.

Our service businesses provide insurance-related services, including serving as an agent for homeowners, general liability, and workers' compensation insurance, among other products, through programs in our direct Personal Lines and Commercial Lines businesses. In 2022, our service contract to act as a servicing agent for CAIP expired and we did not renew the contract.

We evaluate segment profitability based on pretax underwriting profit (loss). Pretax underwriting profit (loss) is calculated as net premiums earned plus fees and other revenues, less: (i) losses and loss adjustment expenses; (ii) policy acquisition costs; (iii) other underwriting expenses; and (iv) policyholder credit expense. Service business pretax profit (loss) is the difference between service business revenues and service business expenses.

Assets and income taxes are not allocated to operating segments, as such allocation would be impractical. Expense allocations are based on certain assumptions and estimates primarily related to revenue and volume; stated segment operating results would change if different methods were applied. We also do not

separately identify depreciation expense by segment. Companywide depreciation expense was \$305.6 million in 2022, \$279.7 million in 2021, and \$274.9 million in 2020. The accounting policies of the operating segments are the same as those described in *Note 1 – Reporting and Accounting Policies*.

Following are the operating results for the years ended December 31:

(millions)	2022		2021		2020	
	Revenues	Pretax Profit (Loss)	Revenues	Pretax Profit (Loss)	Revenues	Pretax Profit (Loss)
Personal Lines						
Agency	\$ 17,744.7	\$ 734.1	\$ 16,881.0	\$ 992.1	\$ 15,789.5	\$ 2,236.5
Direct	20,135.5	769.4	18,492.3	619.2	16,830.6	2,076.5
Total Personal Lines ¹	37,880.2	1,503.5	35,373.3	1,611.3	32,620.1	4,313.0
Commercial Lines	9,088.3	810.3	6,945.2	767.8	4,875.8	634.8
Property ²	2,270.0	(238.4)	2,042.5	(312.3)	1,765.7	(125.1)
Other indemnity ³	2.7	(11.4)	7.7	(1.4)	0	0
Total underwriting operations	49,241.2	2,064.0	44,368.7	2,065.4	39,261.6	4,822.7
Fees and other revenues ⁴	722.1	NA	691.8	NA	603.5	NA
Service businesses	299.3	2.6	271.4	18.6	226.4	20.9
Investments ⁵	(651.9)	(676.2)	2,370.1	2,344.6	2,566.6	2,546.6
Interest expense	NA	(243.5)	NA	(218.6)	NA	(217.0)
Property - Goodwill impairment ²	NA	(224.8)	NA	0	NA	0
Consolidated total	\$ 49,610.7	\$ 922.1	\$ 47,702.0	\$ 4,210.0	\$ 42,658.1	\$ 7,173.2

NA = Not applicable

¹ Personal auto insurance accounted for 94% of the total Personal Lines segment net premiums earned in 2022, 2021, and 2020; insurance for our special lines products (e.g., motorcycles, RVs, watercraft, and snowmobiles) accounted for the balance of the Personal Lines net premiums earned.

² The total pretax loss, including goodwill impairment, for the Property segment was \$463.2 million for 2022. During 2022, 2021, and 2020, pretax profit (loss) also included \$29.1 million, \$56.6 million, and \$56.9 million, respectively, of amortization expense predominately associated with intangible assets attributable to our Property segment. See *Note 15 – Goodwill and Intangible Assets* for further discussion.

³ Includes other underwriting business and run-off operations.

⁴ Pretax profit (loss) for fees and other revenues is allocated to operating segments based on revenue.

⁵ Revenues represent recurring investment income and total net realized gains (losses) on securities; pretax profit (loss) is net of investment expenses.

Our management uses underwriting margin and combined ratio as primary measures of underwriting profitability, as defined above. The underwriting margin is the pretax underwriting profit (loss) expressed as a percentage of net premiums earned (i.e., revenues from underwriting operations). Combined ratio is the complement of the underwriting margin. Following are the underwriting margins and combined ratios for our underwriting operations for the years ended December 31:

	2022		2021		2020	
	Underwriting Margin	Combined Ratio	Underwriting Margin	Combined Ratio	Underwriting Margin	Combined Ratio
Personal Lines						
Agency	4.1%	95.9	5.9%	94.1	14.2%	85.8
Direct	3.8	96.2	3.4	96.6	12.3	87.7
Total Personal Lines	4.0	96.0	4.6	95.4	13.2	86.8
Commercial Lines	8.9	91.1	11.1	88.9	13.0	87.0
Property ¹	(10.5)	110.5	(15.3)	115.3	(7.1)	107.1
Total underwriting operations	4.2	95.8	4.7	95.3	12.3	87.7

¹ Included in 2022, 2021, and 2020, are 1.3 points, 2.8 points, and 3.2 points, respectively, of amortization expense associated with intangible assets.

11. OTHER COMPREHENSIVE INCOME (LOSS)

The components of other comprehensive income (loss), including reclassification adjustments by income statement line item, for the years ended December 31, were as follows:

(millions)	Components of Changes in Accumulated Other Comprehensive Income (after tax)					
	Pretax total accumulated other comprehensive income (loss)	Total tax (provision) benefit	After tax total accumulated other comprehensive income (loss)	Total net unrealized gains (losses) on securities	Net unrealized gains (losses) on forecasted transactions	Foreign currency translation adjustment
Balance at December 31, 2021	\$ 52.3	\$ (11.6)	\$ 40.7	\$ 56.2	\$ (14.9)	\$ (0.6)
Other comprehensive income (loss) before reclassifications:						
Investment securities	(4,168.4)	878.7	(3,289.7)	(3,289.7)	0	0
Foreign currency translation adjustment	(0.7)	0.1	(0.6)	0	0	(0.6)
Total other comprehensive income (loss) before reclassifications	(4,169.1)	878.8	(3,290.3)	(3,289.7)	0	(0.6)
Less: Reclassification adjustment for amounts realized in net income by income statement line item:						
Net realized gains (losses) on securities	(559.4)	112.2	(447.2)	(447.2)	0	0
Interest expense	(0.5)	0.1	(0.4)	0	(0.4)	0
Total reclassification adjustment for amounts realized in net income	(559.9)	112.3	(447.6)	(447.2)	(0.4)	0
Total other comprehensive income (loss)	(3,609.2)	766.5	(2,842.7)	(2,842.5)	0.4	(0.6)
Balance at December 31, 2022	\$ (3,556.9)	\$ 754.9	\$ (2,802.0)	\$ (2,786.3)	\$ (14.5)	\$ (1.2)

(millions)	Components of Changes in Accumulated Other Comprehensive Income (after tax)					
	Pretax total accumulated other comprehensive income (loss)	Total tax (provision) benefit	After tax total accumulated other comprehensive income (loss)	Total net unrealized gains (losses) on securities	Net unrealized gains (losses) on forecasted transactions	Foreign currency translation adjustment
Balance at December 31, 2020	\$ 1,187.4	\$ (255.7)	\$ 931.7	\$ 947.3	\$ (15.6)	\$ 0
Other comprehensive income (loss) before reclassifications:						
Investment securities	(892.4)	193.0	(699.4)	(699.4)	0	0
Foreign currency translation adjustment	(0.8)	0.2	(0.6)	0	0	(0.6)
Total other comprehensive income (loss) before reclassifications	(893.2)	193.2	(700.0)	(699.4)	0	(0.6)
Less: Reclassification adjustment for amounts realized in net income by income statement line item:						
Net realized gains (losses) on securities	242.8	(51.1)	191.7	191.7	0	0
Interest expense	(0.9)	0.2	(0.7)	0	(0.7)	0
Total reclassification adjustment for amounts realized in net income	241.9	(50.9)	191.0	191.7	(0.7)	0
Total other comprehensive income (loss)	(1,135.1)	244.1	(891.0)	(891.1)	0.7	(0.6)
Balance at December 31, 2021	\$ 52.3	\$ (11.6)	\$ 40.7	\$ 56.2	\$ (14.9)	\$ (0.6)

(millions)	Components of Changes in Accumulated Other Comprehensive Income (after tax)						
	Pretax total accumulated other comprehensive income (loss)	Total tax (provision) benefit	After tax total accumulated other comprehensive income (loss)	Total net unrealized gains (losses) on securities	Net unrealized gains (losses) on forecasted transactions	Foreign currency translation adjustment	
Balance at December 31, 2019	\$ 439.1	\$ (94.7)	\$ 344.4	\$ 360.8	\$ (16.4)	\$ 0	
Other comprehensive income (loss) before reclassifications:							
Investment securities	1,557.2	(306.1)	1,251.1	1,251.1	0	0	
Total other comprehensive income (loss) before reclassifications	1,557.2	(306.1)	1,251.1	1,251.1	0	0	
Less: Reclassification adjustment for amounts realized in net income by income statement line item:							
Net realized gains (losses) on securities	810.0	(145.4)	664.6	664.6	0	0	
Interest expense	(1.1)	0.3	(0.8)	0	(0.8)	0	
Total reclassification adjustment for amounts realized in net income	808.9	(145.1)	663.8	664.6	(0.8)	0	
Total other comprehensive income (loss)	748.3	(161.0)	587.3	586.5	0.8	0	
Balance at December 31, 2020	\$ 1,187.4	\$ (255.7)	\$ 931.7	\$ 947.3	\$ (15.6)	\$ 0	

In an effort to manage interest rate risk, we entered into forecasted transactions on Progressive's debt issuances. During the next 12 months, we expect to reclassify \$0.5 million (pretax) into interest expense, related to net unrealized losses on forecasted transactions (see *Note 4 – Debt* for further discussion).

12. LITIGATION

The Progressive Corporation and/or its insurance subsidiaries are named as defendants in various lawsuits arising out of claims made under insurance policies written by our insurance subsidiaries in the ordinary course of business. We consider all legal actions relating to such claims in establishing our loss and loss adjustment expense reserves.

In addition, The Progressive Corporation and/or its insurance subsidiaries are named as defendants in a number of class action or individual lawsuits that challenge certain of the operations of the subsidiaries.

We describe litigation contingencies for which a loss is probable. In addition, we establish accruals for these lawsuits when we can reasonably estimate potential loss exposure, which may include a range of loss, and we will disclose such amount or range of loss if material. As to lawsuits for which the loss is considered probable but not estimable, we do not establish an accrual. Nevertheless, we continue to evaluate this pending litigation to determine if any losses not deemed probable and estimable become so, at which point we would establish an accrual at our best estimate of the loss or range of loss. We also describe litigation contingencies for which a loss is reasonably possible (but not probable). When disclosing reasonably possible litigation contingencies, we will disclose the amount or range of possible loss, if

we are able to make that determination and if material. We review all reasonably possible losses on an ongoing basis to determine whether the likelihood of incurring a loss has become probable, or whether the circumstances have changed such that we may now reasonably estimate a range of loss.

We may also be exposed to litigation contingencies that are remote. Remote litigation contingencies are those for which the likelihood of a loss is slight at the balance sheet date. We do not disclose, or establish accruals for, remote litigation contingencies, but we evaluate these contingencies on an ongoing basis to determine whether the likelihood of a loss has increased.

Each year, certain of our pending litigation matters may be brought to conclusion. For cases that have settled, but for which settlement is not complete, an accrual is established at our best estimate of the loss exposure. We regularly review these and other accruals to ensure they are adequate.

Settlements that are complete are fully reflected in our financial statements. The amounts accrued and/or paid for settlements during the periods presented were not material to our consolidated financial condition, cash flows, or results of operations.

The pending lawsuits summarized below are in various stages of development, and the outcomes are uncertain until final disposition or, if probable and estimable, are accrued and immaterial as of December 31, 2022. At period end, except to the extent an immaterial accrual has been established, we do not consider the losses from these pending cases to be both probable and estimable, and we are unable to estimate a range of loss at this time. It is not possible to determine loss exposure for a number of reasons, including, without limitation, one or more of the following:

- liability appears to be remote;
- putative class action lawsuits generally pose immaterial exposure until a class is actually certified, which, historically, has not been granted by courts in the vast majority of our cases in which class certification has been sought;
- even certified class action lawsuits are subject to decertification, denial of liability and/or appeal;

- class definitions are often indefinite and preclude detailed exposure analysis; and
- complaints rarely state an amount sought as relief, and when such amount is stated, it often is a function of pleading requirements and may be unrelated to the potential exposure.

We plan to contest these suits vigorously, but may pursue settlement negotiations in some cases, as we deem appropriate. In the event that any one or more of these cases results in a substantial judgment against us, or settlement by us, or if our accruals (if any) prove to be inadequate, the resulting liability could have a material adverse effect on our consolidated financial condition, cash flows, and/or results of operations. Based on information currently known, we do not believe that the outcome of any pending cases described below will have a material impact on our consolidated financial condition, cash flows, and/or results of operations.

At December 31, 2022, pending lawsuits as described above that challenge certain of the operations of our subsidiaries included:

Lawsuits seeking class/collective action status alleging that:

- we improperly handle, adjust, and pay physical damage claims, including how we value total loss claims, the application of a negotiation adjustment in calculating total loss valuations, the payment of fees and taxes associated with total losses, and the payment of diminution of value damages.
- we improperly adjust PIP claims in Florida.
- we improperly adjust medical bills submitted by insureds or medical providers in medical claims.
- we improperly pay and reimburse Medicare Advantage Plans on first party medical, PIP, and bodily injury claims.
- we sell illusory underinsured motorist coverage.
- we wrongfully withheld or delayed payments owed to insureds under uninsured/underinsured motorist coverage.
- we must pay an insured the pre-loss actual cash value of a totaled vehicle in addition to the value of the salvage vehicle if we take ownership of the salvage vehicle.
- we violated the Telephone Consumer Protection Act.
- we provided an insufficient amount of premium relief to California insureds in response to the COVID-19 pandemic.
- we improperly use marital status as a rating factor when setting premium in California.
- we fail to timely and fully refund premiums to insureds upon taking title to vehicles that have been deemed total losses.
- we improperly use, examine, and record biometric voice prints.
- we mistitle vehicles by failing to include a salvage designation.
- certain of our compensation practices and overtime payment practices are improper, including our classification of certain employees as exempt from overtime pay requirements.

Lawsuits certified or conditionally certified as class/collective actions alleging that:

- we improperly value total loss claims in Florida and Washington.
- we improperly fail to pay fees and taxes associated with total losses in Florida, Michigan, and New York.
- we improperly adjust medical bills in Washington.
- we improperly calculate basic economic loss as it relates to wage loss coverage.
- we improperly fail to timely process and pay PIP claims in Texas.
- that certain of our compensation practices and overtime payment practices are improper, including our classification of certain employees as exempt from overtime pay requirements.

Non-class/collective/representative lawsuits alleging that:

- we breached a contract by improperly handling a portfolio of high-deductible workers' compensation claims.
- we improperly paid, reimbursed, and reported on claims in which the insured or claimant is a Medicare or Medicaid beneficiary.
- we improperly estimate and pay for physical damage repairs.
- we undervalued and underinsured residential property.
- we failed to provide written notice of cancellation prior to cancelling a homeowner's insurance policy.
- that various employment policies, practices, and/or decisions are improper.

13. LEASES

Included in our consolidated balance sheets are certain operating leases for office space, computer equipment, and vehicles that are reported as a component of other assets and accounts payable, accrued expenses, and other liabilities.

The leased assets represent our right to use an underlying asset for the lease term and the lease liabilities represent our obligation to make lease payments arising from the lease. An incremental borrowing rate is used to calculate the present value of the remaining lease payments.

Contracts are reviewed at inception to determine if it contains a lease and whether the lease qualifies as an operating or financing lease. We do not have material financing leases.

Operating leases are expensed on a straight-line basis over the term of the lease. In determining the lease term, we consider the probability of exercising renewal options. We elected to account for leases with both lease and non-lease components as a single lease component and to apply a portfolio approach to account for our vehicle leases.

The following table summarizes the carrying amounts of our operating leased assets and liabilities at December 31, along with key inputs used to discount our lease liabilities:

(millions)	2022	2021
Operating lease assets	\$ 130.5	\$ 172.6
Operating lease liabilities	\$ 137.2	\$ 180.9
Weighted-average remaining term	2.5 years	2.9 years
Weighted-average discount rate	2.0%	1.6%

At December 31, 2022, the following table shows our operating lease liabilities, on an undiscounted basis for the periods indicated:

(millions)	Commitments
2023	\$ 69.0
2024	46.7
2025	17.0
2026	5.0
2027	1.4
Thereafter	1.8
Total	140.9
Interest	(3.7)
Present value of lease liabilities	\$ 137.2

The operating lease expense for the years ended December 31, was as follows:

(millions)	Expense
2022	\$ 89.1
2021	90.4
2020	95.4

14. DIVIDENDS

Following is a summary of our common and preferred share dividends that were declared and/or paid in the last three years:

(millions, except per share amounts)		Amount	
Declared	Payable	Per Share	Accrued/Paid ¹
<u>Common - Annual-Variable Dividends:</u>			
December 2021	December 2021	1.50	876.5
December 2020	January 2021	4.50	2,635.9
December 2019	January 2020	2.25	1,316.9
 <u>Common - Quarterly Dividends:</u>			
December 2022	January 2023	0.10	58.5
August 2022	October 2022	0.10	58.5
May 2022	July 2022	0.10	58.5
March 2022	April 2022	0.10	58.5
December 2021	January 2022	0.10	58.5
August 2021	October 2021	0.10	58.5
May 2021	July 2021	0.10	58.5
March 2021	April 2021	0.10	58.5
December 2020	January 2021	0.10	58.6
August 2020	October 2020	0.10	58.6
May 2020	July 2020	0.10	58.5
February 2020	April 2020	0.10	58.5
December 2019	January 2020	0.10	58.5
 <u>Preferred Dividends:</u>			
December 2022	March 2023	26.875	13.4
August 2022	September 2022	26.875	13.4
December 2021	March 2022	26.875	13.4
August 2021	September 2021	26.875	13.4
December 2020	March 2021	26.875	13.4
August 2020	September 2020	26.875	13.4
February 2020	March 2020	26.875	13.4

¹The accrual is based on an estimate of shares outstanding as of the record date and recorded as a component of accounts payable, accrued expenses, and other liabilities on the consolidated balance sheets until paid; the prior year common share dividend accrual was reclassified into this line item from dividends payable on common shares to conform to the current year presentation.

Common Share Dividends The Board of Directors adopted a policy of declaring regular quarterly common share dividends, and on at least an annual basis, to consider declaring an additional common share

dividend. The Board decided not to declare an annual-variable dividend for 2022 after assessing our capital position, existing capital resources, and expected future capital needs.

Preferred Share Dividends During 2018, we issued 500,000 Series B Fixed-to-Floating Rate Cumulative Perpetual Serial Preferred Shares, without par value (the Series B Preferred Shares), with a liquidation preference of \$1,000 per share (the stated amount). Holders of the Series B Preferred Shares are entitled to receive cumulative cash dividends semiannually in March and September, if and when declared by the Board of Directors. Until March 15, 2023 (the fixed-rate period), the annual dividend rate is fixed at 5.375% of the stated amount per share.

Beginning March 15, 2023, the annual dividend rate switches to a floating rate equal to the three-month

London Interbank Offered Rate (LIBOR), or a comparable successor base rate, plus a spread of 2.539% applied to the stated amount per share. After the fixed-rate period and up until redemption of the Series B Preferred Shares, the dividends would be payable quarterly, if and when declared by the Board of Directors.

The Series B Preferred Shares are perpetual and have no stated maturity date. After the fixed-rate period, we may redeem the Series B Preferred Shares at the stated amount plus all accrued and unpaid dividends after providing required notice.

15. GOODWILL AND INTANGIBLE ASSETS

Goodwill The majority of the goodwill recorded as of December 31, 2022 and 2021, related to the April 1, 2015, acquisition of a controlling interest in ARX. During 2022, we performed an impairment test of our goodwill allocated to the ARX reporting unit and recorded an impairment loss of \$224.8 million, which is disclosed as a separate line item in our consolidated statements of comprehensive income. The impairment loss was fully allocated to our Property operating segment. There were no previously recorded goodwill impairment losses on any of the outstanding goodwill.

The indicators of impairment primarily related to the magnitude of weather events relative to forecasted expectations during the first half of 2022, as well as other factors impacting our plans to restore our Property business to target profitability in a timely fashion and the subsequent reduced forecasted profitability of ARX.

The quantitative goodwill impairment assessment consisted of comparing the fair value of the reporting unit to its carrying value. To determine the fair value of a reporting unit, we use a discounted cash flow model. The model uses assumptions including, but not limited to, discount rate, forecasted growth, profitability, investment return, and capital requirements. The assumptions and estimates were consistent with those we believe other non-related marketplace participants would use and were based on management's best estimates at the time of the analysis. The calculated fair value of the ARX reporting unit was below its carrying value at June 30, 2022, which resulted in recording the goodwill impairment. There was no indication of impairment on the remaining \$227.9 million of goodwill, of which 98% was attributable to our Personal Lines Agency business and related to the ARX acquisition.

Intangible Assets The following table is a summary of the net carrying amount of other intangible assets as of December 31:

(millions)	2022	2021
Intangible assets subject to amortization	\$ 73.9	\$ 104.9
Indefinite-lived intangible assets ¹	12.4	12.4
Total	\$ 86.3	\$ 117.3

¹Indefinite-lived intangible assets are comprised of state insurance and agent licenses. State insurance licenses were previously subject to amortization under superseded accounting guidance and have \$0.6 million of accumulated amortization for both years presented.

Intangible assets subject to amortization for the years ended December 31, consisted of the following:

(millions)	2022			2021		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Policies in force	\$ 0	\$ 0	\$ 0	\$ 256.2	\$ 247.1	\$ 9.1
Agency relationships	159.2	88.1	71.1	159.2	76.8	82.4
Software rights	69.1	67.0	2.1	69.1	58.3	10.8
Trade name	3.6	2.9	0.7	3.6	1.0	2.6
Total	\$ 231.9	\$ 158.0	\$ 73.9	\$ 488.1	\$ 383.2	\$ 104.9

Amortization expense was \$31.0 million, \$57.7 million, and \$56.9 million for the years ended December 31, 2022, 2021, and 2020, respectively. During the first quarter 2022, the policies in force intangible asset, with a gross carrying amount of \$256.2 million, was fully amortized.

The estimated aggregate amortization on these intangible assets for each of the next five years as of December 31, 2022, follows:

(millions)	Amortization Expense
2023	\$ 14.2
2024	11.4
2025	11.4
2026	11.4
2027	11.4

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of The Progressive Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of The Progressive Corporation and its subsidiaries (the "Company") as of December 31, 2022 and 2021, and the related consolidated statements of comprehensive income, of changes in shareholders' equity and of cash flows for each of the three years in the period ended December 31, 2022, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, 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 opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) 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 matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Valuation of Loss and Loss Adjustment Expense Reserves

As described in Notes 1 and 6 to the consolidated financial statements, as of December 31, 2022, the Company reported a \$30.4 billion loss and loss adjustment expense ("LAE") reserve liability, of which about 90% relates to Personal and Commercial Lines vehicle businesses. Reserves are based on estimates of ultimate liability for losses and LAE relating to events that occurred prior to the end of any given accounting period but have not yet been paid. Management establishes loss and LAE reserves after completing reviews at a disaggregated level of grouping. During a reserve review, ultimate loss amounts are estimated using several industry standard actuarial projection methods. These methods take into account historical comparable loss data at the subset level and estimate the impact of various loss development factors, such as the frequency (number of losses per exposure), severity (dollars of loss per each claim), and average premium (dollars of premium per earned car year), as well as the frequency and severity of LAE costs.

The principal considerations for our determination that performing procedures relating to the valuation of loss and LAE reserves is a critical audit matter are (i) the significant judgment by management when developing the estimate of loss and LAE reserves, which in turn led to a significant degree of auditor judgment and subjectivity in performing procedures relating to the valuation; (ii) the significant audit effort and judgment in evaluating audit evidence relating to the various actuarial projection methods and aforementioned loss development factors; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's valuation of loss and LAE reserves, including controls over the various actuarial projection methods, and development of the loss development factors. These procedures also included, among others, testing the completeness and accuracy of historical data provided by management and the involvement of professionals with specialized skill and knowledge to assist in (i) independently estimating reserves for certain lines of business using actual historical comparable loss data, independently derived loss development factors, and industry data and comparing this independent estimate to management's actuarial determined reserves and (ii) evaluating the appropriateness of the actuarial projection methods and reasonableness of the aforementioned loss development factors used by management for determining the reserve balances for certain lines of business.



Cleveland, Ohio
February 27, 2023

We have served as the Company's auditor since 1984.

Management's Report on Internal Control over Financial Reporting

Progressive's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Securities Exchange Act of 1934. Our internal control structure was designed under the supervision of our Chief Executive Officer and Chief Financial Officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

Our internal control over financial reporting includes policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of assets; provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and our directors; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on our financial statements.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on our evaluation under the framework in *Internal Control – Integrated Framework (2013)*, management concluded that our internal control over financial reporting was effective as of December 31, 2022.

PricewaterhouseCoopers LLP, an independent registered public accounting firm that audited the financial statements included in this Annual Report, has audited, and issued an attestation report on the effectiveness of, our internal control over financial reporting as of December 31, 2022; such report appears herein.

CEO and CFO Certifications

Susan Patricia Griffith, President and Chief Executive Officer of The Progressive Corporation, and John P. Sauerland, Vice President and Chief Financial Officer of The Progressive Corporation, have issued the certifications required by Sections 302 and 906 of The Sarbanes-Oxley Act of 2002 and applicable SEC regulations with respect to Progressive's 2022 Annual Report on Form 10-K, including the financial statements provided in this Report. Among other matters required to be included in those certifications, Mrs. Griffith and Mr. Sauerland have each certified that, to the best of their knowledge, the financial statements, and other financial information included in the Annual Report on Form 10-K, fairly present in all material respects the financial condition, results of operations, and cash flows of Progressive as of, and for, the periods presented. See Exhibits 31 and 32 to Progressive's Annual Report on Form 10-K for the complete Sections 302 and 906 certifications, respectively.

The Progressive Corporation and Subsidiaries

Management's Discussion and Analysis of Financial Condition and Results of Operations

Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is intended to help the reader understand our financial condition and results of operations. MD&A should be read in conjunction with the consolidated financial statements and the related notes, and supplemental information.

I. OVERVIEW

The Progressive insurance organization has been offering insurance to consumers since 1937. The Progressive Corporation is a holding company that does not have any revenue producing operations, physical property, or employees of its own. The Progressive Corporation, together with its insurance and non-insurance subsidiaries and affiliates, comprise what we refer to as Progressive.

We report three operating segments. Our Personal Lines segment writes insurance for personal autos and recreational vehicles (referred to as our special lines products). Our Commercial Lines segment writes auto-related liability and physical damage insurance, workers' compensation insurance primarily for the transportation industry, and business-related general liability and property insurance, predominately for small businesses. Our Property segment writes residential property insurance for homeowners, other property owners, and renters. We operate throughout the United States through both the independent agency and direct distribution channels. We are the third largest private passenger auto insurer in the country, the number one writer of commercial auto insurance, and one of the top 15 homeowners insurance carriers, in each case based on 2021 premiums written.

Our underwriting operations, combined with our service and investment operations, make up the consolidated group.

A. Operating Results

On a year-over-year basis, net income and comprehensive income decreased 78% and 186%, respectively, primarily due to significant valuation declines in both our equity and fixed-maturity security portfolios during 2022. Net holding period losses, primarily from our equity security portfolio, were \$2.1 billion in 2022, compared to net holding period gains of \$0.9 billion in 2021. The market value of our fixed-maturity securities decreased \$2.8 billion during 2022 due to the rise in interest rates throughout the year, compared to valuation declines of \$0.9 billion during 2021.

Another factor contributing to the decrease in net income was the write off of \$224.8 million of goodwill related to the 2015 acquisition of ARX Holding Corp. and its subsidiaries (ARX) during the year. Based on our analysis, we concluded that the fair value of our Property segment was less than the carrying value at the time of the review, primarily based on changes in forecasted expectations relative to the magnitude of weather events during the first half of 2022, as well as other factors impacting our plans to restore our Property business to target profitability in a timely fashion. There was no other indication of impairment on the remaining goodwill.

While the rise in interest rates decreased valuations, it also contributed to the 46% increase in our recurring investment income during the year. For 2022, our pretax recurring book yield was 2.4%, compared to 1.9% for 2021, reflecting an increase in interest rates on our floating-rate securities and the investment of cash and maturities at relatively higher interest rates.

Our underwriting income was \$2.1 billion for both 2022 and 2021. During 2022, we had an underwriting profit margin of 4.2%, which was above our companywide target profit margin of 4%, compared to 4.7% in 2021. Throughout the year, we continued to see volatility in our severity trends as inflation continued to increase the average costs to settle a claim over last year, while frequency trends continued to be favorable. In 2022, we experienced the largest hurricane in our history when Hurricane Ian made landfall multiple times on the Gulf and Atlantic coasts. In total, catastrophe losses were 0.4 points greater in 2022 than 2021.

Although net income was lower in 2022, we did generate top-line growth. Net premiums written and earned increased 10% and 11%, respectively, over 2021. During the year, we surpassed \$50 billion in net premiums written to end 2022 at \$51.1 billion. Companywide policies in force increased 0.9 million, or 3%, over last year to reach 27.4 million at December 31, 2022. As expected, the rate and non-rate

actions described below, which began in 2021 and continued into 2022, slowed volume growth on a year-over-year basis, primarily in the first half of 2022.

We ended 2022 with total capital (debt plus shareholders' equity) of \$22.3 billion, which was down \$0.9 billion from year-end 2021. The year-over-year decrease primarily reflects our comprehensive loss for 2022, in part offset by our \$1.5 billion debt issuance during the year.

B. Insurance Operations

Our Personal Lines and Commercial Lines operating segments were profitable with underwriting margins of 4.0% and 8.9%, respectively, while our Property segment had an underwriting loss margin of 10.5% for the year, which included 25.6 points of catastrophe losses.

While growth is an important objective, we strongly believe that achieving our target profit margin takes precedence over growing premiums when we are challenged to achieve both. With focus on achieving our underwriting profitability target of 4%, we increased personal auto rates in 49 states during 2022, with an aggregate increase of about 13%. We took countrywide net increases of 9% during the first half of 2022, which followed the personal auto rate increases we took during 2021 of about 8%. The rate increases taken during the second half of 2022 were much smaller and at a pace closer to the inflationary pressure we were then experiencing. We will continue to monitor the factors that could impact our loss costs for our personal auto business, which can include new and used car prices, miles driven, driving patterns, loss severity, weather events, inflation, and other components, on a state-by-state basis, and will file for rate adjustments where we deem it necessary.

We believe a key element in improving the accuracy of our personal auto rating is Snapshot[®], our usage-based insurance offering. During 2022, the adoption rates for consumers enrolling in the program increased about 25% in Agency auto and nearly 15% in Direct auto, compared to 2021. Snapshot is available in all states, other than California, and our latest segmentation model is available in states that represented about 25% of our countrywide personal auto premium at year-end 2022. We continue to invest in our mobile application, with mobile devices being chosen for Snapshot monitoring for the majority of new enrollments.

In addition to rate actions to achieve our target profit margin in Personal Lines, we maintained discipline in our media budget and reduced targeted media spend in

certain types of advertising, based on performance against our media and underwriting targets. Our total advertising spend was 5% lower in 2022, compared to the prior year. Consistent with rate actions, management will continue to assess where additional non-rate actions, including adjusting underwriting criteria, bill plans, or advertising spend, may be needed.

During 2022, our overall incurred frequency in our personal auto business decreased about 6%, while severity increased about 13%, compared to the prior year. We continued to see inflationary pressure in the average costs to settle a claim, driven primarily by the increase in the valuation of new and used vehicles on a year-over-year basis.

During the year, on a companywide basis, we recognized 3.4 loss ratio points related to catastrophe losses, compared to 3.0 points in 2021. Hurricane Ian contributed 1.6 points in total, with 1.5 points attributable to our Personal Lines business and 8.8 points to our Property business. The remaining catastrophe losses were attributable to other hurricanes, wind, hail, tornadoes, and winter storms throughout the United States.

Improving profitability continues to be our top priority for our Property business. Due to our concentration of policies in catastrophe-exposed states, severe weather events generally have greater impact on our results compared to other national carriers. In response, we began implementing underwriting changes during the second half of 2021, which continued during 2022, to focus on improving profitability in the Property business. In addition, we increased rates an average of about 19% in our Property segment during 2022, with some of the larger increases in Florida and in hail-prone states, such as Colorado and Oklahoma. About half of this increase occurred in late 2022.

Our companywide net premiums written grew 10% with growth in each of our segments on a year-over-year basis. Personal Lines grew 9%, Commercial Lines 17%, and Property 8%. The Personal Lines increase reflected growth in both our Agency and Direct businesses. The increase in net premiums written in our Commercial Lines business reflected growth in all of our business market targets, but especially in our contractor and auto business market targets. The Commercial Lines growth was also aided, to a lesser extent, by an increase in our transportation network company (TNC) business, due to an increase in the miles driven (which is the basis for determining premiums written for this business), as well

as increased rates to address profitability issues in the TNC business. The Property business growth was primarily due to renewal business since, during 2022, we restricted new business growth, especially in Florida.

Changes in net premiums written are a function of new business applications (i.e., policies sold), premium per policy, and retention. Policies in force grew 3% companywide, with Personal Lines, Commercial Lines, and Property growing 3%, 8%, and 3%, respectively.

On a year-over-year basis, for 2022, Personal Lines new applications grew 1%. Through the first six months of 2022, Personal Lines new applications decreased 18%, reflecting the significant rate increases taken during 2021 and the first half of 2022. As our competitors raised rates during 2022, our new applications started to grow significantly in the latter part of the year, resulting in the overall growth in new applications for 2022.

New personal auto applications grew 2% on a year-over-year basis, with our Agency auto decreasing 3% and Direct auto increasing 6%. While total new application growth was up for the year, Agency auto new applications were down compared to the prior year, as a result of the actions taken to address profitability, as discussed above.

For our Commercial Lines business, [excluding our TNC, business owners' policy (BOP), and Protective Insurance Corporation and subsidiaries (Protective Insurance) products], which we refer to as our core commercial auto product, new applications decreased 1% for 2022, compared to the prior year, mainly driven by decreased demand, primarily in the second half of 2022, in our for-hire transportation product, due to the general weakening of the economy, and the significant new application growth experienced during 2021.

Our Property business new applications decreased 8% for the year, primarily due to rate and other actions taken to address the profitability concerns as discussed above.

During 2022, our written premiums per policy increased in all of our operating segments primarily due to the rate increases taken during the year as discussed above. On a year-over-year basis, written premium per policy increased 11% in Agency personal auto, 8% in Direct personal auto, and 5% for our special lines products, compared to the prior year. In our core commercial auto products, we experienced an 11% increase in written premium per policy, reflecting rate increases of about

6%, in the aggregate, in 2022. The 6% increase in our Property business written premium per policy is substantially less than the 19% rate increases discussed above as a result of taking a portion of the increases later in the year, a shift in the mix of business to a larger share of renters policies, which have lower written premium per policy, and slower homeowners growth in volatile states that have higher average premiums.

We realize that to grow policies in force, it is critical that we retain our customers for longer periods. Consequently, increasing retention continues to be one of our most important priorities. A key initiative to lengthening our retention is to increase our share of multi-product households. We will continue to make investments to improve the customer experience in order to support that goal.

Policy life expectancy, which is our actuarial estimate of the average length of time that a policy will remain in force before cancellation or lapse in coverage, is our primary measure of customer retention in our Personal Lines, Commercial Lines, and Property businesses.

We evaluate personal auto retention using a trailing 12-month policy life expectancy and a trailing 3-month policy life expectancy. The latter can reflect more volatility and is more sensitive to seasonality. On a trailing 3-month basis, our personal auto policy life expectancy was down 9% year over year, which is an improvement from the 32% decrease in policy life expectancy we reported at June 30, 2022. Our trailing 12-month total personal auto policy life expectancy was down 22% year over year, with Agency down 24% and Direct down 19%. Our trailing 12-month policy life expectancy increased 3% for special lines, and decreased 12% for Commercial Lines and 7% for Property.

C. Investments

The fair value of our investment portfolio was \$53.5 billion at December 31, 2022, compared to \$51.5 billion at December 31, 2021. The increase in value from year-end 2021, primarily reflected the proceeds of the \$1.5 billion debt issuance in March 2022 and positive cash flows from our underwriting operations, offset by declines in the valuations of our portfolio, as discussed below.

Our asset allocation strategy is to maintain 0%-25% of our portfolio in Group I securities, with the balance (75%-100%) of our portfolio in Group II securities (the securities allocated to Group I and II are defined below under *Results of Operations – Investments*). At December 31, 2022, 10% of our portfolio was allocated

to Group I securities and 90% to Group II securities, compared to 17% and 83%, respectively, at December 31, 2021. The decrease in the percentage of Group I securities since year end 2021 was primarily driven by sales in our common equity portfolio and, to a lesser extent, high-yield bonds and preferred stocks with proceeds reinvested in Group II short-term investments.

Our recurring investment income generated a pretax book yield of 2.4% for 2022, compared to 1.9% for 2021, due to the increase in interest rates on our floating-rate securities and the investment of cash and maturities at relatively higher interest rates. Our investment portfolio produced a fully taxable equivalent (FTE) total return of (7.8)% for 2022 and of 2.6% for 2021. Our fixed-income and common stock portfolios had FTE total returns of (6.6)% and (19.4)%, respectively, for 2022, compared to (0.1)% and 33.4%, for 2021. The year-over-year decrease in the fixed-income return reflected lower valuations primarily due to the market impact of higher interest rates and wider credit spreads during the last twelve months. The common stock return decline

II. FINANCIAL CONDITION

A. Liquidity and Capital Resources

The Progressive Corporation receives cash through subsidiary dividends, capital raising and other transactions, and uses these funds to contribute to its subsidiaries (e.g., to support growth), to make payments to shareholders and debt holders (e.g., dividends and interest, respectively), to repurchase its common shares, and to redeem or pay off debt, as well as for acquisitions and other business purposes that may arise.

During 2022, The Progressive Corporation received cash from the following sources:

- Debt issuance - issued \$500 million of 2.50% Senior Notes due 2027, \$500 million of 3.00% Senior Notes due 2032, and \$500 million of 3.70% Senior Notes due 2052, in an underwritten public offering.
- Dividends from subsidiaries - received \$538.6 million from its insurance and non-insurance subsidiaries.

The Progressive Corporation deployed capital through the following actions in 2022:

- Dividends
 - Common shares - declared aggregate dividends of \$0.40 per common share, or \$233.7 million.

reflected general market conditions during 2022.

At December 31, 2022, the fixed-income portfolio had a weighted average credit quality of AA and a duration of 2.9 years, compared to AA- and 3.0 years at December 31, 2021. We have shortened our portfolio duration during the year, which we believe provides some protection against further increases in interest rates.

The end of the London Interbank Offered Rate (LIBOR) as an official reference rate will be June 30, 2023. The Federal Reserve Board identified the Secured Overnight Financing Rate (SOFR) as the recommended replacement to U.S. LIBOR. As of December 31, 2022, we owned 175 unique securities with an aggregate par value of \$3.6 billion that are still based on LIBOR, with our other asset-backed securities, mainly collateralized loan obligations, making up the majority of these securities. Due to the provisions in the terms of the securities, which allows a change in the underlying rate if a rate is discontinued, we are expecting a relatively smooth transition to an alternate reference rate.

- Preferred shares - declared aggregate Series B Preferred dividends of \$26.8 million.
- Common Share Repurchases - acquired 0.9 million of our common shares at a total cost of \$99.0 million either in the open market or to satisfy tax withholding obligations in connection with the vesting of equity awards under our employee equity compensation plan. Pursuant to our financial policies, we repurchase common shares to neutralize dilution from equity-based compensation granted during the year and opportunistically when we believe our shares are trading below our determination of long-term fair value.
- Capital Contributions - contributed a net \$797.8 million to its insurance and non-insurance subsidiaries.

The Board decided not to declare an annual-variable dividend for 2022 after assessing our capital position, existing capital resources, and expected future capital needs, including the then current market conditions that could present opportunities for further growth in 2023.

Over the last three years, The Progressive Corporation received dividends from its subsidiaries, net of capital contributions, of \$6.2 billion, and issued \$2.5 billion, in the aggregate, of senior notes.

The covenants on The Progressive Corporation's existing debt securities do not include any rating or credit triggers that would require an adjustment of the interest rate or an acceleration of principal payments in the event that our debt securities are downgraded by a rating agency. While we had an unsecured discretionary line of credit available to us during each of the last three years in the amount of \$250 million, we did not borrow under this arrangement, or engage in other short-term borrowings, to fund our operations or for liquidity purposes.

In the aggregate for the last three years, we made the following payments:

- \$5.5 billion for common share dividends and \$0.1 billion for preferred share dividends;
- \$0.7 billion for interest on our outstanding debt;
- \$0.6 billion related to acquisitions;
- \$0.5 billion for the maturity of debt; and
- \$0.4 billion to repurchase our common shares.

For the three years ended December 31, 2022, operations generated positive cash flows of about \$21.5 billion. In 2022, operating cash flows decreased \$0.9 billion, compared to 2021. While we continued to collect premiums at a faster rate than losses were paid, the decrease in operating cash flow for the year was primarily driven by higher paid losses, compared to last year. We believe cash flows will remain positive in the reasonably foreseeable future and do not expect we will have a need to raise capital to support our operations in that timeframe, although changes in market or regulatory conditions affecting the insurance industry, or other unforeseen events, may necessitate otherwise.

As of December 31, 2022, we held \$28.0 billion in short-term investments and U.S. Treasury securities, which represented 52% of our total portfolio at year end. Based on our portfolio allocation and investment strategies, we believe that we have sufficient readily available marketable securities to cover our claims payments and short-term obligations in the event our cash flow from operations were to be negative. While U.S. Treasury securities are viewed as having lower risk than many other investment opportunities, the U.S. Treasury recently announced it had reached its authorized borrowing limit and defaults under government obligations, including payments related to U.S. Treasury securities, could occur as soon as this summer. Although perhaps unlikely, it is possible that the federal government could fail to raise the federal debt ceiling to avoid default. Any such default would likely have a materially adverse impact on our cash flows and the value of our portfolio and our capital

position. See *Item 1A, Risk Factors* in our 2022 Form 10-K filed with the U.S. Securities and Exchange Commission for a discussion of certain matters that may affect our portfolios and capital position.

Progressive's insurance operations create liquidity by collecting and investing premiums from new and renewal business in advance of paying claims. As primarily an auto insurer, our claims liabilities are generally short in duration. At December 31, 2022, our loss and loss adjustment expense (LAE) reserves were \$30.4 billion. Typically, at any point in time, approximately 50% of our outstanding loss and LAE reserves are paid within the following twelve months and only about 20% are still outstanding after three years. See *Note 6 – Loss and Loss Adjustment Expense Reserves* for further information on the timing of claims payments.

Insurance companies are required to satisfy regulatory surplus and premiums-to-surplus ratio requirements. As of December 31, 2022, our consolidated statutory surplus was \$17.9 billion, compared to \$16.4 billion at December 31, 2021. Our net premiums written-to-surplus ratio was 2.9 to 1 at year-end 2022, 2.8 to 1 at year-end 2021, and 2.7 to 1 at year-end 2020. At year-end 2022, we also had access to \$4.4 billion of securities held in a non-insurance subsidiary, portions of which could be contributed to the capital of our insurance subsidiaries to support growth or for other purposes.

Insurance companies are also required to satisfy risk-based capital ratios. These ratios are determined by a series of dynamic surplus-related calculations required by the laws of various states that contain a variety of factors that are applied to financial balances based on the degree of certain risks (e.g., asset, credit, and underwriting). Our insurance subsidiaries' risk-based capital ratios were in excess of applicable minimum regulatory requirements at year-end 2022. Nonetheless, the payment of dividends by our insurance subsidiaries are subject to certain limitations. See *Note 8 – Statutory Financial Information* for additional information on insurance subsidiary dividends.

We seek to deploy our capital in a prudent manner and use multiple data sources and modeling tools to estimate the frequency, severity, and correlation of identified exposures, including, but not limited to, catastrophic and other insured losses, natural disasters, and other significant business interruptions, to estimate our potential capital needs. Management

views our capital position as consisting of three layers, each with a specific size and purpose:

- The first layer of capital is the amount of capital we need to satisfy state insurance regulatory requirements and support our objective of writing all the business we can write and service, consistent with our underwriting discipline of achieving a combined ratio of 96 or better. This first layer of capital, which we refer to as “regulatory capital,” is held by our various insurance entities.
- While our regulatory capital layer is, by definition, a cushion for absorbing financial consequences of adverse events, such as loss reserve development, litigation, weather catastrophes, and investment market changes, we view that as a base and hold a second layer of capital for even more extreme conditions. The modeling used to quantify capital needs for these conditions is extensive, including tens of thousands of simulations, representing our best estimates of such contingencies based on historical experience. This capital is held either at a non-insurance subsidiary of the holding company or in our insurance entities, where it is potentially eligible for a dividend to the holding company.
- The third layer is capital in excess of the sum of the first two layers and provides maximum flexibility to fund other business opportunities, repurchase stock or other securities, and pay dividends to shareholders, among other purposes. This capital is largely held at a non-insurance subsidiary of the holding company.

We monitor our total capital position regularly throughout the year to ensure we have adequate capital to support our insurance operations. At December 31, 2022, we held total capital (debt plus shareholders' equity) of \$22.3 billion, compared to \$23.1 billion at December 31, 2021. Our debt-to-total capital ratios at December 31, 2022, 2021, and 2020, were 28.7%, 21.2%, and 24.1%, respectively, and were consistent with our financial policy of maintaining a ratio of less than 30%. While our financial policies include a goal of maintaining debt below 30% of total capital at book value, we recognize that various factors, including rising interest rates, widening credit spreads, declines in the equity markets, or erosion in operating results, may result in that ratio exceeding 30% at times, as it did at the end of a couple of months during 2022. In such a situation, as we did during 2022, we may choose to remain above 30% for some time, dependent upon market conditions and the capital needs of our operating businesses. We will continue to monitor this ratio, market conditions, and our capital needs going forward.

At December 31, 2022, we had various noncancelable contractual obligations that were outstanding. We held \$6.5 billion of Senior Notes with maturity dates ranging from 2027 through 2052, with \$4.2 billion of future interest payment obligations related to our outstanding debt. The next debt repayment of \$1.0 billion, in the aggregate, is due upon the maturity of our 2.45% Senior Notes due 2027 and our 2.50% Senior Notes due 2027. See *Note 4 – Debt* for additional information on our long-term debt.

At year-end 2022, we also had \$1.0 billion of purchase obligations that are noncancelable commitments for goods and services (e.g., software licenses, maintenance on information technology equipment, and media placements). About 90% of our purchase obligations are payable within one year and less than 1% will be outstanding for longer than three years. In addition, our Property business has \$205.4 million of minimum commitments under several multiple-layer property catastrophe reinsurance contracts with various reinsurers with terms ranging from one to three years. During 2022, we funded \$3.1 million to limited partnership investments, which are included in our common equity investments in our consolidated balance sheets, and have funding commitments related to these investments of \$15.7 million at December 31, 2022. See *Note 1 – Reporting and Accounting Policies, Commitments and Contingencies* for a discussion of these obligations. We do not have, and do not expect to enter into, any material commitments for capital expenditures in the reasonably foreseeable future.

At least annually, we perform recoverability tests to determine if any of our assets are impaired. We test our goodwill balance for impairment at the reporting unit level annually as of October 1, or more frequently if indicators of impairment exist. As discussed above, in conjunction with the preparation of our second quarter 2022 financial results, we performed a quantitative analysis of the goodwill attributable to our Property segment based on indications that impairment might exist. Based on this analysis, we wrote down the entire \$224.8 million of goodwill attributable to our Property segment during the second quarter 2022. See *Note 15 – Goodwill and Intangible Assets* for further discussion.

Based upon our capital planning and forecasting efforts, we believe we have sufficient capital resources and cash flows from operations to support our current business, scheduled principal and interest payments on our debt, anticipated quarterly dividends on our common shares and dividends on our Series B

Preferred Shares, our contractual obligations, and other expected capital requirements for the foreseeable future.

Nevertheless, we may decide to raise additional capital to take advantage of attractive terms in the market and provide additional financial flexibility. We have an effective shelf registration with the U.S. Securities and

Exchange Commission so that we may periodically offer and sell an indeterminate aggregate amount of senior or subordinated debt securities, preferred stock, depositary shares, common stock, purchase contracts, warrants, and units. The shelf registration enables us to raise funds from the offering of any securities covered by the shelf registration as well as any combination thereof, subject to market conditions.

III. RESULTS OF OPERATIONS – UNDERWRITING

A. Segment Overview

We report our underwriting operations in three operating segments: Personal Lines, Commercial Lines, and Property. As a component of our Personal Lines segment, we report our Agency and Direct business results to provide further understanding of our products by distribution channel.

The following table shows the composition of our companywide net premiums written, by segment, for the years ended December 31:

	2022	2021	2020
Personal Lines			
Agency	36 %	37 %	40 %
Direct	41	41	42
Total Personal Lines	77	78	82
Commercial Lines	18	17	13
Property	5	5	5
Total underwriting operations	100 %	100 %	100 %

Our Personal Lines business writes insurance for personal autos (which accounts for about 94% of the segment’s net premiums written) and special lines products (e.g., motorcycles, RVs, watercraft, and snowmobiles). Within Personal Lines, we often refer to our four consumer segments, which we refer to as:

- Sam - inconsistently insured;
- Diane - consistently insured and maybe a renter;
- Wrights - homeowners who do not bundle auto and home; and
- Robinsons - homeowners who bundle auto and home.

While our personal auto policies are primarily written for 6-month terms, we write 12-month auto policies in our Platinum agencies to promote bundled auto and home

growth. At year-end 2022 and 2021, 14% of our Agency auto policies in force were 12-month policies. To the extent our Agency application mix of annual policies grows, the shift in policy term could increase our written premium mix by channel as 12-month policies have about twice the amount of net premiums written compared to 6-month policies. Our special lines products are written for 12-month terms.

Our Commercial Lines business writes auto-related liability and physical damage insurance, business-related general liability and property insurance predominately for small businesses, and workers’ compensation insurance primarily for the transportation industry. The majority of our Commercial Lines business is written through the independent agency channel although we continue to focus on growing our direct business. To serve our direct channel customers, we continue to expand our product offerings, including adding states where we offer BOP and including it on our digital platform serving direct small business consumers (BusinessQuote Explorer®). The direct commercial auto business, excluding our TNC business, represented about 10% of premiums written for 2022 and 2021, compared to 9% for 2020. About 90% of our Commercial Lines auto policies are written for 12-month terms.

Our Property business writes residential property insurance for homeowners, other property owners, and renters. We write the majority of our Property business through the independent agency channel; however, we continue to expand the distribution of our Property product offerings in the direct channel, which represented about 25% of premiums written for 2022, compared to 23% and 18% for 2021 and 2020, respectively. Property policies are written for 12-month terms.

B. Profitability

Profitability for our underwriting operations is defined by pretax underwriting profit or loss, which is calculated as net premiums earned plus fees and other revenues less losses and loss adjustment expenses, policy acquisition costs, other underwriting expenses, and for 2020, policyholder credits. We also use underwriting margin, which is underwriting profit or loss expressed as a percentage of net premiums earned, to analyze our results. For the three years ended December 31, our underwriting profitability was as follows:

(\$ in millions)	2022		2021		2020	
	Underwriting Profit (Loss)		Underwriting Profit (Loss)		Underwriting Profit (Loss)	
	\$	Margin	\$	Margin	\$	Margin
Personal Lines						
Agency	\$ 734.1	4.1 %	\$ 992.1	5.9 %	\$ 2,236.5	14.2 %
Direct	769.4	3.8	619.2	3.4	2,076.5	12.3
Total Personal Lines	1,503.5	4.0	1,611.3	4.6	4,313.0	13.2
Commercial Lines	810.3	8.9	767.8	11.1	634.8	13.0
Property ¹	(238.4)	(10.5)	(312.3)	(15.3)	(125.1)	(7.1)
Other indemnity ²	(11.4)	NM	(1.4)	NM	0	NM
Total underwriting operations	\$ 2,064.0	4.2 %	\$ 2,065.4	4.7 %	\$ 4,822.7	12.3 %

¹During 2022, 2021, and 2020, pretax profit (loss) includes \$29.1 million, \$56.6 million, and \$56.9 million, respectively, of amortization expense associated with acquisition-related intangible assets attributable to our Property segment. The year-over-year decrease in amortization expense reflects intangible assets that were fully amortized during the first quarter 2022.

²Underwriting margins for our other indemnity businesses are not meaningful (NM) due to the low level of premiums earned by, and the variability of loss costs in, such businesses.

We have taken significant rate increases since the first quarter of 2021 and through 2022. In spite of the rate increases, our underwriting profit margin decreased in 2022, compared to 2021, primarily driven by higher catastrophe losses and higher loss severity. See the *Losses and Loss Adjustment Expenses (LAE)* section below for further discussion of our frequency and severity trends and catastrophe losses incurred during the period.

The onset and continuation of the COVID-19 pandemic shifted consumer behavior and impacted general economic conditions through 2022. We have seen volatility in our severity trends as inflation continued to influence higher vehicle prices and costs to repair vehicles. We have responded, and will continue to respond when necessary, to these market changes through rate increases, underwriting restrictions, and other non-rate actions. Our focus on achieving our target underwriting profitability takes precedence over growth.

Further underwriting results for our Personal Lines business, including results by distribution channel, the Commercial Lines business, the Property business, and our underwriting operations in total, were as follows:

Underwriting Performance¹	2022	2021	2020
Personal Lines – Agency			
Loss & loss adjustment expense ratio	78.1	75.6	63.5
Underwriting expense ratio	17.8	18.5	22.3
Combined ratio	95.9	94.1	85.8
Personal Lines – Direct			
Loss & loss adjustment expense ratio	78.6	77.2	62.9
Underwriting expense ratio	17.6	19.4	24.8
Combined ratio	96.2	96.6	87.7
Total Personal Lines			
Loss & loss adjustment expense ratio	78.3	76.4	63.2
Underwriting expense ratio	17.7	19.0	23.6
Combined ratio	96.0	95.4	86.8
Commercial Lines			
Loss & loss adjustment expense ratio	71.5	69.3	64.5
Underwriting expense ratio	19.6	19.6	22.5
Combined ratio	91.1	88.9	87.0
Property			
Loss & loss adjustment expense ratio	83.3	86.4	77.3
Underwriting expense ratio ²	27.2	28.9	29.8
Combined ratio ²	110.5	115.3	107.1
Total Underwriting Operations			
Loss & loss adjustment expense ratio	77.3	75.7	64.0
Underwriting expense ratio	18.5	19.6	23.7
Combined ratio	95.8	95.3	87.7
Accident year – Loss & loss adjustment expense ratio ³	77.5	75.7	63.5

¹Ratios are expressed as a percentage of net premiums earned. The portion of fees and other revenues related to our loss adjustment activities are netted against loss adjustment expenses and the portion of fees and other revenues related to our underwriting operations are netted against underwriting expenses in the ratio calculations.

²Included in 2022, 2021, and 2020, are 1.3 points, 2.8 points, and 3.2 points, respectively, of amortization expense on acquisition-related intangible assets attributable to our Property segment. Excluding this expense, the Property business would have reported expense ratios of 25.9, 26.1, and 26.6, and combined ratios of 109.2, 112.5, and 103.9, for 2022, 2021, and 2020, respectively.

³The accident year ratios include only the losses that occurred during the period noted. As a result, accident period results will change over time, either favorably or unfavorably, as we revise our estimates of loss costs when payments are made or reserves for that accident period are reviewed.

Losses and Loss Adjustment Expenses (LAE)

(millions)	2022	2021	2020
Change in net loss and LAE reserves	\$ 3,369.6	\$ 4,233.7	\$ 1,574.4
Paid losses and LAE	34,753.1	29,393.9	23,547.4
Total incurred losses and LAE	\$38,122.7	\$33,627.6	\$25,121.8

Claims costs, our most significant expense, represent payments made, and estimated future payments to be made, to or on behalf of our policyholders, including expenses needed to adjust or settle claims. Claims costs are a function of loss severity and frequency and, for our vehicle businesses, are influenced by inflation and driving patterns, among other factors, some of which are discussed below. In our Property business, severity is primarily a function of construction costs and the age of the structure. Accordingly, anticipated

We experienced severe weather conditions in several areas of the country during each of the last three years. Hurricanes, hail storms, tornadoes, and wind activity contributed to catastrophe losses each year. The following table shows our consolidated catastrophe losses and related combined ratio point impact, excluding loss adjustment expenses, for the years ended December 31:

(\$ in millions)	2022		2021		2020	
	\$	Point ¹	\$	Point ¹	\$	Point ¹
Personal Lines	\$1,045.6	2.8	\$ 652.0	1.8	\$439.4	1.3
Commercial Lines	34.4	0.4	26.7	0.4	14.8	0.3
Property	580.4	25.6	633.4	31.0	423.8	24.0
Total catastrophe losses incurred	\$1,660.4	3.4 pts.	\$1,312.1	3.0 pts.	\$878.0	2.2 pts.

¹Represents catastrophe losses incurred during the period, including the impact of reinsurance, as a percentage of net premiums earned for each segment.

Hurricane Ian accounted for approximately 45% of the catastrophe losses in 2022, while Hurricane Ida accounted for about 30% of the 2021 losses. The remainder of the catastrophe losses were generally attributable to other hurricanes, wind and hail storms, and other severe weather events throughout the United States.

In total, our Personal Lines and Commercial Lines businesses incurred \$575 million of losses from Hurricane Ian. About half of the vehicle losses were on our special lines products, including boats and recreational vehicles with boat losses comprising nearly 70% of all the special lines losses. In our boat product, we mitigate hurricane/coastal exposure with a) underwriting restrictions that limit the insured value and length of the boats, compared to non-hurricane exposed areas, and b) increased deductibles for named storms. Additionally, we segment and price our hurricane

changes in these factors are taken into account when we establish premium rates and loss reserves. Loss reserves are estimates of future costs and our reserves are adjusted as underlying assumptions change and information develops. See *Critical Accounting Policies – A. Loss and LAE Reserves* for a discussion of the effect of changing estimates.

Our total loss and LAE ratio increased 1.6 points in 2022 and 11.7 points in 2021, each compared to the prior year. Our accident year loss and LAE ratio, which excludes the impact of prior accident year reserve development during each calendar year, increased 1.8 points in 2022 and 12.2 points in 2021. Several factors that contributed to the year-over-year changes are discussed below and include the impact of catastrophe losses, changes in severity and frequency, and prior accident year reserve development.

risk by territory and set rate levels with a catastrophe load based on historical losses.

For our Property business, we retained \$200 million of losses and allocated loss adjustment expenses (ALAE), net of reinsurance, related to Hurricane Ian. On a gross basis, prior to giving effect to our excess of loss reinsurance contract, we estimated our Property catastrophe losses and ALAE from Hurricane Ian were \$1.0 billion at the end of 2022. We have responded, and plan to continue to respond, promptly to catastrophic events when they occur in order to provide exemplary claims service to our customers.

Changes in our estimate of our ultimate losses on current catastrophes along with potential future catastrophes could have a material impact on our financial condition, cash flows, or results of operations. We reinsure various risks, including, but not limited to,

catastrophic losses. We do not have catastrophe-specific reinsurance for our Personal Lines or commercial auto businesses, but we reinsure portions of our Property business. The Property business reinsurance programs include catastrophe occurrence excess of loss contracts and aggregate excess of loss contracts. We also purchase excess of loss reinsurance on our Protective Insurance workers' compensation insurance.

We evaluate our reinsurance programs during the renewal process, if not more frequently, to ensure our programs continue to effectively address the company's risk tolerance. As a result, during 2022, we entered into new reinsurance contracts under our occurrence excess of loss program for our Property business. The reinsurance program provides coverage, net of retention, of up to \$2.5 billion if the first covered event occurs in Florida and up to \$2.0 billion if the first covered event occurs outside of Florida. Coverage for a second event (and, potentially, for subsequent covered events) would depend on several factors, including the location and the extent of covered losses of the earlier events in the contract period. The per occurrence excess of loss program had a retention threshold for losses and ALAE from the first catastrophic event of \$200 million, which is unchanged from the prior contracts, and a retention threshold for a second catastrophic event of \$100 million. For 2023, the second catastrophic event retention for this coverage has been increased to \$200 million. Portions of our reinsurance programs include reinstatement limits providing coverage for subsequent events, with some portions having an obligatory reinstatement of coverage. Reinstatement premiums would have no effect on our results of operations since, per our contracts, we have separate reinsurance to cover these situations.

For 2023, we entered into a new aggregate excess of loss reinsurance contract that has multiple layers of coverage, with the first retention layer threshold ranging from \$500 million to \$575 million, excluding named tropical storms and hurricanes, and the second retention layer threshold of \$600 million, including named tropical storms and hurricanes. The first and second layers provide coverage up to \$100 million and \$85 million, respectively.

While the total coverage limit and per-event retention will evolve to fit the growth of our business, we expect to remain a consistent purchaser of reinsurance coverage. We were able to place our desired coverage at both June 1, 2022 and January 1, 2023 renewal events. While the cost of reinsurance in the markets in which we participate has continued to increase over the last two years and the availability of reinsurance is subject to many forces outside of our control, we did not, and do not expect to in the near term, experience a significant lack of availability of any of the types of reinsurance that we typically purchase. See *Item 1A, Risk Factors* in our 2022 Form 10-K filed with the U.S. Securities and Exchange Commission, for the year ended December 31, 2022, for a discussion of certain risks related to catastrophe events and the potential impact of climate change. See *Item 1, Business – Reinsurance* on Form 10-K and *Note 7 – Reinsurance* for a discussion of our various reinsurance programs.

The following discussion of our severity and frequency trends in our personal auto business excludes comprehensive coverage because of its inherent volatility, as it is typically linked to catastrophic losses generally resulting from adverse weather. For our commercial auto products, the reported frequency and severity trends include comprehensive coverage. Comprehensive coverage insures against damage to a customer's vehicle due to various causes other than collision, such as windstorm, hail, theft, falling objects, and glass breakage.

Total personal auto incurred severity (i.e., average cost per claim, including both paid losses and the change in case reserves) on a calendar-year basis, over the prior-year periods was as follows:

Coverage Type	Growth Over Prior Year		
	2022	2021 ¹	2020
Bodily injury	8 %	11 %	12 %
Collision	16	11	5
Personal injury protection	(9)	7	14
Property damage	20	8	9
Total	13	9	10

¹Annualized year-over-2019 year

The year-over-year increase for 2022, compared to 2021, in part, reflects the impact of inflation, which continues to increase the valuation of used vehicles and total loss, repair, and medical costs.

Consistent with our prior year reporting, the year-over-year changes for 2021 are compared to 2019 on a two-year annualized basis, which we believe is more insightful when trying to understand our loss results. We believe that the 2021 trends compared to 2020 would not be meaningful for our personal auto business due to the significant impacts that COVID-19 had on our 2020 trends as a result of many factors, including shelter-in-place requirements and the timing of salvage and subrogation collections.

On a calendar-year basis, our commercial auto products' incurred severity, excluding Protective Insurance and our TNC business, increased 6% in 2022, compared to 14% in 2021 and 10% in 2020. In addition to general trends in the marketplace, the increase in our commercial auto products' severity primarily reflects shifts in the mix of business to for-hire transportation, which has higher average severity than the business auto and contractor business market targets. Since the loss patterns in the TNC business are not indicative of our other commercial auto products, disclosing severity and frequency trends excluding that business is more representative of our overall experience for the majority of our commercial auto products.

It is a challenge to estimate future severity, but we continue to monitor changes in the underlying costs, such as general inflation, used car prices, vehicle repair costs, medical costs, health care reform, court decisions, and jury verdicts, along with regulatory changes and other factors that may affect severity.

Our personal auto incurred frequency on a calendar-year basis, over the prior-year periods was as follows:

Coverage Type	Growth Over Prior Year		
	2022	2021 ¹	2020 ²
Bodily injury	(4)%	(11)%	(25)%
Collision	(8)	(3)	(23)
Personal injury protection	(5)	(10)	(28)
Property damage	(5)	(11)	(27)
Total	(6)	(7)	(24)

¹Annualized year-over-2019 year

²Significant decreases reflected the decrease in vehicle miles traveled as a result of the shelter-in-place restrictions put in place to help stop the spread of COVID-19.

As with our personal auto severity trends, comparing 2021 to 2019 instead of 2020 provides more meaningful comparisons due to the significant impact that the COVID-19 pandemic had on frequency during 2020. For example, our total personal auto frequency increased 14% for 2021, compared to 2020, reflecting the decrease in vehicle miles travelled during 2020 that significantly reduced auto accident frequency.

On a calendar-year basis, our commercial auto products' incurred frequency, excluding Protective Insurance and our TNC business, saw an increase of about 3% in 2022 and 9% in 2021, compared to a decrease of about 15% in 2020. On a calendar-year annualized basis, for 2021, incurred frequency decreased 4% compared to 2019. The frequency increase in 2022 was in part due to an uneven recovery across different commercial auto business markets in 2021, some of which have not yet returned to pre-pandemic levels and are continuing to recover at varying rates since the COVID-19 pandemic lows.

We closely monitor the changes in frequency, but the degree or direction of near-term frequency change is not something that we are able to predict with any degree of confidence, and this challenge is exacerbated by the uncertainty of the current environment. We will continue to analyze trends to distinguish changes in our experience from other external factors, such as changes in the number of vehicles per household, miles driven, vehicle usage, gasoline prices, advances in vehicle safety, and unemployment rates, versus those resulting from shifts in the mix of our business or changes in driving patterns, to allow us to react quickly to price for these trends and to reserve more accurately for our loss exposures.

The table below presents the actuarial adjustments implemented and the loss reserve development experienced on a companywide basis in the years ended December 31:

(\$ in millions)	2022	2021	2020
ACTUARIAL ADJUSTMENTS			
Reserve decrease (increase)			
Prior accident years	\$(105.5)	\$ (78.5)	\$ (27.5)
Current accident year	(83.8)	103.9	68.4
Calendar year actuarial adjustments	\$(189.3)	\$ 25.4	\$ 40.9
PRIOR ACCIDENT YEARS DEVELOPMENT			
Favorable (unfavorable)			
Actuarial adjustments	\$(105.5)	\$ (78.5)	\$ (27.5)
All other development	191.8	83.2	(167.8)
Total development	\$ 86.3	\$ 4.7	\$(195.3)
(Increase) decrease to calendar year combined ratio	0.2 pts.	0 pts.	(0.5) pts.

Total development consists of both actuarial adjustments and “all other development” on prior accident years. The actuarial adjustments represent the net changes made by our actuarial staff to both current and prior accident year reserves based on regularly scheduled reviews. Through these reviews, our actuaries identify and measure variances in the projected frequency and severity trends, which allow them to adjust the reserves to reflect the current cost trends. For our Property business, 100% of catastrophe losses are reviewed monthly, and any development on catastrophe reserves are included as part of the actuarial adjustments. For the Personal Lines and Commercial Lines businesses, development for catastrophe losses in the vehicle businesses would be reflected in “all other development,” discussed below, to the extent they relate to prior year reserves. We report these actuarial adjustments separately for the current and prior accident years to reflect these adjustments as part of the total prior accident years development.

“All other development” represents claims settling for more or less than reserved, emergence of unrecorded claims at rates different than anticipated in our incurred but not recorded (IBNR) reserves, and changes in reserve estimates on specific claims. Although we believe the development from both the actuarial adjustments and “all other development” generally results from the same factors, we are unable to quantify the portion of the reserve development that might be applicable to any one or more of those underlying factors.

Our objective is to establish case and IBNR reserves that are adequate to cover all loss costs, while incurring minimal variation from the date the reserves are initially established until losses are fully developed. Our ability to meet this objective is impacted by many factors. Changes in case law, particularly related to personal injury protection (PIP), can make it difficult to estimate reserves timely and with minimal variation. As reflected in the table above, we experienced favorable prior year development during both 2022 and 2021, compared to unfavorable prior year development in 2020.

Reserve development primarily related to the following:

- 2022 - Favorable development of \$169 million in our Personal Lines segment was partially offset by unfavorable development of \$82 million in Commercial Lines. The Personal Lines favorable development was primarily attributable to more subrogation and salvage recoveries and lower LAE than originally anticipated, partially offset by the higher than anticipated severity and frequency of auto property damage payments on previously closed claims and late reported injury claims. The unfavorable development in Commercial Lines was mostly driven by our TNC business, due to higher than anticipated severity of injury case reserves and higher than anticipated severity and frequency of late reported claims.
- 2021 - Favorable development of \$127 million in our Personal Lines segment was offset by unfavorable development of \$87 million in Commercial Lines and \$36 million in Property. The Personal Lines development primarily

reflected revised estimates of our per claim settlement costs, favorable PIP reform and litigation, partially offset by higher than anticipated bodily injury severity in our personal auto business. The unfavorable development in Commercial Lines was mostly due to an increase in bodily injury severity and the emergence of large bodily injury claims, while the Property business saw more previously closed claims reopen.

- 2020 - Personal and Commercial Lines recognized unfavorable development of \$111 million and \$98 million, respectively, while our Property business had \$14 million of favorable development. Higher than anticipated frequency of reopened PIP claims in our personal auto business and an increase in bodily injury severity and the emergence of large bodily injury claims in our Commercial Lines business drove the unfavorable development.

See *Note 6 – Loss and Loss Adjustment Expense Reserves*, for a more detailed discussion of our prior accident years development.

Underwriting Expenses

Underwriting expenses include policy acquisition costs, other underwriting expenses, and, for 2020 only,

policyholder credits. The underwriting expense ratio is our underwriting expenses, net of certain fees and other revenues, expressed as a percentage of net premiums earned. For 2022, our underwriting expense ratio was down 1.1 points, compared to the prior year. The decrease in the point impact reflects a year-over-year decrease in advertising spend during 2022 and a decrease in the costs related to our annual cash-incentive program (Gainshare), which measures segment profitability and growth in policies in force. In total, our advertising spend decreased 5% during 2022, compared to the prior year, as a result of an effort to improve profitability to reach our 96 combined ratio goal.

To analyze underwriting expenses, we also review our non-acquisition expense ratio (NAER), which excludes costs related to policy acquisition, including advertising and agency commissions, from our underwriting expense ratio. By excluding acquisition costs from our underwriting expense ratio, we are able to understand costs other than those necessary to acquire new policies and grow the business. In 2022, our NAER decreased 0.2 points and 0.3 points in our Personal Lines and Property businesses, respectively, and increased 0.2 points in our Commercial Lines business, compared to 2021.

C. Growth

For our underwriting operations, we analyze growth in terms of both premiums and policies. Net premiums written represent the premiums from policies written during the period, less any premiums ceded to reinsurers. Net premiums earned, which are a function of the premiums written in the current and prior periods, are earned as revenue over the life of the policy using a daily earnings convention. Policies in force, our preferred measure of growth since it removes the variability due to rate changes or mix shifts, represents all policies under which coverage was in effect as of the end of the period specified.

For the years ended December 31, (\$ in millions)	2022		2021		2020	
	\$	% Growth	\$	% Growth	\$	% Growth
NET PREMIUMS WRITTEN						
Personal Lines						
Agency	\$ 18,334.2	6 %	\$ 17,257.9	7 %	\$ 16,133.8	5 %
Direct	20,944.3	11	18,910.9	10	17,208.8	9
Total Personal Lines	39,278.5	9	36,168.8	8	33,342.6	7
Commercial Lines						
Property	9,398.8	17	8,015.9	51	5,315.3	11
Other indemnity ¹	2,401.7	8	2,216.2	16	1,910.8	13
Total underwriting operations	2.1	(51)	4.3	NM	0	0
	\$ 51,081.1	10 %	\$ 46,405.2	14 %	\$ 40,568.7	8 %
NET PREMIUMS EARNED						
Personal Lines						
Agency	\$ 17,744.7	5 %	\$ 16,881.0	7 %	\$ 15,789.5	6 %
Direct	20,135.5	9	18,492.3	10	16,830.6	10
Total Personal Lines	37,880.2	7	35,373.3	8	32,620.1	8
Commercial Lines						
Property	9,088.3	31	6,945.2	42	4,875.8	10
Other indemnity ¹	2,270.0	11	2,042.5	16	1,765.7	14
Total underwriting operations	2.7	(65)	7.7	NM	0	0
	\$ 49,241.2	11 %	\$ 44,368.7	13 %	\$ 39,261.6	8 %

NM = Not meaningful

¹ Includes other underwriting business and run-off operations.

December 31, (# in thousands)	2022		2021		2020	
	#	% Growth	#	% Growth	#	% Growth
POLICIES IN FORCE						
Agency auto	7,766.3	(1)%	7,879.0	3 %	7,617.0	9 %
Direct auto	10,131.0	6	9,568.2	8	8,881.4	13
Total auto	17,897.3	3	17,447.2	6	16,498.4	11
Special lines ¹	5,558.1	5	5,288.5	8	4,915.1	8
Personal Lines - total	23,455.4	3	22,735.7	6	21,413.5	10
Commercial Lines	1,046.4	8	971.2	18	822.0	9
Property	2,851.3	3	2,776.2	12	2,484.4	13
Companywide total	27,353.1	3 %	26,483.1	7 %	24,719.9	11 %

¹ Includes insurance for motorcycles, watercraft, RVs, and similar items.

To analyze growth, we review new policies, rate levels, and the retention characteristics of our segments. Although new policies are necessary to maintain a

growing book of business, we recognize the importance of retaining our current customers as a critical component of our continued growth.

As shown in the tables below, we measure retention by policy life expectancy. We review our customer retention for our personal auto products using both a trailing 3-month and a trailing 12-month period. We believe change in policy life expectancy using a trailing 12-month period measure is indicative of recent experience, mitigates the effects of month-to-month variability, and addresses seasonality. Although using a trailing 3-month measure is sensitive to seasonality and can reflect more volatility, this measure is more responsive to current experience and generally can be an indicator of how retention rates are moving.

D. Personal Lines

The following table shows our year-over-year changes for our Personal Lines business:

	Growth Over Prior Year		
	2022	2021	2020
Applications			
New	1%	(2)%	3%
Renewal	1	11	8
Written premium per policy - Auto	9	0	(1)
Policy life expectancy - Auto			
Trailing 3 months	(9)	(1)	7
Trailing 12 months	(22)	2	10

New application growth in our Personal Lines products was up 1% during 2022, in part driven by competitor rate increases, primarily during the second half of the year, and targeted media spend. Our personal auto new application growth was up 2% and our special lines new application growth was down 5% during the year, with the special lines decrease primarily reflecting the significant new application growth experienced during 2021, due to growth in boat, RV, and motorcycle demand. During the year, our personal auto renewal applications were relatively unchanged from the prior year and our special lines products recorded an 8% increase in renewal applications.

Results varied by consumer segment. Personal auto policies in force grew by single digits across all segments except Sam, which experienced a single digit decline. New business application growth was also up across all segments except Sam during 2022. Quote volume increased in all consumer segments, with all consumer segments seeing a decreased rate of conversion. The increases we experienced in our quote volume primarily reflected competitors raising rates.

During 2022, we implemented personal auto rate increases in 49 states that, in the aggregate, on a

countrywide basis, increased rates about 13% for the year. The rate increases, which started in the second quarter 2021 and continued throughout 2022, had a negative impact on our new and renewal business applications and policy life expectancy during 2022. During the second half of 2022, our trailing 3-month policy life expectancy, while still below the prior year, began to show signs of improvement.

Our written premium per policy increased during 2022, primarily due to the rate increases previously discussed. Our focus on achieving our target underwriting profitability takes precedence over growth. We will continue to manage growth and profitability in accordance with our long-standing goal of growing as fast as we can as long as we can provide high-quality customer service at or below a companywide 96 combined ratio on a calendar-year basis.

We report our Agency and Direct business results separately as components of our Personal Lines segment to provide further understanding of our products by distribution channel. The channel discussions below are focused on personal auto insurance since this product accounted for 94% of the Personal Lines segment net premiums written during 2022.

The Agency Business

	Growth Over Prior Year		
	2022	2021	2020
Applications - Auto			
New	(3)%	(8)%	(5)%
Renewal	(3)	8	7
Written premium per policy - Auto	11	1	0
Policy life expectancy - Auto			
Trailing 3 months	(11)	(3)	6
Trailing 12 months	(24)	1	10

The Agency business includes business written by more than 40,000 independent insurance agencies that represent Progressive, as well as brokerages in New York and California. During 2022, 19 states generated new Agency auto application growth, including 3 of our top 10 largest Agency states. New applications decreased for the Sam and Robinsons consumer segments by low double and single digits, respectively, and increased for the Wrights and Diane by single digits through the Agency channel. Policies in force decreased in all consumer segments except the Wrights.

During 2022, we experienced a 15% year-over-year increase in Agency auto quotes and a 15% decrease in the rate of conversion, primarily due to the rate increases taken during 2021 and the first half of 2022. During the fourth quarter 2022, our rate of conversion increased over the same period in 2021, reflecting the rate increases that our competitors took during 2022. All consumer segments saw an increase in quote volume and a decrease in conversion compared to the prior year. Written premium per policy for new and renewal Agency auto business increased 9% and 11%, respectively, compared to 2021. The decreases in policy life expectancy were expected given the rate actions taken over the last year.

The Direct Business

	Growth Over Prior Year		
	2022	2021	2020
Applications - Auto			
New	6 %	0 %	5 %
Renewal	3	13	11
Written premium per policy - Auto	8	(1)	(1)
Policy life expectancy - Auto			
Trailing 3 months	(6)	2	6
Trailing 12 months	(19)	3	10

The Direct business includes business written directly by Progressive online, through our Progressive mobile app, and over the phone. During 2022, we generated new Direct auto application growth in 30 states and the District of Columbia, including 3 of our top 10 largest Direct states. Total auto applications increased 3% due to growth in both new and renewal applications, primarily in the second half of 2022. New applications and policies in force increased across all consumer segments except Sam.

During 2022, we experienced an increase in Direct auto quote volume of 8%, while our rate of conversion decreased 2% for the year but began increasing toward the end of the third quarter of 2022. In addition to competitors raising rates, we also experienced gains in the efficiency of our media spend during the second half of the year, which contributed to the increase in quotes and new applications. All consumer segments saw an increase in quotes. Sam and Diane saw declines in the rate of conversion, while Wrights and Robinsons saw low single digit increases.

Written premium per policy for new and renewal Direct auto business increased 6% and 8%, respectively, during 2022, compared to last year, primarily driven by rate increases. Consistent with our Agency business, the Direct business decrease in policy life expectancy reflected the rate actions taken over the last year.

E. Commercial Lines

Our Commercial Lines business operates in five traditional business markets, which include business auto, for-hire transportation, contractor, for-hire specialty, and tow markets, primarily written through the agency channel. We also write TNC business and BOP insurance. With the acquisition of Protective Insurance during 2021, we expanded our portfolio of offerings to larger fleet and workers' compensation insurance for trucking, along with trucking industry independent contractors, and affinity programs.

The following table and discussion shows our Commercial Lines business, excluding our TNC, BOP, and Protective Insurance products, which we refer to as our commercial auto product. Year-over-year changes in our commercial auto product were as follows:

	Growth Over Prior Year		
	2022	2021	2020
Applications			
New	(1)%	27 %	5 %
Renewal	12	12	6
Written premium per policy	11	17	4
Policy life expectancy			
Trailing 12 months	(12)	11	5

Our commercial auto product experienced a year-over-year decline in new application growth in 2022, primarily reflecting a slow down from the significant amount of growth experienced in 2021, mainly in our for-hire transportation and for-hire specialty business markets, and the softening of the freight market during the year. We experienced a 3% decrease in quote volume and a 3% increase in the rate of conversion in our commercial auto business during 2022, compared to 2021, primarily driven by the for-hire transportation market.

Written premium per policy for our new and renewal commercial auto policies increased 6% and 16%, respectively, in 2022, compared to last year. The increases were primarily due to rate increases. In aggregate, rate increases for commercial auto were about 6% in 2022. Our policy life expectancy decreased compared to 2021, mainly driven by our for-hire

transportation business market. Given the rise in costs to operate a trucking business, many independent owner/operators have begun to migrate back to leasing with larger motor carriers.

F. Property

The following table shows our year-over-year changes for our Property business:

	Growth Over Prior Year		
	2022	2021	2020
Applications			
New	(8)%	20 %	12 %
Renewal	8	10	14
Written premium per policy	6	1	0
Policy life expectancy			
Trailing 12 months	(7)	(9)	(3)

Our Property business writes residential property insurance for homeowners, other property owners, and renters, in the agency and direct channels. During 2022, the Property business experienced a decrease in new applications, primarily due to rate increases and other non-rate actions taken to address the profitability concerns.

Improving profitability and reducing concentration exposure continued to be the top priority for our Property business during 2022. Due to our concentration of policies in catastrophe-exposed states, severe weather events generally have greater impact on our results compared to other national carriers. In response, we began implementing underwriting changes during the second half of 2021, which continued during 2022, to focus on improving profitability and reducing growth in coastal and hail-prone states. In addition, we increased rates an average of about 19% in our Property segment during 2022, with some of the larger increases in Florida and in hail-prone states, such as Colorado and Oklahoma.

The targeted rate increases taken during the year are beginning to be earned into the book of business; however, we realize that our rate actions and underwriting activities to limit growth in the coastal and hail-prone states and to increase our exposure in states with traditionally less catastrophe exposure will require more time than originally anticipated. Combined with the continued extent of the weather-related losses, this prompted us to reevaluate the portion of goodwill related to our 2015 acquisition of ARX and assigned to our Property business for impairment during the year,

resulting in a non-cash goodwill impairment charge of \$224.8 million, which represented the entire amount of goodwill assigned to the Property business.

Our written premium per policy increased on a year-over-year basis, primarily attributable to rate increases, a portion of which were taken later in the year, and providing higher premium coverages to account for inflation. The written premium per policy increase was partially offset by a shift in the mix of business to a larger share of renters policies, which have lower written premiums per policy, and slower homeowners growth in volatile states that have higher average premiums. Our policy life expectancy decreased compared to last year, primarily due to the targeted rate increases in states where we were not achieving our profitability targets. We intend to continue to make targeted rate increases in states where we believe it is necessary to achieve our profitability targets.

G. Litigation

The Progressive Corporation and/or its insurance subsidiaries are named as defendants in various lawsuits arising out of claims made under insurance policies issued by its subsidiaries in the ordinary course of business. We consider all legal actions relating to such claims in establishing our loss and loss adjustment expense reserves.

In addition, various Progressive entities are named as defendants in a number of alleged class/collective/representative actions or individual lawsuits arising out of the operations of the insurance subsidiaries. These cases include those alleging damages as a result of, among other things, our practices in evaluating or paying medical or injury claims or benefits, including, but not limited to, personal injury protection, medical payments, uninsured motorist/underinsured motorist, bodily injury benefits, and workers' compensation, and for reimbursing medical costs incurred by Medicare/Medicaid beneficiaries; our practices in evaluating or paying physical damage claims, including, but not limited to, our payment of total loss claims, application of a negotiation adjustment in calculating total loss valuations, and labor rates paid to auto body repair shops; our insurance product design, including our response to the COVID-19 pandemic; employment matters; commercial disputes, including breach of contract; and cases challenging other aspects of our claims or marketing practices or other business operations. Other insurance companies and/or large employers face many of these same issues. During the last three years, we have settled several class/collective

action and individual lawsuits. These settlements did not have a material effect on our financial condition, cash flows, or results of operations. See *Note 12 – Litigation* for a more detailed discussion.

H. Income Taxes

At December 31, 2022, we had net current income taxes payable of \$10.9 million, which were reported in accounts payable, accrued expenses, and other liabilities, compared to recoverable income taxes of \$19.2 million at December 31, 2021, which were reported in other assets on our consolidated balance sheets. This balance may fluctuate between an asset and a liability from period to period due to normal timing differences. See *Note 5 – Income Taxes* for further information.

A deferred tax asset or liability is a tax benefit or expense, respectively, that is expected to be realized in a future tax return. At December 31, 2022, we reported a net deferred tax asset, compared to a net deferred tax liability at December 31, 2021. The change to a deferred asset from a deferred liability was primarily due to unrealized losses on securities in the fixed-income and equity portfolios occurring in 2022.

We are required to assess our deferred tax assets for recoverability and, based on our analysis, determined that we did not need a valuation allowance on our gross deferred tax assets for either year. Although realization of the gross deferred tax assets is not assured, management believes it is more likely than not that the gross deferred tax assets will be realized based on our expectation we will be able to fully utilize the deductions that are ultimately recognized for tax purposes. We believe our deferred tax asset related to net unrealized losses on fixed-maturity securities will be realized based on the existence of prior year capital gains, current temporary differences related to unrealized gains in our equity portfolio, and other tax planning strategies.

Our effective tax rate was 22% for 2022, compared to 20% in both 2021 and 2020. The increase in the effective tax rate during 2022, compared to 2021 and 2020, was in part attributable to the goodwill impairment in 2022, which is not deductible for income tax purposes.

Consistent with prior years, we had no uncertain tax positions. See *Note 5 – Income Taxes* for further information.

IV. RESULTS OF OPERATIONS – INVESTMENTS

A. Portfolio Summary

At year-end 2022, the fair value of our investment portfolio was \$53.5 billion, compared to \$51.5 billion at year-end 2021. The increase in value from year-end 2021 primarily reflected the proceeds of the \$1.5 billion debt issuance in March 2022 and positive cash flows from our underwriting operations, offset by declines in the valuations of our portfolio. Our investment income (interest and dividends) increased 46% in 2022 and decreased 8% in 2021. This increase in 2022 was primarily due to an increase in interest rates on floating-rate securities in our portfolio and purchases of new investments with higher coupon rates, while the decrease in the prior year reflected lower yields partially offset by an increase in invested assets.

B. Investment Results

Our management philosophy governing the portfolio is to evaluate investment results on a total return basis. The fully taxable equivalent (FTE) total return includes recurring investment income, adjusted to a fully taxable amount for certain securities that receive preferential tax treatment (e.g., municipal securities), and total net realized, and changes in total unrealized, gains (losses) on securities.

The following summarizes investment results for the years ended December 31:

	2022	2021	2020
Pretax recurring investment book yield	2.4 %	1.9 %	2.4 %
FTE total return:			
Fixed-income securities	(6.6)	(0.1)	6.7
Common stocks	(19.4)	33.4	24.3
Total portfolio	(7.8)	2.6	7.9

The increase in the book yield during 2022 primarily reflected investing new cash from operations and proceeds from maturing bonds at higher interest rates and an increase in interest rates on our floating-rate securities. The decrease in the fixed-income total return, compared to last year, reflected the impact of rising interest rates during the last twelve months, as well as widening credit spreads, while the decrease in common stocks reflected general market conditions.

A further break-down of our FTE total returns for our fixed-income portfolio for the years ended December 31, follows:

	2022	2021	2020
Fixed-income securities:			
U.S. Treasury Notes	(7.8)%	(1.2)%	7.4 %
Municipal bonds	(8.3)	(0.2)	9.4
Corporate bonds	(6.0)	(0.4)	8.4
Residential mortgage-backed securities	0.6	1.3	3.0
Commercial mortgage-backed securities	(9.5)	0.5	4.2
Other asset-backed securities	(1.6)	0.7	2.8
Preferred stocks	(8.3)	6.9	6.6
Short-term investments	1.5	0.1	1.0

C. Portfolio Allocation

The composition of the investment portfolio at December 31, was:

(\$ in millions)	Fair Value	% of Total Portfolio	Duration (years)	Average Rating ¹
<u>2022</u>				
U.S. government obligations	\$ 25,167.4	47.0 %	3.7	AAA
State and local government obligations	1,977.1	3.7	3.5	AA+
Foreign government obligations	15.5	0.1	3.5	AAA
Corporate debt securities	9,412.7	17.6	2.8	BBB
Residential mortgage-backed securities	666.8	1.2	0.4	A
Commercial mortgage-backed securities	4,663.5	8.7	2.7	A+
Other asset-backed securities	4,564.6	8.5	1.1	AA+
Preferred stocks	1,397.5	2.6	2.8	BBB-
Short-term investments	2,861.7	5.4	0.1	AAA-
Total fixed-income securities	50,726.8	94.8	2.9	AA
Common equities	2,821.5	5.2	na	na
Total portfolio ²	\$ 53,548.3	100.0 %	2.9	AA
<u>2021</u>				
U.S. government obligations	\$ 18,488.2	35.9 %	3.6	AAA
State and local government obligations	2,185.3	4.2	3.6	AA+
Foreign government obligations	17.9	0.1	4.5	AAA
Corporate debt securities	10,692.1	20.7	2.9	BBB
Residential mortgage-backed securities	790.0	1.5	0.4	A-
Commercial mortgage-backed securities	6,535.6	12.7	3.2	A+
Other asset-backed securities	4,982.3	9.7	1.2	AA
Preferred stocks	1,821.6	3.6	3.6	BBB-
Short-term investments	942.6	1.8	0.2	AA
Total fixed-income securities	46,455.6	90.2	3.0	AA-
Common equities	5,058.5	9.8	na	na
Total portfolio ²	\$ 51,514.1	100.0 %	3.0	AA-

na = not applicable

¹ Represents ratings at period end. Credit quality ratings are assigned by nationally recognized statistical rating organizations. To calculate the weighted average credit quality ratings, we weight individual securities based on fair value and assign a numeric score of 0-5, with non-investment-grade and non-rated securities assigned a score of 0-1. To the extent the weighted average of the ratings falls between AAA and AA+, we assign an internal rating of AAA-.

² At December 31, 2022, we had \$34.4 million of net unsettled security transactions included in other assets, compared to \$143.4 million included in other liabilities at December 31, 2021.

The total fair value of the portfolio at December 31, 2022 and 2021, included \$4.4 billion and \$4.2 billion, respectively, of securities held in a consolidated, non-insurance subsidiary of the holding company, net of any unsettled security transactions.

Our asset allocation strategy is to maintain 0%-25% of our portfolio in Group I securities, with the balance (75%-100%) of our portfolio in Group II securities.

We define Group I securities to include:

- common equities,
- nonredeemable preferred stocks,
- redeemable preferred stocks, except for 50% of investment-grade redeemable preferred stocks with cumulative dividends, which are included in Group II, and
- all other non-investment-grade fixed-maturity securities.

Group II securities include:

- short-term securities, and
- all other fixed-maturity securities, including 50% of investment-grade redeemable preferred stocks with cumulative dividends.

We believe this asset allocation strategy allows us to appropriately assess the risks associated with these securities for capital purposes and is in line with the treatment by our regulators.

The following table shows the composition of our Group I and Group II securities at December 31:

(\$ in millions)	2022		2021	
	Fair Value	% of Total Portfolio	Fair Value	% of Total Portfolio
Group I securities:				
Non-investment-grade fixed maturities	\$ 1,249.2	2.3 %	\$ 2,032.4	3.9 %
Redeemable preferred stocks ¹	92.1	0.2	90.9	0.2
Nonredeemable preferred stocks	1,213.2	2.3	1,639.9	3.2
Common equities	2,821.5	5.2	5,058.5	9.8
Total Group I securities	5,376.0	10.0	8,821.7	17.1
Group II securities:				
Other fixed maturities	45,310.6	84.6	41,749.8	81.1
Short-term investments	2,861.7	5.4	942.6	1.8
Total Group II securities	48,172.3	90.0	42,692.4	82.9
Total portfolio	\$ 53,548.3	100.0 %	\$ 51,514.1	100.0 %

¹ We held no non-investment-grade redeemable preferred stocks at December 31, 2022 or 2021.

To determine the allocation between Group I and Group II, we use the credit ratings from models provided by the National Association of Insurance Commissioners (NAIC) for classifying our residential and commercial mortgage-backed securities, excluding interest-only securities, and the credit ratings from nationally recognized statistical rating organizations (NRSROs) to classify all other debt securities. NAIC ratings are based on a model that considers the book price of our securities when assessing the probability of future losses in assigning a credit rating.

Unrealized Gains and Losses

As of December 31, 2022, our fixed-maturity portfolio had pretax net unrealized losses, recorded as part of accumulated other comprehensive income, of \$3,537.6 million, compared to net unrealized gains of \$71.4 million at December 31, 2021. The decrease from

As a result, NAIC ratings can vary from credit ratings issued by NRSROs. Management believes NAIC ratings more accurately reflect our risk profile when determining the asset allocation between Group I and II securities.

The decrease in the percentage of Group I securities in 2022 was driven by sales and valuation declines in our common equity portfolio, with the proceeds from the common equity sales and the \$1.5 billion debt offering in March 2022 reinvested in Group II short-term investments.

2021 was due to increasing interest rates across our fixed-maturity portfolio and wider credit spreads outside of our short-term and Treasury portfolios. See *Note 2 – Investments* for a further break-out of our gross unrealized gains (losses).

Holding Period Gains (Losses)

The following table provides the balance and activity for both the gross and net holding period gains (losses) for 2022:

(millions)	Gross Holding Period Gains	Gross Holding Period Losses	Net Holding Period Gains (Losses)
Balance at December 31, 2021			
Hybrid fixed-maturity securities	\$ 13.0	\$ (5.5)	\$ 7.5
Equity securities ¹	3,877.2	(14.7)	3,862.5
Total holding period securities	3,890.2	(20.2)	3,870.0
Current year change in holding period securities			
Hybrid fixed-maturity securities	(11.7)	(70.3)	(82.0)
Equity securities ¹	(1,850.6)	(167.5)	(2,018.1)
Total changes in holding period securities	(1,862.3)	(237.8)	(2,100.1)
Balance at December 31, 2022			
Hybrid fixed-maturity securities	1.3	(75.8)	(74.5)
Equity securities ¹	2,026.6	(182.2)	1,844.4
Total holding period securities	\$ 2,027.9	\$ (258.0)	\$ 1,769.9

¹Equity securities include common equities and nonredeemable preferred stocks.

Changes in holding period gains (losses), similar to unrealized gains (losses) in our fixed-maturity portfolio, are the result of changes in market performance as well as sales of securities based on various portfolio management decisions.

Fixed-Income Securities

The fixed-income portfolio is managed internally and includes fixed-maturity securities, short-term investments, and nonredeemable preferred stocks. Following are the primary exposures for the fixed-income portfolio.

Interest Rate Risk This risk includes the change in value resulting from movements in the underlying market rates of debt securities held. We manage this risk by maintaining the portfolio's duration (a measure of the portfolio's exposure to changes in interest rates) between 1.5 and 5 years. The duration of the fixed-income portfolio was 2.9 years at December 31, 2022, compared to 3.0 years at December 31, 2021. The distribution of duration and convexity (i.e., a measure of the speed at which the duration of a security is expected to change based on a rise or fall in interest rates) is monitored on a regular basis.

The duration distribution of our fixed-income portfolio, excluding short-term investments, represented by the interest rate sensitivity of the comparable benchmark U.S. Treasury Notes, at December 31, was:

Duration Distribution	2022	2021
1 year	17.5 %	22.0 %
2 years	16.9	18.8
3 years	21.3	23.5
5 years	25.1	17.6
7 years	14.0	13.1
10 years	5.2	5.0
Total fixed-income portfolio	100.0 %	100.0 %

Credit Risk This exposure is managed by maintaining an A+ minimum average portfolio credit quality rating, as defined by NRSROs. At December 31, 2022, our credit quality rating was AA and at December 31, 2021 our credit quality rating was AA-. The credit quality distribution of the fixed-income portfolio at December 31, was:

Average Rating	2022	2021
AAA	65.5 %	54.7 %
AA	6.4	8.7
A	7.6	8.6
BBB	17.2	21.7
Non-investment grade/non-rated: ¹		
BB	2.5	4.8
B	0.5	1.1
CCC and lower	0.1	0.1
Non-rated	0.2	0.3
Total fixed-income portfolio	100.0 %	100.0 %

¹ The ratings in the table above are assigned by NRSROs.

Concentration Risk Our investment constraints limit investment in a single issuer, other than U.S. Treasury Notes or a state's general obligation bonds, to 2.5% of shareholders' equity, while the single issuer guideline on preferred stocks and/or non-investment-grade debt is 1.25% of shareholders' equity. Additionally, the guideline applicable to any state's general obligation bonds is 6% of shareholders' equity. We consider concentration risk both overall and in the context of individual asset classes and sectors, including but not limited to common equities, residential and commercial mortgage-backed securities, municipal bonds, and high-yield bonds. At December 31, 2022 and 2021, we were within all of the constraints described above.

Prepayment and Extension Risk We are exposed to this risk especially in our asset-backed (i.e., structured

product) and preferred stock portfolios. Prepayment risk includes the risk of early redemption of security principal that may need to be reinvested at less attractive rates. Extension risk includes the risk that a security will not be redeemed when anticipated, and that the security that is extended will have a lower yield than a security we might be able to obtain by reinvesting the expected redemption principal. Our holdings of different types of structured debt and preferred securities help manage this risk. During 2022 and 2021, we did not experience significant adverse prepayment or extension of principal relative to our cash flow expectations in the portfolio.

Liquidity Risk Our overall portfolio remains very liquid and we believe that it is sufficient to meet expected near-term liquidity requirements. The short-to-intermediate duration of our portfolio provides a source of liquidity, as we expect approximately \$7.8 billion, or 36.0%, of principal repayment from our fixed-income portfolio, excluding U.S. Treasury Notes and short-term investments, during 2023. Cash from interest and dividend payments provides an additional source of recurring liquidity.

The duration of our U.S. government obligations, which are included in the fixed-income portfolio, was comprised of the following at December 31, 2022:

(\$ in millions)	Fair Value	Duration (years)
U.S. Treasury Notes		
Less than one year	\$ 834.0	0.7
One to two years	5,565.6	1.5
Two to three years	3,984.0	2.5
Three to five years	8,303.4	4.1
Five to seven years	4,476.4	5.6
Seven to ten years	2,004.0	7.9
Total U.S. Treasury Notes	\$25,167.4	3.7

ASSET-BACKED SECURITIES

Included in the fixed-income portfolio are asset-backed securities, which were comprised of the following at December 31:

(\$ in millions)	Fair Value	Net Unrealized Gains (Losses)	% of Asset-Backed Securities	Duration (years)	Average Rating (at period end) ¹
2022					
Residential mortgage-backed securities	\$ 666.8	\$ (17.2)	6.7 %	0.4	A
Commercial mortgage-backed securities	4,663.5	(782.5)	47.1	2.7	A+
Other asset-backed securities	4,564.6	(259.6)	46.2	1.1	AA+
Total asset-backed securities	\$ 9,894.9	\$ (1,059.3)	100.0 %	1.8	AA-
2021					
Residential mortgage-backed securities	\$ 790.0	\$ 1.7	6.4 %	0.4	A-
Commercial mortgage-backed securities	6,535.6	(25.4)	53.1	3.2	A+
Other asset-backed securities	4,982.3	0.9	40.5	1.2	AA
Total asset-backed securities	\$ 12,307.9	\$ (22.8)	100.0 %	2.2	AA-

¹The credit quality ratings are assigned by NRSROs.

Residential Mortgage-Backed Securities (RMBS) The following table details the credit quality rating and fair value of our RMBS, along with the loan classification and a comparison of the fair value at December 31, 2022, to our original investment value (adjusted for returns of principal, amortization, and write-downs):

Residential Mortgage-Backed Securities (at December 31, 2022)

(\$ in millions)	Non-Agency		Government/GSE ²		Total	% of Total
Average Rating ¹						
AAA	\$ 124.4		\$ 1.2	\$	125.6	18.8 %
AA	24.7		0.4		25.1	3.8
A	392.2		0		392.2	58.8
BBB	115.3		0		115.3	17.3
Non-investment grade/non-rated:						
BB	0.5		0		0.5	0.1
B	0		0		0	0
CCC and lower	2.1		0		2.1	0.3
Non-rated	6.0		0		6.0	0.9
Total fair value	\$ 665.2		\$ 1.6	\$	666.8	100.0 %
Increase (decrease) in value		(4.2)%				(4.1)% (4.2)%

¹The credit quality ratings are assigned by NRSROs; when we assigned the NAIC ratings for our RMBS, 98% of our non-investment-grade securities were rated investment grade and reported as Group II securities, with the remainder classified as Group I.

²The securities in this category are insured by a Government Sponsored Entity (GSE) and/or collateralized by mortgage loans insured by the Federal Housing Administration (FHA) or the U.S. Department of Veteran Affairs (VA).

In the residential mortgage-backed sector, our portfolio consists of bonds that are backed by high-quality borrowers in the underlying mortgages or have strong structural protections. During 2022, we selectively added to our portfolio and opportunistically sold some of the securities at attractive levels.

Commercial Mortgage-Backed Securities (CMBS) The following table details the credit quality rating and fair value of our CMBS, along with a comparison of the fair value at December 31, 2022, to our original investment value (adjusted for returns of principal, amortization, and write-downs):

Commercial Mortgage-Backed Securities (at December 31, 2022)				
(\$ in millions) Average Rating ¹	Multi-Borrower	Single-Borrower	Total	% of Total
AAA	\$ 216.9	\$ 1,213.9	\$1,430.8	30.7 %
AA	0	989.2	989.2	21.2
A	0	933.8	933.8	20.0
BBB	0	931.6	931.6	20.0
Non-investment grade/non-rated:				
BB	0	378.1	378.1	8.1
B	0	0	0	0
Total fair value	\$ 216.9	\$ 4,446.6	\$4,663.5	100.0 %
Increase (decrease) in value	(6.4)%	(14.7)%	(14.4)%	

¹The credit quality ratings are assigned by NRSROs; when we assigned the NAIC ratings for our CMBS, 31% of our non-investment-grade securities were rated investment grade and reported as Group II securities, with the remainder classified as Group I.

The CMBS portfolio experienced wider spreads and high volatility in 2022. New issuance in the single-asset single-borrower (SASB) market slowed significantly in the second half of the year due to less favorable market conditions, as well as low trading volumes and liquidity in the secondary trading market. Given ongoing uncertainty about future trajectory of the economy and its impact on real estate, we reduced certain positions that we believed would be sensitive to potential future economic weakness.

Other Asset-Backed Securities (OABS) The following table details the credit quality rating and fair value of our OABS, along with a comparison of the fair value at December 31, 2022, to our original investment value (adjusted for returns of principal, amortization, and write-downs):

Other Asset-Backed Securities (at December 31, 2022)								
(\$ in millions) Average Rating	Automobile	Collateralized Loan Obligations	Student Loan	Whole Business Securitizations	Equipment	Other	Total	% of Total
AAA	\$1,007.6	\$1,115.2	\$ 41.3	\$ 0	\$535.0	\$185.6	\$2,884.7	63.2 %
AA	96.5	575.0	5.2	0	79.7	21.6	778.0	17.0
A	15.8	0	6.9	0	110.2	135.1	268.0	5.9
BBB	6.7	0	0	563.4	0	34.2	604.3	13.2
Non-investment grade/ non-rated:								
BB	0	0	0	0	0	29.6	29.6	0.7
Total fair value	\$1,126.6	\$1,690.2	\$ 53.4	\$563.4	\$724.9	\$406.1	\$4,564.6	100.0 %
Increase (decrease) in value	(1.5)%	(5.0)%	(10.5)%	(13.7)%	(1.9)%	(10.2)%	(5.4)%	

As valuations across other asset classes were more attractive, we maintained our allocation to the OABS portfolio fairly consistently over the last 12 months.

MUNICIPAL SECURITIES

The following table details the credit quality rating of our municipal securities at December 31, 2022, without the benefit of credit or bond insurance:

Municipal Securities (at December 31, 2022)			
(millions) Average Rating	General Obligations	Revenue Bonds	Total
AAA	\$ 588.0	\$ 238.7	\$ 826.7
AA	432.0	678.6	1,110.6
A	0	37.5	37.5
BBB	0	2.1	2.1
Non-rated	0	0.2	0.2
Total	\$ 1,020.0	\$ 957.1	\$ 1,977.1

Included in revenue bonds were \$480.2 million of single-family housing revenue bonds issued by state housing finance agencies, of which \$314.1 million were

supported by individual mortgages held by the state housing finance agencies and \$166.1 million were supported by mortgage-backed securities.

Of the programs supported by mortgage-backed securities, 84% were collateralized by Ginnie Mae mortgages, which are fully guaranteed by the U.S. government; the remaining 16% were collateralized by Fannie Mae and Freddie Mac mortgages. Of the programs supported by individual mortgages held by the state housing finance agencies, the overall credit quality rating was AA+. Most of these mortgages were supported by FHA, VA, or private mortgage insurance providers.

Credit spreads of tax-exempt municipal bonds tightened during 2022, while spreads of taxable municipal bonds widened. Our allocation to this sector declined modestly during the year.

CORPORATE SECURITIES

The following table details the credit quality rating of our corporate securities at December 31, 2022:

Corporate Securities (at December 31, 2022)									
(millions) Average Rating	Consumer	Industrial	Communication	Financial Services	Technology	Basic Materials	Energy	Total	
AA	\$ 22.4	\$ 0	\$ 0	\$ 329.0	\$ 0	\$ 0	\$ 41.4	\$ 392.8	
A	386.6	281.7	158.4	1,066.5	28.5	113.4	183.7	2,218.8	
BBB	2,178.0	1,228.8	114.7	935.3	472.9	12.6	901.4	5,843.7	
Non-investment grade/ non-rated:									
BB	204.7	107.2	194.5	91.5	33.2	0	31.0	662.1	
B	214.7	7.1	0	0	0	24.4	0	246.2	
CCC and lower	49.1	0	0	0	0	0	0	49.1	
Total fair value	\$ 3,055.5	\$ 1,624.8	\$ 467.6	\$ 2,422.3	\$ 534.6	\$ 150.4	\$ 1,157.5	\$ 9,412.7	

The size of our corporate debt portfolio decreased to \$9.4 billion at December 31, 2022 from \$10.7 billion at December 31, 2021. This decrease was due to securities that matured and a decline in the portfolio valuation due to the increase in interest rates.

We slightly shortened the maturity profile of the corporate debt portfolio during 2022. The duration of the corporate portfolio was 2.8 years at December 31,

2022, compared to 2.9 years at December 31, 2021. Overall, our corporate securities, as a percentage of the fixed-income portfolio, decreased during 2022. At December 31, 2022, our corporate debt securities made up approximately 19% of the fixed-income portfolio, compared to approximately 23% at December 31, 2021. This decrease reflects our more conservative stance in the economic environment prevailing during the year.

PREFERRED STOCKS – REDEEMABLE AND NONREDEEMABLE

The table below shows the exposure break-down for our preferred stocks by sector and rating at year end:

Preferred Stocks (at December 31, 2022)							
(millions) Average Rating	Financial services				Industrials	Utilities	Total
	U.S. Banks	Foreign Banks	Insurance	Other Financial			
BBB	\$ 742.9	\$ 34.4	\$ 95.2	\$ 27.9	\$ 134.7	\$ 42.7	\$ 1,077.8
Non-investment grade/ non-rated:							
BB	135.4	38.1	0	0	24.8	37.6	235.9
Non-rated	0	0	43.8	23.6	16.4	0	83.8
Total fair value	\$ 878.3	\$ 72.5	\$ 139.0	\$ 51.5	\$ 175.9	\$ 80.3	\$ 1,397.5

The majority of our preferred securities have fixed-rate dividends until a call date and then, if not called, generally convert to floating-rate dividends. The interest rate duration of our preferred securities is calculated to reflect the call, floor, and floating-rate features. Although a preferred security will remain outstanding if not called, its interest rate duration will reflect the variable nature of the dividend. Our non-investment-grade preferred stocks were with issuers that maintain investment-grade senior debt ratings.

We also face the risk that dividend payments on our preferred stock holdings could be deferred for one or

more periods or skipped entirely. As of December 31, 2022, all of our preferred securities continued to pay their dividends in full and on time. Approximately 80% of our preferred stock securities pay dividends that have tax preferential characteristics, while the balance pay dividends that are fully taxable.

During 2022, our preferred portfolio declined to \$1.4 billion at December 31, 2022, from \$1.8 billion at December 31, 2021. This decline is primarily due to a decrease in the market valuation of preferred securities as credit spreads widened and interest rates increased.

Common Equities

Common equities, as reported on the consolidated balance sheets at December 31, were comprised of the following:

(\$ in millions)	2022		2021	
Common stocks	\$2,801.7	99.3 %	\$5,041.6	99.7 %
Other risk investments ¹	19.8	0.7	16.9	0.3
Total common equities	\$2,821.5	100.0 %	\$5,058.5	100.0 %

¹The other risk investments consist of limited partnership interests.

The majority of our common stock portfolio consists of individual holdings selected based on their contribution to the correlation with the Russell 1000 Index. We held 789 out of 1,010, or 78%, of the common stocks comprising the index at December 31, 2022, which made up 95% of the total market capitalization of the index. At December 31, 2022 and 2021, the year-to-date total return of the indexed portfolio, based

on GAAP income, was within our targeted tracking error, which is +/- 50 basis points.

During 2022, we sold common equity securities, which were in a realized gain position, as part of our plan to incrementally reduce risk in the portfolio in response to the likelihood of a more difficult economic environment over the near term.

The following is a summary of our indexed common stock portfolio holdings by sector compared to the Russell 1000 Index composition:

Sector	Equity Portfolio Allocation at December 31, 2022	Russell 1000 Allocation at December 31, 2022	Russell 1000 Sector Return in 2022
Consumer discretionary	13.5 %	14.1 %	(34.8) %
Consumer staples	5.9	6.3	3.5
Financial services	12.0	11.3	(11.0)
Health care	15.1	14.4	(4.0)
Materials and processing	2.0	2.2	(8.8)
Other energy	5.1	5.2	61.5
Producer durable	13.7	13.3	(13.2)
Real estate	2.8	3.1	(25.4)
Technology	24.0	24.1	(34.6)
Telecommunications	2.9	2.7	(21.2)
Utilities	3.0	3.3	0.6
Total common stocks	100.0 %	100.0 %	(19.1) %

For 2022, our common stock portfolio FTE total return was (19.4)%, compared to (19.1)% for the Russell 1000 Index, due to common stocks we hold outside of the index.

V. CRITICAL ACCOUNTING POLICIES

Progressive is required to make certain estimates and assumptions when preparing its financial statements and accompanying notes in conformity with GAAP. Actual results could differ from those estimates in a variety of areas. The two areas we view as most critical with respect to the application of estimates and assumptions is the establishment of our loss reserves and the methods for measuring expected credit losses on financial instruments.

A. Loss and LAE Reserves

Loss and loss adjustment expense (LAE) reserves represent our best estimate of our ultimate liability for losses and LAE relating to events that occurred prior to the end of any given accounting period but have not yet been paid. At December 31, 2022, we had \$24.8 billion of net loss and LAE reserves (net of reinsurance recoverables on unpaid losses), which included \$19.7 billion of case reserves and \$5.1 billion of incurred but not recorded (IBNR) reserves. Personal auto liability and commercial auto liability reserves represent approximately 90% of our total carried net reserves. For this reason, the following discussion focuses on our vehicle businesses.

We do not review our loss reserves on a macro level and, therefore, do not derive a companywide range of reserves to compare to a standard deviation. Instead, we review a large majority of our reserves by product/

state subset combinations on a quarterly time frame, with the remaining reserves generally reviewed on a semiannual basis. A change in our scheduled reviews of a particular subset of the business depends on the size of the subset or emerging issues relating to the product or state. By reviewing the reserves at such a detailed level, we have the ability to identify and measure variances in the trends by state, product, and line coverage that otherwise would not be seen on a consolidated basis. We believe our comprehensive process of reviewing at a subset level provides us more meaningful estimates of our aggregate loss reserves.

In analyzing the ultimate accident year loss and LAE experience, our actuarial staff reviews in detail, at the subset level, frequency (number of losses per earned car year), severity (dollars of loss per each claim), and average premium (dollars of premium per earned car year), as well as the frequency and severity of our LAE costs. The loss ratio, a primary measure of loss experience, is equal to the product of frequency times severity divided by the average premium. The average premium for personal and commercial auto businesses is not estimated. The actual frequency experienced will vary depending on the change in the mix in class of drivers we insure, but the IBNR frequency projections for these lines of business are generally stable in the short term, because a large majority of the parties involved in an accident report their claims within a short time period after the occurrence. The severity

experienced by Progressive is much more difficult to estimate, especially for injury claims, since severity is affected by changes in underlying costs, such as medical costs, jury verdicts, judicial interpretations, and regulatory changes. In addition, severity will vary relative to the change in our mix of business by limit.

Assumptions regarding needed reserve levels made by the actuarial staff take into consideration influences on available historical data that reduce the predictiveness of our projected future loss costs. Internal considerations that are process-related, which generally result from changes in our claims organization's activities, include claim closure rates, the number of claims that are closed without payment, and the level of the claims representatives' estimates of the needed case reserve for each claim. These changes and their effect on the historical data are studied at the state level versus on a larger, less indicative, countrywide basis.

External items considered include the litigation atmosphere, changes in medical costs, and the availability of services to resolve claims. These also are better understood at the state level versus at a more macro, countrywide level. These items, as well as additional considerations such as the type of accident and change in reporting patterns, are closely monitored.

At December 31, 2022, we had \$30.4 billion of carried gross reserves and \$24.8 billion of net reserves. Our net reserve balance assumes that the loss and LAE severity for accident year 2022 over accident year 2021 would be 9.1% higher for personal auto liability and 8.9% higher for commercial auto liability. As discussed above, the severity estimates are influenced by many variables that are difficult to precisely quantify and which influence the final amount of claims settlements. That, coupled with changes in internal claims practices, the legal environment, and state regulatory requirements, requires significant judgment in the estimate of the needed reserves to be carried.

The following table highlights what the effect would be to our carried loss and LAE reserves, on a net basis, as of December 31, 2022, if during 2023 we were to experience the indicated change in our estimate of severity for the 2022 accident year (i.e., claims that occurred in 2022):

(millions)	Estimated Changes in Severity for Accident Year 2022				
	-4%	-2%	As Reported	+2%	+4%
Personal auto liability	\$ 14,368.4	\$ 14,695.0	\$ 15,021.6	\$ 15,348.2	\$ 15,674.8
Commercial auto liability	7,144.1	7,239.7	7,335.3	7,430.9	7,526.5
Other ¹	2,443.2	2,443.2	2,443.2	2,443.2	2,443.2
Total	\$ 23,955.7	\$ 24,377.9	\$ 24,800.1	\$ 25,222.3	\$ 25,644.5

¹Includes reserves for personal and commercial auto physical damage claims and our non-auto lines of business; no change in estimates is presented due to the immaterial level of these reserves.

Note: Every percentage point change in our estimate of severity for the 2022 accident year would affect our personal auto liability reserves by \$163.3 million and our commercial auto reserves by \$47.8 million.

Our 2022 year-end loss and LAE reserve balance also includes claims from prior years. Claims that occurred in 2022, 2021, and 2020, in the aggregate, accounted for approximately 92% of our reserve balance. If during 2023 we were to experience the indicated change in our estimate of severity for the total of the prior three accident years (i.e., 2022, 2021, and 2020), the effect to our year-end 2022 reserve balances would be as follows:

(millions)	Estimated Changes in Severity for Accident Years 2022, 2021, and 2020				
	-4%	-2%	As Reported	+2%	+4%
Personal auto liability	\$ 13,259.2	\$ 14,140.4	\$ 15,021.6	\$ 15,902.8	\$ 16,784.0
Commercial auto liability	6,889.7	7,112.5	7,335.3	7,558.1	7,780.9
Other ¹	2,443.2	2,443.2	2,443.2	2,443.2	2,443.2
Total	\$ 22,592.1	\$ 23,696.1	\$ 24,800.1	\$ 25,904.1	\$ 27,008.1

¹Includes reserves for personal and commercial auto physical damage claims and our non-auto lines of business; no change in estimates is presented due to the immaterial level of these reserves.

Note: Every percentage point change in our estimate of severity for the 2022, 2021, and 2020 accident years would affect our personal auto liability reserves by \$440.6 million and our commercial auto reserves by \$111.4 million.

Our best estimate of the appropriate amount for our reserves as of year-end 2022 is included in our financial statements for the year. Our goal is to ensure that total reserves are adequate to cover all loss costs, while sustaining minimal variation from the time reserves are initially established until losses are fully developed. At the point in time when reserves are set, we have no way of knowing whether our reserve estimates will prove to be high or low, or whether one of the alternative scenarios discussed above is reasonably likely to occur. The above tables show the potential favorable or unfavorable development we will realize if our estimates miss by 2% or 4%.

B. Credit Losses on Financial Instruments

An allowance for credit losses is established when the ultimate realization of a financial instrument is determined to be impaired due to a credit event. Measurement of expected credit losses is based on judgment when considering relevant information about past events, including historical loss experience, current conditions, and forecasts of the collectability of the reported financial instrument. The allowance for expected credit losses is measured and recorded at the point ultimate recoverability of the financial instrument is expected to be impaired, including upon the initial recognition of the financial instrument, where warranted. We evaluate financial instrument credit losses related to our available-for-sale securities, reinsurance recoverables, and premiums receivables. Due to the complex nature in evaluating credit loss for our available-for-sale financial instruments, we view the estimates and assumptions used in our analysis as critical.

We routinely monitor our fixed-maturity portfolio for pricing changes that might indicate potential losses exist and perform detailed reviews of securities with unrealized losses to determine if an allowance for credit losses, a change to an existing allowance (recovery or additional loss), or a write-off for an amount deemed uncollectible needs to be recorded. In such cases, changes in fair value are evaluated to determine the extent to which such changes are attributable to:

(i) credit related losses, which are specific to the issuer (e.g., financial conditions, business prospects) where the present value of cash flows expected to be collected is lower than the amortized cost basis of the security or
(ii) market related factors, such as interest rates or credit spreads.

If we do not expect to hold the security to allow for a potential recovery of those expected losses, we will write down the security to fair value and recognize a realized loss in the comprehensive income statement.

For securities whose losses are credit related losses, and for which we do not intend to sell in the near term, we will review the non-market components to determine if a potential future credit loss exists, based on available financial data related to the fixed-maturity securities. If we project that a credit loss exists, we will record an allowance for the credit loss and recognize a realized loss in the comprehensive income statement. For all securities for which an allowance for credit losses has been established, we will re-evaluate the securities, at least quarterly, to determine if further deterioration has occurred or if we project a subsequent recovery in the expected losses, which would require an adjustment to the allowance for credit losses. To the extent we determine that we will likely sell a security prior to recovery of the credit loss, or if the loss is deemed uncollectible, we will write down the security to its fair value and reverse any credit loss allowance that may have been previously recorded.

For an unrealized loss that is determined to be related to current market conditions, we will not record an allowance for credit losses or a write down to fair value. We will continue to monitor these securities to determine if underlying factors other than the current market conditions are contributing to the loss in value.

Based on an analysis of our fixed-maturity portfolio, we have determined our allowance for credit losses related to available-for-sale securities was not material to our financial condition or results of operations for the periods ending December 31, 2022 and 2021.

Safe Harbor Statement Under the Private Securities Litigation Reform Act of 1995: Investors are cautioned that certain statements in this report not based upon historical fact are forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. These statements often use words such as “estimate,” “expect,” “intend,” “plan,” “believe,” “goal,” “target,” “anticipate,” “will,” “could,” “likely,” “may,” “should,” and other words and terms of similar meaning, or are tied to future periods, in connection with a discussion of future operating or financial performance. Forward-looking statements are not guarantees of future performance, are based on current expectations and projections about future events, and are subject to certain risks, assumptions and uncertainties that could cause actual events and results to differ materially from those discussed herein. These risks and uncertainties include, without limitation, uncertainties related to:

- our ability to underwrite and price risks accurately and to charge adequate rates to policyholders;
- our ability to establish accurate loss reserves;
- the impact of severe weather, other catastrophe events and climate change;
- the effectiveness of our reinsurance programs and the continued availability of reinsurance and performance by reinsurers;
- the secure and uninterrupted operation of the systems, facilities and business functions and the operation of various third-party systems that are critical to our business;
- the impacts of a security breach or other attack involving our technology systems or the systems of one or more of our vendors;
- our ability to maintain a recognized and trusted brand and reputation;
- whether we innovate effectively and respond to our competitors’ initiatives;
- whether we effectively manage complexity as we develop and deliver products and customer experiences;
- our ability to attract, develop and retain talent and maintain appropriate staffing levels;
- the impact of misconduct or fraudulent acts by employees, agents, and third parties to our business and/or exposure to regulatory assessments;
- the highly competitive nature of property-casualty insurance markets;
- whether we adjust claims accurately;
- compliance with complex and changing laws and regulations;
- litigation challenging our business practices, and those of our competitors and other companies;
- the success of our business strategy and efforts to acquire or develop new products or enter into new areas of business and navigate related risks;
- how intellectual property rights affect our competitiveness and our business operations;
- the performance of our fixed-income and equity investment portfolios;
- the impact on our investment returns and strategies from regulations and societal pressures relating to environmental, social, governance and other public policy matters;
- the elimination of the London Interbank Offered Rate;
- our continued ability to access our cash accounts and/or convert investments into cash on favorable terms;
- the impact if one or more parties with which we enter into significant contracts or transact business fail to perform;
- legal restrictions on our insurance subsidiaries’ ability to pay dividends to The Progressive Corporation;
- limitations on our ability to pay dividends on our common shares under the terms of our outstanding preferred shares;
- our ability to obtain capital when necessary to support our business and potential growth;
- evaluations by credit rating and other rating agencies;
- the variable nature of our common share dividend policy;
- whether our investments in certain tax-advantaged projects generate the anticipated returns;
- the impact from not managing to short-term earnings expectations in light of our goal to maximize the long-term value of the enterprise;
- the impacts of epidemics, pandemics or other widespread health risks; and
- other matters described from time to time in our releases and publications, and in our periodic reports and other documents filed with the United States Securities and Exchange Commission, including, without limitation, the Risk Factors section of our Annual Report on Form 10-K for the year ending December 31, 2022.

Any forward-looking statements are made only as of the date presented. Except as required by applicable law, we undertake no obligation to update any forward-looking statements, whether as a result of new information, future events or developments or otherwise.

In addition, investors should be aware that accounting principles generally accepted in the United States prescribe when a company may reserve for particular risks, including litigation exposures. Accordingly, results for a given reporting period could be significantly affected if and when we establish reserves for one or more contingencies. Also, our regular reserve reviews may result in adjustments of varying magnitude as additional information regarding claims activity becomes known. Reported results, therefore, may be volatile in certain accounting periods.

Supplemental Information

The Progressive Corporation and Subsidiaries

Ten Year Summary – Selected Financial Information

(unaudited)

(millions – except ratios, policies in force, per share amounts, and number of people employed)

	2022	2021	2020	2019	2018
Net premiums written	\$ 51,081.1	\$ 46,405.2	\$ 40,568.7	\$ 37,577.9	\$ 32,609.9
Growth	10 %	14 %	8 %	15 %	20 %
Net premiums earned	\$ 49,241.2	\$ 44,368.7	\$ 39,261.6	\$ 36,192.4	\$ 30,933.3
Growth	11 %	13 %	8 %	17 %	20 %
Policies in force (thousands):					
Personal Lines	23,455.4	22,735.7	21,413.5	19,408.6	17,759.0
Growth	3 %	6 %	10 %	9 %	10 %
Commercial Lines	1,046.4	971.2	822.0	751.4	696.9
Growth	8 %	18 %	9 %	8 %	8 %
Property ¹	2,851.3	2,776.2	2,484.4	2,202.1	1,936.5
Growth ¹	3 %	12 %	13 %	14 %	32 %
Total revenues	\$ 49,610.7	\$ 47,702.0	\$ 42,658.1	\$ 39,022.3	\$ 31,979.0
Underwriting margins: ²					
Personal Lines	4.0 %	4.6 %	13.2 %	9.5 %	9.7 %
Commercial Lines	8.9 %	11.1 %	13.0 %	10.4 %	13.3 %
Property ¹	(10.5)%	(15.3)%	(7.1)%	(1.7)%	(6.9)%
Total underwriting operations	4.2 %	4.7 %	12.3 %	9.1 %	9.4 %
Net income attributable to Progressive	\$ 721.5	\$ 3,350.9	\$ 5,704.6	\$ 3,970.3	\$ 2,615.3
Per common share - diluted	\$ 1.18	\$ 5.66	\$ 9.66	\$ 6.72	\$ 4.42
Average equivalent common shares - diluted	587.1	587.1	587.6	587.2	586.7
Comprehensive income (loss) attributable to Progressive	\$ (2,121.2)	\$ 2,459.9	\$ 6,291.9	\$ 4,432.9	\$ 2,520.1
Total assets	\$ 75,465.0	\$ 71,132.3	\$ 64,098.3	\$ 54,895.3	\$ 46,575.0
Debt outstanding	\$ 6,388.3	\$ 4,898.8	\$ 5,396.1	\$ 4,407.1	\$ 4,404.9
Redeemable noncontrolling interest	\$ —	\$ —	\$ —	\$ 225.6	\$ 214.5
Total shareholders' equity	\$ 15,891.0	\$ 18,231.6	\$ 17,038.6	\$ 13,673.2	\$ 10,821.8
Statutory surplus	\$ 17,879.9	\$ 16,423.7	\$ 15,194.6	\$ 13,671.1	\$ 11,571.8
Common shares outstanding	584.9	584.4	585.2	584.6	583.2
Common share close price (at December 31)	\$ 129.71	\$ 102.65	\$ 98.88	\$ 72.39	\$ 60.33
Rate of return ³	26.8 %	10.8 %	41.4 %	25.1 %	9.3 %
Market capitalization	\$ 75,867.4	\$ 59,988.7	\$ 57,864.6	\$ 42,319.2	\$ 35,184.5
Book value per common share	\$ 26.32	\$ 30.35	\$ 28.27	\$ 22.54	\$ 17.71
Ratios:					
Return on average common shareholders' equity:					
Net income attributable to Progressive	4.4 %	18.6 %	35.6 %	31.3 %	24.7 %
Comprehensive income (loss) attributable to Progressive	(13.5)%	13.6 %	39.3 %	35.0 %	23.8 %
Debt to total capital ⁴	28.7 %	21.2 %	24.1 %	24.4 %	28.9 %
Price to earnings	109.9	18.1	10.2	10.8	13.6
Price to book	4.9	3.4	3.5	3.2	3.4
Net premiums written to statutory surplus	2.9	2.8	2.7	2.7	2.8
Statutory combined ratio	95.3	94.8	87.9	90.5	89.9
Dividends declared per common share ⁵	\$ 0.40	\$ 1.90	\$ 4.90	\$ 2.65	\$ 2.5140
Number of people employed	55,063	49,077	43,326	41,571	37,346

¹ We began reporting our Property business as a segment on April 1, 2015, therefore, year-over-year growth for 2015 is not applicable (NA).

² Underwriting margins are calculated as pretax underwriting profit (loss), as defined in *Note 10 – Segment Information*, as a percentage of net premiums earned.

³ Represents annual rate of return, assuming dividend reinvestment.

(millions – except ratios, policies in force, per share amounts, and number of people employed)

	2017	2016	2015	2014	2013
Net premiums written	\$ 27,132.1	\$ 23,353.5	\$ 20,564.0	\$ 18,654.6	\$ 17,339.7
Growth	16 %	14 %	10 %	8 %	6 %
Net premiums earned	\$ 25,729.9	\$ 22,474.0	\$ 19,899.1	\$ 18,398.5	\$ 17,103.4
Growth	14 %	13 %	8 %	8 %	7 %
Policies in force (thousands):					
Personal Lines	16,075.5	14,656.8	13,764.7	13,261.9	13,056.4
Growth	10 %	6 %	4 %	2 %	3 %
Commercial Lines	646.8	607.9	555.8	514.7	514.6
Growth	6 %	9 %	8 %	0 %	(1) %
Property ¹	1,461.7	1,201.9	1,076.5	—	—
Growth ¹	22 %	12 %	NA	—	—
Total revenues	\$ 26,839.0	\$ 23,441.4	\$ 20,853.8	\$ 19,391.4	\$ 18,170.9
Underwriting margins: ²					
Personal Lines	6.9 %	4.7 %	6.5 %	6.7 %	6.6 %
Commercial Lines	7.7 %	6.4 %	15.9 %	17.2 %	6.5 %
Property ¹	(5.1) %	3.8 %	10.1 %	—	—
Total underwriting operations	6.6 %	4.9 %	7.5 %	7.7 %	6.5 %
Net income attributable to Progressive	\$ 1,592.2	\$ 1,031.0	\$ 1,267.6	\$ 1,281.0	\$ 1,165.4
Per common share - diluted	\$ 2.72	\$ 1.76	\$ 2.15	\$ 2.15	\$ 1.93
Average equivalent common shares - diluted	585.7	585.0	589.2	594.8	603.6
Comprehensive income (loss) attributable to Progressive	\$ 1,941.0	\$ 1,164.0	\$ 1,044.9	\$ 1,352.4	\$ 1,246.1
Total assets	\$ 38,701.2	\$ 33,427.5	\$ 29,819.3	\$ 25,787.6	\$ 24,408.2
Debt outstanding	\$ 3,306.3	\$ 3,148.2	\$ 2,707.9	\$ 2,164.7	\$ 1,860.9
Redeemable noncontrolling interest	\$ 503.7	\$ 483.7	\$ 464.9	\$ —	\$ —
Total shareholders' equity	\$ 9,284.8	\$ 7,957.1	\$ 7,289.4	\$ 6,928.6	\$ 6,189.5
Statutory surplus	\$ 9,664.4	\$ 8,560.0	\$ 7,575.5	\$ 6,442.8	\$ 5,991.0
Common shares outstanding	581.7	579.9	583.6	587.8	595.8
Common share close price (at December 31)	\$ 56.32	\$ 35.50	\$ 31.80	\$ 26.99	\$ 27.27
Rate of return ³	61.6 %	14.7 %	20.9 %	5.3 %	30.9 %
Market capitalization	\$ 32,761.3	\$ 20,586.5	\$ 18,558.5	\$ 15,864.7	\$ 16,247.5
Book value per common share	\$ 15.96	\$ 13.72	\$ 12.49	\$ 11.79	\$ 10.39
Ratios:					
Return on average common shareholders' equity:					
Net income attributable to Progressive	17.8 %	13.2 %	17.2 %	19.1 %	17.7 %
Comprehensive income (loss) attributable to Progressive	21.7 %	14.9 %	14.2 %	20.1 %	19.0 %
Debt to total capital ⁴	26.3 %	28.3 %	27.1 %	23.8 %	23.1 %
Price to earnings	20.7	20.2	14.8	12.6	14.1
Price to book	3.5	2.6	2.5	2.3	2.6
Net premiums written to statutory surplus	2.8	2.7	2.7	2.9	2.9
Statutory combined ratio	92.8	94.8	91.8	92.1	93.4
Dividends declared per common share ⁵	\$ 1.1247	\$ 0.6808	\$ 0.8882	\$ 0.6862	\$ 1.4929
Number of people employed	33,656	31,721	28,580	26,501	26,145

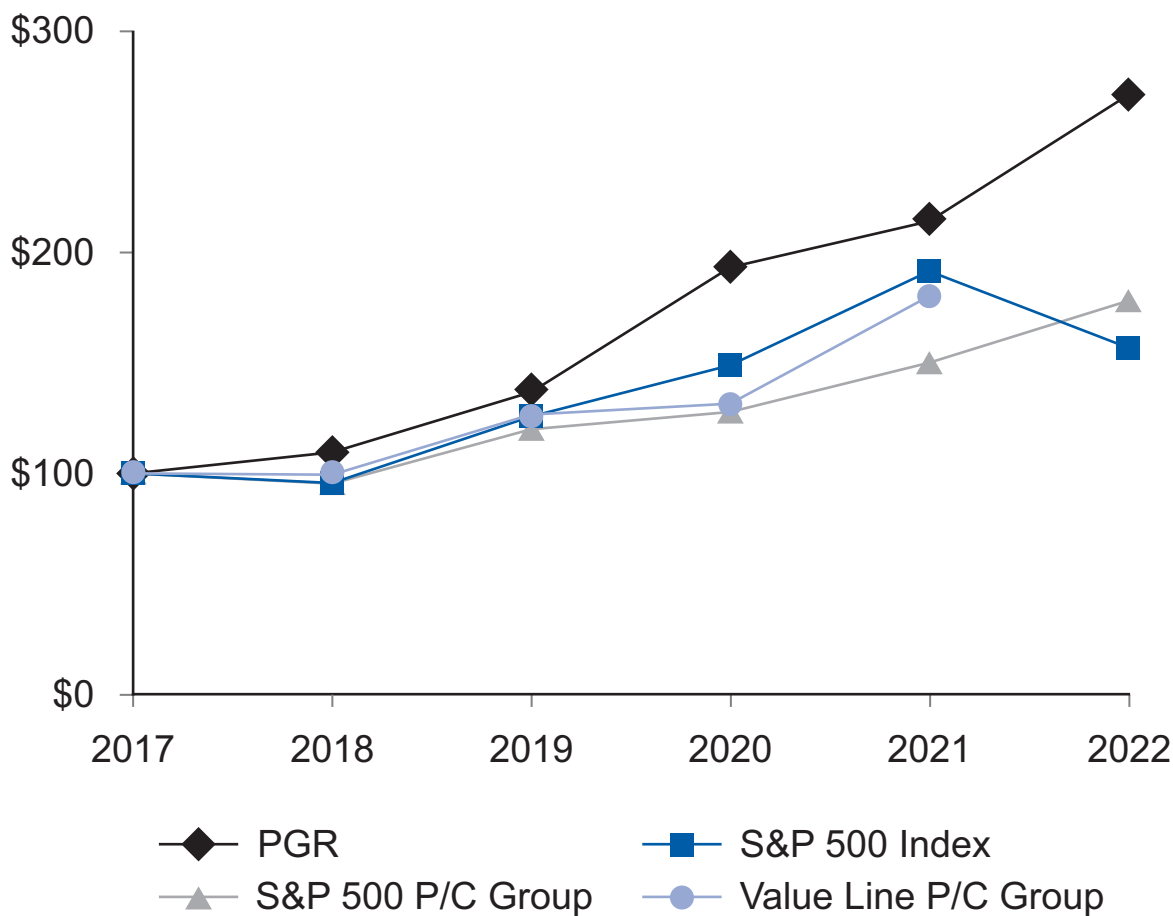
⁴Ratio reflects debt as a percent of debt plus shareholders' equity; redeemable noncontrolling interest is not part of this calculation.

⁵Represents dividends pursuant to the dividend policy in place for the applicable year, plus special cash dividends of \$1.00 per common share in 2013 (see Note 14 – Dividends for further discussion).

The Progressive Corporation and Subsidiaries
Performance Graph
(unaudited)

The following performance graph compares the performance of Progressive’s Common Shares (PGR) to the Standard & Poor’s 500 Stock Index (S&P 500 Index), the Standard & Poor’s 500 Property & Casualty Insurance Index (S&P 500 P/C Group), and the Value Line Property/Casualty Industry Group (Value Line P/C Group) for the last five years. In 2022, we changed our peer group to the S&P 500 P/C Group. We are disclosing our prior peer group, Value Line P/C Group, for comparative purposes; however, we are unable to disclose all five years due to the unavailability of that peer group data for the current year.

Cumulative Five-Year Total Return*
PGR, S&P 500 Index, S&P 500 P/C Group, Value Line P/C Group (Performance Results through 12/31/22)



For the years ended December 31,	(Assumes \$100 was invested at the close of trading on December 31, 2017)				
	2018	2019	2020	2021	2022
PGR	\$ 109.32	\$ 136.71	\$ 193.28	\$ 214.19	\$ 271.60
S&P 500 Index	95.60	125.71	148.76	191.43	156.72
S&P 500 P/C Group	95.31	119.97	127.56	149.90	178.18
Value Line P/C Group	99.34	126.46	131.36	180.11	NA

NA = Not available

*Assumes reinvestment of dividends

The Progressive Corporation and Subsidiaries
Quantitative Market Risk Disclosures
(unaudited)

Quantitative market risk disclosures are only presented for market risk categories when risk is considered material. Materiality is determined based on the fair value of the financial instruments at December 31, 2022, and the potential for near-term losses from reasonably possible near-term changes in market rates or prices. The discussion below relates to instruments

entered into for purposes other than trading; we had no trading financial instruments at December 31, 2022 and 2021. See *Management's Discussion and Analysis of Financial Condition and Results of Operations* for our discussion of the qualitative information about market risk.

Financial instruments subject to interest rate risk were:

(millions)	Fair Value				
	-200 bps Change	-100 bps Change	Actual	+100 bps Change	+200 bps Change
U.S. government obligations	\$ 27,145.5	\$ 26,131.3	\$ 25,167.4	\$ 24,256.3	\$ 23,395.6
State and local government obligations	2,090.8	2,036.5	1,977.1	1,912.9	1,843.7
Foreign government obligations	16.6	16.0	15.5	14.9	14.4
Asset-backed securities	10,265.4	10,075.7	9,894.9	9,722.1	9,558.7
Corporate securities	9,940.7	9,676.2	9,412.7	9,153.8	8,906.3
Preferred stocks	1,477.9	1,436.9	1,397.5	1,359.6	1,323.4
Short-term investments	2,861.7	2,861.7	2,861.7	2,861.7	2,861.7
Total at December 31, 2022	\$ 53,798.6	\$ 52,234.3	\$ 50,726.8	\$ 49,281.3	\$ 47,903.8
Total at December 31, 2021	\$ 48,771.6	\$ 47,863.2	\$ 46,455.6	\$ 45,027.6	\$ 43,598.8

Exposure to risk is represented in terms of changes in fair value due to selected hypothetical movements in market rates. Bonds and preferred stocks are individually priced to yield to the worst case scenario, which includes any issuer-specific features, such as a

call option. Asset-backed securities and state and local government housing securities are priced assuming deal specific prepayment scenarios, considering the deal structure, prepayment penalties, yield maintenance agreements, and the underlying collateral.

Financial instruments subject to equity market risk were:

(millions)	Fair Value		
	-10%	Actual	+10%
Common equities at December 31, 2022	\$ 2,541.7	\$ 2,821.5	\$ 3,101.3
Common equities at December 31, 2021	\$ 4,532.3	\$ 5,058.5	\$ 5,584.7

The model represents the estimated value of our common equity portfolio given a +/-10% change in the market, based on the common stock portfolio's weighted average beta of 1.0 for 2022 and 1.04 for 2021. The beta is derived from recent historical experience, using the S&P 500 as the market surrogate. The historical relationship of the common stock

portfolio's beta to the S&P 500 is not necessarily indicative of future correlation, as individual company or industry factors may affect price movements. Betas are not available for all securities. In such cases, the change in fair value reflects a direct +/-10% change; the portion of our securities without betas is 1.4%.

The Progressive Corporation and Subsidiaries
Net Premiums Written by State
(unaudited)

(\$ in millions)	2022		2021		2020		2019		2018	
Florida	\$ 7,144.6	14.0 %	\$ 6,290.7	13.6 %	\$ 5,533.7	13.6 %	\$ 5,233.4	13.9 %	\$ 4,700.9	14.4 %
Texas	6,089.3	11.9	5,343.5	11.5	4,530.5	11.2	4,081.0	10.8	3,388.6	10.4
California	2,867.1	5.6	2,585.1	5.6	2,241.2	5.5	2,208.8	5.9	1,836.0	5.6
Georgia	2,443.8	4.8	2,147.7	4.6	1,860.9	4.6	1,645.3	4.4	1,452.9	4.5
New York	2,056.1	4.0	2,008.6	4.3	1,932.8	4.8	1,843.2	4.9	1,699.0	5.2
Michigan	2,014.9	4.0	1,962.7	4.2	1,797.6	4.4	1,673.5	4.4	1,423.7	4.4
Ohio	1,708.9	3.3	1,563.0	3.4	1,404.2	3.4	1,339.5	3.6	1,194.0	3.7
Pennsylvania	1,670.2	3.3	1,504.8	3.2	1,327.2	3.3	1,268.3	3.4	1,157.4	3.5
New Jersey	1,599.9	3.1	1,417.5	3.1	1,242.0	3.1	1,192.3	3.2	1,088.1	3.3
Louisiana	1,258.9	2.5	1,154.4	2.5	1,039.4	2.6	965.6	2.6	856.5	2.6
All other	22,227.4	43.5	20,427.2	44.0	17,659.2	43.5	16,127.0	42.9	13,812.8	42.4
Total	\$51,081.1	100.0 %	\$46,405.2	100.0 %	\$40,568.7	100.0 %	\$37,577.9	100.0 %	\$32,609.9	100.0 %

Insurance Quotes, Claims Reporting, and Customer Service

	Personal autos, motorcycles, recreational vehicles, homeowners, other property, and renters	Commercial autos/trucks, business property, and general liability
To receive a quote	1-800-PROGRESSIVE (1-800-776-4737) progressive.com	1-888-806-9598 progressivecommercial.com
To report a claim	1-800-PROGRESSIVE (1-800-776-4737) progressive.com	1-800-PROGRESSIVE (1-800-776-4737) progressivecommercial.com
For customer service:		
If you bought your policy directly through Progressive online or by phone	1-800-PROGRESSIVE (1-800-776-4737) progressive.com	1-800-PROGRESSIVE (1-800-776-4737) progressivecommercial.com
If you bought your policy through an independent agent or broker	1-800-925-2886 (1-800-300-3693 in California) progressive.com/agent	1-800-895-2886 progressivecommercial.com
If you bought your policy through an independent agent or broker for the state of California	1-800-300-3693 Driveinsurance.com	1-800-895-2886 progressivecommercial.com
In addition, iPhone® and Android® users can download the Progressive App to start a quote, report a claim, or service a policy.		

Principal Office

The Progressive Corporation
 6300 Wilson Mills Road
 Mayfield Village, Ohio 44143
 440-461-5000
 progressive.com

Annual Meeting The Annual Meeting of Shareholders will take place on Friday, May 12, 2023, at 10:00 a.m., eastern time. This meeting will be held by online webcast only. You will be able to attend and participate in the Annual Meeting via live webcast by visiting virtualshareholdermeeting.com/PGR2023. To participate in the meeting, you must have your 16-digit control number that is shown on your proxy card. You will not be able to attend the Annual Meeting in person.

Online Annual Report and Proxy Statement Our 2022 Annual Report to Shareholders can be found at: progressive.com/annualreport.

Our 2023 Proxy Statement and 2022 Annual Report to Shareholders, in a PDF format, can be found at: progressiveproxy.com.

Shareholder/Investor Relations Progressive does not maintain a mailing list for distribution of shareholders' reports. To view Progressive's publicly filed documents, shareholders can access our website: progressive.com/sec. To view our earnings and other releases, access: progressive.com/financial-releases.

For financial-related information or to request copies of Progressive's publicly filed documents free of charge, write to: The Progressive Corporation, Investor Relations, 6300 Wilson Mills Road, Box W33, Mayfield Village, Ohio 44143, email: investor_relations@progressive.com, or call: 440-395-2222.

For all other company information, call: 440-461-5000 or access our website at: progressive.com/contactus.

Transfer Agent and Registrar *Registered Shareholders:* If you have questions or changes to your account and your Progressive common shares are registered in your name, write to: American Stock Transfer & Trust Company, Attn: Operations Center, 6201 15th Avenue, Brooklyn, NY 11219; phone: 1-866-709-7695; email: help@astfinancial.com; or visit their website at: astfinancial.com.

Beneficial Shareholders: If your Progressive common shares are held in a brokerage or other financial institution account, contact your broker or financial institution directly regarding questions or changes to your account.

Common Shares, Holders, and Dividends The Progressive Corporation's common shares are traded on the New York Stock Exchange (symbol PGR). There were 1,750 shareholders of record on January 31, 2023. Progressive currently has a dividend policy under which the Board expects to declare regular, quarterly common share dividends and, on at least an annual basis, to consider declaring an additional variable common share dividend. The dividend policy can be found at: progressive.com/dividend.

Counsel Baker & Hostetler LLP, Cleveland, Ohio

Corporate Governance Progressive's Corporate Governance Guidelines and Board Committee Charters are available at: progressive.com/governance.

Accounting Complaint Procedure Any employee or other interested party with a complaint or concern regarding accounting, internal accounting controls, or auditing matters relating to Progressive may report such complaint or concern directly to the Chairperson of the Audit Committee, as follows:

Stuart B. Burgdoerfer, Chair of the Audit Committee, auditchair@progressive.com.

Any such complaint or concern also may be reported anonymously over the following toll-free Alertline: 1-800-683-3604 or online at: progressivealertline.com.

Progressive will not retaliate against any individual by reason of his or her having made such a complaint or reported such a concern in good faith. View the complete procedures at: progressive.com/governance.

Contact Non-Management Directors Interested parties have the ability to contact the non-management directors as a group by sending a written communication clearly addressed to the non-management directors to either of the following:

Lawton W. Fitt, Chairperson of the Board, The Progressive Corporation, email: chair@progressive.com; or

Daniel P. Mascaro, Secretary, The Progressive Corporation, 6300 Wilson Mills Road, Mayfield Village, Ohio 44143 or email: secretary@progressive.com.

The recipient will forward communications so received to the non-management directors.

Whistleblower Protections Progressive will not retaliate against any officer or employee of Progressive because of any lawful act done by the officer or employee to provide information or otherwise assist in investigations regarding conduct that the officer or employee reasonably believes to be a violation of federal securities laws or of any rule or regulation of the Securities and Exchange Commission. View the complete Whistleblower Protections at: progressive.com/governance.

Charitable Contributions We contribute to: (i) The Insurance Institute for Highway Safety to further its work in reducing the human trauma and economic costs of auto accidents; (ii) Humble Design, a nonprofit organization we partnered with to furnish homes for families and veterans transitioning from homelessness; and, (iii) The Progressive Insurance Foundation.

To more broadly represent our employees and their communities, The Progressive Insurance Foundation provides funds to national charitable organizations identified by our Employee Resource Groups and to eligible 501(c)(3) charitable organizations chosen by each participating employee's recommendation, without requiring the employee to contribute. Over the last five years, the funds provided by The Progressive Insurance Foundation related to employee recommended contributions and, prior to 2022, an employee matching program averaged approximately \$5 million per year.

Social Responsibility and Sustainability Progressive uses an online format to communicate our social responsibility efforts, and we see sustainability as part of the value we bring to our shareholders, customers, employees, agents, and communities. Our social responsibility and sustainability reports can be found at: progressive.com/socialresponsibility and progressive.com/sustainability, respectively.

Directors

Philip Bleser^{1,5,7}

Retired Chairman of Global Corporate Banking, JPMorgan Chase & Co. (financial services)

Stuart B. Burgdoerfer^{1,6,7}

Retired Executive Vice President and Chief Financial Officer, L Brands, Inc. (retailing)

Pamela J. Craig^{3,6,7}

Retired Chief Financial Officer, Accenture PLC (global management consulting)

Charles A. Davis^{4,7}

Chief Executive Officer, Stone Point Capital LLC (private equity investing)

Roger N. Farah^{2,3,5,7}

Retired Executive Director, Tory Burch LLC (retailing)

Lawton W. Fitt^{2,4,5,7}

Chairperson of the Board, The Progressive Corporation
Retired Partner, Goldman Sachs Group (financial services)

Susan Patricia Griffith²

President and Chief Executive Officer, The Progressive Corporation

Devin C. Johnson^{6,7}

President and Chief Operating Officer, The SpringHill Company (global consumer and entertainment)

Jeffrey D. Kelly^{1,7}

Retired Chief Operating Officer and Chief Financial Officer, RenaissanceRe Holdings Ltd. (reinsurance services)

Barbara R. Snyder^{3,7}

President, The Association of American Universities (higher education)

Jan E. Tighe^{3,6,7}

United States Navy, Vice Admiral, Retired (military)

Kahina Van Dyke^{4,6,7}

Global Head, Digital Channels and Client Data Analytics, Standard Chartered PLC (international banking)

1 Audit Committee Member

2 Executive Committee Member

3 Compensation Committee Member

4 Investment & Capital Committee Member

5 Nominating & Governance Committee Member

6 Technology Committee Member

7 Independent Director

Corporate Officers

Lawton W. Fitt

Chairperson of the Board
(non-executive)

Susan Patricia Griffith

President
and Chief Executive Officer

John P. Sauerland

Vice President
and Chief Financial Officer

Daniel P. Mascaro

Vice President, Secretary,
and Chief Legal Officer

Patrick S. Brennan

Treasurer

Mariann Wojtkun Marshall

Vice President, Assistant Secretary,
and Chief Accounting Officer

Other Executive Officers

Karen B. Bailo

Commercial Lines President

Jonathan S. Bauer

Chief Investment Officer

Steven A. Broz

Chief Information Officer

Patrick K. Callahan

Personal Lines President

William L. Clawson II

Chief Human Resources Officer

Remi Kent

Chief Marketing Officer

John Murphy

Claims President

Lori Niederst

Customer Relationship Management
President

Andrew J. Quigg

Chief Strategy Officer