

LOUISIANA

Commercial Vehicle Safety Plan

Federal Motor Carrier Safety Administration's Motor Carrier Safety Assistance Program

Fiscal Years 2023 - 2025

Date of Approval: June 28, 2023

FINAL CVSP



Part 1 - MCSAP Overview

Part 1 Section 1 - Introduction

The Motor Carrier Safety Assistance Program (MCSAP) is a Federal grant program that provides financial assistance to States to help reduce the number and severity of accidents and hazardous materials incidents involving commercial motor vehicles (CMV). The goal of the MCSAP is to reduce CMV-involved accidents, fatalities, and injuries through consistent, uniform, and effective CMV safety programs.

A State lead MCSAP agency, as designated by its Governor, is eligible to apply for grant funding by submitting a commercial vehicle safety plan (CVSP), in accordance with the provisions of 49 CFR 350.209, 350.211 and 350.213. The lead agency must submit the State's CVSP to the FMCSA Division Administrator on or before the due date each year. For a State to receive funding, the CVSP needs to be complete and include all required documents. Currently, the State must submit a performance-based plan or annual update each year to receive MCSAP funds.

The online CVSP tool (eCVSP) outlines the State's CMV safety objectives, strategies, activities and performance measures and is organized into the following five parts:

- Part 1: MCSAP Overview (FY 2023 2025)
- Part 2: Crash Reduction and National Program Elements (FY 2023 2025)
- Part 3: National Emphasis Areas and State Specific Objectives (FY 2023 2025)
- Part 4: Financial Information (FY 2023)
- Part 5: Certifications and Documents (FY 2023)

You will find that each of the five eCVSP parts listed above contains different subsections. Each subsection category will provide you with detailed explanation and instruction on what to do for completing the necessary tables and narratives.

The MCSAP program includes the eCVSP tool to assist States in developing and monitoring their grant applications. The eCVSP provides ease of use and promotes a uniform, consistent process for all States to complete and submit their plans. States and territories will use the eCVSP to complete the CVSP and to submit a 3-year plan or an Annual Update to a 3-year plan. As used within the eCVSP, the term 'State' means all the States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, and the Virgin Islands.

REMINDERS FOR FY 2023:

Multi-Year plans—All States will be utilizing the multi-year CVSP format. This means that objectives, projected goals, and activities in the plan will cover a full three-year period. The financial information and certifications will be updated each fiscal year.

Annual Updates for Multi-Year plans—States in Year 2 or Year 3 of a multi-year plan will be providing an Annual Update only. States will review the project plan submitted the previous year and indicate any updates for the upcoming fiscal year by answering the "Yes/No" question provided in each Section of Parts 1-3.

- If Yes is indicated selected, the information provided for Year 1 will be editable and State users can make any necessary changes to their project plan. (Note: Trend Analysis information that supports your current activities is not editable.) Answer carefully as there is only one opportunity to select "Yes" before the question is locked.
- If "No" is selected, then no information in this section will be editable and the user should move forward to the next section.

All multi-year and annual update plans have been pre-populated with data and information from their FY 2022 plans. States must carefully review and update this information to reflect FY 2023 activities prior to submission to FMCSA. The financial information and certifications will be updated each fiscal year.

- Any information that is added should detail major programmatic changes. Do not include minor modifications that reflect normal business operations (e.g., personnel changes).
- Add any updates to the narrative areas and indicate changes by preceding it with a heading (e.g., FY 2023 update). Include descriptions of the changes to your program, including how data tables were modified.
- The Trend Analysis areas in each section are only open for editing in Year 1 of a three-year plan. This data is not editable in Years 2 and 3.

Personally Identifiable Information - PII is information which, on its own or matched with other data, would permit identification of an individual. Examples of PII include: name, home address, social security number, driver's license number or State-issued identification number, date and/or place of birth, mother's maiden name, financial, medical, or educational

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records, non-work telephone numbers, criminal or employment history, etc. PII, if disclosed to or altered by unauthorized individuals, could adversely affect the Agency's mission, personnel, or assets or expose an individual whose information is released to harm, such as identity theft.

States are reminded **not** to include any PII in their CVSP. The final CVSP approved by FMCSA is required to be posted to a public FMCSA website.

Part 1 Section 2 - Mission/Goal Statement

Instructions:

Briefly describe the mission or goal of the lead State commercial motor vehicle safety agency responsible for administering this Commercial Vehicle Safety Plan (CVSP) throughout the State.

NOTE: Please do not include information on any other FMCSA grant activities or expenses in the CVSP.

LSP recognizes the key role of the MCSAP program is to reduce crashes, injuries, and fatalities involving CMVs in general. The Louisiana State Police (LSP) will continue to build upon our historic mission of supporting FMCSA's goal to reduce the number and severity of crashes involving commercial motor vehicles. This will be accomplished through an effective roadside inspection program, aggressive traffic enforcement, thorough compliance reviews/investigations, and effective public education. We will continue to provide technical assistance, training, and education to the motor carrier industry in an effort to bring about voluntary safety compliance. In addition, an increased public awareness campaign will convey the dangers of aggressive driving around large trucks and buses to CMV and Non-CMV drivers alike, with targeted efforts toward prospective and mature drivers, based on data collected and analyzed throughout the year.

In light of a recent increase nationwide in the number and severity of passenger carrier crashes, it is evident that an increased emphasis on passenger carrier safety is necessary. LSP will continue to target the unsafe operation of passenger carriers, in an effort to assist FMCSA in reducing bus crashes and fatalities. In addition, LSP will increase its focus on enforcement efforts in construction work zones and congested areas immediately before and after construction work zones. LSP will continually monitor crash statistics in and around construction work zones and will adjust enforcement and eductation outreach based on that data. Additionally, LSP recognizes the importance of national security, and the danger involving CMVs that carry hazardous materials. LSP will continue an increased inspection/enforcement effort toward such vehicles.

Part 1 Section 3 - MCSAP Structure Explanation

Instructions:

Answer the questions about your CVSP activities and briefly describe the State's commercial motor vehicle (CMV) enforcement program funded by the MCSAP grant. Please do not include activities or expenses associated with any other FMCSA grant program.

Yes	No	Question		
		Are there initiatives involving "rural roads" included in this CVSP?		
		Does your State voluntarily submit an annual Training Plan to the National Training Center (NTC)?		
		Does your State include activities regarding Migrant Worker Transportation in Rural Areas in this CVSP?		

The Louisiana State Police (LSP) is statutorily designated as the only agency authorized to conduct MCSAP activities within the State of Louisiana. As such, we are designated as the Lead MCSAP Agency in Louisiana. MCSAP enforcement is provided by 130 Commissioned and 8 Civilian NAS-Certified Inspectors throughout the Department, all of whom are committed to supporting FMCSA's goal of promoting CMV safety and reducing the number and severity of CMV large truck and bus crashes.

LSP MCSAP Inspectors utilize ASPEN for completing Driver/Vehicle Examination reports. This program aids the inspector in properly identifying motor carriers, thus ensuring accuracy. Inspectors are required to transfer inspections electronically via SafetyNet. This process continues to help Louisiana maintain its green status for data completeness, timeliness, and accuracy.

LSP maintains a close partnership with the Louisiana State University, Highway Safety Research Group (LSU/HSRG), to provide in-depth, comprehensive crash data collection, analysis and reporting. This continued relationship has dramatically improved Louisiana's state data rating over the past several years, resulting in several Data Quality Awards. LSU is contracted as the primary repository for crash data for the Department of Public Safety. As crash reports are received, they are compiled and entered into a database, then forwarded to MCSAP for upload to SafetyNet. The data is also posted to a nationally recognized website, which is updated daily. This data is available to MCSAP supervisors to review and to develop strategies that will most effectively address current crash factors and circumstances. LSP Administrative staff and field supervisors will meet with CARTS Personnel at least quarterly to review the latest crash data and trends and adjust enforcement and inspection efforts accordingly.

FY 2022 Update:

LSU Highway Safety Research Group (LSU/HSRG) has been renamed to the Center for Analytics and Research in Transportation Safety (CARTS).

The MCSAP Data Quality(DQ) Program Section addresses all DataQs challenges, and ensures that all are adequately handled in a timely manner. DQ personnel also provide CMV crash reporting training to local law enforcement agencies throughout the state. Additional administrative personnel have been trained to assist in the event of a substantial increase in the number of DataQ challenges received.

The MCSAP Unit, within the Commercial Vehicle Enforcement Division, is responsible for administering the MCSAP for LSP. The MCSAP Unit is comprised of 45 NAS-certified commissioned inspectors, 8 NAS-certified civilian NESA Investigators, 3 civilian DQ Investigators, and 10 other civilian administrative support personnel. The MCSAP unit receives command supervision from a State Police Captain, and ultimately a State Police Major. The MCSAP Unit is functionally divided along administrative and enforcement lines.

The 24 full time MCSAP troopers conduct enforcement and inspection activities on full time basis.

The 51 support personnel, which include troopers and DPS Personnel, are fully MCSAP certified and conduct these activates on a limited basis.

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Administrative (30)

- One (1) State Police Lieutenant that manages the operations of compliance reviews, civil penalty assessment process, SafetyNet, legislative affairs, and training.
- One (1) State Police Lieutenant that manages all MCSAP grants, activities, and logistics.
- One (1) State Police Sergeant coordinates MCSAP Grants and the New Entrant Safety Audit Program.
- One (1) State Police Sergeant coordinates compliance reviews and training.
- One (1) State Police Sergeant serves as the MCSAP logistics coordinator for the state.
- Seven (7) State Police Troopers conduct compliance reviews, investigations, and outreach.
- One (1) Civilian Administrative Program Manager I supervises all civilian MCSAP personnel.
- Four (4) Civilian Administrative Coordinator IV's perform MCSAP administrative duties such as processing inspections, hearing requests, purchasing, and other administrative duties.
- One (1) Civilian Administrative Coordinator IV (WAE) manages DataQs challenges.
- One (1) Civilian Training/Public Outreach Coordinator (WAE) handles all issues dealing with training and education, both for inspectors and for the public.
- Eight (8) Civilian NESA Auditors (WAE) perform New Entrant audits and education state-wide.
- Three (3) Civilian Data Quality Investigators (WAE) handle data quality issues and state-wide training.

Roadside Enforcement-Levels 1-3 (67)

- Three (3) State Police Lieutenants provide supervision of roadside enforcement (one in each region).
- Six (6) State Police Sergeants provide direct supervision to roadside inspectors (two in each region).

Twenty-Four (24) Troopers are assigned to perform MCSAP enforcement and inspection activities throughout the state on a full-time basis.

Thirty-four (34) Mobile Weight MCSAP Inspectors provide additional support within the Transportation Safety Section that conduct MCSAP inspections and enforcement activities on a full-time basis, in association with all mobile weight enforcement activities.

Support (51)

The MCSAP unit currently receives additional support from fifty-one (51) NAS-Certified enforcement Troopers and DPS Officers throughout the Department, which include:

Towing and Recovery / MVI Unit - Twenty (20) - conduct MCSAP inspections in conjunction with CMV related job functions.

Emergency Services Unit - Twenty (22) - conduct MCSAP inspections in conjunction with CMV related job functions.

Other LSP Personnel - Nine (9) - conduct MCSAP inspections on an occasional basis, in association with regular assigned patrol duties.

FY 2023 Update:

The MCSAP Data Quality(DQ) Program Section addresses all DataQs challenges, and ensures that all are adequately handled in a timely manner. DQ personnel also provide CMV crash reporting training to local law enforcement agencies throughout the state. Additional administrative personnel have been trained to assist in the event of a substantial increase in the number of DataQ challenges received. We are currently changing to a new crash report called eCrash. The transition to the new report has proven a need for increased training and corrections from our data quality personnel. Therefore, we are also expanding our Data Quality program from 3 to 4 personnel.

The MCSAP Unit, within the Commercial Vehicle Enforcement Division, is responsible for administering the MCSAP for LSP. The MCSAP Unit is comprised of 45 NAS-certified commissioned inspectors, 10 NAS-certified civilian NESA Investigators, 4 civilian DQ Investigators, and 10 other civilian administrative support personnel. The MCSAP unit receives command supervision from a State Police Captain, and ultimately a State Police Major. The MCSAP Unit is functionally divided along administrative and enforcement lines. We have seen an increase in new entry audits, so we decided to add a NESA Safety auditor. This will bring our total number of auditors to 10.

The 24 full time MCSAP troopers conduct enforcement and inspection activities on full time basis.

The 51 support personnel, which include troopers and DPS Personnel, are fully MCSAP certified and conduct these activates on a limited basis.

Administrative (33)

- One (1) State Police Lieutenant that manages the operations of compliance reviews, civil penalty assessment process, SafetyNet, legislative affairs, and training.
- One (1) State Police Lieutenant that manages all MCSAP grants, activities, and logistics.
- One (1) State Police Sergeant coordinates MCSAP Grants and the New Entrant Safety Audit Program.
- One (1) State Police Sergeant coordinates compliance reviews and training.
- One (1) State Police Sergeant serves as the MCSAP logistics coordinator for the state.
- Seven (7) State Police Troopers conduct compliance reviews, investigations, and outreach.
- One (1) Civilian Administrative Program Manager I supervises all civilian MCSAP personnel.
- Four (4) Civilian Administrative Coordinator IV's perform MCSAP administrative duties such as processing inspections, hearing requests, purchasing, and other administrative duties.
- One (1) Civilian Administrative Coordinator IV (WAE) manages DataQs challenges.
- One (1) Civilian Training/Public Outreach Coordinator (WAE) handles all issues dealing with training and education, both for inspectors and for the public.
- Ten (10) Civilian NESA Auditors (WAE) perform New Entrant audits and education state-wide.
- Four (4) Civilian Data Quality Investigators (WAE) handle data quality issues and state-wide training.

Roadside Enforcement-Levels 1-3 (67)

- Three (3) State Police Lieutenants provide supervision of roadside enforcement (one in each region).
- Six (6) State Police Sergeants provide direct supervision to roadside inspectors (two in each region).
- Twenty-Four (24) Troopers are assigned to perform MCSAP enforcement and inspection activities throughout the state on a full-time basis.

Thirty-four (34) Mobile Weight MCSAP Inspectors provide additional support within the Transportation Safety Section that conduct MCSAP inspections and enforcement activities on a full-time basis, in association with all mobile weight enforcement activities.

Support (51)

The MCSAP unit currently receives additional support from fifty-one (51) NAS-Certified enforcement Troopers and DPS Officers throughout the Department, which include:

Towing and Recovery / MVI Unit - Twenty (20) - conduct MCSAP inspections in conjunction with CMV related job functions.

Emergency Services Unit - Twenty (22) - conduct MCSAP inspections in conjunction with CMV related job functions.

Other LSP Personnel - Nine (9) - conduct MCSAP inspections on an occasional basis, in association with regular assigned patrol duties.

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Part 1 Section 4 - MCSAP Structure

Instructions:

Complete the following tables for the MCSAP lead agency, each subrecipient and non-funded agency conducting eligible CMV safety activities.

The tables below show the total number of personnel participating in MCSAP activities, including full time and part time personnel. This is the total number of non-duplicated individuals involved in all MCSAP activities within the CVSP. (The agency and subrecipient names entered in these tables will be used in the National Program Elements—Roadside Inspections area.)

The national program elements sub-categories represent the number of personnel involved in that specific area of enforcement. FMCSA recognizes that some staff may be involved in more than one area of activity.

Lead Agency Information					
Agency Name:	LOUISIANA STATE POLICE				
Enter total number of personnel participating in MCSAP activities	151				
National Program Elements	Enter # personnel below				
Driver and Vehicle Inspections	144				
Traffic Enforcement Activities	144				
Investigations*	17				
Public Education and Awareness	13				
Data Collection and Reporting	10				
* Formerly Compliance Reviews and Includes New Entrant Safety Audits					

Subrecipient Information					
Agency Name:					
Enter total number of personnel participating in MCSAP activities	0				
National Program Elements	Enter # personnel below				
Driver and Vehicle Inspections	0				
Traffic Enforcement Activities	0				
Investigations*	0				
Public Education and Awareness	0				
Data Collection and Reporting	0				
* Formerly Compliance Reviews and Includes New Entrant Safety Audits					

Non-funded Agency Information				
Total number of agencies:				
Total # of MCSAP Participating Personnel:				

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Part 2 - Crash Reduction and National Program Elements

Part 2 Section 1 - Overview

Part 2 allows the State to provide past performance trend analysis and specific goals for FY 2023 - 2025 in the areas of crash reduction, roadside inspections, traffic enforcement, audits and investigations, safety technology and data quality, and public education and outreach.

Note: For CVSP planning purposes, the State can access detailed counts of its core MCSAP performance measures. Such measures include roadside inspections, traffic enforcement activity, investigation/review activity, and data quality by quarter for the most recent five fiscal years using the Activity Dashboard on the A&I Online website. The Activity Dashboard is also a resource designed to assist the State with preparing their MCSAP-related quarterly reports and is located at: https://ai.fmcsa.dot.gov. A user id and password are required to access this system.

In addition, States can utilize other data sources available on the A&I Online website as well as internal State data sources. It is important to reference the data source used in developing problem statements, baselines and performance goals/objectives.

Part 2 Section 2 - CMV Crash Reduction

The primary mission of the Federal Motor Carrier Safety Administration (FMCSA) is to reduce crashes, injuries and fatalities involving large trucks and buses. MCSAP partners also share the goal of reducing commercial motor vehicle (CMV) related crashes.

Trend Analysis for 2017 - 2021

Instructions for all tables in this section:

Complete the tables below to document the State's past performance trend analysis over the past five measurement periods. All columns in the table must be completed.

- Insert the beginning and ending dates of the five most recent State measurement periods used in the Measurement Period column. The measurement period can be calendar year, Federal fiscal year, State fiscal year, or any consistent 12-month period for available data.
- In the Fatalities column, enter the total number of fatalities resulting from crashes involving CMVs in the State during each measurement period.
- The Goal and Outcome columns relate to each other and allow the State to show its CVSP goal and the actual outcome for each measurement period. The goal and outcome must be expressed in the same format and measurement type (e.g., number, percentage, etc.).
 - In the Goal column, enter the goal from the corresponding CVSP for the measurement period.
 - In the Outcome column, enter the actual outcome for the measurement period based upon the goal that was set
- Include the data source and capture date in the narrative box provided below the tables.
- If challenges were experienced while working toward the goals, provide a brief narrative including details of how the State adjusted the program and if the modifications were successful.
- The Trend Analysis area is only open for editing during Year 1 of a 3-year plan. This data is not editable in Years 2 and 3.

ALL CMV CRASHES

Select the State's method of measuring the crash reduction goal as expressed in the corresponding CVSP by using the drop-down box options: (e.g. large truck fatal crashes per 100M VMT, actual number of fatal crashes, actual number of fatalities, or other). Other can include injury only or property damage crashes.

Goal measurement as defined by your State: Actual # Fatal Crashes

If you select 'Other' as the goal measurement, explain the measurement used in the text box provided:

Measu Period (Inclu	Fatalities	Goal	Outcome	
Begin Date	End Date			
01/01/2021	12/31/2021	131	94	114
01/01/2020	12/31/2020	95	94	89
01/01/2019	12/31/2019	99	92	90
01/01/2018	12/31/2018	104	92	94
01/01/2017	12/31/2017	109	80	96

MOTORCOACH/PASSENGER CARRIER CRASHES

Select the State's method of measuring the crash reduction goal as expressed in the corresponding CVSP by using the drop-down box options: (e.g. large truck fatal crashes per 100M VMT, actual number of fatal crashes, actual number of fatalities, other, or N/A).

Goal measurement as defined by your State: Actual # Fatal Crashes

If you select 'Other' or 'N/A' as the goal measurement, explain the measurement used in the text box provided:

Measu Period (Includ	Fatalities	Goal	Outcome	
Begin Date	End Date			
01/01/2021	12/31/2021	3	2	3
01/01/2020	12/31/2020	5	2	5
01/01/2019	12/31/2019	5	2	5
01/01/2018	12/31/2018	5	1	4
01/01/2017	12/31/2017	1	1	1

Hazardous Materials (HM) CRASH INVOLVING HM RELEASE/SPILL

Hazardous material is anything that is listed in the hazardous materials table or that meets the definition of any of the hazard classes as specified by Federal law. The Secretary of Transportation has determined that hazardous materials are those materials capable of posing an unreasonable risk to health, safety, and property when transported in commerce. The term hazardous material includes hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, and all other materials listed in the hazardous materials table.

For the purposes of the table below, HM crashes involve a release/spill of HM that is part of the manifested load. (This does not include fuel spilled from ruptured CMV fuel tanks as a result of the crash).

Select the State's method of measuring the crash reduction goal as expressed in the corresponding CVSP by using the drop-down box options: (e.g., large truck fatal crashes per 100M VMT, actual number of fatal crashes, actual number of fatalities, other, or N/A).

Goal measurement as defined by your State: Actual # Fatal Crashes

If you select 'Other' or 'N/A' as the goal measurement, explain the measurement used in the text box provided:

Measu Period (Inclu	Fatalities	Goal	Outcome	
Begin Date	End Date			
01/01/2021	12/31/2021	1	1	1
01/01/2020	12/31/2020	1	1	1
01/01/2019	12/31/2019	2	1	1
01/01/2018	12/31/2018	1	1	1
01/01/2017	12/31/2017	2	1	1

Enter the data sources and capture dates of the data listed in each of the tables above.

Dr. Helmut Schneider, Ph.D. - LSU Highway Safety Research Group, Commercial Vehicle Safety in Louisiana, An Analysis of Truck Crashes for 2018, May 2019. FY 2023 Update: Dr. Helmut Schneider, Ph.D. - LSU Center for Analytics and Research in Transportation Safety, Commercial Vehicle Safety in Louisiana, An Analysis of Truck Crashes for 2021, April 2022.

Narrative: Describe any difficulties achieving the goal, problems encountered, obstacles overcome, lessons learned, etc.

In 2018, although Louisiana experienced a slight decrease (2.1%) in fatal CMV crashes statewide when compared to 2017, the overall reduction goal was not achieved. We believe this is due, in part, to to the increased amount of CMV traffic on the roadways due to a continuing expanding economy along with the second year in a row of increased work zone activities on Interstate and state highways througout the state.

FY 2023 Update:

In 2021, the total number of reported CMV crashes increased by 13% compared to 2020.

We are still experiencing an increase an increase in the amount of CMV traffic on the roadway due to an expanding economy. We continue to have an increase in work zone activities on the interstate and state highways.

Narrative Overview for FY 2023 - 2025

Instructions:

The State must include a reasonable crash reduction goal for their State that supports FMCSA's mission to reduce the national number of crashes, injuries and fatalities involving commercial motor vehicles. The State has flexibility in setting its goal and it can be based on raw numbers (e.g., total number of fatalities or CMV crashes), based on a rate (e.g., fatalities per 100 million VMT), etc.

Problem Statement Narrative: Describe the identified problem, include baseline data and identify the measurement method.

According to Dr. Helmut Schneider with Louisiana State University, Highway Safety Research Group (LSU/HSRG), in 2018, the number of fatal CMV crashes decreased by only 2.1% (2), compared to 2017, down from 96 to 95. Additionally, the total number of CMV crashes decreased by only 0.7% (27) compared to 2017, down from 4116 to 4085.

FY 2021 Update: The Louisiana State University, Highway Safety Research Group (LSU/HSRG), recorded a continued downward trend in 2019 with the total number of CMV fatal crashes at 88 as compared to 95 in 2018 which was a 7.4% decrease.

Additionally, the total number of CMV crashes decreased from 4085 in 2018 to 3833 in 2019 which was a 6.2% decrease.

FY 2022 Update: The Louisiana State University, Center for Analytics & Research (CARTS), recorded that the total number of CMV crashes continued to decrease in 2020. The total number of CMV crashes decreased from 3833 in 2019 to 3667 in 2020 which is a 4.7% decrease.

Additionally, the number of fatal CMV crashes decreased slightly from 90 in 2019 to 88 in 2020, a decrease of 2.2%

FY2023 Update:

In 2021, the total number of reported CMV crashes increased by 13% compared to 2020. The number of fatal CMV crashes increased from 89 in 2020 to 114 in 2021, an increase of 20%. The number of injury crashes increased from 1,851 to 2,157 during the same period, and increase of 16%.

Enter the data source and capture date:

Dr. Helmut Schneider, Ph.D. - LSU Highway Safety Research Group, Commercial Vehicle Safety in Louisiana, An Analysis of Truck Crashes for 2018, May 2019. FY2021 Update: Dr. Helmut Schneider, Ph.D. - LSU Highway Safety Research Group, Commercial Vehicle Safety in Louisiana, An Analysis of Truck Crashes for 2019, May 2020. FY 2022 Update: Dr. Helmut Schneider Ph.D. - LSU Center for Analytics & Research, Commercial Vehicle Safety in Louisiana, An Analysis of

Truck Crashes for 2020, April 2021. FY 2023 Update: Dr. Helmut Schneider, Ph.D. - LSU Center for Analytics and Research in Transportation Safety, Commercial Vehicle Safety in Louisiana, An Analysis of Truck Crashes for 2021, April 2022.

Projected Goal for FY 2023 - 2025:

In the table below, state the crash reduction goal for each of the three fiscal years. The method of measurement should be consistent from year to year. For example, if the overall crash reduction goal for the three year period is 12 percent, then each annual goal could be shown as 4 percent.

	Fiscal Year	Annual Crash Reduction Goals	
	2023		4
ĺ	2024		4
	2025		4

To maximize our current enforcement activities we will collaborate with DOTD, our staff and LSU to ensure efficient manpower to reduce serious CMV crashes in all areas to include work zones. The goal is to reduce CMV crashes by 15 % or more. The collaboration with these partners should allow us to achieve the most significant reduction in CMV crashes. Every effort possible will be utilizes to meet the 15% goal.

Program Activities for FY 2023 - 2025: States must indicate the activities, and the amount of effort (staff hours, inspections, traffic enforcement stops, etc.) that will be resourced directly for the program activities purpose. Increase traffic enforcement as practicable in areas identified as high crash corridors, with emphasis in construction work zones, including the 5 miles leading up to a construction work zone. Supplement regular duty enforcement with approximately 5,000 hours of overtime enforcement, which should produce approximately 3,400 inspections/violations. This traffic enforcement will be specifically targeted to CMV's (with an inspection) and to non-CMV's in the immediate vicinity of CMV's. Provide educational outreach to CMV drivers through safety talks, with a focus on prospective and mature drivers.

Performance Measurements and Monitoring: The State will monitor the effectiveness of its CMV Crash Reduction Goal quarterly and annually by evaluating the performance measures and reporting results in the required Standard Form - Performance Progress Reports (SF-PPRs).

Describe how the State will conduct ongoing monitoring of progress in addition to quarterly reporting.

Performance measures shall be based upon the number of inspections conducted, the number of traffic violations issued, and crash statistics. A 3% (3) reduction in fatal crashes, from 94 to 91, is expected by December 31, 2020. Baseline crash data is established on calendar year 2018 statistics, as 2019 data is not yet available. All quantitative and/or qualitative progress will be tracked from information provided by LSU/HSRG, along with internal departmental statistics. Statistics will be monitored by MCSAP administrative personnel and field supervisors, who will make adjustments to activities as the data dictates. Non-CMV traffic enforcement will be documented and tracked via daily reporting forms submitted by inspectors upon completion of each regular shift or overtime detail. This information will be reported quarterly through MCSAP quarterly reporting.

FY2021 Update: Since the availability of the 2019 crash data, we are expecting to continue a downward trend of 3% with a reduction of fatal crashes from 88 to 85 by December 31, 2021.

FY2022 Update: We are expecting to continue a downward trend of 3% with a reduction of fatal crashes from 85 to 82 by December 31, 2022

FY2023 Update: The number of fatal CMV crashes increased from 89 in 2020 to 114 in 2021, an increase of 28%. Statistics will be monitored by MCSAP administrative personnel and field supervisors, who will make adjustments to activities as the data dictates. Non-CMV traffic enforcement will be documented and tracked via daily reporting forms submitted by inspectors upon completion of each regular shift or overtime detail. This information will be reported quarterly through MCSAP quarterly reporting.

Part 2 Section 3 - Roadside Inspections

In this section, provide a trend analysis, an overview of the State's roadside inspection program, and projected goals for FY 2023 - 2025. The Trend Analysis area is only open for editing during Year 1 of a 3-year plan. This data is not editable during Years 2 and 3.

Note: In completing this section, do NOT include border enforcement inspections. Border Enforcement activities will be captured in a separate section if applicable.

Trend Analysis for 2017 - 2021

Inspection Types	2017	2018	2019	2020	2021
Level 1: Full	9824	8603	7368	6180	8752
Level 2: Walk-Around	26697	20666	17158	19231	26915
Level 3: Driver-Only	20341	13319	9998	20169	17359
Level 4: Special Inspections	9	1	32	52	133
Level 5: Vehicle-Only	68	48	30	63	53
Level 6: Radioactive Materials	0	0	0	0	1
Total	56939	42637	34586	45695	53213

Narrative Overview for FY 2023 - 2025

Overview:

Describe components of the State's general Roadside and Fixed-Facility Inspection Program. Include the day-to-day routine for inspections and explain resource allocation decisions (i.e., number of FTE, where inspectors are working and why).

Enter the roadside inspection application name(s) (e.g., Aspen) used by the State.

LSP use Aspen to conduct roadside inspections.

Enter a narrative of the State's overall inspection program, including a description of how the State will monitor its program to ensure effectiveness and consistency.

The roadside inspection is a primary force which ensures that CMV vehicles and drivers operate safely on the highways. In a continuing effort to employ performance based strategies that will reduce the number of CMV crashes, one of the most effective remains the roadside inspection program. The roadside inspection program employs a degree of selection randomness, which serves as a strong compliance incentive to all motor carriers and their drivers. Additionally, data collected from the roadside inspection effort provides important information of compliance trends, which enables the appropriate allocation of resources. The roadside inspection program is also an integral part of the compliance review program. Unsafe carrier management and safety practices identified at roadside are tracked and evaluated through federal data bases for further carrier review. The roadside inspection program is also an effective means of identifying hazardous material carriers that operate unsafely in the state, and ensures that violators are brought into compliance through enforcement of the Federal Motor Carrier Safety Regulations and Hazardous Material Regulations. Additionally, inspectors seek overloaded CMVs, in an effort to protect the motoring public from dangerous vehicles and unqualified drivers.

LSP enforces the registration requirements and financial responsibilities identified in 49 CFR 350.201(s) 1 and 2 during all roadside inspections. LSP has a strict policy requiring all inspectors to check the carrier's operating authority and financial responsibility requirements during every inspection, in addition to enforcing Federal OOS orders. Inspectors will utilize Query Central to verify all status checks. Upon verification, any vehicle discovered to be operating without the required operating authority, or beyond the scope of the motor carrier's operating authority, will be placed out of service. In addition, inspectors are also required to conduct driver's license status checks on all CMV drivers, during every stop. Any driver found to be operating a CMV without a valid driver's license of the proper class required, will be placed out of service until such time as the violation is corrected.

LSP has 67 full-time NAS-Certified inspectors who perform roadside inspections in conjunction with enforcement activities. Additional support is provided by 51 NAS-Certified inspectors who support roadside inspection efforts, primarily on an

overtime basis.

In FFY 2021, Louisiana's roadside inspection program will continue concentrating on driver-focused inspections, aimed at removing fatigued, impaired, and unqualified drivers. This emphasis is in recognition of the evidence that operator condition/error continues to play a significant factor in CMV crashes, and will be the primary focus of Level III, driver-only inspections. LSP will attempt to meet or exceed FMCSA's recommended number of Level I and Level III inspections performed (at least 33% Level III and 25% Level I). However, inspectors may perform any Level inspection necessary, as circumstances dictate. LSP will continue to enforce FMCSA's ELD mandate during all roadside and enforcement activities. Additionally, LSP requires all inspectors to utilize eRODS when an ELD is present. The utilization of Webservices and successful data transfers are critical to safety and the efficient enforcement of the hours of service regulations. The target goal is to use eRODS whenever possible, which currently has a utilization rate of 25-49%, with a projected goal increase to 50-75%.

LSP will continue to work with the LSU/HSRG to ensure that enforcement efforts are directed toward high-crash corridors, as dictated by statistical data analyzed by LSU/HSRG, as well as trends that develop in different areas across the state. Region Lieutenants and Sergeants will work together to identify "problem areas" in their respective Regions, and will continually direct enforcement efforts to those areas.

LSP will continue support of FMCSA's emphasis on passenger carrier enforcement during FFY 2021. Enforcement will target areas where data indicates a need for enforcement, particularly agricultural regions to ensure safe transportation of migrant workers. According to research provided by LSU/HSRG, data shows that the number of crashes involving both large and small buses has decreased significantly from CY2018 to CY2019. LSP will maintain efforts to see a continued decrease in these types of crashes.

Additionally, Inspectors will maintain awareness for signs of illegal activity during inspection and enforcement efforts, to include human trafficking. LSP will continue to work with Truckers Against Trafficking and other organizations to ensure inspectors have the latest information available to combat human trafficking through identification and education efforts across the state. LSP hosted a CMV Criminal Interdiction course with an emphasis on Human Trafficking in FY2020. We will also continue to post updated Human Trafficking informational pamphlets at all stationary scales throughout the state.

LSP will utilize mobile weight enforcement at locations other than fixed weight facilities, to ensure overloaded CMVs (including intermodal vehicles) are not operating on Louisiana highways, particularly those in disrepair, placing motorists in danger. This includes those CMVs that are missing GVWR information. This occurs quite frequently, as the stickers are removed or painted over, allowing unqualified (Non-CDL) drivers to operate a CMV that actually requires a CDL driver. The appropriate level NAS inspection is conducted with all mobile weight enforcement activities.

Presently, LSP Mobile Weight Enforcement Unit is funded through state dollars in an agreement with Louisiana DOTD. Size and weight activities will only be funded through MCSAP when done in conjunction within or near seaports where intermodal shipping containers enter and exit the United States (Ports of New Orleans, Baton Rouge, Lake Charles, Morgan City, Gramercy, and Shreveport).

FFY 2022 Update:

Operator error and driver distraction continue to be a contributing factor in CMV crashes. We will continue to maintain a focus on improving driver behavior by focusing on at least 33% level III inspections and 25% level I inspections. The level III inspections will focus on RODS, drive fatigue, impairment, distracted and unqualified drivers. We have met our projected ERODS utilization rate of 50-75% and will continue to work on improving our percentage.

We continue to work with LSU (CARTS) on identifying areas of concern throughout the state. Our Regional supervisors continue to monitor trends and make enforcement adjustments accordingly.

CARTS data analysis indicates a decrease in both large and small bus crashes. We remain focused on the continued decrease in bus crashes and enforcement in the agricultural areas to ensure the safety of migrant workers.

Our inspectors maintain a high awareness of criminal activity, particularly human trafficking. We have required all MCSAP Certified personnel to get certified through the Tuckers Against Trafficking (TAT) website. We have included TAT educational material as part of our safety talks and posted educational pamphlet's at stationary scales throughout the state.

Section 1.3 details the breakdown of personnel by enforcement and support and those numbers are accurate.

FFY 2023 Update:

LSP has 67 full-time NAS-Certified inspectors who perform roadside inspections in conjunction with enforcement activities. Additional support is provided by 51 NAS-Certified inspectors who support roadside inspection efforts, primarily on an overtime basis. Due to a shortage in manpower, we are planning to certify (Part A and B) an additional 25 Criminal Patrol Troopers to assist in roadside inspections.

Operator error and driver distraction continue to be a contributing factor in CMV crashes. We will continue to maintain a focus on improving driver behavior by focusing on at least 33% level III inspections and 25% level I inspections. The level III inspections will focus on RODS, driver fatigue, impairment, distracted and unqualified drivers. We have exceeded our projected ERODS utilization rate of 50-75% and are currently operating between 75-100%.

We continue to work with LSU (CARTS) on identifying areas of concern throughout the state. Our Regional supervisors continue to monitor trends and make enforcement adjustments accordingly.

CARTS data analysis indicates an increase in both large and small bus crashes. We remain focused on the continued decrease in bus crashes and enforcement in the agricultural areas to ensure the safety of migrant workers.

Our inspectors maintain a high awareness of criminal activity, particularly human trafficking. We have required all MCSAP Certified personnel to get certified through the Tuckers Against Trafficking (TAT) website. We have included TAT educational material as part of our safety talks and posted educational pamphlets at stationary scales throughout the state. We have also added the TAT contact information to our online payment instruction document. The document is given to every driver after each inspection.

Section 1.3 details the breakdown of personnel by enforcement and support and those numbers are accurate.

Human trafficking is and always will continue be a top priority for LSP and we recently just certified 25 criminal patrol/criminal interdiction troopers, specialized in detecting human trafficking, human smuggling, and drug interdiction. LSP has quarterly in service training to emphasize the importance of this issue, and will continue to distribute human Trafficking educational material to maintain outreach to the community.

Projected Goals for FY 2023 - 2025

Instructions for Projected Goals:

Complete the following tables in this section indicating the number of inspections that the State anticipates conducting during Fiscal Years 2023 - 2025. For FY 2023, there are separate tabs for the Lead Agency, Subrecipient Agencies, and Non-Funded Agencies—enter inspection goals by agency type. Enter the requested information on the first three tabs (as applicable). The Summary table totals are calculated by the eCVSP system.

To modify the names of the Lead or Subrecipient agencies, or the number of Subrecipient or Non-Funded Agencies, visit Part 1, MCSAP Structure.

Note: Per the MCSAP Comprehensive Policy, States are strongly encouraged to conduct at least 25 percent Level 1 inspections and 33 percent Level 3 inspections of the total inspections conducted. If the State opts to do less than these minimums, provide an explanation in space provided on the Summary tab.

MCSAP Lead Agency

Lead Agency is: LOUISIANA STATE POLICE

Enter the total number of certified personnel in the Lead agency: 138

	Projected Goals for FY 2023 - Roadside Inspections						
Inspection Level	Non-Hazmat	Hazmat	Passenger	Total	Percentage by Level		
Level 1: Full	12000	500	125	12625	24.00%		
Level 2: Walk-Around	20000	1900	0	21900	41.63%		
Level 3: Driver-Only	18000	0	80	18080	34.37%		
Level 4: Special Inspections	0	0	0	0	0.00%		
Level 5: Vehicle-Only	0	0	0	0	0.00%		
Level 6: Radioactive Materials	0	0	0	0	0.00%		
Sub-Total Lead Agency	50000	2400	205	52605			

MCSAP subrecipient agency

Complete the following information for each MCSAP subrecipient agency. A separate table must be created for each subrecipient.

Subrecipient is:

Enter the total number of certified personnel in this funded agency: 0

	Projected Goals for FY 2023 - Subrecipients						
Inspection Level	Non-Hazmat	Hazmat	Passenger	Total	Percentage by Level		
Level 1: Full				0	%		
Level 2: Walk-Around				0	%		
Level 3: Driver-Only				0	%		
Level 4: Special Inspections				0	%		
Level 5: Vehicle-Only				0	%		
Level 6: Radioactive Materials				0	%		
Sub-Total Funded Agencies	0	0	0	0			

Non-Funded Agencies

Total number of agencies:	
Enter the total number of non-funded certified officers:	
Enter the total number of inspections projected for FY 2023:	

Summary

Projected Goals for FY 2023 - Roadside Inspections Summary

Projected Goals for FY 2023 Summary for All Agencies

MCSAP Lead Agency: LOUISIANA STATE POLICE

certified personnel: 138
Subrecipient Agencies:
certified personnel: 0

Number of Non-Funded Agencies:

certified personnel:
projected inspections:

# projected inspection	3.				
Inspection Level	Non-Hazmat	Hazmat	Passenger	Total	Percentage by Level
Level 1: Full	12000	500	125	12625	24.00%
Level 2: Walk-Around	20000	1900	0	21900	41.63%
Level 3: Driver-Only	18000	0	80	18080	34.37%
Level 4: Special Inspections	0	0	0	0	0.00%
Level 5: Vehicle-Only	0	0	0	0	0.00%
Level 6: Radioactive Materials	0	0	0	0	0.00%
Total MCSAP Lead Agency & Subrecipients	50000	2400	205	52605	

Note:If the minimum numbers for Level 1 and Level 3 inspections are less than described in the <u>MCSAP</u> <u>Comprehensive Policy</u>, briefly explain why the minimum(s) will not be met.

Note: The table below is created in Year 1. It cannot be edited in Years 2 or 3 and should be used only as a reference when updating your plan in Years 2 and 3.

Projected Goals for FY 2024 Roadside Inspections	Lead Agency	Subrecipients	Non-Funded	Total
Enter total number of projected inspections	52700	0	0	52700
Enter total number of certified personnel	138	0	0	138
Projected Goals for FY 2025 Roadside Inspections				
Enter total number of projected inspections	53000	0	0	53000
Enter total number of certified personnel	138	0	0	138

Part 2 Section 4 - Investigations

Describe the State's implementation of FMCSA's interventions model for interstate carriers. Also describe any remaining or transitioning compliance review program activities for intrastate motor carriers. Include the number of personnel assigned to this effort. Data provided in this section should reflect interstate and intrastate investigation activities for each year. The Trend Analysis area is only open for editing during Year 1 of a 3-year plan. This data is not editable during Years 2 and 3.

The State does not conduct investigations. If this box is checked, the tables and narrative are not required to be completed and won't be displayed.

Trend Analysis for 2017 - 2021

Investigative Types - Interstate	2017	2018	2019	2020	2021
Compliance Investigations					
Cargo Tank Facility Reviews					
Non-Rated Reviews (Excludes CSA & SCR)			1	1	1
CSA Off-Site					
CSA On-Site Focused/Focused CR	24	25	61	49	34
CSA On-Site Comprehensive	60	78	73	99	88
Total Investigations	84	103	135	149	123
Total Security Contact Reviews		5	7	5	4
Total Terminal Investigations		1		1	1

Investigative Types - Intrastate	2017	2018	2019	2020	2021
Compliance Investigations					
Cargo Tank Facility Reviews					
Non-Rated Reviews (Excludes CSA & SCR)					
CSA Off-Site					
CSA On-Site Focused/Focused CR	0	0	2	2	0
CSA On-Site Comprehensive	46	23	26	25	35
Total Investigations	46	23	28	27	35
Total Security Contact Reviews				1	4
Total Terminal Investigations					

Narrative Overview for FY 2023 - 2025

Instructions:

Describe the State's implementation of FMCSA's interventions model to the maximum extent possible for interstate carriers and any remaining or transitioning compliance review program activities for intrastate motor carriers. Include the number of personnel assigned to this effort.

Projected Goals for FY 2023 - 2025

Complete the table below indicating the number of investigations that the State anticipates conducting during FY 2023 - 2025.

Projected Goals for FY 2023 - 2025 - Investigations						
	FY	2023	FY	2024	FY 2025	
Investigation Type	Interstate	Intrastate	Interstate	Intrastate	Interstate	Intrastate
Compliance Investigations	0	0	0	0	0	0
Cargo Tank Facility Reviews	0	0	0	0	0	0
Non-Rated Reviews (Excludes CSA & SCR)	0	0	0	0	0	0
CSA Off-Site	0	0	0	0	0	0
CSA On-Site Focused/Focused CR	35	0	40	0	45	0
CSA On-Site Comprehensive	90	38	95	40	100	45
Total Investigations	125	38	135	40	145	45
Total Security Contact Reviews	0	0	0	0	0	0
Total Terminal Investigations	0	0	0	0	0	0

Add additional information as necessary to describe the carrier investigation estimates.

Carrier investigation estimates are based on 7 Investigators that also perform outreach activities. Investigators perform CSA investigations approximately 75% of the time. LSP has trained two new investigators (commissioned personnel) who will both have completed field training by FFY2020 and will be able to conduct investigations on a full-time basis. FY2023 Update: The projection increase is because we plan to add approximately 5 recently retired troopers to assist in the CR program.

Program Activities: Describe components of the State's carrier investigation activities. Include the number of personnel participating in this activity.

In 2020, seven (7) investigators will conduct interstate and intrastate carrier investigations, in response to complaints from the public, MCSAP roadside inspectors, SMS BASIC alerts, or to meet State post-crash reporting guidelines. Emphasis will be placed on motor coach carriers that are conditionally rated, in addition to those with a safety rating over 5 years old.

When Compliance Review Troopers are not conduction audits, it is because of training or out outreach. The training consists of annual and quarterly in-service, quarterly firearms training and quarterly MCSAP in-service. Our CR Troopers routinely conduct safety talks and educational outreach with industry throughout the state.

Performance Measurements and Monitoring: Describe all measures the State will use to monitor progress toward the annual goals. Further, describe how the State measures qualitative components of its carrier investigation program, as well as outputs.

Performance measures shall be based upon the number of CSA Investigations conducted. LSP administrative personnel will monitor all activities. All quantitative and/or qualitative progress will be reported quarterly, through MCSAP quarterly reporting.

Part 2 Section 5 - Traffic Enforcement

Traffic enforcement means documented enforcement activities by State or local officials. This includes the stopping of vehicles operating on highways, streets, or roads for moving violations of State or local motor vehicle or traffic laws (e.g., speeding, following too closely, reckless driving, and improper lane changes). The Trend Analysis area is only open for editing during Year 1 of a 3-year plan. This data is not editable during Years 2 and 3.

Trend Analysis for 2017 - 2021

Instructions:

Please refer to the <u>MCSAP Comprehensive Policy</u> for an explanation of FMCSA's traffic enforcement guidance. Complete the tables below to document the State's safety performance goals and outcomes over the past five measurement periods.

- 1. Insert the beginning and end dates of the measurement period being used, (e.g., calendar year, Federal fiscal year, State fiscal year or any consistent 12-month period for which data is available).
- 2. Insert the total number CMV traffic enforcement stops with an inspection, CMV traffic enforcement stops without an inspection, and non-CMV stops in the tables below.
- 3. Insert the total number of written warnings and citations issued during the measurement period. The number of warnings and citations are combined in the last column.

	ined Measurement de 5 Periods)	Number of Documented CMV Traffic Enforcement Stops with an Inspection	Number of Citations and Warnings Issued	
Begin Date	End Date			
01/01/2021	12/31/2021	4424	5415	
01/01/2020	12/31/2020	3365	4316	
01/01/2019	12/31/2019	7336	8359	
01/01/2018	12/31/2018	8379	9500	
01/01/2017	12/31/2017	12005	13297	

The State does not conduct CMV traffic enforcement stops without an inspection. If this box is checked, the "CMV Traffic Enforcement Stops without an Inspection" table is not required to be completed and won't be displayed.

The State does not conduct documented non-CMV traffic enforcement stops and was not reimbursed by the MCSAP grant (or used for State Share or MOE). If this box is checked, the "Non-CMV Traffic Enforcement Stops" table is not required to be completed and won't be displayed.

Enter the source and capture date of the data listed in the tables above.

FMCSA MCMIS data snapshot, as of 06/28/2019 FY2023: FMCSA A&I data snapshot, as of 07/11/2022

Narrative Overview for FY 2023 - 2025

Instructions:

Describe the State's proposed level of effort (number of personnel) to implement a statewide CMV (in conjunction with and without an inspection) and/or non-CMV traffic enforcement program. If the State conducts CMV and/or non-CMV traffic enforcement activities only in support of the overall crash reduction goal, describe how the State allocates traffic

enforcement resources. Please include number of officers, times of day and days of the week, specific corridors or general activity zones, etc. Traffic enforcement activities should include officers who are not assigned to a dedicated commercial vehicle enforcement unit, but who conduct eligible commercial vehicle/driver enforcement activities. If the State conducts non-CMV traffic enforcement activities, the State must conduct these activities in accordance with the MCSAP
MCCAP
<a href="MCCAP

In FFY 2020, traffic enforcement will be focused along identified high-crash routes, interstate corridors, work-zones (to include locations within 5 miles before and after work zones), and other areas as crash-reduction statistics indicate (using up-to-date crash statistics in addition to information received from LSU/HSRG). We plan to conduct "High Visible" traffic enforcement in High Risk areas, in an effort to deter aggressive driving behaviors of both CMV and non-CMV drivers. Traffic enforcement will target seat belt violations, and those moving violations which have been identified as major contributing factors in fatality and injury crashes: Failure to Yield, Driving Left of Center, Disregard for Traffic Control, Careless Operation, Following Too Close, Exceeding Posted or Safe Speed, and Texting / Using Hand-Held Mobile Telephone Device While Operating a CMV. We will supplement regular duty hours with approximately 6,000 overtime hours dedicated to traffic enforcement, available to 130 MCSAP-Certified inspectors across the state. This should produce approximately 4,000 inspections / traffic violations. By policy, the appropriate level NAS inspection will be conducted with all CMV traffic enforcement activities. All non-CMV traffic enforcement activities will be conducted in accordance with the MCSAP Comprehensive Policy. In the past, the state has not conducted non-CMV traffic enforcement with MCSAP Funding.

FY 2022 Update: Traffic enforcement will continue to be focused along identified high-crash routes, interstate corridors, work-zones (to include locations within 5 miles before and after work zones), and other areas as crash-reduction statistics indicate (using up-to-date crash statistics in addition to information received from LSU/CARTS). We plan to conduct "High Visible" traffic enforcement in High Risk areas, in an effort to deter aggressive driving behaviors of both CMV and non-CMV drivers.

In addition to the Traffic Enforcement, LSP is participating in Operation Safe Drive in an effort to increase visibility along I-10 and I-20 in conjunction with our neighboring states. Operation Safe Drive focuses on driver violations and reducing unsafe driving behavior. This operation is conducted quarterly in conjunction with states located in the southeastern part of the country.

LSP will have quarterly traffic enforcement details throughout the state on regular duty and overtime. This increased in traffic enforcement should produce approximately 5000 inspections / violations. Note: We will also increase inspections (high visibility) in high risk locations and corridors (regular duty and overtime).

Increase the traffic enforcement on CMV's from 4,000 to 4,500.

FY 2023 Update: Traffic enforcement will continue to be focused along identified high-crash routes, interstate corridors, work-zones (to include locations within 5 miles before and after work zones), and other areas as crash-reduction statistics indicate (using up-to-date crash statistics in addition to information received from LSU/CARTS). We plan to conduct "High Visible" traffic enforcement in High Risk areas, in an effort to deter aggressive driving behaviors of both CMV and non-CMV drivers.

In addition to the Traffic Enforcement, LSP is participating in Operation Safe Drive in an effort to increase visibility along I-10 and I-20 in conjunction with our neighboring states. Operation Safe Drive focuses on driver violations and reducing unsafe driving behavior. This operation is conducted quarterly in conjunction with states located in the southeastern part of the country.

LSP will have quarterly traffic enforcement details throughout the state on regular duty and overtime. This increased in traffic enforcement should produce approximately 7,500 inspections / violations. Note: We will also increase inspections (high visibility) in high risk locations and corridors (regular duty and overtime). Increase the traffic enforcement on CMV's from 4,500 to 7,500.

LSP will utilize all resources available to concentrate to achieve an overall reduction of the CMV crash rate by a minimum of 10 percent, and is committed to this ongoing endeavor and effort, to reduce and ensure the overall crash rate within the state will be reduced by 10%. These activities will include but will not be limited to excessive speed, work zone safety, Impaired driving, distracted driving – cell phone usage and texting, occupant/driver restraint, driver fatigue, prohibited operation – DACH and Federal OOS violation, which will include the optimum days and times, as identified by the State CMV crash data and other current roadway issues that arise from current roadway or traffic conditions.

Projected Goals for FY 2023 - 2025

Using the radio buttons in the table below, indicate the traffic enforcement activities the State intends to conduct in FY 2023 - 2025. The projected goals are based on the number of traffic stops, not tickets or warnings issued. These goals are NOT intended to set a quota.

Note: If you answer "No" to "Non-CMV" traffic enforcement activities, the State does not need to meet the average number of 2014/2015 safety activities because no reimbursement will be requested. If you answer "No" and then click the SAVE button, the Planned Safety Activities table will no longer be displayed.

					Enter Projected Goals (Number of Stops only)		
Yes	No	Traffic Enforcement Activities	FY 2023	FY 2024	FY 2025		
		CMV with Inspection	4500	5000	5000		
		CMV without Inspection	0	0	0		
		Non-CMV	200	200	200		
		Comprehensive and high visibility in high risk locations and corridors (special enforcement details)	2000	2000	2000		

In order to be eligible to utilize Federal funding for Non-CMV traffic enforcement, States must maintain an average number of safety activities which include the number of roadside inspections (including border inspections, if applicable), carrier investigations, and new entrant safety audits conducted in the State for Fiscal Years 2014 and 2015.

The table below displays the information you input into this plan from the roadside inspections (including border inspections, if applicable), investigations, and new entrant safety audit sections. Your planned activities must at least equal the average of your 2014/2015 activities.

	FY 2023 Planned Safety Activities					
Inspections	Investigations	New Entrant Safety Audits	Sum of FY 2023 Activities	Average 2014/15 Activities		
52605	163	650	53418	50320		

Describe how the State will report on, measure and monitor its traffic enforcement efforts to ensure effectiveness, consistency, and correlation to FMCSA's national traffic enforcement priority.

LSP administrative personnel will monitor traffic enforcement efforts on a continual basis to ensure the program is operated in an effective and consistent manner, which adheres to FMCSA's traffic enforcement priority. Adjustments will be made as statistics indicate a need for modification.

Part 2 Section 6 - Safety Technology

Performance and Registration Information Systems Management (PRISM) is a condition for MCSAP eligibility in 49 CFR 350.207(27). States must maintain, at a minimum, full PRISM participation. FMCSA defines "fully participating" in PRISM for the purpose of determining eligibility for MCSAP funding, as when a State's or Territory's International Registration Plan (IRP) or CMV registration agency suspends or revokes and denies registration if the motor carrier responsible for safety of the vehicle is under any Federal OOS order and denies registration if the motor carrier possess an inactive or de-active USDOT number for motor carriers operating CMVs in commerce that have a Gross Vehicle Weight (GVW) of 26,001 pounds or more. Further information regarding full participation in PRISM can be found in the MCP Section 4.3.1.

PRISM, Operations and Maintenance (O&M) costs are eligible expenses subject to FMCSA approval. For Innovative Technology Deployment (ITD), if the State has an approved ITD Program Plan/Top-Level Design (PP/TLD) that includes a project that requires ongoing O&M, this is an eligible expense so long as other MCSAP requirements have been met. O&M expenses must be included and described both in this section and in the Financial Information Part per the method these costs are handled in the State's accounting system (e.g., contractual costs, other costs, etc.).

Safety Technology Compliance Status

Please verify the current level of compliance for your State in the table below using the drop-down menu. If the State plans to include O&M costs in this year's CVSP, please indicate that in the table below. Additionally, details must be in this section and in your Spending Plan.

Technology Program	Current Compliance Level	Include O & M Costs?
ITD	Core ITD Compliant	No
PRISM	Full Participation	No

Avaliable data sources:

- FMCSA ITD website
 PRISM Data And Activity Safety Hub (DASH) website

Enter the agency name responsible for ITD in the State: Louisiana Department of Transportation and Development Enter the agency name responsible for PRISM in the State: Department of Public Safety, Office of Motor Vehicles

Narrative Overview for FY 2023 - 2025

Problem Statement Narrative and Projected Goal: Describe activities your State plans to implement in order to maintain participation in PRISM at your current level (Full, Enhanced, Expanded) and ITD goals.

Louisiana PRISM implementation status is currently identified as Partial Participation (Step 3 - Denying for Federal OOS orders). States must achieve a status of Full Participation (STEP 6 - Denying and Suspending for Federal OOS Orders) by October 1, 2020. PRISM Legislation has been submitted and signed by the Governor to provide for Full Participation (effective August 1, 2019). Office of Motor Vehicles is currently working on internal policy and controls to "flip the switch" to deny and suspend registration for Federal OOS Orders and to allow inspectors to query DOT numbers, license plates, and VIN numbers, which will show Federal OOS Orders on Carriers registered in and outside of the state. Louisiana will achieve status of Full Participation before the October 1, 2020 deadline.

FY2021 Update: SB 47 of the 2019 Louisiana Regular Legislative Session was passed and signed into law effective August 1, 2019. This act gave the legislative authority needed to become fully compliant with PRISM by October 1, 2020. The IRP Section of the Louisiana Office of Motor Vehicles will begin a two week "sprint" in late June, 2020 to ensure all systems are operating properly prior to going live. Louisiana continues to be on track to acheive Full Participation before the October 1. 2020 deadline.

FY 2022 Update: As of October 1, 2020, Louisiana is in compliance with the PRISM requirenments. We are currently in "Full Paricipation".

Office of Motor Vehicle's is currently submitting quarterly PRISM reports to FMSCA. The report contains but is not limited to: Carriers and/or vehicles that have not completed the Biennial update, Imminent Hazard, New Entrant revoked (Expedited Action, Failed Audit or Refusal/no contact), Non-payment of fines, Operating Without Authority or Unsat/Unfit.

FY 2023 Update: Louisiana is in compliance with PRISM requirements. We are currently in "Full Participation"

Office of Motor Vehicles is currently submitting quarterly PRISM reports to FMSCA. The report contains but is not limited to: Carriers and/or vehicles that have not completed the Biennial update, Imminent Hazard, New Entrant revoked (Expedited Action, Failed Audit or Refusal/no contact), Non-payment of fines, Operating Without Authority or Unsat/Unfit.

Program Activities for FY 2023 - 2025: Describe any actions that will be taken to maintain full participation in PRISM and any ITD activities.

Work with The Louisiana Department of Public Safety, Office of Motor Vehicles to enact policy to deny and revoke registration for Federal OOS orders in accordance with newly enacted legislation.

Performance Measurements and Monitoring: Describe all performance measures that will be used and include how the State will conduct ongoing monitoring of progress (e.g., including quarterly SF-PPR reporting).

Performance measures shall be based upon the number of meetings with The Louisiana Office of Motor Vehicles, and the progress towards finalizing policy and procedures needed to proceed with the process.

Part 2 Section 7 - Public Education and Outreach

A public education and outreach program is designed to provide information on a variety of traffic safety issues related to CMVs and non-CMVs that operate around large trucks and buses. The Trend Analysis area is only open for editing during Year 1 of a 3-year plan. This data is not editable during Years 2 and 3.

Trend Analysis for 2017 - 2021

In the table below, provide the number of public education and outreach activities conducted in the past 5 years.

Public Education and Outreach Activities	2017	2018	2019	2020	2021
Carrier Safety Talks	89	38	37	34	41
CMV Safety Belt Education and Outreach	0	0	0	0	0
State Trucking Association Meetings	7	7	7	6	8
State-Sponsored Outreach Events	0	0	0	0	0
Local Educational Safety Events	15	7	7	4	5
Teen Safety Events	0	0	0	0	0

Narrative Overview for FY 2023 - 2025

Performance Objective: To increase the safety awareness of the motoring public, motor carriers and drivers through public education and outreach activities such as safety talks, safety demonstrations, etc.

Describe the type of activities the State plans to conduct, including but not limited to passenger transportation, hazardous materials transportation, and share the road safely initiatives. Include the number of personnel that will be participating in this effort.

Participate in public venues where CMV traffic-related issues may be presented to the public at large. Participate in safety talks at Louisiana Motor Transport Association and other industry sponsored events. Respond to carrier requests for assistance concerning safety or regulatory issues, giving special attention to safe driving, particularly within work zones. LSP will utilize CSA Investigators to support most outreach activities. The 7 investigators will perform outreach activities approximately 25% of the time. Members of LSP Hazmat Section will also conduct safety talks for required local industry annual training for carriers of hazardous cargo.

FY2023 Update: Truckers Against Trafficking (TAT) is a nonprofit organization that trains truck drivers to recognize and report instances of human trafficking. We have received brochures, wallet cards and posters from TAT and are distributing across the state. We have required that all MCSAP certified personnel get certified through the TAT website. We have included TAT educational material as part of our safety talks and posted educational pamphlet at stationary scales throughout the state.

LSP will utilize CSA Investigators to support most outreach activities. The 7 investigators will perform outreach activities approximately 25% of the time. Members of LSP Hazmat Section will also conduct safety talks for required local industry annual training for carriers of hazardous cargo.

LSP works in cooperation with LA DOTD, LA OMV, and other enforcement agencies to notify and inform roadway users and the public in general of this ongoing issue that affects the well-being and safety of all LA residents of the state. All drivers are provided a document after every inspection with the contact information to contact LSP to report. This document also includes a "Truckers Against Trafficking". Education and outreach is provided timely and in sync with current work zone safety issues, including prior notification in advance of ongoing roadway projects, to inform drivers of current conditions that lead to CMV and non CMV accidents due to the construction and maintenance of the Nation's infrastructure or current weather conditions that could lead to potential accidents.

Projected Goals for FY 2023 - 2025

In the table below, indicate if the State intends to conduct the listed program activities, and the estimated number, based on the descriptions in the narrative above.

			Per	formance G	oals
Yes	No	Activity Type	FY 2023	FY 2024	FY 2025
		Carrier Safety Talks	40	45	50
		CMV Safety Belt Education and Outreach			
		State Trucking Association Meetings	5	5	5
		State-Sponsored Outreach Events			
		Local Educational Safety Events	10	15	20
		Teen Safety Events			

Performance Measurements and Monitoring: Describe all performance measures and how the State will conduct monitoring of progress. States must report the quantity, duration and number of attendees in their quarterly SF-PPR reports.

Performance measures shall be based upon the number of education and outreach activities conducted, and the number of attendees. MCSAP administrative personnel will monitor all activities. All quantitative and/or qualitative progress will be tracked by LSP administrative personnel, and reported quarterly, through MCSAP Quarterly Reporting.

Part 2 Section 8 - State Safety Data Quality (SSDQ)

MCSAP lead agencies are allowed to use MCSAP funds for Operations and Maintenance (O&M) costs associated with State Safety Data Quality (SSDQ) requirements to ensure the State meets accuracy, completeness and timeliness measures regarding motor carrier safety data and participates in the national data correction system (DataQs).

SSDQ Compliance Status

Please verify the current level of compliance for your State in the table below using the drop-down menu. If the State plans to include O&M costs in this year's CVSP, select Yes. These expenses must be included in the Spending Plan section per the method these costs are handled in the State's accounting system (e.g., contractual costs, other costs, etc.).

Data Quality Program	Current Compliance Level	Include O & M Costs?
SSDQ Performance	Good	No

Available data sources:

- FMCSA SSDQ website
- FMCSA DataQs website

Enter the agency name responsible for Data Quality: Louisiana State Police

Enter the agency or agencies name responsible for DataQs: Louisiana State Police

Enter the agency name responsible for the Crash Data Repository: Louisiana State Police

In the table below, use the drop-down menus to indicate the State's current rating within each of the State Safety Data Quality categories, and the State's goal for FY 2023 - 2025.

SSDQ Measure	Current SSDQ Rating	Goal for FY 2023	Goal for FY 2024	Goal for FY 2025
Crash Record Completeness	Good	Good	Good	Good
Crash VIN Accuracy	Good	Good	Good	Good
Fatal Crash Completeness	Good	Good	Good	Good
Crash Timeliness	Good	Good	Good	Good
Crash Accuracy	Good	Good	Good	Good
Crash Consistency	No Flag	No Flag	No Flag	No Flag
Inspection Record Completeness	Good	Good	Good	Good
Inspection VIN Accuracy	Good	Good	Good	Good
Inspection Timeliness	Good	Good	Good	Good
Inspection Accuracy	Good	Good	Good	Good

Enter the date of the A & I Online data snapshot used for the "Current SSDQ Rating" column.

Source: A&I online data snapshot: June 28, 2019 FY2021 Update: A&I online data snapshot: June 9, 2020 FY 2022 Update: A&I online data snapshot June 21, 2021 FY 2023 Update: A&I online data snapshot July 13, 2023

Narrative Overview for FY 2023 - 2025

Problem Statement Narrative: Describe any issues encountered for all SSDQ measures not rated as "Good/Green" in the Current SSDQ Rating category column above (i.e., problems encountered, obstacles overcome, lessons learned, etc.).

Louisiana is "Good" or "Green" in all safety data quality elements.

FY 2023 update: Louisiana is "Good" or "Green" in all safety data quality elements.

Program Activities FY 2023 - 2025: Describe activities that will be taken to achieve or maintain a "Good/Green" rating in all measures including the overall SSDQ rating. Also, describe how your State provides resources to conduct DataQs operations within your State, and describe how elevated/appeals requests are handled. Louisiana is "Good" or "Green" in all safety data quality elements.

LSP will continue to monitor SSDQ measures, using the "leading indicator" in A&I Online, and ensure that Louisiana retains a "Good" rating in all categories. LSP MCSAP administrative and clerical staff will continue to hold at least quarterly meetings and regular communication with LSU/HSRG to ensure crash reporting and inspection reporting remains at or near 100% in all categories.

Performance Measurements and Monitoring: Describe all performance measures that will be used to monitor data quality and DataQs performance and include how the State will conduct ongoing monitoring of progress in addition to quarterly SF-PPR reporting.

LSP will continue to monitor SSDQ measures, using the "leading indicator" in A&I Online, and ensure that Louisiana retains a "Good" rating in all categories. LSP MCSAP administrative and clerical staff will continue to hold at least quarterly meetings and regular communication with LSU/HSRG to ensure crash reporting and inspection reporting remains at or near 100% in all categories.

Part 2 Section 9 - New Entrant Safety Audits

States must conduct interstate New Entrant safety audits in order to participate in the MCSAP (49 CFR 350.207.) A State may conduct intrastate New Entrant safety audits at the State's discretion if the intrastate safety audits do not negatively impact their interstate new entrant program. The Trend Analysis area is only open for editing during Year 1 of a 3-year plan. This data is not editable during Years 2 and 3.

For the purpose of this section:

- Onsite safety audits are conducted at the carrier's principal place of business.
- Offsite safety audit is a desktop review of a single New Entrant motor carrier's basic safety management controls and can be conducted from any location other than a motor carrier's place of business. Offsite audits are conducted by States that have completed the FMCSA New Entrant training for offsite audits.
- **Group audits** are neither an onsite nor offsite audit. Group audits are conducted on multiple carriers at an alternative location (i.e., hotel, border inspection station, State office, etc.).

Note: A State or a third party may conduct New Entrant safety audits. If a State authorizes a third party to conduct safety audits on its behalf, the State must verify the quality of the work conducted and remains solely responsible for the management and oversight of the New Entrant activities.

Yes	No	Question
		Does your State conduct Offsite safety audits in the New Entrant Web System (NEWS)? NEWS is the online system that carriers selected for an Offsite Safety Audit use to submit requested documents to FMCSA. Safety Auditors use this same system to review documents and communicate with the carrier about the Offsite Safety Audit.
		Does your State conduct Group safety audits at non principal place of business locations?
		Does your State intend to conduct intrastate safety audits and claim the expenses for reimbursement, state match, and/or Maintenance of Effort on the MCSAP Grant?

Trend Analysis for 2017 - 2021

In the table below, provide the number of New Entrant safety audits conducted in the past 5 years.

New Entrant Safety Audits	2017	2018	2019	2020	2021
Interstate	390	441	454	433	392
Intrastate	0	0	0	0	0
Total Audits	390	441	454	433	392

Note: Intrastate safety audits will not be reflected in any FMCSA data systems—totals must be derived from State data sources.

Narrative Overview for FY 2023 - 2025

Enter the agency name conducting New Entrant activities, if other than the Lead MCSAP Agency:

Please complete the information below by entering data from the NEWS Dashboard regarding Safety Audits in your State. Data Source: New Entrant website			
Date information retrieved from NEWS Dashboard to complete eCVSP	07/13/2022		
Total Number of New Entrant Carriers in NEWS (Unassigned and Assigned)	910		
Current Number of Past Dues	21		

Program Goal: Reduce the number and severity of crashes, injuries, and fatalities involving commercial motor vehicles by reviewing interstate new entrant carriers. At the State's discretion, intrastate motor carriers are reviewed to ensure they have effective safety management programs.

Program Objective: Meet the statutory time limit for processing and completing interstate safety audits of 120 days for Motor Carriers of Passengers and 12 months for all other Motor Carriers.

Projected Goals for FY 2023 - 2025

Summarize projected New Entrant safety audit activities in the table below.

Projected Goals for FY 2023 - 2025 - New Entrant Safety Audits						
	FY 2023		FY 2024		FY 2025	
Number of Safety Audits/Non-Audit Resolutions	Interstate	Intrastate	Interstate	Intrastate	Interstate	Intrastate
# of Safety Audits (Onsite)	100	0	100	0	100	0
# of Safety Audits (Offsite)	550	0	575	0	600	0
# Group Audits	0	0	0	0	0	0
TOTAL Safety Audits	650	0	675	0	700	0
# of Non-Audit Resolutions	200	0	225	0	275	0

Strategies: Describe the strategies that will be utilized to meet the program objective above. Provide any challenges or impediments foreseen that may prevent successful completion of the objective.

The Louisiana State Police (LSP) New Entrant Program is comprised of eight (8) civilian auditors, strategically located throughout the state. These auditors are 100% dedicated to the NESA program and provide educational safety audits to all new Louisiana interstate motor carriers. LSP has streamlined to operate as efficiently as possible, while maintaining quality. LSP will continue to operate in this manner, while providing quality education and assistance to new motor carriers.

With a strong economy, we anticipate a continued increase in the amount of New Entrants during FFY 2020. LSP began conducting Off-Site Safety Audits in the last quarter of FFY 2017, and the number of off-site audits has steadily and increased over time as the number of on-site audits has decreased. Auditors have kept up with the overall increasing numbers, but should the program become inundated with new carriers, NESA-Certified Compliance Review MCSAP Inspectors will assist by conducting safety audits on an overtime basis as needed. Group Audits may also be conducted if needed to assist in managing high inventory levels.

FY 2022 Update: Due to the Covid 19 Pandemic, we converted some on-site audits to off-site audits to limit contact with the public. Despite the pandemic, the NESA Auditors have been able to maintain thier certifications in on/off-site audits and level 1 inspections.

FY 2023 Update: Due to the Covid 19 Pandemic, we converted some on-site audits to off-site audits to limit contact with the public. Despite the pandemic, the NESA Auditors have been able to maintain their certifications in on/off-site audits and level 1 inspections.

Activity Plan for FY 2023 - 2025: Include a description of the activities proposed to help achieve the objectives. If group audits are planned, include an estimate of the number of group audits.

Conduct a minimum of seven (7) safety audits/exits per month, per safety auditor, for a total of 672 audits/exits. This target includes failed audits, revocations, in-activations, and safety audits reclassified as Compliance Reviews. Maintain NAS Level 1 Certification by conducting the required amount of driver/vehicle inspections necessary to maintain certification.

NESA certified Compliance Review MCSAP Inspectors will assist on an overtime basis, as needed, in order to reduce the inventory to manageable levels. The MCSAP inspectors will work on an overtime basis if needed to assist the NESA program when conducting New Entrant Audits. If the situation warrants, group audits may be utilized (none are planned) in an effort to further reduce the inventory to manageable levels.

Performance Measurement Plan: Describe how you will measure progress toward meeting the objective, such as quantifiable and measurable outputs (staffing, work hours, carrier contacts, inspections, etc.). The measure must include specific benchmarks to be reported on in the quarterly progress report, or as annual outputs.

LSP administrative personnel will monitor progress weekly. Performance measures will be based on the total amount of New Entrants received, the amount of current New Entrants, the amount of Safety Audits conducted, safety audits failed, revocations, In-activations, and status changes. All quantitative and qualitative progress will be tracked and reported quarterly to FMCSA, through MCSAP Quarterly Reporting.

Part 3 - National Emphasis Areas and State Specific Objectives

FMCSA establishes annual national priorities (emphasis areas) based on emerging or continuing issues, and will evaluate CVSPs in consideration of these national priorities. Part 3 allows States to address the national emphasis areas/priorities outlined in the Notice of Funding Opportunity (NOFO) and any State-specific objectives as necessary. Specific goals and activities must be projected for the three fiscal year period (FYs 2023 - 2025).

Part 3 Section 1 - Enforcement of Federal OOS Orders during Roadside Activities

Instructions:

FMCSA has established an Out-of-Service (OOS) catch rate of 85 percent for carriers operating while under an Imminent Hazard (IH) or UNSAT/UNFIT OOS order. In this part, States will indicate their catch rate is at least 85 percent by using the check box or completing the problem statement portion below.

Check this box if:

As evidenced by the data provided by FMCSA, the State identifies at least 85 percent of carriers operating under a Federal IH or UNSAT/UNFIT OOS order during roadside enforcement activities and will not establish a specific reduction goal. However, the State will maintain effective enforcement of Federal OOS orders during roadside inspections and traffic enforcement activities.

Narrative Overview for FY 2023 - 2025

Enter your State's OOS Catch Rate percentage if below 85 percent: 77%

Projected Goals for FY 2023 - 2025: Enter a description of the State's performance goals.

Fiscal Year	Goal (%)
2023	100
2024	100
2025	100

Exceed the mandated 85% "catch rate" by September 30, 2020. The "catch rate" is established on the most recent 7 month average, as provided by FMCSA.

FY2021 Update: A&I Data Snapshot, 06/09/2020: Louisiana has a 100% "catch rate" of identifying Unfit/IH motor carriers under a Federal OOSO through April 2020 during roadside inspections.

FY2022 Update: Our OOS catch rate shown in A&I for imminent hazard carriers and unsatisfactory/unfit carriers indicates that we are below the 85% catch rate.

We identified the reports that were considered "Not Identified" and determined their measures were changed in SAFETYNET. Either SAFETYNET or MCMIS matched the carrier on our inspections to an OOS carriers with the same address, once the inspection were approved.

During the roadside inspections, our inspector's identified these carriers through driver interview, registration and query central. From that information, no OOS was reported via query central which is in real time. Our inspectors have no capabilities of linking a carrier's addresses to a different company. For example, one of the carrier's that was changed in SAFETYNET was linked to the owner's father's address. The father had a company that was OOS but was no longer in business. SAFETYNET merged these carriers reflecting an unidentified OOS carrier. Fortunately, our clerical personnel have been able to change these carriers in SAFETYNET to the original carrier identified roadside.

The changes were made in June. SAFETYNET shows the corrections but unfortunately, A&I only updates once a month, therefore, our corrections are not updated in A&I.

All of the carriers that are reported as "not identified", were changed in SAFETYNET. After reviewing these reports, we determined that they should not have been merged or connected to a company with an OOS for IH or Unsatisfactory/unfit.

FY2023 Update:

Our OOS catch rate shown in A&I for imminent hazard carriers and unsatisfactory/unfit carriers indicates that we are below the 85% catch rate.

We identified the reports that were considered "Not Identified" and determined their measures were changed in MCMIS. MCMIS matched the carrier on our inspections to an OOS carriers with the same DOT Number. Note: the DOT number went OOS after the inspection was conducted and approved.

During the roadside inspections, our inspector has identified these carriers through driver interview, registration and query central. From that information, no OOS was reported via Query Central, which is in real time. Our inspectors have no capabilities of linking a carrier's addresses to a different company. For example, one of the companies not identified was matched by VIN in Safetynet and then changed to OOS in Query Central. This change was conducted after the inspection was completed and approved. Fortunately, our clerical personnel have been able to change these carriers in SAFETYNET to the original carrier identified roadside.

The changes were made in July. SAFETYNET shows the corrections but unfortunately, A&I only updates once a month, therefore, our corrections are not updated in A&I.

All of the carriers that are reported as "not identified", were changed in SAFETYNET. After reviewing these reports, we determined that they should not have been merged or connected to a company with an OOS for IH or Unsatisfactory/unfit

Program Activities for FY 2023 - 2025: Describe policies, procedures, and/or technology that will be utilized to identify OOS carriers at roadside. Include how you will conduct quality assurance oversight to ensure that inspectors are effectively identifying OOS carriers and preventing them from operating.

Continue to provide training at MCSAP Quarterly In-Service detailing the importance of ensuring Federal OOS orders are enforced. Continue to require inspectors to run carriers in Query Central for every inspection conducted. LSP has provided remedial training for the inspector identified as needing such, and will provide additional remedial training for inspectors needing such in the future.

After further research, the catch-rate established on the most recent 7 month average of 56% (October 2018 - May 2019), as provided by FMCSA, was captured incorrectly due to our clerical staff "merging" records and improperly assigning DOT numbers to intrastate-only carriers that didn't actually have DOT numbers (Just similiar company names to other carriers with DOT numbers). This process has been remedied and will continue to be monitored by administrative supervisors moving forward.

Our research revealed that three (3) of the nine (9) listed as Unsat/Unfit Carriers were improperly assigned DOT numbers when they were "merged" incorrectly by our clerical staff before being uploaded to Safety Net.

Even at the catch rate of five (5) of six (6) (83%) unsat/unfit that we actually have, we fall under the 85% catch rate established.

In addition to continued training and as-needed remedial training, we will work with Louisiana Office of Motor Vehicles (OMV) toward PRISM full participation (Legislation was approved this spring) in order to give us an additional tool for verification of Federal OOS Orders. OMV will implement software that will allow roadside inspectors to run real-time queries on carrier names, registrations, VIN's, and license plates to check for Federal OOS Orders.

LSP will also add a mandatory check box to our "State Information" tab on Aspen that will require inspectors to click on the box for "Federal OOS Checked" - "Y" or "N" to ensure this step is taken during every inspection.

FY 2023 Update: After further research, it was determined that our clerical staff has the ability to edit reports that are inaccurately labeled as IH or Unsatisfactory/unfit. We will monitor and correct any reports on a weekly basis

Performance Measurements and Monitoring: Describe all performance measures and how the State will conduct ongoing monitoring of progress in addition to quarterly SF-PPR reporting.

Performance measures will be based upon the 12 month "catch rate" of Federal OOS Orders enforcement for Louisiana, provided by FMCSA. All quantitative and/or qualitative progress will be reported quarterly through MCSAP quarterly reporting.

Part 3 Section 2 - Passenger Carrier Enforcement

Instructions:

FMCSA requests that States conduct enhanced investigations for motor carriers of passengers and other high risk carriers. Additionally, States are asked to allocate resources to participate in the enhanced investigations training being offered by FMCSA. Finally, States are asked to continue partnering with FMCSA in conducting enhanced investigations and inspections at carrier locations.

Check this box if:

As evidenced by the trend analysis data, the State has not identified a significant passenger transportation safety problem. Therefore, the State will not establish a specific passenger transportation goal in the current fiscal year. However, the State will continue to enforce the Federal Motor Carrier Safety Regulations (FMCSRs) pertaining to passenger transportation by CMVs in a manner consistent with the MCSAP Comprehensive Policy as described either below or in the roadside inspection section.

Part 3 Section 3 - State Specific Objectives - Past

Instructions:

Describe any State-specific CMV problems that were addressed with FY 2022 MCSAP funding. Some examples may include hazardous materials objectives, Electronic Logging Device (ELD) implementation, and crash reduction for a specific segment of industry, etc. Report below on year-to-date progress on each State-specific objective identified in the FY 2022 CVSP.

Progress Report on State Specific Objectives(s) from the FY 2022 CVSP

Please enter information to describe the year-to-date progress on any State-specific objective(s) identified in the State's FY 2022 CVSP. Click on "Add New Activity" to enter progress information on each State-specific objective.

Activity #1

Activity: Describe State-specific activity conducted from previous year's CVSP.

Hazardous Materials Transportation Safety - Increase enforcement of HM Carriers through roadside inspections, and carrier investigations.

Goal: Insert goal from previous year CVSP (#, %, etc., as appropriate).

Reduce the number of CMV crashes involving the transportation of Hazardous Material by 15% (18), from 124 to 106, and reduce HM Fatal Crashes by 25% (1), from 5 to 4, by December 31, 2019. FY 2023 Update: Reduce the number of CMV crashes involving the transportation of Hazardous Material by 15%, from 83 to 70, and reduce HM Fatal Crashes by 25% (1), from 3 to 2, by December 31, 2022.

Actual: Insert year to date progress (#, %, etc., as appropriate).

Total HM carrier Crashes CY 2019 to date: 65 Total HM carrier Fatal Crashes CY 2019 to date: 0 FY 2023 Update: Total HM carrier Crashes CY 2022 to date: 19 Total HM carrier Fatal Crashes CY 2022 to date: 0

Narrative: Describe any difficulties achieving the goal, problems encountered, obstacles overcome, lessons learned, etc.

Baseline established on CY 2017 results (123 crashes). The amount of HM crashes decreased 22% (27) in 2018, to (96), while HM Fatal Crashes decreased 40% (2), to 3. We have achieved all of the stated goals from the FY 2019 CVSP, and we will continue enforcement through roadside inspections, carrier investigations, and public outreach/education. FY2023 Update: Baseline established on CY 2021 results (84 crashes). The amount of HM crashes decreased 7% (6) in 2021, to (78), while HM Fatal Crashes decreased 25% (4), to 3. We have achieved all of the stated goals from the FY 2021 CVSP, and we will continue enforcement through roadside inspections, carrier investigations, and public outreach/education.

Activity #2

Activity: Describe State-specific activity conducted from previous year's CVSP.

Work Zone Fatal Crashes - Increase traffic enforcement within Work Zone locations. Conduct 8 enforcement details within and around Work Zone areas.

Goal: Insert goal from previous year CVSP (#, %, etc., as appropriate).

Reduce the amount of CMV fatal crashes within work zones (to include the 5 miles prior to work zones) by 25% (4), from 15 to 11, by December 31, 2018. FFY2023 Update: The number of CVM fatality crashes in work zones increased from 11 in 2020 to 16 in 2021. Our goal is to reduce the amount of CMV fatal crashes within work zones (to include the 5 miles prior to work zones) by 25% (4), from 16 to 12, by December 31, 2022.

Actual: Insert year to date progress (#, %, etc., as appropriate).

Total fatal crashes within work zones in CY 2022 to date: 0

Narrative: Describe any difficulties achieving the goal, problems encountered, obstacles overcome, lessons

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learned, etc.

Baseline established on CY 2017 results (15 crashes). There was an increase of 1 work zone fatal crashes during 2018, from 15 to 16. During the same period, there was a significant increase in work zones across the state on the interstate system. FY 2023 Update: Baseline established on CY 2021 results (16 crashes). There was an increase of 7 work zone fatal crashes during 2021, from 16 to 23. During the same period, there was a significant increase in work zones across the state on the interstate system

Part 3 Section 4 - State Specific Objectives - Future

Instructions:

The State may include additional objectives from the national priorities or emphasis areas identified in the MCSAP CVSP Planning Memorandum as applicable. In addition, the State may include any State-specific CMV problems identified in the State that will be addressed with MCSAP funding. Some examples may include hazardous materials objectives, Electronic Logging Device (ELD) implementation, and crash reduction for a specific segment of industry, etc.

Describe any State-specific objective(s) identified for FY 2023 - 2025. Click on "Add New Activity" to enter information on each State-specific objective. This is an optional section and only required if a State has identified a specific State problem planned to be addressed with grant funding.

State Objective #1

Enter the title of your State-Identified Objective.

Work Zone Safety - Decrease work zone crashes through increased traffic enforcement within work zones in addition to the "queue" caused by work zone congestion. FY 2022 Update: HAZMAT Enforcement – We plan on increasing HAZMAT inspections/enforcement in an attempt to reduce HAZMAT crashes in high incident areas. Clearing house - Improve the detection and enforcement of drivers in a prohibited status within the Clearing House. FY 2023 Update: HAZMAT Enforcement – We plan to increase HAZMAT inspections/enforcement in an attempt to reduce HAZMAT crashes in high incident areas. Clearing house - Improve the detection and enforcement of drivers in a prohibited status within the Clearing House.

Narrative Overview for FY 2023 - 2025

Problem Statement Narrative: Describe problem identified by performance data including baseline data.

In 2018, the number of fatal crashes in construction zones increased by 57.1% from 7 to 11 when only the schedule is used. However, the number of crashes must be adjusted by the construction time and miles under construction. For instance, the year 2018 had 36.7% more construction zone day miles, i.e. miles times days under construction. We will therefore adjust the crash count by the miles multiplied by the days under construction to normalize the count. This adjustment does not take into consideration the VMT of CMV within the construction zones because it is not readily available. When miles and days under construction are taken into account, fatal crashes increased from 4.5 fatal crashes per day-mile in 2017 to 5.2 fatal crashes per day-mile in 2018. The number of fatal crashes within the +/-5 miles of the construction zones increased from 15 in 2017 to 16 in 2018 and the number of fatal crashes per day mile decreased from 3.2 in 2017 to 2.6 in 2018 largely due to the 36.7% decrease in construction. There has been a significant increase in work zones in 2019. FY 2022 Update: The number of fatal CMV crashes on all interstates decreased by 8.3% from 24 in 2019 to 22 in 2020 while the number of fatal crashes in construction zones increased by 20.0% from 10 to 12 when only the schedule is used. However, the number of crashes must be adjusted by the construction time and miles under construction. For instance, the year 2020 had 7.2% less construction zone day miles, i.e. miles times days under construction. We will therefore adjust the crash count by the miles multiplied by the days under construction to normalize the count. This adjustment does not take into consideration the VMT of CMV within the construction zones because it is not readily available. When miles and days under construction are taken into account, fatal crashes increased from 4.0 fatal crashes per day-mile in 2019 to 5.2 fatal crashes per day-mile in 2020. The number of fatal crashes within the +/-5 miles of the construction zones increased from 11 in 2019 to 16 in 2020 and the number of fatal crashes per day mile increased from 1.5 in 2019 to 2.3 in 2020 although there was a 7.2% decrease in construction. HAZMAT Data CMV crashes involving CMVs carrying hazardous material are of particular interest due to their potential danger to the environment and community when hazardous materials are released. Over the past 6 years, from 2015 to 2020, on average, about 15.0% of crashes involving hazardous material resulted in a

release of the hazardous material. This percentage was 15.5% in 2020. The actual percentage of release may be higher since many of the CMVs identified as transporting hazardous material may actually be returning with an empty load, thus the percentage of releases based on crashes with full loads of hazardous material may be much higher. The interstates accounted for 38.1% of all crashes involving hazardous materials in 2020. Specifically, Interstate 10 accounts for 68.8% of all hazardous material crashes on interstates in 2020. US highways account for 17.9% of all hazardous material crashes in 2020, with US 90 and US 190 accounting for 26.7% of hazardous material crashes on US highways. State highways accounted for 33.3% of all hazardous crashes in 2020. FY 2023 Update: The number of fatal CMV crashes on all interstates increased by 122.7% from 22 in 2020 to 49 in 2021 while the number of fatal crashes in construction zones increased by 45.5% from 11 to 16. The number of fatal crashes within the +/-5 miles of the construction zones increased from 16 in 2020 to 23 in 2021 . There was also an increase in all CMV crashes within the +/- 5 miles of the approaches that do not include the construction zones, i.e., from 381 in 2020 to 400 in 2021, an increase of 5.0%, while the number of crashes within construction zones decreased from 515 in 2020 to 407 in 2021.a decrease of 21.0%. CMV crashes involving CMVs carrying hazardous material are of particular interest due to their potential danger to the environment and community when hazardous materials are released. Over the past 6 years, from 2016 to 2021, on average, about 14.3% of crashes involving hazardous material resulted in a release of the hazardous material. This percentage was 14.1% in 2021. The actual percentage of release may be higher since many of the CMVs identified as transporting hazardous material may actually be returning with an empty load, thus the percentage of releases based on crashes with full loads of hazardous material may be much higher than the percentages indicated. The interstates accounted for 39.7% of all crashes involving hazardous materials in 2021. Specifically, Interstate 10 accounts for 71.0% of all hazardous material crashes on interstates in 2021. US highways account for 19.2% of all hazardous material crashes in 2021, with US 90 and US 190 accounting for 46.7% of hazardous material crashes on US highways. State highways accounted for 29.5% of all hazardous crashes in 2021.

Projected Goals for FY 2023 - 2025: Enter performance goal.

Reduce the amount of CMV fatal crashes within work zones (to include the 5 miles prior to work zones) by 25% (3), from 11 to 9, in FY 2020. Reduce the amount of CMV fatal crashes within work zones (to include the 5 miles prior to work zones) by 25% in each of FY 2021 and FY 2022. FY 2023 Update: Reduce the amount of CMV fatal crashes within work zones (to include the 5 miles prior to work zones) by 25% in each from FY 2023-2025.

Program Activities for FY 2023 - 2025: Describe the activities that will be implemented including level of effort.

During FY 2020, increase traffic enforcement as practicable within and around work zone locations, particularly targeting areas within 5 miles prior to work zones. Conduct a minimum of eight (8) enforcement details within and around work zones. Provide safe driving information to CMV drivers during safety talks, emphasizing safe driving in work zones. FY 2022 Update: Due to the COVID-19 pandemic, our level of enforcement details was reduced. We plan on continuing a minimum of eight (8) enforcement details within and around work zones. This was our original goal before the pandemic. In addition to our enforcement details, we will provide safe driving information to CMV drivers during safety talks, emphasizing safe driving in work zones. Beginning this FFY we plan on starting a HAZMAT Enforcement Detail once a quarter. We will focus our inspections on high incident areas along the Interstate and US Highways. The details will include enforcement on distracted and aggressive HAZMAT drivers. We will attempt to identify any HAZMAT carriers that do not have the required HAZMAT Permits. We will coordinate with our HAZMAT section for additional manpower. Clearing House – All NAS Certified inspectors are required to check drivers in Query Central and/or CDLIS. The driver's Clearing House status is listed in the ASPEN Inspection (regardless of status). FY 2023 Update: During the COVID-19 pandemic, our level of enforcement details was reduced. We are back to pre-pandemic activities. We plan on continuing a minimum of eight (8) enforcement details within and around work zones. This was our original goal before the pandemic. In addition to our enforcement details, we will provide safe driving information to CMV drivers during

safety talks, emphasizing safe driving in work zones. We also are working with our public affairs office to create a human trafficking educational video that we will present during safety talks. We will continue our HAZMAT Enforcement Details once a quarter. We will focus our inspections on high incident areas along the Interstate and US Highways. The details will include enforcement on distracted and aggressive HAZMAT drivers. We will attempt to identify any HAZMAT carriers that do not have the required HAZMAT Permits. We will coordinate with our HAZMAT section for additional manpower. Clearing House – All NAS Certified inspectors are required to check drivers in Query Central and/or CDLIS. The driver's Clearing House status are listed in the ASPEN Inspection (regardless of status).

Performance Measurements and Monitoring: Describe all performance measures and how the State will conduct ongoing monitoring of progress in addition to quarterly SF-PPR reporting.

Performance measures will be based upon number of the number of traffic violations issued to CMV drivers in work zones; the number of traffic enforcement details conducted. and crash statistics. All quantitative and/or qualitative progress will be tracked from information provided by LSU/HSRG, along with internal departmental statistics. This information will be reported quarterly, through MCSAP Quarterly Reporting. Adjustments will be made as the data indicates and as work zone locations change. Baseline crash data is established on calendar year 2018 statistics, as 2019 data is not yet available. FY2020 Update: As 2019 data became available, it indicated total CMV crashes within Work Zones had decreased 5.2% from 439 in 2018 to 416 in 2019. It also showed a 55.8% decrease in the total number of crashes within the 5 mile approach to Work Zones from 582 to 257 in 2018 and 2019 respectively. Current performance activities will continue as planned for FY 2021. FY 2022 Update: We continue to tracked from information provided by LSU (CARTS), along with internal departmental statistics. This information will be reported quarterly, through MCSAP Quarterly Reporting. Adjustments will be made as the data indicates and as work zone locations change. Regional supervisors closely monitor the statistical trends in their region and make the proper enforcement adjustments. FY 2023 Update: In 2021, the total number of reported CMV crashes increased by 13.6% compared to 2020. The number of fatal CMV crashes increased from 89 in 2020 to 114 in 2021, an increase of 28.1%. The number of injury CMV crashes increased from 1.851 to 2.157 during the same period, an increase of 16.5%. The percentage of CMV drivers in fatal crashes cited for violations stayed the same from 2020 to 2021 at 32.3%. Careless Operation and Failure to Yield were the most frequent citations. CMV drivers in injury and property damage crashes were cited for violations 47.9% and, 49.3% of the time, respectively. Within this same year, careless operation accounted for the majority of violations committed in association with commercial vehicle crashes. Careless operation made up 35.0% of all violations given to the driver of the CMV in fatal crashes and 35.66% in all crashes. Other violations with relatively high occurrence rates were failure to yield, with 12.5% in fatal and 12.2% in all crashes. Since careless operation is often a proxy for speed violations, we can look at the combined percentage of speed and careless operation violations. For fatal CMV crashes, the combined violations (speeding & careless operation) make up 40.0% of all violations the CMV driver receives. In all CMV crashes, this percentage is 37.3%. When failure to yield is included, these percentages increase to 52.5% for fatal crashes and 49.6% for all crashes. The manner of collision most common in all CMV crashes are rear-end types at 29.0% and non-collision types (single vehicle crashes) at 20.54%. For fatal crashes, the types were rear-end collisions at 35.09%, right angle collisions at 18.42%, head-on collisions at 16.67%, and non-collision with motor vehicle crashes at 15.79. During 2021, 35.69% of all CMV crashes in Louisiana occurred on interstates, 29.56% occurred on state highways, and 16.25% occurred on U.S. highways. In 2020, the respective percentages were 37.14 %, 30.35%, and 18.43%. From 2020 to 2021, the number of fatal interstate crashes increased significantly from 22 to 49. U.S. highways experienced no change in fatal crashes and state highways saw a decrease of 2.7%. Thus, the overall increase in CMV related fatalities of 28.1% was largely due to the increase of fatalities on interstates. We continue to track from information provided by LSU (CARTS), along with internal departmental statistics. This information will be reported quarterly, through MCSAP Quarterly Reporting. Adjustments will be made as the data indicates and as work zone locations change. Regional supervisors closely monitor the statistical trends in their region and make the proper enforcement adjustments.

Part 4 - Financial Information

Part 4 Section 1 - Overview

The Spending Plan is an explanation of each budget component, and should support the cost estimates for the proposed work. The Spending Plan should focus on how each item will achieve the proposed project goals and objectives, and explain how costs are calculated. The Spending Plan must be clear, specific, detailed, and mathematically correct. Sources for assistance in developing the Spending Plan include <u>2 CFR part 200</u>, <u>2 CFR part 1201</u>, <u>49 CFR part 350</u> and the <u>MCSAP Comprehensive Policy</u>.

Before any cost is billed to or recovered from a Federal award, it must be allowable (2 CFR §200.403, 2 CFR §200 Subpart E – Cost Principles), reasonable and necessary (2 CFR §200.403 and 2 CFR §200.404), and allocable (2 CFR §200.405).

- <u>Allowable</u> costs are permissible under the OMB Uniform Guidance, DOT and FMCSA regulations and directives, MCSAP policy, and all other relevant legal and regulatory authority.
- Reasonable and Necessary costs are those which a prudent person would deem to be judicious under the circumstances.
- <u>Allocable</u> costs are those that are charged to a funding source (e.g., a Federal award) based upon the benefit received by the funding source. Benefit received must be tangible and measurable.
 - For example, a Federal project that uses 5,000 square feet of a rented 20,000 square foot facility may charge 25 percent of the total rental cost.

Instructions

The Spending Plan should include costs for FY 2023 only. This applies to States completing a multi-year CVSP or an Annual Update to their multi-year CVSP.

The Spending Plan data tables are displayed by budget category (Personnel, Fringe Benefits, Travel, Equipment, Supplies, Contractual and Subaward, and Other Costs). You may add additional lines to each table, as necessary. Please include clear, concise explanations in the narrative boxes regarding the reason for each cost, how costs are calculated, why they are necessary, and specific information on how prorated costs were determined.

The following definitions describe Spending Plan terminology.

- Federal Share means the portion of the total project costs paid by Federal funds. The budget category tables use 95 percent in the federal share calculation.
- State Share means the portion of the total project costs paid by State funds. The budget category tables use 5 percent in the state share calculation. A State is only required to contribute 5 percent of the total project costs of all budget categories combined as State share. A State is NOT required to include a 5 percent State share for each line item in a budget category. The State has the flexibility to select the budget categories and line items where State match will be shown.
- **Total Project Costs** means total allowable costs incurred under a Federal award and all required cost sharing (sum of the Federal share plus State share), including third party contributions.
- Maintenance of Effort (MOE) means the level of effort Lead State Agencies are required to maintain each fiscal year in accordance with 49 CFR § 350.301. The State has the flexibility to select the budget categories and line items where MOE will be shown. Additional information regarding MOE can be found in the MCSAP Comprehensive Policy (MCP) in section 3.6.

On Screen Messages

The system performs a number of edit checks on Spending Plan data inputs to ensure calculations are correct, and values are as expected. When anomalies are detected, alerts will be displayed on screen.

· Calculation of Federal and State Shares

Total Project Costs are determined for each line based upon user-entered data and a specific budget category formula. Federal and State shares are then calculated by the system based upon the Total Project Costs and are added to each line item.

The system calculates a 95 percent Federal share and 5 percent State share automatically and populates these

values in each line. Federal share is the product of Total Project Costs x 95 percent. State share equals Total Project Costs minus Federal share. It is important to note, if Total Project Costs are updated based upon user edits to the input values, the share values will not be recalculated by the system and should be reviewed and updated by users as necessary.

States may edit the system-calculated Federal and State share values at any time to reflect actual allocation for any line item. For example, States may allocate a different percentage to Federal and State shares. States must ensure that the sum of the Federal and State shares equals the Total Project Costs for each line before proceeding to the next budget category.

An error is shown on line items where Total Project Costs does not equal the sum of the Federal and State shares. Errors must be resolved before the system will allow users to 'save' or 'add' new line items.

Territories must ensure that Total Project Costs equal Federal share for each line in order to proceed.

MOE Expenditures

States may enter MOE on individual line items in the Spending Plan tables. The Personnel, Fringe Benefits, Equipment, Supplies, and Other Costs budget activity areas include edit checks on each line item preventing MOE costs from exceeding allowable amounts.

- If "Percentage of Time on MCSAP grant" equals 100%, then MOE must equal \$0.00.
- If "Percentage of Time on MCSAP grant" equals 0%, then MOE may equal up to Total Project Costs as expected at 100%
- If "Percentage of Time on MCSAP grant" > 0% AND < 100%, then the MOE maximum value cannot exceed "100% Total Project Costs" minus "system-calculated Total Project Costs".

An error is shown on line items where MOE expenditures are too high. Errors must be resolved before the system will allow users to 'save' or 'add' new line items.

The Travel and Contractual budget activity areas do not include edit checks for MOE costs on each line item. States should review all entries to ensure costs reflect estimated expenditures.

• Financial Summary

The Financial Summary is a summary of all budget categories. The system provides warnings to the States on this page if the projected State Spending Plan totals are outside FMCSA's estimated funding amounts. States should review any warning messages that appear on this page and address them prior to submitting the eCVSP for FMCSA review.

The system will confirm that:

- Overtime value does not exceed 15% of the MCSAP Award Amount.
- Planned MOE Costs equal or exceed the MOE Baseline amount.
- States' planned Federal and State share totals are each within \$5 of FMCSA's Federal and State share estimated amounts.
- o Territories' planned Total Project Costs are within \$5 of the Federal share.

ESTIMATED Fiscal Year Funding Amounts for MCSAP							
95% Federal Share 5% State Share Total Estimated Fu							
Total	\$6,465,737.00	\$340,302.00	\$6,806,039.00				

Summary of MCSAP Funding Limitations						
Allowable amount for Overtime without written justification (15% of MCSAP Award Amount):	\$1,020,906.00					
MOE Baseline:	\$1,078,072.00					

Part 4 Section 2 - Personnel

Personnel costs are salaries for employees working directly on a project.

Note: Do not include any personally identifiable information (PII) in the CVSP. The final CVSP approved by FMCSA is required to be posted to a public FMCSA website.

Salary and Overtime project costs must be separated when reporting to FMCSA, regardless of the Lead MCSAP Agency or Subrecipient pay structure.

List grant-funded staff who will complete the tasks discussed in the narrative descriptive sections of the CVSP. Positions may be listed by title or function. It is not necessary to list all individual personnel separately by line. The State may use average or actual salary and wages by personnel category (e.g., Trooper, Civilian Inspector, Admin Support, etc.). Additional lines may be added as necessary to capture all your personnel costs.

The percent of each person's time must be allocated to this project based on the amount of time/effort applied to the project. For budgeting purposes, historical data is an acceptable basis.

Note: Reimbursement requests must be based upon documented time and effort reports. Those same time and effort reports may be used to estimate salary expenses for a future period. For example, a MCSAP officer's time and effort reports for the previous year show that he/she spent 35 percent of his/her time on approved grant activities. Consequently, it is reasonable to budget 35 percent of the officer's salary to this project. For more information on this item see 2 CFR §200.430.

In the salary column, enter the salary for each position.

Total Project Costs equal the Number of Staff x Percentage of Time on MCSAP grant x Salary for both Personnel and Overtime (OT).

If OT will be charged to the grant, only OT amounts for the Lead MCSAP Agency should be included in the table below. If the OT amount requested is greater than the 15 percent limitation in the MCSAP Comprehensive Policy (MCP), then justification must be provided in the CVSP for review and approval by FMCSA headquarters.

Activities conducted on OT by subrecipients under subawards from the Lead MCSAP Agency must comply with the 15 percent limitation as provided in the MCP. Any deviation from the 15 percent limitation must be approved by the Lead MCSAP Agency for the subrecipients.

Summary of MCSAP Funding Limitations					
Allowable amount for Lead MCSAP Agency Overtime without written justification (15% of MCSAP Award Amount):	\$1,020,906.00				

Overtime Costs budgeted must be equal to or less than the 15 percent of the MCSAP Award (plus \$5 allowed.) Please include a justification to exceed the limit in the Personnel section.

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Personnel: Salary and Overtime Project Costs									
Salary Project Costs									
Position(s)	# of Staff	% of Time on MCSAP Grant	Salary	Total Project Costs (Federal + State)	Federal Share	State Share	MOE		
Trooper	16	100.0000	\$84,401.00	\$1,350,416.00	\$1,350,416.00	\$0.00	\$0.00		
NESA Investigator	10	100.0000	\$54,600.00	\$546,000.00	\$546,000.00	\$0.00	\$0.00		
Compliance Review Investigators	2	100.0000	\$54,600.00	\$109,200.00	\$109,200.00	\$0.00	\$0.00		
Admin Coordinator IV	4	0.0000	\$108,345.00	\$0.00	\$0.00	\$0.00	\$108,345.00		
Captain	1	100.0000	\$131,673.00	\$131,673.00	\$131,673.00	\$0.00	\$0.00		
Lieutenant	2	0.0000	\$199,068.00	\$0.00	\$0.00	\$0.00	\$199,068.00		
Sergeant	4	0.0000	\$456,894.00	\$0.00	\$0.00	\$0.00	\$456,894.00		
Lieutenant	3	0.0000	\$114,350.00	\$0.00	\$0.00	\$0.00	\$343,050.00		
Sergeant	4	0.0000	\$94,177.00	\$0.00	\$0.00	\$0.00	\$376,708.00		
Trooper	15	100.0000	\$73,470.00	\$1,102,050.00	\$1,102,050.00	\$0.00	\$0.00		
Admin Manager I	1	0.0000	\$42,075.00	\$0.00	\$0.00	\$0.00	\$42,075.00		
Admin Coordinator IV	1	0.0000	\$34,940.00	\$0.00	\$0.00	\$0.00	\$34,940.00		
Admin Coordinator IV	1	0.0000	\$31,824.00	\$0.00	\$0.00	\$0.00	\$31,824.00		
Training/Outreach Coordinator	1	0.0000	\$54,600.00	\$0.00	\$0.00	\$0.00	\$54,600.00		
Data Quality Investigator	4	100.0000	\$54,600.00	\$218,400.00	\$218,400.00	\$0.00	\$0.00		
Subtotal: Salary				\$3,457,739.00	\$3,457,739.00	\$0.00	\$1,647,504.00		
			Overtime Pro	oject Costs					
MCSAP Personnel	100	100.0000	\$11,500.00	\$1,150,000.00	\$977,500.00	\$172,500.00	\$0.00		
Subtotal: Overtime				\$1,150,000.00	\$977,500.00	\$172,500.00	\$0.00		
TOTAL: Personnel				\$4,607,739.00	\$4,435,239.00	\$172,500.00	\$1,647,504.00		
Accounting Method:	Cash								

Enter a detailed explanation of how the personnel costs were derived and allocated to the MCSAP project. Personnel Costs were calculated on current actual wages.

Overtime Justification

LSP is requesting to be allowed to exceed the 15% overtime policy (requesting the same amount that was approved last year). Several factors play a part in this request. LSP has experienced a loss of 46 MCSAP-Certified personnel over the past 4 years. A hiring freeze prevented LSP from replacing these vacancies during the first two years of this period. Additionally, wages increased, which reduced the amount of available overtime hours for MCSAP activities. As a result of the loss of personnel, FFY 2016 activities dropped approximately 18% below projection. The loss of personnel made it necessary to increase overtime to keep the level enforcement and other MCSAP activities at an acceptable level, which we were able to accomplish in FFY 2018. In FFY 2019, 5 full-time vacancies were filled along with the addition of 17 other NAS-Certified Inspectors, however, 4 full-time and 10 other NAS-Certified Inspector positions have since become vacant. The increase in vacancies is attributed to a large amount of departmental personnel reaching retirement, combined with the lack of hiring over the past several years. As a result, gains noted in FFY 2019 subsided slightly due to the additional vacancies. We filled 5 of the existing vacancies during FFY 2020 as planned. However, we experienced 6 additional retirements over the 12 months following. LSP secured state funding to hold a 50-person Academy in August 2019 and graduated over 40 cadets in January 2020. An additional 50-person academy was planned for the spring of CY 2020, but was canceled due to COVID-19. LSP Command Staff planned to recruit additional inspectors from the ranks of seasoned patrol Troopers assigned to individual Troops (the Troopers we recruit to become NAS-Certified Inspectors would be replaced with new LSP Cadet Class Graduates). This process was expected to take approximately 18 months, but has been put on hold until LSP can secure state funding for another cadet class to avoid depleting personnel from Troops across the state. The budget shortfall the state is experiencing due to the 2019 Cyber-attack and the 2020 pandemic is significant and affecting our ability to hire new cadets. Fortunately, the state is projected to begin a 60-70-person class in September 2021. Upon completion and training of the new troopers, we atticipate on replacing the current vacancies.

FFY 2022 Update: activity projections are calculated based on the anticipation of the additional overtime being approved. The increase in overtime funding should correlate to approximately 6000 MCSAP activities, to include inspections and traffic enforcement. The increased inspections will focus on work zones and aggressive driving. This

is a short-term solution to a temporary personnel problem, which we hope to correct by FFY 2023, pending economic recovery for the state.

The State Police is projected to begin a 60-70-person class in September 2021. Upon completion and training of the new troopers, we anticipate on replacing the current vacancies.

LSP currently has 3 trooper vacancies in Commercial Vehicle Enforcement (Roadside Enforcement). These vacancies will be filled after the Cadet Class graduates in early 2022. These position are not an increase in personnel, they are to back fill current positions that have been vacated because of retirements or promotions. These 3 positions are reflected accurately as salaries in the budget table.

FY 2022 Updates

2022 BIL Revisions.

We moved 16 troopers (\$\$1,350,416) from MOE to the grant.

We added 1 Data Quality Investigator, 2 NESA Investigators and 2 Compliance Review Investigators.

FY 2023 Update:

LSP is requesting to be allowed to exceed the 15% overtime policy. Several factors play a part in this request. LSP has experienced unprecedented loss of MCSAP-Certified personnel over the past several years. In conjunction with the loss of personnel and the global pandemic, we have seen a reduction in our projected inspection activity. These factors have made it necessary to increase overtime to keep the level enforcement and other MCSAP activities at an acceptable level, which we were able to accomplish.

Fortunately, LSP graduated 51 troopers in 2020 and we are projecting to graduate approximately 75 troopers in 2022 (two classes with 51 and 25 cadets). We recently filled some of our vacant positions. However, we experienced additional retirements that has left us with a net loss of personnel. We currently have four trooper vacancies statewide.

Activity projections are calculated based on the anticipation of the additional overtime being approved. The increase in overtime funding should correlate to approximately 6000 MCSAP activities, to include inspections and traffic enforcement. The increased inspections will focus on work zones and aggressive driving. This is a short-term solution to a temporary personnel problem, which we hope to correct by FFY 2024, pending economic recovery for the state.

LSP currently has four trooper vacancies in Commercial Vehicle Enforcement. These vacancies will be filled after the Cadet Class graduate and are properly trained. These position are not an increase in personnel, they are to back fill current positions that have been vacated because of retirements or promotions. These positions are reflected accurately as salaries in the budget table.

Part 4 Section 3 - Fringe Benefits

Fringe costs are benefits paid to employees, including the cost of employer's share of FICA, health insurance, worker's compensation, and paid leave. Only non-Federal grantees that use the **accrual basis** of accounting may have a separate line item for leave, and is entered as the projected leave expected to be accrued by the personnel listed within Part 4.2 – Personnel. Reference 2 CFR §200.431(b).

Show the fringe benefit costs associated with the staff listed in the Personnel section. Fringe costs may be estimates, or based on a fringe benefit rate. If using an approved rate by the applicant's Federal cognizant agency for indirect costs, a copy of the indirect cost rate agreement must be provided in the "My Documents" section in eCVSP and through grants.gov. For more information on this item see 2 CFR §200.431.

Show how the fringe benefit amount is calculated (i.e., actual fringe rate, rate approved by HHS Statewide Cost Allocation or cognizant agency, or an aggregated rate). Include a description of the specific benefits that are charged to a project and the benefit percentage or total benefit cost.

Actual Fringe Rate: a fringe rate approved by your cognizant agency or a fixed rate applied uniformly to each position.

Aggregated Rate: a fringe rate based on actual costs and not a fixed rate (e.g. fringe costs may vary by employee position/classification).

Depending on the State, there are fixed employer taxes that are paid as a percentage of the salary, such as Social Security, Medicare, State Unemployment Tax, etc. For more information on this item see the Fringe Benefits Job Aid below.

Fringe costs method: Aggregated Rate - documentation added to 'My Documents' to describe rate calculation

Total Project Costs equal the Fringe Benefit Rate x Percentage of Time on MCSAP grant x Base Amount divided by 100.

Fringe Benefit Rate: The rate that has been approved by the State's cognizant agency for indirect costs; or a rate that has been calculated based on the aggregate rates and/or costs of the individual items that your agency classifies as fringe benefits.

Base Amount: The salary/wage costs within the proposed budget to which the fringe benefit rate will be applied.

Fringe Benefits Project Costs									
Position(s)	Fringe Benefit Rate	% of Time on MCSAP Grant	Base Amount	Total Project Costs (Federal + State)	Federal Share	State Share	MOE		
Lieutenant	10.2000	100.0000	\$343,050.00	\$34,991.10	\$29,745.93	\$5,245.17	\$0.00		
Sergeant	12.1000	100.0000	\$376,708.00	\$45,581.66	\$38,748.97	\$6,832.69	\$0.00		
Trooper	15.1000	100.0000	\$1,102,050.00	\$166,409.55	\$141,464.76	\$24,944.79	\$0.00		
Admin Manager I	65.3000	100.0000	\$42,075.00	\$27,474.97	\$23,356.47	\$4,118.50	\$0.00		
Admin Coordinator IV	70.2000	100.0000	\$34,940.00	\$24,527.88	\$20,851.15	\$3,676.73	\$0.00		
Admin Coordinator IV	1.4500	100.0000	\$31,824.00	\$461.44	\$392.27	\$69.17	\$0.00		
Data Quality Investigators	1.4500	100.0000	\$163,800.00	\$2,375.10	\$2,019.07	\$356.03	\$0.00		
NESA Investigators	1.4500	100.0000	\$436,800.00	\$6,333.60	\$5,384.19	\$949.41	\$0.00		
Training/Outreach Coordinator	1.4500	100.0000	\$54,600.00	\$791.70	\$673.02	\$118.68	\$0.00		
Medicare for Overtime	100.0000	100.0000	\$12,018.00	\$12,018.00	\$10,215.30	\$1,802.70	\$0.00		
Uniform Allowance	100.0000	100.0000	\$39,936.00	\$39,936.00	\$33,946.00	\$5,990.00	\$0.00		
Captain	61.4000	100.0000	\$131,673.00	\$80,847.22	\$80,847.22	\$0.00	\$0.00		
Lieutenant	63.9000	100.0000	\$199,068.00	\$127,204.45	\$127,204.45	\$0.00	\$0.00		
Sergeant	62.6000	100.0000	\$456,894.00	\$286,015.64	\$286,015.64	\$0.00	\$0.00		
Trooper	65.7000	0.0000	\$1,350,422.00	\$0.00	\$0.00	\$0.00	\$887,227.00		
Admin Coordinator IV	78.5000	100.0000	\$108,345.00	\$85,050.82	\$85,050.82	\$0.00	\$0.00		
Commissioned Personnel Retirement	100.0000	0.0000	\$954,627.00	\$0.00	\$0.00	\$0.00	\$954,627.00		
TOTAL: Fringe Benefits				\$940,019.13	\$885,915.26	\$54,103.87	\$1,841,854.00		

Enter a detailed explanation of how the fringe benefit costs were derived and allocated to the MCSAP project.

Fringe (Retirement for Commissioned Personnel - 52.40%; Non-Commissioned Personnel - 40.10%), Medicare - 1.45% is calculated for each employee based on their projected salary. Health Insurance is budgeted at \$10,000 per employee due to the varying medical insurance plan costs. The fringe rates for each position vary due to the insurance cost multiplied by the number of positions.

The following positions are filled with retired personnel rehired by the Department. Medical Insurance and Retirement is not deducted from their salary however, Medicare is calculated and deducted as required:

Admin Coordinator IV

Data Quality Investigators

NESA Investigators

Training/Outreach Coordinator

All State of Louisiana employees participate in a State Retirement System therefore, FICA is not calculated or deducted from their salary.

Medicare for overtime is calculated at 1.45%

Uniform Maintenance Allowance is calculated at \$8 per day worked by commissioned officers, at an average of 208 days worked per year (24 Commissioned Officers x \$8 Day x 208 Days = \$39,936.00.

All of the Commissioned Personnel whose salaries are applied to the grant have their retirement (52.40%) expenses being applied to MOE (3 Lieutenants, 4 Sergeants, and 15 Troopers) = \$954,627. This is done to keep the amount of fringe costs to the grant down so it can utilized in other categories that would help facilitate the original mission.

The 3 troopers are not an increase in personnel, just backfilling positions and are accurately included in the current fringe budget table.

Fringe (Retirement for Commissioned Personnel - 58.80%; Non-Commissioned Personnel - 39.50%), Medicare - 1.45% is calculated for each employee based on their projected salary. Health Insurance is budgeted at \$10,000 per employee due to the varying medical insurance plan costs. The fringe rates for each position vary due to the insurance cost multiplied by the number of positions. Note: I

attached the actuary calculations for both, commissioned and non-commissioned personnel, in the "my documents" section, in the eCVSP.

The following positions are filled with retired personnel rehired by the Department. Medical Insurance and Retirement is not deducted from their salary however, Medicare is calculated and deducted as required:

Admin Coordinator IV

Data Quality Investigators

NESA Investigators

Training/Outreach Coordinator

All State of Louisiana employees participate in a State Retirement System therefore; FICA is not calculated or deducted from their salary.

Medicare is calculated at 1.45%

Uniform Maintenance Allowance is calculated at 8 per day worked by commissioned officers, at an average of 208 days worked per year (24 Commissioned Officers x 8 Day x 208 Days) = 39,936.00.

Part 4 Section 4 - Travel

Itemize the positions/functions of the people who will travel. Show the estimated cost of items including but not limited to, airfare, lodging, meals, transportation, etc. Explain in detail how the MCSAP program will directly benefit from the travel.

Travel costs are funds for field work or for travel to professional meetings.

List the purpose, number of persons traveling, number of days, percentage of time on MCSAP Grant, and total project costs for each trip. If details of each trip are not known at the time of application submission, provide the basis for estimating the amount requested. For more information on this item see <u>2 CFR §200.475</u>.

Total Project Costs should be determined by State users, and manually input in the table below. There is no system calculation for this budget category.

Travel Project Costs										
Purpose	# of Staff	# of Days	% of Time on MCSAP Grant	Total Project Costs (Federal + State)	Federal Share	State Share	MOE			
CVSA/FMCSA Data Quality Workshop	4	4	100.0000	\$6,000.00	\$5,100.60	\$899.40	\$0.00			
COHMED Conference	2	4	100.0000	\$3,000.00	\$2,550.30	\$449.70	\$0.00			
Regional Planning Meeting	2	4	100.0000	\$4,000.00	\$3,400.00	\$600.00	\$0.00			
CVSA Workshop	4	4	100.0000	\$8,000.00	\$6,800.80	\$1,199.20	\$0.00			
LMTA TDC/Annual Conference	4	4	100.0000	\$6,000.00	\$5,700.00	\$300.00	\$0.00			
Safe Drive/Technology Workshop	2	4	100.0000	\$3,000.00	\$2,850.00	\$150.00	\$0.00			
NAIC	2	5	100.0000	\$5,000.00	\$4,250.00	\$750.00	\$0.00			
CVSA Annual Conference	5	4	100.0000	\$7,000.00	\$5,950.70	\$1,049.30	\$0.00			
CVSA/MCSAP Training Travel	10	4	100.0000	\$10,000.00	\$9,500.00	\$500.00	\$0.00			
MCSAP Program Travel	10	1	100.0000	\$5,000.00	\$4,750.00	\$250.00	\$0.00			
NESA/DQ Program Travel	14	1	100.0000	\$48,600.00	\$46,170.00	\$2,430.00	\$0.00			
Unexpected Training and Travel	19	4	100.0000	\$1,900.00	\$1,615.19	\$284.81	\$0.00			
Louisiana Inspector Challenge	10	3	100.0000	\$5,000.00	\$4,750.00	\$250.00	\$0.00			
TOTAL: Travel				\$112,500.00	\$103,387.59	\$9,112.41	\$0.00			

Enter a detailed explanation of how the travel costs were derived and allocated to the MCSAP project.

FY 2023 Update:

Costs are estimated based on average past travel inclusive of conference fees, meals, lodging, airfare, etc.

MCSAP CVSP Regional Planning Meeting (Spring 2023)

2 people x \$2,000.00 each = \$4,000.00

CVSA Workshop / FMCSA Leadership Conference (Spring 2023)

4 people x \$2,000.00 each = \$8,000.00

Louisiana Motor Transport Association TDC/Annual Conference (Summer 2023)

4 people x \$1500.00 each = \$6,000.00

Officers participate in multiple speaking sessions during the conference and TDC, where a multitude of CMV safety related topics are covered. This is a major component of our carrier outreach program, which has been approved for many years.

Safe Drive/Technology Workshop (Summer 2023)

2 people x \$1,500.00 each = \$3,000.00

Presentations on topics of interest to the CMV highway traffic safety and

data communities, including analysis, program management, problem identification, and evaluation.

North American Inspectors Competition (NAIC) (Summer 2023) 2 people x 2,500.00 each = \$5,000.00

CVSA Annual Conference (Fall 2023) 5 people x \$1,400.00 each = \$7,000.00

CVSA/MCSAP Training Travel (Throughout the year)
10 people x \$1,000.00 each = \$10,000.00
Certification training travel costs

MCSAP Program Travel 10 people x \$500.00 each = \$5,000.00

NESA/Data Quality Program Travel Total estimated cost = \$48,600.00

Program travel cost was calculated by obtaining the average miles traveled per month over the past 14 months for each Safety Auditor/DQ Investigator based on actual miles traveled and then multiplied by .64cents per mile. Average miles traveled = 452×14 personnel = $6,328 \times 12$ months = $75,936 \times 9.64 = 448,600.00$.

Unexpected Training and Travel 19 people x \$100.00 each = \$1,900.00 Training travel costs for unforeseen MCSAP training and travel

Louisiana Inspector Challenge

10 people x \$500.00 each = \$5000.00

This event is dedicated to recognizing and awarding commercial vehicle inspector excellence. In addition, the winner of this event will participate in NAIC. Each inspector receives training on the latest safety information, technology, standards, and inspection procedures while sharing ideas, techniques, and experiences with other inspectors.

COHMED Conference

2 people $\times $1500 = #3,000.00$

CVSA/FMCSA Data Quality Workshop

4 people x \$1500.00 = \$6,000.

Total Travel Costs = \$112,500.00

All travel costs must adhere to state per diem and travel policies as listed below:

TIER I

Breakfast \$12

Lunch \$16

Dinner \$29

Total \$57

Lodging Area	Routine Lodging
In-State Cities (except as listed)	\$96
Alexandria/Leesville/Natchitoches	\$99
Baton Rouge - EBR	\$99
Covington/Slidell - St. Tammany	\$96
Lake Charles - Calcasieu	\$96
Lafayette	\$96

TIER II

Breakfast \$13

Lunch \$18

Dinner \$31

Total \$62

Lodging Area	Routine Lodging
New Orleans - Orleans, St. Bernard, Jefferson and Plaquemines Parishes July- September	\$136
New Orleans - Orleans, St. Bernard, Jefferson and Plaquemines Parishes October – January	\$136
New Orleans - Orleans, St. Bernard, Jefferson and Plaquemines Parishes February-June	\$158
Out-of-State (Except Cities listed in Tier III & IV)	\$96

TIER III

Breakfast \$13

Lunch \$19

Dinner \$33

Total \$65

Lodging Area Routine Lodging

Austin, TX; Atlanta, GA; Cleveland, OH; Dallas/Fort Worth, TX; Denver, CO; \$170

Ft. Lauderdale, FL; Hartford, CT; Houston, TX; Kansas City, MO; Las Vegas

Los Angeles, CA; Miami, FL; Minneapolis/St. Paul, MN; Nashville, TN; Oakland, CA;

Orlando, FL; Philadelphia, PA.; Phoenix, AZ, Pittsburgh, PA; Portland, OR;

Sacramento, CA; San Antonio, TX; San Diego, CA; Sedona, AZ; St. Louis, MO;

Wilmington, DE; all of Alaska and Hawaii; Puerto Rico; US Virgin Island;

American Samoa; Guam, Saipan

TIER IV

Breakfast \$14

Lunch \$21

Dinner \$36

Total \$71

Lodging Area Routine Lodging Baltimore, MD; San Francisco, CA; Seattle, WA; Chicago IL, Boston, MA \$212 Alexandria, VA; Arlington, VA; New York City, NY; Washington, DC \$225

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Part 4 Section 5 - Equipment

Equipment is tangible or intangible personal property. It includes information technology systems having a useful life of more than one year, and a per-unit acquisition cost that equals or exceeds the lesser of the capitalization level established by the non-Federal entity (i.e., the State) for financial statement purposes, or \$5,000.

 If your State's equipment capitalization threshold is below \$5,000, check the box below and provide the threshold amount. See §200.12 Capital assets, §200.20 Computing devices, §200.48 General purpose equipment, §200.58 Information technology systems, §200.89 Special purpose equipment, and §200.94 Supplies.

Show the total cost of equipment and the percentage of time dedicated for MCSAP related activities that the equipment will be billed to MCSAP. For example, you intend to purchase a server for \$5,000 to be shared equally among five programs, including MCSAP. The MCSAP portion of the total cost is \$1,000. If the equipment you are purchasing will be capitalized (depreciated), you may only show the depreciable amount, and not the total cost (2 CFR §200.436 and 2 CFR §200.439). If vehicles or large IT purchases are listed here, the applicant must disclose their agency's capitalization policy.

Provide a description of the equipment requested. Include the quantity, the full cost of each item, and the percentage of time this item will be dedicated to MCSAP grant.

Total Project Costs equal the Number of Items x Full Cost per Item x Percentage of Time on MCSAP grant.

Equipment Project Costs									
Item Name	# of Items	Full Cost per Item	% of Time on MCSAP Grant	Total Project Costs (Federal + State)	Federal Share	State Share	MOE		
Scanners	3	\$2,500.00	100	\$7,500.00	\$5,774.70	\$1,725.30	\$0.00		
Desktop Computers	2	\$1,500.00	100	\$3,000.00	\$2,550.00	\$450.00	\$0.00		
Mobile Data Terminals	4	\$2,000.00	100	\$8,000.00	\$6,800.00	\$1,200.00	\$0.00		
Radars	2	\$3,000.00	100	\$6,000.00	\$5,100.00	\$900.00	\$0.00		
LIDARS	2	\$3,000.00	100	\$6,000.00	\$5,100.00	\$900.00	\$0.00		
Vehicles	5	\$43,000.00	100	\$215,000.00	\$182,750.00	\$32,250.00	\$0.00		
MCSAP Software Updates	1	\$120,000.00	100	\$120,000.00	\$89,444.00	\$30,556.00	\$0.00		
TOTAL: Equipment				\$365,500.00	\$297,518.70	\$67,981.30	\$0.00		
Equipment threshold is \$1,0	000								

Enter a detailed explanation of how the equipment costs were derived and allocated to the MCSAP project.

Vehicles:

Vehicle costs, to include up-fitting, are estimated based on current contract pricing. The new vehicles are needed to replace current full-time MCSAP vehicles which are at high mileage and identified for replacement. These vehicles will be used 100% for MCSAP activities.

MCSAP Data System:

The existing LSP data system supporting all MCSAP enforcement and administrative activities, was put in place over 20 years ago. This existing system relies upon a Lotus Notes platform which is no longer supported by DPS IT services. The system cannot be further expanded to meet current data volumes and interface requirements with evolving applications, and has become increasing unstable. The existing system has reached the limits of its scalability and no longer performs in a stable and reliable manner, resulting in a level of performance which is unacceptable to LSP operations. Current system performance significantly impedes productivity and performance of LSP MCSAP enforcement and administrative operations, to include data reporting. The first phase of the upgrade, which has been completed, was to build and install two (2) new servers for data uploads of Inspection Reports to Safety Net. These servers are housed and serviced by the Louisiana Office of Technology Services, which is required by policy. The Department is currently implementing a new CAD/RMS system statewide which will include records management for MCSAP inspection reports currently being stored on the Lotus Notes platform which continues to become more unstable.

LSP has begun using the RMS system but not for MCSAP inspections. The implementation of the required applications for MCSAP are slower than anticipated. Louisiana Office of Technology Services are steadily making updates and improvements and we anticipate the system will be fully functioning by Summer 2022.

Mobile Data Terminal Repair/Replacement:

4 @ \$2,000.00 = \$8,000.00

Desktop Computers:

2 @ \$1,500.00 each = \$3,000.00

Radars:

Replacement for MCSAP Traffic Enforcement 2 @ \$3,000.00 each = \$6,000.00

Lidars:

Replacement for MCSAP Traffic Enforcement 2 @ \$3,000.00 each = \$6,000.00

Replacement Scanners for MCSAP office personnel:

Scanning of all MCSAP Related documents

3 @ \$2,500.00 each = \$7,500.00

Total Equipment = \$365,500

We purchase Mobile Data Terminals, Desktop Computers, Radars and LIDAR's through contractual agreements. Those costs are negotiated and agreed upon and then a contract is processed between LSP and the vendor. Therefore, the amounts are determined by contractual agreement.

FY2023 Update:

We are currently working on replacing the LSP data system supporting all MCSAP enforcement and administrative activities. It was put in place over 20 years ago. This existing system relies upon a Lotus Notes platform which is no longer supported by DPS IT services. The system cannot be further expanded to meet current data volumes and interface requirements with evolving applications, and has become increasing unstable. The existing system has reached the limits of its scalability and no longer performs in a stable and reliable manner, resulting in a level of performance which is unacceptable to LSP operations. Current system performance significantly impedes productivity and performance of LSP MCSAP enforcement and administrative operations, to include data reporting. The first phase of the upgrade, which has been completed, was to build and install two (2) new servers for data uploads of Inspection Reports to Safety Net. These servers are housed and serviced by the Louisiana Office of Technology Services, which is required by policy.

The implementation of the required applications for MCSAP are not complete. Louisiana Office of Technology Services are steadily making updates and improvements. LSP has begun using the RMS system but not for MCSAP inspections. The CVE Unit will transition to the new ASPEN update called Safespec upon its release later this year.

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Replacement Scanners for MCSAP office personnel:

Scanning of all MCSAP Related documents

3 @ \$2,500.00 each = \$7,500.00

Desktop Computers:

2 @ \$1,500.00 each = \$3,000.00

Mobile Data Terminal Repair/Replacement:

4 @ \$2,000.00 = \$8,000.00

Radars:

Replacement for MCSAP Traffic Enforcement 2 @ \$3,000.00 each = \$6,000.00

Lidars:

Replacement for MCSAP Traffic Enforcement 2 @ \$3,000.00 each = \$6,000.00

Vehicles:

Replacement Units for MCSAP Personnel

5 @ \$43,000 = \$215,000

MCSAP Software Update:

LOTUS Notes Update - \$120,000

Total Equipment = \$365,500

We purchase Mobile Data Terminals, Desktop Computers, Radars and LIDAR's through contractual agreements. Those costs are negotiated and agreed upon and then a contract is processed between LSP and the vendor. Therefore, the amounts are determined by contractual agreement.

Part 4 Section 6 - Supplies

Supplies means all tangible property other than that described in §200.33 Equipment. A computing device is a supply if the acquisition cost is less than the lesser of the capitalization level established by the non-Federal entity for financial statement purposes or \$5,000, regardless of the length of its useful life. See also §200.20 Computing devices and §200.33 Equipment.

Estimates for supply costs may be based on the same allocation as personnel. For example, if 35 percent of officers' salaries are allocated to this project, you may allocate 35 percent of your total supply costs to this project. A different allocation basis is acceptable, so long as it is reasonable, repeatable and logical, and a description is provided in the narrative.

Provide a description of each unit/item requested, including the quantity of each unit/item, the unit of measurement for the unit/item, the cost of each unit/item, and the percentage of time on MCSAP grant.

Total Project Costs equal the Number of Units x Cost per Unit x Percentage of Time on MCSAP grant.

Supplies Project Costs									
Item Name	# of Units/ Unit of Measurement	Cost per Unit	% of Time on MCSAP Grant	Total Project Costs (Federal + State)	Federal Share	State Share	MOE		
Office Supplies	1 Year	\$32,037.87	100.0000	\$32,037.87	\$20,341.77	\$11,696.10	\$0.00		
Printer Ink Cartridges	1 Year	\$45,000.00	100.0000	\$45,000.00	\$38,250.00	\$6,750.00	\$0.00		
Inspection Related Supplies	1 Year	\$15,000.00	100.0000	\$15,000.00	\$12,750.00	\$2,250.00	\$0.00		
HM Enforcer Software	100 Each	\$260.00	100.0000	\$26,000.00	\$22,100.00	\$3,900.00	\$0.00		
CVSA OOS Critera Handbooks/Pictorials	150 Each	\$28.00	100.0000	\$4,200.00	\$3,570.00	\$630.00	\$0.00		
FMCSR/HMR Guides	1 Year	\$7,800.00	100.0000	\$7,800.00	\$6,630.00	\$1,170.00	\$0.00		
Printers - Troopers	30 Each	\$100.00	100.0000	\$3,000.00	\$2,850.00	\$150.00	\$0.00		
Replacement Office Furniture	1 Set	\$10,000.00	100.0000	\$10,000.00	\$9,500.00	\$500.00	\$0.00		
CVSA Decals	14000 Each	\$0.30	100.0000	\$4,200.00	\$3,570.00	\$630.00	\$0.00		
Uniform Related Supplies	1 Year	\$31,343.00	100.0000	\$31,343.00	\$26,644.68	\$4,698.32	\$0.00		
Printers - NESA/Office Personnel	15 Each	\$200.00	100.0000	\$3,000.00	\$2,850.00	\$150.00	\$0.00		
TOTAL: Supplies				\$181,580.87	\$149,056.45	\$32,524.42	\$0.00		

Enter a detailed explanation of how the supply costs were derived and allocated to the MCSAP project.

FY 2023 Update:

Office Supplies:

Paper, Envelopes, Folders, Files, Postage, Other Office Supplies For administration of the MCSAP \$32037.87

Uniform Related Supplies:

Uniforms – MCSAP Administrative Staff (LSP regulation) Replacements as needed @ \$90.00 each set = \$4,171.00

Uniforms – Class C (LSP regulation)
Replacements as needed @ \$90.00 each set = \$4,172.00

Uniforms – Class B (LSP regulation) 25 x 2 sets @ \$100.00 each set = \$5,000.00 Uniforms – Heatgear Shirts (LSP regulation) 50 x 4 each @ \$25 each = \$5,000.00

Uniforms – Ballistic Vest Carriers (LSP Regulation) 10 x \$200 each = \$2,000.00

Uniforms – Footwear Replacement footwear for MCSAP certified officers 47 pair @ \$150.00 each = \$7,000.00

Uniform Caps – Class B (LSP regulation) 100 x 2 each @ \$10.00 each = \$2,000.00

Uniforms - Nylon Web Gear - Class B (LSP regulation)

Includes for each officer: inner belt, web belt, weapon holster, handcuff cases, ammo magazine pouch, chemical spray pouch, knife holder, flashlight holder, latex glove holder, baton holder, portable radio holder, belt keepers, and other equipment holders. Replacement as needed @ \$200.00 each = \$2,000.00

Total Uniform Related Supplies: \$31,343

Printer Ink Cartridges:

To print inspection reports and investigations 1,800 @ \$25 each = **\$45,000.00**

Inspection Related Supplies:

Replacement for inspectors as needed (Creepers, gloves, glasses, chalk, measuring devices, cameras, chocks, etc) 142 officers @ \$105.63 per officer = \$15,000.00

Hazardous Material Trucking Enforcement Software:

Hazardous Material Enforcement licenses 100 x \$260.00 each = **\$26,000.00**

CVSA Out-of-Service Criteria Handbook/ Pictorial:

150 @ \$28.00 each = **\$4,200.00**

Federal Motor Carrier Safety Regulations Guides:

150 FMCSR books @ \$20.00 each \$3,000.00 120 HMR books @ \$40.00 each \$4,800.00 Total = **\$7,800.00**

Printers:

Replacement printers to print ASPEN reports in vehicles 30 printers @ \$100.00 each \$3,000.00 Replacement printers for MCSAP Office personnel / NESA Personnel 15 @ \$200 each \$3,000.00 Total Printers = \$6,000.00

Replacement Office Furniture:

Replacement desks, chairs, filing cabinets for MCSAP personnel throughout the state. 1 @ \$10,000.00 each = **\$10,000.00**

CVSA Decals:

14,000 @ \$0.30 each = \$4,200.00

Total Supplies Cost = \$181,580.87

The costs for office supplies, uniform related supplies, printer ink, inspection related supplies, printers and replacement furniture are based on historical estimates calculated over the past few years.

The cost for HM Enforcer, CVSA OOS Criteria Handbook, FMCSA Regulation books and CVSA Decals are not estimated cost. These are actual costs provided by the vendor.

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Part 4 Section 7 - Contractual and Subaward

This section includes contractual costs and subawards to subrecipients. Use the table below to capture the information needed for both contractual agreements and subawards. The definitions of these terms are provided so the instrument type can be entered into the table below.

Contractual – A contract is a legal instrument by which a non-Federal entity purchases property or services needed to carry out the project or program under a Federal award (2 CFR §200.22). All contracts issued under a Federal award must comply with the standards described in 2 CFR §200 Procurement Standards.

Note: Contracts are separate and distinct from subawards; see 2 CFR §200.330 for details.

Subaward – A subaward is an award provided by a pass-through entity to a subrecipient for the subrecipient to carry out part of a Federal award received by the pass-through entity. It does not include payments to a contractor or payments to an individual that is a beneficiary of a Federal program. A subaward may be provided through any form of legal agreement, including an agreement that the pass-through entity considers a contract (2 CFR §200.92 and 2 CFR §200.330).

Subrecipient - Subrecipient means a non-Federal entity that receives a subaward from a pass-through entity to carry out part of a Federal program, but does not include an individual who is a beneficiary of such program. A subrecipient may also be a recipient of other Federal awards directly from a Federal awarding agency (2 CFR §200.93).

Enter the legal name of the vendor or subrecipient if known. If unknown at this time, please indicate 'unknown' in the legal name field. Include a description of services for each contract or subaward listed in the table. Entering a statement such as "contractual services" with no description will not be considered meeting the requirement for completing this section.

The Unique Entity Identifier (UEI) is the new, non-proprietary identifier that replaces the DUNS number. All contractors and subrecipients must be registered in the System for Award Management (SAM.gov). The UEI will be requested in and assigned by SAM.gov. Enter the UEI number of each entity in the space provided in the table.

Select the Instrument Type by choosing either Contract or Subaward for each entity.

Total Project Costs should be determined by State users and input in the table below. The tool does not automatically calculate the total project costs for this budget category.

Operations and Maintenance-If the State plans to include O&M costs that meet the definition of a contractual or subaward cost, details must be provided in the table and narrative below.

Please describe the activities these costs will be using to support (i.e., ITD, PRISM, SSDQ or other services.)

Contractual and Subaward Project Costs									
Legal Name	UEI Number	Instrument Type	% of Time on MCSAP Grant	Total Project Costs (Federal + State)	Federal Share	State Share	MOE		
Office Space	UEI	Contract	100.0000	\$120,000.00	\$120,000.00	\$0.00	\$0.00		
Description of Se	rvices: Lease	e for Region 2	Office Space						
Xerox/Sharp Electronics	UEI	Contract	100.0000	\$6,500.00	\$6,500.00	\$0.00	\$0.00		
Description of Se	rvices: Copie	er Rental/Servi	ce Contract						
Timothy Bella	UEI	Contract	100.0000	\$75,000.00	\$75,000.00	\$0.00	\$0.00		
Description of Se	rvices: Medic	cal Assessmer	nts						
Louisiana State University	UEI	Contract	100.0000	\$200,000.00	\$200,000.00	\$0.00	\$0.00		
Description of Services: CMV and HM Crash Data Entry and Analysis									
TOTAL: Contractual and Subaward				\$401,500.00	\$401,500.00	\$0.00	\$0.00		

Enter a detailed explanation of how the contractual and subaward costs were derived and allocated to the MCSAP project.

FY2023 Update:

XEROX and Sharp Electronics: \$6,500

Rental/Service Contract for MCSAP copier/scanner/printer (paid monthly)

Dr. Bella: \$75,000

Annual contract with Dr. Timothy Bella, M.D. to monitor MCSAP inspectors' health for contamination from inspecting HazMat cargo. Contract is to be paid upon services rendered and based upon number of physicals conducted. Dr. Bellum is just a service provider.

100 @ \$750.00 each = \$75,000.00

Louisiana State University: \$200,000.00

LSP will contract with LSU Highway Safety Research Group to continue input of CMV crash data and analysis of this data for preparation of an annual report used to develop the annual CVSP. This will include the analysis of all Hazardous Materials related transport incidents and crashes, where commercial vehicles were the mode of transportation. Additionally, this analysis will assist in the State's Data Quality Rating improvement/maintenance efforts, as well as aid in directing enforcement efforts based on the changing data. This contract is the continuation of a successful service that began in FFY 2001. LSU UEI number is ECQEYCHRNKJ4.

Office Space (2 Offices): \$120,000.00

The leased office space will house Region 2 and 3 MCSAP personnel. The offices will be located strategically throughout the state and are essential for effective enforcement. The offices will allow our MCSAP Personnel to store MCSAP Supplies, conduct MCSAP Administrative Hearings and provide an office for our supervisors to complete their day-to-day operations.

Originally, the office space leased to house Region 2 MCSAP personnel was reimbursed 50% of the total lease (\$60,000). We are requesting full reimbursement for the Region 2 building and adding an additional office (Region 3). This cost is an estimation derived from the Region 2 lease of \$60,000.

Originally, the office space leased to house Region 2 MCSAP personnel was reimbursed 50% of the total lease (\$60,000). Both MCSAP and Weight personnel were utilizing the building. Weights personnel and supplies are no longer located at these facilities so we are now requesting 100% reimbursement.

We are requesting full reimbursement for the Region 2 building and adding an additional office (Region 3). Previously, MCSAP Personnel were using LSP Troops located throughout the state, but because of overcrowding there is no longer space available at the troops.

Both Region 2 and 3 office buildings are not state owned facilities. The annual rent at Region 2 is \$60,000. We based the cost for the Region 3 facility, along with inflation and location cost, on the previous rent of the region 2 office.

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Total Contractual = \$401,500

Part 4 Section 8 - Other Costs

Other Costs are those not classified elsewhere and are allocable to the Federal award. These costs must be specifically itemized and described. The total costs and allocation bases must be explained in the narrative. Examples of Other Costs (typically non-tangible) may include utilities, leased property or equipment, fuel for vehicles, employee training tuition, meeting registration costs, etc. The quantity, unit of measurement (e.g., monthly, annually, each, etc.), unit cost, and percentage of time on MCSAP grant must be included.

Operations and Maintenance-If the State plans to include O&M costs that do not meet the definition of a contractual or subaward cost, details must be provided in the table and narrative below. Please identify these costs as ITD O&M, PRISM O&M, or SSDQ O&M. Sufficient detail must be provided in the narrative that explains what components of the specific program are being addressed by the O&M costs.

Enter a description of each requested Other Cost.

Enter the number of items/units, the unit of measurement, the cost per unit/item, and the percentage of time dedicated to the MCSAP grant for each Other Cost listed. Show the cost of the Other Costs and the portion of the total cost that will be billed to MCSAP. For example, you intend to purchase air cards for \$2,000 to be shared equally among five programs, including MCSAP. The MCSAP portion of the total cost is \$400.

Total Project Costs equal the Number of Units x Cost per Item x Percentage of Time on MCSAP grant.

Indirect Costs

Information on Indirect Costs (2 CFR §200.56) is captured in this section. This cost is allowable only when an approved indirect cost rate agreement has been provided in the "My Documents" area in the eCVSP tool and through Grants.gov. Applicants may charge up to the total amount of the approved indirect cost rate multiplied by the eligible cost base. Applicants with a cost basis of salaries/wages and fringe benefits may only apply the indirect rate to those expenses. Applicants with an expense base of modified total direct costs (MTDC) may only apply the rate to those costs that are included in the MTDC base (2 CFR §200.68).

- Cost Basis is the accumulated direct costs (normally either total direct salaries and wages or total direct costs exclusive of any extraordinary or distorting expenditures) used to distribute indirect costs to individual Federal awards. The direct cost base selected should result in each Federal award bearing a fair share of the indirect costs in reasonable relation to the benefits received from the costs.
- Approved Rate is the rate in the approved Indirect Cost Rate Agreement.
- Eligible Indirect Expenses means after direct costs have been determined and assigned directly to Federal awards and other activities as appropriate. Indirect costs are those remaining to be allocated to benefitted cost objectives. A cost may not be allocated to a Federal award as an indirect cost if any other cost incurred for the same purpose, in like circumstances, has been assigned to a Federal award as a direct cost.
- Total Indirect Costs equal Approved Rate x Eligible Indirect Expenses divided by 100.

Your State will not claim reimbursement for Indirect Costs.

Other Costs Project Costs							
Item Name	# of Units/ Unit of Measurement	Cost per Unit	% of Time on MCSAP Grant	Total Project Costs (Federal + State)	Federal Share	State Share	MOE
Post-Crash Course	1 Year	\$1,000.00	100.0000	\$1,000.00	\$850.00	\$150.00	\$0.00
CMV Interdiction Course	1 Year	\$1,000.00	100.0000	\$1,000.00	\$850.00	\$150.00	\$0.00
MCSAP Vehicle Maintenance	1 Year	\$30,000.00	100.0000	\$30,000.00	\$30,000.00	\$0.00	\$0.00
MCSAP Vehicle Fuel Costs	1 Year	\$140,000.00	100.0000	\$140,000.00	\$140,000.00	\$0.00	\$0.00
Training Costs (Classroom supplies, materials, etc.)	1 Year	\$4,800.00	100.0000	\$4,800.00	\$4,080.00	\$720.00	\$0.00
Public Outreach	1 Year	\$4,100.00	100.0000	\$4,100.00	\$3,485.00	\$615.00	\$0.00
US Postmaster	1 Year	\$1,400.00	100.0000	\$1,400.00	\$1,190.00	\$210.00	\$0.00
CVSA Dues	1 Year	\$12,900.00	100.0000	\$12,900.00	\$10,965.00	\$1,935.00	\$0.00
Document Destruction	1 Year	\$2,000.00	100.0000	\$2,000.00	\$1,700.00	\$300.00	\$0.00
TOTAL: Other Costs				\$197,200.00	\$193,120.00	\$4,080.00	\$0.00

Enter a detailed explanation of how the 'other' costs were derived and allocated to the MCSAP project.

Training Costs:

Tuition, classroom supplies, consumables, course material, tuition, etc.

\$1,800.00

Louisiana Inspectors Challenge Competition Supplies

(Includes misc. inspection supplies/classroom supplies, consumables).

\$3,000.00

Total Training Costs = \$4,800.00

Public Outreach:

"Be ready. Be buckled", "Share the Road", "Don't Hang in the No-Zone", etc.

The state will continue to support the national CMV safety campaigns listed above, and will work with OMV on new campaigns to combat human trafficking, through billboards and highway signs, along high crash corridors, in addition to safety talks. This initiative will relay important CMV safety information in an attempt to reduce the number and severity of CMV related crashes and provide education/awareness of human trafficking.

Total Public Outreach Costs = \$4,100.00

US Postmaster:

Post box and prepaid envelopes to receive and send notification letters, Data Q's, etc. **\$1,400.00**

Conference Costs:

Conference fees/Workshop registration/tuition fees **\$6,700.00**

CVSA Annual Dues:

\$12,900.00

Lidar/Radar Repair:

(repairs made by manufacturer)

\$2,000.00

Document Destruction:

Industrial on-site shredding of sensitive documents

\$2,000.00

Post-Crash Course:

LSP will host CMV Post-Crash Inspection Course at the LSP Training Academy. Training will be made available to other states' MCSAP Lead agencies.

(costs to include classroom supplies and Post-Crash Inspection Kit)

\$1,000.00

CMV Interdiction Course:

LSP will host CMV Interdiction Course (emphasis on Human Trafficking) at the LSP Training Academy as a follow-up to basic CMV Interdiction Course hosted last year.

\$1,000.00

Total Other Expenses Applied to Grant = \$35,900.00

MOE Expenditures:

MCSAP Vehicle Maintenance and Repair MCSAP Fuel Costs

\$30,000.00 \$140,000.00

The cost for CVSA Dues are provided by CVSA. All other cost is based on historical estimates calculate over the past few years.

FY 2023 Update:

Training Costs:

Tuition, classroom supplies, consumables, course material, tuition, etc.

\$1,800.00

Louisiana Inspectors Challenge Competition Supplies

(Includes misc. inspection supplies/classroom supplies, consumables).

\$3,000.00

Total Training Costs = \$4,800.00

Public Outreach:

"Be ready. Be buckled", "Share the Road", "Don't Hang in the No-Zone", Truckers Against Trafficking etc.

The state will continue to support the national CMV safety campaigns listed above, and will work with OMV on new campaigns to combat human trafficking, through billboards and highway signs, along high crash corridors, in addition to safety talks. This initiative will relay important CMV safety information in an attempt to reduce the number and severity of CMV related crashes and provide education/awareness of human trafficking.

Total Public Outreach Costs = \$4,100.00

US Postmaster:

Post box and prepaid envelopes to receive and send notification letters, Data Q's, etc.

\$1,400.00

CVSA Annual Dues:

\$12,900.00

Document Destruction:

Industrial on-site shredding of sensitive documents

\$2,000.00

Post-Crash Course:

LSP will host CMV Post-Crash Inspection Course at the LSP Training Academy. Training will be made available to other states' MCSAP Lead agencies.

(costs to include classroom supplies and Post-Crash Inspection Kit)

\$1,000.00

CMV Interdiction Course:

LSP will host CMV Interdiction Course (emphasis on Human Trafficking) at the LSP Training Academy as a follow-up to basic CMV Interdiction Course hosted last year.

\$1,000.00

MCSAP Fuel and Maintenance

MCSAP Vehicle Maintenance and Repair \$30,000.00 MCSAP Fuel Costs \$140,000.00

The LSP Fleet Section is in charge of tracking the cost for fuel and maintenance on all MCSAP Units. LSP used the cost provided by fleet to estimate the requested reimbursement.

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Total Other Expenses Applied to Grant = \$197,200.00

The cost for CVSA Dues are provided by CVSA. All other cost is based on historical estimates calculate over the past few years.

Part 4 Section 9 - Comprehensive Spending Plan

The Comprehensive Spending Plan is auto-populated from all line items in the tables and is in read-only format. Changes to the Comprehensive Spending Plan will only be reflected by updating the individual budget category table(s).

ESTIMATED Fiscal Year Funding Amounts for MCSAP						
95% Federal 5% State Total Estimated Share Share Funding						
Total	\$6,465,737.00	\$340,302.00	\$6,806,039.00			

Summary of MCSAP Funding Limitations				
Allowable amount for Overtime without written justification (15% of MCSAP Award Amount):	\$1,020,906.00			
MOE Baseline:	\$1,078,072.00			

Estimated Expenditures						
Personnel						
	Federal Share	State Share	Total Project Costs (Federal + Share)	MOE		
Trooper	\$1,350,416.00	\$0.00	\$1,350,416.00	\$0.00		
NESA Investigator	\$546,000.00	\$0.00	\$546,000.00	\$0.00		
Compliance Review Investigators	\$109,200.00	\$0.00	\$109,200.00	\$0.00		
Admin Coordinator IV	\$0.00	\$0.00	\$0.00	\$108,345.00		
Captain	\$131,673.00	\$0.00	\$131,673.00	\$0.00		
Lieutenant	\$0.00	\$0.00	\$0.00	\$199,068.00		
Sergeant	\$0.00	\$0.00	\$0.00	\$456,894.00		
Lieutenant	\$0.00	\$0.00	\$0.00	\$343,050.00		
Sergeant	\$0.00	\$0.00	\$0.00	\$376,708.00		
Trooper	\$1,102,050.00	\$0.00	\$1,102,050.00	\$0.00		
Admin Manager I	\$0.00	\$0.00	\$0.00	\$42,075.00		
Admin Coordinator IV	\$0.00	\$0.00	\$0.00	\$34,940.00		
Admin Coordinator IV	\$0.00	\$0.00	\$0.00	\$31,824.00		
Training/Outreach Coordinator	\$0.00	\$0.00	\$0.00	\$54,600.00		
Data Quality Investigator	\$218,400.00	\$0.00	\$218,400.00	\$0.00		
Salary Subtotal	\$3,457,739.00	\$0.00	\$3,457,739.00	\$1,647,504.00		
MCSAP Personnel	\$977,500.00	\$172,500.00	\$1,150,000.00	\$0.00		
Overtime subtotal	\$977,500.00	\$172,500.00	\$1,150,000.00	\$0.00		
Personnel total	\$4,435,239.00	\$172,500.00	\$4,607,739.00	\$1,647,504.00		

Fringe Benefits						
	Federal Share	State Share	Total Project Costs (Federal + State)	MOE		
Lieutenant	\$29,745.93	\$5,245.17	\$34,991.10	\$0.00		
Sergeant	\$38,748.97	\$6,832.69	\$45,581.66	\$0.00		
Trooper	\$141,464.76	\$24,944.79	\$166,409.55	\$0.00		
Admin Manager I	\$23,356.47	\$4,118.50	\$27,474.97	\$0.00		
Admin Coordinator IV	\$20,851.15	\$3,676.73	\$24,527.88	\$0.00		
Admin Coordinator IV	\$392.27	\$69.17	\$461.44	\$0.00		
Data Quality Investigators	\$2,019.07	\$356.03	\$2,375.10	\$0.00		
NESA Investigators	\$5,384.19	\$949.41	\$6,333.60	\$0.00		
Training/Outreach Coordinator	\$673.02	\$118.68	\$791.70	\$0.00		
Medicare for Overtime	\$10,215.30	\$1,802.70	\$12,018.00	\$0.00		
Uniform Allowance	\$33,946.00	\$5,990.00	\$39,936.00	\$0.00		
Captain	\$80,847.22	\$0.00	\$80,847.22	\$0.00		
Lieutenant	\$127,204.45	\$0.00	\$127,204.45	\$0.00		
Sergeant	\$286,015.64	\$0.00	\$286,015.64	\$0.00		
Trooper	\$0.00	\$0.00	\$0.00	\$887,227.00		
Admin Coordinator IV	\$85,050.82	\$0.00	\$85,050.82	\$0.00		
Commissioned Personnel Retirement	\$0.00	\$0.00	\$0.00	\$954,627.00		
Fringe Benefits total	\$885,915.26	\$54,103.87	\$940,019.13	\$1,841,854.00		

Travel						
	Federal Share	State Share	Total Project Costs (Federal + State)	MOE		
CVSA/FMCSA Data Quality Workshop	\$5,100.60	\$899.40	\$6,000.00	\$0.00		
COHMED Conference	\$2,550.30	\$449.70	\$3,000.00	\$0.00		
Regional Planning Meeting	\$3,400.00	\$600.00	\$4,000.00	\$0.00		
CVSA Workshop	\$6,800.80	\$1,199.20	\$8,000.00	\$0.00		
LMTA TDC/Annual Conference	\$5,700.00	\$300.00	\$6,000.00	\$0.00		
Safe Drive/Technology Workshop	\$2,850.00	\$150.00	\$3,000.00	\$0.00		
NAIC	\$4,250.00	\$750.00	\$5,000.00	\$0.00		
CVSA Annual Conference	\$5,950.70	\$1,049.30	\$7,000.00	\$0.00		
CVSA/MCSAP Training Travel	\$9,500.00	\$500.00	\$10,000.00	\$0.00		
MCSAP Program Travel	\$4,750.00	\$250.00	\$5,000.00	\$0.00		
NESA/DQ Program Travel	\$46,170.00	\$2,430.00	\$48,600.00	\$0.00		
Unexpected Training and Travel	\$1,615.19	\$284.81	\$1,900.00	\$0.00		
Louisiana Inspector Challenge	\$4,750.00	\$250.00	\$5,000.00	\$0.00		
Travel total	\$103,387.59	\$9,112.41	\$112,500.00	\$0.00		

Equipment						
	Federal Share	State Share	Total Project Costs (Federal + State)	MOE		
Scanners	\$5,774.70	\$1,725.30	\$7,500.00	\$0.00		
Desktop Computers	\$2,550.00	\$450.00	\$3,000.00	\$0.00		
Mobile Data Terminals	\$6,800.00	\$1,200.00	\$8,000.00	\$0.00		
Radars	\$5,100.00	\$900.00	\$6,000.00	\$0.00		
LIDARS	\$5,100.00	\$900.00	\$6,000.00	\$0.00		
Vehicles	\$182,750.00	\$32,250.00	\$215,000.00	\$0.00		
MCSAP Software Updates	\$89,444.00	\$30,556.00	\$120,000.00	\$0.00		
Equipment total	\$297,518.70	\$67,981.30	\$365,500.00	\$0.00		

Supplies						
	Federal Share	State Share	Total Project Costs (Federal + State)	MOE		
Office Supplies	\$20,341.77	\$11,696.10	\$32,037.87	\$0.00		
Printer Ink Cartridges	\$38,250.00	\$6,750.00	\$45,000.00	\$0.00		
Inspection Related Supplies	\$12,750.00	\$2,250.00	\$15,000.00	\$0.00		
HM Enforcer Software	\$22,100.00	\$3,900.00	\$26,000.00	\$0.00		
CVSA OOS Critera Handbooks/Pictorials	\$3,570.00	\$630.00	\$4,200.00	\$0.00		
FMCSR/HMR Guides	\$6,630.00	\$1,170.00	\$7,800.00	\$0.00		
Printers - Troopers	\$2,850.00	\$150.00	\$3,000.00	\$0.00		
Replacement Office Furniture	\$9,500.00	\$500.00	\$10,000.00	\$0.00		
CVSA Decals	\$3,570.00	\$630.00	\$4,200.00	\$0.00		
Uniform Related Supplies	\$26,644.68	\$4,698.32	\$31,343.00	\$0.00		
Printers - NESA/Office Personnel	\$2,850.00	\$150.00	\$3,000.00	\$0.00		
Supplies total	\$149,056.45	\$32,524.42	\$181,580.87	\$0.00		

Contractual and Subaward				
	Federal Share	State Share	Total Project Costs (Federal + State)	MOE
Office Space	\$120,000.00	\$0.00	\$120,000.00	\$0.00
Xerox/Sharp Electronics	\$6,500.00	\$0.00	\$6,500.00	\$0.00
Timothy Bella	\$75,000.00	\$0.00	\$75,000.00	\$0.00
Louisiana State University	\$200,000.00	\$0.00	\$200,000.00	\$0.00
Contractual and Subaward total	\$401,500.00	\$0.00	\$401,500.00	\$0.00

Other Costs				
	Federal Share	State Share	Total Project Costs (Federal + State)	MOE
Post-Crash Course	\$850.00	\$150.00	\$1,000.00	\$0.00
CMV Interdiction Course	\$850.00	\$150.00	\$1,000.00	\$0.00
MCSAP Vehicle Maintenance	\$30,000.00	\$0.00	\$30,000.00	\$0.00
MCSAP Vehicle Fuel Costs	\$140,000.00	\$0.00	\$140,000.00	\$0.00
Training Costs (Classroom supplies, materials, etc.)	\$4,080.00	\$720.00	\$4,800.00	\$0.00
Public Outreach	\$3,485.00	\$615.00	\$4,100.00	\$0.00
US Postmaster	\$1,190.00	\$210.00	\$1,400.00	\$0.00
CVSA Dues	\$10,965.00	\$1,935.00	\$12,900.00	\$0.00
Document Destruction	\$1,700.00	\$300.00	\$2,000.00	\$0.00
Other Costs total	\$193,120.00	\$4,080.00	\$197,200.00	\$0.00

Total Costs				
Federal Share State Share Total Project Costs (Federal + State) MOE				MOE
Subtotal for Direct Costs	\$6,465,737.00	\$340,302.00	\$6,806,039.00	\$3,489,358.00
Total Costs Budgeted	\$6,465,737.00	\$340,302.00	\$6,806,039.00	\$3,489,358.00

Part 4 Section 10 - Financial Summary

The Financial Summary is auto-populated by the system by budget category. It is a read-only document and can be used to complete the SF-424A in Grants.gov. Changes to the Financial Summary will only be reflected by updating the individual budget category table(s).

- The system will confirm that percentages for Federal and State shares are correct for Total Project Costs. The edit check is performed on the "Total Costs Budgeted" line only.
- The system will confirm that Planned MOE Costs equal or exceed FMCSA funding limitation. The edit check is performed on the "Total Costs Budgeted" line only.
- The system will confirm that the Overtime value does not exceed the FMCSA funding limitation. The edit check is performed on the "Overtime subtotal" line.

E	STIMATED Fiscal Year Fund	ing Amounts for MCSAP	
	95% Federal Share	5% State Share	Total Estimated Funding
Total	\$6,465,737.00	\$340,302.00	\$6,806,039.00

Summary of MCSAP Funding Limitations	
Allowable amount for Overtime without written justification (15% of MCSAP Award Amount):	\$1,020,906.00
MOE Baseline:	\$1,078,072.00

Overtime Costs budgeted must be equal to or less than 15 percent of the MCSAP Award (plus \$5 allowed.) Please include a justification to exceed the limit in the Personnel section.

	Estimated Expenditures			
	Federal Share	State Share	Total Project Costs (Federal + State)	Planned MOE Costs
Salary Subtotal	\$3,457,739.00	\$0.00	\$3,457,739.00	\$1,647,504.00
Overtime Subtotal	\$977,500.00	\$172,500.00	\$1,150,000.00	\$0.00
Personnel Total	\$4,435,239.00	\$172,500.00	\$4,607,739.00	\$1,647,504.00
Fringe Benefits Total	\$885,915.26	\$54,103.87	\$940,019.13	\$1,841,854.00
Travel Total	\$103,387.59	\$9,112.41	\$112,500.00	\$0.00
Equipment Total	\$297,518.70	\$67,981.30	\$365,500.00	\$0.00
Supplies Total	\$149,056.45	\$32,524.42	\$181,580.87	\$0.00
Contractual and Subaward Total	\$401,500.00	\$0.00	\$401,500.00	\$0.00
Other Costs Total	\$193,120.00	\$4,080.00	\$197,200.00	\$0.00
	95% Federal Share	5% State Share	Total Project Costs (Federal + State)	Planned MOE Costs
Subtotal for Direct Costs	\$6,465,737.00	\$340,302.00	\$6,806,039.00	\$3,489,358.00
Indirect Costs	\$0.00	\$0.00	\$0.00	NA
Total Costs Budgeted	\$6,465,737.00	\$340,302.00	\$6,806,039.00	\$3,489,358.00

Part 5 - Certifications and Documents

Part 5 includes electronic versions of specific requirements, certifications and documents that a State must agree to as a condition of participation in MCSAP. The submission of the CVSP serves as official notice and certification of compliance with these requirements. State or States means all of the States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, and the Virgin Islands.

If the person submitting the CVSP does not have authority to certify these documents electronically, then the State must continue to upload the signed/certified form(s) through the "My Documents" area on the State's Dashboard page.

Part 5 Section 1 - State Certification

The State Certification will not be considered complete until the four questions and certification declaration are answered. Selecting 'no' in the declaration may impact your State's eligibility for MCSAP funding.

- 1. What is the name of the person certifying the declaration for your State? Colonel Lamar Davis
- 2. What is this person's title? Superintendent
- 3. Who is your Governor's highway safety representative? Lisa Freeman
- 4. What is this person's title? Executive Director

The S	State affirmatively accepts the State certification declaration written below by selecting 'yes'.
	Yes
	Yes, uploaded certification document

State Certification declaration:

I, Colonel Lamar Davis, Superintendent, on behalf of the State of LOUISIANA, as requested by the Administrator as a condition of approval of a grant under the authority of $\underline{49}$ U.S.C. $\underline{\S}$ 31102, as amended, certify that the State satisfies all the conditions required for MCSAP funding, as specifically detailed in $\underline{49}$ C.F.R. $\underline{\S}$ 350.211.

If there are any exceptions that should be noted to the above certification, include an explanation in the text box below.

Part 5 Section 2 - Annual Review of Laws, Regulations, Policies and Compatibility Certification

You must answer all three questions and indicate your acceptance of the certification declaration. Selecting 'no' in the declaration may impact your State's eligibility for MCSAP funding.

- 1. What is the name of your certifying State official? Colonel Lamar Davis
- 2. What is the title of your certifying State official? Superintendant
- 3. What are the phone # and email address of your State official? 225-925-6113: Deputy.secretary@la.gov

The S	State affirmatively accepts the compatibility certification declaration written below by selecting 'yes'.
	Yes
	Yes, uploaded certification document
	No

I, Colonel Lamar Davis, certify that LOUISIANA has conducted the annual review of its laws and regulations for compatibility regarding commercial motor vehicle safety and that the State's safety laws remain compatible with the Federal Motor Carrier Safety Regulations (49 CFR parts 390-397) and the Hazardous Materials Regulations (49 CFR parts 107 (subparts F and G only), 171-173, 177, 178, and 180) and standards and orders of the Federal government, except as may be determined by the Administrator to be inapplicable to a State enforcement program. For the purpose of this certification, Compatible means State laws or regulations pertaining to interstate commerce that are identical to the FMCSRs and HMRs or have the same effect as the FMCSRs and identical to the HMRs and for intrastate commerce rules identical to or within the tolerance guidelines for the FMCSRs and identical to the HMRs.

If there are any exceptions that should be noted to the above certification, include an explanation in the text box below.

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Part 5 Section 3 - New Laws/Legislation/Policy Impacting CMV Safety

Has the State adopted/enacted any new or updated laws (i.e., statutes) impacting CMV safety since the last CVSF or annual update was submitted?
Yes No
Has the State adopted/enacted any new administrative actions or policies impacting CMV safety since the last CVSP?
Yes No

FY 2023 Certification of MCSAP Conformance (State Certification)

I, Lamar Davis, Superintendent, on behalf of the State Louisiana, as requested by the Administrator as a condition of approval of a grant under the authority of 49 U.S.C. § 31102, as amended, do hereby certify as follows:

- 1. The State has designated The Louisiana Department of Public Safety and Corrections, Public Safety Services, Office of State Police, as the Lead State Agency to administer the Commercial Vehicle Safety Plan (CVSP) throughout the State for the grant sought to perform defined functions under the CVSP.
- 2. The State has assumed responsibility for and adopted commercial motor carrier and highway hazardous materials safety regulations, standards and orders that are compatible with the FMCSRs and the HMRs, and the standards and orders of the Federal Government.
- 3. The State will cooperate in the enforcement of financial responsibility requirements under 49 C.F.R. part 387.
- 4. The State will enforce registration (i.e., operating authority) requirements under 49 U.S.C §§ 13902 and 31134 by prohibiting the operation of any vehicle discovered to be operating without the required registration or beyond the scope of the motor carrier's registration.
- 5. The laws of the State provide the State's enforcement officials right of entry (or other method a State may use that is adequate to obtain the necessary information) and inspection sufficient to carry out the purposes of the CVSP, as approved.
- 6. The Lead State Agency and any subrecipient of MCSAP funds have the legal authority, resources, and qualified personnel necessary to enforce the State's commercial motor carrier, driver, and highway hazardous materials safety laws, regulations, standards, and orders.
- 7. The State has undertaken efforts to emphasize and improve enforcement of State and local traffic laws as they pertain to CMV safety.
- 8. The State will obligate the funds or resources necessary to provide a matching share to the Federal assistance provided in the grant to administer the plan submitted and to enforce the State's commercial motor carrier safety, driver, and hazardous materials laws, regulations, standards, and orders in a manner consistent with the approved plan.
- 9. The State will maintain the maintenance of effort required under 49 C.F.R. § 350.225.
- 10. The State requires that all reports required in the CVSP be available to FMCSA upon request, meets the reporting requirements, and uses the forms for recordkeeping, inspections, and investigations that FMCSA prescribes.
- 11. The State implements performance-based activities, including deployment and maintenance of technology, to enhance the efficiency and effectiveness of CMV safety programs.

- 12. The State dedicates sufficient resources to a program to ensure that accurate, complete, and timely motor carrier safety data are collected and reported, and to ensure the State's participation in a national motor carrier safety data correction system prescribed by FMCSA.
- 13. The State will ensure that the Lead State Agency will coordinate the CVSP, data collection, and information systems with the State highway safety improvement program under 23 U.S.C. § 148(c).
- 14. The State will ensure participation in information technology and data systems as required by FMCSA for jurisdictions receiving MCSAP funding.
- 15. The State will ensure that information is exchanged with other States in a timely manner.
- 16. The laws of the State provide that the State will grant maximum reciprocity for inspections conducted pursuant to the North American Standard Inspection procedure, through the use of a nationally accepted system allowing ready identification of previously inspected CMVs.
- 17. The State will conduct comprehensive and highly visible traffic enforcement and CMV safety inspection programs in high-risk locations and corridors.
- 18. The State will ensure that it has departmental policies stipulating that roadside inspections will be conducted at locations that are adequate to protect the safety of drivers and enforcement personnel.
- 19. The State will ensure that, except in the case of an imminent or obvious safety hazard, an inspection of a vehicle transporting passengers for a motor carrier of passengers is conducted at a bus station, terminal, border crossing, maintenance facility, destination, or other location where motor carriers may make planned stops (excluding a weigh station).
- 20. The State will address activities in support of the national program elements listed in 49 C.F.R. § 350.203.
- 21. The State will ensure that detection of criminal activities and CMV size and weight enforcement activities described in 49 C.F.R. § 350.227(b) funded with MCSAP funds will not diminish the effectiveness of other CMV safety enforcement programs.
- 22. The State will ensure that violation sanctions imposed and collected by the State are consistent, effective, and equitable.
- 23. The State will include, in the training manual for the licensing examination to drive a non-CMV and the training manual for the licensing examination to drive a CMV, information on best practices for safe driving in the vicinity of noncommercial and commercial motor vehicles.

- 24. The State has in effect a requirement that registrants of CMVS demonstrate their knowledge of the applicable FMCSRs, HMRs, or compatible State laws, regulations, standards, and orders on CMV safety.
- 25. The State will transmit to its roadside inspectors at the notice of each Federal exemption granted pursuant to 49 U.S.C. § 31315(b) and 49 C.F.R. §§ 390.32 and 390.25 as provided to the State by FMCSA, including the name of the person granted the exemption and any terms and conditions that apply to the exemption.
- 26. Except for a territory of the United States, the State will conduct safety audits of interstate and, at the State's discretion, intrastate new entrant motor carriers under 49 U.S.C. § 31144(g). The State must verify the quality of the work conducted by a third party authorized to conduct safety audits under 49 U.S.C. §31144(g) on its behalf, and the State remains solely responsible for the management and oversight of the activities.
- 27. The State willfully participates in the performance and registration information systems management program under 49 U.S.C. §31106(b) not later than October 1, 2020, or demonstrates to FMCSA an alternative approach for identifying and immobilizing a motor carrier with serious safety deficiencies in a manner that provides an equivalent level of safety.
- 28. The State will ensure that it cooperates in the enforcement of hazardous materials safety permits issued under subpart E of part 385 of this subchapter by verifying possession of the permit when required while conducting vehicle inspections and investigations, as applicable.
- 29. In the case of a State that shares a land border with another country, the State may conduct a border CMV safety program focusing on international commerce that includes enforcement and related projects or will forfeit all MCSAP funds based on border-related activities.
- 30. In the case that a State meets all MCSAP requirements and funds operation and maintenance costs associated with innovative technology deployment with MCSAP funds, the State agrees to comply with the requirements established in 49 C.F.R. subpart D.

Date	uly 28, 2022	
Signature _	Cal Lanor F. Dais	

Annual Review of Laws, Regulations, Policies and Compatibility Certification

I, Colonel Lamar A. Davis, on behalf of the State of Louisiana have the authority to make the following certification on behalf of the State. I certify that the State has conducted the annual review required by 49 C.F.R. section 350.331 of its laws, regulations, standards, and orders on commercial motor vehicle (CMV) safety and that the State's safety laws, regulations, standards, and orders on CMV safety are compatible with the Federal Motor Carrier Safety Regulations (49 C.F.R. parts 390, 391, 392, 393, 395, 396, and 397) and the Hazardous Material Regulations (49 C.F.R. parts 107 (subparts F and G only), 171-173, 177, 178, and 180), except as may be determined by the Administrator to be inapplicable to a State enforcement program.

For the purpose of this certification, *compatible* means State laws, regulations, standards, and orders on CMV safety that:

- (1) As applicable to interstate commerce not involving the movement of hazardous materials:
 - (i) Are identical to or have the same effect as the FMCSRs; or
 - (ii) If in addition to or more stringent than the FMCSRs, have a safety benefit, do not unreasonably frustrate the Federal goal of uniformity, and do not cause an unreasonable burden on interstate commerce when enforced;
- (2) As applicable to intrastate commerce not involving the movement of hazardous materials:
 - (i) Are identical to or have the same effect as the FMCSRs; or
 - (ii) Fall within the limited variances from the FMCSRs allowed under 49 C.F.R. sections 350.341; and
- (3) As applicable to interstate and intrastate commerce involving the movement of hazardous materials, are identical to the HMRs.

If there are any exceptions that should be noted to the above certification, include an explanation below.

(See attachment)

Signature of Certifying Official:	Col Lans F. Dains	
Title of Certifying Official:	Deputy Secretary	
Date of Certification:	July 28, 2022	cair .

ANNUAL CERTIFICATION OF COMPATIBILITY

In accordance with 49 CFR, Part 350 and 355, as Superintendent of the Louisiana State Police, I do hereby certify that the State of Louisiana is compatible with appropriate parts of the Federal Motor Carrier Safety Regulations (FMCSRs) and the Federal Hazardous Materials Regulations (FHMRs) as follows:

INTERSTATE MOTOR CARRIERS

The following Federal Motor Carrier Safety Regulations and Hazardous Materials Regulations promulgated by the United States Department of Transportation, revised as of January 01, 2018, and contained in the following Parts of 49 CFR as now in effect or as hereafter amended, are adopted through legislation between the Louisiana Department of Public Safety and Corrections and the United States Department of Transportation.

	Hazardous Material Regulations
Part 107	Hazardous Materials Program Procedures
Part 171	General Information, Regulations, and Definitions
D + 170	Hazardous Materials Table, Special Provisions, and Hazardous Materials
Part 172	Communications, Emergency Response Information, and Training Requirements
Part 173	Shippers—General Requirements for Shipments and Packagings
Part 177	Carriage by Public Highways
Part 178	Specifications for Packagings
Part 180	Continuing Qualification and Maintenance of Packagings
	Motor Carrier Safety Regulations
Part 355	Compatibility of State Laws and Regulations Affecting Interstate Motor Carrier Operations
Part 360	Fees for Motor Carrier Registration and Insurance
Part 365	Rules Governing Applications for Operating Authority
Part 367	Standards for Registration with States
Part 373	Receipts and Bills
Part 374	Passenger Carrier Regulations
Part 375	Transportation of Household Goods in Interstate Commerce: Consumer Protection Regulations
Part 376	Lease and Interchange of Vehicles
Part 379	Preservation of Records
Part 382	Controlled Substances and Alcohol Use and Testing
Part 383	Commercial Driver's License Standards; Requirements and Penalties
Part 384	State Compliance with Commercial Driver's License Program
Part 385	Safety Fitness Procedures
Part 386	Rules of Practice for Motor Carrier, Broker, Freight Forwarder and Hazardous Materials Proceedings
Part 387	Minimum Levels of Financial Responsibility for Motor Carriers
Part 388	Cooperative Agreements with States
Part 389	Rulemaking Procedures-Federal Motor Carrier Safety
Part 390	Federal Motor Carrier Safety Regulations; General
Part 391	Qualifications of Drivers
Part 392	Driving of Commercial Motor Vehicles
Part 393	Parts and Accessories Necessary for Safe Operation
Part 395	Hours of Service of Drivers
Part 396	Inspection, Repair, and Maintenance
Part 397	Transportation of Hazardous Materials; Driving and Parking Rules

INTRASTATE MOTOR CARRIERS

Adopted same as interstate with the exception of the following variances:

- 1. Substitution of "26,000 pounds" for all references made to "10,000 pounds".
- 2. Part 391.11(b)(1) shall read, "is at least 21 years old, or is at least 18 years old and lawfully possesses an appropriately classified driver's license secured from the Louisiana Department of Public Safety and Corrections."
- 3. Exemption of drivers from Sections 391.21, 391.23 and 391.33, who were regularly employed by Motor Carrier for a continuous period of no less than 3 years immediately prior to January 20, 1988.
- 4. Exemption of drivers regularly employed as a commercial vehicle operator for a minimum of 24 months prior to March 31, 1992, from complying with Sections 391.41(b)(1) through (5), (10), and (11). However, such a driver may remain qualified only as long as an examining physician determines, during the biennial medical examination required in Section 391.45, that the existing medical or physical condition that would otherwise render a driver unqualified has not significantly worsened or that another disqualifying medical or physical condition has not manifested. The medical examiner's certificate must display upon its face, the inscription "MEDICALLY UNQUALIFIED OUTSIDE LOUISIANA" when a driver is qualified in accordance with the provisions stated herein. The grandfather exemptions were discontinued on August 31, 1994.
- 5. When applicable, the words "Louisiana Department of Public Safety and Corrections" and/or "Office of State Police" are substituted where "U.S. Department of Transportation", "Federal Highway Administration," "Federal Highway Administrator," "Director," "Bureau of Motor Carrier Safety," or "Office of Motor Carrier Safety" appear.
- 6. When applicable, substitute the compatible Louisiana Department of Public Safety and Corrections forms or procedures, where special U.S. Department of Transportation forms or procedures are specified or required, if such are required by the State.

Colonel Lamar Davis, Superintendent

Louisiana State Police

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TITLE VI PROGRAM COMPLIANCE PLAN



STATE OF LOUISIANA
DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONS
PUBLIC SAFETY SERVICES

POLICY STATEMENT

It is the policy of the Louisiana Department of Public Safety and Corrections, Public Safety Services¹, (LADPS), in accordance with Title VI of the Civil Rights Act of 1964 and the Assurances set forth in the Louisiana Department of Public Safety and Corrections, Public Safety Services, Title VI Program Compliance Plan ("Plan") to ensure that "no person shall on the grounds of race, color, national origin, sex, age, disability, low-income or LEP, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity" for which LADPS receives any Federal financial assistance from the United States Department of Transportation (DOT), through the Federal Motor Carrier Safety Administration (FMCSA).

The LADPS will ensure compliance with 49 CFR Part 21 and 49 CFR Part 303 as identified in the FMCSA Standard Title VI/Non-discrimination Assurances document along with the additional related Non-discrimination authorities.

Responsibility for the implementation and day to day administration of the Plan will be delegated to a Title VI Program Coordinator. This coordinator will be assigned for both Office of State Police and to the Office of Motor Vehicles. The Title VI Coordinator will ensure that LADPS effectively implements its Title VI Program to include conducting investigations of alleged actions in violation of Title VI in connection with any program or activity for which their respective office receives any Federal financial assistance from the United States Department of Transportation (DOT), through the Federal Motor Carrier Safety Administration (FMCSA). All LADPS employees and appointees are directed to coordinate with the Title VI coordinators to ensure effective implementation of the Title VI Program.

Lamar A. Davis, Colonel

Deputy Secretary, Public Safety Services Superintendent, Louisiana State Police 7 28 22 Date

¹ For purposes of this document, the Department of Public Safety and Corrections, Public Safety Services, consists of the Office of State Police, the Office of Motor Vehicles, and the Louisiana Highway Safety Commission. At this time, the Louisiana Highway Safety Commission has not been awarded Federal financial assistance from the DOT, through the FMCSA. This document will be modified in the event that this changes.

The United States Department of Transportation

Standard Title VI/Non-Discrimination Assurances

DOT Order No. 1050.2A

The <u>Louisiana Department of Public Safety and Corrections</u>, <u>Public Safety Services</u> (herein referred to as the "Recipient"), **HEREBY AGREES THAT**, as a condition to receiving any Federal financial assistance from the United States Department of Transportation (DOT), through the **Federal Motor Carrier Safety Administration (FMCSA)**, is subject to and will comply with the following:

Statutory/Regulatory Authorities

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 Stat. 252), (prohibits discrimination on the basis of race, color, national origin);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Title IX of the Education Amendments of 1972, as amended, (20 U.S.C. § 1681 et seq.), (prohibits discrimination on the basis of sex in education programs or activities);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability);
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Americans with Disabilities Act of 1990, as amended, (42 U.S.C. § 12101 et seq.), (prohibits discrimination on the basis of disability);
- 49 C.F.R. part 21 (entitled Nondiscrimination In Federally-Assisted Programs Of The Department Of Transportation—Effectuation Of Title VI Of The Civil Rights Act Of 1964);
- 49 C.F.R. part 27 (entitled Nondiscrimination On The Basis Of Disability In Programs Or Activities Receiving Federal Financial Assistance);
- 49 C.F.R. part 28 (entitled Enforcement Of Nondiscrimination On The Basis Of Handicap In Programs Or Activities Conducted By The Department Of Transportation);
- 49 C.F.R. part 37 (entitled Transportation Services For Individuals With Disabilities (ADA));
- 49 C.F.R. part 303 (FMCSA's Title VI/Nondiscrimination Regulation);
- 28 C.F.R. part 35 (entitled Discrimination On The Basis Of Disability In State And Local Government Services);
- 28 C.F.R. section 50.3 (U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964);

The preceding statutory and regulatory cites hereinafter are referred to as the "Acts" and "Regulations," respectively.

Although not applicable to Recipients directly, there are certain Executive Orders and relevant guidance that direct action by Federal agencies regarding their federally assisted programs and activities to which compliance is required by Recipients to ensure Federal agencies carry out their responsibilities. Executive Order 12898 (1995), entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" emphasizes that Federal agencies

should use existing laws to achieve Environmental Justice, in particular Title VI, to ensure nondiscrimination against minority populations. Recipients should be aware that certain Title VI matters raise Environmental Justice concerns and FMCSA intends that all Recipients evaluate and revise existing procedures (as appropriate) to address and implement Environmental Justice considerations. See the following FHWA website for more information and facts about Environmental Justice: http://www.fhwa.dot.gov/environment/environmental justice/index.cfm

Additionally, Executive Order 13166 (2001) on Limited English Proficiency, according to the U.S. Department of Justice in its Policy Guidance Document dated August 16, 2000 (65 Fed. Reg. at 50123), clarifies the responsibilities associated with the "application of Title VI's prohibition on national origin discrimination when information is provided only in English to persons with limited English proficiency." When receiving Federal funds Recipients are expected to conduct a Four-Factor Analysis to prevent discrimination based on National Origin. (See also U.S. DOT's "Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficient (LEP) Persons," dated December 14, 2005, (70 Fed. Reg. at 74087 to 74100); the Guidance is a useful resource when performing a Four-Factor Analysis).

General Assurances

In accordance with the Acts, the Regulations, and other pertinent directives, circulars, policy, memoranda, and/or guidance, the Recipient hereby gives assurance that it will promptly take any measures necessary to ensure that:

"No person in the United States shall, on the grounds of race, color, national origin, sex, age, disability, low-income, or LEP be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Recipient receives Federal financial assistance from DOT, including the FMCSA."

The Civil Rights Restoration Act of 1987 clarified the original intent of Congress, with respect to Title VI and other Non-discrimination requirements (The Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973) by restoring the broad, institutional-wide scope and coverage of these non-discrimination statutes and requirements to include all programs and activities of the Recipient, so long as any portion of the program is Federally-assisted.

Specific Assurances

More specifically, and without limiting the above general Assurances, the Recipient agrees with and gives the following Assurances with respect to its Federally assisted FMCSA Program:

- 1. The Recipient agrees that each "activity," "facility," or "program," as defined in 49 C.F.R. §§ 21.23 (b) and 21.23 (e) will be (with regard to an "activity") facilitated, or will be (with regard to a "facility") operated, or will be (with regard to a "program") conducted in compliance with all requirements imposed by, or pursuant to the Acts and the Regulations;
- 2. The Recipient will insert the following notification in all solicitations for bids, Requests For Proposals for work, or material subject to the Acts and the Regulations made in connection

with the FMCSA Program and, in adapted form, in all proposals for negotiated agreements regardless of funding source:

"The Louisiana Department of Public Safety and Corrections, Public Safety Services, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, all contractors will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of the owner's race, color, national origin, sex, age, disability, income-level, or LEP in consideration for an award.";

- 3. The Recipient will insert the clauses of Appendix A and E of this Assurance in every contract or agreement subject to the Acts and the Regulations;
- 4. The Recipient will insert the clauses of Appendix B of this Assurance, as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a Recipient;
- That where the Recipient receives Federal financial assistance to construct a facility, or part of
 a facility, the Assurance will extend to the entire facility and facilities operated in connection
 therewith;
- 6. That where the Recipient receives Federal financial assistance in the form, or for the acquisition of real property or an interest in real property, the Assurance will extend to rights to space on, over, or under such property;
- 7. That the Recipient will include the clauses set forth in Appendix C and Appendix D of this Assurance, as a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the Recipient with other parties:
 - a. for the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
 - b. for the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.
- 8. That this Assurance obligates the Recipient for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the Assurance obligates the Recipient, or any transferee for the longer of the following periods:
 - a. the period during which the property is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits; or
 - b. the period during which the Recipient retains ownership or possession of the property.

- 9. The Recipient will provide for such methods of administration for the program as are found by the Secretary of Transportation or the official to whom he/she delegates specific authority to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the Acts, the Regulations, and this Assurance.
- 10. The Recipient agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the Acts, the Regulations, and this Assurance.

By signing this ASSURANCE, Louisiana Department of Public Safety and Corrections, Public Safety Services, also agrees to comply (and require any sub-recipients, sub-grantees, contractors, successors, transferees, and/or assignees to comply) with all applicable provisions governing the FMCSA access to records, accounts, documents, information, facilities, and staff. You also recognize that you must comply with any program or compliance reviews, and/or complaint investigations conducted by the FMCSA. You must keep records, reports, and submit the material for review upon request to FMCSA, or its designee in a timely, complete, and accurate way. Additionally, you must comply with all other reporting, data collection, and evaluation requirements, as prescribed by law or detailed in program guidance.

Louisiana Department of Public Safety and Corrections, Public Safety Services, gives this ASSURANCE in consideration of and for obtaining any Federal grants, loans, contracts, agreements, property, and/or discounts, or other Federal-aid and Federal financial assistance extended after the date hereof to the recipients by the Department of Transportation under the **FMCSA Program**. This ASSURANCE is binding on [insert State], other recipients, sub-recipients, sub-grantees, contractors, subcontractors and their subcontractors', transferees, successors in interest, and any other participants in the **FMCSA Program**. The person (s) signing below is authorized to sign this ASSURANCE on behalf of the Recipient.

Lamar A. Davis, Colonel Deputy Secretary, Public Safety Services Superintendent, Louisiana State Police

by Col law H. Down
(Signature of Authorized Official)

DATED 7 28 22

APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

- Compliance with Regulations: The contractor (hereinafter includes consultants) will comply
 with the Acts and the Regulations relative to Nondiscrimination in Federally-assisted programs
 of the U.S. Department of Transportation, Federal Motor Carrier Safety Administration
 (FMCSA), as they may be amended from time to time, which are herein incorporated by
 reference and made a part of this contract.
- 2. **Nondiscrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin, sex, age, disability, income-level, or LEP in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations as set forth in Appendix E, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 C.F.R. part 21.
- 3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, national origin, sex, age, disability, income-level, or LEP.
- 4. Information and Reports: The contractor will provide all information and reports required by the Acts, the Regulations and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the FMCSA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the FMCSA, as appropriate, and will set forth what efforts it has made to obtain the information.
- 5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Nondiscrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the FMCSA may determine to be appropriate, including, but not limited to:
 - a. withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. cancelling, terminating, or suspending a contract, in whole or in part.
- 6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The

contractor will take action with respect to any subcontract or procurement as the Recipient or the FMCSA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

CLAUSES FOR DEEDS TRANSFERING UNITED STATES PROPERTY

APPENDIX B

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Assurance 4:

NOW, THEREFORE, the Department of Transportation as authorized by law and upon the condition that the <u>Louisiana Department of Public Safety and Corrections</u>, <u>Public Safety Services</u> will accept title to the lands and maintain the project constructed thereon in accordance with <u>The State of Louisiana</u>, the Regulations for the Administration of Federal Motor Carrier Safety Administration (FMCSA) Program, and the policies and procedures prescribed by the FMCSA of the Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, part 21, Non-discrimination in Federally-assisted programs of the Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the <u>Louisiana Department of Public Safety and Corrections</u>, <u>Public Safety Services</u> all the right, title and interest of the Department of Transportation in and to said lands described in Exhibit "A" attached hereto and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto <u>Louisiana Department of Public Safety and Corrections</u>, <u>Public Safety Services</u> and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the <u>Louisiana Department of Public Safety and Corrections</u>, <u>Public Safety Services</u> its successors and assigns.

The Louisiana Department of Public Safety and Corrections, Public Safety Services, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, national origin, sex, age, disability, income-level, or LEP be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]* (2) that the Louisiana Department of Public Safety and Corrections, Public Safety Services will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, part 21, Non-discrimination in Federally-assisted programs of the Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended, and (3) that in the event of breach of any of the above-mentioned non-discrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the Department of Transportation and its assigns as such interest existed prior to this instruction.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to effectuate the purpose of Title VI.)

CLAUSES FOR TRANSFER OF REAL PROPERTY ACQUIRED OR IMPROVED UNDER THE ACTIVITY, FACILITY OR PROGRAM

APPENDIX C

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the <u>Louisiana Department of Public Safety and Corrections</u>, <u>Public Safety Services</u> pursuant to the provisions of Assurance 7(a):

- A. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that:
 - 1. In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended) such that no person on the grounds of race, color, national origin, sex, age, disability, income-level, or LEP will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
- B. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Non-discrimination covenants, *Louisiana Department of Public Safety and Corrections, Public Safety Services* will have the right to terminate the (lease, license, permit, etc.) and to enter, reenter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued.*
- C. With respect to a deed, in the event of breach of any of the above Non-discrimination covenants, the <u>Louisiana Department of Public Safety and Corrections</u>, <u>Public Safety Services</u> will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the <u>Louisiana Department of Public Safety and Corrections</u>, <u>Public Safety Services</u> and its assigns.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to effectuate the purpose of Title VI.)

CLAUSES FOR CONSTRUCTION/USE/ACCESS TO REAL PROPERTY ACQUIRED UNDER THE ACTIVITY, FACILITY OR PROGRAM

APPENDIX D

The following clauses will be included in deeds, licenses, permits, or similar instruments/ agreements entered into by <u>Louisiana Department of Public Safety and Corrections</u>, <u>Public Safety</u> pursuant to the provisions of Assurance 7(b):

- A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, national origin, sex, age, disability, income-level, or LEP will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, national origin, sex, age, disability, income-level, or LEP will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.
- B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Non-discrimination covenants, *Louisiana Department of Public Safety and Corrections, Public Safety* will have the right to terminate the (license, permit, etc., as appropriate) and to enter or reenter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued.*
- C. With respect to deeds, in the event of breach of any of the above Non-discrimination covenants, <u>Louisiana Department of Public Safety and Corrections, Public Safety</u> will there upon revert to and vest in and become the absolute property of <u>Louisiana Department of Public Safety and Corrections, Public Safety</u> and its assigns.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to effectuate the purpose of Title VI.)

APPENDIX E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. § 2000d *et seq.*), (prohibits discrimination on the basis of race, color, national origin), as implemented by 49 C.F.R. § 21.1 *et seq.* and 49 C.F.R. part 303;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973 (23 U.S.C. § 324 et seq.) (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794 et seq.) (prohibits discrimination on the basis of disability); and 49 C.F.R. part 27;
- The Age Discrimination Act of 1975, as amended (42 U.S.C. § 6101 et seq.) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (Pub. L. 97-248 (1982)), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (102 Stat. 28) ("....which restore[d] the broad scope of coverage and to clarify the application of title IX of the Education Amendments of 1972, section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, and title VI of the Civil Rights Act of 1964.");
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 -- 12189), as implemented by Department of Justice regulations at 28 C.F.R. parts 35 and 36, and Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. § 1681 et seq).

DESCRIPTION OF FEDERAL AID PROGRAMS

Louisiana Office of Motor Vehicles

The Louisiana Office of Motor Vehicles performs functions of the State relative to the examination and licensing of operators of motor vehicles and the suspension and revocation of such licenses. Additionally, the Office of Motor Vehicles performs functions such as issuance of vehicle titles, registration certificates, and license plates for all motor vehicles operated upon the highways of the State. The Office of Motor Vehicles applies for and is generally awarded funding through the Commercial Driver's License Program Improvement grant, a discretionary grant administered through FMCSA. This grant provides financial assistance to States to improve compliance with the requirements of 49 CFR Parts 383 and 384. Additionally, the Commercial Driver's License Program Improvement grant provides funding for projects that will improve the national Commercial Driver's License (CDL) program, are of potential benefit to all jurisdictions in the United States, are designed to address national safety concerns and circumstances, or that address emerging issues relating to CDL program implementation.

Louisiana State Police

The Louisiana State Police is designated as the lead Motor Carrier Safety Assistance Program (MCSAP) agency in the state, and participates in several federal program grants through FMCSA, to include the MCSAP Basic, New Entrant, and High Priority grants. These grants support activities directly related to reducing the number and severity of commercial motor vehicle related crashes, protecting the state's highways and bridge systems from accelerated damage, and removing dangerous commercial motor carriers, drivers, and vehicles from our roadways.

The MCSAP Basic grant program is a formulary grant that focuses on reducing the number and severity of commercial motor vehicle related crashes, by enforcement of the Federal Motor Carrier Safety Regulations and Hazardous Material Regulations, through an effective roadside inspection/enforcement program, compliance investigations, and education/outreach.

The MCSAP New Entrant Grant program, which was merged with the MCSAP Basic Grant Program in FY2017, focuses on reducing the number and severity of commercial motor vehicle related crashes, by conducting required safety audits on new interstate motor carriers, to ensure effective safety management controls are in place. This will ensure commercial motor carriers operate safely from the beginning, therefore, reducing large truck and bus crashes, and improving highway safety.

The High Priority grant program is a competitive grant that focuses on reducing the number and severity of large truck and bus crashes, by improving data collection/quality efforts, and implementing high priority activities and projects aimed at improving commercial motor vehicle safety. Accurate data and high priority activities will increase the Department's ability to provide adequate resources towards improving highway safety.

Louisiana Highway Safety Commission

To date, the Louisiana Highway Safety Commission has not applied for a grant program or programs administered by the Federal Motor Carrier Safety Administration.

NOTICE TO THE PUBLIC

This notice has been placed on the Louisiana Department of Public Safety and Corrections, Public Safety Services, website and placed in all Louisiana Department of Public Safety and Corrections, Public Safety Services, public facilities.²

Louisiana Department of Public Safety and Corrections, Public Safety Services, Title VI Notice to Public/Beneficiaries/Participants.

The Louisiana Department of Public Safety and Corrections, Public Safety Services, hereby gives notice that it is the policy of the Department to assure full compliance with Title VI of the Civil Rights Act of 1964 and related nondiscrimination authorities in all programs and activities for which the Louisiana Department of Public Safety and Corrections, Public Safety Services, receives any Federal financial assistance from the United States Department of Transportation (DOT), through the Federal Motor Carrier Safety Administration (FMCSA). Title VI and related non-discrimination authorities require that no person in the United States shall, on the grounds of race, color, national origin, sex, age, disability, low-income or Limited English Proficiency, be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination.

Any person who believes they have, individually or as a member of any specific class of persons, been subjected to discrimination on the basis of race, color, national origin, sex, age, disability, income level or Limited English Proficiency has the right to file a formal complaint with the Louisiana Department of Public Safety and Corrections, Public Safety Services. Any such complaint must be in writing and filed with the Title VI Coordinator within one hundred eighty (180) days following the date of the alleged discriminatory occurrence.

Any person interested in obtaining additional information regarding the Title VI Program as it pertains to the Office of Motor Vehicles of the Office of State Police, or wishing to file a complaint regarding the Office of Motor Vehicles or Office of State Police, may contact the LA DPS, Title VI Coordinator, Compliance Program Section, Office of Legal Affairs at 7979 Independence Blvd., Ste. 307, Baton Rouge, LA 70806, Telephone: (225) 925-6103. Mail pertaining to Title VI may be sent to: LA DPS, Title VI Coordinator, Compliance Program Section, Office of Legal Affairs, P.O. Box 66614, Box B-4, Baton Rouge, LA 70896-6614.

² Public facilities are only those locations that are publically accessible, including troops, Louisiana State Police Head Quarters, Office of Motor Vehicles field offices, and weight scales. A patrol vehicle is not considered publicly accessible.

SUB-RECIPIENT COMPLIANCE REPORTS

No entity within the Louisiana Department of Public Safety and Corrections, Public Safety Services, sub-awards any grant dollars received.

TRAINING

The Louisiana Department of Public Safety and Corrections, Public Safety Services, has made the Title VI Program training available to all Office of Motor Vehicles and Office of State Police employees. Participation in the training is required on an annual basis through an automated, recurring training system. Beginning in Fiscal Year 2020, Title VI training was made available in PowerDMS, an automated, recurring training system, that ensures all required employees complete the training prior to the end of the State's fiscal year. Effective July 1, 2020, the Office of Motor Vehicles Title VI training was updated and is offered in a dynamic format that adheres to Louisiana Division of Administration's accessibility guidelines and meets the Federal provisions set forth in Section 508. Effective July 1, 2021, the Office of State Police Title VI training was updated to include a section on limited English proficiency and P.O. 205 Bias-Based Profiling. Once Office of State Police adopts a policy regarding CMV Inspection Selection, a new section on this policy will be added to the Office of State Police Title VI training.

A log of employees who have completed the training is maintained and may be generated for review at any time. This training will be made available to any sub-recipients should there be sub-recipients in the future.

ACCESS TO RECORDS

The Title VI Coordinator will maintain records, which include, but are not limited to, implementation of the Title VI Program requirements, Title VI complaints or lawsuits and related documentation, records of correspondence to and from complainants, and Title VI investigations. These documents shall be made available to the Federal Motor Carrier Safety Administration staff either through periodic submission and/or upon request by Federal Motor Carrier Safety Administration staff.

COMPLAINT DISPOSITION PROCESS

All written formal complaints citing Title VI or related non-discrimination authorities ("Title VI Complaint" or "Complaint") that are received by Louisiana Department of Public Safety and Corrections, Public Safety Services, will be referred immediately to the attention of the Title VI Coordinator for processing. The Title VI Coordinator will inform the highest ranking official within his or her respective office of all written formal Title VI discrimination complaints received.

1. Any person who believes himself or any specific class of persons to be subjected to discrimination prohibited by Title VI or related non-discrimination authorities and in connection with a program for which Louisiana Department of Public Safety and

Corrections, Public Safety Services, receives any Federal financial assistance from the United States Department of Transportation (DOT), through the Federal Motor Carrier Safety Administration (FMCSA), may by himself or by a representative file a written Title VI Complaint with Louisiana Department of Public Safety and Corrections, Public Safety Services.

- 2. A Complaint must be filed not later than 180 days after the date of the alleged discrimination occurred.
- 3. Complaints shall be in writing and shall be signed by the complainant and/or the complainant's representative. Complaints shall clearly state the entity within Louisiana Department of Public Safety and Corrections, Public Safety Services, that employs the person who allegedly engaged in the discrimination. Complaints shall set forth as fully as possible the facts and circumstances surrounding the claimed discrimination. Each complaint shall include the following:
 - a. Name, address, and phone number of the complainant.
 - b. Name(s) and business address(es) of the employees who the complaint alleges have discriminated.
 - c. Basis of complaint (i.e., race, color, national origin, sex, age, disability, low-income or LEP).
 - d. Date of alleged discriminatory act(s).
 - e. Date the complaint was received.
 - f. A statement of the complaint.
 - g. Other agencies (state, local, or Federal) where the complaint has been filed.
- 4. The Office of State Police and the Office of Motor Vehicles will maintain one Complaint Log which will be made available to FMCSA upon request.
- 5. Each Complaint which is regarding an employee for whom La. R.S. 40:2531 applies shall be investigated and processed according to Louisiana State Police Policy, P.O. 209, Complaints and Administrative Investigations.
- 6. Each complaint which is regarding any person other than those to whom La. R.S. 40:2531 applies shall be investigated and processed as follows:
 - a. Within 10 days of receipt of the Complaint, the Title VI Coordinator will acknowledge receipt of the Complaint, inform the complainant of the action taken or proposed action to process the Complaint and advise the complainant of other avenues of redress available, such as the Federal Motor Carrier Safety Administration.
 - b. Within 60 days of receipt of the Complaint, Louisiana Department of Public Safety and Corrections, Public Safety Services, will cause an investigation of the Compliant to take place and a general investigation report, based on the information obtained, to be provided to a Title VI Coordinator.
 - c. Within 90 days of receipt of the Complaint, a Title VI Coordinator will notify the complainant in writing of the final decision reached regarding his or her Complaint, including the proposed disposition of the matter.

STATUS OF CORRECTIVE ACTIONS

During the previous fiscal year, Louisiana Department of Public Safety and Corrections did not receive Title VI complaints to investigate. A log of complaints and related investigations are available for review upon request. No investigation resulted in a Title VI violation or required corrective action.

COMMUNITY PARTICIPATION PROCESS

The Louisiana Department of Public Safety and Corrections, Public Safety Services, primarily through the Office of Motor Vehicles provides services/activities to the public through the activity of the issuance of driver's license/identification cards and motor vehicle registration and title documents. The Community Participation Process provided herein relates solely to the Office of Motor Vehicles.

The Office of Motor Vehicles utilizes multiple avenues to ensure that the residents of Louisiana remain informed on the availability and locations of service centers.

Public Website

The Office of Motor Vehicles staff maintains a page on the official website expresslane.org that contains a full list of all offices, office hours, addresses and services provided. Each office manager is responsible for ensuring that the information is up to date. All information listed can be updated in real time if the need should arise. Also included on the page is a link entitled "office closures." This section is utilized to list all office closures related to "act of god" events.

In addition to state run offices, Office of Motor Vehicles partners with private motor vehicle offices known as public tag agents (PTA) to provide a number of driver's license and vehicle registration services. A link to all PTA locations and services offered are also accessible at expresslane.org.

Public Service Announcement

The Office of Motor Vehicles also utilizes public service announcements as a method to notify residents about changes to hours of operations or services provided.

By State statute, the Office of Motor Vehicles must maintain an office within every parish seat. Some parishes with larger populations have additional locations for better service availability to the residents of that parish. The Office of Motor Vehicles routinely evaluates the effectiveness and quantity of services provided at each office and determines if additional resources are required. Based on these determinations, Office of Motor Vehicles has the flexibility to provide resources, etc. to maintain a high level of customer service. PTAs are opened in locations at the discretion of the business owner, and at this time, Office of Motor Vehicles does not dictate where the PTAs may or may not be located. In the event that the Louisiana legislature proposes to increase or decrease the number of service centers, Office of Motor Vehicles commits to the following steps to ensure that Office of Motor Vehicles will inform the greatest number of affected customers of proposed changes and create an avenue by which customers can submit comments and feedback of proposed changes:

- 1. Prepare a Stakeholders List Depending on the parish(es) affected by the proposed change(s), Office of Motor Vehicles will compile a list of stakeholders to identify potential affected customers (both benefited and burdened by the proposed changes). This list of stakeholders will be sufficiently inclusive to ensure that the greatest numbers of customers are made aware of proposed changes. Information on the stakeholders will incorporate demographic information for affected customers, including race, color, national origin (including Limited English Proficient individuals), sex, age, disability, and income-level. The stakeholder list will also include advocacy groups, churches, community-based organizations, and other advisory bodies, which may be useful in disseminating information to large groups of people.
- 2. Publicize Proposed Changes Office of Motor Vehicles will determine how to communicate the news of the proposed change(s) to the greatest number of customers, which may include hard copy publications (i.e., newspapers, newsletters, posters, etc.), electronic media (i.e., website, social media to include Facebook, twitter, etc.), and stakeholder groups. This news will be communicated in an accessible and inclusive manner (including foreign language translations, if necessary) that promotes effective public participation and is free of linguistic, cultural, economic or historical barriers.
- 3. <u>Plan Public Meetings</u> If needed, Office of Motor Vehicles will determine an effective number of Public Meetings to hold in strategically-significant areas within each affected area and at appropriate times to reach the greatest number of customers. Additionally, Office of Motor Vehicles will determine the most effective methods for and communicate news of the Public Meeting(s) to the greatest number of customers, which may include hard copy publications (i.e., newspapers, newsletters, posters, etc.), electronic media (i.e., website, social media to include Facebook, twitter, etc.), and stakeholder groups.
- 4. <u>Conduct the Public Meetings</u> If public meetings are held, Office of Motor Vehicles will ensure that reasonable time is provided for attendees to provide comments regarding the proposed change(s);
- 5. Review and Analysis At the conclusion of the outreach effort, Office of Motor Vehicles will review the comments and analyze the impacts to all customers (regardless of a customer's race, color, national origin, sex, age, disability, income-level, or LEP) regarding their ability to access the facilities/services both prior to the proposed change(s) and following the proposed change(s). This analysis will be sufficiently detailed so that the ultimate conclusion as to how the proposed change(s) will impact customers is well-documented;
- 6. <u>Written Report</u> Office of Motor Vehicles will prepare a detailed record to capture all aspects of the outreach effort;
- Submission to FMCSA Office of Motor Vehicles will submit the record to FMCSA and will incorporate any comments by FMCSA as deemed appropriate following a review of the record;

- 8. Implement the change(s);
- 9. <u>Monitor Feedback</u> Office of Motor Vehicles will monitor customer communications for a period of time determined by the intensity of the proposed changes (i.e., six months, one year) for reactions to the change(s);
- 10. <u>Re-Evaluate</u> Office of Motor Vehicles will be prepared to adjust the change(s) as appropriate dependent upon the actual impact to customers;
- 11. <u>Adjust</u> Office of Motor Vehicles will adjust the change(s) as appropriate dependent upon the actual impact to customers;
- 12. Notification of Title VI Program Protections Office of Motor Vehicles will communicate the process by which any person who believes they have, individually or as a member of any specific class of persons, been subjected to discrimination on the basis of race, color, national origin, sex, age, disability, income level, or Limited English Proficiency may to file a formal complaint with the Louisiana Department of Public Safety and Corrections, Public Safety Services. Any such complaint must be in writing and filed with a Department VI Program Coordinator within one hundred eighty (180) days following the date of the alleged discriminatory occurrence. A complaint regarding the Office of Motor Vehicles may be should be submitted in person as follows: LA DPS, Title VI Coordinator, Compliance Program Section, Office of Legal Affairs, 7979 Independence Blvd., Ste. 307, Baton Rouge, LA 70806; or mailed to: LA DPS, Title VI Coordinator, Compliance Program Section, Office of Legal Affairs, P.O. Box 66614, Box B-4, Baton Rouge, LA 70896-6614.

Information regarding this process will be posted on the Office of Motor Vehicles' website and within each affected office.

In the event that the Office of Motor Vehicles determines that an additional office is required in a parish, the Office of Motor Vehicles will determine the appropriate outreach based upon the preceding 12 steps.

COMMERCIAL MOTOR VEHICLES INSPECTION SELECTION & UNBIASED ENFORCEMENT POLICIES

Currently, Office of State Police uses Policy *P.O. 205 Bias-Based Profiling*, effective July 15, 2012. Office of State Police, Operational Development, has developed a Memorandum entitled "Title VI Program Requirements and Enforcement Activities" dated January 26, 2022 to complement *P.O. 205 Bias-Based Profiling*. Office of State Police will submit an executed copy of the Memorandum to FMCSA Office of Civil Rights and will notify FMCSA Office of Civil Rights once the Memorandum has been distributed to affected personnel.

Louisiana Department of Public Safety and Corrections, Public Safety Services

Title VI Advisory Committee

The Louisiana Department of Public Safety and Corrections, Public Safety Services, Title VI Program compliance plan is prepared and updated by the following:

Ms. Caitlin Boyd Grants Administrator Office of Motor Vehicles Caitlin.Boyd2@la.gov

Ms. Becky Davis Motor Vehicle Manager, Administration Office of Motor Vehicles Becky.Davis@la.gov

Lt. Kirk Thibodeaux Transportation Safety Services Motor Carrier Safety – Grants Louisiana State Police Kirk. Thibodeaux@la.gov

Brittney Hull Director of Compliance Programs Louisiana Department of Public Safety Office of Legal Affairs



JOHN BEL EDWARDS GOVERNOR

Lamar Davis, Colonel
Deputy Secretary

State of Louisiana

Department of Public Safety and Corrections Public Safety Services

January 26, 2022

To:

All NAS-Certified Inspectors

From:

Captain Fertano Jackson Commander, TSS/CVE

Re:

Title VI Program Requirements and Enforcement Activities

TSS – Motor Carrier Safety is committed to the unbiased and equitable treatment of all persons in enforcing the law and providing services. Employees conducting motor vehicle enforcement, including CMV inspections, will adhere to this memo, which prohibits biased based policing of any type. In addition to Policy 205 "Bias-Based Profiling," we will adhere to the following:

- 1. It is the policy of the Louisiana State Police (LSP) to uphold and ensure full compliance with the non-discrimination requirements of Title VI of the Civil Rights Act of 1964 (Title VI) and related non-discrimination authorities as identified in the FMCSA Title VI Program Assurance signed by the LSP Superintendent.
- a. These authorities require that no person shall be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any LSP program or activity based on race, color, national origin, sex, age, disability, income level, or limited English proficiency.
- b. Our CMV inspection selection operating procedures are data-driven, objective, and non-discriminatory in their applications. Inspections will be random, data-driven, or when probable cause exists. Criteria for Selection of CMV's for Inspections at Ports of Entry, Scales, and During Mobile Operations:
 - 1. Inspection priority is given to an observed violation of law or regulations related to the driver or the vehicle, including equipment, size, weight and load violations.
 - 2. When available, POEs will consistently use standardized electronic vehicle screening systems that utilize ISS carrier safety rating information. Carriers that are poorly rated or have insufficient data will take priority in the inspection selection.
 - 3. When CMV traffic patterns are minimal, CMVs with no valid CVSA decal may be selected for inspection.

- 4. Vehicles displaying a valid CVSA decal will not be subject to re-inspection unless an equipment violation is observed or a driver violation is suspected.
- 5. Inspectors shall not interrupt or otherwise disturb any driver of a CMV in an off duty or sleeper berth status, when the CMV is legally parked, for the sole purpose of conducting a random inspection.

Documentation:

- 1. All inspections will be documented through the ASPEN inspection program.
- 2. Inspections shall be uploaded as soon as possible, but no later than the end of the inspecting employee's shift.
- 3. Inspections containing out-of-service violations should be uploaded immediately.
- 4. When the ASPEN program is not available, CVSA inspections are to be documented on a hand written Driver-Vehicle Examination Report.

LSP will remain consistent with national and international programs by following the guidelines in CVSA's Operational Policy 13. The link to Public Notice of Title VI Program Rights is http://www.lsp.org/pdf/Public Notice of Title VI Program Rights 1 12 22.pdf

c. LSP has adopted a Public Notice of Compliance with Title VI Program Rights that informs the public of the department's Title VI program assurances and responsibilities. This public notice is posted for public access at this link:

http://www.lsp.org/pdf/Title VI Program Compliance Plan.pdf

- d. LSP provides Title VI program-related training to personnel conducting traffic enforcement, compliance reviews, and safety audit activities, including the adherence to FMCSA Enforcement Memorandum regarding ELP versus LEP (MC-ECE-2016-006).
- 2. LSP must ensure that all of its programs and activities are operated in a nondiscriminatory manner. Complaints received from members of the Public (including drivers) will be disposed of according to the Complaint Disposition Process section of DPS' Title VI Program Compliance Plan. In order to monitor LSP's Title VI Program compliance, our legal section will review any complaints and review Title VI Meeting summaries for disparities based on race, color, national origin, sex, age, disability, income level, or limited English proficiency.

LSP's legal staff will conduct comprehensive compliance reviews to:

- a. Ensure compliance with Title VI Program requirements.
- b. Provide technical assistance in the program areas implementation of Title VI Program requirements.
- c. Correct deficiencies, when found to exist.
- 3. As part of LSP's Title VI Program internal monitoring programs, CMV enforcement, including commercial vehicle inspections, will be reviewed annually to ensure compliance with Title VI Program requirements, provide any needed technical assistance in the implementation of Title VI Program requirements, and correct any deficiencies found to exist.

Distribution Date - 1/26/2022

LOUISIANA STATE POLICE RETIREMENT SYSTEM

ACTUARIAL VALUATION AS OF JUNE 30, 2021

G. S. CURRAN & COMPANY, LTD.

Actuarial Services

10555 N. Glenstone Place • Baton Rouge, Louisiana 70810 • (225)769-4825

Gary S. Curran, FCA, MAAA, ASA, EA Consulting Actuary

Gregory M. Curran, FCA, MAAA, ASA, EA Consulting Actuary

October 7, 2021

Board of Trustees Louisiana State Police Retirement System 9224 Jefferson Highway Baton Rouge, Louisiana 70809

Ladies and Gentlemen:

We are pleased to present our report on the actuarial valuation of the Louisiana State Police Retirement System for the fiscal year ending June 30, 2021. Our report is based on the actuarial assumptions specified and relies on the data supplied by the system's administrators and accountants. This report was prepared at the request of the Board of Trustees of Louisiana State Police Retirement System. The primary purposes of the report are to determine the actuarially required contribution for the retirement system for the fiscal year ending June 30, 2022, and to recommend the net direct employer contribution rate for Fiscal 2023. This report does not contain the information necessary for accounting disclosures as required by Governmental Accounting Standards Board (GASB) Statements 67 and 68; that information is included in a separate report. This report was prepared exclusively for Louisiana State Police Retirement System for a specific limited purpose. It is not for the use or benefit of any third party for any purpose.

In our opinion, all assumptions on which this valuation is based are reasonable individually and in the aggregate. Both economic and demographic assumptions are based on our expectations for future experience for the fund. This report has been prepared in accordance with generally accepted actuarial principles and practices, and to the best of our knowledge and belief, fairly reflects the actuarial present values and costs stated herein. The undersigned actuary is a member of the American Academy of Actuaries, has met the qualification standards for the American Academy of Actuaries to render the actuarial opinions incorporated in this report, and is available to provide further information or answer any questions with respect to this valuation.

Sincerely,

G. S. CURRAN & COMPANY, LTD.

By: Mgory M. Gregory Curran, F.C.A., M.A.A.A., A.S.A.

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SUMMARY OF VALUATION RESULTS LOUISIANA STATE POLICE RETIREMENT SYSTEM

Valuation Date:			June 30, 2021	June 30, 2020
Census Summary:	Active Members		951	1,029
	Retired Members and Survivors		1,295	1,268
	Terminated Due a Deferred Benefit		37	38
	Terminated Due a Refund		183	179
Payroll:		\$	75,908,386	\$ 80,281,571
Benefits in Payment:		\$	64,716,052	\$ 59,283,228
Valuation Interest Rate	:		6.95%	7.00%
Present Value of Future	e Benefits	\$	1,490,842,416	\$ 1,441,370,283
Actuarial Accrued Liab	oility (EAN):	\$	1,314,386,755	\$ 1,254,441,437
Unfunded Actuarial Ac	crued Liability:	\$	295,150,724	\$ 324,114,494
Experience Account:		\$	9,497,110	\$ 2,195,198
Actuarial Value of Asse	ets:	\$	1,019,236,031	\$ 930,326,943
Market Value of Assets	s (Includes Experience Account):	\$	1,159,337,587	\$ 891,750,736
Ratio of AVA to Actua	rial Accrued Liability:		77.54%	74.16%
			Fiscal 2021	Fiscal 2020
Market Rate of Return	(Excluding Money Market DROP funds):		32.10%	1.15%
Actuarial Rate of Retur	n (Excluding Money Market DROP funds):		11.38%	5.56%
Non-Money Market DF	ROP Account Interest Credit Rate:		10.88%	5.06%
			Fiscal 2022	Fiscal 2021
Employers' Normal Co		\$	16,011,252	\$ 16,796,513
Amortization Cost (Mic	• •	\$	29,995,343	\$ 27,241,193
Projected Administrativ		\$	1,223,042	\$ 930,656
Insurance Premium Tax		<u>\$</u>	(1,500,000)	\$ (1,500,000)
Net Direct Employer A	ctuarially Required Contributions:	\$	45,729,637	\$ 43,468,362
Projected Payroll:		\$	75,555,357	\$ 80,098,373
Actuarially Required N	et Direct Employer Contribution Rate:		60.5%	54.3%
Actual Employee Contr	ribution Rate:			
Employees whose fi	irst state service occurred before January 1, 2	011:	8.5%	8.5%
Employees whose fi	irst state service occurred on or after January	1, 201	11: 9.5%	9.5%
Actual Net Direct Emp	loyer Contribution Rate:		58.8%	52.4%
			Fiscal 2023	Fiscal 2022
Minimum Recommend	ed Net Direct Employer Cont. Rate:		62.9%	58.8%

GENERAL COMMENTS

The values and calculations in this report were determined by applying statistical analysis and projections to system data and the assumptions listed. There is sometimes a tendency for readers to either dismiss results as mere "guesses" or alternatively to ascribe a greater degree of accuracy to the results than is warranted. In fact, neither of these assessments is valid. Actuarial calculations by their very nature involve estimations. As such, it is likely that eventual results will differ from those presented. The degree to which such differences evolve will depend on several factors including the completeness and accuracy of the data utilized, the degree to which assumptions approximate future experience, and the extent to which the mathematical model accurately describes the plan's design and future outcomes.

Data quality varies from system to system and year to year. The data inputs involve both asset information and census information of plan participants. In both cases, the actuary must rely on third parties; nevertheless, steps are taken to reduce the probability and degree of errors. The development of assumptions is primarily the task of the actuary; however, information and advice from plan administrators, staff, and other professionals may be factored into the formation of assumptions. The process of setting assumptions is based primarily on analysis of past trends, but modification of historical experience is often required when the actuary has reason to believe that future circumstances may vary significantly from the past. Setting assumptions includes but is not limited to collecting past plan experience and studying general population demographics and economic factors from the past. The actuary will also consider current and future macro-economic and financial expectations as well as factors that are likely to impact the particular group under consideration. Hence, assumptions will also reflect the actuary's judgment with regard to future changes in plan population and decrements in view of the particular factors which impact participants. Thus, the process of setting assumptions is not mere "guess work" but rather a process of mathematical analysis of past experience and of those factors likely to impact the future.

One area where the actuary is limited in his ability to develop accurate estimates is the projection of future investment earnings. The difficulties here are significant. First, the future is rarely like the past, and the data points available to develop stochastic trials are far fewer than the number required for statistical significance. In this area, some guess work is inevitable. However, there are tools available to lay a foundation for making estimates with an expectation of reliability. Although past data is limited, that which is available is likely to provide some insight into the future. This data consists of general economic and financial values such as past rates of inflation, rates of return variance, and correlations of returns among various asset classes along with the actual asset experience of the plan. In addition, the actuary can review the current asset market environment as well as economic forecasts from governmental and investment research groups to form a reasonable opinion with regard to probable future investment experience for the plan.

All of the above efforts would be in vain if the assumption process was static, and the plan would have to deal with the consequences of actual experience differing from assumptions after forty or fifty years of compounded errors. However, actuarial funding methods for pension plans all allow for periodic corrections of assumptions to conform with reality as it unfolds. This process of repeated correction of estimates produces results which although imperfect are nevertheless a reasonable approach to determine the contribution levels which will provide for the future benefits of plan participants.

COMMENTS ON DATA

For the valuation, the system's administration furnished a census derived from the system's master data processing file indicating each active covered employee's sex, date of birth, service credit, annual salary, and accumulated contributions. Information on retirees detailing dates of birth of retirees and beneficiaries, sex, as well as option categories and benefit amounts, was provided in like manner. In addition, data was supplied on former employees who are vested or who have contributions remaining on deposit. As illustrated in Exhibit VIII, there are 951 active contributing members in the system of whom 666 have vested retirement benefits; 1,295 former members or their beneficiaries are receiving retirement benefits. An additional 220 terminated members have contributions remaining on deposit with the system; of this number 37 have vested rights for future retirement benefits.

Census data submitted to our office is tested for errors. Several types of census data errors are possible; to ensure that the valuation results are as accurate as possible, a significant effort is made to identify and correct these errors. To minimize coverage errors (i.e., missing or duplicated individual records) the records are checked for duplicates, and a comparison of the current year's records to those submitted in prior years is made. Changes in status, new records, and previous records that have no corresponding current record are identified. This portion of the review indicates the annual flow of members from one status to another and is used to check some of the actuarial assumptions such as retirement rates, rates of withdrawal, and mortality. In addition, the census is checked for reasonableness in several areas such as age, service, salary, and current benefits. The records identified by this review as questionable are checked against data from prior valuations; those not recently verified are included in a detailed list of items sent to the system's administrative staff for verification and/or correction. Once the identified data has been researched and verified or corrected, it is returned to us for use in the valuation. Occasionally some requested information is either unavailable or impractical to obtain. In such cases, values may be assigned to missing data. The assigned values are based on information from similar records or based on information implied from other data in the record.

In addition to the statistical information provided on the system's participants, the system's administrator furnished general information related to other aspects of the system's expenses, benefits and funding. Valuation asset values as well as income and expenses for the fiscal year were based on information furnished by the firm of Ericksen Krentel. As indicated in the system's financial statements, the net market value of system's assets was \$1,159,337,587 as of June 30, 2021. Net investment income for Fiscal 2021 measured on a market value basis was \$283,632,949. Contributions to the system for the fiscal year totaled \$56,666,702; benefits and expenses amounted to \$72,712,800.

Notwithstanding our efforts to review both census and financial data for apparent errors, we must rely upon the system's administrative staff and accountants to provide accurate information. Our review of submitted information is limited to validation of reasonableness and consistency. Verification of submitted data to source information is beyond the scope of our efforts.

COMMENTS ON ACTUARIAL METHODS AND ASSUMPTIONS

This valuation is based on the Individual Entry Age Normal actuarial cost method. The unfunded accrued liability is amortized with level payments over various periods as specified in R.S. 11:102. Amortization bases for actuarial asset and liability gains or losses (except as noted below) or changes in assumptions were generally amortized over 30 years prior to Fiscal 2018. Since the funded ratio of the plan (based on the actuarial value of assets) exceeded 70% in Fiscal 2017, such amortization periods for

new amortization bases beginning with the Fiscal 2018 valuation are set to twenty years as specified in the statutes. All contribution shortfalls and excesses are amortized as a level dollar amount over 5 years. Since the passage of Act 95 of 2016, in each valuation the first \$5,000,000 of any asset gain (adjusted pro-rata for increases in the Actuarial Value of Assets) has been used to immediately reduce the system's oldest outstanding positive amortization base (without immediate reamortization). The statutes state that after the system's funded percentage reaches 80%, the remaining balance of the bases that have been reduced by such gains will be reamortized over the remainder of the amortization period originally established for each base. R.S. 11:102.4 further states that beginning with Fiscal 2020 and every fifth year thereafter, the remaining liability of such bases net of all payments made since the last reamortization will be reamortized with annual level-dollar payments over the remainder of the amortization period originally established. Therefore, in the 2020 valuation the amortization of loss bases that had been previously reduced due to Act 95 of 2016 were reamortized through the completion of the original amortization period. Details related to the reductions in the oldest positive amortization bases due to the application of the priority allocations are shown in Exhibit V-D. The 1995, 1997, 1999, 2001 and 2002 Experience Loss bases have been affected. Over the past few years, the 1995, 1997, 1999 and 2001 Experience Loss bases have been fully liquidated years earlier than originally planned due to the application of the priority allocations as well as continued payments on fully liquidated bases. The reamortization provision effective in Fiscal 2020 resulted in no future payments for those loss bases affected by the priority allocations prior to Fiscal 2020. Application of the 2021 priority allocation fully offset the 2001 Experience Loss base and slightly reduced the 2002 Experience Loss base. Because the system's funded ratio is below 80% and the statute does not provide for reamortization of bases reduced by the priority allocation until 2025, the payments on the 2001 and 2002 Experience Loss bases remain unchanged despite the priority allocation.

Because the system's valuation interest rate was lowered to 6.95% within the 2021 actuarial valuation, the payments on the system's unfunded accrued liability were adjusted to account for the change in interest rate. This change caused payments on bases lowered by the priority allocation to be determined based on the original balance prior to impact of the priority allocation.

Although Act 56 of the 2021 legislative session has the potential to affect plan liabilities, due to limited number of affected survivors and our determination that the impact of future increases will not be material to the valuation results, the actuarial liabilities for those affected will be based only on those increases that are included within the benefits reported to the actuary each year for use in the actuarial valuation.

In each year, fifty percent of the asset gains which exceed the adjusted \$5,000,000 threshold (priority amount) are used to fund the system's Experience Account which may be allocated to future permanent benefit increases (commonly referred to as cost-of-living adjustments), subject to certain limitations. Following the June 30, 2015, valuation, all allocations to the Experience Account have been amortized as a loss with level payments over ten years.

In addition to such deposits to the Experience Account, each year the balance in the account is credited with investment earnings or debited with investment losses, shown in this report as the rate of return on the Actuarial Value of Assets. The balance in the account cannot exceed the reserve necessary to grant one (two if the system is funded 80% or greater) permanent benefit increase as otherwise authorized by law. Any funds credited to the Experience Account offset those allocated to the Investment Gain/Loss Experience. The funding methodology for the plan includes the system's "Experience Account" in the Actuarial Value of Assets.

The Priority Amount, which represents the maximum amount of system returns in excess of the system's actuarially assumed rate of return that may be applied to the oldest outstanding positive amortization base, has been set at the following levels since its creation:

Fiscal 2015 -	\$5,000,000
Fiscal 2016 -	\$5,497,148
Fiscal 2017 -	\$6,056,800
Fiscal 2018 -	\$6,633,747
Fiscal 2019 -	\$6,980,899
Fiscal 2020 -	\$7,273,861
Fiscal 2021 -	\$7,969,006

A liability is recognized for the existing balance in the Experience Account together with the present value of future contributions to the account up to the maximum permissible value of the account based upon current account limitations. This is in recognition of the fact that the legal mechanism for credits to the Experience Account are substantively automatic up to the limit set on the account balance. However, contributions to this account in excess of the account limit will require a legislative act. Although the board of trustees has authority to recommend ad hoc Permanent Benefit Increases (PBIs) be approved by the legislature under limited circumstances, these PBIs have not shown to have a historical pattern, the amounts of the PBIs have not been set relative to a defined cost-of-living or inflation index, and there is no evidence to conclude that PBIs will be granted on a predictable basis in the future. Therefore, for purposes of determining the present value of benefits, these PBIs were deemed not to be substantively automatic and the present value of benefits excludes PBIs beyond the current account limitations of the Experience Account. Since a liability for future PBIs up to the authorized Experience Account balance has been included in the system's accrued liabilities, the assets in the Experience Account were included in the actuarial value of assets for funding purposes.

A plan experience study was performed in 2018 to review the assumptions used in the actuarial valuation. This study was performed based on the actuarial data for the Fiscal 2012 through Fiscal 2017 valuation. The assumptions used in the Fiscal 2018 actuarial valuation were set based upon that study. Since the implementation of these new assumptions within the 2018 valuation, there have been two changes in plan assumptions. Within the 2019 valuation a change was made to model future handicapped child survivor benefits. Within this valuation, the valuation interest rate was lowered from 7.0% to 6.95% within this valuation. The change in liability assumptions within this valuation increased the actuarial accrued liability of the system by \$7,057,794. When amortized over the next twenty years, this results in an additional interest adjusted amortization payment of \$641,695 per year, or 0.85% of projected payroll.

RISK FACTORS

Defined benefit pension plans are subject to a number of risks. These can be related either to plan assets or liabilities. To pay benefits, the plan must have sufficient assets. Several factors can lead to asset levels which are below those required to pay promised benefits. The first risk in this regard is the failure to contribute adequate funds to the plan. In some ways, this is the greatest risk since other risks can usually be addressed by adequate actuarial funding. Louisiana constitutional and statutory provisions greatly limit this risk by requiring that state and statewide plans maintain funding on an actuarial basis. The state constitution sets forth general requirements with specific funding parameters specified in the state statutes.

All pension plans are subject to the uncertainty of asset performance. The total nominal rate of return on assets is comprised of the real rates of return earned on the portfolio of investments plus the underlying inflation rate. High levels of inflation are a risk to plan members in that they reduce purchasing power of plan benefits. As the plan attempts to offset inflation by providing permanent benefit increases, costs will inevitably increase unless provisions are made to prefund such adjustments. Very low inflation will generally reduce the nominal rate of return on assets; deflation can potentially reduce the capital value of trust assets. During the decade preceding 2020 inflation levels remained in a fairly narrow range, yet inflation has significantly increased since the beginning of the Covid-19 pandemic. Forecasts from investment professionals prior to the pandemic generally called for a continuation of a low inflation environment. Although many forecasters believe that recent inflation spikes will be transitory, at this time there is significant uncertainty related to future inflation. There is always the possibility that high inflation will become a problem in the future or that the country will experience a deflationary period; however, most expert opinion currently assesses these alternatives as unlikely in the near term.

Asset performance over the long run depends not only on average returns but also on the volatility of returns. Two portfolios of identical size with identical average rates of return will accumulate different levels of assets if the volatility of returns differs since increased volatility reduces the accumulation of assets. Volatility of returns will be determined by both market conditions and the asset allocation of the investment portfolio. If the system's investment portfolio has a substantial allocation to assets that have low price stability, the risk of portfolio volatility will increase, although low correlations among asset classes can mitigate this risk. Another element of asset risk is reinvestment risk. Interest rate declines can subject pension plans to an increase in this risk. As fixed income securities mature, investment managers may be forced to reinvest funds at decreasing rates of return. For the foreseeable future it is unlikely, though not impossible, that interest rates will steeply decline mitigating the reinvestment risk the plan currently faces.

The system is also exposed to risk related to cash flow. Where benefit payments exceed contributions to a plan, the plan will be required to use investment income or potentially investment capital to pay benefits. In cases where it is necessary to use investment income to pay retirement benefits, investment market downturns will place additional stress on the portfolio and make the recovery from such downturns more difficult since funds available for reinvestment are reduced by benefit payments. The historical cash flow graph and demonstration given in this report illustrates the noninvestment cash flow and benefit payments of the system over the last 10 years. Only recently have annual benefit payments exceeded annual contributions to the plan. Future net noninvestment cash flows for the system will be determined based upon both the system maturity and future contribution levels. Hence, increases in future contributions due to adverse actuarial experience will tend to mitigate the potential of negative cash flows arising from the natural maturation of the system whereas reduced contribution levels resulting from, positive experience will tend to increase the extent of negative cash flows. Absent a significant increase in the active membership of the system, the trend of higher proportions of retired membership will continue and the current trend toward higher levels of negative noninvestment cash flows will continue in the near future.

In addition to asset risk, the plan is also subject to risks related to liabilities. These risks include longevity risk (the risk that retirees will live longer than expected), termination risk (the risk that fewer than the anticipated number of members will terminate service prior to retirement), and other factors that may have an impact on the liability structure of the plan. In a general sense, the short-term effects of these risks on the cost structure of the plan are somewhat limited since changes in these factors tend to be gradual and follow long-term secular trends. Final average compensation plans are also vulnerable to

unexpectedly large increases in salary for individual members near retirement. The effect of such events frequently relates to pay plan revisions where salaries "catch-up" after a number of years of slow growth. Revisions of this type usually depend on general economic conditions and can result in liability losses. However, they generally are infrequent and are more of a short-term issue.

Liability risk also includes items such as data errors. Significant errors in plan data can distort or disguise plan liabilities. When data corrections are made, the plan may experience unexpected increases or decreases in liabilities. Even natural disasters and dislocations in the economy or other unforeseen events can present risks to the plan. These events can affect member payroll and plan demographics, both of which impact costs. The risk associated with either of these factors can vary dependent upon the severity of the event and cannot be easily forecasted.

Beyond identifying risk categories, it is possible to quantify some risk factors. One fairly well-known risk metric is the funded ratio of the plan. The rate is given as plan assets divided by plan liabilities. However, the definition of each of these terms may vary. The two typical alternatives used for assets are the market and actuarial value of assets. There are a number of alternative measures of liability depending on the funding method employed. The Governmental Accounting Standards Board (GASB) specifies that for financial reporting purposes, the funded ratio is determined by using the market value of assets divided by the entry age normal accrued liability. This value is given in the system's financial report. Alternatively, we have calculated the ratio of the actuarial value of assets to the entry age normal accrued liability based on the funding methodology used to fund the plan. The ratio is 77.54% as of June 30, 2021. This value gives some indication of the financial strength of the plan; however, it does not guarantee the ability of the fund to pay benefits in the future or indicate that in the future, contributions are likely to be less than or greater than current contributions. In addition, the ratio cannot be used in isolation to compare the relative strength of different retirement systems. However, the trend of this ratio over time can give some insight into the financial health of the plan. Even in this regard, caution is warranted since market fluctuations in asset values and changes in plan assumptions can distort underlying trends in this value. Exhibit IX gives a history of this value for the last ten years. One additional risk measure is the sensitivity of the plan's cost structure to asset gains and losses. We have determined that based on current assets and demographics, for each percentage under the assumed rate of return on the actuarial value of assets, there will be a corresponding increase in the actuarially required contribution as a percentage of projected payroll of 1.23% for the fund. For earnings above the assumed rate of return, the reduction in costs will generally be less than this amount due to the priority allocation and the allocation of a portion of investment gains to the Experience Account.

Each pension plan has its own unique benefit structure and demographic profile. As a result, each plan will respond to changes in interest rates in a unique way. As the expected rate of return on investments changes and the interest rate used to discount plan liabilities is adjusted, the shift in plan liabilities will depend upon the duration of the liabilities (which can be understood as the plan's sensitivity to the change in the interest rate). A slightly different measure of the duration for the plan can also be understood as an indicator of the plan's maturity. When a pension plan is first established, all of the participants are active members; as members retire and the plan matures, the duration of the plan decreases. A determination of the liability duration gives some insight into the investment time horizon of the plan. Thus, the liability duration of a closed plan can be thought of as the weighted "center of gravity" of plan benefit cash flows with expected cash flows occurring both before and after the duration value. For open plans with a continuous flow of new entrants this measure is somewhat less informative since the duration horizon keeps changing as new members enter the plan. For this plan we have estimated the effective liability duration as 10.87.

The ability of a system to recover from adverse asset or liability performance is related to the maturity of the plan population. In general, plans with increasing active membership are less vulnerable to asset and liability gains and losses than mature plans since changes in plan costs can be partially allocated to new members. If the plan has a large number of active members compared to retirees, asset or liability losses can be more easily addressed. As more members retire, contributions can only be collected from a smaller segment of the overall plan population. Often, population ratios of actives to annuitants are used to measure the plan's ability to adjust or recover from adverse events since contributions are made by or on behalf of active members but not for retirees. Thus, if the plan suffers a mortality loss through increased longevity, this will affect both actives and retirees, but the system can only fund this loss by contributions related to active members. A measure of risk related to plan maturity is the ratio of total benefit payments to active payroll. For Fiscal 2021 this ratio is 85%; ten years ago this ratio was 62%.

One other area of exposure the plan faces is the possibility that plan assumptions will need to be revised to conform to changing actual or expected plan experience. Such assumption revisions may relate to economic or demographic factors. With regard to the economic assumptions, there is always the possibility that market expectations will require an adjustment to the assumed rate of return. Current market expectations are that in this area a decrease in the assumptions is more probable than an increase. The magnitude of any potential such change will be related to future capital market expectations.

With regard to the economic assumptions, we have determined that a reduction in the valuation interest rate by 1% (without any change to other collateral factors) would increase the actuarially required employer contribution rate for Fiscal 2022 by 23.0% of payroll. However, after accounting for the effect of the contribution shortfall, the recommended employer contribution rate for Fiscal 2023 would increase by 27.9%. Further adjustments to the future assumed rates of return may be required; however, the likelihood of such an event is difficult to gauge since it requires assigning probabilities to future capital market scenarios.

Noneconomic assumptions such as mortality or other rates of decrement such as withdrawal, retirement, or disability are also subject to change. In general, such changes tend to affect plan costs less than adjustments to the assumed rates of return. Quantifying the probability or magnitude of such changes is beyond the scope of this report.

In summary, there is a risk that future actuarial measurements may differ significantly from current measurements presented in this report due to factors such as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, and changes in plan provisions or applicable law. Ordinarily, variations in these factors will offset to some extent. However, even with the expectation that not all variations in costs will likely travel in the same direction, factors such as those outlined above have the potential on their own accord to pose a significant risk to future cost levels and solvency of the system.

CHANGES IN PLAN PROVISIONS

The following legislative changes directly affecting the retirement system were enacted during the 2021 Regular Session of the Louisiana Legislature.

Act 35 enables members of the Louisiana State Police Retirement System (LSPRS) who previously transferred service credit into the system from another retirement system at an accrual rate below the

LSPRS applicable rate to pay the actuarial cost to upgrade the accrual rate for all or a portion of the member's transferred service credit at any time thereafter.

Act 37 provided a nonrecurring benefit payment to certain retirees and survivors receiving benefits from LSPRS to be paid from the system's experience account. This one-time payment was payable August 31, 2021, in an amount equal to the lesser of \$3 for each month of creditable service plus \$2 for each month of retirement through June 30, 2021 or the member's current monthly benefit. This payment was made to the following individuals:

- 1. Any non-disabled retiree of the system who meets all of the following as of June 30, 2021:
 - a. Receives a monthly benefit of \$2,500 or less
 - b. Has attained the age of 60
 - c. Has been retired for one year
 - d. Neither participated in the Deferred Retirement Option Plan or Back-Deferred Retirement Option Plan nor the Initial Benefit Option
 - e. Hired prior to September 8, 1978, and retired with at least 20 years of creditable service
 - f. Hired on or after September 8, 1978, and retired with at least 25 years of creditable service
- 2. Any nonretiree beneficiary receiving a benefit who meets the following as of June 30, 2021:
 - a. Beneficiary benefit is not based on the death of a disabled retiree
 - b. Benefits have been paid to the retiree or the beneficiary, or both combined for at least one year
 - c. The retiree would have attained age 60 by June 30, 2021
 - d. The retiree would have otherwise met the criteria in rule 1 above
- 3. Any person who receives a survivor benefit from the system based upon a member's death in the line of duty as of June 30, 2021
- 4. Any disability retiree or person who receives benefits from the death of a disability retiree as of June 30, 2021

Act 55 changes the language in R.S. 11:1311 relative to system retirees who return to employment. The act states that any rehired retiree who returns to employment which would render him eligible for membership in the system may not become a member of the system. If his earnings during any calendar year of reemployment exceed 50% of the average final compensation payment of his retirement benefit shall be suspended for every month of such reemployment. Upon subsequent separation of such employment or upon death, the retirement allowance or beneficiary benefits due shall again be paid. For rehired retirees who return to employment with the Department of Public Safety and Corrections in any capacity that would not render him eligible for membership in the system, his employment with respect to retirement shall be governed by the laws governing the Louisiana State Employees' Retirement System.

Act 56 adds an automatic increasing feature to the survivor benefits under R.S. 11:1345.8(B), payable on behalf of a member who was killed by an intentional act of violence or dies as a direct result of an injury sustained as a consequence of an intentional act of violence. Such benefits shall increase at a rate of 3% until the benefit equals the maximum of the officer's paygrade for his classification under the pay plan that applied to the officer on the date of death.

Act 249 provides that any member with a minimum of twelve years of creditable service may, at the time of his retirement, purchase up to five years of service credit in one-year increments. Such member

will be required to pay the actuarial cost of such purchased service in a lump sum payment prior to the date of retirement. Members must submit a letter of intent to purchase service credit with his application to retire not less than thirty days prior to the specified date of retirement.

ASSET EXPERIENCE

The actuarial and market rates of return for the past ten years are given below. These investment rates of return were determined by assuming a uniform distribution of income and expense throughout the fiscal year.

	Market Value †	Actuarial Value †
2012	0.53%	3.17%
2013	13.92%	16.77%
2014	17.93%	12.48%
2015	3.00%	10.66%
2016	-1.63%	6.23%
2017	14.62%	8.23%
2018	9.40%	8.22%
2019	4.12%	6.26%
2020	1.15%	5.56%
2021	32.10%	11.38%

† Rates of return calculated based on assets inclusive of Experience Account but exclusive of money market DROP assets and income.

Geometric Average Market Rates of Return

5-year average	(Fiscal 2017 – 2021)	11.77%
10-year average	(Fiscal 2012 – 2021)	9.09%
15-year average	(Fiscal 2007 – 2021)	7.36%
20-year average	(Fiscal 2002 – 2021)	6.99%
25-year average	(Fiscal 1997 – 2021)	7.38%
	(Fiscal 1992 – 2021)	7.87%

The market rate of return gives a measure of investment return on a total return basis and includes realized and unrealized capital gains and losses as well as interest income. The rate of return is calculated on assets invested in the system's portfolio. DROP assets invested in money market investments have been excluded from the rate of return calculation. This rate of return gives an indication of performance for an actively managed portfolio where securities are bought and sold with the objective of producing the highest total rate of return. During 2021, the fund earned \$7,791,706 of dividends, interest and other recurring income. In addition, the Fund had net realized and unrealized capital gains on investments of \$278,720,474. Fund investment expenses totaled \$2,879,231.

The actuarial rate of return is presented for comparison to the assumed long-term rate of return of 7.00% for Fiscal 2021 (6.95% for Fiscal 2022). DROP accounts that are credited with earnings based on the actual rate of return of the system should be credited with 10.88% (i.e. 11.38% less 0.5% as detailed in the prior provision of R.S. 11:1312 as authorized by Section 4 of Act 480 of the 2009 Regular Legislative Session). The actuarial rate of return is calculated based on the actuarial value of assets net of DROP assets invested in money market accounts and includes all interest, dividends, and recognized capital gains as given in Exhibit VI net of money market income earned by DROP assets. Investment

income used to calculate this yield is based upon a smoothing of investment returns above or below the valuation interest rate over a five-year period, subject to constraints. The difference between rates of return on an actuarial and market value basis results from the smoothing of gains or losses on investments relative to the valuation interest rate. In the future, yields in excess of the 6.95% assumption will reduce future costs; yields below 6.95% will increase future costs. For Fiscal 2021, the system experienced actuarial investment earnings of \$40,388,905 above the actuarial assumed earnings rate of 7.00% in effect during Fiscal 2021. Partially offsetting these asset experience gains were allocations of \$7,969,006 to the oldest UAL debit bases and \$7,601,224 to the Experience Account leaving net asset gains of \$24,818,675. The gross actuarial gain decreased the interest-adjusted amortization payments on the system's UAL by \$3,672,160 or 4.86% of projected payroll. The impact of this actuarial gain was offset by funds allocated to the Experience Account which increased the interest-adjusted amortization payments on the system's UAL by \$1,044,072, or 1.38% of projected payroll. The impact was further offset by funds allocated to the oldest positive bases based upon the priority allocation rules. These funds increased the interest-adjusted amortization payments on the system's UAL by \$724,542, or 0.96% of projected payroll.

DEMOGRAPHICS AND LIABILITY EXPERIENCE

The average active contributing member is 43 years old with 15.8 years of service credit and an annual salary of \$79,820. The system's active contributing membership experienced a decrease of 78 members during Fiscal 2021; over the last five years, the number of active contributing members decreased by 90.

The average service retiree is 67 years old with a monthly benefit of \$4,770. The average age of a regular retiree at retirement is 50. The number of retirees and beneficiaries receiving benefits from the system as shown in the report increased by 27 during the fiscal year; over the last five years, the number of retirees and beneficiaries receiving benefits from the system increased by 75. Over the last five years, annual benefits in payment increased by \$22,849,263.

Liability experience for the year was unfavorable. The total number of retirements and disabilities were below projected levels. The total number of withdrawals from active status were above projected levels. Overall salary increases and retiree deaths were near expected levels, but salary increases for members with 11-22 years of service exceed assumed levels. Additionally, there was an increase in the liability related to the recognition of the Experience Account that reduced liability experience for the year. Net plan liability experience losses totaled \$3,077,350. The interest adjusted amortization payment on this loss was \$279,793, or 0.37% of projected payroll.

FUNDING ANALYSIS AND RECOMMENDATIONS

Actuarial funding of a retirement system is a process whereby funds are accumulated over the working lifetimes of employees in such a manner as to have sufficient assets available at retirement to pay for the lifetime benefits accrued by each member of the system. The required contributions are determined by an actuarial valuation based on rates of mortality, termination, disability, and retirement, as well as investment return and other statistical measures specific to the particular group. Each year a determination is made of two cost components, and the actuarially required contributions are based on the sum of these two components. These two components are the normal cost and the amortization payments on the unfunded actuarial accrued liability. The normal cost refers to the annual cost for active members allocated to each year by the particular cost method utilized. The term unfunded accrued

liability (UAL) refers to the excess of the present value of plan benefits over the sum of current assets and future normal costs. Each year the UAL grows with interest and is reduced by payments. In addition, it may be increased or diminished by plan experience, changes in assumptions, or changes in benefits including COLA's. Contributions in excess of or less than the actuarially required amount can also decrease or increase the UAL balance. New entrants to the system can also increase or lower costs as a percent of payroll depending upon their demographic distribution. Finally, payroll growth affects plan costs since payments on the system's unfunded accrued liability are on a fixed, level dollar schedule. If payroll increases, these costs are reduced as a percentage of payroll. Conversely, if payroll decreases, these costs are increased as a percentage of payroll.

In order to establish the actuarially required contribution in any given year, it is necessary to define the assumptions, funding method, and method of amortizing the UAL. Thus, the determination of what contribution is actuarially required depends upon the funding method and amortization schedules employed. Given the current balance on the UAL of \$295,150,724, the method of amortizing the UAL has a material impact on employer costs. Regardless of the method selected, the ultimate cost of providing benefits is dependent upon the benefits, expenses, and investment earnings. Only to the extent that some methods accumulate assets more rapidly and thus produce greater investment earnings does the funding method affect the ultimate cost.

An explanation of the change in costs related to asset and liability gains and losses as well as changes in demographics and assumptions is given in prior sections of the report. In addition to these components, variances in contribution levels and payroll also affect costs. For Fiscal 2021 contributions totaled \$820,781 more than required; the interest-adjusted amortization credit based on the contribution surplus for Fiscal 2022 is \$193,308, or 0.26% of projected payroll. In addition, for Fiscal 2022 the net effect of the change in payroll on amortization costs was to increase such costs by 2.04% of projected payroll.

A reconciliation of the change in costs is given below. Values listed in dollars are interest adjusted for payment throughout the fiscal year. Percentages are based on the projected payroll for Fiscal 2022 except for those items labeled Fiscal 2021.

	Dollars	Percentage of Payroll
Employer Normal Cost for Fiscal 2021	\$ 16,796,513	20.97%
Cost of Assumption Changes	\$ 262,436	0.35%
Cost of Demographic and Salary Changes	\$ (1,047,697)	(0.13%)
Employer Normal Cost for Fiscal 2022	\$ 16,011,252	21.19%
UAL Payments for Fiscal 2021	\$ 27,241,193	34.01%
Change due to change in valuation interest rate	\$ (101,619)	(0.13%)
Change due to change in payroll	N/A	2.04%
Change due to elimination of Amortization Credits/Payments	\$ 4,031,132	5.34%
Additional Amortization Expenses for Fiscal 2022:		
Liability Assumption Loss	\$ 641,698	0.85%
Liability Experience Loss	\$ 279,793	0.37%
Asset Experience Gain	\$ (3,672,160)	(4.86%)
Gains Allocated to Experience Account	\$ 1,044,072	1.38%
Priority Allocation	\$ 724,542	0.96%
Contribution Surplus	\$ (193,308)	(0.26%)
Total Amortization Expense for Fiscal 2022	\$ 29,995,343	39.70%

Insurance Premium Taxes	\$ (1,500,000)	(1.99%)
Projected Administrative Expenses for Fiscal 2022	\$ 1,223,042	1.62%
Total Normal Cost & Amortization Payments	\$ 45,729,637	60.52%

The derivation of the actuarially required contribution for the current fiscal year is given in Exhibit I. The employer's normal cost for Fiscal 2022, interest adjusted for mid-year payment is \$16,011,252. The amortization payments on the system's unfunded actuarial accrued liability total \$29,995,343. The total actuarially required contribution is determined by adding these two values together with administrative expenses. The net direct actuarially required employer contribution for Fiscal 2022 is determined based on the sum of employer normal cost, amortization payments on the unfunded actuarial accrued liability, and estimated administrative expenses offset by projected insurance premium taxes collections allocated to the Fund for Fiscal 2022. As given in line 14 of Exhibit I, the net actuarially required employer contribution for Fiscal 2022 is \$45,729,637, or 60.5% of projected payroll.

Since the actual employer contribution rate for Fiscal 2022 is 58.8% of payroll, there will be a contribution deficit of 1.7% of payroll. This deficit will increase the actuarially required contribution recommended for Fiscal 2023. In order to determine a minimum recommended net direct employer contribution rate for Fiscal 2023, the Employer Normal Cost and Amortization Payments were estimated for Fiscal 2023 and adjusted for the impact of the estimated contribution shortfall for Fiscal 2022. As given in line 25 of Exhibit I, the estimated actuarially required net direct employer contribution for Fiscal 2023 is \$48,729,828, or 62.9% of projected payroll.

PERMANENT BENEFIT INCREASES

During Fiscal 2021, the actual cost of living (as measured by the US Department of Labor CPI-U) increased by 5.4%. Permanent Benefit Increase (PBI) provisions for the system are detailed in R.S. 11:1332 within the statutes relative to the Experience Account. Act 214 of the 2018 Regular Session of the Louisiana Legislature changed the limitation for adding funds to the Experience Account, allowing the Board to fund not only the basic permanent benefit increase but also the supplemental permanent benefit increase described in R. S. 11:1332(F). The Experience Account cannot be credited with funds that would cause the balance in the account to exceed the reserve of one "standard" permanent benefit increase defined in R.S. 11:1332(C) plus the cost of a "supplemental" permanent benefit increase defined in R.S. 11:1332(F) if the system is less than 80% funded or two permanent benefit increases if the system is at least 80% funded. R.S. 11:1332(C) sets forth the basis for determining the maximum percentage increase in the benefits permissible for the "standard" permanent benefit increase. The maximum percentage increase is based upon the funded percentage of the system as of the most recent actuarial valuation. In addition, other restrictions related to the system's actuarial rate of return and the timing of the most recent such increase may apply. A table of permissible increase rates is given below:

Funded Percentage of the System	Maximum Percent PBI
At least 80%	3.0%
At least 75% but less than 80%	2.5%
At least 65% but less than 75%	2.0%
At least 55% but less than 65%	1.5%
Less than 55%	No PBI permitted

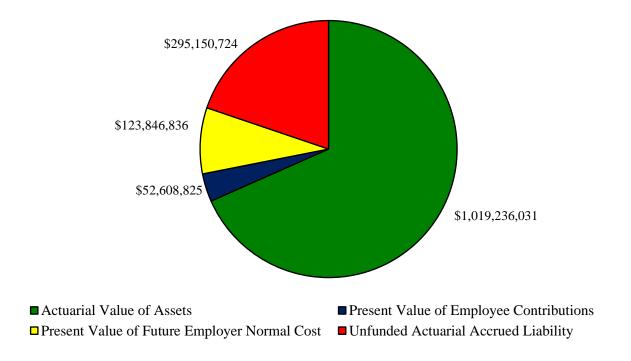
In addition, if the fund is less than 85% funded and the legislature granted a permanent benefit increase in the preceding fiscal year, no increase may be granted.

If there are sufficient funds in the Experience Account and the system meets the necessary criteria to grant a permanent benefit increase, the Board of Trustees may recommend to the President of the Senate and the Speaker of the House of Representatives that the system be permitted to grant a permanent benefit increase. The standard permanent benefit increase is based on the benefit in payment at the time the adjustment is approved with a maximum adjustment based on the first \$60,000 of benefits, where the \$60,000 limit is increased annually by the consumer price index for all urban consumers from July 1, 2015, through the end of the fiscal year of valuation. No permanent benefit increase can be paid in an amount greater than the increase in the Consumer Price Index for all urban consumers during the twelvemonth period ending on the system's valuation date. Permanent benefit increases may be provided only to retirees who have received benefits for at least one full year. In addition, non-disabled retirees may only receive a permanent benefit increase if they have attained age sixty.

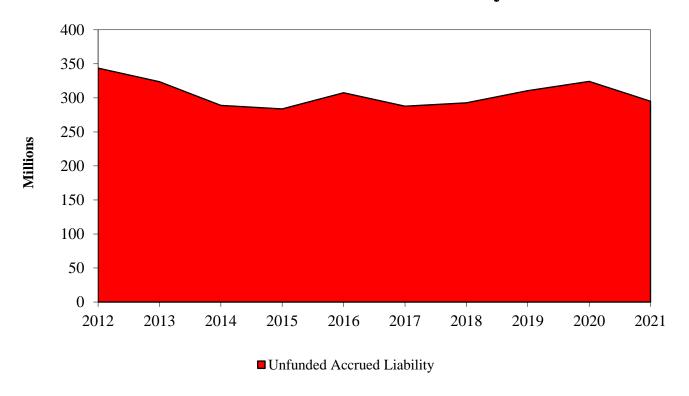
For Fiscal 2021, the Experience Account was filled with an amount sufficient to fund both the base experience account PBI and the system's supplemental PBI. The limit for additions to the Experience Account was based upon the present value of a 2% PBI increase payable to qualifying retirees and beneficiaries along with a supplemental PBI equal to 2% of the benefit being paid at the time the PBI is granted to those retires and beneficiaries who are at least sixty-five years old at the time of payment and who retired on or before June 30, 2001. PBIs are payable only on the first \$60,000 of benefits (adjusted for CPI-U from July 1, 2015 through the end of the fiscal year of valuation).

Although the system did not grant a PBI as defined by R.S. 11:1332 during Fiscal 2021, the legislature did approve a one-time payment to a small number of retirees and beneficiaries from funds previously set aside in the Experience Account. The Board of Trustees will have to review the limitations within R.S. 11:1332 related to the ability of the Board to ask the legislature to grant a PBI under R.S. 11:1332 to determine whether the one-time payment granted within the most recent year precludes the request of the legislature to authorize the expenditure of the Experience Account. The statutes preclude such a request unless "The legislature has not granted a benefit increase in the preceding fiscal year."

Components of Present Value of Future Benefits June 30, 2021

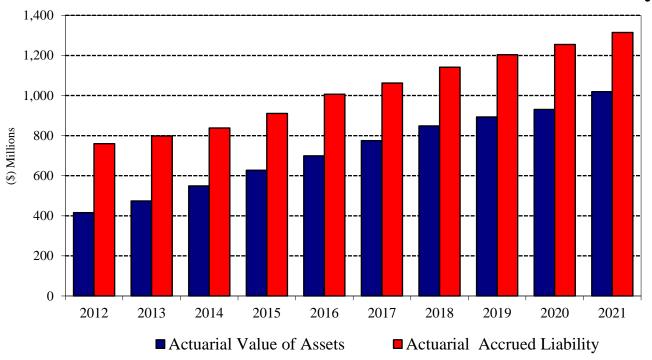


Unfunded Accrued Liability



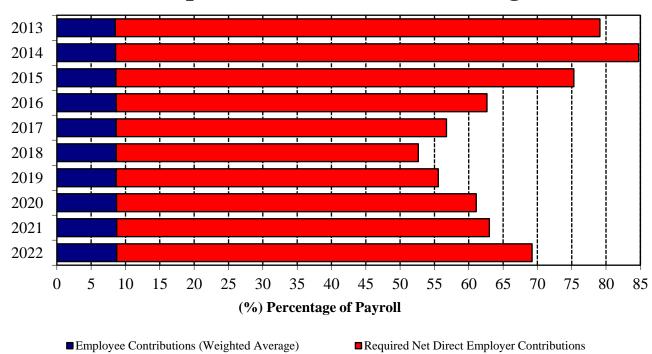
-15-G. S. Curran & Company, Ltd.

Actuarial Value of Assets vs. Actuarial Accrued Liability



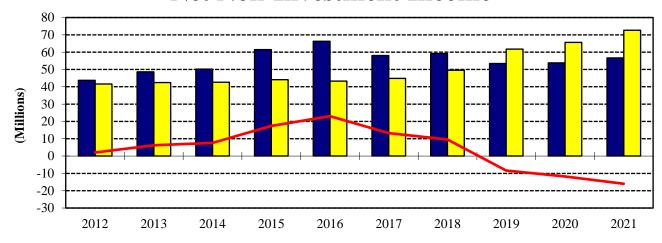
Actuarial Value of Assets includes the balance of the Experience Account beginning with Fiscal 2017.

Components of Actuarial Funding



(2015 and later employee contribution level is a weighted average of rates paid by employees in different tiers. Counts by tier unavailable prior to 2015)

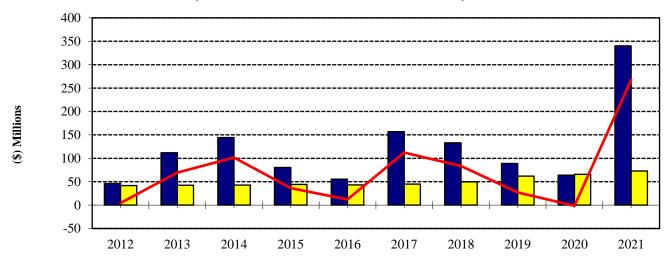
Net Non-Investment Income



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Non-Investment Income (\$Mil)	43.7	48.6	50.2	61.5	66.3	58.1	59.2	53.4	53.8	56.7
Benefits and Expenses (\$Mil)	41.6	42.4	42.6	44.1	43.2	44.9	49.6	61.8	65.6	72.7
Net Non-Investment Income (\$Mil)	2.1	6.2	7.6	17.4	23.0	13.2	9.6	-8.4	-11.8	-16.0

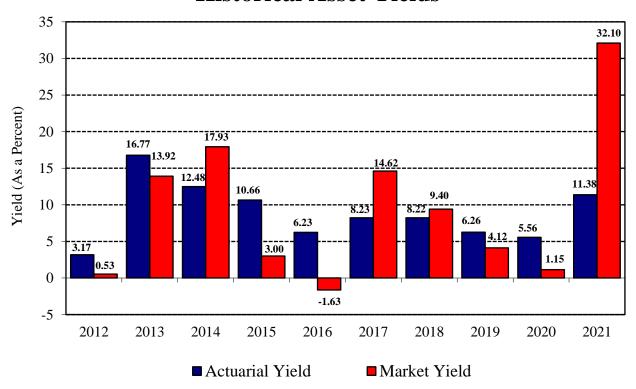
Total Income vs. Expenses

(Based on Market Value of Assets)



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Income (\$Mil)	46.1	111.9	144.3	80.4	55.4	157.0	133.2	88.9	64.0	340.3
Benefits and Expenses (\$Mil)	41.6	42.4	42.6	44.1	43.2	44.9	49.6	61.8	65.6	72.7
Net Change in MVA (\$Mil)	4.5	69.5	101.7	36.3	12.1	112.1	83.6	27.1	-1.6	267.6

Historical Asset Yields



EXHIBITS

EXHIBIT I ANALYSIS OF ACTUARIALLY REQUIRED CONTRIBUTIONS

1. 2. 3. 4. 5.	Normal Cost of Retirement Benefits	\$ \$ \$ \$	19,494,954 394,533 1,352,043 508,941 271,885
6.	TOTAL Normal Cost as of July 1, 2021 (1 + 2 + 3 + 4 + 5)	\$	22,022,356
7.	TOTAL Normal Cost Interest Adjusted for Midyear Payment	\$	22,774,779
8.	Adjustment to Total Normal Cost for Employee Portion	\$	6,763,527
9.	TOTAL Employer Normal Cost Adjusted for Midyear Payment (7 – 8)	\$	16,011,252
10.	Amortization Payments on Unfunded Accrued Liability (Midyear)	\$	29,995,343
11.	Projected Administrative Expenses for Fiscal 2022	\$	1,223,042
12.	Gross Employer Required Contribution (9 + 10 + 11)	\$	47,229,637
13.	Projected Insurance Premium Taxes due in Fiscal 2022	\$	1,500,000
14.	Net Direct Actuarially Required Employer Contribution for Fiscal 2022 (12 – 13)	\$	45,729,637
15.	Projected Payroll for Contributing Members (Fiscal 2022)	\$	75,555,357
16.	Net Direct Actuarially Required Employer Contribution as a Percentage of Projected Payroll for Fiscal 2022 (14 ÷ 15)		60.5%
17.	Actual Net Direct Employer Contribution Rate for Fiscal 2022		58.8%
18.	Projected Fiscal 2022 Contribution Loss (Gain) as a % of Payroll (16 – 17)		1.7%
19.	Projected Fiscal 2022 Employer Contribution Shortfall (Surplus) (15 × 18)	\$	1,284,441
20.	Amortization of Interest Adjusted Fiscal 2022 Employer Contribution Shortfall (Surplus) Based on Midyear Payment in Fiscal 2023	\$	312,844
21.	Estimated Fiscal 2023 Employer Normal Cost Adjusted for Midyear Payment	\$	16,411,533
22.	Estimated Fiscal 2023 Amortization Payments	\$	32,251,833
23.	Estimated Fiscal 2023 Administrative Expenses	\$	1,253,618
24.	Projected Insurance Premium Taxes due in Fiscal 2023	\$	1,500,000
25.	Estimated Actuarially Net Direct Required Employer Contributions for Fiscal 2023 (20 + 21 + 22 + 23 - 24)	\$	48,729,828
26.	Projected Payroll for Contributing Members (Fiscal 2023)	\$	77,444,241
27.	Minimum Recommended Net Direct Employer Contribution Rate for Fiscal 2023 (25 ÷ 26, Rounded to nearest 0.10%)		62.9%

EXHIBIT II PRESENT VALUE OF FUTURE BENEFITS

PRESENT VALUE OF FUTURE BENEFITS FOR ACTIVE MEMBERS:

Retirement Benefits		
Survivor Benefits 6,985,051		
Disability Benefits		
Vested Termination Benefits		
Refunds of Contributions		
TOTAL Present Value of Future Benefits for Active Members	\$	708,069,019
PRESENT VALUE OF FUTURE BENEFITS FOR TERMINATED MEMBERS:		
Terminated Vested Members Due Benefits at Retirement \$ 14,788,784		
Terminated Members with Reciprocals		
Due Benefits at Retirement		
Terminated Members Due a Refund		
TOTAL Present Value of Future Benefits for Terminated Members		
TOTAL Tresent value of ruture benefits for Terminated Memoers	\$	15,218,229
PRESENT VALUE OF FUTURE BENEFITS FOR RETIREES:	\$	15,218,229
	\$	15,218,229
PRESENT VALUE OF FUTURE BENEFITS FOR RETIREES:	\$	15,218,229
PRESENT VALUE OF FUTURE BENEFITS FOR RETIREES: Regular Retirees	\$	15,218,229
PRESENT VALUE OF FUTURE BENEFITS FOR RETIREES: Regular Retirees	\$	15,218,229
PRESENT VALUE OF FUTURE BENEFITS FOR RETIREES: Regular Retirees	\$	15,218,229
PRESENT VALUE OF FUTURE BENEFITS FOR RETIREES: Regular Retirees	\$	15,218,229
PRESENT VALUE OF FUTURE BENEFITS FOR RETIREES: Regular Retirees	\$	15,218,229 767,555,168

EXHIBIT III – SCHEDULE A MARKET VALUE OF ASSETS

CURRENT ASSETS:	
Cash in Banks \$ 84,976	
Contributions Receivable	
Accrued interest and dividends	
Other Current Assets	
TOTAL CURRENT ASSETS	\$ 3,092,287
Property Plant & Equipment	\$ 1,174,238
INVESTMENTS:	
Cash Equivalents \$ 31,971,308	
Equities	
Fixed Income	
Alternative Investments 155,891,387	
Collateral for Securities Lending	
TOTAL INVESTMENTS	\$ 1,211,135,257
DEFERRED OUTFLOWS OF RESOURCES	\$ 561,341
TOTAL ASSETS	\$ 1,215,963,123
CURRENT LIABILITIES:	
Accounts Payable	
Unearned Revenue	
Securities Lending Obligations 53,403,797	
Other Post-Employment Benefits	
Net Pension Liability	
TOTAL CURRENT LIABILITIES	\$ 56,515,298
DEFERRED INFLOWS OF RESOURCES	\$ 110,238

\$ 56,625,536

TOTAL LIABILITIES.....

EXHIBIT III – SCHEDULE B ACTUARIAL VALUE OF ASSETS

Excess (Shortfall) of invested income for current and previous 4 years: †	
Fiscal year 2021 Fiscal year 2020 Fiscal year 2019 Fiscal year 2018 Fiscal year 2017	\$ 221,767,002 (51,903,672) (24,865,406) 18,881,595 51,566,684
Total for five years	\$ 215,446,203
Deferral of excess (shortfall) of invested income:	
Fiscal year 2021 (80%) Fiscal year 2020 (60%) Fiscal year 2019 (40%) Fiscal year 2018 (20%) Fiscal year 2017 (0%)	\$ 177,413,602 (31,142,203) (9,946,162) 3,776,319
Total deferred for year	\$ 140,101,556
Market value of plan net assets, end of year	\$ 1,159,337,587
Preliminary actuarial value of plan assets, end of year	\$ 1,019,236,031
Actuarial value of assets corridor	
85% of market value, end of year	\$ 985,436,949
115% of market value, end of year	\$ 1,333,238,225
Final actuarial value of plan net assets, end of year	\$ 1,019,236,031

[†] Excess (shortfall) of actual investment income versus expected investment income is calculated based on assets and income adjusted to exclude the money market DROP accounts.

EXHIBIT IV PRESENT VALUE OF FUTURE CONTRIBUTIONS

Employee Contributions to the Annuity Savings Fund	\$	52,608,825
Employer Normal Contributions to the Pension Accumulation Fund		123,846,836
Employer Amortization Payments to the Pension Accumulation Fund		295,150,724
TOTAL PRESENT VALUE OF FUTURE CONTRIBUTIONS	\$	471,606,385
EXHIBIT V – SCHEDULE A		
ACTUARIAL ACCRUED LIABILITIES		
LIABILITY FOR ACTIVE MEMBERS		
Accrued Liability for Retirement Benefits \$ 510,331,851		
Accrued Liability for Survivor Benefits		
Accrued Liability for Disability Benefits		
Accrued Liability for Vested Termination Benefits		
Accrued Liability for Refunds of Contributions		
	Ф	521 (12 250
TOTAL Actuarial Accrued Liability for Active Members	\$	531,613,358
LIABILITY FOR TERMINATED MEMBERS	\$	15,218,229
LIABILITY FOR RETIREES AND SURVIVORS	\$	767,555,168
TOTAL ACTUARIAL ACCRUED LIABILITY	\$	1,314,386,755
ACTUADIAL WALLE OF AGGETG	Ф	1 010 026 021
ACTUARIAL VALUE OF ASSETS	\$	1,019,236,031
UNFUNDED ACTUARIAL ACCRUED LIABILITY	\$	295,150,724
UNITURDED ACTUARIAL ACCRUED LIADILITT	φ	493,130,724

EXHIBIT V – SCHEDULE B CHANGE IN UNFUNDED ACTUARIAL ACCRUED LIABILITY

PRIOR YEAR UNFUNDED ACCRUED LIABILITY	\$ 324,114,494
Interest on Unfunded Accrued Liability \$ 22,688,015	
Liability Assumption Loss	
Liability Experience Loss	
Gains Allocated to Experience Account	
TOTAL Additions to UAL	\$ 40,424,425
Asset Experience Gain	
Contribution Excess with Accrued Interest	
Interest Adjusted Amortization Payments	
TOTAL Reductions to UAL	\$ 69,388,195
NET Change in Unfunded Accrued Liability	\$ (28,963,770)
CURRENT YEAR UNFUNDED ACCRUED LIABILITY	\$ 295,150,724

EXHIBIT V - SCHEDULE C AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY June 30, 2021

		duile 50,	2021			
FISCAL	DESCRIPTION	AMORT.	INITIAL	YEARS	REMAINING	AMORT.
YEAR	DESCRIPTION	PERIOD	BALANCE	REMAINING	BALANCE	PAYMENTS
1994	Experience Gain	20	(1,381,660)	8	(783,151)	(122,392)
1996	Experience Gain	20	(9,762,782)	8	(5,533,715)	(864,819)
1998	Experience Gain	20	(2,444,207)	8	(1,385,419)	(216,516)
2000	Experience Gain	20	(21,262,939)	8	(12,052,206)	(1,883,541)
2001	Experience Loss†	20	14,218,540	8	0	1,245,391
2002	Experience Loss†	20	36,882,500	8	20,905,522	3,267,173
2003	Liability Assumption Loss	24	14,644,647	12	10,191,351	1,196,535
2003	Experience Loss	20	60,111,382	8	34,072,183	5,324,863
2004	Experience Loss	20	16,579,889	8	9,397,772	1,468,701
2005	Experience Loss	20	14,086,441	8	7,984,443	1,247,823
2006	Experience Gain	20	(11,718,142)	8	(6,642,046)	(1,038,031)
2007	Experience Loss	20	13,788,779	8	7,815,719	1,221,455
2008	Liability Assumption Loss	29	9,487,421	17	7,575,205	722,961
2008	Experience Loss	20	29,944,312	8	16,972,958	2,652,565
2009	Liability Assumption Loss	30	1,032,469	18	840,237	77,820
2009	Experience Loss	30	74,940,622	18	60,987,475	5,648,492
2010	Experience Loss	30	26,844,661	19	22,423,728	2,020,977
2011	Experience Loss	30	28,079,134	20	24,017,344	2,111,515
2012	Experience Loss	30	7,358,996	21	6,431,790	552,782
2013	Change in Method Gain	30	(12,256,998)	22	(10,925,715)	(919,735)
2013	Liability Assumption Loss	30	26,210,291	22	23,363,477	1,966,754
2013	Experience Gain	30	(25,552,458)	22	(22,777,093)	(1,917,392)
2014	Experience Gain	30	(1,327,488)	23	(1,205,871)	(99,599)
2015	Experience Loss	30	22,863,386	24	21,131,997	1,715,193
2016	Experience Loss	30	46,924,931	25	44,068,157	3,519,864
2017	Change in Model	30	(5,046,395)	26	(4,809,200)	(378,491)
2017	Liability Assumption Loss	30	5,260,562	26	5,013,300	394,553
2017	Asset Assumption Gain	30	(5,260,562)	26	(5,013,300)	(394,553)
2017	Liability Experience Loss	30	6,707,700	26	6,392,420	503,092
2017	Asset Experience Gain ‡	30	(8,661,909)	26	(8,254,772)	(649,662)
2017	Gains Allocated to Experience Account	10	970,763	6	658,805	129,033
2017	Priority Allocation	30	6,056,800	26	5,772,113	454,273
2017	Contribution Gain	5	(9,572,640)	1	(2,181,941)	(2,181,941)
2018	Asset Experience Gain ‡	20	(9,489,939)	17	(8,745,732)	(834,674)
2018	Gains Allocated to Experience Account	10	1,428,096	7	1,095,797	189,784
2018	Priority Allocation	20	6,633,747	17	6,113,523	583,461
2018	Liability Experience Gain	20	(4,765,728)	17	(4,391,994)	(419,162)
2018	Contribution Gain	5	(9,859,043)	2	(4,347,433)	(2,246,716)
2018	Liability Assumption Loss	20	31,066,762	17	28,630,481	2,732,431
2019	Asset Experience Loss	20	6,255,910	18	5,940,028	550,149
2019	Liability Experience Loss	20	14,797,428	18	14,050,256	1,301,296
2019	Contribution Gain	5	(175,367)	3	(112,244)	(39,955)
2019	Liability Assumption Loss	20	46,005	18	43,683	4,046
2020	Asset Experience Loss	20	12,800,034	19	12,487,804	1,125,485
2020	Liability Experience Loss	20	5,965,187	19	5,819,679	524,509
2020	Contribution Gain	5	(460,495)	4	(380,419)	(104,894)
2021	Gross Asset Experience Gain	20	(40,388,905)	20	(40,388,905)	(3,550,841)
2021	Gains Allocated to Experience Account	10	7,601,224	10	7,601,224	1,009,578
2021	Priority Allocation	20	7,969,006	20	7,969,006	700,605
2021	Liability Experience Loss	20	3,077,350	20	3,077,350	270,549
2021	Contribution Gain	5	(820,781)	5	(820,781)	(186,922)
2021	Liability Assumption Loss	20	7,057,836	20	7,057,836	620,498
	•		. ,			,
TOTA	AL Unfunded Actuarial Accrued Liability	ty		\$	295,150,724	
TOT	I Figure 2002 Amortization Payments	ot Doginning	of Voor			\$ 20,004,270

TOTAL Fiscal 2022 Amortization Payments at Beginning of Year

TOTAL Fiscal 2022 Amortization Payments Adjusted to Mid-Year

\$ 29,004,370 \$ 29,995,343

EXHIBIT V – SCHEDULE D AMORTIZATION BASE ADJUSTMENTS

1995 Experience Loss:

Outstanding Balance of 1995 Experience Loss (as of June 30, 2016)	\$ 15,968,624
Accumulated Priority Allocations as of June 30, 2016	\$ (6,056,900)
Amortization Payment on the 1995 Experience Loss (July 1, 2016)	\$ (1,785,663)
Interest on the Net Amortization Base to June 30, 2017	\$ 568,824
Net Balance of the 1995 Experience Loss as of June 30, 2017	\$ 8,694,885
Priority Allocation Applied to 1995 Liability Experience Loss - June 30, 2017	\$ (6,056,800)
Outstanding Balance of 1995 Experience Loss (as of June 30, 2017)	\$ 2,638,085
Amortization Payment on the 1995 Experience Loss (July 1, 2017)	\$ (1,785,663)
Interest on the Net Amortization Base to June 30, 2018	\$ 59,670
Net Balance of the 1995 Experience Loss as of June 30, 2018	\$ 912,092
Priority Allocation Applied to 1995 Experience Loss - June 30, 2018	\$ (912,092)
Outstanding Balance of the 1995 Experience Loss (as of June 30, 2018)	\$ 0
1997 Experience Loss:	
Outstanding Balance of 1997 Experience Loss (as of June 30, 2017)	\$ 3,324,613
Amortization Payment on the 1997 Experience Loss (July 1, 2017)	\$ (391,192)
Interest on the Net Amortization Base to June 30, 2018	\$ 205,339
Net Balance of the 1997 Experience Loss as of June 30, 2018	\$ 3,138,760
Priority Allocation Applied to 1997 Experience Loss - June 30, 2018	\$ (3,138,760)
Outstanding Balance of the 1997 Experience Loss (as of June 30, 2018)	\$ 0
1999 Experience Loss:	
Outstanding Balance of 1999 Experience Loss (as of June 30, 2017)	\$ 9,362,648
Amortization Payment on the 1999 Experience Loss (July 1, 2017)	\$ (1,101,660)
Interest on the Net Amortization Base to June 30, 2018	\$ 578,269
Net Balance of the 1999 Experience Loss as of June 30, 2018	\$ 8,839,257
Priority Allocation Applied to 1999 Experience Loss - June 30, 2018	\$ (2,582,895)
Outstanding Balance of the 1999 Experience Loss (as of June 30, 2018)	\$ 6,256,362
Amortization Payment on the 1999 Experience Loss (July 1, 2018)	\$ (1,101,660)
Amortization Payment on the 1995 Experience Loss (July 1, 2018)	\$ (1,785,663)
Amortization Payment on the 1997 Experience Loss (July 1, 2018)	\$ (391,192)
Interest on the Net Amortization Base to June 30, 2019	\$ 208,449
Net Balance of the 1999 Experience Loss as of June 30, 2019	\$ 3,186,296
Priority Allocation Applied to 1999 Experience Loss - June 30, 2019	\$ 0
Outstanding Balance of the 1999 Experience Loss (as of June 30, 2019)	\$ 3,186,296
Amortization Payment on the 1999 Experience Loss (July 1, 2019)	\$ (1,101,660)
Amortization Payment on the 1995 Experience Loss (July 1, 2019)	\$ (1,785,663)
Portion of Amortization Payment on the 1997 Experience Loss (July 1, 2019)	\$ (298,973)
Interest on the Net Amortization Base to June 30, 2020	\$ 0
Net Balance of the 1999 Experience Loss as of June 30, 2020	\$ 0

EXHIBIT V – SCHEDULE D (CONTINUED) AMORTIZATION BASE ADJUSTMENTS

2001 Experience Loss:

Outstanding Balance of 2001 Experience Loss (as of June 30, 2019)	\$ 9,479,559
Remainder from payment on 1997 Liability Experience Loss (July 1, 2019)	\$ (92,219)
Amortization Payment on the 2001 Liability Experience Loss (July 1, 2019)	\$ (1,261,379)
Interest on the Net Amortization Base to June 30, 2020	\$ 568,817
Net Balance of the 2001 Experience Loss as of June 30, 2020	\$ 8,694,778
Amortization Payment on the 2001 Experience Loss (July 1, 2020)	\$ (1,247,225)
Interest on the Net Amortization Base to June 30, 2021	\$ 521,329
Priority Allocation Portion Applied to 2001 Experience Loss (June 30, 2021)	\$ (7,968,882)
Outstanding Balance of the 2001 Experience Loss (as of June 30, 2021)	\$ 0
2002 Experience Loss:	
Outstanding Balance of 2001 Experience Loss (as of June 30, 2021)	\$ 20,905,646
Priority Allocation Portion Applied to 2001 Experience Loss (June 30, 2021)	\$ (124)
Net Balance of the 2001 Liability Experience Loss as of June 30, 2021	\$ 20,905,522

EXHIBIT VIANALYSIS OF CHANGE IN ASSETS

Actuarial Value of Assets (June 30, 2020)	\$ 930,326,943
INCOME:	
Member Contributions\$ 7,097,723Employer Contributions42,911,660Irregular Contributions3,733,655Motor Vehicle Fees1,423,664Insurance Premium Taxes1,500,000	
Total Contributions	\$ 56,666,702
Net Appreciation of Investments \$ 278,720,474 Interest & Dividends 7,752,995 Miscellaneous Income 38,711 Investment Expense (2,879,231) Net Investment Income TOTAL Income EXPENSES:	\$ 283,632,949 340,299,651
Retirement Benefits\$ 71,581,166Refunds of Contributions88,495Transfers to Other Systems90,081Administrative Expenses953,058	
TOTAL Expenses	\$ 72,712,800
Net Market Value Income for Fiscal 2021 (Income – Expenses)	\$ 267,586,851
Unadjusted Fund Balance as of June 30, 2021 (Fund Balance Previous Year + Net Income)	\$ 1,197,913,794
Income Adjustment for Actuarial Smoothing	\$ (178,677,763)
Actuarial Value of Assets: (June 30, 2021)	\$ 1,019,236,031

EXHIBIT VII EXPERIENCE ACCOUNT

1.	Experience Account Balance – June 30, 2020	\$ 2,195,198
2.	Investment Gain, if any	\$ 40,388,905
3.	Priority Allocation to Reduce Oldest Positive UAL Base	\$ 7,969,006
4.	Residual Investment Gain, if any (2 – 3)	\$ 32,419,899
5.	Investment Gain to Allocate to the Experience Account (50% \times 4)	\$ 16,209,950
6.	Credit for Investment Earnings based on AVA rate of return, if positive	\$ 249,814
7.	Total Preliminary Credits to be Allocated to Experience Account (5 + 6)	\$ 16,459,764
8.	Debit for Investment Losses based on AVA rate of return, if negative	\$ 0
9.	Present Value of One Time Payments Paid August 30, 2021	\$ (549,126)
10.	Total Preliminary Debits to be Allocated to Experience Account (8 + 9)	\$ (549,126)
11.	Total Net Credit/Debit to be Allocated to Experience Account (7 + 10)	\$ 15,910,638
12.	Limit to the Experience Account Balance – June 30, 2021	\$ 9,497,110
13.	Experience Account Balance – June 30, 2021 (Lesser of 1+11 &12 - at least 0)	\$ 9,497,110

EXHIBIT VIII CENSUS DATA

		Terminated with Funds		
	Active	on Deposit	Retired	Total
Number of members as of June 30, 2020	1,029	217	1,268	2,514
Additions to Census				
Initial membership				
Omitted in error last year	1			1
Death of another member			20	20
Adjustment for multiple records				
Change in Status during Year				
Actives terminating service	(10)	10		
Actives who retired	(63)		63	
Actives entering DROP				
Term. members rehired				
Term. members who retire		(5)	5	
Retirees who are rehired				
Refunded who are rehired				
DROP participants retiring				
DROP returned to work				
Omitted in error last year				
Eliminated from Census				
Refund of contributions	(4)	(2)		(6)
Deaths	(2)		(61)	(63)
Included in error last year				
Adjustment for multiple records				
Number of members as of June 30, 2021	951	220	1,295	2,466

ACTIVES CENSUS BY AGE:

Age	Number Male	Number Female	Total Number	Average Salary	Total Salary
21 - 25	12	0	12	51,212	614,549
26 - 30	75	3	78	53,502	4,173,138
31 - 35	106	4	110	56,007	6,160,791
36 - 40	147	9	156	66,210	10,328,759
41 - 45	178	9	187	79,303	14,829,646
46 - 50	206	11	217	95 , 707	20,768,381
51 - 55	144	4	148	100,099	14,814,610
56 - 60	37	1	38	98,460	3,741,470
61 - 65	5	0	5	95,408	477,042
TOTAL	910	41	951	79,820	75,908,386

THE ACTIVE CENSUS INCLUDES 666 ACTIVES WITH VESTED BENEFITS, INCLUDING 0 ACTIVE FORMER DROP PARTICIPANTS.

TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
31 - 35	1	0	1	27,948	27,948
36 - 40	1	0	1	20,832	20,832
41 - 45	10	0	10	31,503	315,031
46 - 50	19	2	21	37,316	783,637
51 - 55	4	0	4	42,290	169,158
TOTAL	35	2	37	35,584	1,316,606

TERMINATED MEMBERS DUE A REFUND OF CONTRIBUTIONS:

Contributions		Ranging Tota		
From		To	Numbe:	r Contributions
0	_	99	7 4	3,351
100	_	499	66	17,000
500	_	999	13	8,511
1000	_	1999	4	5,229
2000	_	4999	8	23,695
5000	_	9999	5	36,823
10000	_	19999	3	43,056
20000	_	99999	10	291,780
	TO	TAL	183	429,445

REGULAR RETIREES:

Age	Number	Number	Total	Average	Total
	Male	Female	Number	Benefit	Benefit
46 - 50	25	1	26	86,326	2,244,482
51 - 55	139	6	145	86,051	12,477,369
56 - 60	117	7	124	79,853	9,901,805
61 - 65	119	2	121	68,282	8,262,168
66 - 70	177	2	179	53,635	9,600,582
71 - 75 76 - 80 81 - 85 86 - 90 91 - 99	177 185 106 48 23	1 1 1 0	179 186 107 49 23	39,456 32,348 28,672 23,052 18,900	7,338,878 3,461,259 1,404,905 530,204 132,302
TOTAL	946	21	967	57,243	55,353,954

DISABILITY RETIREES:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
41 - 45	3	1	4	30,705	122,820
46 - 50	7	0	7	35,321	247,248
51 - 55	3	1	4	39,162	156,646
56 - 60	7	0	7	32,730	229,111
61 - 65	3	1	4	23,775	95,099
66 - 70	6	1	7	24,851	173,958
71 - 75	11	1	12	23,297	279,568
76 - 80	9	1	10	25,109	251.088
81 - 85	2	0	2	32,973	65,946
86 - 90	1	0	1	40,827	40,827
TOTAL	52	6	58	28.661	1.662.311

SURVIVORS:

Age	Number Male	Number Female	Total Number	Average Benefit	Total Benefit
0 - 25 31 - 35 36 - 40 41 - 45 46 - 50 51 - 55 56 - 60 61 - 65 66 - 70 71 - 75 76 - 80 81 - 85 86 - 90	3 0 0 0 2 0 0 0 0 1 0 2	2 2 1 5 5 6 23 25 41 49 52 31	5 2 1 7 5 6 23 25 42 49 54 31	55,558 39,659 26,182 69,434 58,954 42,996 59,149 43,882 27,723 26,960 24,071 23,752 20,649	277,791 79,318 26,182 69,434 412,680 214,981 354,891 1,009,282 693,065 1,132,309 1,179,476 1,282,607 640,111
91 - 99	0	19	19	17,245	327,659
TOTAL	8	262	270	28,518	7,699,786

ACTIVE MEMBERS:

Completed Years of Service

ı	02884760870	Н		ΙΦ [0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0
Total	1	9 5		Average Salary	51,21,51,50,000,000,000,000,000,000,000,000,	79,82
30&Over	8 1	10		30&0ver	116,592	119,958
25-29	1 1 1 1 2 2 2 2 2 3 3 4 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	126		25-29	97,478 113,913 108,860 103,873 94,748	109,556
20-24	30 106 43 5	186		20-24	91,280 98,873 103,648 98,466	98,777
15-19	33 33 21 21 6	198	ervice	15-19	65,372 73,811 86,273 86,665 82,648 86,238 83,173	83,788
10-14	0 % 4 H 4 0 H R % W	171	ars of Se	10-14	59,890 68,936 70,774 71,399 73,106	68,536
5 - 9	L 4 2 2 2 5 6 9 2 6 8 4 2 6 7 8 9 8 9 8 9 8 9 8 9 8 9 9 9 9 9 9 9 9	121	Completed Yea	5	56,089 56,201 56,751 59,903 57,878 56,971	56,970
4	1 2 6 7 1 3	5 8	Comp	4	54,840 554,981 553,010 553,010	54,855
m	80 4.107.701	72	 	m	553, 955 553, 955 552, 827 553, 1255 53, 528	52,981
2		0	ACTIVE MEMBERS	2		0
Н	8 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		OF	 H	50,356 50,726 50,709 50,682 50,473	50,627
0		0	JAL SALAR	0		0
Attained Ages	21 - 25 26 - 30 31 - 35 36 - 40 41 - 45 46 - 50 51 - 55 56 - 60 61 - 65	Totals	AVERAGE ANNUAL SALARY	Attained Ages	0 - 20 26 - 25 26 - 30 31 - 35 36 - 40 41 - 45 46 - 50 51 - 55 56 - 60 61 - 65 66 & OVer	Average

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TERMINATED MEMBERS DUE A DEFERRED RETIREMENT BENEFIT:

Years Until Retirement Eligibility

Total	0 1 1 1 0 0 1 4 0 0 0 0 0 0 0 0 0 0 0 0	37		Average Benefit	27,948 20,832 31,503 37,316 42,290
30 &Over		0		30&Over	
25-29		0		25-29	
20-24		0	ity	20-24	
15-19	1	Н	NEFIT: . Eligibility	15-19	27,948
10-14	П	Н	A DEFERRED RETIREMENT BENEFIT: Years Until Retirement Eligi	10-14	20,832
5 - 9	10	10	RRED RETI s Until R	5 - 3	31,503
4	α	2	DUE A DEFERR Years	4	27,432
m	ო	т	MEMBERS D	m	21,964
5	ω	9	TERMINATED	2	46,442
H	Ŋ	Ŋ	OF	 	33,293
0	r2 4	თ	AL BENEF:	0	43,554
Attained Ages	31 - 30 31 - 35 36 - 40 41 - 45 46 - 50 51 - 55 56 & Over	Totals	AVERAGE ANNUAL BENEFITS	Attained Ages	0 - 30 31 - 35 36 - 40 41 - 45 46 - 50 51 - 55 6 & Over

35,584

0

27,948

20,832

31,503

27,432

21,964

46,442

33,293

42,992

Average

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SERVICE RETIREES:

Completed Years Since Retirement

	Total	26 145 124 121 179 107 107 7	967	Average Benefit	86,326 86,326 79,853 53,635 39,446 23,642 23,052
	30 &Over	1 4 4 5 8 8 8 8 0 7 7	186	30&Over	12,732 18,640 24,982 24,999 19,747
	25-29	1 3 4 1 8 6 9 3 6 8 6 8	80	25-29	27,78 28,642 31,088 42,231 45,085
	20-24	13 32 5	7.1	20-24	33,085 36,210 40,255 40,311
	15-19	5 5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		Ketirement	61,340 54,729 56,889 63,093
	10-14	11 60 16 2	i	ars Since	70,015 59,828 70,021 75,777 51,310
	5 - 9	1 0 0 1 1 0 0 1 1 0 1 0 1 1 0 1 1 1 1 1	ഗ	Completed Year	65,238 54,158 64,741 64,314 65,067
4	4	1 4 2 2	••	Comp	56,985 62,081 81,490 95,531
	ო	1 2 2 8 8 3	45 VICE RETIREES	m	95,061 76,965 100,752 107,476
	5	2 4 W 2 0 C V	87 LE TO SER	5	91,039 88,875 87,825 115,407 89,225
	H	8 1 1 7 8 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8	52 ITS PAYABLE	1	94,306 86,072 96,367 99,253
	0	1 3 1 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	68 UAL BENEF	0	85,615 98,183 100,167 85,995
	Attained Ages	0 - 50 51 - 55 56 - 60 61 - 65 66 - 70 71 - 75 76 - 80 81 - 85 86 - 90	Totals 68 AVERAGE ANNUAL BENEFIT	Attained Ages	0 - 50 51 - 55 56 - 60 61 - 65 66 - 70 71 - 75 76 - 80 81 - 85 81 - 85 81 - 85

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DISABILITY RETIREES:

Completed Years Since Retirement

Total	047474730010	28		Average Benefit	33 33 33 33 33 33 33 33 33 33 33 33 33	28.661
	2 4 6 8 2 1	9			1 3 3 5 5 7	0
30&Over		7		30&Over	19,67 24,01 24,85 32,97 40,82	25,10
25-29	ო ო ⊣	7		25-29	25,965 22,593 25,435	24,444
20-24	1 8 1 1	9	٠٠	20-24	38,755 31,889 15,664 27,023	29,518
15-19	7 11	м	Retirement	15-19	23,725	29,181
10-14	7 0 11	Ŋ	rs Since	10-14	27,867 41,380 42,997	39,324
5 - 9	⊘ το L 1	∞	ES: Completed Year	5 - 9	24,495 37,543 35,131	33,980
4		0	RETIREES: Comp	4		0
m	₽	П	ABILITY	() ()	31,665	31,665
~	0	7	TO DIS	7	36,916	36,916
H		0	TS PAYABLE	Н		0
0		0	AL BENEFIT	0		0
Attained Ages	0 - 40 41 - 45 46 - 50 51 - 55 56 - 60 61 - 65 66 - 70 71 - 75 76 - 80 81 - 85 86 - 90	Totals	AVERAGE ANNUAL	Attained Ages	0 - 40 41 - 45 46 - 50 51 - 55 56 - 60 61 - 65 66 - 70 71 - 75 76 - 80 81 - 85 86 - 90 91 & Over	Average

SURVIVING BENEFICIARIES OF FORMER MEMBERS:

TIREMENT
NCE RE
YEARS SI
LETED Y
COMP

TOTAL	0044001 0001110000000000000000000000000	270
30 &OVER	4 7 4 7 8 4 1 4 9 4 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	198
25-29	N 20 20 11 11 11 11 11 11 11 11 11 11 11 11 11	19
20-24	н ннемерон	18
15-19	H 60 H	7
10-14	н н ннннон	б
- R	H H 4	7
4	н	Н
m	2 1	м
8	α	N
H	п п п	4
0	н н	N
ATTAINED AGES	21 - 25 26 - 30 31 - 35 36 - 40 41 - 45 46 - 50 51 - 55 56 - 60 61 - 65 61 - 65 71 - 75 76 - 80 81 - 85 86 - 90 81 - 85	TOTALS

AVERAGE ANNUAL BENEFITS PAYABLE TO SURVIVORS OF FORMER MEMBERS:

COMPLETED YEARS SINCE RETIREMENT

AVERAGE BENEFIT	26, 230 62, 230 26, 230 26, 185 26, 185 58, 185 58, 185 59, 185 70, 995 70, 995 70, 185 70, 18	28,518
30 &OVER	20,692 21,427 19,675 21,205 21,641 22,956 20,649	21,162
25-29	32,178 28,815 28,142 30,792 34,919 35,676	31,874
20-24	29,703 24,286 28,737 24,286 37,766 36,421 34,878 40,494	35,579
15-19	52,238 66,962 37,510 68,929	56,725
10-14	53,088 47,1,421 862,986 80,832 80,849	67,622
5	57,401 69,434 60,666 70,978	67,344
4	72,496	72,496
m	54,759	56,051
0	90,341	90,341
	26,230 26,230 26,230	68,800
0	26,182 63,972	45,077
ATTAINED AGES	21 - 25 26 - 30 31 - 35 36 - 40 41 - 45 46 - 50 51 - 55 56 - 60 61 - 65 61 - 65 71 - 75 71 - 75 81 - 85 81 - 85	AVERAGE

EXHIBIT IX YEAR-TO-YEAR COMPARISON

	Fiscal 2021	Fiscal 2020	Fiscal 2019	Fiscal 2018
Number of Active Members Number of Retirees & Survivors Number of Terminated Due Deferred Benefits Number Terminated Due Refunds	951 1,295 37 183	1,029 1,268 38 179	1,033 1,239 44 170	1,129 1,174 44 169
Active Lives Payroll	\$ 75,908,386	\$ 80,281,571	\$ 79,742,159	\$ 85,349,504
Retiree Benefits in Payment	\$ 64,716,051	\$ 59,283,228	\$ 54,960,399	\$ 47,329,769
Market Value of Assets (Includes Side Funds)	\$ 1,159,337,587	\$ 891,750,736	\$ 893,350,033	\$ 866,309,038
Ratio of Actuarial Value of Assets to Actuarial Accrued Liability	77.54%	74.16%	74.19%	74.34%
Actuarial Accrued Liability (EAN)	\$ 1,314,386,755	\$ 1,254,441,437	\$ 1,203,479,513	\$ 1,141,255,546
Actuarial Value of Assets †	\$ 1,019,236,031	\$ 930,326,943	\$ 892,857,106	\$ 848,456,307
UAL (Funding Excess)	\$ 295,150,724	\$ 324,114,494	\$ 310,622,407	\$ 292,799,239
Experience Account	\$ 9,497,110	\$ 2,195,198	\$ 2,079,574	\$ 1,957,062
	Fiscal 2022	Fiscal 2021	Fiscal 2020	Fiscal 2019
Employee Contribution Rate For Employees Hired Before July 1, 2010	8.50%	8.50%	8.50%	8.50%
Employee Contribution Rate For Employees Hired On Or After July 1, 2010	9.50%	9.50%	9.50%	9.50%
Actuarially Required Employer Contribution as a Percentage of Projected Payroll	60.50%	52.40%	46.90%	44.00%
Actual Employer Contribution as a Percentage of Projected Payroll	58.80%	52.40%	49.10%	43.10%

[†] Prior to 2017, AVA was net of Experience Account

Fiscal 2017	Fiscal 2016	Fiscal 2015	Fiscal 2014	Fiscal 2013	Fiscal 2012
1,071 1,155 43 139	1,041 1,220 41 N/A	991 1,224 41 N/A	956 1,229 34 N/A	933 1,234 37 N/A	979 1,222 34 N/A
\$ 84,059,551	\$ 75,969,718	\$ 64,632,596	\$ 54,331,845	\$ 51,261,574	\$ 57,828,488
\$ 43,286,212	\$ 41,866,788	\$ 41,737,344	\$ 40,440,528	\$ 39,770,484	\$ 38,290,020
\$ 782,572,348	\$ 670,423,169	\$ 659,126,281	\$ 622,793,610	\$ 521,130,665	\$ 451,657,917
72.91%	69.45%	68.85%	65.53%	59.44%	54.76%
\$ 1,062,446,959	\$ 1,006,626,437	\$ 910,845,343	\$ 837,940,546	\$ 797,839,506	\$ 759,652,635
\$ 774,664,801	\$ 699,121,700	\$ 627,083,218	\$ 549,075,148	\$ 474,235,310	\$ 415,965,659
\$ 287,782,158	\$ 307,504,737	\$ 283,762,125	\$ 288,865,398	\$ 323,604,196	\$ 343,686,976
\$ 5,260,562	\$ 3,963,595	\$ 12,416,791	\$ 12,069,552	\$ 18,164,123	\$ 0
Fiscal 2018	Fiscal 2017	Fiscal 2016	Fiscal 2015	Fiscal 2014	Fiscal 2013
8.50%	8.50%	8.50%	8.50%	8.50%	8.50%
9.50%	9.50%	9.50%	9.50%	9.50%	9.50%
48.10%	54.00%	66.70%	76.20%	70.60%	59.70%
47.40%	51.20%	60.80%	75.30%	70.00%	68.60%

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SUMMARY OF PRINCIPAL PLAN PROVISIONS

The Louisiana State Police Retirement System (LSPRS) was established by Act 293 of the 1938 Legislative Session, for the purpose of providing retirement allowances and other benefits as described under R.S. 11:1301 – 11:1345. The following summary of plan provisions covers many of the most important plan provisions covering LSPRS but is not a description of every plan provision and should only be used for general informational purposes. This summary does not constitute a guarantee of benefits. The provisions contained within this section are as of June 30, 2021.

MEMBERSHIP:

Sworn, commissioned law enforcement officers of the Division of State Police of the Department of Public Safety who have completed the State Police Training Academy Course of Instruction on the Effective Date of the Fund and those subsequently employed who did not withdraw employee contributions. Also, any state police employee who is a sworn, commissioned law enforcement officer of the office of state police, who serves in an active capacity in an unclassified position in the Department of Public Safety and Corrections, and who has previously contributed to this system, shall be eligible to continue contributing and accruing service credit in this system. In addition, the secretary and deputy secretary of the Department of Public Safety, provided they are sworn, commissioned State Police officers who have graduated from the State Police Academy.

CONTRIBUTION RATES:

Employees whose first employment making them eligible for membership in one of Louisiana's state retirement systems occurred on or before December 31, 2010 contribute 8.50% of salary and employees whose first employment making them eligible for membership in one of Louisiana's state retirement systems occurred on or after January 1, 2011 contribute 9.50% of salary. Employers contribute an actuarially determined "normal contribution" rate plus "accrued liability contribution" rate.

CONTRIBUTION REFUNDS:

Upon withdrawal from service, members not entitled to a retirement allowance may receive a refund of accumulated contributions.

FINAL AVERAGE COMPENSATION:

For members employed prior to September 8, 1978, the average final salary is the average salary including any additional pay or salary provided by the legislature over and above that set by the Civil Service Commission, received for the year ending on the last day of the month immediately preceding the date of retirement or date of death or for any one-year period, whichever is the greatest.

For members employed on or after September 8, 1978, and on or before December 31, 2010, the average final salary is the average salary including any additional pay or salary provided by the legislature over and above that set by the Civil Service Commission, received for the thirty-six month period ending on the last day of the month immediately preceding the date of retirement or date of death or for any thirty-six consecutive months, whichever is the greatest. The earnings to be considered exclude overtime, expenses, and clothing allowances. The earnings to be considered for the thirteenth through the twenty-fourth month shall not exceed one hundred twenty-five percent of the earnings of the first through the

twelfth month. The earnings to be considered for the final twelve months shall not exceed one hundred twenty-five percent of the earnings of the thirteenth through the twenty-fourth month.

For members employed on or after January 1, 2011 the average final salary is the average annual earned compensation of a member for the sixty highest months of successive employment, or for the highest sixty successive joined months of employment where interruption of service occurred; The earnings to be considered for the thirteenth through the twenty-fourth month shall not exceed one hundred fifteen percent of the earnings of the first through the twelfth month. The earnings to be considered for the twenty-fifth through the thirty-sixth month shall not exceed one hundred fifteen percent of the earnings of the through the forty-eighth month shall not exceed one hundred fifteen percent of the earnings of the twenty-fifth through the thirty-sixth month. The earnings for the final twelve months shall not exceed one hundred fifteen percent of the earnings of the thirty-seventh through the forty-eighth month.

VESTED WITHDRAWAL BENEFITS:

Members with sufficient service credit who terminate employment prior to reaching retirement eligibility age may elect to leave accumulated contributions on deposit and receive a retirement allowance based on the creditable service and accrual rate for their period of membership upon reaching their retirement eligibility age.

For members whose first employment making them eligible for membership in one of Louisiana's state retirement systems occurred on or before December 31, 2010, who have ten or more years of creditable service, may elect to leave accumulated contributions on deposit and after withdrawal from service receive a retirement allowance based on the creditable service and accrual rate for their period of membership upon reaching age fifty.

For members whose first employment making them eligible for membership in one of Louisiana's state retirement systems occurred on or after January 1, 2011, who have twelve or more years of creditable service, may elect to leave accumulated contributions on deposit and after withdrawal from service receive a retirement allowance based on the creditable service and accrual rate for their period of membership upon reaching age fifty-five.

NORMAL RETIREMENT BENEFITS:

Any member of the system whose initial date of employment was prior to September 8, 1978, regardless of age, who has credit for at least twenty years of service shall be paid a monthly benefit equal to the sum of three and one-third percent multiplied by the member's monthly average salary, and further multiplied by the number of years of service credited to the member's account, but the total annual benefit shall not exceed one hundred percent of the member's final average annual salary.

Any member of the system, whose first employment making him eligible for membership in one of the state systems occurred on or before December 31, 2010, and who has attained age fifty and who has credit for at least ten years of service shall be paid a monthly benefit equal to the sum of three and one-third percent multiplied by the member's monthly average salary, and further multiplied by the number of years of service credited to the member's account, but the total annual benefit shall not exceed one hundred percent of the member's final average annual salary.

Any member of the system whose initial date of employment occurred on or after September 8, 1978, and whose first employment making him eligible for membership in one of the state systems occurred

on or before December 31, 2010, who has credit for at least twenty-five years of service, regardless of age, shall be paid a monthly benefit equal to the sum of three and one-third percent multiplied by the member's monthly average salary, and further multiplied by the number of years of service credited to the member's account, but the total annual benefit shall not exceed one hundred percent of the member's final average annual salary.

Any member of the system whose first employment making him eligible for membership in one of the state systems occurred on or after January 1, 2011, shall become a member of the New State Police Retirement Plan of the system as a condition of employment.

Any member of the New State Police Retirement Plan shall be eligible for retirement if he has:

- (1) Twenty-five years or more of service, at any age.
- (2) Twelve years or more of service, at age fifty-five or thereafter.
- (3) Twenty years of service credit at any age, exclusive of military service and unused annual and sick leave, but any person retiring under this Paragraph shall have his benefit, inclusive of military service credit and allowable unused annual and sick leave, actuarially reduced from the earliest age that he would normally become eligible for a regular retirement if he had continued in service to that age. Members retiring under the twenty year at any age rule may not participate in Back-DROP or the Initial Benefit Option.

INITIAL BENEFIT OPTION: In lieu of receiving a regular retirement benefit according to the relevant benefit computation rules, a member who does not retire under the Back-DROP may elect to receive a reduced retirement benefit plus an initial lump sum payment of up to thirty-six times the member's maximum monthly retirement benefit. The reduced retirement benefit plus initial lump sum payment will be determined to be actuarially equivalent to the member's regular retirement benefit computed based on the relevant benefit computation rules.

BACK-DEFERRED RETIREMENT OPTION PLAN (BACK-DROP):

In lieu of receiving a normal retirement benefit, a member (1) who has accrued more service credit than the minimum required for eligibility for a normal retirement benefit and (2) who has attained an age that is greater than the minimum required for eligibility for a normal retirement benefit, if applicable, may elect to retire and have his benefits structured, calculated, and paid as provided in the Back-Deferred Retirement Option Program. At the time of retirement, a member who elects to receive a Back-DROP benefit shall select a period that shall not exceed the lesser of thirty-six months or the number of months of creditable service accrued after the member first attained eligibility. The period shall be comprised of the most recent calendar days corresponding to the member's employment for which service credit accrued. For purposes of Back-DROP, creditable service will be reduced by the Back-DROP period and shall not include reciprocal service credit. The sum of the Back-DROP period and the accrued service credit used to calculate the member's monthly benefit shall not exceed thirty years. Final average compensation shall be calculated by excluding all earnings during Back-DROP. Employee contributions received by the retirement system during the Back-DROP period shall, at the member's election, be refunded to the member without interest or deposited directly into the member's Back-DROP account. Employer contributions and any interest that has accrued on employer and employee contributions received during the period shall be retained by the system and shall not be refunded to the member or to the employer. The member's maximum monthly retirement benefit payable shall be equal to the Back-DROP monthly benefit. In addition to the monthly benefit, the member shall be paid a lump-sum benefit equal to the Back-DROP maximum monthly retirement benefit multiplied by the number of months

selected as the Back-DROP period. The Back-DROP lump sum shall, at the member's election, be distributed to the member or transferred to an individual account for self-directed investments. Such account shall be credited with interest at the actual rate of return earned on such account balance investments. Permanent benefit increases shall not be payable on the member's Back-DROP lump sum.

ACCUMULATION OF SICK AND ANNUAL LEAVE:

A member may convert unused sick and annual leave to retirement credit on the basis of one work day for each eight hours of unused leave. Such converted leave shall not be used to determine eligibility for retirement. A member who has sick and annual leave that if converted to retirement credit would exceed one hundred percent of the member's average compensation may receive a lump sum payment equal to the additional leave's actuarial value.

DISABILITY BENEFITS:

The board of trustees shall award disability benefits to any sworn, commissioned law enforcement officer of the office of state police who is eligible and who has been officially certified as having a disability by the State Medical Disability Board.

Any member whose first employment making him eligible for membership in one of the state systems occurred on or before December 31, 2010, who applies for retirement due to a total and permanent disability caused solely as the result of injuries sustained in the performance of his official duties shall receive a disability benefit equal to fifty percent of his average salary, plus one and one-half percent of his average salary for each year of service credit in excess of ten years. Such benefit shall not exceed one hundred percent of the member's average salary.

Any member whose first employment making him eligible for membership in one of the state systems occurred on or before December 31, 2010, who applies for retirement due to a total and permanent disability caused not as a result of injuries sustained in the performance of his official duties with at least five years of service credit shall receive a disability benefit equal to fifty percent of his average salary plus one and one-half percent for each year of service credit in excess of ten years. Such benefit shall not exceed one hundred percent of the member's average salary.

Any member whose first employment making him eligible for membership in one of the state systems occurred on or before December 31, 2010, who applies for retirement due to a total and permanent disability caused solely as the result of injuries sustained in the performance of official duties including loss of limb, loss of organ, total loss of sight or hearing, paralysis, or permanent damage to the brain or spinal cord, shall receive a disability benefit equal to one hundred percent of his average annual salary, or thirty-six thousand dollars annually, whichever is greater.

Any member whose first employment making him eligible for membership in one of the state systems occurred on or after January 1, 2011, who applies for retirement due to a total and permanent disability resulting solely from injuries sustained in the performance of his official duties, shall receive a disability benefit equal to seventy-five percent of his average compensation regardless of years of service.

Any member whose first employment making him eligible for membership in one of the state systems occurred on or after January 1, 2011, who applies for retirement due to a total and permanent disability caused as the result of any other reason, a member with at least ten years of service credit shall receive a disability benefit equal to fifty percent of his average salary plus one and one-half percent for each year

of service credit in excess of ten years. Such benefit shall not exceed one hundred percent of the member's average salary.

SURVIVOR BENEFITS:

For members whose first employment making them eligible for membership in one of the state systems occurred on or before December 31, 2010:

The surviving spouse of any such sworn commissioned law enforcement officer of the office of state police of the Department of Public Safety and Corrections who is killed in the discharge of his duties, or dies from immediate effects of any injury received as the result of an act of violence occurring while engaged in the discharge of his duties, shall receive a benefit equal to seventy-five percent of the salary being received by the employee at the time of the decedent's death or injury, provided the surviving spouse was married to the decedent at the time of the event which resulted in the officer's death. If there is no surviving spouse, surviving minor children shall receive the benefit until reaching eighteen years of age, or twenty-three years of age if a student.

The surviving spouse of any such sworn commissioned law enforcement officer of the office of state police of the Department of Public Safety and Corrections whose death occurs other than in the line of duty shall receive a monthly benefit according to the following table:

Deceased officer's Service Credit	Percent of Final Salary Survivor Benefit
Less than 5 years	25%
At least 5, but less than 10	30%
At least 10, but less than 15	40%
At least 15, but less than 20	50%

If the officer dies with at least 20 years of service, the surviving spouse shall receive a monthly benefit equal to the amount that the employee would have received had the employee elected to retire at the time of his death.

The surviving spouse of any employee whose death occurs other than in the line of duty shall cease receiving benefits while remarried, if remarried before age fifty-five.

Upon the death of an employee where there is no surviving spouse, or if the spouse has remarried and forfeited his or her benefit, the minor children of the deceased shall receive a monthly benefit equal to the greater of 1) 60% of the average salary of the deceased member, or 2) The pension that would have been received by the surviving spouse. Such minor child benefits are divided equally and cease as each minor child reaches eighteen years of age, or twenty-three years of age if a student. Children with a total physical or mental disability may receive benefits beyond age eighteen (or twenty-three).

In the event of the death of member where there is no surviving spouse and no minor children, a monthly pension of twenty-five percent of the average salary of the deceased employee shall be paid to the parent(s) if either of them derives their main support from the employee.

In the event of death of a former employee with at least ten years of service credit, the qualified surviving spouse shall receive a pension equal to the monthly retirement pay that would have been payable to the decedent. In the event of death of a retired employee, the qualified surviving spouse shall receive a pension equal to the monthly retirement pay that was being paid to the decedent on the date of

death. (Surviving spouse benefits cease upon remarriage in some cases) If there is no surviving spouse eligible to receive benefits, the minor children of the decedent shall be entitled to share equally in a benefit equal to the greater of the spousal benefit or 60% of the average salary. If there is no surviving spouse or minor children, the qualifying parent(s) of the decedent may be entitled to benefits.

For members whose first employment making them eligible for membership in one of the state systems occurred on or after January 1, 2011:

If a member's death occurs in the line of duty or is a direct result of an injury sustained while in the line of duty, a monthly benefit equal to eighty percent of the member's average compensation will be shared equally by the surviving spouse, qualified minor children, or qualified disabled children.

Upon the death of a member with at least five years of service credit (two of which were earned immediately prior to death unless the member had at least twenty years) other than in the line of duty, the surviving spouse with a minor child or child with a disability, shall receive fifty percent of the benefit to which the member would have been entitled if he had retired on the date of death, or \$600 per month, whichever is greater. (Spousal benefits cease upon remarriage in some cases)

In addition, qualifying children receive fifty percent of the benefit to which the spouse would be entitled, up to a maximum 100% to all children.

A surviving spouse without a minor child or a child with a disability, shall receive a benefit based on the decedent's years of service credit earned to the date of death using the applicable accrual rate, or \$600 per month, whichever is greater. (Spousal benefits cease upon remarriage in some cases)

In the event of death of a member with no surviving spouse or child due benefits, the accumulated contributions are payable to the designated beneficiaries, or estate.

Upon the death of a former member who terminated prior to attaining the requisite age for retirement eligibility with at least twelve years of service credit and contributions on deposit, the surviving spouse shall receive a monthly benefit equal to fifty percent of the benefit that would have been payable to the decedent.

Upon the death of a retired employee, the surviving spouse shall receive a monthly benefit equal to seventy-five percent of the benefit that was being paid to the decedent on the date of death provided the surviving spouse was married to the decedent for at least two years prior to the decedent's death.

Upon the death of a former member or retired employee with no surviving spouse, or if the spouse has remarried and forfeited his benefit, the minor children shall be entitled to fifty percent of the monthly retirement benefit that would have been payable to the decedent or was being paid to the decedent on the date of death. If there are no qualified children, the parents of the decedent may be entitled to a benefit under certain circumstances.

PERMANENT BENEFIT INCREASES:

Act 333 of 2007 established an Experience Account to be used to pay permanent benefit increases (PBIs). The Experience Account is credited with 50% of the investment experience gain in excess of \$5 million (indexed based on increases in the actuarial value of assets after June 30, 2015) along with that

portion of the net investment income, if any, attributable to the prior year balance, subject to maximum accumulation limitation based upon the Plan's funded percentage. The account is also debited with that portion of the system's net investment loss, if any, attributable to the prior year balance. In no event may the amount in the experience account fall below zero. Once the balance of the Experience Account accumulates a sum sufficient to grant retirees a PBI, the Board may recommend that the legislature grant a PBI on benefits up to \$60,000 (indexed), not to exceed the lesser of the CPI-U or a percentage determined based on the funded level percentage attained by the system as described in R. S. 11:1332, provided a PBI had not been granted in the prior year. Benefits are restricted to disability retires and those retirees and beneficiaries who have attained the age of 60 and have been retired for at least one year. Maximum limitations are outlined in ACT 399 of 2014. In addition, the Experience Account statute outlines a supplemental permanent benefit increase of 2% of the benefit being received (subject to limitation by the indexed \$60,000 limit) to all retirees and beneficiaries who are at least age 65 and who retired on or before June 30, 2001.

ACTUARIAL ASSUMPTIONS

In determining actuarial costs, certain assumptions must be made regarding future experience under the plan. These assumptions include the rate of investment return, mortality of plan members, rates of salary increase, rates of retirement, rates of termination, rates of disability, and various other factors that have an impact on the cost of the plan. To the extent that future experience varies from the assumptions selected for valuation, future costs will be either higher or lower than anticipated. The following chart illustrates the effect of emerging experience on the plan.

-	_		_	_		
Factor	Increase	in	Factor	Rec	ulte	in

Investment Earnings Rate Decrease in Cost
Annual Rate of Salary Increase Increase in Cost
Rates of Retirement Increase in Cost
Rates of Termination Decrease in Cost
Rates of Disability Increase in Cost
Rates of Mortality Decrease in Cost

ACTUARIAL COST METHOD: Individual Entry Age Normal with Allocation of Cost

Based on Earnings. Entry and Attained Ages Calculated

on an Age Near Birthday Basis.

VALUATION INTEREST RATE: 6.95% (Net of investment expenses)

ACTUARIAL ASSET VALUES: All assets are valued at market value adjusted to defer

four-fifths of all earnings above or below the valuation interest rate in the valuation year, three-fifths of all earnings above or below the valuation interest rate in the prior year, two-fifths of all earnings above or below the valuation interest rate from two years prior, and one-fifth of all earnings above or below the valuation interest rate from three years prior. The resulting smoothed values are subject to a corridor of 85% to 115% of the market value of assets. If the smoothed value falls outside the corridor, the actuarial value is set equal to the average of the corridor limit and the

smoothed value.

ACTIVE MEMBER MORTALITY: 110% of the RP2014 Total Dataset Employee Table for

males and 105% of the RP2014 Total Dataset Employee Table for females, each with the full

generational MP2017 scale.

ANNUITANT AND BENEFICIARY 110% of the RP2014 Total Dataset Healthy Annuitant

MORTALITY: Table for males and 105% of the RP2014 Total Dataset

Healthy Annuitant Table for females, each with the full

generational MP2017 scale.

DISABLED LIVES MORTALITY: RP2014 Total Dataset Disabled Tables for Males and

Females with the full generational MP2017 scale.

PERMANENT BENEFIT INCREASES: The present value of future retirement benefits is based

on benefits currently being paid by the system and includes previously granted permanent benefit increases. The present values and accrued liabilities within this report do not include provisions for potential future increases not yet authorized by the Legislature, but do include a recognition of the existing balance in the Experience Account together with the present value of future contributions to the Account up to the maximum permissible value of the Account based upon

current account limitations.

ANNUAL SALARY INCREASE RATE: 5.25% (2.50% inflation /2.75% merit)

RETIREMENT RATES: The table of these rates through age 75 is included later

in the report. These rates apply only to those individuals

eligible to retire.

DISABILITY RATES: The table of these rates through age 75 is included later

in this report.

WITHDRAWAL RATES: The following rates of withdrawal are applied based

upon completed years of service:

Service Duration		Service Duration	
	Rate	2 01 001 011	Rate
(\leq)		(≤)	
1	0.036	14	0.003
2	0.026	15	0.003
3	0.011	16	0.003
4	0.009	17	0.003
5	0.018	18	0.003
6	0.028	19	0.003
7	0.030	20	0.003
8	0.027	21	0.003
9	0.021	22	0.003
10	0.017	23	0.003
11	0.016	24	0.003
12	0.014	Above 24	0.010
13	0.003		

Note: The withdrawal rate for individuals eligible to retire is

assumed to be zero.

VESTING ELECTING PERCENTAGE: Any member who terminates service credit after

reaching the vesting threshold may not receive a refund of employee contributions. Thus, we have elected to recognize that 100% of such employees will wait to receive a vested benefit.

Back-DROP UTILIZATION:

Back-DROP is an alternative form of retirement benefit elected at the time of retirement. Back-DROP utilization probabilities based on recent experience are as follows:

1 year	2 year	<u>3 year</u>
9.93%	4.96%	12.06%

RETIREMENT LIMITATIONS:

Projected retirement benefits are not subject to IRS Section 415 limits.

ACCUMULATED LEAVE POLICIES:

Retirements are monitored to determine the amount of leave converted to service credit. Leave credit is accrued throughout the duration of the member's career. The average service credit converted is expressed as a 5.5% increase in the accrued benefit.

MARRIAGE STATISTICS:

70% of the members are assumed to be married; husbands are assumed to be three years older than wives.

FAMILY STATISTICS:

Assumptions utilized in determining the costs of various survivor benefits as listed below, are derived from the information provided in the 2015 U. S. Census:

Member's	% With	Number of	Average	Remarriage
<u>Age</u>	Children	Children	<u>Age</u>	Rates
25	70%	1.84	5	0.04566
35	86%	2.13	9	0.02636
45	75%	1.70	12	0.01355
55	22%	1.42	14	N/A
65	4%	1.45	15	N/A

"IN THE LINE OF DUTY" DEATH:

20% of the active deaths are assumed to occur while in the line of duty (service connected).

"IN THE LINE OF DUTY" DISABILITY:

50% of the active disabilities awarded by the Board of Trustees are assumed to have occurred while in the line of duty (service related).

ACTUARIAL TABLES AND RATES

Age	Retirement Rates	Disability Rates
18	0.00000	
19	0.00000	0.00083
20	0.00000	0.00083
21	0.00000	0.00083 0.00083
22 23	0.00000	0.00083
23 24	0.00000	0.00083
24 25	0.00000	0.00083
25 26	0.00000	0.00083
27	0.00000	0.00083
28	0.00000	0.00083
29	0.00000	0.00083 0.00083
30	0.00000	0.00083
31	0.00000	0.00083
32	0.00000	0.00083
33	0.00000	0.00083
34	0.00000	0.00083
35	0.00000	0.00083
36	0.00000	0.00094
37	0.00000	0.00103
38	0.00000	0.00110
39	0.00000	0.00132
40	0.00000	0.00171
41	0.00000	0.00171
42	0.00000	0.00215
43	0.10000	0.00242
44	0.10000	0.00275
45	0.10000	0.00314
46	0.10000	0.00358
47	0.10000	0.00402
48	0.10000	0.00457
49	0.10000	0.00517
50	0.25000	0.00589
51	0.25000	0.00671
52	0.25000	0.00759
53	0.25000	0.00864
54	0.25000	0.00979
55	0.25000	0.01111
56	0.25000	0.01265
57	0.50000	0.01436
58	0.50000	0.01628
59	0.50000	0.01854
60 61	0.50000 0.50000	0.02684
62	0.50000	0.02684
63	0.99000	0.02684 0.02684
64	0.99000	0.02684
65	0.99000	0.02684
66	0.99000	0.02684
67	0.99000	0.02684
68	0.99000	0.02684
69	0.99000	0.02684
70	0.99000	0.02684
71	0.99000	0.02684
72	0.99000	0.02684
73	0.99000	0.02684
74	0.99000	0.02684
75	1.00000	0.02684

PRIOR YEAR ASSUMPTIONS

VALUATION INTEREST RATE: 7.00% (Net of investment expenses)

GLOSSARY

Accrued Benefit – The pension benefit that an individual has earned as of a specific date based on the provisions of the plan and the individual's age, service, and salary as of that date.

Actuarial Accrued Liability – The actuarial present value of benefits payable to members of the fund less the present value of future normal costs attributable to the members.

Actuarial Assumptions – Assumptions as to the occurrence of future events affecting pension costs. These assumptions include rates of mortality, withdrawal, disablement, and retirement. Also included are rates of investment earnings, changes in compensation, as well as statistics related to marriage and family composition.

Actuarial Cost Method – A procedure for determining the portion of the cost of a pension plan to be allocated to each year. Each cost method allocates a certain portion of the actuarial present value of benefits between the actuarial accrued liability and future normal costs. Once this allocation is made, a determination of the normal cost attributable to a specific year can be made along with the payment to amortize any unfunded actuarial accrued liability. To the extent that a particular funding method allocates a greater (lesser) portion of the actual present value of benefits to the actuarial accrued liability it will allocate less (more) to future normal costs.

Actuarial Equivalence – Payments or receipts with equal actuarial value on a given date when valued using the same set of actuarial assumptions.

Actuarial Gain (Loss) – The financial effect on the fund of the difference between the expected and actual experience of the fund. The experience may be related to investment earnings above (or below) those expected or changes in the liability structure due to fewer (or greater) than the expected numbers of retirements, deaths, disabilities, or withdrawals. In addition, other factors such as pay increases above (or below) those forecast can result in actuarial gains or losses. The effect of such gains (or losses) is to decrease (or increase) future costs.

Actuarial Present Value – The value, as of a specified date, of an amount or series of amounts payable or receivable thereafter, with each amount adjusted to reflect the time value of money (through accrual of interest) and the probability of payments. For example: if \$600 invested today will be worth \$1,000 in 10 years and there is a 50% probability that a person will live 10 years, then the actuarial present value of \$1,000 payable to that person if he should survive 10 years is \$300.

Actuarial Value of Assets – The value of cash, investments, and other property belonging to the pension plan as used by the actuary for the purpose of the actuarial valuation. This may correspond to the book value, market value, or some modification involving either or both book and market value. Adjustments to market values are often made to reduce the volatility of asset values.

Asset Gain (Loss) – That portion of the actuarial gain attributable to investment performance above (below) the expected rate of return in the actuarial assumptions.

Amortization Payment – That portion of the pension plan contribution designated to pay interest and reduce the outstanding principal balance of unfunded actuarial accrued liability. If the amortization payment is less than the accrued interest on the unfunded actuarial accrued liability the outstanding principal balance will increase.

Contribution Shortfall (Excess) – The difference between contributions recommended in the prior valuation and the actual amount received.

Decrements – Events which result in the termination of membership in the system such as retirement, disability, withdrawal, or death.

Deferred Retirement Option Plan (DROP) Account – The account into which DROP accruals are paid and from which DROP lump sum balances are disbursed.

Employer Normal Cost – That portion of the normal cost not attributable to employee contributions. It includes both direct contributions made by the employer and contributions from other non-employee sources such as revenue sharing and revenues related to taxes.

Funded Ratio – A measure of the ratio of assets to liabilities of the system according to a specific definition of those two values. Typically, the assets used in the measure are the actuarial value of assets; the liabilities are defined by reference to some recognized actuarial funding method. Thus, the funded ratio of a plan depends not only on the financial strength of the plan but also on the funding method used to determine the liabilities and the asset valuation method used to determine the assets in the ratio.

Initial Benefit Option (IBO) Account – The account into which the initial benefit is deposited. Interest is credited thereto, and monthly payments made from this account.

Normal Cost – That portion of the actuarial present value of pension plan benefits and expenses allocated to a valuation year by the actuarial cost method. This is analogous to one year's insurance premium.

Pension Benefit Obligation – The actuarial present value of benefits earned or credited to date based on the members expected final average compensation at retirement. For current retirees or terminated members this is equivalent to the actuarial present value of their accrued benefit.

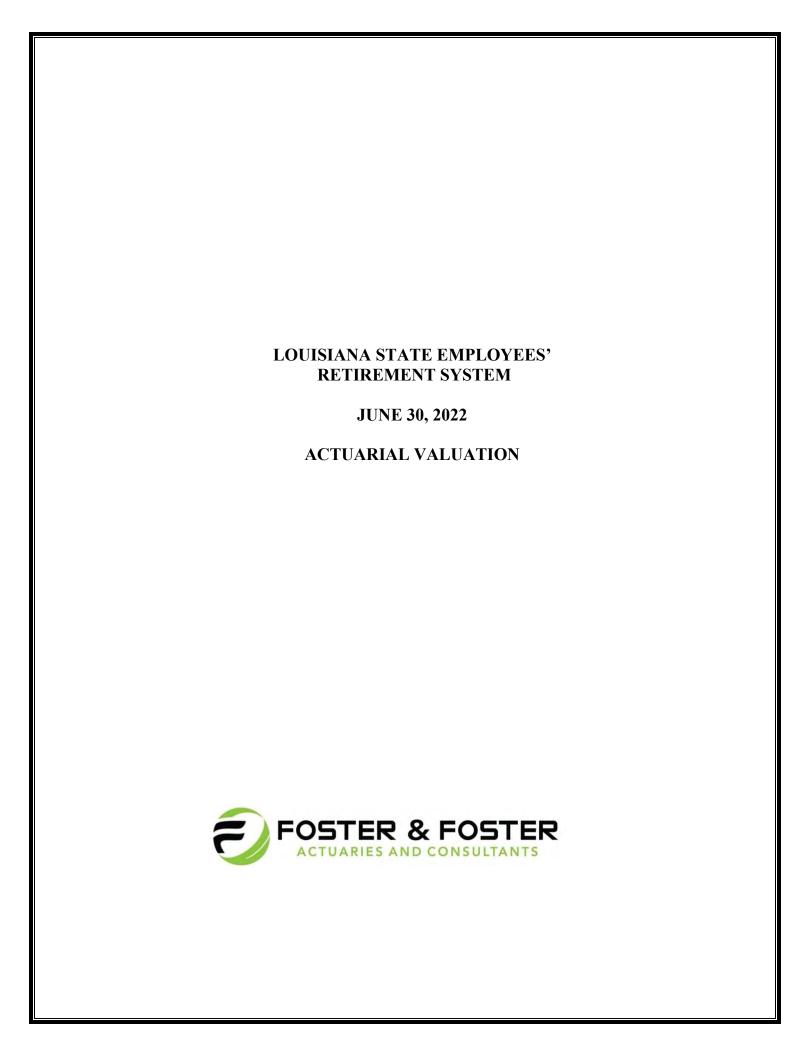
Priority Allocation – The actual returns available for application to the oldest outstanding positive amortization base. (In accordance with R.S. 11:102.4)

Priority Amount – The maximum amount of system returns in excess of the system's actuarially assumed rate of return that may be applied to the oldest outstanding positive amortization base, regardless of whether actual returns that equal or exceed the maximum are available. (In accordance with R.S. 11:102.4)

Projected Benefits – The benefits expected to be paid in the future based on the provisions of the plan and the actuarial assumptions. The projected values are based on anticipated future advancement in age and accrual of service as well as increases in salary paid to the participant.

Unfunded Actuarial Accrued Liability – The excess of the actuarial accrued liability over the actuarial value of assets.

Vested Benefits – Benefits that the members are entitled to even if they withdraw from service.





September 29, 2022

Board of Trustees Louisiana State Employees' Retirement System Post Office Box 44213 Baton Rouge, Louisiana 70804-4213

Ladies and Gentlemen:

This report is prepared for the Louisiana State Employees' Retirement System (LASERS) Board of Trustees to present the results of the actuarial valuation of assets and liabilities, as well as funding requirements, as of June 30, 2022. The primary purpose of the report is to provide a measure of the plan's liability and funding levels and to determine the actuarially required contribution for fiscal year ending 2023 and the projected actuarially required contribution rate for fiscal year ending 2024. Section IV provides disclosures of the Fiduciary Net Position and Net Pension Liabilities required by the Governmental Accounting Standards Board Statements 67/68. Results of the funding valuation and GASB valuations should not be relied upon for other purposes.

In preparing this valuation, we have relied upon the information provided by the System regarding plan provisions, plan membership, plan assets and other matters as detailed in this report. In particular, we have relied upon the Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position as audited by Postlethwaite & Netterville, Certified Public Accountants. We did not audit the data or plan assets but reviewed for reasonableness and consistency with prior year data. Our review concluded that the data is reasonable and consistent with the prior year's data.

The liabilities and normal costs shown herein have been estimated on the basis of the actuarial cost methods as specified in Louisiana Revised Statutes Title 11 Section 22(6). All actuarial assumptions and methods have been approved by the Board of Trustees and are reasonable and appropriate for the purposes of this valuation. However, other sets of assumptions and methods could also be reasonable and could produce materially different results. Actual results may vary from the assumptions used to prepare the valuation.

The funding percentages and unfunded accrued liability as measured based on the actuarial value of assets will differ from similar measures based on the market value of assets. These measures, as provided, are appropriate for determining the adequacy of future contributions, but may not be appropriate for the purpose of settling a portion or all of its liabilities. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic

LASERS Actuarial Valuation June 30, 2022

assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements and changes in plan provisions or applicable law. The scope of this report does not

include an analysis of the range of such future measurements.

In performing the valuations, we used third-party software to model (calculate) the underlying liabilities and

costs. These results are reviewed in the aggregate and for individual sample lives. The output from the

software is either used directly or input into internally developed models that apply the funding and

accounting rules to generate the costs. All internally developed models are reviewed as part of the valuation

process. As a result of this review, we believe that the models have produced reasonable results. We do not

believe there are any material inconsistencies among assumptions or unreasonable output produced due to the

aggregation of assumptions.

This report has been prepared in accordance with actuarial standards of practice, and to the best of our

knowledge, fairly reflects the actuarial present value of accrued benefits of the Louisiana State Employees'

Retirement System.

Shelley is an Associate in the Society of Actuaries and Pat is a Fellow in the Society of Actuaries. Shelley

and Pat are members of the American Academy of Actuaries and meet the Qualification Standards of the

American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,

FOSTER & FOSTER INC.

Shelley R. Johnson, ASA, MAAA

Shelley R. Johnson

D. Patrick McDonald, FSA, EA, MAAA, FCA

D. Patrick M Dnold

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PRESENTATION OF VALUATION RESULTS

SUMMARY OF VALUATION RESULTS

			Prior Y	'ears
		June 30, 2022	June 30, 2021	June 30, 2020
I.	Membership Census			
	Retirees	49,747	49,535	49,341
	Actives	37,358	38,572	39,487
	DROP	1,199	1,311	1,367
	Terminated Vested	3,868	3,724	3,691
II.	Annual Benefits	\$1,395,718,166	\$1,364,477,409	\$1,328,286,600
III.	Total Payroll	2,008,311,596	2,004,062,861	1,999,414,595
IV.	Market Value of Assets	13,238,580,140	14,716,344,767	11,420,710,895
	Valuation Assets	13,824,312,747	13,347,462,993	12,617,189,040
V.	Experience Account	23,082,605	85,173,827	12,289,990
VI.	Investment Yield			
	Market Value (Total Assets)	-7.02%	33.03%	-3.98%
	Market Value (Excl. Self Directed, ORP)	-7.29%	34.58%	-4.32%
	Actuarial Value	7.05%	9.95%	3.94%
	DROP	6.55%	9.45%	3.44%
VII.	Total Normal Cost	225,224,285	218,244,525	208,142,784
	Total Normal Cost (% of Payroll)	11.21%	10.89%	10.41%
	Employer Normal Cost (% of Payroll)	3.11%	2.81%	2.35%
VIII.	Unfunded Actuarial Accrued Liability (UAAL)	6,974,009,198	6,872,857,541	7,074,189,759
	Funded Percentage	66.5%	66.0%	64.1%
	UAAL w/o discount rate/method changes 1	4,918,407,777	5,047,740,413	5,494,242,231
	Funding % w/o discount rate/method changes 1	73.8%	72.6%	69.7%
IX.	Funding Requirements (Mid-Year)			
	1) Discount Rate (Current Year) ²	7.25%	7.40%	7.55%
	Discount Rate (Next Year) ²	7.25%	7.25%	7.40%
	2) Employee Contribution	163,146,854	163,058,370	162,479,335
	Avg. Employee Contribution Rate	8.10%	8.08%	8.06%
	3) Restated Required Employer Contribution	844,193,312	818,701,523	793,572,215
	Aggregate Rate (Current Year) ³	41.9%	40.6%	39.4%
	Restated Expected Contribution (Current Year)	825,805,064	811,255,752	818,444,293
	4) Projected Required Employer Contribution	848,965,875	835,703,090	817,898,542
	Proj. Aggregate Rate (Next Year) ³	41.9%	41.0%	40.2%

Approximate values if not for the discount rate changes from 8.25% and change to entry age normal cost method. Note: 2021 and 2020 estimated values have been restated using an improved estimation method.

The discount rate is the long-term expected rate of return less 35 basis points to account for gain-sharing

Aggregate employer contribution rate for all plans, net of special sub-plan direct UAL payments.

PROJECTED CONTRIBUTION RATES BY PLAN

Act 1026 of the 2010 Legislative Session requires the employer contribution rate to be determined separately for each plan as shown in the table below. The normal cost portion of each plan's employer contribution rate varies based upon that plan's benefits, member demographics, actuarial assumptions, and the rate contributed by employees. The shared UAL contribution rate is determined in aggregate for all plans. The UAL established due to a specific plan or group of plans due to legislation will be allocated entirely to that plan or those plans. The Rank and File Employer Contribution Rate is applicable to Appellate Law Clerks, as determined by the Public Retirement Systems' Actuarial Committee (PRSAC) and was developed by including Appellate Law Clerk normal costs and payroll. The dollar amounts of the aggregate funding requirements for LASERS are shown in Section III.

Projected Cost for Fiscal Year 2023/2024								
		Total					Plan	Total
		Normal	Employee	Employer	Admin	Shared	Specific	Employer
	Plan	Cost %	NC %	NC %	Expense	UAL	UAL	Contribution
Plan	Status	(A)	(B)	(A)- (B)	%	%	%	%
Rank & File, App. Law Clerks	Open	10.3%	7.8%	2.5%	0.89%	37.92%	0.00%	41.3%
Judges and Court Officers	Closed	18.5%	11.5%	7.0%	0.89%	37.92%	0.00%	45.8%
Legislators	Closed	9.7%	11.5%	-1.8%	0.89%	37.92%	0.00%	37.0%
Special Legislative	Closed	9.7%	9.5%	0.2%	0.89%	37.92%	0.00%	39.0%
Corrections - Primary	Closed	9.1%	9.0%	0.1%	0.89%	37.92%	1.03%	39.9%
Corrections - Secondary	Closed	14.6%	9.0%	5.6%	0.89%	37.92%	0.23%	44.6%
Wildlife	Closed	23.7%	9.5%	14.2%	0.89%	37.92%	0.06%	53.1%
Peace Officers	Closed	13.1%	9.0%	4.1%	0.89%	37.92%	0.06%	43.0%
Alcohol Tobacco Control	Closed	12.8%	9.0%	3.8%	0.89%	37.92%	0.03%	42.6%
Bridge Police	Closed	9.8%	8.4%	1.4%	0.89%	37.92%	0.07%	40.3%
Judges (Act 992)	Open	18.9%	13.0%	5.9%	0.89%	37.92%	0.00%	44.7%
Hazardous Duty (Act 992)	Open	17.7%	9.5%	8.2%	0.89%	37.92%	0.02%	47.0%
Harbor Police Plan	Closed	17.4%	9.0%	8.4%	0.89%	37.92%	0.09%	47.3%
Aggregate LASERS Plans	·	11.2%	8.1%	3.1%	0.89%	37.92%	0.01%	41.9%

FUNDING REQUIREMENTS SPECIFIC TO INDIVIDUAL SUB-PLANS

Peace Officers - Act 414 of 2007 increased the accrual rate for certain Peace Officers. The resulting UAL increase is funded with annual payments over 30 years from the Department of Public Safety Peace Officers' Fund.

Rank & File – Act 992 of 2010 changed the retirement eligibility for members hired on or after July 1, 2006. The increase in UAL is amortized over 30 years with level payments and paid only by employers of rank and file members.

All Public Safety Plans –Act 224 of 2018 provides for a 100 percent survivor benefit for any member eligible for Hazardous Duty Plan membership, if killed in the line of duty by an intentional act of violence. The benefit increase resulted in a UAL increase for the following plans: Corrections Primary, Corrections Secondary, Wildlife, Peace Officers, Alcohol Tobacco Control, Bridge Police, Hazardous Duty, and Harbor Police. The UAL payment is amortized over 10 years with level payments and paid by employers of members in each applicable plan via the plan specific UAL payment.

Act 595 provides for a disability benefit equal to 100 percent of final average compensation for members of the Hazardous Duty, Corrections Primary and Secondary, Wildlife and Harbor Police plans

who are totally and permanently disabled in the line of duty by an intentional act of violence. The change is prospective for current members and retrospective for any eligible retirees. The UAL increase resulting from the prospective change was amortized with level payments beginning June 30, 2018. The UAL increase resulting from the retrospective change was amortized with level payments beginning June 30, 2019. Both are amortized over 10 years.

CHANGES SINCE PRIOR VALUATION

The Board reduced the discount rate from 7.40% to 7.25%, effective July 1, 2022. This change was anticipated in the prior valuation when determining the projected contribution requirements for Fiscal Year 2022/2023 and is also used to determine the projected contribution requirements for Fiscal Year 2023/2024.

Act 656 of 2022 provided a one-time supplemental payment equal to the lesser of the retiree's or beneficiary's monthly benefit, or \$2,000. Eligibility is based on the current statutory COLA eligibility requirements. The increase in accrued liability includes the present value of the payment and is offset by funds disbursed from the Experience Account.

CHANGE IN FUNDING REQUIREMENTS

The aggregate employer contribution rate established by the Public Retirement Systems' Actuarial Committee for the 2022/23 plan year was 41.0%. The restated employer contribution rate determined by this valuation for the 2022/23 plan year is 41.9%. Therefore, an employer contribution deficit of 0.9% of payroll is expected next year.

Changes in the required contribution are generally the result of gains or losses resulting from actual experience differing from expected plan experience, expected changes in the UAL payment due to statutory requirements, and changes in actuarial assumptions or methods. Changes in the employer contribution rate are impacted by both the change in the total dollar required contribution and by the total aggregate payroll for active members.

The projected aggregate employer contribution rate increased from 41.0% for Fiscal Year 2022/2023 to 41.9% for Fiscal Year 2023/2024. The reasons for the change are detailed below. The total of the items contributing to the contribution rate change may not exactly equal the actual contribution rate change due to rounding and since the items impacting the rate are not additive and may overlap.

Normal Cost		0.01%
UAL Payment		
Investment Experience Loss	0.17%	
Other Experience Loss	0.32%	
Contribution Variance Payment Change	0.12%	
Change in Discount Rate from Prior Year Estimate	0.02%	
Total UAL Payment Change		0.63%
Payroll Change		0.24%
Administrative Expenses		0.02%
Total		0.90%
Actual Contribution Rate Change		0.90%

CHANGE IN UNFUNDED ACCRUED LIABILITY

Below is a reconciliation of the change in the plan's unfunded accrued liability (UAL).

Unfunded Accrued Liability - June 30, 2021		\$ 6,872,857,541
Interest on Unfunded Liability	\$ 508,591,458	
Amortization Payments	\$ (772,016,725)	
Legislative Acts Income (Act 170 of 2022)*	\$ (21,831,939)	
Investment Experience Loss	\$ 44,219,996	
Act 656 of 2022 (One-time Supp. Payment)	\$ 68,096,068	
Experience Account Disbursement	\$ (68,096,068)	
Other Experience Loss	\$ 81,350,507	
Employer Contribution Surplus	\$ (14,055,118)	
Discount Rate Change (from 7.40% to 7.25%)	\$ 274,893,478	
Total Change		\$ 101,151,657
Unfunded Accrued Liability - June 30, 2022		\$ 6,974,009,198

^{*} Includes \$2,577 in litter fines and \$21,829,362 in State surplus funds

PLAN EXPERIENCE

The actuarial assumptions represent the best estimate of future plan experience in order to properly fund benefits. The actuarial valuation results are dependent on the actuarial assumptions used to measure plan liabilities. These assumptions, which are adopted by the Board of Trustees, are detailed in Appendix E. A gain or loss occurs if the actual experience differs from assumed experience used to determine the prior year's projected plan measurements. The funding policy, in Appendix C, describes how investment and non-investment gains are amortized, or allocated for other purposes.

Demographic and Salary Experience

Demographic assumptions include rates of retirement/DROP, rates at which members become disabled, turnover rates, mortality rates, and several other assumptions. Salary assumptions anticipate future salary increases. During the 2021/22 plan year, the system incurred an experience loss of \$81,350,507 due to plan experience differing from that anticipated by the demographic and salary assumptions. The loss is amortized over 30 years with level payments.

A breakdown of the non-investment experience gain/(loss) is provided below:

	\$ Gain/(Loss)	% of Liability
Active Member Decrements	(\$27,426,871)	-0.13%
Active Member Salaries	(\$54,199,455)	-0.26%
Inactive Mortality	\$7,911,177	0.04%
Administrative Expenses	(\$976,887)	0.00%
Other	(\$6,658,471)	-0.03%
Total Experience Gain/(Loss)	(\$81,350,507)	-0.39%
Total Actuarial Liability	\$20,798,321,945	

<u>Investment Experience</u>

The market value of assets and actuarial value of assets include funds from the Optional Retirement Plan (ORP) and DROP accounts with member-directed investments. The rate of return on the actuarial value of assets is determined for trust assets net of these accounts, and in total, as shown below.

	Actuarial Value of	Directed DROP	Net Actuarial Value
	Assets	Accounts	of Assets
Beginning Assets	13,432,636,820	645,406,623	12,787,230,197
Contributions	1,038,753,162	65,120,140	973,633,022
Benefits Payments and Expenses	1,500,559,236	69,879,381	1,430,679,855
Investment Income	876,564,606	(8,068,116)	884,632,722
Ending Asset Value	13,847,395,352	632,579,266	13,214,816,086
Net AVA Rate of Return			7.05%

For the plan year ending June 30, 2022, the realized actuarial rate of return based upon the actuarial value of assets is 7.05%. Since this is less than the 7.40% discount rate, which was the assumed rate of return expected to fund regular plan benefits, the result is an investment experience loss of \$44,219,996, net of gains allocated to side funds or DROP Accounts. Investment experience losses are amortized over 30 years with level payments. Investment experience gains up to the threshold amounts, are allocated to the Original Amortization Base and Experience Account Allocation Base. The remaining gain is amortized over 30 years with level payments. One-half of the remaining gain is allocated to the experience account, up to the statutory cap and is amortized over ten years as a loss.

Development of Investment Gain/(Loss)

*	
A. Beginning Net Actuarial Value of Assets (AVA)	12,787,230,197
B. Total Contributions	973,633,022
C. Benefits Payments and Expenses	1,430,679,855
D. Ending Net Actuarial Value of Assets (AVA)	13,214,816,086
E. Investment Income (D - A - B + C)	884,632,722
Investment Rate of Return	7.05%
F. Expected Investment Income	928,852,718
Expected Rate of Return	7.40%
G. Investment Gain/(Loss) (E - F)	(44,219,996)
H. Gain Allocated to Side Funds or DROP Account	-
I. Net Investment Gain/(Loss) (G - H)	(44,219,996)
Current Threshold to OAB/EAAB	
J. \$100,000,000 Indexed by AVA Increase	121,022,374

The historical geometric average rates of return on the actuarial value of assets, net of investment expenses, for plan years ending June 30 are shown below. The discount rate reflects the expected return assumed to fund regular plan benefits. The historical returns below are analogous to the discount rate plus returns expected to be allocated to the experience account.

	Actuarial Rate		Geometric		
	of Return		Average		
2017	7.62%	5 Year	6.71%		
2018	7.52%	10 Year	8.43%		
2019	5.18%	15 Year	6.45%		
2020	3.94%	20 Year	6.85%		
2021	9.95%	25 Year	6.86%		
2022	7.05%	30 Year	7.46%		

DROP accounts for members eligible for DROP prior to January 1, 2004 are credited with interest at the System's actuarial rate of return less a 0.5% expense adjustment, but not below zero. The DROP interest rate for the period July 1, 2021 through June 30, 2022 after the expense adjustment is 6.55%. DROP accounts for members eligible for DROP after January 1, 2004 are invested in self-directed accounts approved by the Board of Trustees.

The Harbor Police Retirement System Annual DROP Interest Rate is the three-year average (calculated as the compound average of 36 months) investment return of the plan assets for the period ending the June 30th immediately preceding that given date. The average rate so determined is to be reduced by a "contingency" adjustment of 0.5 percentage points, but not to below zero. The Harbor Police Retirement System Annual DROP Interest Rate for the period July 1, 2022 through June 30, 2023 after the "contingency" adjustment is 6.0586 percent. This number is provided by LASERS.

ACTUARIAL ASSETS/VALUATION ASSETS

The gross actuarial value of assets, developed in Section II, are determined based on the market value of assets, with gradual recognition of gains and losses relative to the discount rate over a five-year period in order to smooth the effects of short-term market volatility. Valuation assets are determined as the gross actuarial value of assets less the assets held in side-fund accounts. Valuation assets are used to determine the employer contribution rate (see Section III).

The side-fund accounts excluded from valuation assets are as follows:

Employer Credit Account: This account, established by Act 588 of 2004, accumulates the excess contributions based on the minimum employer contribution rate of 15.5%, over the actuarially determined employer contribution, as restated in the current valuation. The minimum rate is not currently applicable. The account continues to have a zero balance.

Experience Account: The account is used to fund permanent benefit increases for retirees. Fifty percent of any excess return above \$100,000,000 (indexed to increases in the actuarial value of assets, beginning June 30, 2016) will be credited to the Experience Account, subject to the restrictions provided in Act 399 of 2014, as described in the Summary of Plan Provisions (Appendix B). A total of \$68,096,068 was disbursed from the account to offset the increase in liability for a one-time supplemental benefit increase per Act 656 of 2022, which was paid on August 15, 2022. The fund currently has a balance of \$23,082,605.

LEGISLATIVE/PLAN CHANGES

Act 170 of 2022 provided a supplemental appropriation of \$21,831,939 to LASERS, which includes State surplus funds and litter fines, to be applied to the IUAL, which is a component of the Original Amortization Base.

Act 656 of 2022 provided a one-time supplemental payment equal to the lesser of (1) the retiree's or beneficiary's monthly benefit, or (2) \$2,000. Eligibility is to be determined based on the current statutory COLA requirements based on the retiree's age, where applicable, as of June 30, 2022. Funds are to be paid from the Experience account not later than September 15, 2022.

The following provisions of Act 95 of 2016 will be implemented as certain triggers are met:

- The net remaining liability of the OAB and EAAB shall be re-amortized after application of the hurdle payments in Fiscal Year 2024/2025 and in every fifth year thereafter, until funded ratio reaches 80%.
- Changes the amortization period for most actuarial changes, gains, or losses from 30 years to 20 years once the funded ratio reaches 70%.

ACCELERATED REDUCTION AND REAMORTIZATION OF OAB AND EAAB

Act 497 of 2009 established the OAB and EAAB and required the application of certain investment gains and contribution variance credits to these schedules. Act 399 of 2014 modified the provisions of Act 497 and specifies that until the System's funded ratio reaches 85%, the funds applied to these schedules will be used to pay off the schedules early, rather than to reduce employer contributions. Since 2009, \$224,670,810 has been applied to the OAB and \$364,970,329 has been applied to the EAAB. Funds credited to the EAAB since it's last re-amortization on June 30, 2019 result in an early payoff from FY 2039/40 to FY 2036/37, with a reduced final payment in the last payment year.

FUNDED STATUS

The funded status is a measure of the plan's assets relative to the plan's obligations. The current funded ratio is 66.5%, as measured by the plan's valuation assets divided by the total actuarial accrued liability, based on the asset valuation method, actuarial cost method, and actuarial assumptions described in Appendix E. The funded ratio has increased from 55.9% since 2012. See Appendix D for a 10-year history. If not for the reductions in the discount rate and change to the Entry Age Normal Cost method, the funded ratio would have increased to 73.8%. However, these changes have improved the financial stability of the plan by reducing the potential for future contribution rate increases. If all actuarial assumptions are realized, the funded ratio is expected to steadily increase as unfunded liabilities are amortized in accordance with the plan's funding policy.

The funded ratio reported for GASB purposes, which is based on the market value of assets rather than on valuation assets, is 64.1%.

ASSETS/FINANCIAL SUMMARY

STATEMENT OF REVENUES AND EXPENSES

---- Prior Years ----June 30, 2022 June 30, 2021 June 30, 2020 **Operating Income:** 1. Contribution Income \$ 166,954,560 Member 167,117,810 \$ 164,576,018 **Employer** 833,659,874 844,395,225 837,086,539 ORP 325,589 381,162 363,063 2. Other Income 21,831,939 8,438,055 16,668,183 Legislative Acts Income ¹ Transfers/Purchases 11,082,262 10.062,645 11,300,144 Miscellaneous 4,493,495 4,735,688 4,655,368 Total Non-Investment Income 1,038,753,162 1,034,725,142 1,034,649,315 3. Investment Income (920,857,381) 3,805,906,491 Investments (388,156,381) Less Investment Expenses (95,101,172)(102,313,232)(92,417,433) Net Investment Income (480,573,814) (1,015,958,553)3,703,593,259 4. Total Income 22,794,609 4,738,318,401 554,075,501 **Operating Expenses:** 1. General Administration 16,710,210 16,606,586 16,749,257 Other Post Employment Benefits 966,102 89,651 42,750 Depreciation Expenses 800,575 769,107 820,094 2. Benefits Paid Pension Benefits 1,447,668,471 1.394.914.135 1,368,004,318 Return of Contributions 34,413,878 30,305,050 30,447,178 Total Benefits Paid 1,482,082,349 1,425,219,185 1,398,451,496 3. Total Expenses 1,500,559,236 \$ 1,442,684,529 1,416,063,597 \$ (1,477,764,627) (861,988,096) **Net Income:** \$ 3,295,633,872

Legislative Acts Income: 2022 includes \$2,577 in litter fines and \$21,829362 in appropriations from Act 170 of 2022; 2021 includes \$7,368 in litter fines and \$8,430,687 in appropriations from Act 120 of 2021; 2020 includes \$6,628 in litter fines and \$16,661,555 in appropriations from Act 255 of 2020

COMPARATIVE SUMMARY OF REVENUES BY SOURCE AND EXPENSES BY TYPE

Revenues by Source

Plan	Member	Employer	Investment	
Year	Contribution	Contribution ¹	Income ³	Total
2013	173,357,802	682,836,602	1,106,494,873	1,962,689,277
2014	152,993,052	635,974,701	1,770,521,381	2,559,489,134
2015	153,281,097	739,607,123	152,809,130	1,045,697,350
2016	152,233,771	744,582,736	(296,729,233)	600,087,274
2017	149,931,242	689,633,005	1,520,600,699	2,360,164,946
2018	152,189,709	744,678,436	1,011,537,508	1,908,405,653
2019	160,338,556	782,681,902	452,914,317	1,395,934,775
2020	164,576,018	870,073,297	(480,573,814)	554,075,501
2021	166,954,560	867,770,582	3,703,593,259	4,738,318,401
2022	167,117,810	871,635,352	(1,015,958,553)	22,794,609

Expenses by Type

Plan			Administrative	
Year	Benefits	Refunds	Expenses 2,3	Total
2013	1,070,410,859	61,522,162	18,932,247	1,150,865,268
2014	1,167,477,166	77,118,765	17,638,128	1,262,234,059
2015	1,199,079,252	38,308,757	18,011,841	1,255,399,850
2016	1,238,507,932	35,997,261	17,018,181	1,291,523,374
2017	1,274,461,022	37,606,040	18,536,860	1,330,603,922
2018	1,317,635,325	35,191,508	25,141,552	1,377,968,385
2019	1,343,892,705	34,948,707	18,107,490	1,396,948,902
2020	1,368,004,318	30,447,178	17,612,101	1,416,063,597
2021	1,394,914,135	30,305,050	17,465,344	1,442,684,529
2022	1,447,668,471	34,413,878	18,476,887	1,500,559,236

Includes transfers and purchases and the annual employer contribution, and any legislative appropriations.
 Includes other expenses, not related to administration.

³ Investment Income and Administrative Expenses do not tie to LASERS financial statements for 2013 because Investment Administrative Expenses were transferred from Administrative Expenses to Investment Income per instructions from GASB.

STATEMENT OF ASSETS

			Prior Years		
•	June 30, 2022		June 30, 2021		June 30, 2020
\$	169,121,709	\$	148,590,579	\$	139,023,019
	183,287,969		250,365,783		533,930,023
	1,200,717,250		1,341,333,489		1,287,120,678
	1,659,244,087		1,687,925,583		1,267,656,475
	3,717,981,231		4,301,389,387		2,172,131,338
	2,780,795,943		3,644,585,085		2,929,335,194
	5,840,563		5,954,546		6,217,506
	3,467,824,267		3,298,280,425		3,028,015,501
	51,590,097		38,268,362		59,505,364
	(229,120)		6,447		6,629
	2,406,144		(354,919)		(2,230,832)
	13,238,580,140		14,716,344,767		11,420,710,895
	11,167,928,091		11,037,578,296		10,596,943,658
		183,287,969 1,200,717,250 1,659,244,087 3,717,981,231 2,780,795,943 5,840,563 3,467,824,267 51,590,097 (229,120) 2,406,144 13,238,580,140	\$ 169,121,709 \$ 183,287,969 1,200,717,250	June 30, 2022 June 30, 2021 \$ 169,121,709 \$ 148,590,579 183,287,969 250,365,783 1,200,717,250 1,341,333,489 1,659,244,087 1,687,925,583 3,717,981,231 4,301,389,387 2,780,795,943 3,644,585,085 5,840,563 5,954,546 3,467,824,267 3,298,280,425 51,590,097 38,268,362 (229,120) 6,447 2,406,144 (354,919) 13,238,580,140 14,716,344,767	June 30, 2022 June 30, 2021 \$ 169,121,709 \$ 148,590,579 \$ 183,287,969 250,365,783 \$ 1,200,717,250 \$ 1,341,333,489 \$ 1,659,244,087 1,687,925,583 \$ 3,717,981,231 \$ 4,301,389,387 \$ 2,780,795,943 3,644,585,085 \$ 5,840,563 \$ 5,954,546 \$ 3,467,824,267 \$ 3,298,280,425 \$ 51,590,097 \$ 38,268,362 \$ (229,120) \$ 6,447 \$ 2,406,144 \$ (354,919) \$ 13,238,580,140 14,716,344,767

ACTUARIAL VALUE OF ASSETS

The actuarial value of assets (AVA) is determined as the market value of assets (MVA) adjusted to gradually recognize investment gains and losses relative to the net assumed investment return, over a 5-year period in 20% increments. The actuarial value of assets is subject to Corridor Limits of 80% to 120% of the Market Value of Assets. The tables below show the development of the actuarial value of assets and the amount of deferred gains and losses to be recognized in future years.

	Market Value	Deferred	De fe rre d
Plan Year	Gain/(Loss)	%	Gain/(Loss)
2019	(469,064,390)	20%	(93,812,878)
2020	(1,398,931,804)	40%	(559,572,721)
2021	2,857,048,590	60%	1,714,229,154
2022	(2,087,073,459)	80%	(1,669,658,767)
			(608,815,212)
Market Value	of Assets		13,238,580,140
- Deferred As	set Gain/(Loss)		(608,815,212)
Preliminary A	ctuarial Value of Assets	5	13,847,395,352
CORRIDOR	LIMITS		
Minimum = 8	80% of Market Value		10,590,864,112
Maximum =	120% of Market Value		15,886,296,168
Actuarial Valu	e of Assets		13,847,395,352

Deferred Gain/Loss to be Recognized in Actuarial Value of Assets in Future Years

Plan	Deferred				
Year	Gain/(Loss)	2023	2024	2025	2026
2019	(93,812,878)	(93,812,878)			_
2020	(559,572,721)	(279,786,361)	(279,786,360)		
2021	1,714,229,154	571,409,718	571,409,718	571,409,718	
2022	(1,669,658,767)	(417,414,692)	(417,414,692)	(417,414,692)	(417,414,691)
	(608,815,212)	(219,604,213)	(125,791,334)	153,995,026	(417,414,691)

SIDE FUNDS AND DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

			Prior Years				
		June 30, 2022 Ju		ne 30, 2021	Ju	June 30, 2020	
EMPLOYER CREDIT ACCOUNT 1:							
Prior Year Ending Balance	\$	-	\$	-	\$	_	
+ Current Year Allocation		-		-		_	
- Current Year Disbursements		_		_		_	
+ Accumulated Interest		-		_		_	
Total Fund Balance - Year End		-		-		-	
INITIAL UAL AMORTIZATION FUND:							
Prior Year Ending Balance	\$	-	\$	_	\$	_	
+ Current Year Allocation		-		-		-	
- Current Year Disbursements		-		-		-	
+ Accumulated Interest		-		-		-	
Total Fund Balance - Year End		-		-		-	
EXPERIENCE ACCOUNT FUND:							
Prior Year Ending Balance	\$	85,173,827	\$	12,289,990	\$	11,824,506	
+ Experience Account Allocation				77,702,485		-	
- Benefit Disbursements		(68,096,068)		(6,041,053)		-	
+ Accumulated Interest		6,004,846		1,222,405		465,484	
Fund Balance - Year End		23,082,605		85,173,827		12,289,990	
DEVELOPMENT OF VALUATION ASSETS:							
Actuarial Value of Assets	\$	13,847,395,352	\$ 13	3,432,636,820	\$ 1	2,629,479,030	
- Employer Credit Account	4		Ψ 1.	-	¥ 1	-	
- Initial UAL Fund		-		-		_	

- Experience Account Fund

Valuation Assets

23,082,605

\$ 13,347,462,993

\$ 13,824,312,747

¹ The Employer Credit Account was created by ACT 588 of 2004.

DEVELOPMENT OF COSTS, LIABILITIES AND CONTRIBUTIONS

Normal Costs and Accrued Liabilities are calculated based on the Provisions of the Plan as summarized in Appendix B in accordance with the Entry Age Normal Cost Method, and the Actuarial Assumptions outlined in Appendix E.

			Prior Yea	ar
	June 30, 20)22	June 30, 20	021
		% of		% of
	Dollar Amount	Salary	Dollar Amount	Salary
Discount Rate	7.25%		7.40%	
I. Normal Costs				
Active Members with Complete Data				
a) Retirement Benefits	136,298,904	6.79%	130,762,314	6.52%
b) Disability Benefits	4,132,454	0.20%	3,940,747	0.20%
c) Survivor Benefits	4,437,172	0.22%	4,344,539	0.22%
d) Voluntary Termination	80,355,755	4.00%	79,196,925	3.95%
TOTAL	225,224,285	11.21%	218,244,525	10.89%
II. Actuarial Accrued Liability				
a) Active Members				
1) Retirement/Termination Benefits	5,098,156,310		4,937,165,645	
2) Disability Benefits	53,119,692		52,058,753	
3) Survivor Benefits	63,565,517		62,468,179	
	5,214,841,519		5,051,692,577	
b) Retired and Inactive Members				
1) Regular Retirees	11,736,387,806		11,300,327,045	
2) Disability	233,191,866		237,335,673	
3) Survivors	924,681,092		881,684,751	
4) Terminated Vested	384,951,279		378,147,491	
5) Contributions Refunded	94,391,162		90,048,020	
6) DROP Deferred Benefits	1,066,225,729		1,122,799,731	
7) DROP Account Balances	1,138,772,981		1,152,219,353	
8) ORP Account Balances	4,878,511		6,065,893	
	15,583,480,426		15,168,627,957	
c) Total	20,798,321,945		20,220,320,534	

	June 30, 2022	Prior Year June 30, 2021
II. Actuarial Accrued Liability	20,798,321,945	20,220,320,534
Discount Rate	7.25%	7.40%
III. Valuation Assets	13,824,312,747	13,347,462,993
IV. Unfunded Actuarial Accrued		
Liability - Entry Age Normal	6,974,009,198	6,872,857,541
a) Change over prior year	101,151,657	(201,332,218)
b) Funded Percentage	66.5%	66.0%
V. Employer Contributions To Fund Current Plan Year ¹		
a) Employer Portion of Normal Cost	62,733,160	56,709,275
b) Administrative Expenses	18,000,000	17,500,000
c) Amortization Payments	763,755,919	738,385,308
d) Prior Contribution Variance Amort. Pmt	-	6,560,307
TOTAL Required Contribution	844,489,079	819,154,890
Less direct UAL payments ²	295,767	453,367
NET contribution required	844,193,312	818,701,523
	41.9%	40.6%
PRSAC Approved rate ³	41.0%	40.2%
VI. Projected Employer Contributions		
Discount Rate	7.25%	7.25%
To Fund Next Plan Year ¹		
a) Employer Portion of Normal Cost	63,054,978	63,196,547
b) Administrative Expenses	18,000,000	17,500,000
c) Amortization Payments	763,755,919	753,318,995
d) Prior Contribution Variance Amort. Pmt	4,450,745	1,983,315
TOTAL Required Contribution	849,261,642	835,998,857
Less direct UAL payments ²	295,767	295,767
NET contribution required	848,965,875	835,703,090
	41.9%	41.0%
Projected Rank and File Employer Normal Cost Rate	2.48%	2.50%
Projected Aggregate Employer Normal Cost Rate	3.11%	3.10%
VII. Current Payroll	2,008,311,596	2,004,062,861
Projected Payroll - Mid Year	2,014,158,693	2,018,049,135
Projected Payroll - Next Year	2,024,491,230	2,036,887,452

Dollar amounts reflect estimated payments due mid-year on January 1st per Act 81.

Direct UAL payments for Act 414 and Harbor Police are not included in the employer contribution rate.

³ Constitutional Minimum is 12% without regard to Employer Credits.

Actuarially

GASB STATEMENTS 67/68 REPORTING

The Governmental Accounting Standards Board Statements No. 67/68 establish financial reporting standards for state and local governmental pension plans and their sponsors that are administered through trusts or equivalent arrangements. The required actuarial disclosures are illustrated below. The Plan Fiduciary Net Position is the Market Value of Assets used for the funding valuation. The Total Pension Liability was developed using the Entry Age Normal cost method.

SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY

	June 30, 2022		June 30, 2021		June 30, 2020	
Total Pension Liability Plan Fiduciary Net Position	\$ \$	20,798,321,945 13,238,580,140	\$ \$	20,220,320,534 14,716,344,767	\$ \$	19,691,378,799 11,420,710,895
Net Pension Liability	\$	7,559,741,805	\$	5,503,975,767	\$	8,270,667,904
Plan Fiduciary Net Position as a percentage of Total Pension Liability		63.7%		72.8%		58.0%
Covered Employee Payroll	\$	2,008,311,596	\$	2,004,062,861	\$	1,999,414,595
Net Pension Liability as percentage of Covered Employee Payroll		376.4%		274.6%		413.7%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

	Actuariany				
	Determined	Contributions	Contribution		Contributions as
Fiscal	Contribution	in Relation to	Deficiency	Covered	a % of Covered
Year	$(ADC)^1$	ADC ¹	(Excess)	Payroll	Payroll
2013	724,391,420	649,029,708	75,361,712	1,951,987,750	33.2%
2014	709,799,409	612,698,414	97,100,995	1,813,759,357	33.8%
2015	697,377,899	722,137,361	(24,759,462)	1,856,735,292	38.9%
2016	694,091,525	718,606,514	(24,514,989)	1,842,286,184	39.0%
2017	701,906,777	675,583,750	26,323,027	1,821,943,975	37.1%
2018	707,672,002	725,802,871	(18, 130, 869)	1,864,035,191	38.9%
2019	717,033,569	760,150,449	(43,116,880)	1,952,495,777	38.9%
2020	785,380,878	837,449,602	(52,068,724)	1,999,414,595	41.9%
2021	795,212,826	844,776,387	(49,563,561)	2,004,062,861	42.2%
2022	820,423,194	833,985,463	(13,562,269)	2,008,311,596	41.5%

¹ Contributions shown are not interest adjusted. Actual contributions tie to financial statements.

STATEMENT OF CHANGES IN NET PENSION LIABILITY

	2022	2021	2020
Total Pension Liability (TPL)			
Service Cost	218,244,525	218,244,525	220,437,301
Interest	1,457,616,767	1,449,374,537	1,447,710,612
Changes of Benefit Terms ¹	68,096,068	6,041,053	-
Diff Between Expected and Actual Experience	41,232,922	10,871,434	(158,856,913)
Changes of Assumptions	274,893,478	269,629,371	52,927,000
Retirement Benefits	(1,447,668,471)	(1,394,914,135)	(1,368,004,318)
Refunds and Transfers	(34,413,878)	(30,305,050)	(30,447,178)
Net Change in Total Pension Liability	578,001,411	528,941,735	163,766,504
Total Pension Liability - Beginning	20,220,320,534	19,691,378,799	19,527,612,295
Total Pension Liability - Ending (a)	20,798,321,945	20,220,320,534	19,691,378,799
Plan Fiduciary Net Position			
Employer Contributions	855,817,402	853,214,442	854,117,785
Employee Contributions	167,117,810	166,954,560	164,576,018
Net Investment Income	(1,015,958,553)	3,703,593,259	(480,573,814)
Other Income	15,817,950	14,556,140	15,955,512
Retirement Benefits	(1,447,668,471)	(1,394,914,135)	(1,368,004,318)
Refunds and Transfers of Member Contributions	(34,413,878)	(30,305,050)	(30,447,178)
Administrative Expense	(16,710,210)	(16,606,586)	(16,749,257)
Other Postemployment Benefit Expenses	(966,102)	(89,651)	(42,750)
Depreciation and Amortization Expenses	(800,575)	(769,107)	(820,094)
Net Change in Plan Fiduciary Net Position	(1,477,764,627)	3,295,633,872	(861,988,096)
Plan Fiduciary Net Position - Beginning	14,716,344,767	11,420,710,895	12,282,698,991
Plan Fiduciary Net Position - Ending (b)	13,238,580,140	14,716,344,767	11,420,710,895
Ending Net Pension Liability (NPL) (a) - (b)	7,559,741,805	5,503,975,767	8,270,667,904
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	63.7%	72.8%	58.0%
Covered Employee Payroll	\$ 2,008,311,596	\$ 2,004,062,861	\$ 1,999,414,595
Net Pension Liability as a Percentage of Covered Employee Payroll	376.4%	274.6%	413.7%

¹ Increase in Net Pension Liability resulting from Act 37 of 2021.

Actuarial Assumptions:

All assumptions used for purposes of GASB Statement 67/68 reporting requirements are described in Appendix E, except for the discount rate. Please see below for a description of the discount rate used for GASB Statement 67/68 reporting.

Discount Rate:

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the long term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adjusting for expected inflation of 2.30% and an adjustment for the effect of rebalancing/diversification. The resulting expected long-term nominal rate of return is 8.34%. Best estimates of geometric real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2022 are summarized in the following table:

	Long Term Expected
Asset Class	Real Rate of Return
Cash	0.39%
Domestic Equity	4.57%
International Equity	5.76%
Domestic Fixed Income	1.48%
International Fixed Income	5.04%
Alternatives	8.30%
Total Fund	5.91%

The discount rate used to measure the total pension liability was 7.25 percent.

The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

		Current Discount	
	1% Decrease	Rate	1% Increase
	6.25%	7.25%	8.25%
2022 Employers' Net Pension Liability	9,512,361,423	7,559,741,805	5,779,236,411

The Schedule of Pension Amounts, below, provides employers with amounts to be recognized in the financial statements and note disclosures for GASB 68 reporting. In accordance with GASB Statement 68, changes in total pension liability due to differences between actual and expected experience and changes in assumptions are amortized over a period equal to the average of the expected remaining service lives of all employees that are provided with pensions through the pension plan (active and inactive employees) determined as of the beginning of the measurement period. The current average remaining service life, when rounded up to the next higher whole number changed from 3 years to 2 years in 2019. Differences between projected and actual investment returns are amortized over a closed 5-year period.

2022 Active Remaining Service Life:	# Years	Plan Year	Amortization Period
Active	7.41	2014-2018	3.00
Active After DROP	3.79	2019-2022	2.00
Supplemental	3.29		
DROP	0		
Term Vested	0		
Term Non-vested	0		
Retired	0		
Weighted Average	1.80		
Amortization Period (Rounded Up)	2.0 Years		

SCHEDULE OF PENSION AMOUNTS

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	(5,503,975,767)	(2,310,572,625)	1,167,275,137	
Total Pension Liability Factors:				
Service cost	(218,244,525)			218,244,525
Interest	(1,457,616,767)			1,457,616,767
Changes in benefit terms	(68,096,068)			68,096,068
Differences between expected and actual	(41,232,922)	-	41,232,922	
Amortization of current year		-	(20,616,461)	20,616,461
Amortization of prior years			(5,435,717)	5,435,717
Changes in assumptions	(274,893,478)	-	274,893,478	
Amortization of current year		-	(137,446,739)	137,446,739
Amortization of prior years		-	(134,814,685)	134,814,685
Benefit payments	1,447,668,471			(1,447,668,471)
Refunds and Transfers of Member	34,413,878			(34,413,878)
Net Change in Total Pension Liability	(578,001,411)		17,812,798	560,188,613
Plan Fiduciary Net Position:				
Employer Contributions	855,817,402			
Employee Contributions	167,117,810			(167,117,810)
Expected earnings on pension plan investments	1,071,180,273			(1,071,180,273)
Differences between projected and actual				
earnings on pension plan investments	(2,087,138,826)	-	2,087,138,826	
Amortization of current year		-	(417,427,765)	417,427,765
Amortization of prior years		596,362,921	(373,615,907)	(222,747,014)
Retirement Benefits	(1,447,668,471)			1,447,668,471
Administrative Expense	(16,710,210)			16,710,210
Refunds and Transfers of Member	(34,413,878)			34,413,878
Other	14,051,273			(14,051,273)
Net Change in Plan Fiduciary Net Position	(1,477,764,627)	596,362,921	1,296,095,154	441,123,954
Ending Balance	(7,559,741,805)	(1,714,209,704)	2,481,183,089	1,001,312,567

MEMBERSHIP DATA

LASERS provides the data for individual members of the system as of the valuation date. The validity of the results of any actuarial valuation is dependent upon the accuracy of the data provided. Our review of submitted data is limited to validation of reasonableness and consistency in several areas, such as age, service, salary, and current benefits. Our review includes checks for duplicate records and a comparison of the current year records to those submitted in prior years. Records identified as containing suspicious data were assigned values based on information from similar records or based on historical averages for similarly situated members. Suspicious data are not necessarily errors, but data which fall outside the normal parameters. Notwithstanding our efforts to review both census and financial data for apparent errors, we must rely upon the system's administrative staff and accountants to provide accurate information.

The data contained in this valuation is summarized on the following pages. The data summarized in the tables that follow serve as the basis for determining costs and liabilities. Salary and benefit totals in the membership profiles may not sum exactly to totals shown due to rounding.

Salary data contained in the profiles and valuation report exceed the amount reported by internal audit for members with less than one year of service. In the valuation process, salaries are annualized for members with fractional service in the first year of employment.

Disability retirees who have reached normal retirement eligibility requirements are considered regular retirees by LASERS but are classified as disability retirees for purposes of the actuarial valuation. Liabilities are calculated accordingly.

ACTIVE MEMBERS BY PLAN

	2022	2021	2020
Rank and File, Appellate Law Clerks	31,252	32,324	32,774
Legislators	3	4	4
Judges, Prior to 2011	133	136	173
Judges, Post 2011	186	186	126
Wildlife	110	124	130
Corrections Primary	55	67	91
Corrections Secondary	1,016	1,151	1,272
Peace Officers	29	32	35
Alcohol Tobacco Control	8	7	9
Bridge Police	3	3	3
Hazardous Duty Plan	3,122	2,995	3,182
Harbor Police	15	16	19
Subtotal	35,932	37,045	37,818
Post DROP	1,426	1,527	1,669
Total Active Members	37,358	38,572	39,487

TOTAL MEMBERS

	2022	2021	2020
Active Members	37,358	38,572	39,487
DROP Participants	1,199	1,311	1,367
Regular Retirees	41,678	41,449	41,271
Disability Retirees	1,918	2,000	2,091
Survivors	6,151	6,086	5,979
Terminated Vested	3,868	3,724	3,691
Subtotal	92,172	93,142	93,886
Terminated, Due Refund	59,146	57,464	55,676
Total Members	151,318	150,606	149,562

MEMBER RECONCILIATION

	Active Pre-DROP	Active after DROP	Terminated Vested	In DROP	Retired, Disabled, Survivors	Total
June 30, 2021	37,045	1,527	3,724	1,311	49,535	93,142
Additions						
Initial Membership	3,589					3,589
Non-Vested Rehire	491					491
Data Revisions		3	15	1	37	56
Change in Status						
Active to Terminated Vested	(631)		631			
Active to In DROP	(370)			370		
Active to Retired	(926)				926	
Disabled to Active						
Terminated Vested to Active	133		(133)			
Terminated Vested to Retiree			(174)		174	
Terminated Vested to DROP			(4)	4		
In DROP to Active after DROP		211		(211)		
In DROP to Retiree				(274)	274	
Active After DROP to Retiree		(315)			315	
Eliminated from Census						
Refunded	(1,448)		(147)			(1,595)
Terminated, Due Refund	(1,894)		(14)			(1,908)
Deceased	(35)	(2)	(17)	(2)	(1,425)	(1,481)
Data Revisions	(22)	2	(13)		(89)	(122)
June 30, 2022	35,932	1,426	3,868	1,199	49,747	92,172

LASERS MEMBERSHIP PROFILE Regular Members Before July 2006

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2022

					Credited Service	<u>, </u>				
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
25 - 29										
30 - 34		1			2					3
		\$36,364			\$75,013					\$111,377
35 - 39		7	5	12	170	19	1			214
		\$307,587	\$165,492	\$530,945	\$9,409,574	\$1,060,794	\$45,616			\$11,520,008
40 - 44	4	14	14	42	794	377	29			1274
	\$122,812	\$574,226	\$541,014	\$2,649,892	\$50,867,758	\$23,790,185	\$2,159,510			\$80,705,397
45 - 49		15	21	46	587	872	304	15		1860
		\$667,040	\$1,203,394	\$2,698,033	\$37,537,098	\$59,217,953	\$20,142,907	\$1,382,483		\$122,848,908
50 - 54	1	18	18	42	538	883	797	106	3	2406
	\$20,510	\$708,420	\$1,186,907	\$2,602,378	\$32,616,303	\$57,866,568	\$56,486,638	\$8,622,914	\$410,616	\$160,521,254
55 - 59	1	14	13	31	464	667	259	149	34	1632
	\$15,872	\$831,924	\$613,039	\$1,655,284	\$26,226,603	\$40,580,727	\$18,079,497	\$12,231,369	\$2,579,908	\$102,814,223
60 - 64		10	8	27	299	266	152	110	62	934
		\$384,605	\$311,505	\$1,407,802	\$16,628,020	\$15,633,057	\$10,223,884	\$9,265,404	\$4,393,970	\$58,248,247
65 - 69		2	3	6	137	142	93	49	37	469
		\$63,604	\$183,012	\$358,807	\$8,839,325	\$8,612,616	\$6,023,464	\$3,363,782	\$2,869,807	\$30,314,417
70+		1		4	52	77	56	33	32	255
		\$11,322		\$239,678	\$2,421,528	\$4,346,380	\$3,784,120	\$2,013,489	\$2,744,476	\$15,560,993
Total	6	82	82	210	3043	3303	1691	462	168	9047
	\$159,194	\$3,585,092	\$4,204,363	\$12,142,819	\$184,621,222	\$211,108,280	\$116,945,636	\$36,879,441	\$12,998,777	\$582,644,824

Averages ---- Attained Age 53.09
Service Years 22.04
Active Salary \$64,402

LASERS MEMBERSHIP PROFILE Regular Members After July 2006

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2022

				Credited Servic	e					
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25	637	504	9							1150
	\$16,852,430	\$15,055,816	\$286,396							\$32,194,642
25 - 29	565	1458	375	8						2406
	\$16,617,229	\$56,335,814	\$16,361,016	\$292,881						\$89,606,940
30 - 34	464	1415	1054	207	10	1				3151
	\$14,840,072	\$59,684,050	\$52,596,999	\$11,301,230	\$461,527	\$48,879				\$138,932,757
35 - 39	369	1203	1121	780	178	3				3654
	\$13,014,369	\$54,433,118	\$58,244,116	\$47,915,932	\$11,168,369	\$181,599				\$184,957,503
40 - 44	315	1015	826	709	272	11				3148
	\$12,016,251	\$46,166,574	\$43,324,724	\$44,281,589	\$17,113,593	\$667,933				\$163,570,664
45 - 49	267	810	658	535	233	17	2			2522
	\$9,436,486	\$37,575,800	\$34,977,020	\$31,270,965	\$15,156,159	\$1,338,959	\$111,167			\$129,866,556
50 - 54	227	739	671	478	211	11	5			2342
	\$8,116,137	\$33,196,201	\$35,956,700	\$28,552,064	\$12,984,405	\$807,614	\$416,900			\$120,030,021
55 - 59	167	571	588	476	194	14	5	2		2017
	\$5,835,680	\$26,143,767	\$29,499,799	\$27,659,842	\$11,213,326	\$1,078,254	\$409,230	\$114,088		\$101,953,986
60 - 64	61	279	360	333	107	9	3			1152
	\$2,381,663	\$12,587,735	\$17,522,477	\$17,158,054	\$6,020,716	\$706,519	\$349,327			\$56,726,491
65 - 69	26	67	124	165	59	6	1			448
	\$1,047,583	\$3,239,832	\$6,583,646	\$9,190,100	\$3,424,318	\$595,859	\$63,301			\$24,144,639
70+	3	24	34	45	19	1				126
	\$132,560	\$1,364,547	\$1,922,311	\$2,626,575	\$1,516,957	\$110,893				\$7,673,843
Total	3101	8085	5820	3736	1283	73	16	2		22116
	\$100,290,460	\$345,783,254	\$297,275,204	\$220,249,232	\$79,059,370	\$5,536,509	\$1,349,925	\$114,088		\$1,049,658,042

 Averages
 ---- Attained Age
 42.29

 Service Years
 6.13

 Active Salary
 \$47,461

LASERS MEMBERSHIP PROFILE Appellate Law Clerks

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2022

Credited Service											
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total	
< 25											
25 - 29											
30 - 34											
35 - 39				2 \$144,118						2 \$144,118	
40 - 44				5	4					9	
40 44				\$409,521	\$332,789					\$742,310	
45 - 49				1	11	3	2			17	
				\$75,413	\$884,497	\$245,726	\$171,302			\$1,376,938	
50 - 54				2	6	3	5			16	
				\$174,468	\$568,548	\$288,860	\$459,228			\$1,491,104	
55 - 59					2	7	5	5	3	22	
					\$180,177	\$674,498	\$546,423	\$529,216	\$326,233	\$2,256,547	
60 - 64				2	3	4	2	2	1	14	
				\$174,408	\$293,655	\$360,490	\$222,756	\$251,821	\$103,491	\$1,406,621	
65 - 69					3	1		1		5	
					\$270,611	\$130,000		\$89,340		\$489,951	
70+				1	1		1	1		4	
				\$75,321	\$81,220		\$93,696	\$106,285		\$356,522	
Total				13	30	18	15	9	4	89	
				\$1,053,249	\$2,611,497	\$1,699,574	\$1,493,405	\$976,662	\$429,724	\$8,264,111	

 Averages
 ----- Attained Age
 54.75

 Service Years
 21.85

 Active Salary
 \$92,855

LASERS MEMBERSHIP PROFILE Participating Legislators

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2022

				Cred	ited Service					
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
25 - 29										
30 - 34										
35 - 39										
40 - 44										
45 - 49										
50 - 54						1 \$265,457				1 \$265,457
55 - 59						. ,				. ,
60 - 64				1 \$124,303						1 \$124,303
65 - 69				, ,, , , , , ,						7- 7-
70+					1 \$111,260					1 \$111,260
Total				1 \$124,303	1	1 \$265,457				3 \$501,020

 Averages
 ---- Attained Age
 64.37

 Service Years
 18.87

 Active Salary
 \$167,007

LASERS MEMBERSHIP PROFILE Active Judges Pre 2011

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2022

Credited Service											
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total	
< 25											
25 - 29											
30 - 34											
35 - 39											
40 - 44											
45 - 49		1 \$154,999		2 \$240,549	3 \$334,786					6 \$730,334	
50 - 54		1 \$163,658	1 \$170,339	16 \$2,455,334	4 \$594,017	3 \$429,789	2 \$271,287			27 \$4,084,424	
55 - 59		1 \$163,658	* - 1 0) = -	10 \$1,610,984	8 \$1,148,132	5 \$765,653	1 \$143,978	1 \$170,339		26 \$4,002,744	
60 - 64		ψ100,000	2 \$291,518	9 \$1,500,948	9 \$1,425,021	\$660,536	\$653,450	2 \$340,678		30 \$4,872,151	
65 - 69			Ψ251,510	\$831,652	6 \$844,534	6 \$980,250	\$1,864,638	\$699,329		\$5,220,403	
70+		1 \$163,658		7 - 2 - 1,00 -	\$333,997	3 \$492,488	2 \$292,849	4 \$609,849		12 \$1,892,841	
Total		\$645,973	3 \$461,857	42 \$6,639,467	32 \$4,680,487	21 \$3,328,716	20 \$3,226,202	11 \$1,820,195		133 \$20,802,897	

Averages ---- Attained Age 61.03 Service Years 19.18 Active Salary \$156,413

LASERS MEMBERSHIP PROFILE Active Judges Post 2011

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2022

			Cr	edited Service						
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
25 - 29										
30 - 34										
35 - 39	2 \$268,998	8 \$1,211,534	2 \$187,507	1 \$170,339						13 \$1,838,378
40 - 44	1 \$94,210	23 \$3,603,513	7 \$1,056,332	\$327,316	1 \$163,658					34 \$5,245,029
45 - 49		13 \$2,133,581	14 \$2,202,840	2 \$327,600	1 \$163,658					30 \$4,827,679
50 - 54		16 \$2,520,748	13 \$1,997,711	2 \$328,649		1 \$163,658				32 \$5,010,766
55 - 59		10 \$1,566,441	14 \$2,304,482	5 \$812,990	1 \$163,658	2 \$313,877				32 \$5,161,448
60 - 64	1 \$131,365	11 \$1,806,919	8 \$1,315,291		1 \$163,658					21 \$3,417,233
65 - 69		11 \$1,663,204	8 \$1,313,595	4 \$666,940	,					23 \$3,643,739
70+		, ,	1 \$163,004	,						1 \$163,004
Total	4 \$494,573	92 \$14,505,940	67 \$10,540,762			3 \$477,535				186 \$29,307,276

 Averages
 --- Attained Age
 52.78

 Service Years
 5.66

 Active Salary
 \$157,566

LASERS MEMBERSHIP PROFILE Hazardous Duty

CELLS DEPICT - MEMBER COUNT
TOTAL SALARY

VALUATION DATE 6/30/2022

	Credited Service											
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total		
< 25	188	175	9							372		
	\$5,300,822	\$6,261,579	\$412,428							\$11,974,829		
25 – 29	121	284	103	1						509		
	\$3,839,834	\$11,162,143	\$4,777,434	\$54,477						\$19,833,888		
30 - 34	83	218	162	24	1					488		
	\$2,499,835	\$8,778,982	\$8,269,652	\$1,378,111	\$57,502					\$20,984,082		
35 - 39	75	132	134	40	22					403		
	\$2,396,656	\$5,449,634	\$6,767,875	\$2,110,697	\$1,236,338					\$17,961,200		
40 - 44	53	127	105	37	41	19				382		
	\$1,680,261	\$5,303,803	\$5,153,425	\$2,116,077	\$2,434,657	\$1,268,611				\$17,956,834		
45 - 49	49	93	78	28	25	30	9			312		
	\$1,554,644	\$3,949,573	\$3,956,307	\$1,576,169	\$1,550,660	\$2,103,339	\$724,661			\$15,415,353		
50 - 54	36	83	98	29	18	26	12	1		303		
	\$1,205,538	\$3,740,577	\$4,963,965	\$1,732,053	\$1,139,115	\$1,663,249	\$778,123	\$106,213		\$15,328,833		
55 - 59	16	71	59	27	14	10	5			202		
	\$577,831	\$3,215,209	\$3,120,751	\$1,336,555	\$826,389	\$559,059	\$292,372			\$9,928,166		
60 - 64	9	36	40	8	7	3	6	1		110		
	\$339,557	\$1,655,569	\$2,048,459	\$448,633	\$366,224	\$162,829	\$386,774	\$69,369		\$5,477,414		
65 - 69	4	9	11	2	1	1	1			29		
	\$112,582	\$361,592	\$620,970	\$111,420	\$72,529	\$76,589	\$63,139			\$1,418,821		
70+	3	3	4	2	-	•	-			12		
	\$107,882	\$111,740	\$219,172	\$87,034						\$525,828		
Total	637	1231	803	198	129	89	33	2		3122		
	\$19,615,441	\$49,990,401	\$40,310,438	\$10,951,226	\$7,683,414	\$5,833,676	\$2,245,069	\$175,582		\$136,805,247		

Averages ---- Attained Age 38.94
Service Years 5.45
Active Salary \$43,820

LASERS MEMBERSHIP PROFILE Corrections Primary

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2022

					Credited Service					
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
25 - 29										
30 - 34										
35 - 39										
40 - 44			2			1				3
			\$88,159			\$88,399				\$176,558
45 - 49					1	12	1			14
					\$65,518	\$801,846	\$57,653			\$925,017
50 - 54		1				7	2			10
		\$36,231				\$421,853	\$140,707			\$598,791
55 - 59		1				5	1	3	1	11
		\$39,938				\$317,628	\$70,037	\$173,482	\$145,783	\$746,868
60 - 64					1	4	3	3	1	12
					\$42,732	\$222,524	\$196,253	\$207,792	\$57,663	\$726,964
65 - 69					·	5		-	-	5
						\$264,410				\$264,410
70+										•
Total		2	2		2	34	7	6	2	55
		\$76,169	\$88,159		\$108,250	\$2,116,660	\$464,650	\$381,274	\$203,446	\$3,438,608

Averages ---- Attained Age 55.49 Service Years 23.57

Active Salary \$62,520

LASERS MEMBERSHIP PROFILE Corrections Secondary

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2022

Credited Service											
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total	
< 25											
25 - 29											
30 - 34			1	23	3					27	
			\$39,924	\$1,171,805	\$158,432					\$1,370,161	
35 - 39			2	64	62	6				134	
			\$77,532	\$3,407,777	\$3,510,558	\$397,365				\$7,393,232	
40 - 44		1		46	93	70	5			215	
		\$46,231		\$2,470,728	\$5,568,537	\$4,522,374	\$365,581			\$12,973,451	
45 - 49		1	2	28	56	111	18			216	
		\$37,992	\$90,791	\$1,491,962	\$3,277,414	\$7,511,370	\$1,294,132			\$13,703,661	
50 - 54				31	45	92	31	4		203	
				\$1,676,697	\$2,557,363	\$5,864,413	\$2,339,590	\$340,149		\$12,778,212	
55 - 59				31	37	55	12	4		139	
				\$1,441,780	\$1,932,439	\$3,364,931	\$876,593	\$400,072		\$8,015,815	
60 - 64				18	16	15	4	3		56	
				\$948,892	\$820,113	\$819,264	\$240,953	\$202,213		\$3,031,435	
65 - 69				4	5	4	1	1	2	17	
				\$216,025	\$239,377	\$210,111	\$67,499	\$53,664	\$131,467	\$918,143	
70+				2	5	2	,		Í	9	
				\$85,413	\$243,366	\$103,622				\$432,401	
Total		2	5	247	322	355	71	12	2	1016	
		\$84,223	\$208,247	\$12,911,079	\$18,307,599	\$22,793,450	\$5,184,348	\$996,098	\$131,467	\$60,616,511	

 Averages
 ---- Attained Age
 48.51

 Service Years
 18.97

 Active Salary
 \$59,662

LASERS MEMBERSHIP PROFILE Wildlife

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2022

					Credited Se	ervice				
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
25 - 29										
30 - 34				3						3
				\$211,318						\$211,318
35 - 39				12	11	1				24
				\$798,932	\$792,754	\$68,633				\$1,660,319
40 - 44				3	26	6				35
				\$214,940	\$1,882,731	\$491,830				\$2,589,501
45 - 49				3	8	11				22
				\$195,422	\$628,750	\$1,009,707				\$1,833,879
50 - 54					5	10	3			18
					\$358,498	\$908,046	\$325,484			\$1,592,028
55 - 59					3	2	2	1		8
					\$235,932	\$162,183	\$176,783	\$105,392		\$680,290
60 - 64										
65 - 69										
70+										
Total				21	53	30	5	1		110
				\$1,420,612	\$3,898,665	\$2,640,399	\$502,267	\$105,392		\$8,567,335

 Averages
 ----- Attained Age
 44.91

 Service Years
 18.38

 Active Salary
 \$77,885

LASERS MEMBERSHIP PROFILE Peace Officers

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2022

				Cr	edited Service					
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
25 - 29										
30 - 34										
35 - 39				1	1					\$128,262
40 - 44				\$59,519	\$68,843 5	1				\$128,362 6
40 - 44					\$321,907	\$56,193				\$378,100
45 - 49				1	4	2	4			11
				\$48,918	\$273,190	\$147,441	\$258,571			\$728,120
50 - 54				4 10,5 10	2	3	1			6
					\$107,089	\$177,187	\$60,195			\$344,471
55 - 59						1	2			3
						\$79,530	\$152,309			\$231,839
60 - 64										
65 - 69					1					1
					\$84,194					\$84,194
70+										
Total				2	13	7	7			29
				\$108,437	\$855,223	\$460,351	\$471,075			\$1,895,086

Averages ---- Attained Age 48.62 Service Years 20.95

Active Salary \$65,348

LASERS MEMBERSHIP PROFILE Alcohol Tobacco Control

CELLS DEPICT

MEMBER COUNT TOTAL SALARY VALUATION DATE 6/30/2022

				Credit	ed Service					
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
25 - 29										
30 - 34										
35 - 39				1						1
40 44				\$61,565	2					\$61,565
40 - 44					2 ¢122 191					¢122 191
45 40					\$132,181	2				\$132,181
45 - 49					1	3				4
					\$56,077	\$209,985				\$266,062
50 - 54										
55 - 59										
60 - 64								1		1
								\$88,254		\$88,254
65 - 69										
70+										
Total				1	3	3		1		8
				\$61,565	\$188,258	\$209,985		\$88,254		\$548,062

Averages ---- Attained Age 46.44 Service Years 19.96

Active Salary \$68,508

LASERS MEMBERSHIP PROFILE Bridge Police

CELLS DEPICT

MEMBER COUNT TOTAL SALARY VALUATION DATE 6/30/2022

				Cred	lited Service					
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
25 - 29										
30 - 34										
35 - 39				1 \$55,068						1 \$55,068
40 - 44				. ,	1					1
					\$73,137					\$73,137
45 - 49										
50 - 54										
55 - 59									1 \$71,906	1 \$71,906
60 - 64									\$71,900	\$71,900
65 - 69										
70+										
Total				1	1				1	3
				\$55,068	\$73,137				\$71,906	\$200,111

Averages ---- Attained Age 46.71
Service Years 22.70
Active Salary \$66,704

LASERS MEMBERSHIP PROFILE Harbor Police

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2022

				Credi	ted Service					
Age	<1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35+	Total
< 25										
25 - 29			1							1
			\$50,715							\$50,715
30 - 34				1						1
				\$58,347						\$58,347
35 - 39			1	1	2					4
			\$55,841	\$64,424	\$123,051					\$243,316
40 - 44										
45 - 49				1		3				4
				\$56,820		\$229,940				\$286,760
50 - 54						2	1			3
						\$121,881	\$76,961			\$198,842
55 - 59						1				1
						\$65,660				\$65,660
60 - 64						,				Ź
65 - 69										
70+						1				1
						\$62,626				\$62,626
Total			2	3	2	7	1			15
			\$106,556	\$179,591	\$123,051	\$480,107	\$76,961			\$966,266

Averages ---- Attained Age 46.27 Service Years 17.71 Active Salary \$64,418

LASERS MEMBERSHIP PROFILE Active After DROP

CELLS DEPICT - MEMBER COUNT

TOTAL SALARY TOTAL BENEFIT VALUATION DATE 6/30/2022

						Credited Serv	rice			
Age	<1	1	2	3	4	5-9	10-14	15-20		Total
40-44										
Pay										
Benefit										
45-49	1	1								2
Pay	\$87,667	\$44,429								\$132,096
Benefit	\$38,544	\$42,024								\$80,568
50-54	15	9	5	1	2					32
Pay	\$1,037,379	\$704,035	\$436,213	\$75,615	\$165,948					\$2,419,190
Benefit	\$791,484	\$422,856	\$236,364	\$44,424	\$76,692					\$1,571,820
55-59	88	74	26	23	16	26	4			257
Pay	\$4,768,876	\$5,314,570	\$1,761,851	\$1,603,547	\$1,175,671	\$1,853,006	\$404,437			\$16,881,958
Benefit	\$3,464,424	\$3,085,548	\$1,146,456	\$962,232	\$665,688	\$1,011,504	\$98,076			\$10,433,928
60 - 64	105	114	89	54	55	125	16	1		559
Pay	\$5,147,053	\$7,024,986	\$6,063,012	\$3,955,006	\$3,719,421	\$9,052,057	\$1,359,858	\$92,971		\$36,414,364
Benefit	\$2,607,936	\$3,054,552	\$3,255,936	\$2,062,656	\$2,047,056	\$5,061,516	\$602,988	\$19,752		\$18,712,392
65 - 69	1	13	77	64	55	141	38	5	2	396
Pay	\$9,868	\$681,555	\$4,150,607	\$3,990,541	\$3,316,058	\$9,817,221	\$2,717,760	\$324,638	\$197,342	\$25,205,590
Benefit	\$3,780	\$197,052	\$1,469,328	\$1,654,248	\$1,295,616	\$4,379,268	\$1,222,572	\$105,408	\$26,172	\$10,353,444
70+	1			2	3	76	54	36	8	180
Pay	\$24,051			\$97,481	\$127,780	\$5,060,724	\$3,062,654	\$2,992,984	\$566,938	\$11,932,612
Benefit	\$2,892			\$20,004	\$20,352	\$1,690,188	\$959,352	\$966,828	\$172,680	\$3,832,296
Total	211	211	197	144	131	368	112	42	10	1426
Pay	\$11,074,895	\$13,769,575	\$12,411,683	\$9,722,190	\$8,504,878	\$25,783,008	\$7,544,709	\$3,410,593	\$764,280	\$92,985,811
Benefit	\$6,909,060	\$6,802,032	\$6,108,084	\$4,743,564	\$4,105,404	\$12,142,476	\$2,882,988	\$1,091,988	\$198,852	\$44,984,448

Averages ---- Attained Age 64.34
Service Years 4.84
Average Salary \$65,207
Average Benefit \$31,546

LASERS MEMBERSHIP PROFILE DROP Participants

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS

VALUATION DATE 6/30/2022

			Years Retired				
Age	<1	1 - 2	2-3	3 - 4	4-5	5+	Total
< 40							
40-44							
45-49	8	6	1				15
	\$427,812	\$230,281	\$61,236				\$719,329
50-54	75	77	52				204
	\$3,558,744	\$3,812,499	\$2,332,536				\$9,703,779
55-59	157	190	214	1			562
	\$6,382,404	\$8,137,182	\$9,358,032	\$53,880			\$23,931,498
60-64	126	142	146				414
	\$3,145,956	\$4,187,219	\$3,966,900				\$11,300,075
65-69		1	2				3
		\$78,348	\$8,388				\$86,736
70-74			1				1
			\$2,820				\$2,820
75-79							
80-84							
85-90							
90+							
Total	366	416	416	1			1199
	\$13,514,916	\$16,445,530	\$15,729,912	\$53,880			\$45,744,238

Averages ---- Attained Age 57.85
Years Retired 1.57
Average Benefit \$38,152

LASERS MEMBERSHIP PROFILE Post Retirement Services

CELLS DEPICT - MEMBER COUNT TOTAL SALARY

VALUATION DATE 6/30/2022

				Cı	redited Service					
Age	<1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 10	10 - 14	15 - 19	20+	Total
< 25										
25 - 29										
30 - 34										
35 - 39										
40 - 44										
45 - 49	1 \$63,994	\$73,163								\$137,157
50 - 54	\$116,396	2 \$197,546								\$313,942
55 - 59	\$261,410	14 \$1,200,585	6 \$435,841	3 \$174,916	1 \$49,144					28 \$2,121,896
60 - 64	14 \$780,544	\$1,361,616	9 \$596,064	2 \$201,272	· · · · ·	1 \$67,420				\$3,006,916
65 - 69	13 \$584,740	\$1,272,816	\$ \$590,296	\$114,746	1 \$50,149	1 \$116,295				\$2,729,042
70+	\$1,328,699	\$1,004,135	13 \$786,892	\$86,491	Ψυ V,Σ .7	\$57,710				\$3,263,927
Total	67 \$3,135,783	87 \$5,109,861	36 \$2,409,093	9 \$577,425	2 \$99,293	3 \$241,425				204 \$11,572,880

 Averages
 ---- Attained Age
 67.98

 Service Years
 3.47

 Active Salary
 \$56,730

LASERS MEMBERSHIP PROFILE Regular Retirees

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS

VALUATION DATE 6/30/2022

Years Retired												
Age	<1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 10	10 - 14	15 - 19	20+	Total		
< 40	1									1		
	\$20,892									\$20,892		
40-44	10	5	3	4		2				24		
	\$340,992	\$154,680	\$53,580	\$103,200		\$28,224				\$680,676		
45-49	47	29	16	21	14	54				181		
	\$2,095,764	\$1,140,396	\$494,412	\$567,528	\$512,904	\$1,144,860				\$5,955,864		
50-54	85	73	79	65	62	325	22	1		712		
	\$4,443,455	\$3,665,964	\$3,669,132	\$2,624,220	\$2,724,228	\$8,674,320	\$540,852	\$25,080		\$26,367,251		
55-59	169	170	182	274	237	1083	309	70	20	2514		
	\$7,436,924	\$8,166,447	\$7,504,344	\$11,840,088	\$10,413,276	\$37,443,192	\$9,815,988	\$1,469,112	\$408,144	\$94,497,515		
60-64	423	363	404	468	435	2319	1841	403	189	6845		
	\$11,727,002	\$9,476,750	\$11,294,664	\$12,165,480	\$12,414,936	\$87,328,344	\$69,573,540	\$9,678,192	\$3,385,056	\$227,043,964		
65-69	206	237	185	237	288	3281	3006	1634	506	9580		
	\$5,370,764	\$7,660,476	\$5,719,788	\$6,127,644	\$7,620,840	\$85,365,048	\$116,671,644	\$51,182,340	\$10,362,768	\$296,081,312		
70-74	66	87	76	105	130	1249	3023	3079	1439	9254		
	\$2,146,989	\$3,579,240	\$3,501,264	\$2,893,212	\$3,402,876	\$31,423,968	\$75,976,416	\$99,694,128	\$40,589,592	\$263,207,685		
75-79	14	35	19	35	30	379	824	2166	2550	6052		
	\$527,064	\$1,545,209	\$611,136	\$1,189,764	\$874,044	\$9,792,684	\$18,180,564	\$45,927,468	\$74,830,392	\$153,478,325		
80-84	2	6	1	7	8	87	167	421	2802	3501		
0.7.00	\$106,572	\$105,408	\$16,512	\$315,936	\$249,936	\$2,839,032	\$4,170,432	\$7,098,588	\$64,335,180	\$79,237,596		
85-90		f2(2(0	l \$44.544	2 \$44.244	f52.500	19	35	85 \$1,720,044	1791	1935		
90+	1	\$36,360	\$44,544	\$44,244	\$52,500	\$634,188	\$1,162,704	\$1,729,944 9	\$37,429,224 1063	\$41,133,708 1079		
90 ⊤	\$42,492					\$2,940	\$153,780	\$151,464	\$18,679,476	\$19,030,152		
Total	1024	1006	966	1218	1205	8799	9232	7868	10360	41678		
1000	\$34,258,909	\$35,530,930	\$32,909,376	\$37,871,316	\$38,265,540	\$264,676,800	\$296,245,920	\$216,956,316	\$250,019,832	\$1,206,734,939		

Averages

---- Attained Age 71.16
Years Retired 14.39
Average Benefit \$28,954

LASERS MEMBERSHIP PROFILE Disability Retirees

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS

VALUATION DATE 6/30/2022

					Years Retired					
Age	<1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 10	10 - 14	15 - 19	20+	Total
< 40	3	1	1		1					6
	\$30,828	\$28,944	\$9,132		\$50,424					\$119,328
40-44	2	4	3		4	5	2			20
	\$70,908	\$90,924	\$50,724		\$67,956	\$66,564	\$28,248			\$375,324
45-49	2	2	7	3	3	13	4	1		35
	\$38,964	\$45,438	\$141,948	\$51,444	\$32,148	\$238,704	\$64,884	\$35,280		\$648,810
50-54	3	6	8	8	3	28	32	9		97
	\$67,651	\$101,088	\$240,012	\$147,528	\$120,264	\$510,840	\$562,824	\$139,668		\$1,889,875
55-59	16	14	6	13	4	62	69	25	13	222
	\$397,056	\$185,592	\$97,536	\$187,272	\$75,120	\$1,238,472	\$1,310,902	\$336,996	\$124,848	\$3,953,794
60-64	1	3	3	2	10	77	92	77	53	318
	\$15,600	\$45,444	\$44,784	\$23,772	\$140,592	\$1,279,740	\$1,741,692	\$1,227,420	\$554,556	\$5,073,600
65-69				1		45	108	122	144	420
				\$23,328		\$1,003,644	\$1,806,444	\$2,156,112	\$1,832,496	\$6,822,024
70-74							38	96	198	332
							\$607,920	\$1,461,048	\$2,586,336	\$4,655,304
75-79							1	34	202	237
							\$66,960	\$433,560	\$2,458,068	\$2,958,588
80-84									138	138
									\$1,476,432	\$1,476,432
85-90									75	75
									\$760,596	\$760,596
90+									18	18
									\$169,104	\$169,104
Total	27	30	28	27	25	230	346	364	841	1918
	\$621,007	\$497,430	\$584,136	\$433,344	\$486,504	\$4,337,964	\$6,189,874	\$5,790,084	\$9,962,436	\$28,902,779

Averages ---- Attained Age 68.27
Years Retired 18.83
Average Benefit \$15,069

LASERS MEMBERSHIP PROFILE

Survivor Benefits

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS

VALUATION DATE 6/30/2022

	Years Retired												
Age	<1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 10	10 - 14	15 - 19	20+	Total			
< 40	8	17	14	10	12	65	79	88	138	431			
	\$222,792	\$617,200	\$331,452	\$246,708	\$239,232	\$1,680,423	\$1,923,936	\$1,727,712	\$2,058,168	\$9,047,624			
40-44	1	2	3	2	1	9	19	17	71	125			
	\$16,800	\$46,939	\$76,704	\$37,032	\$15,180	\$135,444	\$347,292	\$309,576	\$1,193,328	\$2,178,295			
45-49	2	5	2	3	4	15	14	21	59	125			
	\$54,816	\$97,500	\$28,884	\$40,596	\$55,140	\$223,332	\$237,948	\$399,204	\$894,588	\$2,032,008			
50-54	2	5	4	6	7	16	25	26	62	153			
	\$104,484	\$237,432	\$82,452	\$173,460	\$109,836	\$380,892	\$452,388	\$368,412	\$890,160	\$2,799,516			
55-59	1	3	5	7	7	37	56	39	57	212			
	\$19,872	\$75,912	\$141,816	\$137,460	\$214,416	\$893,028	\$1,280,652	\$643,824	\$821,316	\$4,228,296			
60-64	4	7	6	6	5	70	101	76	116	391			
	\$132,732	\$141,099	\$153,408	\$129,840	\$78,276	\$1,714,176	\$2,411,700	\$1,612,836	\$1,716,996	\$8,091,063			
65-69	1	8	6	9	8	111	144	160	235	682			
	\$42,420	\$308,892	\$154,464	\$213,360	\$107,736	\$2,605,908	\$3,378,096	\$3,347,280	\$3,996,696	\$14,154,852			
70-74			3	1	2	55	153	244	418	876			
			\$38,268	\$7,320	\$90,012	\$1,321,356	\$3,403,344	\$4,871,376	\$8,393,820	\$18,125,496			
75-79		1			1	24	71	188	690	975			
		\$6,012			\$732	\$871,380	\$1,405,692	\$3,470,148	\$13,105,488	\$18,859,452			
80-84				3	2	13	21	82	826	947			
				\$23,376	\$65,820	\$276,012	\$455,280	\$1,486,164	\$14,034,300	\$16,340,952			
85-90						3	10	18	711	742			
						\$68,100	\$223,092	\$263,328	\$10,837,188	\$11,391,708			
90+						1	1	3	487	492			
						\$17,292	\$22,644	\$37,572	\$7,009,440	\$7,086,948			
Total	19	48	43	47	49	419	694	962	3870	6151			
	\$593,916	\$1,530,986	\$1,007,448	\$1,009,152	\$976,380	\$10,187,343	\$15,542,064	\$18,537,432	\$64,951,488	\$114,336,210			

Averages ---- Attained Age 72.01 Years Retired 23.65 Average Benefit \$18,588

LASERS MEMBERSHIP PROFILE Terminated Vested

CELLS DEPICT - MEMBER COUNT TOTAL BENEFITS

VALUATION DATE 6/30/2022

Credited Service											
Age	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	Total	
<20											
20-24			2							2	
			\$11,820							\$11,820	
25-29			47							47	
			\$449,544							\$449,544	
30-34	1	1	193	11						206	
	\$552	\$3,276	\$2,322,823	\$155,676						\$2,482,327	
35-39		3	345	110	14					472	
		\$33,053	\$3,988,537	\$1,922,233	\$262,020					\$6,205,843	
40-44	1	1	247	236	49	6	1			541	
	\$216	\$2,258	\$2,649,915	\$4,002,588	\$1,119,284	\$181,466	\$31,601			\$7,987,329	
45-49		1	186	290	98	15	2			592	
		\$15,600	\$2,017,728	\$5,277,076	\$2,277,031	\$513,563	\$64,128			\$10,165,125	
50-54		3	166	348	163	38	12	1		731	
		\$10,979	\$2,043,518	\$5,821,476	\$4,050,344	\$1,274,833	\$466,312	\$33,708		\$13,701,169	
55-59	1	3	142	351	201	60	12	2		772	
00 03	\$194	\$8,737	\$1,641,302	\$5,674,058	\$4,506,632	\$1,753,734	\$421,663	\$77,784		\$14,084,104	
60-64	1	1	87	153	59	21	3	<i>\$77,</i> 7701	1	326	
00 01	\$1,076	\$10,332	\$892,930	\$2,176,576	\$1,115,078	\$413,332	\$147,133		\$40,620	\$4,797,076	
65-69	Ψ1,070	2	20	55	23	7	1		ψ10,020	108	
03 07		\$13,730	\$252,738	\$781,539	\$380,768	\$125,203	\$37,509			\$1,591,488	
70+	2	Ψ10,700	3	41	11	6	6	1	1	71	
, , ,	\$31,200		\$37,284	\$506,133	\$198,755	\$117,668	\$146,525	\$29,549	\$44,676	\$1,111,790	
Total	6	15	1438	1595	618	153	37	4	2	3868	
1 otai	\$33,238	\$97,965	\$16,308,139	\$26,317,357	\$13,909,911	\$4,379,798	\$1,314,871	\$141,041	\$85,296	\$62,587,615	
	\$33,436	\$71,703	\$10,500,139	φ40,517,557	φ13,707,711	ψ 1 ,3/3,/90	φ1,31 4 ,0/1	\$141,041	\$65,490	\$02,567,015	

Averages ---- Attained Age 50.49
Service Years 11.40
Average Benefit \$16,181

SUMMARY OF PLAN PROVISIONS

EFFECTIVE DATE:

July 1, 1947

EMPLOYEE:

Any person legally occupying a position in state service.

EMPLOYER:

The State of Louisiana or any of its boards, commissions, departments, agencies and courts which are contributing members and those approved for membership by the legislature from which any employee receives his compensation.

ELIGIBILITY FOR PARTICIPATION:

Condition of employment in state service except the following: elected or appointed officials or employees who are contributing members of any other state system; public officials and state employees who receive a per diem in lieu of compensation; persons employed on or after July 1, 1991, who work on a part-time basis except those with ten or more years of service in the system; patient or inmate help in state charitable, penal or correctional institutions; part-time students, interns and resident physicians; independent contractors; retirees of the retirement system who return to work under certain conditions; judges in office prior to October 2, 1976, who did not elect to become members prior to October 2, 1976; civilian employees who on November 1, 1981, were within five years of retirement eligibility in the Federal Civil Service Retirement and Disability Fund; certain unclassified, temporary seasonal employees of the Department of Revenue excluding the Louisiana Tax Commission; Employees of the New Orleans City Park Improvement Association, certain employees of political subdivisions.

CREDITABLE SERVICE:

For service prior to January 1, 1973: 1/4 year granted for each 89 day interval of service, not to exceed one credit per fiscal year. Minimum 15 days required for 1st Quarter credit.

For service on or after January 1, 1973, a member shall receive credit based on the ratio of actual pay to the annual base per calendar year. Fractional service shall be rounded to the next highest 1/10th, not to exceed 100 percent per year.

ADDITIONAL CREDITABLE SERVICE:

- 1. Credit for service canceled by withdrawal of accumulated contributions may be restored by member by paying into system the amount withdrawn plus interest at the Actuarial Valuation rate.
- 2. Maximum of four years of credit for military service may be obtained for each member with at least two years of service, contingent on payment of Actuarial Cost.

- 3. Credit for service which was classified as a job appointment or emergency appointment where the intended duration of employment exceeds two years of service.
- 4. At retirement, all accumulated unused sick and annual leave shall be credited based on the following schedule:

1 - 26 Days	10% of a Year
27 - 52 Days	20% of a Year
53 - 78 Days	30% of a Year
79 - 104 Days	40% of a Year
105 - 130 Days	50% of a Year
131 - 156 Days	60% of a Year
157 - 182 Days	70% of a Year
183 - 208 Days	80% of a Year
209 - 234 Days	90% of a Year
235 - 260 Days	100% of a Year

Service credit for unused leave can be used for computation purpose only, not for eligibility. An actuarial equivalent lump sum is available after August 15, 1993.

EARNABLE COMPENSATION:

The base pay earned by an employee for a given pay period as reported by the employing agency. This includes the full amount earned by an employee, overtime, and per diem earned by an employee of the House of Representatives, the Senate, or an agency of the legislature, and expense allowances and per diem paid to members of the legislature, the clerk, or sergeant at arms of the House of Representatives and president and secretary or sergeant at arms of the Senate.

AVERAGE FINAL COMPENSATION FOR BENEFIT PURPOSES:

The average annual earned compensation for the 36 highest months of successive employment, or the highest 36 successive joined months where interruption of service occurred; part-time employees use the base pay the part-time employee would have received had employment been full-time. Per Act 75 of 2005, average final compensation for Regular members, Bridge Police, and Appellate Law Clerks hired on or after July 1, 2006, is determined as the 60 highest months of successive employment. Per Act 992 of 2010, average final compensation for Judges hired on or after January 1, 2011 and all members of the Hazardous Duty Plan is based on the highest 60 months. Compensation is limited by the 401(a)(17) compensation limit of the Internal Revenue Code for certain members.

ACCUMULATED CONTRIBUTIONS:

The sum of all amounts deducted from earned compensation and credited to the individual account in the employee's savings account, plus regular interest credited prior to July 1971.

EMPLOYER CONTRIBUTIONS:

Determined in accordance with Louisiana Revised Statutes Sections 102 and 102.1, which require the employer rate to be actuarially determined and set annually, based on the Public Retirement Systems' Actuarial Committee's recommendation to the Legislature.

EMPLOYEE CONTRIBUTIONS:

Plan	Current Contribution
Regular Employees, Appellate Law Clerks, Optional Retirement Plan	
Pre-Act 75 (hired before 7/1/2006)	7.5%
Post-Act 75 (hired after 6/30/2006)	8.0%
Legislators	11.5%
Special Legislative	9.5%
Judges hired before 1/1/2011	11.5%
Judges hired after 12/31/2010	13.0%
Corrections Primary and Secondary	9.0%
Wildlife and Fisheries, Hazardous Duty	9.5%
Peace Officers/Alcohol Tobacco Control	9.0%
Bridge Police	8.5%
Harbor Police	9.0%

NORMAL RETIREMENT ELIGIBILITY AND BENEFIT:

Members whose first LASERS eligible employment occurs on or after July 1, 2015:

- 1. Regular Plan: Eligible with 5 years at age 62. Benefit accrual rate is 2.5%.
- 2. Judges: Eligible with 5 years at age 62. Benefit accrual is 3.5%, plus regular plan benefits for prior service.
- 3. Hazardous Duty Plan: Eligible with 12 years at age 55 or 25 years at any age. Benefit accrual rate is 3.33% for service earned in the Hazardous Duty Plan if the last 10 years of service was earned in a hazardous duty position; otherwise, the accrual rate is 2.5%.

Members whose first LASERS eligible employment occurs during January 1, 2011 to June 30, 2015:

- 1. Regular Plan: Eligible with 5 years at age 60. Benefit accrual rate is 2.5%.
- 2. Judges: Eligible with 5 years at age 60. Benefit accrual is 3.5% plus regular plan benefits for prior service.
- 3. Hazardous Duty Plan: Eligible with 12 years at age 55 or 25 years at any age. Benefit accrual rate is 3.33% for service earned in the Hazardous Duty Plan if the last 10 years of service was earned in a hazardous duty position; otherwise, the accrual rate is 2.5%.

Members whose first LASERS eligible employment occurs prior to January 1, 2011:

- 1. Regular members hired prior to July 1, 2006: Eligible with 10 years at age 60, or 25 years at age 55, or 30 years at any age. Regular members hired on or after July 1, 2006 are eligible with 5 years at age 60. Benefit accrual rate is 2.5% for all years of service.
- 2. Judges, Court Officers, and Appellate Law Clerks: Eligible with 18 years at any age, 10 years at age 65, 20 total years with at least 12 years as a judge or court officer at age 50, 12 years at age 55, or age 70 regardless of service. Judges and Court Officers earn 3.5% for year of service, plus regular plan benefits for prior service. Appellate Law Clerks earn 2.5% for all years of service.

- 3. Members of the legislature, governor, lieutenant governor and state treasurer: Eligible with 16 years of service at any age, 20 total years with at least 12 years as a member of this class at age 50, or 12 years at age 55. Members earn 3.5% per year of service, plus regular plan benefits for prior service.
- 4. Plans for certain employees of the Department of Public Safety and Corrections:
 - a. Corrections Primary, hired before August 15, 1986: Eligible with 10 years at age 60 or 20 years at any age. Benefit accrual rate is 2.5%.
 - b. Corrections Primary, hired August 15, 1986 to December 31, 2001: Eligible with 10 years at age 60, 20 years at age 50, or 25 years at any age. Benefit accrual rate is 2.5%.
 - c. Corrections Primary, hired prior to January 1, 2002, and employed as a probation and parole officers in the Office of Adult Services of the Department of Corrections: Eligible as stated above. Benefit accrual rate is 3.0% for service earned prior to July 1, 2014 and 3.33% for service earned after June 30, 2014.
 - d. Corrections Secondary Plan, hired after January 1, 2002, or transferred from Corrections Primary Plan: Eligible with 10 years at age 60 or 25 years at any age. Benefit accrual rate is 3.33%.

5. Wildlife and Fisheries:

- a. Members hired before July 1, 2003: 10 years at age 55, or 20 years at any age. Benefit accrual is 3.0% for service earned prior to July 1, 2003 and 3.33% for service earned after June 30, 2003.
- b. Members hired on or after July 1, 2003: 10 years at age 60, or 25 years at any age. Benefit accrual is 3.33%.
- 6. Peace Officers: Eligible with 10 years of service and age 60 or at 25 years at age 55, or 30 years at any age. Benefit accrual is 3.33%.
- 7. Alcohol Tobacco Control: Eligible with 10 years of service and age 60 or at 25 years of service at any age. Benefit accrual is 3.33%.
- 8. Bridge Police: Eligible with 10 years at age 60, or 25 years at any age. Benefit accrual is 2.5%.

Members originally enrolled in the Harbor Police Retirement System who transferred to LASERS and elected not to enroll in the Hazardous Duty Plan are eligible with 25 years at any age, 10 years at age 60, 12 years at age 55, or 20 years at age 45. Benefit accrual is 3.33%.

NOTES:

- A. Benefits are limited to 100% of final average compensation.
- B. Retirees who return to work will continue to receive unreduced benefits if compensation does not exceed 50% of the annual benefit during the fiscal year. Earnings above this limit will result in a corresponding reduction to benefits. Retirees who return to work may choose to suspend their retirement benefits and resume making contributions in the system. Upon subsequent retirement, benefit will resume. If post-retirement employment is at least 36 months, a supplemental benefit will be calculated. Otherwise, employee contributions will be refunded.
- C. A \$300 annual supplemental benefit is provided to persons who become members of the retirement system prior to July 1, 1986 (Act 608 of 1986).
- D. For members employed after January 1, 1990, the annual pension paid from the trust cannot exceed the maximum benefit provided under Section 415(b) of the Internal Revenue Code, and related Section 415 regulations, as adjusted for inflation and form of benefit other than life annuity or qualified joint and survivor annuity for retirement ages.

ACTUARIALLY REDUCED RETIREMENT:

Members with 20 years of service credit at any age are eligible for an actuarially reduced benefit from the earliest date member would be eligible if employment had continued, to the earliest normal retirement date, based on service earned to date. This does not apply to the Correctional Secondary Plan members, Wildlife agents hired on or after July 1, 2003, or Harbor Police Plan members.

POST RETIREMENT INCREASES:

The provisions regarding future Permanent Benefit Increases (PBIs) were substantially changed by Act 399 of 2014. PBIs may be granted, if requested by the Board and approved with a two-thirds vote of both houses of legislature, provided there are sufficient funds in the Experience Account to fully fund the increase on an actuarial basis.

Experience Account Credits/Debits: After allocation of the first \$100,000,000 to the unfunded accrued liability, the Experience Account is credited with 50% of the remaining excess investment income, up to a maximum balance as described below. The \$100,000,000 threshold is indexed based upon the increase in the actuarial value of assets. Excess investment income is investment income for the prior fiscal year in excess of the expected income based on the actuarial valuation rate for that fiscal year. Balances in the Experience Account accrue interest at the actuarial rate of return earned during the prior year. All credits are limited as follows:

If the system's funded ratio is less than 80%, the Experience Account is limited to the reserve necessary to grant one PBI. If the funded ratio is at least 80%, the Experience Account is limited to the reserve necessary to fund two PBI's. The Experience Account is debited for the increase in actuarial accrued liability resulting from the increases.

<u>Permanent Benefit Increases:</u> No increase can be granted if the legislature granted an increase in the preceding fiscal year, unless the system is 85% funded or greater. Additionally, PBI's are limited to the lesser of the increase in the Consumer Price Index, U.S. city average for all urban consumers (CPI-U) for the twelve-month period ending on the system's valuation date, or by a percentage increase determined by the system's funded ratio:

Funded Ratio	PBI Increase Limit
< 55%	0%
55% to <65%	1.5%
65% to <75%	2.0%
75% to <80%	2.5%
80% +	3.0%

Beginning July 1, 2015, any increase is limited to the first \$60,000 of a retiree's annual benefit, increased annually by the CPI-U for the twelve-month period ending in June. If the actuarial rate of return for the prior plan year is less than 8.25%, regardless of the discount rate, the increase is limited to the lesser of 2% or the amount described above.

<u>Eligibility Requirements:</u> Benefits are restricted to those retirees who have attained age 60 and have been retired for at least one year. The minimum age 60 for the receipt of a benefit increase does not apply to disability retirees.

MINIMUM BENEFITS:

Effective September 1, 2001, retirees and beneficiaries receiving retirement benefits shall be entitled to a minimum benefit which is not less than \$30.00 per month for each year of creditable service. The minimum benefit is adjusted for the option elected at retirement.

DISABILITY RETIREMENT:

Eligibility:

Ten years of creditable service and certification of disability by medical board. (Medical examination may be required once per year for the first five years of disability retirement, and once every three years thereafter, until age 60.) No minimum service requirement for judges hired before January 1, 2011. Five years of service for members of the Harbor Police Plan.

Benefit:

- 1. The disability retirement annuity shall be equivalent to the regular retirement formula without reduction due to age for all classes of membership.
- 2. For judges and court officers, the benefit in (1) but not less than 50% of current salary.
- 3. Corrections Primary Plan: When the disability is incurred in the line of duty, the retirement annuity is 60% of their final average compensation. When incurred in the line of duty and caused by an intentional act of violence, the retirement annuity is 100% of final average compensation. Otherwise, benefits paid per (1) above.
- 4. Corrections Secondary Plan: When the disability is incurred in the line of duty, the retirement annuity is 40% of final average compensation. If the member has 10 or more years of service, the benefit will be the greater of 40% of final average compensation or the benefit determined by (1) above. When incurred in the line of duty and caused by an intentional act of violence, the retirement annuity is 100% of final average compensation. Disabilities not incurred in the line of duty determined per (1) above.
- 5. For certain Wildlife agents: When partially disabled and not eligible for (1) above, the retirement annuity is 75% of the annuity in (1); When totally disabled while in the line of duty, the retirement annuity is 60% of final average compensation. When the disability is incurred in the line of duty and caused by an intentional act of violence, the retirement annuity is 100% of final average compensation.
- 6. Hazardous Duty Plan: When the disability is incurred in the line of duty, the retirement annuity is 75% of their final average compensation. When incurred in the line of duty and caused by an intentional act of violence, the retirement annuity is 100% of final average compensation. Disabilities not incurred in the line of duty paid per (1) above.
- 7. Harbor Police Plan: When the disability is incurred in the line of duty, the retirement annuity is 60% of final average compensation. When incurred in the line of duty and caused by an intentional act of violence, the retirement annuity is 100% of final average compensation. When not incurred in the line of duty, the retirement annuity is 40% of final average compensation if under age 55, and is the regular retirement annuity if age 55 or greater.

SURVIVOR'S BENEFITS:

Members whose first LASERS eligible employment occurs on or after January 1, 2011, or members of the Hazardous Duty Plan regardless of when hired:

Eligibility and Benefit:

1. Regular Members and Judges:

- a. Surviving spouse with minor children of a deceased member with five years of service credit, two of which were earned immediately prior to death, or 20 years of service will receive 50% of the retirement benefit that would have been due to the member, or \$600 per month if greater. Each qualifying child will receive 50% of the spouse's benefit, up to 2 children. The total spouse and children benefit is subject to a minimum based on the Option 2A equivalent for the surviving spouse.
- b. Surviving spouse, legally married one year prior to death, of a deceased member with 10 years of service credit, two of which were earned immediately prior to death, or 20 years of service regardless of date earned will receive the Option 2A equivalent of the retirement benefit that would have been due to the member, or \$600 per month if greater.
- c. Surviving minor children will each (up to two) receive 50% of the benefit paid to a surviving spouse with children. This amount will be divided equally among all eligible children.
- d. Surviving physically handicapped or mentally disabled children continue to receive a minor child's benefit described above in (1) or (3), whichever is applicable.

2. Hazardous Duty Members:

- a. Surviving spouse and children of members who did not die in the line of duty receive benefits described for non-Hazardous Duty members.
- b. Surviving spouse and children of members who died in the line of duty receive 80% of the member's final average compensation, or 100% if the death was caused by an intentional act of violence. The benefit is shared equally.
- c. Surviving spouse of a retired member will receive 75% of members' monthly benefit. If no spouse, then surviving children receive (1.c.) above.
- 3. If no one is eligible to receive a survivor benefit, named beneficiary receives accumulated contributions.

Members whose first LASERS eligible employment occurs prior to January 1, 2011:

Eligibility and Benefit:

1. Regular members:

- a. Surviving spouse, legally married one year prior to death, of a deceased member with 10 years of service credit, two of which were earned immediately prior to death, or 20 years of service, receive the greater of 50% of member's average compensation or \$200 per month.
- b. If member with no spouse has surviving minor child, and 5 years of service credit, two of which were earned immediately prior to death, or 20 years of service, minor children receive the greater of 75% of member's average compensation or \$300 per month.
- c. For surviving spouse with minor children, the spouse must be eligible per (a) above and the children per (b) above to receive these benefits. If either one is ineligible, then the criteria in (a) or (b) would apply accordingly.

- d. Surviving physically handicapped or mentally disabled children continue to receive a minor child's benefit described above in (a) or (c) whichever is applicable.
- 2. Surviving spouse of a judge or court officer receive survivor's benefit described in (1a) or (1b), but not less than the greater of 1/3 the member's current compensation, 50% of the retirement pay which such member was entitled or receiving prior to death, or 50% of the member's final average compensation (if the provisions of R.S. 11:471 are met). Benefit limited to 75% of average compensation.

3. Corrections

- a. In the line of duty:
 - i. Surviving spouse with no minor children: 60% of average compensation if member had less than 25 years of service, or 75% of average compensation with 25 or more years of service.
 - ii. Minor children or disabled children and no spouse: 60% of average compensation if member had less than 5 years of service (25 years for Secondary Plan), or 75% of average compensation if member had 5 or more years of service (25 years for Secondary Plan).
 - iii. Surviving spouse with minor children: 60% of average compensation if member had less than 5 years of service (25 years for secondary plan) and benefit divided 1/3 to spouse and 2/3 to minor children equally. 75% of average compensation with 5 or more years of service (25 years for Secondary Plan) and benefit divided 1/3 to spouse and 2/3 to minor children equally.
- b. Not in the line of duty: Benefits in accordance with the provisions for regular members.

4. Wildlife agents

- a. In the line of duty:
 - i. Surviving spouse receives 75% of average compensation if member has 25 or more years of service, otherwise, spouse receives 60% of compensation. Spouse receives 100% if the death was caused by an intentional act of violence. Benefits cease upon remarriage.
 - ii. Minor children (if no eligible surviving spouse): one child 30% of average compensation, 2 children 40%, 3 children 50%, 4 or more children 60%, divided equally among children. Minor children receive 100% if the death was caused by an intentional act of violence.
- b. Not in the line of duty benefit to surviving spouse and children: Surviving spouse receives a benefit as if the member retired on the date of death, until remarried. If member dies prior to age 55 with at least 15 years of service, benefit computed based on years of service without regard to age.
- c. Survivors of retired Wildlife agents will receive 75% of the retiree benefit in priority order: surviving spouse (until remarriage), minor children, parents who derive main support from retiree.
- 5. If no one is eligible to receive a survivor benefit, then the named beneficiary will receive the member's accumulated contributions.

6. Harbor Police

a. In line of duty benefit to surviving spouse is 60% of average compensation, regardless of years of service or 100% if the death was caused by an intentional act of violence. Benefits cease upon remarriage. Benefits continue to minor children until age 18 if there is no eligible surviving spouse or the member's parents if there is no eligible surviving spouse or child.

b. Not in the line of duty benefit to surviving spouse with children is 60% of final average compensation, until remarried and children attain age 18. If no children, surviving spouse receives 40% of final average compensation, until remarried. If no surviving spouse, children receive 60% of final average compensation until the youngest child attains age 18. If no surviving spouse or child, parents who derive sole support from member receive 40% of final average compensation.

OPTIONAL FORMS OF BENEFIT:

In lieu of receiving normal retirement benefit, member may elect to receive actuarial equivalent of retirement allowance in a reduced form as follows:

- Option 1 If a member dies before receiving present value of annuity in monthly payments, balance paid to designated beneficiary(ies).
- Option 2 100% of reduced retirement allowance, if member dies, continued for designated beneficiary's lifetime.
- Option 3 50% of reduced retirement allowance, if member dies, continued for designated beneficiary's lifetime.
- Option 4 Other benefits of equal actuarial value may be elected with approval of board.
 - A. 90% of the maximum retirement allowance to member; when member dies, 55% of the maximum retirement allowance continued to beneficiary.
 - B. 55% of the reduced retirement allowance, if member dies, continued for designated beneficiary's lifetime.

Member's reduced benefit reverts to the maximum if the beneficiary predeceases the annuitant.

If divorced after retirement, optional benefit can revert to maximum benefit with actuarial adjustment.

<u>Automatic COLA Option</u> – An irrevocable retirement option which permits the member to receive an actuarially reduced benefit with a 2.5% annual benefit COLA (Cost of Living Adjustment) beginning on the first retirement anniversary date, but not before the retiree attains age 55 or would have attained age 55 in the case of a surviving spouse. This option can be chosen in combination with the above options.

<u>Initial Benefit Option</u> - Maximum benefit actuarially reduced for partial lump sum equal to not more than 36 months of maximum monthly pension.

REFUND OF CONTRIBUTIONS:

If a member ceases to be a member, except by death or retirement, he shall be paid in full or partially at his option, the amount of the accumulated contributions credited to his individual account in annuity savings fund plus any accumulated interest thereon as of June 30, 1971; if member of legislature, no interest. No interest credited after June 30, 1971. Death prior to retirement - accumulated contributions credited to individual account in annuity savings fund are returnable to a designated beneficiary or to member's estate.

DEFERRED RETIREMENT OPTION PLAN:

Instead of terminating employment and accepting a service retirement allowance, any member who has met the normal eligibility requirements may participate in the Deferred Retirement Option Plan (DROP).

<u>Normal Eligibility</u>: Any member who is eligible for unreduced service retirement allowance may begin participation on the first retirement eligibility date for a period not to exceed the third anniversary of retirement eligibility.

<u>Benefit:</u> Upon termination of employment, a participant will receive, at his option:

- 1. Lump sum payment (equal to the payments to the account);
- 2. A true annuity based upon his account; or
- 3. Other methods of payment approved by the Board of Trustees.

If a participant dies during the period of participation in the program, his account balance shall be paid to the beneficiary, or if none, to his estate in any form approved by the Board of Trustees.

If employment is not terminated at the end of DROP participation, then:

- 1. Payment into account shall cease;
- 2. Payment from account only upon termination of employment; and
- 3. The participant shall resume active contributing membership.

Upon termination of employment, the benefit payments indicated above shall be paid. The participant shall receive an additional retirement benefit based on additional service rendered since termination of DROP participation, usually the normal method of computation of benefit subject to the following:

- 1. If additional service was less than the period used to determine the average compensation, then the average compensation figure used to calculate the additional benefit shall be based on compensation used to determine the initial benefit
- 2. If additional service was greater than the period used to determine the average compensation, the average compensation figure used to calculate the additional benefit shall be based on compensation earned during the period of additional service.

DROP accounts for members who become eligible for retirement prior to January 1, 2004, and participate in DROP shall earn interest, following termination of DROP, at a rate of 0.5% below the actuarial rate of the System's investment portfolio. Members eligible for retirement on or after January 1, 2004, must invest their DROP accounts in self-directed accounts approved by the Board of Trustees.

The annual DROP interest rate for the Harbor Police plan is the three-year average investment return of the plan assets (calculated as the compound average of 36 months) for the period ending the June 30th immediately preceding that given date. This rate determined by LASERS is reduced by a 0.5% "contingency" adjustment, but not to below zero. DROP interest is forfeited if member does not cease employment after DROP participation.

FUNDING POLICY

LASERS' funding policy is established by Sections 102 and 102.1 of Title 11 of the Louisiana Revised Statutes. LASERS is funded by employee and employer contributions, as a percentage of payroll, plus investment earnings. The basic elements of the annual required contribution are the normal cost, which is the cost of benefits earned by current active employees that is allocated to the current year, plus amortization of the unfunded accrued liability (UAL). Act 55 of 2014, Section 1, appropriates a percentage of nonrecurring revenue in accordance with the Constitution Article VII, Section 10(D)(2)(b)(ii) and requires the funds to be used to reduce the IUAL. The funds are used to reduce the Original Amortization Base (OAB), which includes the Initial Unfunded Accrued Liability (IUAL).

Per State constitutional provisions, the employer contribution rate cannot drop below 12%, without regard to employer credits, and without a corresponding adjustment to the employee contribution rate. Per statutory provisions, the employer contribution rate cannot drop below 15.5% until the UAL that existed on June 30, 2004 is fully funded. Amounts paid to the system due to the minimum will be accumulated in the employer credit account to be used exclusively to reduce any UAL created before July 1, 2004.

Employee contributions are fixed and established by statutes. Employer contributions are determined using the Entry Age Normal actuarial cost method, as required by statute and actuarial assumptions regarding future experience, such as long-term expected investment rates of return, future salary increases, and demographic assumptions such as rates of retirement, termination, disability, and mortality. The actuarial assumptions utilized in this valuation can be found in Appendix E of this report. The cost method is used to determine the normal cost, which is divided into the employee portion and the employer portion, both expressed as a percentage of payroll. The cost method also determines the plans total actuarial accrued liability. The Unfunded Accrued Liability (UAL) is determined as the total actuarial accrued liability less the plan's valuation assets, which are developed in Section II of this report. The UAL changes annually due to plan experience gains or losses, which develop as actual plan experience will differ from that assumed by the actuarial assumptions, and if applicable, changes in benefits, or actuarial methods and/or assumptions. Statutes provide for the amortization of changes in the UAL.

Benefit changes resulting in an actuarial cost can only be enacted by a two-thirds vote of the legislature and must be paid within 10 years. Non-investment experience gains and losses and investment losses are amortized over 30 years with level payments. Investment gains are first allocated to the OAB and EAAB, without re-amortization, up to the \$100 million threshold amounts, indexed beginning June 30, 2016, as required by Act 399 of 2014. By not re-amortizing, gains applied to these schedules result in earlier pay-off of these schedules. One-half of any remaining gains are credited to the Experience Account up to the statutory cap. Any remaining gains are then amortized over 30 years with level payments. Beginning in 2016, the full investment gain remaining after the allocation to the OAB and EAAB will be amortized over 30 years, and any gains credited to the Experience Account will be amortized as an offsetting loss over a 10-year period. Once the fund attains a funded ratio of 70%, future gains or losses (investment and non-investment) that would have otherwise been amortized over 30 years will be amortized over 20 years.

If the System is less than 80% funded, the net remaining liability of the OAB and EAAB shall be reamortized after application of the "threshold allocations" in Fiscal Year 2024/2025 and in every fifth fiscal year thereafter. Once the system attains an 80% funded ratio, the OAB and EAAB will be re-amortized following allocations of "threshold allocations" or contribution variance surpluses. All other schedules will have level payments.

If aggregate payroll increases at the same rate as the increase in amortization payments, the employer contribution rate attributable to the amortization payments will maintain a level percentage of payroll. If future aggregate payroll increases at a higher rate than the total amortization payments, the employer contribution will decrease. A table and graph showing future UAL amortization payments in aggregate for all current schedules are shown in Appendix F.

Employers pay the full required employer contribution rate, as recommended to the legislature by the Public Retirement Systems' Actuarial Committee (PRSAC). This rate is determined as the projected actuarially determined contribution divided by the projected payroll. The actual actuarially determined contribution and actual payroll will vary from the projected amounts, resulting in a contribution variance. Per statutory requirements, contribution surpluses will be allocated to the EAAB through fiscal year 2039/2040, and contribution deficits will be amortized over a five-year period with level payments.

The funding policy described above is consistent with the plan accumulating adequate assets to make benefit payments when due and improving the funded status of the plan by fully amortizing the unfunded accrued liability, assuming the actuarially determined contributions will be paid when due and all actuarial assumptions will be realized.

DISCUSSION OF RISK

Measuring pension obligations and calculating actuarially determined contributions require the use of assumptions regarding future economic and demographic experience. It should be noted that the liabilities and the corresponding funded status presented in this report would differ if a different assumption set were utilized. Future plan experience may differ from the assumptions used in this valuation resulting in actuarial gains and losses. The extent of these differences will impact the plan's future financial condition, the volatility of future plan measurements, and the volatility of future required contributions. Actuarial losses on assets and liabilities will lead to higher contribution amounts, while actuarial gains on assets and liabilities will lead to lower contribution amounts. Because these risks may not be apparent to the reader, we have included a summary of the key risk factors that should be considered.

Investment Risk

For most plans, investment returns are a significant portion of the assets used to fund plan benefits. Therefore, current plan liabilities are developed by discounting future expected benefits based on the expected returns that will be used to fund those benefits.

Statutory funding policy provides that a portion of investment gains will be transferred to the experience account to fund future Permanent Benefit Increases, should the legislature grant them. The guidance provided in Actuarial Standard of Practice No. 27, Selection of Economic Assumptions for Measuring Pension Obligations, makes it clear that the discount rate is not necessarily the same as the expected investment return assumption. Section 3.5.1 states that the actuary may determine that it is appropriate to adjust the economic assumptions for provisions that are difficult to measure, of which the definition includes gain-sharing provisions. Therefore, in accordance with this guidance, the reasonableness of the discount rate is evaluated against the expected investment return less the portion of returns that are expected to be transferred to the experience account rather than fund regular plan benefits.

Due to the nature of investments, long-term expectations are not a guarantee and actual average long-term returns may be above or below the assumed investment return. Investment experience gains and losses will develop from two sources: (1) the extent to which the actual long-term rate of return used to fund regular plan benefits differs from the discount rate, and (2) the extent to which transfers to the experience account differ from the margin described above. Short-term volatility in actual returns is expected and will result in year-over-year fluctuations in financial metrics. Prolonged periods of investment performance below the assumed rate of return can result in a decrease in funded status (i.e. increases unfunded liabilities) and an increase in contributions required in future years. Of course, the opposite is also true. Therefore, as part of the annual valuation process, the expected return is evaluated in comparison to LASERS investment consultant's expected return for LASERS portfolio and industry-average long-term capital market assumptions to determine if the return assumption continues to be reasonable.

Demographic Risk

The results in this report assume demographic characteristics of the plan will follow a pattern consistent with assumptions disclosed for termination of employment, incidence of disabilities, timing of retirement, and duration of payments throughout retirement. Actuarial assumptions are applied to large groups of individuals to reasonably estimate plan liabilities and are not necessarily intended to be applied on an individual basis. As actual demographic experience will differ from the assumptions, future experience gains and losses will develop.

Payroll Risk

Individual Salary - Total plan liabilities include the estimated impact of future salary increases on future benefits for individual plan participants. To the extent that future salary increases differ from plan assumptions, gains and losses will develop.

Aggregate Plan Payroll - The valuation determines the Actuarially Determined Contribution (ADC) for the year immediately following the valuation date and projects the ADC for the following year. The employer contribution rate for the second fiscal year following the valuation date, which is the rate actually paid by the employer, is determined as the projected ADC divided by projected aggregate payroll. A contribution surplus may develop if actual aggregate payroll for the projected period exceeds the projected aggregate payroll and/or if the restated ADC is less than the projected ADC. Conversely, a contribution deficit may develop if actual aggregate payroll for the projected period is less than projected aggregate payroll and/or if the restated ADC is greater than the projected ADC.

Contribution Risk

This risk results from the potential that actual employer contributions may deviate from actuarially determined contributions, which are determined in accordance with statutory funding policy. The funding policy provides contribution requirements that will result in a reasonable expectation that assets will accumulate to be sufficient to pay plan benefits when due, and eventually reach a 100% funded status if actuarial assumptions are realized in the aggregate. The Louisiana Constitutional requirements set forth in Article 10 Section 29(E) further reduce contribution risk.

Other Considerations

Significant legislative changes have been enacted since 2009, which reduced the plan's risk of not accumulating sufficient assets to pay plan benefits when due. Highlights of these changes are listed below:

- Restructuring of UAL payment schedules so that all schedules are amortized with level payments.
- Dedication of significantly more investment experience gains to the reduction of UAL debt before credits can be made to the Experience Account to fund future Permanent Benefit Increases (PBIs).
- Reduction in the maximum PBI percentage that can be granted, until funded status reaches 80%.
- Limitations on frequency of potential for Board to request that future PBI's be granted.
- Reduction in the term of future amortization schedules from 30 years to 20 years once the system attains a 70% funded ratio.
- Requirement that contribution variance surpluses and a portion of investment experience gains be used to reduce the UAL without an immediate reduction to employer contributions.
- Funding of administrative expenses via direct employer contributions.
- Constitutional requirement that benefit provisions enacted by the legislature that have an actuarial cost be amortized over a 10-year period.

Impact of Plan Maturity on Risk

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared among active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on the risk characteristics and risk tolerance of the plan. For example, plans with a large amount of liability attributable to retirees have a shorter time horizon to recover from losses (such as investment experience losses due to lower than expected investment returns) than plans where the majority of the liability is attributable to active members. For this reason, highly mature plans with a substantial liability due to retirees and inactive members have

less tolerance for risk. Similarly, mature plans paying substantial retirement benefits resulting in a small positive or negative net cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan and assessing risk, we have provided some relevant metrics and discuss the highlights of information derived from these metrics below.

* Asterisks in tables in this section denote dollar values shown in millions Note all values may not foot totals show due to rounding

				(D)	(E)				
	(A)			Inactive	Total			(A)/	(D)/(E)
	Total	(B)	(C)	Accrued	Accrued	(F)	(F)/(E)	(B+C)	Accrued
	Active	DROP	Inactive	Liability	Liability	Valuation	Funded	Support	Liability
	Members	Members	Members	*	*	Assets *	Ratio	Ratio	Ratio
2013	44,111	2,092	49,587	\$11,981	\$16,182	\$9,741	60.2%	85.4%	74.0%
2014	40,321	1,838	51,498	\$13,073	\$17,878	\$10,606	59.3%	75.6%	73.1%
2015	40,194	1,682	51,596	\$13,327	\$18,217	\$11,318	62.1%	75.4%	73.2%
2016	39,284	1,609	52,066	\$13,692	\$18,576	\$11,631	62.6%	73.2%	73.7%
2017	39,055	1,520	52,473	\$13,978	\$18,792	\$11,977	63.7%	72.3%	74.4%
2018	39,293	1,398	52,726	\$14,244	\$19,104	\$12,361	64.7%	72.6%	74.6%
2019	39,533	1,354	53,013	\$14,502	\$19,528	\$12,521	64.1%	72.7%	74.3%
2020	39,487	1,367	53,032	\$14,804	\$19,691	\$12,617	64.1%	72.6%	75.2%
2021	38,572	1,311	53,259	\$15,169	\$20,220	\$13,347	66.0%	70.7%	75.0%
2022	37,358	1,199	53,615	\$15,583	\$20,798	\$13,824	66.5%	68.2%	74.9%

<u>Funded Ratio</u>: The funded ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has increased from 60.2% to 66.5% over the last ten years. This ratio generally reflects the financial health of the plan but should not be considered in isolation since changes in methods and assumptions may reduce the funded ratio but also reduce future potential losses and resulting contribution rate increases. For example, during this time period, <u>LASERS</u> has reduced the discount rate from 8.25% to 7.25% and changed the actuarial cost method from projected unit credit to entry age normal which in total have increased the unfunded accrued liability by \$2.2 billion (\$2.1 billion remaining in UAL). If not for these changes, the funded ratio would be approximately 73.8%. However, these changes have improved the financial stability of the plan by reducing the potential for future contribution rate increases. If all actuarial assumptions are realized, the funded ratio is expected to steadily increase as unfunded liabilities are amortized in accordance with the plan's funding policy.

<u>Support Ratio</u>: The support ratio is determined as the ratio of active to inactive members. Active membership, which includes Active After DROP members, decreased substantially between 2013 and 2014 due in part to State lay-offs and continues to decrease. Inactive membership, which includes retirees, survivors, and terminated vested membership has steadily increased. As a result, the support ratio has decreased from 85.4% to 68.2%, over the last ten years. This should be closely monitored by the investment staff to be sure no cash-flow issues develop that would require pre-mature liquidation of assets, which could result in investment experience losses.

<u>Accrued Liability Ratio</u>: The accrued liability ratio, which is a measure of the proportion of Total Accrued Liability attributable to inactive members has remained steady since 2013 at approximately 75%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors should be amortized over a shorter time horizon than for a less mature plan. The legislature has enacted a provision

that will reduce the amortization period from 30 years to 20 years once the funded ratio reaches 70%.

	(A)		(A)/(B)
	Market	(B)	Asset
	Value of	Total	Volatility
	Assets *	Payroll *	Ratio
2013	\$10,328	\$1,952	529.1%
2014	\$11,625	\$1,814	640.9%
2015	\$11,415	\$1,857	614.8%
2016	\$10,724	\$1,842	582.1%
2017	\$11,753	\$1,822	645.1%
2018	\$12,284	\$1,864	659.0%
2019	\$12,283	\$1,952	629.1%
2020	\$11,421	\$1,999	571.2%
2021	\$14,716	\$2,004	734.3%
2022	\$13,239	\$2,008	659.2%

Asset Volatility Ratio: The asset volatility ratio, determined as the ratio of the Market Value of Assets to Total Payroll, is a measure of the impact of investment volatility on employer contributions which are paid as a percentage of payroll. Although MVA growth that exceeds payroll growth may contribute to the financial stability of the plan, the amortization of changes in these higher asset values have a greater impact on contribution volatility as this ratio increases. Since 2013, the asset volatility ratio has increased from 529.1% to 659.2%.

	(A) Contributions*	(B) Benefits*	(A)-(B) Contributions less Benefits*	(C) Market Value of Assets*	(B)/(C) Benefits/ MVA	[(A)- (B)]/(C)
2013	\$856	\$1,151	(\$295)	\$10,328	11.1%	-2.9%
2014	\$789	\$1,262	(\$473)	\$11,625	10.9%	-4.1%
2015	\$893	\$1,255	(\$363)	\$11,415	11.0%	-3.2%
2016	\$897	\$1,292	(\$395)	\$10,724	12.0%	-3.7%
2017	\$840	\$1,331	(\$491)	\$11,753	11.3%	-4.2%
2018	\$897	\$1,378	(\$481)	\$12,284	11.2%	-3.9%
2019	\$943	\$1,397	(\$454)	\$12,283	11.4%	-3.7%
2020	\$1,035	\$1,416	(\$381)	\$11,421	12.4%	-3.3%
2021	\$1,035	\$1,443	(\$408)	\$14,716	9.8%	-2.8%
2022	\$1,039	\$1,501	(\$462)	\$13,239	11.3%	-3.5%

<u>Cash Flow Measures:</u> Mature plans paying substantial retirement benefits resulting in small positive or negative cash flows may be more sensitive to near term investment volatility. Note investment returns result in significant asset growth despite the negative cash flow.

	(A)	(B)	(A)+(B)
	Investment	Other	Total
	Experience	Experience	Experience
	Gains/(Losses)*	Gains/(Losses)*	Gain/(Loss)*
2013	\$321	\$429	\$750
2014	\$473	\$61	\$534
2015	\$281	(\$28)	\$253
2016	(\$250)	\$81	(\$169)
2017	(\$14)	\$100	\$86
2018	(\$20)	\$18	(\$2)
2019	(\$286)	(\$96)	(\$382)
2020	(\$431)	\$151	(\$280)
2021	\$273	(\$6)	\$267
2022	(\$44)	(\$81)	(\$126)

Experience Gains and Losses: As plan experience differs from actuarial assumptions, experience gains and losses will develop. If assumptions are appropriately determined, gains and losses are expected to offset over time. Consistent gains or losses may be an indication that actuarial assumptions need to be reevaluated. LASERS' consistent "other" experience gains result primarily from salary and mortality assumptions. Recent changes following the experience study are expected to mirror actual experience more closely.

The risks identified and discussed above are the most significant risks based on the characteristics of the plan, however this is not an exhaustive list of potential risks that could be considered. Advanced modeling, as well as the identification of additional risks, can be helpful and can be provided upon request of the Board.

ACTUARIAL COST METHODS AND ASSUMPTIONS

ACTUARIAL COST METHOD:

Louisiana Statutes, R. S. 11:22, prescribes the Entry Age Normal cost method for funding valuation purposes. This cost method generally produces normal costs that are level as a percentage of the member's projected pay if the composition of the active group with regard to age, sex, and service is stable. Normal costs are attributed from the first period in which a member accrues benefits through all assumed exit ages until retirement.

ASSET VALUATION:

The market value of assets is adjusted to gradually recognize investment gains and losses relative to the discount rate over a 5-year period in 20% increments. The adjusted asset value is subject to Corridor Limits of 80% to 120% of the market value of assets.

ACCOUNTING DISCLOSURE:

The Statements of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position provided by the accounting staff were the final drafts prior to publication. If these statements differ from the final audit report, a revised actuarial report will be issued, but only to the extent that any changes affect the employer's contribution rate or the return on the Actuarial Value of Assets.

ADMINISTRATIVE EXPENSES:

Administrative expenses are funded directly by employers as a percentage of projected payroll beginning July 1, 2018, in accordance with Act 94 of 2016. Projected administrative expenses are determined based on prior year actual expenses with consideration of any expected variations provided by LASERS Fiscal Division.

POST RETIREMENT BENEFIT INCREASES:

The accrued actuarial liability includes previously granted post-retirement benefit increases. Louisiana law pertaining to LASERS' retiree benefit increases provides for the funding of future increases by requiring the automatic transfer of a portion of excess investment earnings to the experience account, subject to the statutory maximum balance of the account. The law does not provide for automatic benefit increases. Many conditions must be met before an increase can be granted, as described in the Post-Retirement Increases section of the Summary of Plan Provisions in Appendix B of this report. The legislature and governor have the ultimate authority as to whether a future increase will be granted. Since a portion of investment earnings will be used to fund these benefits, if granted, the rate used to discount plan liabilities represents the long-term expected returns (net of investment expenses) less the expected returns used to fund future retiree benefit increases. This adjustment is made in accordance with Actuarial Standards of Practice No. 27 (section 3.5.1) regarding the selection of economic assumptions, which states that it is appropriate to adjust the economic assumptions to provide for plan provisions that are difficult to measure, such as gain-sharing provisions.

ACTUARIAL ASSUMPTIONS:

Demographic and Salary assumptions used in the valuation were adopted by the Board of Trustees following the most recent experience study. The Retirement System is required to conduct an experience study every five years. An experience study was completed for the observation period of July 1, 2013 through June 30, 2018. The recommended assumption changes based on this study were adopted by the Board, effective July 1, 2019. The experience study report, dated January 23, 2019, provides further information regarding the rationale for these assumptions. The current rate tables are illustrated at the end of this appendix.

INFLATION:

The Board of Trustees adopted a change in the inflation assumption from 2.50% to 2.30%, effective July 1, 2020.

DISCOUNT RATE / INVESTMENT EARNINGS:

<u>Funding Valuation Assumption</u>: A discount rate of 7.25%, was used for the June 30, 2022 valuation, including for the projected contribution requirements for Fiscal Year 2023/2024.

The discount rate for funding purposes reflects the assumed investment rate of return, net of investment expenses, and net of investment gains expected to be allocated to the Experience Account to fund future permanent benefit increases (35 basis points). Therefore, by excluding returns expected to be used for purposes other than funding regular plan benefits, the discount rate represents the expected returns to be used to fund regular plan benefits.

GASB Assumptions: A discount rate of 7.25% is used for GASB reporting purposes.

MORTALITY ASSUMPTIONS:

Mortality rates were revised based on the 2014-2018 experience study as follows:

General Active Employees

Males RP-2014 Blue Collar Employee *0.978 Females RP-2014 Blue Collar Employee * 1.144

Public Safety Active Employees

Males RP-2014 Blue Collar Employee *1.005 Females RP-2014 Blue Collar Employee * 1.129

General Retiree/Inactive Employees

Males RP-2014 Blue Collar Annuitant * 1.280 Females RP-2014 White Collar Annuitant * 1.417

Public Safety Retiree/Inactive Employees

Males RP-2014 Blue Collar Annuitant *1.185 Females RP-2014 Blue Collar Annuitant * 1.017 Disability Retirees

Males RP-2000 Disability Retiree * 1.009 Females RP-2000 Disability Retiree * 1.043

Mortality assumptions for active and regular retirees include adjustments for expected future mortality improvement using the MP-2018 Generational Improvement Scale. Mortality assumptions for Disability Retirees include no adjustments for expected future mortality improvement, based on plan experience.

DISABILITY ASSUMPTION:

Rates of total and permanent disability vary based upon attained age and vary by plan, based upon the 2014-2018 experience study.

RETIREMENT/DROP ASSUMPTION:

Eligibility for normal retirement benefits and DROP participation is based on age and service requirements that vary by plan, based on the 2014-2018 experience study.

TERMINATION ASSUMPTIONS:

Voluntary termination or withdrawal rates are based on the 2014-2018 experience study. Rates for Regular members and Corrections/Hazardous Duty members are based on a combination of age and service. Rates for Wildlife employees are 7.6% for zero to five years of service and 0.5% for six or more years of service. The expected withdrawal rate for Judges is a flat rate of 1.20%. For members terminating with vested benefits, it is assumed that 20% will elect to withdraw their accumulated employee contribution, and 80% will receive a benefit beginning at age 60.

SALARY GROWTH:

The rates of annual salary growth are based upon the member's years of service and are based on the 2014-2018 experience study. The rates include anticipated productivity growth, merit adjustments, and an inflation component, which is consistent with the inflation assumptions used to develop the discount rate. For valuation purposes, current salaries and projected future salaries are limited to the Section 401(a)(17) limit of the Internal Revenue Service Code, with future indexed increases.

All salary growth assumptions were reduced by 0.20%, effective July 1, 2020, based on the reduction in the inflation assumption from 2.50% to 2.30%.

FAMILY STATISTICS:

The composition of the family is based upon Current Population Reports published by the United States Census Bureau. Seventy-five percent of the membership is assumed to be married. The wife is assumed to be three years younger than the husband. Sample rates for the assumed number of minor children are as follows:

	Number of	Years for Youngest
Age of	Minor	Child to Attain
Member	Children	Majority
25	1.2	17
30	1.4	15
35	1.7	13
40	1.7	10
45	1.4	8
50	1.1	4

CONVERTED LEAVE:

Leave credit is accrued throughout a member's career and converted to service credit or paid as a lump sum. Converted leave rates below represent the percentage increase in a retiree's accrued benefit upon conversion of the leave to benefits. The current rates are based on the 2014-2018 experience study.

	Regular	
	Retirement	Disability
Regular Members	5.0%	1.5%
Judicial Members	0.5%	1.0%
Corrections	9.0%	3.0%
Wildlife	9.0%	3.0%
Rehired Retirees	7.5%	N/A

Actuarial Assumptions Regular Members

		TERMINATION RATES							
	DISABILITY	< 1	1	2-3	4-6	7-9	10+		
AGE	RATES	YEAR	YEAR	YEARS	YEARS	YEARS	YEARS		
18	0.0000	0.500	0.550	0.330	0.230	0.105	0.080		
19	0.0000	0.500	0.550	0.330	0.230	0.105	0.080		
20	0.0000	0.500	0.380	0.330	0.230	0.105	0.080		
21	0.0001	0.500	0.320	0.330	0.230	0.105	0.080		
22	0.0001	0.440	0.300	0.240	0.230	0.105	0.080		
23	0.0001	0.380	0.300	0.240	0.230	0.105	0.080		
24	0.0001	0.325	0.270	0.200	0.230	0.105	0.080		
25	0.0001	0.325	0.270	0.200	0.160	0.105	0.080		
26	0.0001	0.325	0.270	0.200	0.160	0.105	0.080		
27	0.0001	0.290	0.270	0.200	0.160	0.105	0.080		
28	0.0001	0.290	0.270	0.200	0.160	0.105	0.080		
29	0.0001	0.290	0.230	0.180	0.160	0.105	0.080		
30	0.0001	0.290	0.230	0.180	0.133	0.105	0.080		
31	0.0001	0.290	0.230	0.180	0.133	0.080	0.080		
32	0.0001	0.290	0.230	0.180	0.133	0.080	0.080		
33	0.0001	0.290	0.230	0.180	0.133	0.080	0.080		
34	0.0001	0.290	0.220	0.180	0.133	0.080	0.055		
35	0.0005	0.290	0.220	0.180	0.133	0.080	0.055		
36	0.0005	0.290	0.220	0.180	0.133	0.080	0.055		
37	0.0005	0.290	0.220	0.150	0.133	0.080	0.055		
38	0.0005	0.290	0.180	0.150	0.130	0.080	0.055		
39	0.0005	0.280	0.180	0.150	0.130	0.080	0.055		
40	0.0010	0.280	0.180	0.150	0.130	0.080	0.055		
41	0.0010	0.280	0.180	0.150	0.130	0.080	0.055		
42	0.0010	0.280	0.180	0.140	0.125	0.080	0.055		
43	0.0010	0.250	0.180	0.140	0.125	0.080	0.055		
44	0.0010	0.250	0.180	0.140	0.125	0.080	0.055		
45	0.0015	0.250	0.180	0.140	0.125	0.080	0.050		
46	0.0015 0.0015	0.250 0.250	0.180	0.140 0.125	0.125	0.075 0.075	0.050		
47 48	0.0015	0.250	0.180 0.180	0.125	0.115 0.115	0.075	0.050 0.050		
48	0.0015	0.250	0.180	0.125	0.115	0.075	0.050		
50	0.0013	0.250	0.180	0.125	0.115	0.075	0.050		
51	0.0022	0.250	0.180	0.125	0.115	0.073	0.050		
52	0.0022	0.250	0.180	0.125	0.115	0.070	0.050		
53	0.0022	0.250	0.180	0.115	0.115	0.070	0.050		
54	0.0022	0.250	0.180	0.115	0.085	0.070	0.050		
55	0.0022	0.200	0.180	0.115	0.085	0.070	0.050		
56	0.0030	0.200	0.180	0.115	0.085	0.070	0.050		
57	0.0030	0.200	0.180	0.115	0.085	0.070	0.050		
58	0.0030	0.200	0.180	0.115	0.085	0.070	0.050		
59	0.0030	0.200	0.180	0.115	0.085	0.070	0.050		
60	0.0000	0.200	0.180	0.115	0.085	0.070	0.050		
61	0.0000	0.200	0.180	0.115	0.085	0.070	0.050		
62	0.0000	0.200	0.180	0.115	0.085	0.070	0.050		
63	0.0000	0.200	0.180	0.115	0.085	0.070	0.050		
64	0.0000	0.200	0.180	0.115	0.085	0.070	0.050		
65	0.0000	0.200	0.180	0.115	0.085	0.070	0.050		
66	0.0000	0.200	0.180	0.115	0.085	0.070	0.050		
67	0.0000	0.200	0.180	0.115	0.085	0.070	0.050		
68	0.0000	0.200	0.180	0.115	0.085	0.070	0.050		
69	0.0000	0.200	0.180	0.115	0.085	0.070	0.050		
70	0.0000	0.200	0.180	0.115	0.085	0.070	0.050		
71	0.0000	0.200	0.180	0.115	0.085	0.070	0.050		
72	0.0000	0.200	0.180	0.115	0.085	0.070	0.050		
73	0.0000	0.200	0.180	0.115	0.085	0.070	0.050		
74	0.0000	0.200	0.180	0.115	0.085	0.070	0.050		

Actuarial Assumptions Regular Members

	RI	ETIREM						
	< 10	10-19	20-24	25-29	30+			SALARY
AGE	YOS	YOS	YOS	YOS	YOS		DUR	INCREASE
18	0.000	0.000	0.000	0.000	0.000		0	0.1280
19	0.000	0.000	0.000	0.000	0.000		1	0.0690
20	0.000	0.000	0.000	0.000	0.000		2	0.0615
21	0.000	0.000	0.000	0.000	0.000		3	0.0540
22	0.000	0.000	0.000	0.000	0.000		4	0.0515
23	0.000	0.000	0.000	0.000	0.000		5	0.0490
24	$0.000 \\ 0.000$	$0.000 \\ 0.000$	0.000 0.000	$0.000 \\ 0.000$	$0.000 \\ 0.000$		6 7	0.0460 0.0430
25 26	0.000	0.000	0.000	0.000	0.000		8	0.0430
27	0.000	0.000	0.000	0.000	0.000		9	0.0390
28	0.000	0.000	0.000	0.000	0.000		10	0.0360
29	0.000	0.000	0.000	0.000	0.000		11	0.0360
30	0.000	0.000	0.000	0.000	0.000		12	0.0360
31	0.000	0.000	0.000	0.000	0.000		13	0.0330
32	0.000	0.000	0.000	0.000	0.000		14	0.0320
33	0.000	0.000	0.000	0.000	0.000		15	0.0320
34	0.000	0.000	0.000	0.000	0.000		16	0.0320
35	0.000	0.000	0.000	0.000	0.000		17	0.0320
36	0.000	0.000	0.000	0.000	0.000		18	0.0310
37	0.000	0.000	0.000	0.000	0.000		19	0.0300
38	0.000	0.050	0.050	0.050	0.000		20	0.0300
39	0.000	0.050	0.050	0.050	0.000		21	0.0300
40	0.000	0.050	0.050	0.050	0.000		22	0.0300
41	0.000	0.050	0.050	0.050	0.000		23	0.0300
42	0.000	0.050	0.050	0.050	0.000		24	0.0300
43	0.000	0.050	0.050	0.050	0.000		25	0.0300
44	0.000	0.050	0.050	0.050	0.000		26	0.0300
45	0.000	0.050	0.050	0.050	0.000		27	0.0300
46	0.000	0.050	0.050	0.050	0.000		28	0.0300
47	0.000	0.050	0.050	0.050	0.000		29	0.0300
48	0.000	0.080	0.080	0.080	0.200		30	0.0300
49	0.000	0.080	0.080	0.080	0.200		31	0.0300
50 51	0.000 0.000	0.100 0.100	0.100 0.100	0.100 0.100	0.200 0.200		32 33	0.0300 0.0300
52	0.000	0.100	0.100	0.100	0.200		33 34	0.0300
53	0.000	0.100	0.100	0.100	0.200		35	0.0300
54	0.000	0.100	0.100	0.100	0.250		36	0.0300
55	0.000	0.180	0.180	0.600	0.600		37	0.0300
56	0.000	0.180	0.180	0.200	0.200		38	0.0300
57	0.000	0.180	0.180	0.200	0.200		39	0.0300
58	0.000	0.180	0.180	0.200	0.200		40	0.0300
59	0.000	0.180	0.180	0.200	0.200		41	0.0300
60	0.350	0.350	0.350	0.350	0.350		42	0.0300
61	0.180	0.180	0.180	0.180	0.180		43	0.0300
62	0.170	0.170	0.170	0.170	0.170		44	0.0300
63	0.150	0.150	0.150	0.150	0.150		45	0.0300
64	0.170	0.170	0.170	0.170	0.170		46	0.0300
65	0.200	0.200	0.200	0.200	0.200		47	0.0300
66	0.180	0.180	0.180	0.180	0.180		48	0.0300
67	0.180	0.180	0.180	0.180	0.180		49	0.0300
68	0.180	0.180	0.180	0.180	0.180		50	0.0300
69	0.180	0.180	0.180	0.180	0.180		51	0.0300
70 71	0.180	0.180	0.180	0.180	0.180		52 53	0.0300
71	0.180	0.180	0.180	0.180	0.180		53	0.0300
72	0.180	0.180	0.180	0.180	0.180		54 55	0.0300
73	0.180	0.180	0.180	0.180	0.180		55 56	0.0300
74	0.180	0.180	0.180	0.180	0.180		56	0.0300

Actuarial Assumptions Judges

		RETIR				
A CIE	DISABILITY	< 12	12-17	18+	DIID	SALARY
AGE	RATES	YOS	YOS	YOS	DUR	1NCREASE 0.0505
18 19	$0.0000 \\ 0.0000$	$0.000 \\ 0.000$	$0.000 \\ 0.000$	$0.000 \\ 0.000$	0 1	0.0303
20	0.0000	0.000	0.000	0.000	2	0.0255
21	0.0000	0.000	0.000	0.000	3	0.0255
22	0.0000	0.000	0.000	0.000	4	0.0255
23	0.0000	0.000	0.000	0.000	5	0.0255
24	0.0000	0.000	0.000	0.000	6	0.0255
25	0.0000	0.000	0.000	0.000	7	0.0255
26	0.0000	0.000	0.000	0.000	8	0.0255
27	0.0000	0.000	0.000	0.000	9	0.0255
28	0.0000	0.000	0.000	0.000	10	0.0255
29	0.0000	0.000	0.000	0.000	11	0.0255
30	0.0000	0.000	0.000	0.000	12	0.0255
31 32	$0.0000 \\ 0.0000$	$0.000 \\ 0.000$	$0.000 \\ 0.000$	$0.000 \\ 0.000$	13 14	0.0255 0.0255
33	0.0000	0.000	0.000	0.000	15	0.0255
34	0.0000	0.000	0.000	0.000	16	0.0255
35	0.0000	0.000	0.000	0.000	17	0.0255
36	0.0000	0.000	0.000	0.000	18	0.0255
37	0.0000	0.000	0.000	0.000	19	0.0255
38	0.0000	0.000	0.000	0.068	20	0.0255
39	0.0000	0.000	0.000	0.068	21	0.0255
40	0.0000	0.000	0.000	0.068	22	0.0255
41	0.0000	0.000	0.000	0.068	23	0.0255
42	0.0000	0.000	0.000	0.068	24	0.0255
43	0.0000	0.000	0.000	0.068	25	0.0255
44	0.0000	0.000	0.000	0.068	26	0.0255
45	0.0002	0.000	0.000	0.068	27	0.0255
46	0.0002	0.000	0.000	0.068	28 29	0.0255
47 48	0.0002 0.0002	$0.000 \\ 0.000$	$0.000 \\ 0.000$	$0.068 \\ 0.068$	30	0.0255 0.0255
49	0.0002	0.000	0.000	0.068	31	0.0255
50	0.0002	0.000	0.000	0.068	32	0.0255
51	0.0002	0.000	0.000	0.068	33	0.0255
52	0.0002	0.000	0.000	0.068	34	0.0255
53	0.0002	0.000	0.000	0.068	35	0.0255
54	0.0002	0.000	0.000	0.068	36	0.0255
55	0.0002	0.000	0.208	0.115	37	0.0255
56	0.0002	0.000	0.090	0.115	38	0.0255
57	0.0002	0.000	0.090	0.115	39	0.0255
58	0.0002	0.000	0.090	0.115	40	0.0255
59	0.0002	0.000	0.090	0.115	41	0.0255
60	0.0002	0.108	$0.090 \\ 0.090$	0.238 0.173	42 43	0.0255 0.0255
61 62	0.0002 0.0002	0.108 0.108	0.090	0.173	43 44	0.0255
63	0.0002	0.108	0.090	0.173	45	0.0255
64	0.0002	0.108	0.090	0.173	46	0.0255
65	0.0002	0.108	0.182	0.173	47	0.0255
66	0.0002	0.108	0.105	0.122	48	0.0255
67	0.0002	0.108	0.105	0.122	49	0.0255
68	0.0002	0.108	0.105	0.122	50	0.0255
69	0.0002	0.108	0.105	0.122	51	0.0255
70	0.0000	0.108	0.105	0.122	52	0.0255
71	0.0000	0.108	0.105	0.122	53	0.0255
72	0.0000	0.108	0.105	0.545	54	0.0255
73	0.0000	0.108	0.105	0.545	55 56	0.0255
74	0.0000	0.108	0.105	0.545	56	0.0255

Actuarial Assumptions Corrections/Hazardous Duty & Wildlife

	DISABI		EMENT/ RATES		TERMINATION RATES (Excluding Wildlife)							
	LITY	< 10	10+	< 1								SALARY
AGE	RATES	YOS	YOS	YOS	YOS	YOS	YOS	YOS	YOS	YOS	DUR	INCREASES
18	0.0000	0.000	0.000	0.580	0.500	0.300	0.370	0.155	0.064	0.028	0	0.1380
19	0.0000	0.000	0.000	0.580	0.500	0.300	0.370	0.155	0.064	0.028	1	0.1380
20	0.0001	0.000	0.000	0.580	0.390	0.300	0.370	0.155	0.064	0.028	2	0.0630
21	0.0001	0.000	0.000	0.580	0.390	0.300	0.370	0.155	0.064	0.028	3	0.0605
22	0.0001	0.000	0.000	0.580	0.390	0.300	0.370	0.155	0.064	0.028	4	0.0580
23	0.0001	0.000	0.000	0.480	0.360	0.300	0.240	0.155	0.064	0.028	5	0.0555
24	0.0001	0.000	0.000	0.480	0.305	0.300	0.240	0.155	0.064	0.028	6	0.0555
25	0.0001	0.000	0.000	0.480	0.305	0.300	0.240	0.155	0.064	0.028	7	0.0480
26	0.0001	0.000	0.000	0.467	0.305	0.240	0.205	0.155	0.064	0.028	8	0.0480
27	0.0001	0.000	0.000	0.467	0.305	0.240	0.205	0.155	0.064	0.028	9	0.0480
28	0.0001	0.000	0.000	0.467	0.305	0.240	0.205	0.135	0.064	0.028	10	0.0480
29	0.0001	0.000	0.000	0.467	0.305	0.240	0.200	0.135	0.064	0.028	11	0.0480
30	0.0005	0.000	0.000	0.435	0.255	0.240	0.200	0.135	0.064	0.028	12	0.0480
31	0.0005	0.000	0.000	0.435	0.255	0.240	0.200	0.100	0.064	0.028	13	0.0430
32	0.0005	0.000	0.000	0.435	0.255	0.200	0.200	0.100	0.064	0.028	14	0.0380
33	0.0005	0.000	0.000	0.435	0.255	0.200	0.200	0.100	0.064	0.028	15	0.0355
34	0.0005	0.000	0.000	0.435	0.255	0.200	0.200	0.100	0.064	0.028	16	0.0355
35	0.0013	0.000	0.000	0.435	0.255	0.200	0.200	0.100	0.064	0.028	17	0.0355
36	0.0013	0.000	0.000	0.410	0.255	0.200	0.155	0.100	0.064	0.028	18	0.0355
37	0.0013	0.000	0.110	0.410	0.255	0.200	0.155	0.100	0.064	0.028	19	0.0355
38	0.0013	0.000	0.110	0.410	0.255	0.200	0.155	0.100	0.064	0.028	20	0.0355
39	0.0013	0.000	0.110	0.410	0.210	0.200	0.155	0.100	0.064	0.028	21	0.0355
40	0.0017	0.000	0.110	0.410	0.210	0.200	0.155	0.090	0.064	0.028	22	0.0355
41	0.0017	0.000	0.110	0.410	0.210	0.200	0.155	0.090	0.064	0.028	23	0.0355
42	0.0017	0.000	0.235	0.320	0.210	0.200	0.155	0.090	0.064	0.028	24	0.0355
43	0.0017	0.000	0.235	0.320	0.170	0.200	0.155	0.090	0.064	0.028	25	0.0355
44	0.0017	0.000	0.235	0.320	0.170	0.200	0.155	0.090	0.064	0.028	26	0.0355
45	0.0028	0.000	0.235	0.320	0.170	0.120	0.155	0.090	0.064	0.028	27	0.0355
46	0.0028	0.000	0.235	0.320	0.170	0.120	0.155	0.090	0.064	0.028	28	0.0355
47	0.0028	0.000	0.235	0.320	0.170	0.120	0.100	0.090	0.064	0.028	29	0.0355
48	0.0028	0.000	0.235	0.320	0.170	0.120	0.100	0.090	0.064	0.028	30	0.0355
49	0.0028	0.000	0.235	0.275	0.170	0.120	0.100	0.090	0.064	0.028	31	0.0355
50	0.0055	0.000	0.235	0.275	0.170	0.120	0.100	0.090	0.064	0.028	32	0.0355
51	0.0055	0.000	0.235	0.275	0.170	0.120	0.100	0.090	0.064	0.028	33	0.0355
52 53	0.0055	0.000	0.235	0.275	0.170	0.120	0.100	0.090	0.064	0.028	34	0.0355
53	0.0055	0.000	0.235	0.275	0.170	0.090	0.100	0.090	0.064	0.028	35	0.0355
54	0.0055	0.000	0.235 0.235	0.275 0.275	0.170	0.090	0.100	0.090	0.064 0.064	0.028	36 37	0.0355
55 56	0.0080	0.000			0.170	0.090	0.100	0.090		0.028		0.0355
56 57	$0.0080 \\ 0.0080$	$0.000 \\ 0.000$	0.235 0.289	0.190 0.190	$0.170 \\ 0.170$	0.090 0.090	0.100 0.100	0.090 0.090	0.064 0.064	$0.028 \\ 0.028$	38 39	0.0355 0.0355
57 58	0.0080	0.000	0.289	0.190	0.170	0.090	0.100	0.090	0.064	0.028	40	0.0355
59	0.0080	0.500	0.269	0.190	0.170	0.090	0.100	0.090	0.064	0.028	41	0.0355
60	0.0080	0.500	0.369	0.190	0.170	0.090	0.100	0.090	0.064	0.028	41	0.0355
61	0.0000	0.300	0.240	0.190	0.170	0.090	0.100	0.090	0.064	0.028	43	0.0355
62	0.0000	0.325	0.196	0.190	0.170	0.090	0.100	0.090	0.064	0.028	44	0.0355
63	0.0000	0.325	0.196	0.190	0.170	0.090	0.100	0.090	0.064	0.028	45	0.0355
64	0.0000	0.325	0.196	0.190	0.170	0.090	0.100	0.090	0.064	0.028	46	0.0355
65	0.0000	0.325	0.196	0.190	0.170	0.090	0.100	0.090	0.064	0.028	47	0.0355
66	0.0000	0.325	0.196	0.190	0.170	0.090	0.100	0.090	0.064	0.028	48	0.0355
67	0.0000	0.325	0.196	0.190	0.170	0.090	0.100	0.090	0.064	0.028	49	0.0355
68	0.0000	0.325	0.196	0.190	0.170	0.090	0.100	0.090	0.064	0.028	50	0.0355
69	0.0000	0.325	0.196	0.190	0.170	0.090	0.100	0.090	0.064	0.028	51	0.0355
70	0.0000	0.325	0.196	0.190	0.170	0.090	0.100	0.090	0.064	0.028	52	0.0355
71	0.0000	0.325	0.196	0.190	0.170	0.090	0.100	0.090	0.064	0.028	53	0.0355
72	0.0000	0.325	0.196	0.190	0.170	0.090	0.100	0.090	0.064	0.028	54	0.0355
73	0.0000	0.325	0.196	0.190	0.170	0.090	0.100	0.090	0.064	0.028	55	0.0355
74	0.0000	0.325	0.196	0.190	0.170	0.090	0.100	0.090	0.064	0.028	56	0.0355
	l l											

Actuarial Assumptions Mortality Tables

	Adjusted RP-2014 Base Table			P	rojected 202	0 Table	Projected 2050 Table		
	Age	Male	Female	Age	Male	Female	Age	Male	Female
General	20	0.000513	0.000208	20	0.000532	0.000220	20	0.000411	0.000172
Active	30	0.000572	0.000279	30	0.000666	0.000319	30	0.000521	0.000251
Member	40	0.000795	0.000508	40	0.000909	0.000561	40	0.000746	0.000455
Mortality	50	0.002134	0.001414	50	0.002046	0.001377	50	0.001618	0.001077
	60	0.005934	0.003133	60	0.006024	0.003264	60	0.004510	0.002473
	A	Male	Female	A	Male	Female	A ~~	Male	Female
Public	Age 20	0.000528	0.000205	Age	0.000547	0.000217	Age	0.000423	0.000169
Safety				20			20		
Active	30	0.000588	0.000275	30	0.000685	0.000315	30	0.000536	0.000247
Member Mortality	40	0.000817	0.000501	40	0.000934	0.000553	40	0.000767	0.000449
Mortanty	50	0.002193	0.001395	50	0.002102	0.001359	50	0.001663	0.001062
	60	0.006097	0.003092	60	0.006189	0.003221	60	0.004634	0.002440
	Age	Male	Female	Age	Male	Female	Age	Male	Female
General	50	0.005202	0.002942	50	0.004987	0.002866	50	0.003945	0.002241
Non-	60	0.003202	0.002542	60	0.010988	0.002800	60	0.003943	0.002241
Disabled	70	0.010824	0.003314	70	0.010988	0.003744	70	0.008220	0.004332
Retiree Mortality	80	0.066380	0.014933	80	0.063142	0.014257	80	0.013923	0.010933
Wiortanty	90	0.187405	0.141993	90	0.180033	0.138271	90	0.137459	0.106224
	70	0.107103	0.111773	70	0.100033	0.130271	70	0.137133	0.100221
	Age	Male	Female	Age	Male	Female	Age	Male	Female
Public Safely	50	0.004816	0.002870	50	0.004617	0.002796	50	0.003653	0.002186
Salely Non-	60	0.010020	0.005832	60	0.010172	0.006075	60	0.007615	0.004603
Disabled	70	0.023329	0.014203	70	0.022866	0.013521	70	0.017523	0.010385
Retiree	80	0.061453	0.038813	80	0.058455	0.037324	80	0.043855	0.027776
Mortality	90	0.173496	0.113767	90	0.166671	0.110785	90	0.127257	0.085108
	Age	Male	Female	Age	Male	Female	Age	Male	Female
General	30	0.022774	0.007770	30	0.022774	0.007770	30	0.022774	0.007770
and	40	0.022774	0.007770	40	0.022774	0.007770	40	0.022774	0.007770
Public Sofoty	50	0.029236	0.012031	50	0.029236	0.012031	50	0.029236	0.012031
Safety Disabled	60	0.042420	0.022778	60	0.042420	0.022778	60	0.042420	0.022778
Mortality	70	0.063146	0.039253	70	0.063146	0.039253	70	0.063146	0.039253
-	80	0.110356	0.075421	80	0.110356	0.075421	80	0.110356	0.075421

AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY June 30, 2022 - (7.25% Discount Rate)

Date	Description	Notes *	Amtz. Period	Initial Liability	Years Remain	Remaining Balance	Mid-Year Payment
2022	OAB	Note 1	7	1,002,732,098	7	1,002,732,098	185,194,718
2022	EAAB	Note 2	18	1,874,305,969	18	1,874,305,969	202,802,984
2022	2009 Change in Assumptions	11010 2	17	(178,405,518)	17	(178,405,518)	(17,951,515)
2022	2009 Change in Liability		17	1,112,629,282	17	1,112,629,282	111,954,954
2022	2010 Change in Liability		18	521,853,857	18	521,853,857	51,002,216
2022	2011 Change in Liability		19	73,753,082	19	73,753,082	7,020,145
2022	Change in Lia (Assumed Rate)		20	309,973,510	20	309,973,510	28,804,362
2022	Change in Lia (Experience)		20	236,388,676	20	236,388,676	21,966,474
2022	Change in Asset Val Method		21	(75,271,792)	21	(75,271,792)	(6,843,206)
2022	Change in Lia (Experience)		21	(477,455,495)	21	(477,455,495)	(43,407,050)
2022	2014 Assumption Change		22	653,388,139	22	653,388,139	58,226,217
2022	2014 Method Change		22	560,381,276	22	560,381,276	49,937,976
2022	2014 Non-Inv Experience Gain		22	(55,124,508)	22	(55,124,508)	(4,912,381)
2022	2015 Experience Gain		23	(140,763,130)	23	(140,763,130)	(12,316,755)
2022	2016 Experience Loss		24	157,304,483	24	157,304,483	13,535,486
2022	2017 Discount Rate/Salary Chg		25	39,396,367	25	39,396,367	3,338,213
2022	2017 Experience Gain		25	(80,540,833)	25	(80,540,833)	(6,824,550)
2022	2018 Experience Loss		26	2,130,998	26	2,130,998	178,036
2022	2018 Discount Rate Change		26	79,667,604	26	79,667,604	6,655,905
2022	2019 Discount Rate/Assumptions		27	66,528,805	27	66,528,805	5,486,483
2022	2019 Experience Loss		27	369,464,619	27	369,464,619	30,468,928
2022	2020 Inv and Other Experience		28	274,302,700	28	274,302,700	22,352,181
2022	2020 Discount Rate/Salary Change		28	51,859,794	28	51,859,794	4,225,913
2022	2021 Inv and Other Experience		29	(147,984,784)	29	(147,984,784)	(11,926,661)
2022	2021 Experience Account Allocation		9	72,183,944	9	72,183,944	10,812,288
2022	2021 Discount Rate Change		29	266,973,954	29	266,973,954	21,516,455
2022	2021 Discount Rate Change 2022 Inv and Other Experience		30	125,570,503	30	125,570,503	10,017,796
2022	2022 Discount Rate Change		30	274,893,478	30	274,893,478	21,930,522
	·	-	D1 C	'C' TTAT			
2022	A -4 414 Chair Lia	J	Plan Spec		1.5	2746245	205.777
2022	Act 414 - Chg in Lia	NI 4 2	15	2,746,245	15	2,746,245	295,767
2022	Act 224 and 595	Note 3	6	450,071	6	450,071	91,881
2022	Act 595 retro	Note 3	7	675,774	7	675,774	122,137
	Total Outstanding Balance					6,974,009,168	763,755,919
2022	2018 Contribution Variance Credit	Note 4	1	-	1	-	-
2022	2019 Contribution Variance Credit	Note 4	2	-	2	-	-
2022	2020 Contribution Variance Credit	Note 4	3	-	3	-	-
2022	2021 Contribution Variance Credit	Note 4	4	-	4	-	-
2022	2022 Contribution Variance Credit	Note 4	5	-	5	-	
,	Total Contribution Variance Credit	Balance				\$ -	\$ -

Total Unfunded Actuarial Accrued Liability

\$6,974,009,168 \$763,755,919

^{*} See UAL Amortization Schedule Notes within this Appendix.

AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY June 30, 2023 (Projected)- (7.25% Discount Rate)

			Amtz.		Years	Remaining	Mid-Year
Date	Description	Notes *	Period	Initial Liability	Remain	Balance	Payme nt
2022	OAB	Note 1	7	1,002,732,098	6	883,639,638	185,194,718
2022	EAAB	Note 2	18	1,874,305,969	17	1,800,167,185	202,802,984
2022	2009 Change in Assumptions		17	(178,405,518)	16	(172,749,046)	(17,951,515)
2022	2009 Change in Liability		17	1,112,629,282	16	1,077,352,590	111,954,954
2022	2010 Change in Liability		18	521,853,857	17	506,869,563	51,002,216
2022	2011 Change in Liability		19	73,753,082	18	71,830,008	7,020,145
2022	Change in Lia (Assumed Rate)		20	309,973,510	19	302,616,338	28,804,362
2022	Change in Lia (Experience)		20	236,388,676	19	230,778,029	21,966,474
2022	Change in Asset Val Method		21	(75,271,792)	20	(73,642,065)	(6,843,206)
2022	Change in Lia (Experience)		21	(477,455,495)	20	(467,117,993)	(43,407,050)
2022	2014 Assumption Change		22	653,388,139	21	640,458,792	58,226,217
2022	2014 Method Change		22	560,381,276	21	549,292,363	49,937,976
2022	2014 Non-Inv Experience Gain		22	(55,124,508)	21	(54,033,696)	(4,912,381)
2022	2015 Experience Gain		23	(140,763,130)	22	(138,213,031)	(12,316,755)
2022	2016 Experience Loss		24	157,304,483	23	154,691,496	13,535,486
2022	2017 Discount Rate/Salary Chg		25	39,396,367	24	38,795,497	3,338,213
2022	2017 Experience Gain		25	(80,540,833)	24	(79,312,432)	(6,824,550)
2022	2018 Experience Loss		26	2,130,998	25	2,101,118	178,036
2022	2018 Discount Rate Change		26	79,667,604	25	78,550,545	6,655,905
2022	2019 Discount Rate/Assumptions		27	66,528,805	26	65,670,255	5,486,483
2022	2019 Experience Loss		27	369,464,619	26	364,696,702	30,468,928
2022	2020 Inv and Other Experience		28	274,302,700	27	271,041,375	22,352,181
2022	2020 Discount Rate/Salary Change		28	51,859,794	27	51,243,206	4,225,913
2022	2021 Inv and Other Experience		29	(147,984,784)	28	(146,362,243)	(11,926,661)
2022	2021 Experience Account Allocation		9	72,183,944	8	66,219,904	10,812,288
2022	2021 Discount Rate Change		29	266,973,954	28	264,046,786	21,516,455
2022	2022 Inv and Other Experience		30	125,570,503	29	124,299,777	10,017,796
2022	2022 Discount Rate Change		30	274,893,478	29	272,111,661	21,930,522
			Plan Spe	ecific UAL			
2022	Act 414 - Chg in Lia		15	2,746,245	14	2,639,046	295,767
2022	Act 224 and 595	Note 3	6	450,071	5	387,548	91,881
2022	Act 595 retro	Note 3	7	675,774	6	598,281	122,137
	Total Outstanding Balance					6,688,667,197	763,755,919
2022	2019 Contribution Variance Credit	Note 4	2	_	1	_	_
2022	2020 Contribution Variance Credit	Note 4	3	_	2	_	_
2022	2021 Contribution Variance Credit	Note 4	4	_	3	_	_
2022	2022 Contribution Variance Credit	Note 4	5	_	4	_	_
2022	2023 Contribution Variance Credit	Note 4	5	18,773,050	5	18,773,050	4,450,745
_0	Total Contribution Variance Cred			10,775,050	-	\$ 18,773,050	\$ 4,450,745
						, , , - , - , - , - , - , -	. ,,
Total l	Unfunded Actuarial Accrued Liabil	\$6,707,440,247	\$768,206,664				

^{*} See UAL Amortization Schedule Notes within this Appendix.

UAL AMORTIZATION SCHEDULES NOTES

Act 497 of 2009 consolidated all LASERS amortization schedules established on or before July 1, 2008, except those established due to benefit changes for a specific plan, into two schedules: the Original Amortization Base (OAB) and the Experience Account Amortization Base (EAAB). The OAB, which consists of the outstanding balance of the Initial Unfunded Accrued Liability (IUAL) and other schedules with negative outstanding balances, was credited with the balance of funds from the IUAL fund. The EAAB consists of the 2004 schedule and all other remaining schedules. The outstanding balance of this schedule was credited with funds from the IUAL subaccount, which were originally transferred from the Employee Experience Account on June 30, 2009. The EAAB payment schedule is prescribed by statute, as described in Note 2 below.

All schedules were re-amortized, effective July 1, 2022, using a rate of 7.25%.

Note 1: The Original Amortization Base includes the Initial Unfunded Accrued Liability (IUAL) and certain negative bases that existed prior to 2009: The new combined balance was credited with funds from IUAL Account. The OAB was reduced by \$50 million on June 30, 2013, and re-amortized. The OAB was reduced by appropriations paid to LASERS per Act 368 of 2015, Act 59 of 2018, Act 50 of 2019, Act 255 of 2020, Act 120 of 2021, and Act 170 of 2022. This schedule was re-amortized to its original pay-off date of 2029 on June 30, 2019, and on June 30, 2021, both per Act 95 of 2016. Future payments will remain level until paid off in 2029 or before.

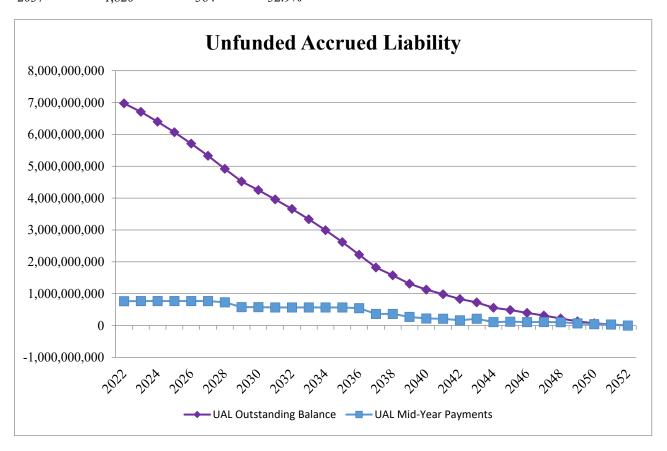
Note 2: The Experience Account Amortization Base includes the liability resulting from Act 588 of 2004 which zeroed out the Experience Account, and certain other positive schedules that existed prior to 2009. The new combined balance was credited with funds from the sub-account of the IUAL Fund, which were transferred from the Experience Account on June 30, 2009. The EAAB was reduced by \$50 million on June 30, 2013 and re-amortized. This schedule was re-amortized to its original pay-off date of 2040 on June 30, 2019, per Act 95 of 2016. Future payments will remain level until paid off in 2040 or before.

Note 3: Acts 224 and 595 of 2018 Increase in Accrued Liability – Increase in disability and survivor benefits for members disabled or killed in the line of duty. The resulting amortization payments are allocated to the plan specific UAL payment for each affected plan.

Note 4: Per Act 399 of 2014, the 2015 and 2016 contribution variance surpluses were used to reduce the OAB. The 2018-2022 contribution variance surpluses were used to reduce the EAAB. The 2022 contribution variance surplus was updated from last year's projected amount as a deficit to a surplus of \$14,055,118.

UAL Outstanding Balance and Payment Schedule Based on Projected June 30, 2023 UAL Schedules

FY Beginning	UAL Outstanding Balance (Millions)	UAL Mid-Year Payments (Millions)	Payment % Change	FY Beginning	UAL Outstanding Balance (Millions)	UAL Mid- Year Payments (Millions)	Payment % Change
2022	6,974	764	0.0%	2038	1,575	364	0.0%
2023	6,707	768	0.6%	2039	1,312	270	-25.8%
2024	6,398	768	0.0%	2040	1,127	219	-18.9%
2025	6,066	768	0.0%	2041	981	212	-3.2%
2026	5,711	768	0.0%	2042	832	162	-23.9%
2027	5,329	768	0.0%	2043	725	212	31.1%
2028	4,920	729	-5.1%	2044	558	109	-48.7%
2029	4,522	578	-20.7%	2045	486	121	11.3%
2030	4,250	578	0.0%	2046	396	107	-11.2%
2031	3,960	568	-1.9%	2047	314	111	3.2%
2032	3,659	568	0.0%	2048	222	104	-6.2%
2033	3,337	568	0.0%	2049	130	68	-34.5%
2034	2,991	568	0.0%	2050	69	42	-39.0%
2035	2,620	568	0.0%	2051	31	32	-23.1%
2036	2,222	543	-4.3%	2052	0	0	
2037	1,820	364	-32.9%				



Components of Original Amortization Base (Dollar amounts in millions)

	Annual Outstanding Balance						Annual Payments				
	IUAL	IUAL Acct	Net IUAL	Other Schedules	Total OAB	IUAL	IUAL Acct	Net IUAL	Other Schedules	Total OAB	
2022	1,669.4	-57.7	1,611.7	-609.0	1,002.7	308.3	-10.7	297.7	-112.5	185.2	
2023	1,471.1	-50.8	1,420.3	-536.7	883.6	308.3	-10.7	297.7	-112.5	185.2	
2024	1,258.5	-43.5	1,215.0	-459.1	755.9	308.3	-10.7	297.7	-112.5	185.2	
2025	1,030.4	-35.6	994.8	-375.9	618.9	308.3	-10.7	297.7	-112.5	185.2	
2026	785.8	-27.1	758.7	-286.7	472.0	308.3	-10.7	297.7	-112.5	185.2	
2027	523.5	-18.1	505.4	-191.0	314.4	308.3	-10.7	297.7	-112.5	185.2	
2028	242.1	-8.4	233.8	-88.3	145.4	250.8	-8.7	242.1	-91.5	150.6	
2029	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

This table has changed from previously published tables due to legislative appropriations allocated to the IUAL, and the change in discount rate from 7.40% to 7.25%.

GLOSSARY

Accrued Benefit – The pension benefit that an individual has earned as of a specific date based on the provisions of the plan and the individual's age, service, and salary as of that date.

Actuarial Accrued Liability – Computed differently under different funding methods, the actuarial accrued liability generally represents the portion of the actuarial present value of benefits attributable to service credit earned (or accrued) as of the valuation date.

Actuarial Present Value of Benefits – Amount which, together with future interest, is expected to be sufficient to pay all benefits to be paid in the future, regardless of when earned, as determined by the application of a particular set of actuarial assumptions; equivalent to the actuarial accrued liability plus the present value of future normal costs attributable to the members.

Actuarial Assumptions – Assumptions as to the occurrence of future events affecting pension costs. These assumptions include rates of investment earnings, changes in compensation, rates of mortality, withdrawal, disablement, and retirement as well as statistics related to marriage and family composition.

Actuarial Cost Method – A method of determining the portion of the cost of a pension plan to be allocated to each year; sometimes referred to as the "actuarial funding method." Each cost method allocates a certain portion of the actuarial present value of benefits between the actuarial accrued liability and future normal costs

Actuarial Equivalence – Series of payments with equal actuarial present values on a given date when valued using the same set of actuarial assumptions.

Actuarial Present Value - The amount of funds required as of a specified date to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payments between the specified date and the expected date of payment.

Actuarial Value of Assets – The value of cash, investments, and other property belonging to the pension plan as used by the actuary for the purpose of the actuarial valuation. This may correspond to market value of assets, or some modification using an asset valuation method to reduce the volatility of asset values.

Actuarially Reduced – The method of adjusting a benefit received at an early date, or paid in a form other than the lifetime of the member so that the expected total cost to the retirement system is equivalent to the cost if the benefit did not begin until later, or was paid for the lifetime of the member.

Asset Gain (Loss) – That portion of the actuarial gain attributable to investment performance above (below) the expected rate of return in the actuarial assumptions.

Amortization – Paying off an interest-discounted amount with periodic payments of interest and (generally) principal, as opposed to paying off with a lump sum payment.

Amortization Payment – That portion of the pension plan contribution designated to pay interest and reduce the outstanding principal balance of unfunded actuarial accrued liability. If the amortization payment is less than the accrued interest on the unfunded actuarial accrued liability the outstanding principal balance will increase.

Contribution Variance – The difference between actuarially required contribution and the actual amount received based upon a projected contribution rate. Results in an increase or decrease to future required contributions.

Discount Rate – The interest rate used in developing present values to reflect the time value of money.

Decrements – Events which result in the termination of membership in the system such as retirement, disability, withdrawal, or death.

Employer Normal Cost – Portion of the normal cost not paid by employee contributions.

Entry Age Normal (EAN) Funding Method – A standard actuarial funding method whereby each member's normal costs (service costs) are generally level as a percentage of pay from entry age until retirement. The annual cost of benefits is comprised of the normal cost plus an amortization payment to reduce the UAL.

Experience Gain (Loss) – The difference between actual unfunded actuarial accrued liabilities and anticipated unfunded actuarial accrued liabilities during the period between two valuation dates. It is a measurement of the difference between actual and expected experience, and may be related to investment earnings above (or below) those expected or changes in the liability due to fewer (or greater) than expected numbers of retirements, deaths, disabilities, or withdrawals, or variances in pay increases relative to assumed pay increases. The effect of such gains (or losses) is to decrease (or increase) future costs.

Experience Account Amortization Base (EAAB) – Amortization base created in 2010 by Act 497 of 2009. Consolidated and re-amortized schedules created in the following valuation years, which existed prior to Act 497: 1996, 1999 - 2003, 2004 (the liability resulting from Act 588 of 2004 which zeroed out the Experience Account), and 2008. The new combined balance was credited with funds from the sub-account of the IUAL Fund, which were transferred from the Experience Account on June 30, 2009.

Funded Ratio – A measure of the ratio of the actuarial value of assets to liabilities of the system. Typically, the assets used in the measure are the actuarial value of assets as determined by the asset valuation method adopted by the Board of Trustees; the liabilities are determined using the actuarial funding method specified by Louisiana statute. Thus, the funded ratio depends not only on the financial strength of the plan but also on the asset valuation method used to determine the assets and on the funding method used to determine the liabilities.

Governmental Accounting Standards Board (GASB) – Governmental agency that sets the accounting standards for state and local government operations.

Market Value of Assets (MVA) – The value of assets as they would trade on an open market.

Normal Cost – Computed differently under different funding methods, generally that portion of the actuarial present value of benefits allocated to the current plan year.

Original Amortization Base (OAB) – Amortization base created in 2010 by Act 497 of 2009. Consolidated and re-amortized schedules created in the following valuation years, which existed prior to Act 497: 1993 (Initial Unfunded Accrued Liability), 1993 (Change in Liability), 1994, 1995, 1997, 1998, 2005, 2006, and 2007 (excluding schedules established to amortize liability resulting from Acts 414, 262, and 740).

Permanent Benefit Increase – An increase in specified current retiree benefits authorized by statutes.

Projected Benefits – The benefits expected to be paid in the future based on the provisions of the plan and the actuarial assumptions. The projected values are based on anticipated future advancement in age and accrual of service as well as increases in salary paid to the participant.

Projected Unit Credit (PUC) Funding Method – A standard actuarial funding method whereby the actuarial present value of projected benefits of each individual is accumulated from the participant's attained age to anticipated retirement. The portion attributable to current year benefit accruals is called the normal cost. The

actuarial present value of future benefits in proportion to service accrued on the date of valuation is called the actuarial accrued liability. The annual cost of benefits is comprised of the normal cost plus an amortization payment to reduce the unfunded actuarial accrued liability.

Public Retirement Systems' Actuarial Committee (PRSAC) –A committee created by state law to insure orderly and consistent strategies for continuing development and growth that will attain and maintain the soundness of the public retirement systems, plans and funds, adopts the official valuation for each state and statewide retirement system, and reports all findings, recommendations and official valuation to the House and Senate committees on retirement and the Joint Legislative Committee on the Budget.

Side-Fund Assets – Assets held in the trust for purposes other than for paying the accrued benefits or administrative expenses of the plan.

Unfunded Actuarial Accrued Liability (UAAL or UAL) – The excess of the actuarial accrued liability over the valuation assets; sometimes referred to as "unfunded past service liability". UAL increases each time an actuarial loss occurs and when new benefits are added without being fully funded initially and decreases when actuarial gains occur.

Valuation Assets – The actuarial value of assets less side-fund assets; represents the portion of the actuarial value of assets available to pay the accrued benefits of the plan.

Vested Benefit – Benefits that the members are entitled to regardless of employment status.