June 23, 2016

TO:	Board of Trustees of the Local Governmental Employees' Retirement System
FROM:	Firefighters' and Rescue Squad Workers' Pension Fund Advisory Panel
Re:	Annual Report to the Board of Trustees of the NC Local Governmental Employees' Retirement System Regarding the Status and Needs of the NC Firefighters' and Rescue Squad Workers' Pension Fund

The Firefighters' and Rescue Squad Workers' Pension Fund Advisory Panel (Advisory Panel) met on June 6, 2016, at 9:30 a.m. for an extensive review of the Firefighters' and Rescue Squad Workers' Pension Fund (Fund). All members, with the exception of Debra Poe, were present. At the meeting, the Advisory Panel's agenda items included the following:

- December 31, 2014 Actuarial Valuation of the Fund
- December 31, 2014 Results of the Experience Investigation and Recommending Revised Table
- Legislative Update
- Update of Retirement Systems Division (RSD) Operations
- Buck Consultant's Progress on the Firefighters' and Rescue Squad Workers' Pension Fund Data Cleanse project
- Plan of Work and Timeline for Redevelopment of ORBIT Recordkeeping Software for Fire & Rescue Pension Fund

As annually required, the Advisory Panel is pleased to submit the following 2016 Annual Report to the Board of the Trustees of the North Carolina Local Governmental Employees' Retirement System regarding the status and needs of the Fund.

LEGISLATION

Sam Watts, RSD Policy Analyst, presented an update on the legislation affecting the Firefighters' and Rescue Squad Workers' Pension Fund. Mr. Watts reported on the Retirement Technical Corrections Act (Senate Bill 886), which would clarify service purchases for the Fund. Mr. Watts presented on the Retirement Systems Administrative Changes Bill (House Bill 1134 and Senate Bill 887), which makes two policy changes related to the Fund. The bill would allow members of the Fund to designate beneficiaries for the return of contributions upon the death of the member, and it creates a benefit enhancement that would provide a survivorship benefit if a member dies in the line of duty.

OPERATIONS UPDATE

Tom Causey, RSD Deputy Director of Operations, and Donna Boyette, Firefighters' and Rescue Squad Workers' Pension Fund Coordinator, provided the Advisory Panel with an operations update for administration of the fund. Mr. Causey noted that the team has consistently met and exceeded the operational goals.

- 2015 rosters were successfully uploaded into ORBIT on January 31, 2016
- Mid-February generated 1,516 TADS to agencies
- 85% of the agencies submitted contributions in advance of the March 31 deadline
- Agencies that submitted contributions after the deadline were given three choices:
 - 1. Post money to accounts to apply as contributions for future years
 - 2. Purchase the 2015 contributions
 - 3. Have the funds returned

Note: no exceptions were granted in 2016

- Team has been fully staffed since April 2015
- Team metrics are being exceeded significantly
- First issue of the Firefighters' and Rescue Squad Workers' Pension Fund eNewsletter was launched January 2016

ORBIT REDESIGN

David Starling, Constituent Relations, and Linda Enderlin, Business Systems Manager, updated the Advisory Panel on progress towards automation of the Fire & Rescue Pension Fund administration. RSD staff continues its efforts to plan, design, build, test and implement a Fire and Rescue Pension Fund module within ORBiT, its online recordkeeping platform. The goal is to enhance ORBiT self-service to be more customer-friendly for participating members. These enhancements include providing members with the ability to view fully credited service and contributions paid to date, as well as allowing members to perform service purchase estimates. Additionally, ORBiT fire and rescue department selfservice capabilities will be available to process member contributions and provide departments with the ability to contribute using EFT. The roster process will be enhanced to provide more information, including beginning and end dates of service. RSD is continuing its efforts to enhance the integrity of member/department data.

RSD has identified 17 separate business requirements for implementation. Requirements have been completed on 10 of the 17. 1 of the 17 requirements (Maintain Agency) has been fully implemented to date.

DECEMBER 31, 2014, ACTUARIAL VALUATION

Larry Langer and Mike Ribble, of Buck Consultants, presented the December 31, 2014, actuarial valuation for the Fund. Key results of the December 31, 2014, valuation as compared to the previous valuation were:

- Market value returns of 6.24% compared to 7.25% assumed
 - No significant legislation signed into law
- Adjustments to actuarial assumptions intended to estimate the impact of a full audit of the census data for lapsed members, including the development of the appropriate lapse assumption based on the full audit
- No significant changes in funding methodology from the prior year's valuations

When compared to the December 31, 2013, valuation, the above resulted in:

• Higher funded ratio (90.9% in the December 31, 2014, valuation compared to 88.3% in the December 31, 2013, valuation)

• Lower employer required contribution (\$12,830,706 for fiscal year ending June 30, 2017, compared to \$13,240,552 for fiscal year ending June 30, 2016)

The Fund is well-funded compared to its peers. This is due to:

- Stakeholders working together to keep the Fund well-funded since inception
- A history of appropriating and contributing the recommended contribution requirements
- Assumptions that, in aggregate, are more conservative than peers
- A funding policy that aggressively pays down unfunded liability over a 12-year period
- Modest changes in benefits when compared to peers

Continued focus on these measures will be needed to maintain the solid status of the Fund well into the future.

RESULTS OF THE EXPERIENCE INVESTIGATION

Buck Consultants shared the Investigation of Demographic and Economic Experience Five-Year Period from January 1, 2010 through December 31, 2014 for the Firefighters' and Rescue Squad Workers' Pension Fund. The Experience review resulted in proposed changes to the following:

- Demographic Assumptions
- Economic Assumptions
- Funding Methods

Key takeaways from the Experience Review are as follows:

Assumption	Observed Experience Relative to Expectations	Recommendation	Impact on Costs	
1. Mortality	Fewer Deaths	Decrease Rates and Update Mortality Improvement Projection Scale	Significant Increase	
2. Service retirement	In-Service Distributions	No Change	N/A	
3. Disability retirement	Fewer Disabilities	Decrease Rates (with LGERS)	Slight Decrease	
4. Termination from active employment	Under Data Audit Review	N/A	N/A	
5. Lapse assumption	Under Data Audit Review	N/A	N/A	
6. Investment Return	Current Assumption Reasonable	No Change	N/A	
7. Merit pay increases	N/A	N/A	N/A	
8. Inflation	Current Assumption Reasonable	No Change	N/A	
9. Productivity growth	N/A	N/A	N/A	
10. Amortization method	Current Assumption Reasonable	No Change	N/A	
11. Actuarial cost method	Current Assumption Reasonable	No Change	N/A	
12. Asset valuation method	Not Transparent or Predictable	5-year smoothing	Slight Decrease	

The mortality assumption was the source of the largest increase in costs. While there were fewer deaths than expected over the past few years, the increase in costs was driven more by the increase in mortality improvements suggested by national studies.

ACTUARIAL DATA AUDIT OF THE FUND

Larry Langer and Mike Ribble of Buck Consultants updated the Advisory Panel on their progress towards completion of the actuarial data audit of the Fund. To be eligible for a benefit, a Firefighters' and Rescue Squad Workers' Pension Fund member must have completed 20 years of roster service and 20 years of contributions. Many members leave before meeting the requirements to be eligible for a retirement benefit. These members are called "lapsed" members. A "deeper dive" research project was initially requested in order to assess the ability to create a lapse assumption that would reduce both future liabilities and the State's ongoing contribution requirement to the Plan.

Buck Consultants reviewed 13,565 records as of the 2013 actuarial valuation

- Found 10,735 with actual lapses (breakdown below contains duplicates)
 - o 2005 with lapses and returned somewhere in the roster service history
 - 342 with multiple return from lapses
 - 3,391 with lapses of 8 or more years
 - Buck Consultants recommended contact for return of contributions
 - 7,060 currently lapsed less than 8 years
- Remaining 2,830 had updated data and no lapse

Buck Consultants shared the following observations regarding the data on the likelihood that members would return after a lapse:

- Reviewed lapses by age and by roster service
 - Return from lapse experience is relatively uniform across member ages and roster service at the start of lapse
- Reviewed lapses up to 10 years
 - Very few members return after 8 years of lapse, so lapse assumption was consolidated to 0% after 8 years
- Recommended changing assumptions to better align with past experience

	Lapse = 1	Lapse = 2	Lapse = 3	Lapse = 4	Lapse = 5	Lapse = 6	Lapse = 7	Lapse = 8
Return to Work Assumption	42.00%	23.00%	14.00%	10.00%	6.00%	4.50%	3.00%	0.00%

Estimated Impact on the FYE June 30, 2017 Annual Required Contribution

	Experience Investigation*	Revised Lapse Assumption
Normal Cost	\$7,084,000	\$6,018,000
Accrued Liability	\$10,518,000	\$8,275,000
Annual Required Contribution	\$17,602,000	\$14,293,000
Impact of Lapse Assumption		\$(3,309,000)

Appropriate next steps are as follows:

- Encourage lapsed members over age 65 to submit application for return of contributions
- Encourage lapsed members who receive return of contributions in other North Carolina administered plans to submit application for return of contributions
- Encourage lapsed members that are not expected to return to service to submit application for return of contributions
 - After confirming they have not yet returned to service (since 2012)
- Perform death search on all lapsed population
 - Contact survivors of deceased active members to encourage them to submit application for return of contributions
- Set final fiscal assumptions
 - Estimate impact on FYE 2017 required contribution
 - o Incorporate assumptions into actuarial valuation at December 31, 2015
- Load updated information into ORBIT

Project costs exceeded \$900,000 and will return in excess of \$3 million annually.

NEEDS OF THE FUND

The Advisory Panel identified the following needs of the fund:

Actuarial

- Continue to seek full funding of the ARC
- Continue to aggressively reduce liabilities
- Maintain a conservative funding policy and appropriate balance on benefits
- Strive to reach a 100% funding status for the fund

Process/Operations

- Continue efforts to complete the ORBiT redesign
- Continue to improve data integrity
- Continue the positive momentum towards achieving operational goals
- Develop member statements
- Continue to improve Departments' access to service/credit information about each department and its members.
- Continue efforts to reconcile the various member contribution amounts over time and various laws to ensure accuracy of data for members as they near retirement
- Reorder the TAD's Electronic submission of the TADs and contributions hierarchy of active, inactive, deceased, disabled, and retired members of TAD screen.
- Continue to promote the \$170 benefit in the Fire & Rescue Newsletter to attract and retain members

Policy/Legislative

- Continue to monitor the Gross Premium Tax since, as the ARC is reduced, there may be an opportunity to increase benefits to the members
- With more and more career firefighters and rescue squad workers consider a tiered benefit for increased benefit for years exceeding 20
- The efforts of RSD staff and the strong results should be shared with the legislators

- Consider an incentive program to attract and retain members
- Continue to monitor for felony forfeitures to ensure compliance with the statute

The Retirement Systems Division will evaluate the needs of the Fund as shared by the Advisory Panel and incorporate those needs into the ongoing project, where applicable.