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# INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

Board of Trustees Supplemental Retirement Plans of North Carolina Raleigh, North Carolina

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Supplemental Retirement Income Plan of North Carolina (401(k) Plan) and the North Carolina Employee Deferred Compensation Plan (457(b) Plan), collectively referred to as the Supplemental Retirement Plans of North Carolina (the Plans), which comprise the statement of fiduciary net position as of December 31, 2018, and the related statements of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated July 26, 2019.

# **Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the Plans' internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Plans' internal control. Accordingly, we do not express an opinion on the effectiveness of the Plans' internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.



# **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the Plans' financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

# Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the Plans' internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Plans' internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Clifton Larson Allen LLP

CliftonLarsonAllen LLP

Baltimore, Maryland July 26, 2019

# **Supplemental Retirement Income** Plan of North Carolina and North Carolina Public Employee Deferred Compensation Plan (Fiduciary Funds of the State of North Carolina)

**Financial Report** 

December 31, 2018

# Supplemental Retirement Income Plan of North Carolina and North Carolina Public Employee Deferred Compensation Plan (together "Supplemental Retirement Plans of North Carolina")

December 31, 2018

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# **INDEPENDENT AUDITORS' REPORT**

Board of Trustees Supplemental Retirement Plans of North Carolina Raleigh, North Carolina

# **Report on the Financial Statements**

We have audited the accompanying financial statements of the Supplemental Retirement Income Plan of North Carolina (401(k) Plan) and the North Carolina Public Employee Deferred Compensation Plan (457(b) Plan), collectively referred to as the Supplemental Retirement Plans of North Carolina (the Plans), which comprise the statements of fiduciary net position as of December 31, 2018, and the related statements of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, as listed in the table of contents.

# Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

# Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



# Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Plans as of December 31, 2018, and the respective changes in their fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

# Other Matters

# **Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, as listed in the table of contents, be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

# Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated July 26, 2019, on our consideration of the Plans' internal control over financial reporting and on our tests of their compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Plans' internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Plans' internal control over financial reporting and compliance.

Clifton Larson Allen LLP

CliftonLarsonAllen LLP

Baltimore, Maryland July 26, 2019

The Supplemental Retirement Plans of North Carolina (the "Plans") include the Supplemental Retirement Income Plan of North Carolina (the "401(k) Plan") and the North Carolina Public Employee Deferred Compensation Plan (the "457(b) Plan"). This discussion and analysis of the Plans' financial performance provides an overview of the Plans' financial activities for the year ended December 31, 2018. It is intended to be a narrative supplement to the Plans' financial statements.

# **Using the Financial Report**

This discussion and analysis is an introduction to the Plans' basic financial statements. This financial report for each Plan consists of two financial statements and the notes to the financial statements.

The Statements of Fiduciary Net Position report the Plans' assets, liabilities, and resultant fiduciary net position where Assets - Liabilities = Fiduciary Net Position. The assets are held in a trust for the benefit of participants at the end of the Plans' fiscal year. It can be thought of as a snapshot of the financial position of the Plans at that specific point in time.

The Statements of Changes in Fiduciary Net Position report the Plans' transactions that occurred during the fiscal year where Additions - Deductions = Net Change in Fiduciary Net Position. It is a record of the activity that occurred over the year and explains the changes that have occurred to the prior year's fiduciary net positions on the Statements of Fiduciary Net Position.

The Plans' investments are divided among 11 options – six equity funds, two fixed income funds, an inflation responsive fund, an inflation protected securities fund (referred to collectively herein as the "Pooled Account") and the NC Stable Value Fund. The assets in the Pooled Account are held in separate accounts and collective investment trusts.

The notes to the financial statements are an integral part of the financial statements and include additional information not readily evident in the statements themselves.

# Financial Highlights – 401(k) Plan

The following financial highlights occurred during the 401(k) Plan year ended December 31, 2018:

- The 401(k) Plan's fiduciary net position decreased by approximately \$393 million to approximately \$9.8 billion during the 2018 plan year. This decline in assets was primarily due to the challenging financial markets faced by all investors in 2018. The Asset Class and Economic Discussion section of this Management Discussion and Analysis provides additional detailed information pertaining to the domestic and global economies and markets during 2018.
- The GoalMaker model portfolios offered within the plans were enhanced significantly (GoalMaker 2.0) to better meet the needs of all participants while reducing expenses. This strategic allocation change reduced the amount of participant balances invested in Stable Value while increasing balances in Fixed Income and International Equities.
- The total number of participants in the plan increased approximately 2% ending the year with approximately 255,300 participants on December 31, 2018, versus approximately 250,300 participants the year prior.

(in thousands of dollars)	2018		2018		 2017
Investments					
Pooled account, at fair value	\$	7,769,223	\$ 7,749,918		
Stable value fund		1,714,972	2,133,109		
Receivables					
Notes receivable from participants		299,578	292,525		
Other		6,287	7,188		
Liabilities		(1,227)	 (1,136)		
Fiduciary net position	\$	9,788,833	\$ 10,181,604		

# Condensed Statements of Fiduciary Net Position (401(k) Plan), as of December 31:

In general, the financial markets produced negative returns for the year. The Pooled Account increased slightly by approximately \$19 million or approximately 0.2% due in part to the addition of assets resulting from the implementation of the enhanced GoalMaker service. Assets were added to the NC Fixed Income Fund, NC International Equity Fund, and NC Large Cap Index Fund. There was a decrease in assets from the NC Stable Value Fund, the NC Fixed Income Index Fund, and the NC Large Cap Core Fund.

Calendar year 2018 proved to be very challenging with all the major indices finishing the year down or flat. The S&P 500 Index finished the year down 4.38%. International Equity markets were also down with the MSCI ACWI ex-US Index down 13.80% for the year. The Fixed Income market was flat for the year with the Bloomberg Barclays Aggregate Index returning 0.01%. Both Investment Grade (-2.11%) and High Yield Bonds (-2.08%) were negative for the year. Both fixed income sectors underperformed U.S. Treasuries, which were up 0.86%. Commodities also declined during the year with the Bloomberg Commodity Index returning negative 11.25%.

The assets of the NC Stable Value Fund decreased by 19.6% for the year. The majority of the decrease is due to an allocation move out of stable value into other asset classes as part of the GoalMaker 2.0 model changes.

# Condensed Statements of Changes in Fiduciary Net Position (401(k) Plan), for the year ended December 31:

(in thousands of dollars)	2018		2018		2018		2018		2018		2018		2018			2017
Additions																
Contributions	\$	573,988	\$	536,433												
Net investment income (loss)		(394,270)		1,302,064												
Interest on notes receivable from participants		14,043		12,517												
Miscellaneous income		2,610		2,109												
Total additions		196,371		1,853,123												
Deductions																
Distributions to participants and beneficiaries		577,971		500,736												
Administrative expenses		11,171		10,314												
Total deductions		589,142		511,050												
Net increase (decrease) in fiduciary net position	\$	(392,771)	\$	1,342,073												

Net investment loss, which measures net depreciation in the fair market value of investments net of interest earned on those investments, was approximately \$394 million in 2018 as compared to approximately \$1.3 billion of net investment income in the year prior. The Asset Class and Economic Discussion section of this Management Discussion and Analysis provides additional detailed information pertaining to the domestic and global economies and markets during 2018.

Both employers and participants increased the level of contributions to the plan with the average participant contribution rising to \$180 per pay period. Total contributions to the 401(k) Plan rose approximately 7% or \$38 million over the prior year. Roth contributions (a component of total contributions) picked up significantly, increasing by approximately 17% in 2018 as compared to 2017. Distributions to participants and beneficiaries increased by approximately \$77 million, or approximately 15% with retired and terminated employees seeking distributions. Both lump sum and systematic forms of distributions increased over the prior year.

We are not aware of any other currently known facts, decisions or conditions that are expected to have a significant impact on fiduciary net position or changes in fiduciary net position as of December 31, 2018. However, financial markets reversed course in the first quarter of 2019 with all major indices showing strong performance.

# Financial Highlights – 457(b) Plan

The following financial highlights occurred during the 457(b) Plan year ended on December 31, 2018:

- The 457(b) Plan's fiduciary net position was approximately \$1.4 billion on December 31, 2018, representing a decrease of approximately \$58 million during the 2018 plan year. This decrease was primarily due to a net investment loss of approximately \$48 million. Net investment loss measures net depreciation in the fair value of investments net of interest earned on those investments. Please see the Asset Class and Economic Discussion for additional information.
- As in the 401(k), the GoalMaker asset allocation service offered within the 457(b) was enhanced to reduce expenses while better meeting the needs of participants "to and through" retirement. The changes to GoalMaker are detailed in the "Other Highlights" section of the Management's Discussion and Analysis.
- There were approximately 55,400 and 53,800 participants in the 457(b) Plan at December 31, 2018, and 2017, respectively.

(in thousands of dollars)	2018		 2017
Investments			
Pooled account, at fair value	\$	973,375	\$ 984,331
Stable value fund		356,250	403,287
Receivables			
Notes receivable from participants		21,456	20,865
Other		683	1,026
Liabilities		(255)	(215)
Fiduciary net position	\$	1,351,509	\$ 1,409,294

# Condensed Statements of Fiduciary Net Position (457(b) Plan), as of December 31:

Fiduciary net position decreased 4.1% in 2018. This decrease is due in large part to a net investment loss reflecting negative returns in the financial markets. The Pooled Account declined 1.1% while the assets within the NC Stable Value Fund decreased by 11.7%. The majority of the decline in Stable Value assets is due to an allocation move out of stable value into other asset classes as part of the GoalMaker 2.0 model changes.

All of the major indices finished 2018 down or flat. The S&P 500 Index finished the year down 4.38%. International Equity markets were also down with the MSCI ACWI ex-US Index down 13.80% for the year. The Fixed Income

# Supplemental Retirement Plans of North Carolina Management's Discussion and Analysis (Unaudited) Year Ended December 31, 2018

market was flat for the year with the Bloomberg Barclays Aggregate Index returning 0.01%. Both Investment Grade (-2.11%) and High Yield Bonds (-2.08%) were negative for the year. Both fixed income sectors underperformed U.S. Treasuries, which were up 0.86%. Commodities also declined during the year, with the Bloomberg Commodity Index returning negative 11.25%.

# Condensed Statements of Changes in Fiduciary Net Position (457(b) Plan), for the year ended December 31:

(in thousands of dollars)	2018		 2017
Additions			
Contributions	\$	79,746	\$ 77,567
Net investment income (loss)		(48,284)	167,916
Miscellaneous income		492	425
Interest on notes receivable from participants		1,027	874
Total additions	-	32,981	 246,782
Deductions			
Distributions to participants and beneficiaries		88,455	83,502
Administrative expenses		2,311	2,207
Total deductions		90,766	85,709
Net increase (decrease) in fiduciary net position	\$	(57,785)	\$ 161,073

Total contributions to the 457(b) Plan grew approximately \$2 million or nearly 3% in 2018 due to an increase in participant Roth contributions as well as employer contributions to the plan. Distributions to participants and beneficiaries increased by approximately \$5 million, or approximately 6%. This increase was due to an increase in both lump sum disbursements to retired or terminated employees as well as "in-service" withdrawals to active employees.

Net investment loss was approximately \$48 million, due in large part to negative performance in the financial markets.

We are not aware of any other currently known facts, decisions or conditions that are expected to have a significant impact on fiduciary net position or changes in fiduciary net position as of December 31, 2018. However, financial markets reversed course in the first quarter of 2019 with all major indices showing strong performance.

# **Other Highlights**

In June 2018, the Plans transitioned to a new GoalMaker asset allocation model (GoalMaker 2.0). Although implemented in June 2018, this change had previously been approved by the Supplemental Retirement Board of Trustees ("Board") in September 2017. The new model incorporates several improvements for the benefit of participants including the following: lowers fees by utilizing passive strategies in the most efficient asset classes (large cap equity); adds age-related cohorts, including in post-retirement (extending the model 'through retirement'); introduces a new TIPS (Treasury Inflation Protected Securities) Fund; reduces Stable Value and increases the equity allocations in the longer-dated funds; provides a smoother glidepath (less abrupt asset allocation changes); provides a more efficient use of the fund options within the Plans (removed the Global Equity Fund); and improves participant outcomes by ensuring all GoalMaker participants have the age adjustment feature turned on (although participants may elect to turn off the age adjustment feature).

The Board approved two manager terminations during 2018. The TimesSquare Small Mid Cap Growth strategy was terminated and replaced by the BlackRock Russell 2500 Index Fund in September 2018. The PIMCO Inflation Response Multi Asset Fund was terminated and replaced by the BlackRock Strategic Completion Fund in November 2018.

The Plans' expenses remain competitive when compared to a peer group of institutional mutual funds. At the end of 2018, the average asset-based plan expenses consisting of investment management, custodial and administrative fees were approximately 0.236%. This compares favorably to the median expense ratio of the Mercer Institutional Mutual Fund Universe of 0.516%. There is an additional recordkeeping fee of \$31 per account.

An administrative fee of 2.5 basis points is charged to participants annually. This is included in the 0.236% noted above. The administrative fee is collected to cover the Plans' administrative expenses and is the sole source of revenue received. The administrative fee covers expenses that include Supplemental Retirement Plan staff salaries and benefits, Departmental overhead, fees to required service providers, including the Plans' investment consultant and auditor, board expenses and other expenses deemed appropriate under the Internal Revenue Code's exclusive benefit rule. Given the accumulated reserve balance in the administrative expense account, at its September 20, 2018 Board meeting, staff recommended and the Supplemental Retirement Board of Trustees approved a "fee holiday" for NC 401(k) and NC 457 Plans for the calendar year 2019. During this "fee holiday," participants will not be charged the 2.5 basis points administrative fee during the calendar year 2019.

# Asset Class and Economic Discussion

Net Investment Loss for the 457(b) and 401(k) Plans was \$48 million and \$394 million, respectively due primarily to negative performance within the financial markets during 2018.

According to the World Bank, global growth in 2018 came in at an estimated 3%, with United States gross domestic product growth of 2.9%.

#### U.S. Equities

U.S. equities, as measured by the Russell 3000 Index, were down 5.2% for the year after a fourth-quarter sell-off. Investors experienced volatility throughout the year as all major stock market indices finished the year negative. The U.S. stock market was down the least out of the major regions. Cyclical stocks posted the year's largest losses, underscored by double-digit declines in financials, industrials, materials and energy sectors. Energy companies led the fourth-quarter sell-off on rapidly falling oil prices and worries about the outlook for the world economy. The energy sector was the worst performing sector for the year (-18.3%), followed by the materials sector (-16.2%). Traditionally defensive sectors fared better as health care (+6.1%) and utility sectors (+4.6%) rose.

Growth oriented equities continued to outperform value across all capitalizations throughout 2018.

Within U.S. Equity, Small Cap Value was the worst performing style (-12.9%), while the best performing style was Large Cap Growth (-1.5%), which was still in negative territory.

Within the plans, the NC Large Cap Core Fund (-3.3%) outperformed its benchmark, the Russell 1000 Index, by 1.50 percentage points for the year. The NC Small / Mid Cap Fund (-11.3%) underperformed its benchmark, the Russell 2500 Index, by 1.30 percentage points for the year.

# International Equities

International equities, as measured by the MSCI ACWI ex-USA, underperformed U.S. equities and ended the year down 13.8%. Currency declines, political tensions and slowing economic and earnings growth led non-U.S. stocks to lag U.S. stocks in 2018.

The North Carolina International Equity Fund returned negative 14.7% for the year, underperforming its benchmark, the MSCI ACWI ex USA by 90 basis points.

#### Emerging Market Equities

Emerging Market equities trailed developed markets for the year. The MSCI Emerging Markets Index was down 14.6% for the year driven by global trade tensions and emerging market currency depreciation. Currency depreciation was a major factor contributing to the index's worst performing markets, including Turkey (-40.3%) and South Africa (-18.0%).

# Supplemental Retirement Plans of North Carolina Management's Discussion and Analysis (Unaudited) Year Ended December 31, 2018

# Currencies

The U.S. Dollar saw gains against most major currencies during the year. The Euro declined 4.4% against the Dollar during the year, while the British Pound fell 5.6% as Brexit uncertainty weighed on the outlook for the UK. The Japanese Yen gained 2.8% against the Dollar in 2018. Following weak performance in the first three quarters of 2018, emerging market currencies were broadly flat in the fourth quarter. The Chinese Yuan stabilized in the fourth quarter and the Mexican Peso fell 4.7% due to policy uncertainty from the newly elected government and concerns over the NAFTA deal.

#### Fixed Income

The Federal Reserve increased interest rates four times in 2018, taking the Federal Funds rate from 1.5% in 2017 to 2.5% by year-end. Rising interest rates put downward pressure on bond prices for most of the year. U.S. bonds finished the year flat at 0.01% and global bonds were up 3.17%. Within U.S. fixed income, both high yield and investment grade bond sectors finished the year down 2.1%.

The North Carolina Fixed Income Fund was in line with its benchmark, the Bloomberg Barclays Aggregate Index, both returning 0.0% in 2018.

#### Commodities & Real Assets

The Bloomberg Commodity Index was down 11.2% for the year. U.S. Real Estate Investment Trusts (REITs) finished the year down 4%, while global REITs were also down 4.7% for the year. Commodities posted negative results during the fourth quarter as the prices of crude oil fell sharply amid concerns of excess supply and weaker global growth. The Bloomberg Barclays U.S. TIPS Index finished the year down 1.3%.

The North Carolina Inflation Responsive Fund returned negative 4.5% in 2018, exhibiting negative performance during the year primarily due to the fund's exposure to commodities and REITs.

# Economic Discussion

Real World GDP growth was an estimated 3.0% in 2018 compared to 3.1% in 2017. Growth in advanced economies is estimated to have slightly decelerated to 2.2% in 2018. Economic activity in the advanced economies diverged throughout 2018. Growth in the United States remained solid due to fiscal stimulus, while activity in the Euro area was weaker than expected due to slowing net exports. Inflation in the advanced economies remained contained in 2018. The Consumer Price Index ("CPI") rose 1.9% over the 12 months ending December 31, 2018. The index for all items less food and energy increased 2.2% over the one-year period. The U.S. economy added an average of 220,000 jobs per month in 2018. The unemployment rate finished the year at 3.9%, while average hourly earnings rose by 3.2% during 2018.

Emerging Market GDP growth was an estimated 4.2% in 2018. A strengthening U.S. dollar, increased financial market volatility, and rising risk premiums intensified capital outflow and currency pressures in some large emerging markets and developing economies. Energy prices fluctuated substantially mainly due to supply factors, with sharp declines occurring toward the end of 2018. Other commodity prices, particularly metals, also weakened, posing renewed headwinds for commodity exporters.

Note: All NC fund performance is net of fees.

For detailed information regarding investment performance of the funds, please access the Plans' website at www.ncplans.prudential.com.

# **Requests for Information**

This financial report is designed to provide a general overview of the finances of the Supplemental Retirement Plans of North Carolina. If you have any questions or concerns about this report or need additional financial information, contact Mary Buonfiglio, Deputy Director of Supplemental Retirement Plans, North Carolina Department of State Treasurer, 3200 Atlantic Avenue, Raleigh, NC 27604.

# (in thousands of dollars)

	401(k)	457(b)
Assets		
Investments		
Pooled Account, at fair value	5 7,769,223	\$ 973,375
North Carolina Stable Value Fund		
Unallocated insurance contracts, at contract value		
Synthetic Guaranteed Investment Contracts	1,501,678	311,943
Insurance Company Separate Account	181,382	37,678
Wells Fargo/BlackRock Short Term Investment Fund, at amortized cost	31,912	6,629
Total stable value fund	1,714,972	356,250
Total investments	9,484,195	1,329,625
Receivables		
Contributions		
Participants	3,937	627
Employers	2,325	43
Notes receivable from participants	299,578	21,456
Other	25	13
Total receivables	305,865	22,139
Total assets	9,790,060	1,351,764
Liabilities		
Accounts payable	1,227	255
Total liabilities	1,227	255
Fiduciary net position	9,788,833	\$ 1,351,509

The accompanying notes are an integral part of these financial statements.

# Supplemental Retirement Plans of North Carolina Statements of Changes in Fiduciary Net Position Year Ended December 31, 2018

# (in thousands of dollars)

	401(k)		457(b)	
Additions				
Investment income (loss)				
Net depreciation in fair value of investments	\$	(444,623)	\$	(61,055)
Interest income		50,353		12,771
Total net investment loss		(394,270)		(48,284)
Other income				
Interest on notes receivable from participants		14,043		1,027
Miscellaneous income		2,610		492
Total other income		16,653		1,519
Contributions				
Plan participant contributions, including rollover contributions of \$57,011 for the 401(k) Plan and				
\$10,243 for the 457(b) Plan		362,667		76,705
Employer contributions		211,321		3,041
Total contributions		573,988		79,746
Total additions		196,371		32,981
Deductions				
Distributions to participants and beneficiaries		577,971		88,455
Administrative expenses		11,171		2,311
Total deductions		589,142		90,766
Net decrease in fiduciary net position		(392,771)		(57,785)
Fiduciary net position				
Beginning of year		10,181,604		1,409,294
End of year	\$	9,788,833	\$	1,351,509

The accompanying notes are an integral part of these financial statements.

# 1. Plan Description

The following description of the Supplemental Retirement Plans of North Carolina ("Plans") is provided for general informational purposes only. The Plans include the Supplemental Retirement Income Plan of North Carolina (the "401(k) Plan") and the North Carolina Public Employee Deferred Compensation Plan (the "457(b) Plan"). More complete information regarding the Plans' provisions may be found in the respective plan documents.

# General

The 401(k) Plan, established effective January 1, 1985, is a defined contribution multiple-employer governmental plan sponsored by the State of North Carolina ("Plan Sponsor"). As of December 31, 2018, the Plan is utilized by 1,029 governmental employers in North Carolina consisting principally of state agencies, counties, school systems, cities, and towns.

The 457(b) Plan, established effective January 1, 1974, is a defined contribution multiple-employer governmental plan sponsored by the State of North Carolina ("Plan Sponsor"). As of December 31, 2018, the 457(b) Plan is utilized by 511 governmental employers in North Carolina consisting principally of state agencies, counties, school systems, cities, and towns.

# **Plan Administration**

The Supplemental Retirement Board of Trustees ("Board") and the Retirement Systems Division of the Department of State Treasurer ("Department") have the responsibility for administering the 401(k) Plan and the 457(b) Plan according to the plan documents, North Carolina General Statutes ("N.C.G.S."), and the Internal Revenue Code ("IRC"), with the Department serving as the Primary Administrator ("Primary Administrator") carrying out the provisions of the Plans, as directed by the Board. The Board and the Department have entered into an agreement with Prudential Retirement Insurance and Annuity Company ("Contractor") to perform recordkeeping, administration and education services.

The Plans offer six equity funds, an inflation responsive fund, an inflation protected securities fund, two fixed income funds, and a stable value fund. The actively managed funds have multiple investment managers (with the exception of the inflation protected securities fund which has a singular manager), and the passively managed funds each have a single investment manager.

The Board has engaged Galliard Capital Management, Inc. ("Galliard") to provide professional management of the NC Stable Value Fund. Under Galliard's management, the NC Stable Value Fund allocates funds to five insurance contracts with six underlying investment managers, as well as a short-term collective investment trust.

# Participation

Those employees eligible for the 401(k) Plan include participants of the following:

- Teachers' and State Employees' Retirement System of North Carolina ("TSERS")
- Consolidated Judicial Retirement System
- Legislative Retirement System
- North Carolina Local Governmental Employees' Retirement System ("LGERS")
- Optional Retirement Program
- Law Enforcement officers as defined under N.C. G.S. 143-166.30 and 134-166.50

Those employees eligible for the 457(b) Plan are employees of the state, any county or municipality, the North Carolina Community College System and any political subdivision of the state that have elected to participate in the 457(b) Plan.

The 401(k) Plan had approximately 255,300 unique participants at December 31, 2018.

The 457(b) Plan had approximately 55,400 unique participants at December 31, 2018.

# Contributions

401(k) Plan participants may elect to contribute between 1% and 80%, in whole percentages, of their compensation, as defined by the 401(k) Plan, subject to certain limitations under the IRC. 457(b) Plan participants may elect to contribute between 1% and 100%, in whole percentages, of their compensation, as defined by the 457(b) Plan, subject to certain limitations under the IRC. The Plans limit the amount of an individual's annual contributions to the maximum allowed by the IRC (\$18,500 for 2018). Federal and state income tax on amounts contributed by participants are deferred until benefits are paid to the participants. An employee may begin contributing to the 401(k) Plan on the first enrollment date, which is at least 60 days, or such shorter period as the governmental employer determines, after the date he or she files with the governmental employer a notice whereby the employee: 1) makes an election to contribute a percentage of his/her compensation or fixed dollar amount to the Plans and 2) authorizes the governmental employer to reduce his/her compensation by such percentage or amount. An employee may become a participant in the 457(b) Plan by entering into an enrollment agreement prior to the beginning of the calendar month in which the enrollment agreement is to become effective or such other date as may be permitted under the Code. Participating employers may make contributions to the Plans. Employer contributions to the 401(k) Plan and the 457(b) Plan were approximately \$211 million and \$3 million, respectively, in 2018.

Roth contributions are permissible within the 401(k) Plan and 457(b) Plan. Roth contributions are elective deferrals that the participant elects to include in gross income. Qualified distributions from a designated Roth account are excludable from gross income. Generally, a distribution qualifies for income exclusion when it occurs more than five years after the initial contribution to the account and when the participant is age  $59\frac{1}{2}$  or older, dies or becomes disabled.

In-plan Roth conversion provisions were added to the 401(k) Plan and 457(b) Plan effective December 1, 2010 and April 1, 2011, respectively. As of the effective date, the Plans accept Roth contributions made on behalf of participants. All contribution sources and earnings thereon, except Roth contributions and Roth rollover contributions, will be eligible for in-plan Roth conversions in accordance with the standard in-service withdrawal and termination distribution provisions of the Plans. Participants and spousal beneficiaries will be allowed to elect voluntary federal and state income tax withholding on in-plan Roth conversion. In-plan Roth conversion amounts. Withholding will be deducted from eligible amounts in advance of the in-plan Roth conversion. In-plan Roth conversion amounts will remain invested among the same plan investment options in which they were invested prior to the conversion ("like to like").

The 401(k) Plan allows participants age 50 or older to make catch-up contributions in accordance with and subject to the limitations of Section 414(v) of the IRC (6,000 for 2018). The 401(k) Plan allows participants to contribute amounts being rolled over from other eligible retirement plans, as defined in the 401(k) Plan document. Participating governmental employers may elect to make discretionary contributions to the 401(k) Plan as determined by the General Assembly or the participating governmental employer.

With respect to participants who are law enforcement officers, the governmental employer of the law enforcement officers shall contribute to the 401(k) Plan on behalf of each such law enforcement officer an amount equal to such percentage, as determined by the North Carolina General Assembly, of compensation received during the plan year (5% in 2018). Law enforcement officers, excluding sheriffs, shall also receive a contribution, allocated on a per capita basis, of an amount equal to a division, as determined by the North

Carolina General Assembly, of receipts collected under North Carolina General Statute 7A-304 on account of assessed cost of court.

The 457(b) Plan allows participants age 50 or older to make catch-up contributions in accordance with and subject to the limitations of Section 414(v) of the IRC. The 457(b) Plan allows participants to contribute amounts being rolled over from other eligible retirement plans, as defined in the 457(b) Plan document. In addition, the 457(b) Plan allows participants within three years of reaching a normal retirement age to contribute up to twice the amount allowed by the IRC (\$37,000 for 2018) subject to certain limitations. The age 50 or older catch-up contributions cannot be used in conjunction with the three-year catch-up contributions.

Pursuant to N.C.G.S. 143-166.30(g1) and 143-166.50(e2). state and local law enforcement officers forfeit employer contributions made to the 401(k) Plan on or after December 1, 2012, if the law enforcement officer is convicted of a felony related to employment on or after December 1, 2012.

# Vesting

Subject to the felony forfeiture law described in the preceding paragraph, participants are at all times 100% vested in their contributions, employer contributions and their allocated earnings thereon.

# **Payment of Benefits**

On termination of employment due to retirement, disability or death, the participant, or sole beneficiary, may receive the amount to the credit of the participant's account upon election of a payment option. Upon such election, a participant or sole beneficiary may elect to receive payments from their account in monthly, quarterly, semiannual or annual installments over a period not to exceed the participant's, or sole beneficiary's, life expectancy. In addition, hardship distributions are available to actively employed participants if certain criteria are met.

# **Participant Accounts**

Individual accounts are maintained by the Contractor for each of the Plans' participants to reflect the participant's and employer's contributions, as well as the participant's share of the Plans' income and any related administrative expenses. Allocations of income and expenses are based on the proportion that each participant's account balance bears to the total of all participant account balances. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

# **Notes Receivable from Participants**

Participants may borrow from their accounts subject to certain limitations and the approval of the Contractor according to the loan policy adopted by the Board.

A participant with an account balance equal to or less than \$20,000 may borrow the lesser of i) 100% of the participant's account balance or ii) \$10,000. A participant with an account balance of more than \$20,000 may borrow the lesser of i) \$50,000 (reduced by the excess, if any, of the participant's highest outstanding balance of loans from the Plans during the one-year period ending on the day before the date on which such loan is made) or ii) one-half (1/2) of the participant's vested account balance. The minimum loan amount allowed is \$1,000.

A participant may have only one loan outstanding at any time in the 401(k) Plan and one in the 457(b) Plan and, for repayments made by check or similar payment method, must wait 15 days to initiate a new loan after paying off an existing loan. The interest rate charged on loans shall be reasonable as determined by the Primary Administrator. During 2018, the interest rate charged was equal to the prime rate, as reported by the US Federal Reserve, on the last business day of each calendar quarter, plus 1%. At December 31, 2018, the interest rates on outstanding loans ranged from 4.25% to 6.00% for the 401(k) Plan and 4.25% to 10.25% for the 457(b) Plan. The term of the loan shall be arrived at by mutual agreement between the participant and the Contractor but shall not exceed five years, except in the case of a loan to purchase a primary residence, which shall not exceed 15 years. At December 31, 2018, the loans outstanding had initial repayment terms between one and fifteen years for the 401(k) Plan and for the 457(b) Plan.

Under the Loan Policy of the Plans, members are permitted to continue repaying loans after they separate from service. Members electing to continue loan repayments after separating from service are subject to a one-time \$100 loan administration fee.

#### **Investment Elections**

Upon enrollment in the Plans, a participant may direct contributions to any investment option offered by the Plans. The participant has a broad range of options from which to choose, which allows the participants to diversify their investments. At December 31, 2018, the Plans offered 11 investment options – six equity funds, an inflation responsive fund, an inflation protected securities fund and two fixed income funds (referred to collectively herein as the "Pooled Account") and the North Carolina Stable Value Fund. Participants exercise control over the assets in their individual accounts and are solely responsible for choosing the investment options for their account. Participants may change their investment elections daily provided they do not violate market timing policies. The Plans are not governed by any law or regulation restricting its deposits or investments other than that of following the prudent person rule and acting solely in the interests of participants.

# **Transfer Benefit Option**

Members of TSERS and LGERS are allowed to transfer part or all of their balances in the 401(k) Plan, 457(b) Plan, and other qualified plans to TSERS and LGERS to receive an additional monthly benefit. For plans other than the 401(k) or 457(b) Plan, the funds are first transferred into the 401(k) Plan or 457(b) Plan, and then transferred to TSERS or LGERS. When funds are transferred into the Plans from other qualified plans, these contributions are reflected in total contributions as rollover contributions. Transfers to TSERS and LGERS are reflected as distributions on the Statement of Changes in Fiduciary Net Position.

# 2. Summary of Significant Accounting Policies

#### **Reporting Entity**

The Plans are reported by the State of North Carolina as fiduciary funds. The financial statements of the Plans are intended to present the fiduciary net position and the changes in fiduciary net position of only that portion of the total fiduciary funds that are attributable to the Plans. They do not purport to, and do not, present the financial position of the total fiduciary funds of the State of North Carolina as of December 31, 2018, and the changes in its financial position for the year then ended.

#### **Basis of Accounting**

The financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America, including all applicable effective statements of the Governmental Accounting Standards Board ("GASB"), and on the accrual basis of accounting.

#### Investments

The Plans invest in various types of investment securities. Investment securities are exposed to various risks, such as interest rate, market and credit risks. The Plans invest in securities with contractual cash flows, such as asset-backed securities, collateralized mortgage obligations and commercial mortgage-backed securities. The value, liquidity and related income of these and other securities are sensitive to changes in economic conditions, including real estate values, delinquencies or defaults, or both.

Due to the level of risks associated with certain investment securities, it is at least possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of fiduciary net position. Assets are reported at fair value.

The Plans' investments are divided between the Pooled Account and the NC Stable Value Fund. The assets in the Pooled Account are held in separate accounts and collective investment trusts.

The Plans' investments in the Pooled Account are stated at fair value. The value of each Plan's account within the Group Trust is adjusted periodically to reflect each Plan's share of the value of the Group Trust. Units of common/commingled funds, including collective investment funds, are valued at the net asset value of shares held by the Plans. Investments in fixed income securities (U.S. treasuries and U.S. agency securities, asset-backed securities, collateralized mortgage obligations, domestic corporate bonds, foreign government bonds, foreign corporate bonds, state and local government bonds, mutual funds, and mortgage pass-throughs) are valued on the basis of valuations furnished by independent pricing services. These services determine valuations for normal institutional-size trading units of such securities using models or matrix pricing, which incorporates yield and/or price with respect to bonds that are considered comparable in characteristics such as rating, interest rate, maturity date and quotations from bond dealers to determine current value. If these valuations are deemed to be either not reliable or not readily available, the fair value will be determined in good faith by the custodian. Common stock is valued at the closing price reported on the active market on which the individual securities are traded.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Contributions to the group trust are credited to participant accounts as units. The value of a unit changes each day based on the current fair value of the investment portfolio. Earnings as well as market fluctuations, are reflected in unit values.

A valuation date occurs each day that the New York Stock Exchange ("NYSE") is open. The recordkeeper processes all participant transactions on the valuation date at the value of Pooled Account and NC Stable Value Fund investments as of the close of the financial market's business day.

The Plans' investments in the NC Stable Value Fund are stated at contract value with the exception of the Wells Fargo/Blackrock Short Term Investment Fund, a fund of highly liquid assets used for liquidity and stated at amortized cost. Both contract value and amortized cost approximate fair value based on GASB standards. The NC Stable Value Fund's investments, excluding the Wells Fargo/Blackrock Short Term Investment Fund, consist of unallocated insurance contracts, which are nonparticipating investments. As such, GASB reporting standards provide they be reported at contract value. The NC Stable Value Fund ordinarily allows participants to withdraw their investment at contract value which represents their principal investment plus interest at a stated rate (known as the "crediting rate"), less withdrawals. As a result, participants are provided investment statements showing their activity in the NC Stable Value Fund at contract value rather than fair value.

The crediting rate of security-backed contracts will track current market yields on a trailing basis. The rate reset allows the contract value to converge with the fair value of the underlying portfolio over time, assuming the portfolio continues to earn the current yield for a period of time equal to the current portfolio duration. The net crediting rate reflects fees paid to security-backed contract issuers.

To the extent that the underlying portfolio of a security-backed contract has unrealized and/or realized losses, a positive adjustment is made to the adjustment from fair value to contract value under contract value accounting. As a result, the future crediting rate may be lower over time than the then-current market rates. Similarly, if the underlying portfolio generates unrealized and/or realized gains, a negative adjustment is made to the adjustment value, and the future crediting rate may be higher than the then-current market rates.

# **Contributions Receivable**

Participant contributions receivable represent amounts withheld from participants, but not remitted to the Contractor as of the Plans' year end. Employer contributions receivable represent the matching portion the employer owes the Plans on participant contributions receivable.

#### **Notes Receivable from Participants**

Notes receivable from participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Delinquent notes receivable from participants are reclassified as distributions based upon the terms of the respective Plan documents.

#### **Payment of Distributions**

Distributions are recorded when paid.

#### Administrative Expenses and Investment Management Fees

All administrative costs of the Plans are deducted from participants' account balances. These costs include (a) benefit-responsive investment contract fees, which are included in the cost of investments and in determining net proceeds on sales of investments, and (b) operational expenses required for administration of the Plans including the Primary Administrator's expenses, custodial expenses, and investment management fees which are charged against the various fund's assets on a pro rata basis throughout the year. An annual recordkeeping and communication fee of \$31 is charged per account and is deducted from accounts quarterly on a per account basis (\$7.75 per quarter). Loan initiation fees and custodial expenses are reported as administrative expenses. Loan initiation fees are deducted from the accounts of the individual participants that are initiating loans. Custodian and investment management fees for commingled trusts are charged based on a percentage of net asset value and are paid from the assets of the respective funds. Certain other administrative expenses are paid by the Contractor.

# Use of Estimates in the Preparation of Financial Statements

The preparation of financial statements, in conformity with accounting principles generally accepted in the United States of America, requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions during the reporting period. Actual results could differ from those estimates.

#### 3. Investments

The following table presents a summary of investments at December 31, 2018:

(in thousands of dollars)						
	401(k) Plan		457(b) Plan		n Total	
Pooled Account (Notes 4 and 6)	\$	7,769,223	\$	973,375	\$	8,742,598
Stable Value Fund (Notes 5 and 6)						
North Carolina Stable Value Fund						
Unallocated Insurance Contracts						
Prudential Insurance Company (Prudential)		432,985		89,944		522,929
Nationwide Life Insurance Company (Nationwide Life)		306,300		63,627		369,927
American General Insurance Company (American General)		344,077		71,475		415,552
Metropolitan Life Insurance Company Separate Account (MetLife)		181,382		37,678		219,060
Transamerica Life Insurance Company (Transamerica Life)		418,316		86,897		505,213
Wells Fargo/BlackRock Short-Term Investment Fund		31,912		6,629		38,541
Total stable value fund		1,714,972		356,250		2,071,222
Total investments	\$	9,484,195	\$ 1	1,329,625	\$	10,813,820

# 4. Investments in Pooled Account

The Plans' investments are held in a group trust established as of January 4, 2016. The Board authorized the establishment of the North Carolina Supplemental Retirement Plans Group Trust (the "Group Trust") for the purpose of commingling the corpus of the separate trusts of the Plans and the Board adopted the Declaration of Trust establishing the Group Trust. In addition, the Board agreed to act as trustee of the Group Trust, under the terms and conditions of the Declaration of Trust. The assets are managed by investment managers appointed by the Board and specified in investment agreements. The Plans are the beneficial owners of the assets in the Group Trust, which are accounted for in separate participating trust accounts for the Plans. The value of each Plan's account within the Group Trust is adjusted for the contributions and disbursements made with respect to each Plan; the investment gains and losses attributable to each Plan; and the costs allocated to each Plan. Each participating trust account is adjusted periodically to reflect each Plan's share of the fair market value of the Group Trust.

The following table presents the assets, including the investments and the percentage of each Plan's interest in each of the funds. Investment income and expense are presented in total for each fund in the Pooled Account:

NC Large CAP Index	
*Blackrock Equity Index Non-Lendable Collective Investment Fund, at fair value	\$ 2,336,761
401(k) plan interest in NC Large CAP Index	 2,105,338
401(k) plan interest percentage	 90%
457(b) plan interest in NC Large CAP Index	 231,423
457(b) plan interest percentage	 10%
Investment loss	
Net depreciation in fair value of investments - collective trust	(142,905)
NC Large CAP Core	
Domestic common stock, at fair value	1,645,044
Cash and cash equivalents	609
Accrued interest income	1,705
Accounts payable - fees	(1,383)
Due to broker for securities purchased	 (1,376)
Total net assets	 1,644,599
401(k) plan interest in NC Large Cap Core	 1,422,732
401(k) plan interest percentage	 87%
457(b) plan interest in NC Large Cap Core	221,867
457(b) plan interest percentage	13%
Investment income and (expenses)	
Net depreciation in fair value of investments	(42,880)
Dividends and interest	25,033
Management and administrative fees	 (6,782)
Net investment loss	 (24,629)

# NC Fixed Income

*PIM (Prudential Investment Mgt) Core Plus Bond Fund - collective trust	771,138
Separate Account - TCW Core Plus Bond Fund	806,876
Total investments, at fair value	1,578,014
Cash and cash equivalents	456
Accrued income	3,978
Due from broker for securities sold	8,573
Receivable for foreign exchange contract	15,701
Due to broker for securities purchased	(42,988)
Payable for foreign exchange contract	(16,080)
Accounts payable - fees	(421)
Total net assets	1,547,233
401(k) plan interest in NC Fixed Income	1,390,825
401(k) plan interest percentage	90%
457(b) plan interest in NC Fixed Income	156,408
457(b) plan interest percentage	10%
Investment income and (expenses)	
Net appreciation in fair value of investments - Blackrock Transition Account	303
Net appreciation in fair value of investments - PIM Core Plus Bond Fund	7,083
Net depreciation in fair value of investments - TCW Core Plus Bond Fund	(8,010)
Interest	18,087
Management and administrative fees	(1,426)
Net investment income	16,037

# NC International

No international	
Domestic common stock, at fair value	152,745
Foreign stock	1,407,145
Total investments, at fair value	1,559,890
Cash and cash equivalents	2,473
Accrued income	7,441
Receivable for foreign exchange contract	2,070
Due from broker for securities sold	1,079
Payable for foreign exchange contract	(2,073)
Due to broker for securities purchased	(1,942)
Accounts payable - fees	(1,758)
Total net assets	1,567,180
401(k) plan interest in NC International	1,427,268
401(k) plan interest percentage	91%
457(b) plan interest in NC International	139,912
457(b) plan interest percentage	9%
Investment income and (expenses)	
Net depreciation in fair value of investments	(241,537)
Dividends and interest	47,302
Management and administrative fees	(9,898)
Net investment loss	(204,133)
NC Small MID CAP Index	
Blackrock Russell 2500 Collective Investment Fund, at fair value	268,290
401(k) plan interest in NC Small MID CAP Index	240,539
401(k) plan interest percentage	90%
457(b) plan interest in NC Small MID CAP Index	27,751
457(b) plan interest percentage	10%
Investment loss	
Net depreciation in fair value of investments - collective trust	(31,013)

NC Small MID CAP	
Domestic common stock, at fair value	714,880
Cash and cash equivalents	875
Accrued interest income	628
Due from broker for securities sold	915
Accounts payable - fees	(785)
Due to broker for securities purchased	(1,222)
Total net assets	715,291
401(k) plan interest in NC Small MID CAP	593,247
401(k) plan interest percentage	83%
457(b) plan interest in NC Small MID CAP	122,044
457(b) plan interest percentage	17%
Investment income and (expenses)	
Net depreciation in fair value of investments	(75,098)
Dividends and interest	9,556
Management and administrative fees	(4,891)
Net investment loss	(70,433)
NC U.S. Debt Index	
Blackrock U.S. Debt Index Non-Lendable Collective Investment Fund, at fair value	69,728
401(k) plan interest in NC U.S. Debt Index	55,182
401(k) plan interest percentage	79%
457(b) plan interest in NC U.S. Debt Index	14,546
457(b) plan interest percentage	21%
Investment loss	
Net depreciation in fair value of investments - collective trust	(9,294)
NC International Index	
Blackrock MSCI ACWI ex-U.S. Index Non-Lendable Collective Investment Fund, at fair value	67,343
401(k) plan interest in NC International Index	52,613
401(k) plan interest percentage	78%
457(b) plan interest in NC International Index	14,730
457(b) plan interest percentage	22%
Investment loss	
Net depreciation in fair value of investments - collective trust	(11,177)

NC Inflation Responsive	
Blackrock Strategic Completion Fund, at fair value	345,792
401(k) plan interest in NC Inflation Responsive	 319,250
401(k) plan interest percentage	 92%
457(b) plan interest in NC Inflation Responsive	 26,542
457(b) plan interest percentage	 8%
Investment income and (expenses)	
Net depreciation in fair value of investments	(29,160)
Dividends and interest	13,582
Management and administrative fees	(177)
Net investment loss	(15,755)
NC TIPS	
Fixed income securities, at fair value	179,702
Cash and cash equivalents	304
Accrued interest income	394
Accounts payable - fees	(19)
Total net assets	 180,381
401(k) plan interest in NC TIPS	 162,229
401(k) plan interest percentage	90%
457(b) plan interest in NC TIPS	 18,152
457(b) plan interest percentage	 10%
Investment income and (expenses)	
Net depreciation in fair value of investments	(486)
Dividends and interest	490
Management and administrative fees	 (58)
Net investment loss	 (54)
Total Pooled Separate Account SA - NC Asset	\$ 8,742,598
Total 401(k) plan interest in Pooled Separate Account SA-NC	\$ 7,769,223
Total 401(k) plan interest percentage in Pooled Separate Account SA-NC	 89%
Total 457(b) plan interest in Pooled Separate Account SA-NC	\$ 973,375
Total 457(b) plan interest percentage in Pooled Separate Account SA-NC	 11%

\* Represents individual investment greater than or equal to 5% of the fair value of the Plans' investments

# Interest Rate Risk

(in thousands of dollars)

The Plans do not have a formal investment policy that limits duration as a means of managing its exposure to fair value losses arising from increasing interest rates. The managers within the NC Fixed Income Fund and the NC TIPS Fund have duration targets relative to a specified benchmark. The maturities of the fixed income securities held in the NC Fixed Income Fund, the NC TIPS Fund and collective investment funds in certain equity accounts, which are subject to interest rate risk, as of December 31, 2018, are as follows:

(in thousands of donais)															
	Investment Maturities (in Years) at Fair Market Value														
Investment Type	F	air Value	Le	ss than 1		1 to 5		6 to 10	Мо	e than 10					
Collateralized mortgage obligations	\$	46,490	\$	21,279	\$	-	\$	9,081	\$	16,130					
Mortgage pass throughs		225,438		35,941		5,554		9,653		174,290					
Domestic corporate bonds		236,198		36,430		77,564		64,276		57,928					
Asset-backed securities		53,529		53,503		-		-		26					
Foreign corporate bonds		25,533		2,124		13,767		7,075		2,567					
U.S. treasury securities		347,842		4,033		155,847		132,678		55,284					
U.S. agencies securities		3,587		-		2,996		-		591					
Foreign government bonds		16,054		16,054		-		-		-					
State and local government bonds		1,245		-		-		-		1,245					
Mutual funds		22,654		-		9,374		13,280		-					
Common/commingled fund															
Collective investment funds		74,529		74,529		-		-		-					
Fixed income core plus bond fund		771,138		-		-		771,138		-					
Total	\$	1,824,237	\$	243,893	\$	265,102	\$	1,007,181	\$	308,061					

Investments may also include various collateralized mortgage obligations, asset-backed securities, and commingled funds considered to be sensitive to changes in interest rates due to the existence of prepayment or conversion features.

# Collateralized Mortgage Obligation Securities

Collateralized Mortgage Obligations ("CMOs") generate a return based upon either the payment of interest or principal on mortgages in an underlying pool. The relationship between interest rates and prepayments makes the fair value sensitive to changes in interest rates. In falling interest rate environments, the underlying mortgages are subject to a higher propensity of prepayments. In a rising interest rate environment, the opposite is true.

# Asset-Backed Securities

Asset-backed securities are securities that are primarily serviced by the cash flows of a discrete pool of receivables or other financial assets, either fixed or revolving, that by their terms convert into cash within a finite time period, plus any rights or other assets designed to assure the servicing or timely distribution of proceeds to the security holders.

# Commingled Funds

The Plans own units in a commingled fixed income core plus bond fund and in a short term collective investment trust. The weighted average maturity of the PIM Core Plus Bond Fund, which is a common/commingled fund and included in the NC Fixed Income Fund in the Pooled Account of the Plans, is approximately 7 years. As a result, the fund is sensitive to changes in interest rates.

# Credit Risk

Credit risk is the risk an issuer or other counterparty to an investment will not fulfill its obligations, such as the chance that a bond issuer will fail to pay interest or principal in a timely manner, or that negative perceptions of the issuer's ability to make these payments will cause security prices to decline. These circumstances may arise due to a variety of factors such as financial weakness, bankruptcy, litigation and/or adverse political developments. Certain fixed income securities, including obligations of the U.S. government or those explicitly guaranteed by the U.S. government, are not considered to have credit risk. The Plans do not have a formal policy to limit credit risk.

A bond's credit quality is an assessment of the issuer's ability to pay interest on the bond, and ultimately to repay the principal. Credit quality is evaluated by one of the independent bond-rating agencies - for example, Moody's Investors Service ("Moody's"), Standard and Poor's ("S&P"), or Fitch Ratings ("Fitch"). The lower the rating, the greater the chance, in the rating agency's opinion, that the bond issuer will default or fail to meet its payment obligations. Generally, the lower a bond's credit rating, the higher its yield should be to compensate for the additional risk. The investment guidelines applicable to the NC Fixed Income Fund place restrictions on the total risk exposure of the fund and specifically the concentration of the debt securities in which the fund invests. The investment guidelines for the NC TIPS Fund limit non-cash sweep investments to U.S. Treasury Inflation Protected Securities ("TIPS") and TIPS futures.

The following table presents the rating of debt securities held in the NC Fixed Income Fund, the NC TIPS Fund and collective investment funds in certain equity accounts, as of December 31, 2018:

(in thousands of dollars)								ess than vestment			Fre	
Investment Type	Fair Value	Aa	aa / AAA	Aa / AA	A	/ A- / A+	Baa/BBB	 grade	I	Unrated		mpt from t quality (1)
Collateralized mortgage obligations	\$ 46,490	\$	-	\$ 24,431	\$	65	\$ 840	\$ 20,111	\$	1,043	\$	-
Mortgage pass throughs	225,438		-	186,133		-	-	-		-		39,305
Domestic corporate bonds	236,198		23,641	7,838		70,700	121,335	11,777		907		-
Asset-backed securities	53,529		3,529	10,429		2,436	256	36,879		-		-
Foreign corporate bonds	25,533		263	779		6,657	16,152	1,637		45		-
U.S. treasury securities	347,842		-	-		-	-	-		-		347,842
U.S. agencies securities	3,587		-	3,587		-	-	-		-		-
Foreign government bonds	16,054		-	-		16,054	-	-		-		-
State and local government bonds	1,245		-	1,173		72	-	-		-		-
Mutual funds	22,654		-	-		-	-	-		22,654		-
Common/commingled fund												
Collective investment funds	74,529		-	-		-	-	-		74,529		-
Fixed income core plus bond fund	771,138		-	-		-	-	-		771,138		-
Total	\$ 1,824,237	\$	27,433	\$ 234,370	\$	95,984	\$ 138,583	\$ 70,404	\$	870,316	\$	387,147

(1) Obligations of the United States Government or obligations explicitly guaranteed by the United States Government are not considered to have credit risk and do not require disclosure of credit quality.

#### **Commingled Funds**

The Fixed Income Core Plus Bond Fund, which is a common/commingled fund and included in the NC Fixed Income Fund of the Pooled Account, has more than 86% of its debt securities rated BBB or better including 49% of which are rated AAA at December 31, 2018.

# **Custodial Credit Risk**

Custodial credit risk is the risk that, in the event of the failure of a counterparty financial institution, the Plans will not be able to recover the value of its investments and other assets that are in possession of an outside third party. The Plans do not have a formal policy to limit custodial credit risk.

#### **Concentration of Credit Risk**

Concentration of credit risk is the risk of loss attributed to the magnitude of a Plan's investment in a single issuer. Money market funds and external investment pools are excluded from this disclosure requirement. Obligations explicitly guaranteed by the U.S. Government are not considered to have credit risk. The Plans do not have a formal policy to limit concentration of credit risk. Included in the Pooled Account are investments in individual collective trust funds under the various index funds and fixed-income options. Such funds that equal 5% or more of the fair value of the Plan's investments are the Russell 2500 Index Fund holdings within the NC Small/Mid Cap Fund and the NC Small/Mid Cap Index Fund, and the collective trust/index funds identified with an asterisk in the presentation of the Pooled Account table within this footnote. The guidelines applicable to these funds place restrictions on the concentration of the securities in which the funds invest.

#### **Foreign Currency Risk**

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. There is no formally adopted investment policy to limit foreign currency exposure.

# Supplemental Retirement Plans of North Carolina Notes to Financial Statements Year Ended December 31, 2018

The foreign investments, primarily in the NC International Fund expose the Plans to foreign currency risk. The following table presents in U.S. dollars the Pooled Account exposure to foreign currency as of December 31, 2018:

# Currency (in thousands of dollars)

_	•	
Euro	\$	406,147
Pound Sterling		230,126
Japanese Yen		193,459
Hong Kong Dollar		122,782
Swiss Franc		92,204
Swedish Krona		55,159
New Taiwan Dollar		50,202
Indian Rupee		44,689
Singapore Dollar		42,541
South Korean Won		34,687
Canadian Dollar		32,935
Australian Dollar		22,768
South African Rand		21,725
Brazil Real		18,917
Danish Krone		18,769
Malaysian Ringgit		7,660
Mexican Peso		6,593
Indonesian Rupiah		3,291
Turkish Lira		3,050
UAE Dirham		2,875
Thai Baht		2,618
Qatari Riyal		1,216
Norwegian Krone		8
Russian Ruble		7
Polish Zloty		4
	\$	1,414,432

# 5. Stable Value Fund

The NC Stable Value Fund consists of four synthetic guaranteed investment contracts, a separate account guaranteed investment contract, and a short-term investment fund. Galliard provides the professional management and oversight of the NC Stable Value Fund.

With the synthetic guaranteed investment contracts (synthetic GICs), the Plans own the underlying assets and negotiate a wrap contract for insurance protection. Because the synthetic GICs are fully benefitresponsive and nonparticipating investments, contract value, which approximates fair value, is the relevant measurement attribute for that portion of the net position attributable to the synthetic GIC. Contract value represents contributions made under the contract, plus earnings, less participant withdrawals and administrative expenses. Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment at contract value. The interest crediting rate is reset, at a minimum, on a quarterly basis to reflect the performance of the underlying portfolio wrapped by the contract. The compound crediting rate methodology uses a formula to smooth out the gains or losses on the fixed income investments that back the wrap contract. The formula components are the current contract value, the fair value of the underlying portfolio, the annualized weighted average yield to maturity (or yield to worst) of the underlying portfolio and the weighted average (or effective) duration of the underlying portfolio. The change in these factors from quarter to quarter impacts future crediting rate. The crediting rates of the contract may not fall below zero.

The separate account GIC is a fully benefit-responsive contract where the issuer owns the underlying investments, which are segregated for the benefit of the Plans. A separate account GIC is valued at contract value as the relevant measurement attribute for that portion of the net position attributable to the separate account GIC. Contract value represents contributions made under the contract, plus earnings, less participant withdrawals and administrative expenses. Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment at contract value. The interest crediting rate is reset, at a minimum, on a quarterly basis to reflect the performance of the underlying portfolio wrapped by the contract. The compound crediting rate methodology uses a formula to smooth out the gains or losses on the fixed-income investments that back the wrap contract. The formula components are the current contract value, the fair value of the underlying portfolio, the annualized weighted average yield to maturity of the underlying portfolio and the weighted average duration of the underlying portfolio. The change in these factors from quarter to quarter impacts the future crediting rate. The crediting rate may not fall below zero.

The five wrap contract issuers are Prudential, Nationwide Life, American General, Transamerica Life, and MetLife. Wrap contract issuers maintain a book value asset or fund balance and report the yield credited on that book balance (crediting rate). The contracts are issued by insurance companies which guarantee the return of principal and a stated rate of interest. The contracts do not provide protection from all defaulting events of the underlying fixed income investments, which could result in a negative return on the fund.

The contracts are described as follows:

**Prudential Synthetic GIC** - The Plans have a fully benefit-responsive synthetic GIC with Prudential. The contract covers a fixed income separate account managed by Jennison, a fixed income separate account managed by Prudential, and a fixed income separate account managed by Galliard. The Plans own the securities within the fixed income separate accounts. At December 31, 2018, the Prudential wrap contract covering the fixed income investment had no fair value. Wells Fargo Bank is the custodian for the underlying investments.

**Nationwide Life Synthetic GIC** - The Plans have a fully benefit-responsive synthetic GIC with NationwideLife. The contract covers two fixed income separate accounts managed by Galliard. The Plans own the securities within the fixed income separate accounts. At December 31, 2018, there was no fair value to the wrap contract. Wells Fargo Bank is the custodian for the underlying investments.

*American General Synthetic GIC* - The Plans have a fully benefit-responsive synthetic GIC with American General. The contract covers a fixed income separate account managed by Payden & Rygel and a fixed income separate account managed by Galliard. All of the underlying investments are owned by the Plans. At December 31, 2018, there was no fair value to the wrap contract. Wells Fargo Bank is the custodian for the underlying investments.

*Transamerica Life Synthetic GIC* - The Plans have a fully benefit-responsive synthetic GIC with Transamerica Life. The contract covers a fixed income separate account managed by TCW and two fixed income separate accounts managed by Galliard. All of the underlying investments are owned by the Plans. At December 31, 2018, there was no fair value to the wrap contract. Wells Fargo Bank is the custodian for the underlying investments.

**MetLife Insurance Company Separate Account** – The Plans have a fully benefit-responsive separate account GIC with MetLife. The separate account GIC is backed by assets invested in a pooled insurance separate account, a portfolio owned by the life insurance company but invested outside the insurance company's general investment account and managed by Dodge & Cox. The assets of the separate account are held for the benefit of the Plans and certain other plans and stated in the financial statements at contract value, which was \$219 million at December 31, 2018. The fair value of the Plans' portion of the assets in the separate account was reported by MetLife to be \$215 million. The Bank of New York Mellon is the custodian for the underlying investments. At December 31, 2018, there was no fair value to the wrap contract.

*Wells Fargo/BlackRock Short Term Investment Fund* - This segment of the portfolio is invested in a shortterm investment fund trusteed by Wells Fargo and managed by BlackRock, where the underlying securities are held at amortized cost (net asset value). The amortized cost accounting used in the fund very closely approximates the fair market value of the investments. The Plans' investments in this fund are included in the disclosures of risk. At December 31, 2018, the fair value of the assets in the Wells Fargo/BlackRock Short Term Investment Fund was \$39 million.

# Crediting Interest Rate for Fully Benefit-Responsive Contracts

The crediting interest rate is based on a formula agreed upon with the issuer within the contracts. Such interest rates are reviewed on a quarterly basis for resetting.

Yields and Crediting Rate Ranges for 2018	Earnings (1)	Crediting Rate (net of fees)
Prudential Synthetic GIC		2.80% - 2.91%
Jennison Fixed Income Separate Account	2.97%	
Prudential Fixed Income Separate Account	3.40%	
Galliard Short Fixed Income Separate Account	3.04%	
Nationwide Life Synthetic GIC		1.82% - 2.53%
Galliard Short Fixed Income Separate Account	3.04%	
Galliard Intermediate Fixed Income Separate Account	3.40%	
American General Synthetic GIC		1.69% - 2.63%
Payden & Rygel Fixed Income Separate Account	3.35%	
Galliard Short Fixed Income Separate Account	3.04%	
Transamerica Life Synthetic GIC		2.03% - 2.17%
TCW Fixed Income Separate Account	3.20%	
Galliard Short Fixed Income Separate Account	3.04%	
Galliard Intermediate Fixed Income Separate Account	3.40%	
MetLife Insurance Company Separate Account	3.61%	2.71% - 2.78%

(1) Represents the portfolio's yield to maturity at December 31, 2018.

#### Fair Value of Fully Benefit-Responsive Contracts

The market values for which the Plans do not directly own the underlying assets are previously disclosed in the MetLife Insurance Company Separate Account section of this note. The market values of the fully benefit-responsive contracts for which the Plans own the underlying assets at December 31, 2018 are as follows:

(in thousands of dollars)		1(k) Plan Total tract Value	U Inv	01(k) Plan nderlying vestments Market Value	7(b) Plan Total tract Value	Un Inve M	7(b) Plan derlying estments /larket Value
Prudential Synthetic GIC - Fixed Income Separate Accounts (1)	\$	432,985	\$	431,123	\$ 89,944	\$	89,557
Nationwide Life Synthetic GIC - Fixed Income Separate Accounts (2)		306,300		303,146	63,627		62,972
American General Synthetic GIC - Fixed Income Separate Accounts (3)		344,077		340,877	71,475		70,810
Transamerica Life Synthetic GIC - Fixed Income Separate Accounts (4)		418,316		409,835	 86,897		85,135
Total Synthetic GIC Components	\$2	1,501,678	\$	1,484,981	\$ 311,943	\$	308,474

(1) There are three separate accounts in the Prudential Synthetic GIC - Galliard Short Fixed Income Separate Account, Jennison Fixed Income Separate Account, and Prudential Fixed Income Separate Account.

(2) There are two separate accounts in the Nationwide Life Synthetic GIC - Galliard Short Fixed Income Separate Account and Galliard Intermediate Fixed Income Separate Account

(3) There are two separate accounts in the American General Synthetic GIC - Galliard Short Fixed Income Separate Account and Payden & Rygel Fixed Income Separate Account.

(4) There are three separate accounts in the Transamerica Life Synthetic GIC - Galiliard Short Fixed Income Separate Account, Galiliard Intermediate Fixed Income Separate Account, and TCW Fixed Income Separate Account.

#### **Interest Rate Risk**

The fixed income securities underlying the synthetic GICs and separate account GICs are subject to interest rate risk. The Plans do not have a formal policy to limit interest rate risk. However, the fund's underlying investment manager guidelines and duration guidelines seek to manage the overall fund's exposure to interest rate risk. The maturities of the securities underlying the GICs owned by the Plans as of December 31, 2018 are as follows:

(in thousands of dollars)

			Investment Maturities (in Years) at Fair Market Val										
Investment Type		Fair Value		Less Than 1		1 to 5		6 to 10	Мо	re Than 10			
Collateralized mortgage obligations	\$	21,603	\$	-	\$	151	\$	-	\$	21,452			
Commercial mortgage-backed securities		60,639		-		35		-		60,604			
Mortgage pass throughs		346,864		-		12,629		44,732		289,503			
Domestic corporate bonds		452,133		17,079		326,723		99,107		9,224			
Asset-backed securities		257,236		35,018		156,806		39,482		25,930			
Foreign corporate bonds		113,108		9,245		91,650		11,011		1,202			
U.S. Treasury securities		457,795		146,617		206,665		99,680		4,833			
U.S. agencies securities		50,836		7,919		12,500		2,862		27,555			
Foreign government bonds		11,444		170		5,698		5,576		-			
State and local government bonds		33,525		2,325		9,995		14,408		6,797			
Common/commingled fund													
Collective investment funds		48,028		48,028		-		-		-			
Total	\$	1,853,211	\$	266,401	\$	822,852	\$	316,858	\$	447,100			

(1) Assets for which the Plans do not directly own the underlying securities are excluded from this chart.

Investments may also include various collateralized mortgage obligations and asset backed securities that are considered to be sensitive to changes in interest rates due to the existence of prepayment or conversion features.

# Supplemental Retirement Plans of North Carolina Notes to Financial Statements Year Ended December 31, 2018

#### Asset-Backed Securities

Asset-backed securities are securities that are primarily serviced by the cash flows of a discrete pool of receivables or other financial assets, either fixed or revolving, that by their terms convert into cash within a finite time period, plus any rights or other assets designed to assure the servicing or timely distribution of proceeds to the security holders.

#### Collateralized Mortgage Obligation Securities

CMOs generate a return based upon either the payment of interest or principal on mortgages in an underlying pool. The relationship between interest rates and prepayments makes the fair value sensitive to changes in interest rates. In falling interest rate environments, the underlying mortgages are subject to a higher propensity of prepayments. In a rising interest rate environment, the opposite is true.

#### **Commingled Funds**

The NC Stable Value Fund owns units in the Wells Fargo/BlackRock Short Term Investment Fund in both the liquidity buffer and short duration segments, which is a commingled fund. The fund is invested in a diversified portfolio of money market instruments and has a weighted average maturity of 27 days at December 31, 2018.

#### **Credit Risk**

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations, such as the chance that a bond issuer will fail to pay interest or principal in a timely manner, or that negative perceptions of the issuer's ability to make these payments will cause security prices to decline. These circumstances may arise due to a variety of factors such as financial weakness, bankruptcy, litigation and/or adverse political developments. Certain fixed- income securities, including obligations of the U.S. government or those explicitly guaranteed by the U.S. government, are not considered to have credit risk. The Plans do not have a formal policy to limit credit risk.

A bond's credit quality is an assessment of the issuer's ability to pay interest on the bond, and ultimately to pay the principal. Credit quality is evaluated by one of the independent bond rating agencies – for example, Moody's, S&P, or Fitch. The lower the rating, the greater the chance (in the rating agency's opinion), that the bond issuer will default or fail to meet its payment obligations. Generally, the lower a bond's credit rating, the higher its yield should be to compensate for the additional risk. The fund's underlying investment manager guidelines and credit quality guidelines seek to manage the overall fund's credit risk.

The following table presents the debt securities ratings of the GICs owned by the Plans as of December 31, 2018:

#### (in thousands of dollars)

	ody's/S&P															
Investment Type	Fair Value		Aaa/AAA		Aa/AA		Α		Baa/BBB		Less than Investment Grade		Unrated			mpt from Credit Quality (2)
Collateralized mortgage obligations	\$	21,603	\$ 19	,112	\$	2,491	\$	-	\$	-	\$	-	\$	-		
Commercial mortgage-backed securities		60,639	60	,639		-		-		-		-		-		-
Mortgage pass throughs		346,864	21	,776		287,589		-		-		-		-		37,499
Domestic corporate bonds		452,133		189		19,541		169,708		255,349		7,346		-		-
Asset-backed securities		257,236	227	,916		29,320		-		-		-		-		-
Foreign corporate bonds		113,108	10	,786		7,670		67,076		26,944		632		-		-
U.S. treasury securities		457,795		-		-		-		-		-		-		457,795
U.S. agencies securities		50,836		-		50,836		-		-		-		-		-
Foreign government bonds		11,444		-		5,817		5,157		470		-		-		-
State and local government bonds		33,525	9	,016		22,812		1,697		-		-		-		-
Common/commingled fund																
Collective investment funds		48,028		-		-		-		-		-		48,028		-
	\$	1,853,211	\$ 349	,434	\$	426,076	\$	243,638	\$	282,763	\$	7,978	\$	48,028	\$	495,294

(1) Assets for which the Plans do not directly own the underlying securities are excluded from this chart.

(2) Obligations of the United States Government or obligations explicitly guaranteed by the United States Government, including mortgage pass-throughs, are not considered to have credit risk and do not require disclosure of credit quality.

#### Commingled Funds

The Wells Fargo/BlackRock Short Term Investment Fund consists primarily of certificates of deposit, commercial paper and repurchase agreements.

#### Custodial Credit Risk

Custodial credit risk is the risk that, in the event of the failure of a counterparty financial institution, the Plans will not be able to recover the value of its investments and other assets that are in possession of an outside third party. The Plans do not have a formal policy to limit custodial credit risk.

# **Concentration of Credit Risk**

Concentration of credit risk is the risk of loss attributed to the magnitude of the Plans' investment in a single issuer or category of issuer with similar risk. Money market funds and external investment pools are excluded from this disclosure requirement. Obligations explicitly guaranteed by the U.S. Government are not considered to have credit risk. However, more than 5% of the NC Stable Value Fund's securities were invested in Federal Home Loan Mortgage Corporation and in Federal National Mortgage Association. Investments in Federal Home Loan Mortgage Corporation, which are included in both US Agencies and Mortgage Pass-throughs classifications, totaled \$114.6 million and comprised 5.5% of the NC Stable Value Fund's total investments. Investments in Federal National Mortgage Association, which are classified as Mortgage Pass-throughs, totaled \$200.3 million and comprised 9.7% of the NC Stable Value Fund's total investments. Per the Plans' Investment Policy Statement in effect at December 31, 2018, all investment accounts managed for the Plans must maintain sufficient diversification among security issuers and market sectors such that the performance of one security or sector will not have an excessive impact on the manager's portfolio. In addition, the fund's investment guidelines seek to manage the fund's concentration risk.

# 6. Fair Value Measurement

The Plans categorize fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy levels are summarized in the three levels listed below:

- Level 1 Unadjusted quoted prices for identical instruments in active markets.
- Level 2 Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.
- Level 3 Valuations derived from valuation techniques in which significant inputs are unobservable.

The Plans had the following recurring fair value measurements as of December 31, 2018:

# Supplemental Retirement Plans of North Carolina Notes to Financial Statements Year Ended December 31, 2018

(in thousands of dollars)		Fair Value Measurements Using											
	As of 12/31/2018	m ider	oted prices in active narkets for ntical assets (Level 1)	Significant other observable inputs (Level 2)		unobs inj	ificant ervable outs vel 3)						
Pooled Account													
Investments measured at fair value													
Domestic equity securities	\$ 1,835,259	\$	1,835,259	\$	-	\$	-						
Foreign equity securities	1,405,159		1,405,159		-		-						
Collateralized mortgage obligations	46,490		-		46,490		-						
Domestic corporate bonds	236,198		-		236,198		-						
Mortgage pass throughs	225,438		-		225,438		-						
U.S. Treasury securities	347,842		-		347,842		-						
Asset-backed securities	53,529		-		53,529		-						
Foreign corporate bonds	25,533		-		25,533		-						
International preferred securities	1,986		1,986		-		-						
U.S. agencies securities	3,587		-		3,587		-						
Foreign government bonds	16,054		-		16,054		-						
State and local government bonds	1,245		-		1,245		-						
Total investments by fair value level	4,198,320		3,242,404		955,916		-						

#### Investments measured at the Net Asset Value (NAV)

		Unfunded	Redemption	Redemption
		commitments	frequency	notice (days)
Commingled equity funds (1)	3,278,673	-	Daily	1
Commingled fixed income (2)	771,138	-	Daily	1
Mutual funds (3)	22,654	-	Daily	1
Commingled U.S. debt fund (4)	69,666	-	Daily	1
Collective investment fund (5)	74,529	-	Daily	1
Commingled inflation responsive fund (6)	345,426	-	Daily	1
Total investments at the NAV	4,562,086			
Total Pooled Account investments at fair value	8,760,406			
Accruals and assets not at fair value	(17,808)			
Total Pooled Account investments	\$ 8,742,598			

(1) Four funds. Each are valued at the net asset value of units held at the end of the period, based upon the fair value of the underlying investments.

(2) One fund. Valued at the net asset value of units held at the end of the period, based upon the fair value of the underlying investments.

(3) Two funds. NAV is determined by dividing the total value of the fund's portfolio investments and other assets attributable to the fund,

less liabilities, by the total number of shares outstanding. Value determined at the end of each day the NYSE is open.

(4) One fund. Valued at the net asset value of units held at the end of the period, based upon the fair value of the underlying investments.
(5) This fund is invested in the BNY Mellon 
Enterprint Provide The Fund primarily invests in instruments issued by the

US Government and Federal agencies, short-term corporate obligations, commercial paper, and certificates of deposit. The average weighted maturity of these funds does not exceed 60 days.

(6) One fund. Valued at the net asset value of units held at the end of the period, based upon the fair value of the underlying investments.

# Supplemental Retirement Plans of North Carolina Notes to Financial Statements Year Ended December 31, 2018

				Fair V	/alue N	leasurements	Using	
	As o	f 12/31/2018	Quoted prices in active markets for identical assets (Level 1)		Significant other observable inputs (Level 2)		unobs in	iificant servable outs vel 3)
Stable Value Fund Investments measured at fair value								
Domestic corporate bonds	\$	452,133	\$	-	\$	452,133	\$	-
U.S. treasury securities	Ŷ	457,795	Ŧ	_	Ŷ	457,795	÷	-
Foreign corporate bond		113,108		-		113,108		-
Asset-backed securities		257,236		-		257,236		-
Foreign government bonds		11,444		-		11,444		-
Mortgage pass throughs		346,864		-		346,864		-
U.S. agencies securities		50,836		-		50,836		-
State and local government bonds		33,525		-		33,525		-
Collateralized mortgage obligations		21,603		-		21,603		-
Commercial mortgage backed securities		60,639		-		60,639		-
Investments at fair value		1,805,183		-		1,805,183		-
Investments measured at the Net Asset Value (NAV)								
			Unfu	inded	Re	edemption	Rede	mption
			comm	itments	fr	equency	no	otice
Short term collective trust fund (1)		48,028		-		Daily	1	day
Investments at NAV		48,028						-
Total Stable Value Fund investments	Ś	1,853,211						

Note: Assets for which the Plans do not directly own the underlying securities and cash balances are excluded from the above table. The fair value of the MetLife Insurance Company Separate Account have been previously disclosed in Note 5.

(1) One fund. Valued at the net asset value of units held on the valuation date.

#### Valuation Methodologies and Inputs

Equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities.

Level 2 Collateralized Mortgage Obligations evaluators monitor structured product markets, interest rate movements, new issue information and other market data. Market color such as trades, bids, and offers are applied to the model.

Level 2 Domestic bonds are priced using both spread-based and price-based evaluations. Evaluators survey the dealer community to obtain relevant trade data, benchmark quotes and spreads.

Level 2 Mortgage Pass throughs are evaluated on interest rate movements and other market data to derive spread, yield and/or price data as appropriate allowing data points to be extrapolated for application across a range of related securities.

Level 2 U.S. Treasuries are evaluated by using data from several live feeds which include active market makers and inter-dealer brokers. Sources are reviewed on the basis of their historical accuracy for individual issues and maturity ranges.

Level 2 Asset-backed securities are priced using a model with inputs including market pricing conventions such as yield/spread/discount margin/price solicited from market buy- and sell-side sources including primary dealers, portfolio managers, and research analysts.

Level 2 Foreign corporate bonds are priced using available direct market color (trades, covers, bids, offers and price talk). Market data is enriched to derive spread, yield and/or price data. Enriched data is tested against current evaluations and tolerances and parameters. System parameters are regularly adjusted to reflect prevailing market conditions.

# 7. Related Party Transactions

The Plans contract with Galliard, a subsidiary of Wells Fargo, to act as a delegated fiduciary investment manager for the NC Stable Value Fund. Wells Fargo provides collective investment vehicles and custodial and trustee services for the NC Stable Value Fund. Galliard has discretion over the benefit responsive contracts and the underlying investment managers. Galliard also has the authority to invest in securities subject to guidelines in Galliard's contract with the Board and the Department. As an advisor, Galliard is primarily responsible for ensuring that negotiated investment contracts are adhered to by the insurance companies, banks or other eligible providers who have entered into such contracts. Not less than quarterly, Galliard reports the financial condition of the investment contracts and whether the contracts are being administered according to their respective terms. The fees for wrap coverage, investment management and advisory services are deducted from participants' account balances. The Galliard contract was amended and restated in February 2018, which included a revision to the investment structure and guidelines and lower fees.

Prudential Retirement, a specialized unit of the Prudential Financial Investment Division, provides recordkeeping and participant services for the Plans. The fee to Prudential is deducted from the participants' account balances.

One of the funds within the NC Fixed Income Fund is a commingled vehicle offered by Prudential Trust Company and managed by Prudential Investment Management, Inc. Jennison Associates, a registered investment advisory division within Prudential Global Investment Management, manages a portion of the NC Stable Value Fund. Affiliates of Prudential Retirement also are a wrap provider (Prudential Insurance Company of America) and an investment manager (PGIM, Inc.) for the NC Stable Value Fund.

The Bank of New York Mellon serves as the custodian for the Plans and provides global custody services related to the Pooled Account. These fees are deducted from the participants' account balances. The Bank of New York Mellon also provides a short-term cash vehicle for the temporary investment of funds until they are invested on a longer-term basis.

# 8. Tax Status

The 401(k) Plan received a favorable determination letter from the Internal Revenue Service ("IRS") on November 14, 2016. The determination letter stated that following review, the 401(k) Plan was in compliance with all applicable sections of the IRC. The 401(k) Plan document was modified on December 13, 2018.

The 457(b) Plan document was revised on June 21, 2018. The NC 457(b) Plan has not applied for a Private Letter Ruling from the IRS.

The Plans are subject to rules and regulations promulgated by the IRS. Failure to comply with the rules and regulations of the IRS could result in penalties to the Plans and for the Plan Sponsor. The Department has analyzed the tax positions taken by the Plans, and has concluded that as of December 31, 2018, there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements.

# 9. Plan Termination

Although the General Assembly of North Carolina has not expressed any intent to do so, it has the right to terminate the Plans under the provisions of each of the Plans' documents. In the event of a plan termination, assets of that plan would be distributed to participants as soon as administratively possible.