

FEDERAL RETIREMENT THRIFT INVESTMENT BOARD 77 K Street NE, Washington, DC 20002

MEMORANDUM FOR BOARD MEMBERS

JONES, BILYEU, McCRAY, AND JASIEN



FROM: Ravindra Deo, Executive Director

DATE: April 13, 2022

SUBJECT: March 2022 Performance Review – G, F, C, S, I, and L Funds

INTRODUCTION

This report reviews key aspects of the investment performance of the G, F, C, S, I, and L Funds, investment manager performance and tracking error, interfund transfer activity, and L Funds participation.

RETURNS AND TRACKING ERRORS

The tables below contain the monthly and year-to-date (YTD) returns and tracking errors for the F, C, S, and I Funds and for the separate accounts managed by BlackRock and State Street. Due to rounding, the tracking errors may not match the differences in returns.

March 2022 Returns and Tracking Errors

		Fixed Income (F Fund)	Large Cap (C Fund)	Small Mid Cap (S Fund)	International (I Fund)
	Index	-2.78	3.71	0.86	0.64
Return	BlackRock	-2.71	3.72	0.91	-0.32
(%)	State Street	-2.77	3.71	0.88	n/a
	TSP Fund (Net)	-2.73	3.72	0.90	-0.33
Tracking	BlackRock	0.07	0.01	0.06	-0.97
Error vs Index (%)	State Street	0.01	0.00	0.02	n/a
muex (%)	TSP Fund	0.05	0.00	0.05	-0.97

BlackRock's performance for the F Fund exceeded the Fixed Income Index's return by 7 basis points, primarily due to securities lending. Its performance for the C Fund was in line with the Large Cap Index. For the S Fund, BlackRock outperformed the Small Mid Cap Index by 6 basis points, primarily resulting from securities lending. Its performance for the I Fund lagged the International index by 97 basis points, primarily due to fair value pricing.

State Street's performance for the F, C, and S Funds was in line with the Funds' respective indices for the month.

2022 YTD Returns and Tracking Errors

		Fixed Income (F Fund)	Large Cap (C Fund)	Small Mid Cap (S Fund)	International (I Fund)
	Indov			-	
	Index	-5.93	-4.60	-9.34	-5.91
Return	BlackRock	-5.73	-4.58	-9.21	-6.76
(%)	State Street	-5.95	-4.60	-9.26	n/a
	TSP Fund (Net)	-5.79	-4.59	-9.24	-6.77
Tracking					
Error vs	BlackRock	0.20	0.02	0.13	-0.85
Index (%)	State Street	-0.01	0.00	0.08	n/a
IIIUEX (70)	TSP Fund	0.14	0.00	0.10	-0.86

BlackRock's year-to-date performance for the F Fund exceeded the Fixed Income Index's return by 20 basis points, primarily due to securities lending and a difference in the timing of pricing by BlackRock and by the index provider on December 31, 2021. Its performance for the C Fund was in line with the Large Cap Index. For the S Fund, BlackRock outperformed the Small Mid Cap Index by 13 basis points, primarily resulting from securities lending. Its performance for the I Fund lagged the International Index by 85 basis points, primarily due to fair value pricing.

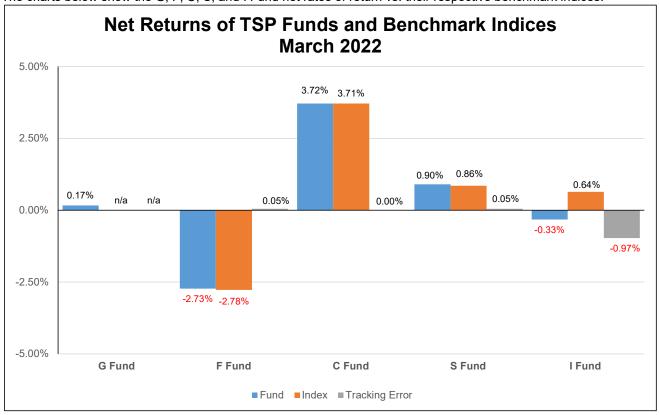
Year-to-date, State Street's performance for the F and C Funds was in line with the Funds' respective indices. For the S Fund, State Street outperformed the Small Mid Cap Index by 8 basis points, primarily due to securities lending.

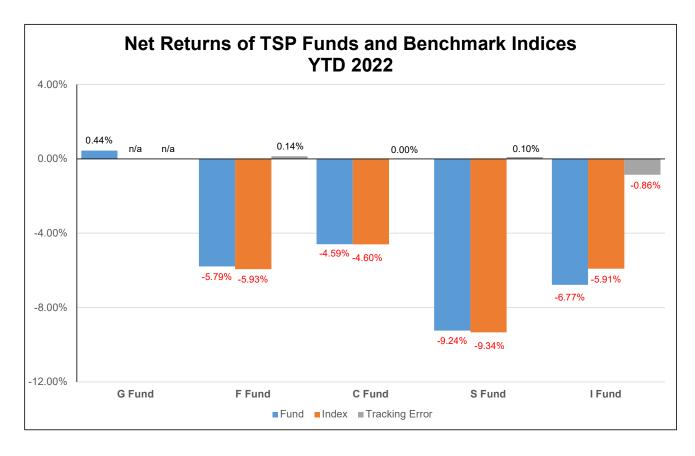
TSP Net Returns as of March 31, 2022

C Fund					
T-Year S-Year S		1-Year	3-Year	5-Year	10-Year
F Fund	G Fund	1.56%	1.45%	1.93%	1.94%
F Fund					
Bloomberg Barclays US Agg Bond Index 4.15% 1.69% 2.14% 2.24% 1.69% 0.21% 0.06% 0.10% 0.24% 0.21% 0.06% 0.10% 0.24% 0.21% 0.06% 0.10% 0.24% 0.21% 0.06% 0.10% 0.24% 0.24% 0.21% 0.06% 0.10% 0.24% 0.24% 0.21% 0.06% 0.10% 0.24%					
Tracking Error 0.21% 0.06% 0.10% 0.24%					
T-Year S-Year To-Year To-Yea					2.24%
C Fund 15.63% 18.88% 15.95% 14.65% S&P 500 Index 15.65% 18.92% 15.99% 14.64% Tracking Error -0.01% -0.05% -0.04% 0.01% I-Year 3-Year 5-Year 10-Year S Fund -5.31% 14.08% 12.05% 12.42% Dow Jones US Completion TSM Index -5.46% 14.09% 11.96% 12.15% Tracking Error 0.16% -0.01% 0.10% 0.27% I-Year 3-Year 5-Year 10-Year I Fund 0.37% 7.73% 6.84% 6.51% MSCI EAFE Index 1.16% 7.78% 6.72% 6.27% Tracking Error -0.80% -0.06% 0.12% 0.24% L Income Fund 2.77% 4.49% 4.36% 4.16% L 2025 Fund 4.29% N/A N/A N/A L 2030 Fund 4.93% 9.48% 8.48% 8.35% L 2040 Fund 5.16% N/A N/A N/A L 2045 Fund 5.55% N/	Tracking Error	0.21%	0.06%	0.10%	0.24%
C Fund 15.63% 18.88% 15.95% 14.65% S&P 500 Index 15.65% 18.92% 15.99% 14.64% Tracking Error -0.01% -0.05% -0.04% 0.01% I-Year 3-Year 5-Year 10-Year S Fund -5.31% 14.08% 12.05% 12.42% Dow Jones US Completion TSM Index -5.46% 14.09% 11.96% 12.15% Tracking Error 0.16% -0.01% 0.10% 0.27% I-Year 3-Year 5-Year 10-Year I Fund 0.37% 7.73% 6.84% 6.51% MSCI EAFE Index 1.16% 7.78% 6.72% 6.27% Tracking Error -0.80% -0.06% 0.12% 0.24% L Income Fund 2.77% 4.49% 4.36% 4.16% L 2025 Fund 4.29% N/A N/A N/A L 2030 Fund 4.93% 9.48% 8.48% 8.35% L 2040 Fund 5.16% N/A N/A N/A L 2045 Fund 5.55% N/					
S&P 500 Index 15.65% 18.92% 15.99% 14.64% Tracking Error -0.01% -0.05% -0.04% 0.01%		1-Year	3-Year	5-Year	10-Year
Tracking Error	C Fund	15.63%	18.88%	15.95%	14.65%
S Fund	S&P 500 Index	15.65%	18.92%	15.99%	14.64%
S Fund	Tracking Error	-0.01%	-0.05%	-0.04%	0.01%
S Fund					
Dow Jones US Completion TSM Index Tracking Error		1-Year	3-Year	5-Year	10-Year
Tracking Error 0.16% -0.01% 0.10% 0.27% I Fund 0.37% 7.73% 6.84% 6.51% MSCI EAFE Index 1.16% 7.78% 6.72% 6.27% Tracking Error -0.80% -0.06% 0.12% 0.24% L Income Fund 2.77% 4.49% 4.36% 4.16% L 2025 Fund 4.29% N/A N/A N/A L 2030 Fund 4.93% 9.48% 8.48% 8.35% L 2035 Fund 5.16% N/A N/A N/A L 2040 Fund 5.55% N/A N/A N/A L 2050 Fund 5.77% 12.17% 10.62% 10.29% L 2055 Fund 6.95% N/A N/A N/A L 2065 Fund 6.94% N/A N/A N/A L 2065 Fund 6.94% N/A N/A N/A	S Fund	-5.31%	14.08%	12.05%	12.42%
T-Year 3-Year 5-Year 10-Year 1 Fund 0.37% 7.73% 6.84% 6.51% MSCI EAFE Index 1.16% 7.78% 6.72% 6.27% 7.73% 6.84% 6.51% 6.27% 7.86% 6.72% 6.27% 7.86% 6.72% 6.27% 7.86% 6.72% 6.27% 7.86% 6.72% 6.27% 7.86% 6.72% 6.27% 7.86	Dow Jones US Completion TSM Index	-5.46%	14.09%	11.96%	12.15%
Fund 0.37% 7.73% 6.84% 6.51% MSCI EAFE Index 1.16% 7.78% 6.72% 6.27% 7.26king Error -0.80% -0.06% 0.12% 0.24%	Tracking Error	0.16%	-0.01%	0.10%	0.27%
Fund 0.37% 7.73% 6.84% 6.51% MSCI EAFE Index 1.16% 7.78% 6.72% 6.27% 7.26king Error -0.80% -0.06% 0.12% 0.24%					
MSCI EAFE Index Tracking Error 1.16% 7.78% 6.72% 6.27% L Income Fund L 2025 Fund L 2030 Fund L 2040 Fund L 2040 Fund L 2045 Fund L 2050 Fund L 2055 Fund L 2060 Fund L 2060 Fund L 2060 Fund L 2060 Fund L 2065 Fund L		1-Year	3-Year	5-Year	10-Year
Tracking Error -0.80% -0.06% 0.12% 0.24% L Income Fund 2.77% 4.49% 4.36% 4.16% L 2025 Fund 4.29% N/A N/A N/A L 2030 Fund 4.93% 9.48% 8.48% 8.35% L 2035 Fund 5.16% N/A N/A N/A L 2040 Fund 5.41% 10.94% 9.64% 9.40% L 2045 Fund 5.55% N/A N/A N/A L 2050 Fund 5.77% 12.17% 10.62% 10.29% L 2055 Fund 6.95% N/A N/A N/A L 2060 Fund 6.94% N/A N/A N/A L 2065 Fund 6.94% N/A N/A N/A	I Fund	0.37%	7.73%	6.84%	6.51%
1-Year 3-Year 5-Year 10-Year L Income Fund 2.77% 4.49% 4.36% 4.16% L 2025 Fund 4.29% N/A N/A N/A N/A L 2030 Fund 4.93% 9.48% 8.48% 8.35% L 2035 Fund 5.16% N/A N/A N/A N/A L 2040 Fund 5.41% 10.94% 9.64% 9.40% L 2045 Fund 5.55% N/A N/A N/A L 2050 Fund 5.77% 12.17% 10.62% 10.29% L 2055 Fund 6.95% N/A N/A N/A N/A L 2060 Fund 6.94% N/A N/A	MSCI EAFE Index	1.16%	7.78%	6.72%	6.27%
L Income Fund 2.77% 4.49% 4.36% 4.16% L 2025 Fund 4.29% N/A N/A N/A L 2030 Fund 4.93% 9.48% 8.48% 8.35% L 2035 Fund 5.16% N/A N/A N/A L 2040 Fund 5.41% 10.94% 9.64% 9.40% L 2045 Fund 5.55% N/A N/A N/A L 2050 Fund 5.77% 12.17% 10.62% 10.29% L 2055 Fund 6.95% N/A N/A N/A L 2060 Fund 6.94% N/A N/A N/A L 2065 Fund 6.94% N/A N/A N/A	Tracking Error	-0.80%	-0.06%	0.12%	0.24%
L Income Fund 2.77% 4.49% 4.36% 4.16% L 2025 Fund 4.29% N/A N/A N/A L 2030 Fund 4.93% 9.48% 8.48% 8.35% L 2035 Fund 5.16% N/A N/A N/A L 2040 Fund 5.41% 10.94% 9.64% 9.40% L 2045 Fund 5.55% N/A N/A N/A L 2050 Fund 5.77% 12.17% 10.62% 10.29% L 2055 Fund 6.95% N/A N/A N/A L 2060 Fund 6.94% N/A N/A N/A L 2065 Fund 6.94% N/A N/A N/A					
L 2025 Fund 4.29% N/A N/A N/A L 2030 Fund 4.93% 9.48% 8.48% 8.35% L 2035 Fund 5.16% N/A N/A N/A L 2040 Fund 5.41% 10.94% 9.64% 9.40% L 2045 Fund 5.55% N/A N/A N/A L 2050 Fund 5.77% 12.17% 10.62% 10.29% L 2055 Fund 6.95% N/A N/A N/A L 2060 Fund 6.94% N/A N/A N/A L 2065 Fund 6.94% N/A N/A N/A		1-Year	3-Year	5-Year	10-Year
L 2030 Fund 4.93% 9.48% 8.48% 8.35% L 2035 Fund 5.16% N/A N/A N/A L 2040 Fund 5.41% 10.94% 9.64% 9.40% L 2045 Fund 5.55% N/A N/A N/A L 2050 Fund 5.77% 12.17% 10.62% 10.29% L 2055 Fund 6.95% N/A N/A N/A L 2060 Fund 6.94% N/A N/A N/A L 2065 Fund 6.94% N/A N/A N/A	L Income Fund	2.77%	4.49%	4.36%	4.16%
L 2035 Fund 5.16% N/A N/A N/A L 2040 Fund 5.41% 10.94% 9.64% 9.40% L 2045 Fund 5.55% N/A N/A N/A L 2050 Fund 5.77% 12.17% 10.62% 10.29% L 2055 Fund 6.95% N/A N/A N/A L 2060 Fund 6.94% N/A N/A N/A L 2065 Fund 6.94% N/A N/A N/A	L 2025 Fund	4.29%	N/A	N/A	N/A
L 2040 Fund 5.41% 10.94% 9.64% 9.40% L 2045 Fund 5.55% N/A N/A N/A L 2050 Fund 5.77% 12.17% 10.62% 10.29% L 2055 Fund 6.95% N/A N/A N/A L 2060 Fund 6.94% N/A N/A N/A L 2065 Fund 6.94% N/A N/A N/A	L 2030 Fund	4.93%	9.48%	8.48%	8.35%
L 2045 Fund 5.55% N/A N/A N/A L 2050 Fund 5.77% 12.17% 10.62% 10.29% L 2055 Fund 6.95% N/A N/A N/A L 2060 Fund 6.94% N/A N/A N/A L 2065 Fund 6.94% N/A N/A N/A	L 2035 Fund	5.16%	N/A	N/A	N/A
L 2050 Fund 5.77% 12.17% 10.62% 10.29% L 2055 Fund 6.95% N/A N/A N/A L 2060 Fund 6.94% N/A N/A N/A L 2065 Fund 6.94% N/A N/A N/A	L 2040 Fund	5.41%	10.94%	9.64%	9.40%
L 2055 Fund 6.95% N/A N/A N/A L 2060 Fund 6.94% N/A N/A N/A L 2065 Fund 6.94% N/A N/A N/A	L 2045 Fund	5.55%	N/A	N/A	N/A
L 2060 Fund 6.94% N/A N/A N/A L 2065 Fund 6.94% N/A N/A N/A	L 2050 Fund	5.77%	12.17%	10.62%	10.29%
L 2065 Fund 6.94% N/A N/A N/A	L 2055 Fund	6.95%	N/A	N/A	N/A
	L 2060 Fund	6.94%	N/A	N/A	N/A
Inception date for L 2025, L 2035, L 2045, L 2055, L 2060, L 2065: July 1, 2020	L 2065 Fund	6.94%	N/A	N/A	N/A
	Inception date for L 2025, L 2035, L 2045, L 2055,	L 2060, L 20	065: July 1	, 2020	

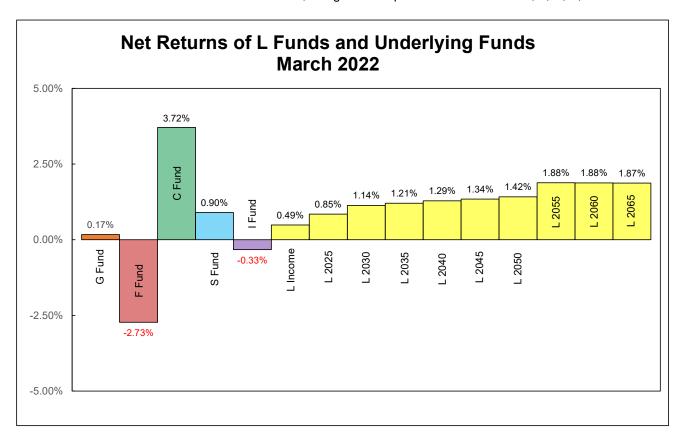
Performance of TSP Funds

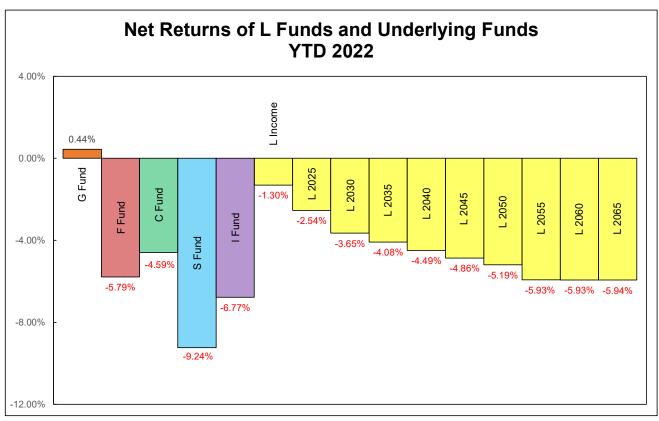
The charts below show the G, F, C, S, and I Fund net rates of return vs. their respective benchmark indices.



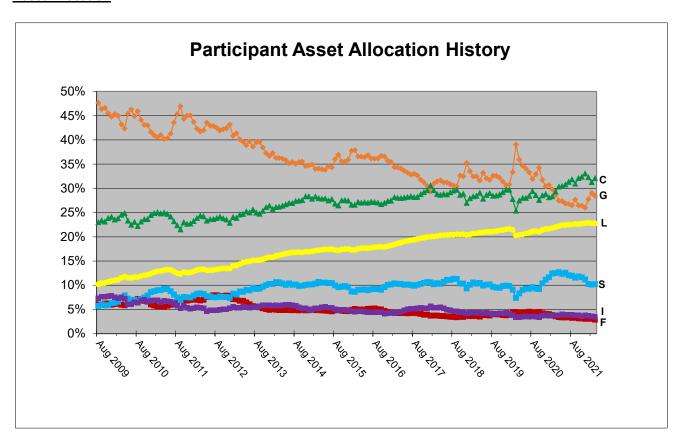


Net rates of return for the L Funds are shown below, along with comparable returns for the G, F, C, S, and I Funds.



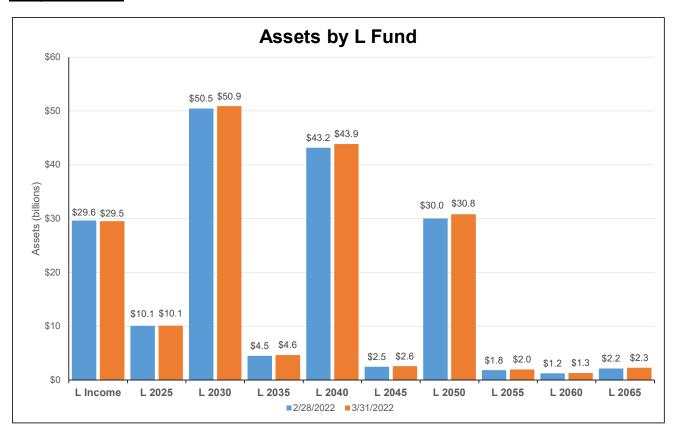


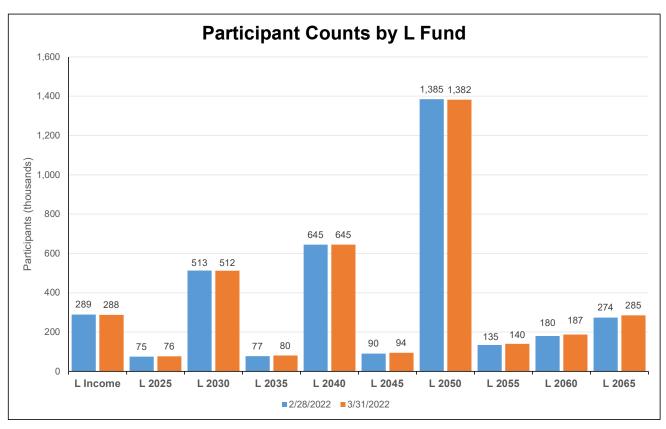
Asset Allocation

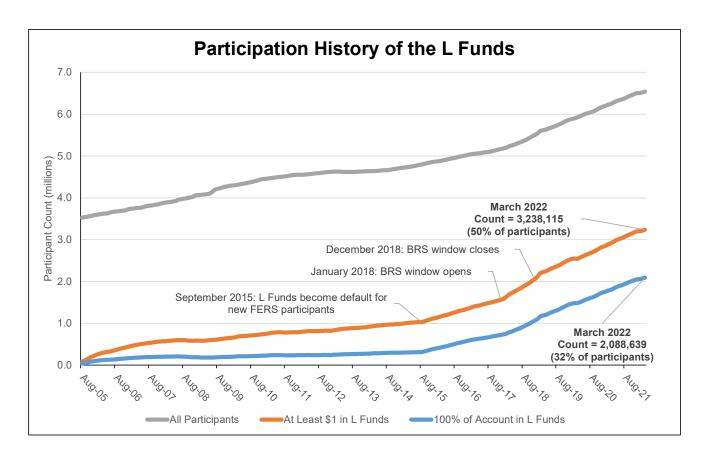


	<u>Participan</u>	t Allocation	Individual TSP Funds		
	Assets (Billions)	Share of Total	Assets Share ((Billions) Total		
G Fund	\$222.8	28.5%	\$280.3	35.8%	
F Fund	\$22.7	2.9%	\$34.7	4.4%	
C Fund	\$251.1	32.1%	\$306.8	39.2%	
S Fund	\$79.9	10.2%	\$94.9	12.1%	
l Fund	\$27.7	3.5%	\$65.6	8.4%	
<u>L Funds</u>	<u>\$178.0</u>	<u>22.8%</u>	<u>n/a</u>	<u>n/a</u>	
Total	\$782.3	100%	\$782.3	100%	

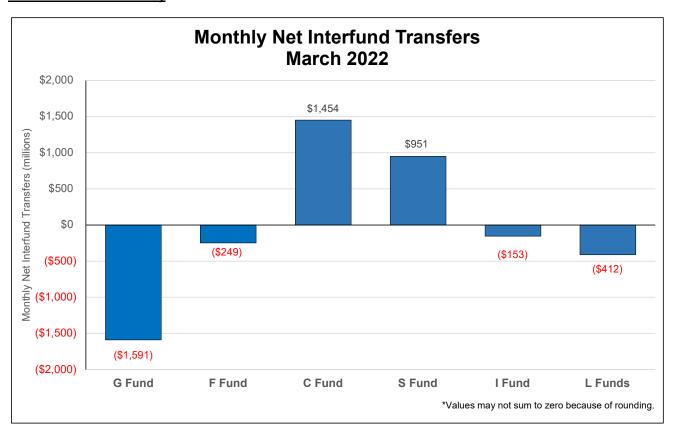
Lifecycle (L) Funds







Interfund Transfer Activity



PROXY VOTING – FOURTH QUARTER 2021

An audit of BlackRock's proxy voting conducted by ISS found no exceptions to BlackRock's established guidelines during the fourth quarter of 2021. Likewise, an audit of State Street's proxy voting conducted by ISS found no exceptions to State Street's established guidelines during the fourth quarter of 2021. Copies of the audit reports are provided in this report as Attachments 1 and 2. The ISS audit reports for the first quarter of 2022 are not yet available.

CLASS ACTION SETTLEMENTS – FOURTH QUARTER 2021

BlackRock began the fourth quarter with 69 open claims. During the quarter, the F and C Funds each had one claim opened. Nineteen claims were opened in the S Fund. Overall, 13 claims were settled for a total of \$2,502,168. Four claims in the C Fund were settled for \$749,309, and nine claims in the S Fund were settled for \$1,752,858. Additionally, residual payments from four previously closed S Fund claims yielded \$96,433. Two claims in the S Fund were closed due to administrator action, bringing the total number of claims closed during the quarter to 15. Seventy-five claims remained open at BlackRock at the end of the quarter.

	Open at Start of Quarter*	Opened During Quarter	Closed During Quarter	Open Claims Outstanding	Total of Settled Claims in 2021
F Fund	-	1	-	1	\$0
C Fund	20	1	4	17	\$1,544,703
S Fund	49	19	11	57	\$4,564,938
I Fund	-	-	-	-	\$4,432
Total	69	21	15	75	\$6,114,073

^{*}A review of claims resulted in corrections that changed the number of open claims in the C and S Funds at the start of the quarter from 18 to 20 and from 50 to 49, respectively.

State Street did not have any open claims at the beginning of the fourth quarter. During the quarter, three claims were opened in the S Fund. No claims were settled during the quarter, and three claims remained open at end of the quarter.

	Open at Start of Quarter	Opened During Quarter	Closed During Quarter	Open Claims Outstanding	Total of Settled Claims in 2021
F Fund	-	-	-	-	-
C Fund	-	-	-	-	-
S Fund	-	3	-	3	-
I Fund	n/a	n/a	n/a	n/a	n/a
Total	-	3	-	3	-

ATTACHMENTS

Attachment 1: Audit Report on BlackRock's Proxy Voting in the Fourth Quarter of 2021 Attachment 2: Audit Report on State Street's Proxy Voting in the Fourth Quarter of 2021



January 18, 2022

Ms. Michelle Edkins **Managing Director** Corporate Governance & Responsible Investment BlackRock 55 East 52nd St New York, NY 10055

Dear Michelle,

Enclosed are the results of our review of US proxy votes by BlackRock for the 4th quarter of 2021. Our review found that there were no exceptions to policy over this period.

Best regards,



Recoverable Signature



Signed by: 161923fe-1fa1-4c5e-a954-b052a253edf1

Andrew E. Linberg

Head of Custom Research - Americas

INSTITUTIONAL SHAREHOLDER SERVICES INC.

702 King Farm Boulevard Suite 400 Rockville, MD 20850



MEMORANDUM

The results of our review of BlackRock's 4th quarter proxy voting for US meetings are as follows:

- Votes at 45 meetings were examined.
- Votes at 16 of the 45 meetings were for directors, auditors, and/or management say-on-pay (MSOP) only.
- At the 29 remaining meetings, there were 56 non-director/auditor/MSOP proposals.

The following table illustrates the votes involved by proposal type:

Proposal	Votes
Executive stock plan	11
Employee share purchase plan	1
Advisory vote on golden parachute compensation	6
Frequency vote on MSOP	2
Increase authorized common stock	6
Issue shares for private placement	1
Approve issuance of shares pursuant to merger	3
Approve merger agreement	6
Amend securities transfer restrictions	1
Approve tax benefit preservation plan	1
Adjourn meeting	9
Amend bylaw	1
Amend certification of incorporation	1
Shareholder proposal	7
Total:	56

INSTITUTIONAL SHAREHOLDER SERVICES INC.

702 King Farm Boulevard Suite 400 Rockville, MD 20850



- There were 11 votes cast on executive stock plans:
 - a) 9 votes were cast in favor of the plans (81.8 percent);
 - b) 2 votes were cast against the plans (18.2 percent);
 - i.) 1 plan was opposed due to the ability to reprice options without prior shareholder approval;
 - ii.) 1 plan was opposed due to the presence of an evergreen provision.
- There was 1 vote cast on an employee share purchase plan; the vote was cast in favor of the plan.
- There were 9 votes cast on mergers, acquisitions and/or major corporate transactions, including 3 issuances of shares pursuant to mergers; the votes were cast in favor of the transactions.
- There were 6 votes cast on increases in authorized common stock:
 - a) 5 votes were cast in favor of the increases (83.3 percent);
 - b) 1 vote was cast against the increases (16.7 percent).
- There were 7 votes cast on shareholder proposals which included:
 - a) 1 shareholder proposal to amend proxy access; the vote was cast against the proposal.
 - b) 1 shareholder proposal to report on workplace engagement in governance; the vote was cast against the proposal.
 - c) 1 shareholder proposal to adopt simple majority vote; the vote was cast in favor of the proposal.
 - d) 1 shareholder proposal to report on racial equity audit; the vote was cast in favor of the proposal.
 - e) 1 shareholder proposal to require independent board chair; the vote was cast in favor of the proposal.
 - f) 1 shareholder proposal to report on political contributions; the vote was cast against the proposal.
 - g) 1 shareholder proposal to adopt policy to include non-management employees as prospective director candidates; the vote was cast against the proposal.
- There were 23 votes cast on management advisory votes on executive compensation:
 - a) 21 votes were cast in favor of the advisory votes (91.3 percent);
 - b) 2 votes were cast against the advisory votes (8.7 percent).
- There were 6 votes cast on management advisory votes on golden parachute compensation:
 - a) 5 votes were cast in favor of the advisory votes (83.3 percent);
 - b) 1 vote was cast against the advisory votes (16.7 percent).

There were no exceptions to policy this period.



Institutional Shareholder Services Inc.

702 King Farm Boulevard Suite 400 Rockville, MD 20850 T: +1. 301.556.0500 | F: +1.301.556.0491

March 2, 2022

Benjamin Colton Global Co-Head of Asset Stewardship State Street Global Advisors One Iron Street Boston, MA 02210

Dear Benjamin,

In connection with the proxy voting services provided by Institutional Shareholder Services Inc. ("ISS") to State Street Global Advisors, I certify that:

- a.) ISS has completed a review of a sampling of proxy research reports issued by ISS during the fourth quarter of 2021 to ascertain whether the reports and the vote recommendations therein were made in accordance with ISS' "benchmark" proxy voting policy framework; and
- b.) There were no material issues identified during the review.

Sincerely,

Dan Lantz

Chief Compliance Officer

Institutional Shareholder Services