Dreyfus Institutional Treasury Securities Cash Advantage Fund

ANNUAL REPORT
April 30, 2018

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Contents

THE FUND

FOR MORE INFORMATION

LETTER TO SHAREHOLDERS

Dear Shareholder:

This annual report for Dreyfus Institutional Treasury Securities Cash Advantage Fund covers the 12-month period ended April 30, 2018. During the reporting period, the fund produced the following yields and effective yields:[1]

	Annualized Yield (%)	Annualized Effective Yield (%)
Institutional Shares	0.98	0.99
Hamilton Shares	0.95	0.95
Premier Shares	0.69	0.70

Yields of money market instruments climbed over the reporting period in response to sustained economic growth, more stimulative fiscal policies, and three increases in short-term interest rates from the Federal Reserve Board (the "Fed").

Less Accommodative Monetary Policy Boosted Interest Rates

The reporting period began in the midst of positive investor sentiment as investors and monetary policymakers looked forward to stronger economic growth stemming, in part, from the business-friendly policies of a recently inaugurated presidential administration. In May 2017, the expanding U.S. economy led to the creation of 155,000 new jobs, and the unemployment rate slid to 4.3%. Manufacturing activity expanded in June 2017, with 15 of 18 manufacturing industries reporting growth. The unemployment rate ticked higher in June 2017 to 4.4%, and 239,000 new jobs were added. The Fed raised short-term interest rates for the third time in six months, sending the federal funds rate to between 1.00% and 1.25%. The U.S. economy grew at a 3.1% annualized rate during the second quarter of 2017.

The economy generated 190,000 new jobs in July 2017, and the unemployment rate returned to 4.3%. Activity in the manufacturing and services sectors continued to grow, but at slower rates than previously. In August 2017, 221,000 jobs were added, and the unemployment rate rose to 4.4%. Housing starts exceeded forecasts, but retail sales generally disappointed.

September 2017 saw U.S. factory activity climb to a 13-year high as companies invested to make their operations more efficient. The labor market produced only 14,000 new jobs, in part due to hurricanes affecting Florida and Texas. Yet, the unemployment rate fell to 4.2%. The U.S. economy expanded at a 3.2% annualized rate over the third quarter of 2017.

The unemployment rate declined to 4.1% in October 2017, and 271,000 jobs were created. Automobile purchases increased 0.7% as Gulf Coast residents replaced flood-damaged vehicles. The U.S. economy added 216,000 jobs in November 2017, and the unemployment rate stayed steady at 4.1%. The Fed implemented another interest-rate hike in mid-December 2017, raising the federal funds rate to between 1.25% and 1.50%. The unemployment rate remained at 4.1% and 175,000 new jobs were created. Retail sales during the holiday season climbed 4.9% compared to the previous year, and investors responded positively to the enactment of federal tax reform legislation. The U.S. economy grew at an annualized 2.9% rate during the fourth quarter of 2017.

In January 2018, 176,000 new jobs were added and the unemployment rate stayed at 4.1%. Corporate earnings growth continued to exceed expectations and hiring activity proved brisk. Hourly wages began to rise at their strongest pace since the 2008 recession, suggesting that inflation might begin to accelerate. February 2018 saw renewed volatility in the financial markets as inflation fears mounted in response to the addition of 324,000 jobs. The unemployment rate stayed steady at 4.1% for the fifth consecutive month. Manufacturing activity continued to expand, and consumer confidence remained high. Volatility in the financial markets remained high in March 2018, when investors reacted nervously to rhetoric regarding potential new trade tariffs. Job creation trailed off compared to previous months with 155,000 new jobs, but the manufacturing industry posted its strongest job gains in more than three years. The unemployment rate remained at 4.1%, but consumer confidence fell slightly due to worries about potential trade disputes.

In April 2018, the unemployment rate slid to 3.9%, a 17-year low, and an estimated 159,000 new jobs were added to the workforce. Retail sales grew by 0.3% amid persistently strong consumer confidence, which showed no sign of deterioration despite sharply rising fuel prices. In addition, long-term interest rates continued to climb, as the yield on 10-year U.S. Treasury bonds topped 3% for the first time since 2014.

Additional Rate Hikes Expected

The Fed has continued to moderate its accommodative monetary policy by unwinding its balance sheet through the sale of U.S. government securities, and more short-term interest-rate hikes are anticipated over the remainder of 2018 and into 2019. Indeed, at its meeting just days after the reporting period's end, the Fed indicated that inflation was approaching its 2% target.

In the rising interest-rate environment, we have maintained the fund's weighted average maturity in a range that is modestly shorter than industry averages. This strategy is intended to capture higher yields as they become available. As always, we have retained our longstanding focus on quality and liquidity.

[1] *Effective yield is based upon dividends declared daily and reinvested monthly. Yields fluctuate. Past performance is no guarantee of future results.*

You could lose money by investing in a money market fund. Although the fund seeks to preserve the value of your investment at $1.00 per share, it cannot guarantee it will do so. An investment in the fund is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. The fund's sponsor has no legal obligation to provide financial support to the fund, and you should not expect that the sponsor will provide financial support to the fund at any time.

Sincerely,

Patricia A. Larkin
Chief Investment Officer of BNY Mellon Cash Investment Strategies
May 15, 2018

UNDERSTANDING YOUR FUND'S EXPENSES (Unaudited)

As a mutual fund investor, you pay ongoing expenses, such as management fees and other expenses. Using the information below, you can estimate how these expenses affect your investment and compare them with the expenses of other funds. You also may pay one-time transaction expenses, including sales charges (loads) and redemption fees, which are not shown in this section and would have resulted in higher total expenses. For more information, see your fund's prospectus or talk to your financial adviser.

Review your fund's expenses

The table below shows the expenses you would have paid on a $1,000 investment in Dreyfus Institutional Treasury Securities Cash Advantage Fund from November 1, 2017 to April 30, 2018. It also shows how much a $1,000 investment would be worth at the close of the period, assuming actual returns and expenses.

Expenses and Value of a $1,000 Investment
assuming actual returns for the six months ended April 30, 2018

	Institutional Shares	Hamilton Shares	Premier Shares
Expenses paid per $1,000†	$ .80	$ .99	$ 2.24
Ending value (after expenses)	$ 1,006.00	$ 1,005.80	$ 1,004.60

COMPARING YOUR FUND'S EXPENSES WITH THOSE OF OTHER FUNDS (Unaudited)

Using the SEC's method to compare expenses

The Securities and Exchange Commission ("SEC") has established guidelines to help investors assess fund expenses. Per these guidelines, the table below shows your fund's expenses based on a $1,000 investment, assuming a hypothetical 5% annualized return. You can use this information to compare the ongoing expenses (but not transaction expenses or total cost) of investing in the fund with those of other funds. All mutual fund shareholder reports will provide this information to help you make this comparison. Please note that you cannot use this information to estimate your actual ending account balance and expenses paid during the period.

Expenses and Value of a $1,000 Investment
assuming a hypothetical 5% annualized return for the six months ended April 30, 2018

	Institutional Shares	Hamilton Shares	Premier Shares
Expenses paid per $1,000	$ .80	$ 1.00	$ 2.26
Ending value (after expenses)	$ 1,024.00	$ 1,023.80	$ 1,022.56

† *Expenses are equal to the fund's annualized expense ratio of .16% for Institutional shares, .20% for Hamilton shares and .45% for Premier shares, multiplied by the average account value over the period, multiplied by 181/365 (to reflect the one-half year period).*

STATEMENT OF INVESTMENTS

April 30, 2018

Description	Annualized Yield on Date of Purchase (%)	Principal Amount($)	Value($)
U.S. Treasury Bills - 93.4%			
5/3/18	1.55	101,000,000[a]	100,991,328
5/10/18	1.72	3,000,000[a]	2,998,710
5/24/18	1.60	50,000,000[a]	49,949,049
5/31/18	1.62	34,000,000[a]	33,954,100
6/14/18	1.68	65,000,000[a]	64,866,930
6/21/18	1.67	45,000,000[a]	44,893,856
7/5/18	1.75	75,000,000[a]	74,764,375
7/12/18	1.63	90,000,000[a]	89,708,400
7/19/18	1.71	118,000,000[a]	117,560,464
7/26/18	1.83	60,000,000[a]	59,738,775
Total U.S. Treasury Bills			
(cost $639,425,987)			**639,425,987**
U.S. Treasury Floating Rate Notes - 6.6%			
5/1/18, 3 Month U.S. T-BILL FLAT	1.85	20,000,000[b]	19,994,359
5/1/18, 3 Month U.S. T-BILL + .17%	1.86	25,000,000[b]	25,018,388
Total U.S. Treasury Floating Rate Notes			
(cost $45,012,747)			**45,012,747**
Total Investments (cost $684,438,734)		**100.0%**	**684,438,734**
Liabilities, Less Cash and Receivables		**.0%**	**(160,628)**
Net Assets		**100.0%**	**684,278,106**

[a] *Security is a discount security. Income is recognized through the accretion of discount.*

[b] *Variable rate security—rate shown is the interest rate in effect at period end. Date shown represents the earlier of the next interest reset date or ultimate maturity date.*

Portfolio Summary (Unaudited) †	Value (%)
U.S. Treasury Bills	93.4
U.S. Treasury Floating Rate Notes	6.6
	100.0

† *Based on net assets.*

See notes to financial statements.

STATEMENT OF ASSETS AND LIABILITIES

April 30, 2018

	Cost	Value
Assets ($):		
Investments in securities—See Statement of Investments	684,438,734	684,438,734
Interest receivable		2,416
		684,441,150
Liabilities ($):		
Due to The Dreyfus Corporation and affiliates—Note 2(b)		142,755
Cash overdraft due to Custodian		19,894
Payable for shares of Beneficial Interest redeemed		1
Accrued expenses		394
		163,044
Net Assets ($)		**684,278,106**
Composition of Net Assets ($):		
Paid-in capital		684,433,324
Accumulated net realized gain (loss) on investments		(155,218)
Net Assets ($)		**684,278,106**

Net Asset Value Per Share	Institutional Shares	Hamilton Shares	Premier Shares
Net Assets ($)	464,838,285	2,468,705	216,971,116
Shares Outstanding	464,949,577	2,469,158	217,014,591
Net Asset Value Per Share ($)	**1.00**	**1.00**	**1.00**

See notes to financial statements.

STATEMENT OF OPERATIONS

Year Ended April 30, 2018

Investment Income ($):	
Interest Income	**12,429,428**
Expenses:	
Management fee—Note 2(a)	1,800,122
Service Plan fees—Note 2(b)	1,025,806
Trustees' fees—Note 2(a,c)	14,278
Total Expenses	**2,840,206**
Less—reduction in fees due to earnings credits—Note 2(b)	(7,187)
Less—Trustees' fees reimbursed by Dreyfus—Note 2(a)	(14,278)
Net Expenses	**2,818,741**
Investment Income—Net	**9,610,687**
Net Realized Gain (Loss) on Investments—Note 1(b) ($)	**(155,218)**
Net Increase in Net Assets Resulting from Operations	**9,455,469**

See notes to financial statements.

STATEMENT OF CHANGES IN NET ASSETS

	Year Ended April 30,	
	2018	2017
Operations ($):		
Investment income—net	9,610,687	2,315,030
Net realized gain (loss) on investments	(155,218)	22,657
Net Increase (Decrease) in Net Assets Resulting from Operations	**9,455,469**	**2,337,687**
Distributions to Shareholders from ($):		
Investment income—net:		
Institutional Shares	(4,707,587)	(1,234,964)
Hamilton Shares	(2,857,888)	(900,419)
Premier Shares	(2,067,869)	(180,086)
Total Distributions	**(9,633,344)**	**(2,315,469)**
Beneficial Interest Transactions ($1.00 per share):		
Net proceeds from shares sold:		
Institutional Shares	1,158,495,493	1,251,238,017
Hamilton Shares	4,217,841,864	3,529,107,858
Premier Shares	973,781,791	1,390,146,059
Distributions reinvested:		
Institutional Shares	660,830	246,234
Hamilton Shares	4	272
Premier Shares	1,698,740	152,775
Cost of shares redeemed:		
Institutional Shares	(1,259,815,632)	(1,052,700,366)
Hamilton Shares	(4,358,347,554)	(3,529,521,266)
Premier Shares	(1,079,898,081)	(1,537,205,494)
Increase (Decrease) in Net Assets from Beneficial Interest Transactions	**(345,582,545)**	**51,464,089**
Total Increase (Decrease) in Net Assets	**(345,760,420)**	**51,486,307**
Net Assets ($):		
Beginning of Period	1,030,038,526	978,552,219
End of Period	**684,278,106**	**1,030,038,526**

See notes to financial statements.

FINANCIAL HIGHLIGHTS

The following tables describe the performance for each share class for the fiscal periods indicated. All information reflects financial results for a single fund share. Total return shows how much your investment in the fund would have increased (or decreased) during each period, assuming you had reinvested all dividends and distributions. These figures have been derived from the fund's financial statements.

	Year Ended April 30,		Four Months Ended April 30,	Year Ended December 31,		
Institutional Shares	2018	2017	2016[a]	2015	2014	2013
Per Share Data ($):						
Net asset value, beginning of period	1.00	1.00	1.00	1.00	1.00	1.00
Investment Operations:						
Investment income—net	.010	.003	.000[b]	.000[b]	.000[b]	.000[b]
Distributions:						
Dividends from investment income—net	(.010)	(.003)	(.000)[b]	(.000)[b]	(.000)[b]	(.000)[b]
Net asset value, end of period	1.00	1.00	1.00	1.00	1.00	1.00
Total Return (%)	.99	.26	.04[c]	.00[d]	.00[d]	.00[d]
Ratios/Supplemental Data (%):						
Ratio of total expenses to average net assets	.16	.16	.16[e]	.16	.16	.16
Ratio of net expenses to average net assets	.16	.16	.16[e]	.04	.03	.05
Ratio of net investment income to average net assets	.99	.28	.11[e]	.00[d]	.00[d]	.00[d]
Net Assets, end of period ($ x 1,000)	464,838	565,621	366,822	351,361	335,941	342,749

[a] *The fund has changed its fiscal year end from December 31 to April 30.*
[b] *Amount represents less than $.001 per share.*
[c] *Not annualized.*
[d] *Amount represents less than .01%.*
[e] *Annualized.*
See notes to financial statements.

Hamilton Shares	Year Ended April 30, 2018	Year Ended April 30, 2017	Four Months Ended April 30, 2016[a]	Year Ended December 31, 2015	Year Ended December 31, 2014	Year Ended December 31, 2013
Per Share Data ($):						
Net asset value, beginning of period	1.00	1.00	1.00	1.00	1.00	1.00
Investment Operations:						
Investment income—net	.009	.002	.000[b]	.000[b]	.000[b]	.000[b]
Distributions:						
Dividends from investment income—net	(.009)	(.002)	(.000)[b]	(.000)[b]	(.000)[b]	(.000)[b]
Net asset value, end of period	1.00	1.00	1.00	1.00	1.00	1.00
Total Return (%)	.95	.22	.02[c]	.00[d]	.00[d]	.00[d]
Ratios/Supplemental Data (%):						
Ratio of total expenses to average net assets	.20	.20	.20[e]	.20	.20	.20
Ratio of net expenses to average net assets	.20	.20	.20[e]	.04	.03	.06
Ratio of net investment income to average net assets	.83	.30	.08[e]	.00[d]	.00[d]	.00[d]
Net Assets, end of period ($ x 1,000)	2,469	142,974	143,388	4,395	6,888	6,990

[a] *The fund has changed its fiscal year end from December 31 to April 30.*
[b] *Amount represents less than $.001 per share.*
[c] *Not annualized.*
[d] *Amount represents less than .01%.*
[e] *Annualized.*
See notes to financial statements.

Premier Shares	Year Ended April 30, 2018	2017	Four Months Ended April 30, 2016[a]	Year Ended December 31, 2015	2014	2013
Per Share Data ($):						
Net asset value, beginning of period	1.00	1.00	1.00	1.00	1.00	1.00
Investment Operations:						
Investment income—net	.007	.001	.000[b]	.000[b]	.000[b]	.000[b]
Distributions:						
Dividends from investment income—net	(.007)	(.001)	(.000)[b]	(.000)[b]	(.000)[b]	(.000)[b]
Net asset value, end of period	1.00	1.00	1.00	1.00	1.00	1.00
Total Return (%)	.70	.05	.00[c,d]	.00[d]	.00[d]	.00[d]
Ratios/Supplemental Data (%):						
Ratio of total expenses to average net assets	.45	.45	.45[e]	.45	.45	.45
Ratio of net expenses to average net assets	.45	.36	.25[e]	.04	.03	.05
Ratio of net investment income to average net assets	.67	.05	.01[e]	.00[d]	.00[d]	.00[d]
Net Assets, end of period ($ x 1,000)	216,971	321,444	468,342	401,092	384,388	422,077

[a] *The fund has changed its fiscal year end from December 31 to April 30.*
[b] *Amount represents less than $.001 per share.*
[c] *Not annualized.*
[d] *Amount represents less than .01%.*
[e] *Annualized.*
See notes to financial statements.

NOTE 1—Significant Accounting Policies:

Dreyfus Institutional Treasury Securities Cash Advantage Fund (the "fund") is a separate diversified series of Dreyfus Institutional Reserves Funds (the "Company"), which is registered under the Investment Company Act of 1940, as amended (the "Act"), as an open-end management investment company and operates as a series company currently offering three series, including the fund. The fund's investment objective is to seek as high a level of current income as is consistent with the preservation of capital and the maintenance of liquidity. The Dreyfus Corporation (the "Manager" or "Dreyfus"), a wholly-owned subsidiary of The Bank of New York Mellon Corporation ("BNY Mellon"), serves as the fund's investment adviser.

MBSC Securities Corporation (the "Distributor"), a wholly-owned subsidiary of Dreyfus, is the distributor of the fund's shares, which are sold to the public without a sales charge. The fund is authorized to issue an unlimited number of $.001 par value shares of Beneficial Interest in each of the following classes of shares: Institutional shares, Hamilton shares and Premier shares. Hamilton shares and Premier shares are subject to a Service Plan adopted pursuant to Rule 12b-1 under the Act. Other differences between the classes include the services offered to and the expenses borne by each class, and certain voting rights. Income, expenses (other than expenses attributable to a specific class), and realized and unrealized gains or losses on investments are allocated to each class of shares based on its relative net assets.

The fund operates as a "government money market fund" as that term is defined in Rule 2a-7 under the Act. It is the fund's policy to maintain a constant net asset value ("NAV") per share of $1.00 and the fund has adopted certain investment, portfolio valuation and dividend and distribution policies to enable it to do so. There is no assurance, however, that the fund will be able to maintain a constant NAV per share of $1.00.

The Company accounts separately for the assets, liabilities and operations of each series. Expenses directly attributable to each series are charged to that series' operations; expenses which are applicable to all series are allocated among them on a pro rata basis.

The Financial Accounting Standards Board ("FASB") Accounting Standards Codification is the exclusive reference of authoritative U.S. generally accepted accounting principles ("GAAP") recognized by the FASB to be applied by nongovernmental entities. Rules and interpretive releases of the Securities and Exchange Commission ("SEC") under authority of federal laws are also sources of authoritative GAAP for SEC registrants. The fund's financial statements are prepared in accordance with GAAP, which may require the use of management estimates and assumptions. Actual results could differ from those estimates.

The Company enters into contracts that contain a variety of indemnifications. The fund's maximum exposure under these arrangements is unknown. The fund does not anticipate recognizing any loss related to these arrangements.

(a) Portfolio valuation: Investments in securities are valued at amortized cost in accordance with Rule 2a-7 under the Act. If amortized cost is determined not to approximate market value, the fair value of the portfolio securities will be determined by procedures established by and under the general supervision of the Company's Board of Trustees (the "Board").

The fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (i.e., the exit price). GAAP establishes a fair value hierarchy that prioritizes the inputs of valuation techniques used to measure fair value. This hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements).

Additionally, GAAP provides guidance on determining whether the volume and activity in a market has decreased significantly and whether such a decrease in activity results in transactions that are not orderly. GAAP requires enhanced disclosures around valuation inputs and techniques used during annual and interim periods.

Various inputs are used in determining the value of the fund's investments relating to fair value measurements. These inputs are summarized in the three broad levels listed below:

> **Level 1**—unadjusted quoted prices in active markets for identical investments.
>
> **Level 2**—other significant observable inputs (including quoted prices for similar investments, interest rates, prepayment speeds, credit risk, etc.).
>
> **Level 3**—significant unobservable inputs (including the fund's own assumptions in determining the fair value of investments).

The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. For example, money market securities are valued using amortized cost, in accordance with rules under the Act. Generally, amortized cost approximates the current fair value of a security, but since the value is not obtained from a quoted price in an active market, such securities are reflected within Level 2 of the fair value hierarchy.

The following is a summary of the inputs used as of April 30, 2018 in valuing the fund's investments:

Valuation Inputs	Short-Term Investments ($)†
Level 1 - Unadjusted Quoted Prices	-
Level 2 - Other Significant Observable Inputs	684,438,734
Level 3 - Significant Unobservable Inputs	-
Total	**684,438,734**

† *See Statement of Investments for additional detailed categorizations.*

At April 30, 2018, there were no transfers between levels of the fair value hierarchy. It is the fund's policy to recognize transfers between levels at the end of the reporting period.

(b) Securities transactions and investment income: Securities transactions are recorded on a trade date basis. Interest income, adjusted for accretion of discount and amortization of premium on investments, is earned from settlement date and is recognized on the accrual basis. Realized gains and losses from securities transactions are recorded on the identified cost basis.

(c) Dividends and distributions to shareholders: It is the policy of the fund to declare dividends daily from investment income-net. Such dividends are paid monthly. Dividends from net realized capital gains, if any, are normally declared and paid annually, but the fund may make distributions on a more frequent basis to comply with the distribution requirements of the Internal Revenue Code of 1986, as amended (the "Code"). To the extent that net realized capital gains can be offset by capital loss carryovers, it is the policy of the fund not to distribute such gains.

(d) Federal income taxes: It is the policy of the fund to continue to qualify as a regulated investment company, if such qualification is in the best interests of its shareholders, by complying with the applicable provisions of the Code, and to make distributions of taxable income sufficient to relieve it from substantially all federal income and excise taxes.

As of and during the period ended April 30, 2018, the fund did not have any liabilities for any uncertain tax positions. The fund recognizes interest and penalties, if any, related to uncertain tax positions as income tax expense in the Statement of Operations. During the period ended April 30, 2018, the fund did not incur any interest or penalties.

Each tax year in the three-year period ended April 30, 2018 and each tax year in the two-year period ended December 31, 2015 remains subject to examination by the Internal Revenue Service and state taxing authorities.

At April 30, 2018, the components of accumulated earnings on a tax basis were substantially the same as for financial reporting purposes.

Under the Regulated Investment Company Modernization Act of 2010, the fund is permitted to carry forward capital losses for an unlimited period. Furthermore, capital loss carryovers retain their character as either short-term or long-term capital losses.

The accumulated capital loss carryover is available for federal income tax purposes to be applied against future net realized capital gains, if any, realized subsequent to April 30, 2018. The fund has $155,218 of short-term capital losses which can be carried forward for an unlimited period.

The tax character of distributions paid to shareholders during the fiscal periods ended April 30, 2018 and April 30, 2017 were as follows: ordinary income $9,610,687 and $2,315,469 and long-term capital gains $22,657 and $0, respectively.

During the period ended April 30, 2018, as a result of permanent book to tax differences, primarily due to dividend reclassification, the fund increased undistributed investment income-net by $22,657 and decreased accumulated net realized gain (loss) on investments by the same amount. Net assets and net asset value per share were not affected by this reclassification.

At April 30, 2018, the cost of investments for federal income tax purposes was substantially the same as the cost for financial reporting purposes (see the Statement of Investments).

NOTE 2—Management Fee and Other Transactions with Affiliates:

(a) Pursuant to a management agreement with Dreyfus, the management fee is computed at the annual rate of .16% of the value of the fund's average daily net assets and is payable monthly. Out of its fee, Dreyfus pays all of the expenses of the fund except management fees, Rule 12b-1 Service Plan fees, brokerage fees, taxes, fees and expenses of non-interested Trustees (including counsel fees) and extraordinary expenses. In addition, Dreyfus is required to reduce its fee in an amount equal to the fund's allocable portion of fees and expenses of the non-interested

Trustees (including counsel fees). During the period ended April 30, 2018, fees reimbursed by Dreyfus amounted to $14,278.

(b) Under the fund's Service Plan adopted pursuant to Rule 12b-1 under the Act, with respect to the fund's applicable Hamilton shares and Premier shares, the fund pays the Distributor for distributing such classes of shares, for servicing and/or maintaining shareholder accounts and for advertising and marketing. The Service Plan provides for payments to be made at annual rates of .04% and .29% of the value of such class' average daily net assets of the Hamilton and Premier shares, respectively. The fees payable under the Service Plan are payable without regard to actual expenses incurred. During the period ended April 30, 2018, Hamilton shares and Premier shares were charged $137,360 and $888,446, respectively, pursuant to the Service Plan.

The fund has arrangements with the custodian whereby the fund may receive earnings credits when positive cash balances are maintained, which are used to offset custody fees paid by Dreyfus. For financial reporting purposes, the fund includes net earnings credits as an expense offset in the Statement of Operations. During the period ended April 30, 2018, reduction in fees due to earnings credits amounted to $7,187.

The components of "Due to The Dreyfus Corporation and affiliates" in the Statement of Assets and Liabilities consist of: management fees $91,720 and Service Plan fees $58,819, which are offset against an expense reimbursement currently in effect in the amount of $4,100 and reduction of earnings credits in the amount of $3,684.

(c) Each Board member also serves as a Board member of other funds within the Dreyfus complex. Annual retainer fees and attendance fees are allocated to each fund based on net assets.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Trustees of Dreyfus Institutional Treasury Securities Cash Advantage Fund

Opinion on the Financial Statements

We have audited the accompanying statement of assets and liabilities of Dreyfus Institutional Treasury Securities Cash Advantage Fund (the "Fund") (one of the funds constituting Dreyfus Institutional Reserves Funds), including the statement of investments, as of April 30, 2018, and the related statement of operations for the year then ended, the statements of changes in net assets for each of the two years in the period then ended, the financial highlights for each of the two years in the period then ended, for the period from January 1, 2016 to April 30, 2016 and for each of the three years in the period ended December 31, 2015 and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Fund (one of the funds constituting Dreyfus Institutional Reserves Funds) at April 30, 2018, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period then ended and its financial highlights for each of the two years in the period then ended, for the period from January 1, 2016 to April 30, 2016 and for each of the three years in the period ended December 31, 2015, in conformity with U.S. generally accepted accounting principles.

Basis for opinion

These financial statements are the responsibility of the Fund's management. Our responsibility is to express an opinion on the Fund's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Fund in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Fund is not required to have, nor were we engaged to perform, an audit of the Fund's internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Fund's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our procedures included confirmation of securities owned as of April 30, 2018, by correspondence with the custodian and others or by other appropriate auditing procedures where replies were not received. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Ernst & Young LLP

We have served as the auditor of one or more Dreyfus investment companies since at least 1957, but we are unable to determine the specific year.

New York, New York
June 20, 2018

IMPORTANT TAX INFORMATION (Unaudited)

For federal tax purposes, the fund hereby reports 100% of ordinary income dividends paid during the fiscal period ended April 30, 2018 as qualifying "interest-related dividends." For state individual income tax purposes, the fund hereby reports 100% of the ordinary income dividends paid during its fiscal period ended April 30, 2018 as attributable to interest income from direct obligations of the United States. Such dividends are currently exempt from taxation for individual income tax purposes in most states, including New York, California, Connecticut and the District of Columbia. The fund designates $22,657 as a long-term capital gain distribution for reporting purposes.

BOARD MEMBERS INFORMATION (Unaudited)

INDEPENDENT BOARD MEMBERS

Joseph S. DiMartino (74)
Chairman of the Board (2008)

Principal Occupation During Past 5 Years:

- Corporate Director and Trustee (1995-present)

Other Public Company Board Memberships During Past 5 Years:

- CBIZ (formerly, Century Business Services, Inc.), a provider of outsourcing functions for small and medium size companies, Director (1997-present)

No. of Portfolios for which Board Member Serves: 124

Francine J. Bovich (66)
Board Member (2015)

Principal Occupation During Past 5 Years:

- Trustee, The Bradley Trusts, private trust funds (2011-present)

Other Public Company Board Memberships During Past 5 Years:

- Annaly Capital Management, Inc., a real estate investment trust, Director (2014-present)

No. of Portfolios for which Board Member Serves: 72

Gordon J. Davis (76)
Board Member (2012)

Principal Occupation During Past 5 Years:

- Partner in the law firm of Venable LLP (2012-present)

Other Public Company Board Memberships During Past 5 Years:

- Consolidated Edison, Inc., a utility company, Director (1997-2014)
- The Phoenix Companies, Inc., a life insurance company, Director (2000-2014)

No. of Portfolios for which Board Member Serves: 54

Isabel P. Dunst (71)
Board Member (2014)

Principal Occupation During Past 5 Years:

- Senior Counsel, Hogan Lovells LLP (2018-present; previously, Of Counsel, 2015-2018, Partner, 1990-2014)

No. of Portfolios for which Board Member Serves: 33

Nathan Leventhal (75)
Board Member (2009)

Principal Occupation During Past 5 Years:

- President Emeritus of Lincoln Center for the Performing Arts (2001-present)
- Chairman of the Avery Fisher Artist Program (1997-2014)

Other Public Company Board Memberships During Past 5 Years:

- Movado Group, Inc., Director (2003-present)

No. of Portfolios for which Board Member Serves: 47

Robin A. Melvin (54)
Board Member (2014)

Principal Occupation During Past 5 Years:

- Co-chairman, Illinois Mentoring Partnership, non-profit organization dedicated to increasing the quantity and quality of mentoring services in Illinois; (2014-present; board member since 2013)

No. of Portfolios for which Board Member Serves: 99

Roslyn M. Watson (68)
Board Member (2014)

Principal Occupation During Past 5 Years:

- Principal, Watson Ventures, Inc., a real estate investment company (1993-present)

No. of Portfolios for which Board Member Serves: 58

Benaree Pratt Wiley (71)
Board Member (2009)

Principal Occupation During Past 5 Years:

- Principal, The Wiley Group, a firm specializing in strategy and business development (2005-present)

Other Public Company Board Memberships During Past 5 Years:

- CBIZ (formerly, Century Business Services, Inc.), a provider of outsourcing functions for small and medium size companies, Director (2008-present)

No. of Portfolios for which Board Member Serves: 79

J. Charles Cardona (62)
Board Member (2014)

Principal Occupation During Past 5 Years:

- Retired. President and a Director of the Manager (2008-2016), Chairman of the Distributor (2013-2016, Executive Vice President, 1997-2013)

No. of Portfolios for which Board Member Serves: 33

J. Charles Cardona is deemed to be an "interested person" (as defined under the Act) of the Company as a result of his previous affiliation with The Dreyfus Corporation.

Once elected all Board Members serve for an indefinite term, but achieve Emeritus status upon reaching age 80. The address of the Board Members and Officers is c/o The Dreyfus Corporation, 200 Park Avenue, New York, New York 10166. Additional information about the Board Members is available in the fund's Statement of Additional Information which can be obtained from Dreyfus free of charge by calling this toll free number: 1-800-DREYFUS.

Clifford L. Alexander, Jr., Emeritus Board Member
Whitney I. Gerard, Emeritus Board Member
George L. Perry, Emeritus Board Member

OFFICERS OF THE FUND (Unaudited)

BRADLEY J. SKAPYAK, President since January 2010.

Chief Operating Officer and a director of the Manager since June 2009, Chairman of Dreyfus Transfer, Inc., an affiliate of the Manager and the transfer agent of the funds, since May 2011 and Chief Executive Officer of MBSC Securities Corporation since August 2016. He is an officer of 62 investment companies (comprised of 124 portfolios) managed by the Manager. He is 59 years old and has been an employee of the Manager since February 1988.

BENNETT A. MACDOUGALL, Chief Legal Officer since October 2015.

Chief Legal Officer of the Manager and Associate General Counsel and Managing Director of BNY Mellon since June 2015; from June 2005 to June 2015, he served in various capacities with Deutsche Bank – Asset & Wealth Management Division, including as Director and Associate General Counsel, and Chief Legal Officer of Deutsche Investment Management Americas Inc. from June 2012 to May 2015. He is an officer of 63 investment companies (comprised of 149 portfolios) managed by the Manager. He is 46 years old and has been an employee of the Manager since June 2015.

JAMES BITETTO, Vice President since January 2008 and Secretary since February 2018.

Managing Counsel of BNY Mellon and Secretary of the Manager, and an officer of 63 investment companies (comprised of 149 portfolios) managed by the Manager. He is 51 years old and has been an employee of the Manager since December 1996.

JOSEPH M. CHIOFFI, Vice President and Assistant Secretary since January 2008.

Managing Counsel of BNY Mellon, and an officer of 63 investment companies (comprised of 149 portfolios) managed by the Manager. He is 56 years old and has been an employee of the Manager since June 2000.

SONALEE CROSS, Vice President and Assistant Secretary since March 2018.

Counsel of BNY Mellon since October 2016; Associate at Proskauer Rose LLP from April 2016 to September 2016; Attorney at EnTrust Capital from August 2015 to February 2016; Associate at Sidley Austin LLP from September 2013 until August 2015. She is an officer of 63 investment companies (comprised of 149 portfolios) managed by Dreyfus. She is 30 years old and has been an employee of the Manager since October 2016.

MAUREEN E. KANE, Vice President and Assistant Secretary since April 2015.

Managing Counsel of BNY Mellon since July 2014; from October 2004 until July 2014, General Counsel, and from May 2009 until July 2014, Chief Compliance Officer of Century Capital Management. She is an officer of 63 investment companies (comprised of 149 portfolios) managed by the Manager. She is 56 years old and has been an employee of the Manager since July 2014.

SARAH S. KELLEHER, Vice President and Assistant Secretary since April 2014.

Managing Counsel of BNY Mellon since December 2017; from March 2013 to December 2017 Senior Counsel of BNY Mellon. She is an officer of 63 investment companies (comprised of 149 portfolios) managed by the Manager. She is 42 years old and has been an employee of the Manager since March 2013.

JEFF PRUSNOFSKY, Vice President and Assistant Secretary since January 2008.

Senior Managing Counsel of BNY Mellon, and an officer of 63 investment companies (comprised of 149 portfolios) managed by the Manager. He is 52 years old and has been an employee of the Manager since October 1990.

NATALYA ZELENSKY, Vice President and Assistant Secretary since March 2017.

Counsel of BNY Mellon since May 2016; Attorney at Wildermuth Endowment Strategy Fund/Wildermuth Advisory, LLC from November 2015 until May 2016; Assistant General Counsel at RCS Advisory Services from July 2014 until November 2015; Associate at Sutherland, Asbill & Brennan from January 2013 until January 2014. She is an officer of 63 investment companies (comprised of 149 portfolios) managed by Dreyfus. She is 32 years old and has been an employee of the Manager since May 2016.

JAMES WINDELS, Treasurer since January 2008.

Director – Mutual Fund Accounting of the Manager, and an officer of 63 investment companies (comprised of 149 portfolios) managed by the Manager. He is 59 years old and has been an employee of the Manager since April 1985.

RICHARD CASSARO, Assistant Treasurer since January 2008.

Senior Accounting Manager – Money Market and Municipal Bond Funds of the Manager, and an officer of 63 investment companies (comprised of 149 portfolios) managed by the Manager. He is 59 years old and has been an employee of the Manager since September 1982.

GAVIN C. REILLY, Assistant Treasurer since January 2008.

Tax Manager of the Investment Accounting and Support Department of the Manager, and an officer of 63 investment companies (comprised of 149 portfolios) managed by the Manager. He is 49 years old and has been an employee of the Manager since April 1991.

ROBERT S. ROBOL, Assistant Treasurer since January 2008.

Senior Accounting Manager – Dreyfus Financial Reporting of the Manager, and an officer of 63 investment companies (comprised of 149 portfolios) managed by the Manager. He is 54 years old and has been an employee of the Manager since October 1988.

ROBERT SALVIOLO, Assistant Treasurer since January 2008.

Senior Accounting Manager – Equity Funds of the Manager, and an officer of 63 investment companies (comprised of 149 portfolios) managed by the Manager. He is 51 years old and has been an employee of the Manager since June 1989.

ROBERT SVAGNA, Assistant Treasurer since January 2008.

Senior Accounting Manager – Fixed Income and Equity Funds of the Manager, and an officer of 63 investment companies (comprised of 149 portfolios) managed by the Manager. He is 51 years old and has been an employee of the Manager since November 1990.

JOSEPH W. CONNOLLY, Chief Compliance Officer since January 2008.

Chief Compliance Officer of the Manager, the Dreyfus Family of Funds and BNY Mellon Funds Trust (63 investment companies, comprised of 149 portfolios). He is 60 years old and has served in various capacities with the Manager since 1980, including manager of the firm's Fund Accounting Department from 1997 through October 2001.

CARIDAD M. CAROSELLA, Anti-Money Laundering Compliance Officer since January 2016.

Anti-Money Laundering Compliance Officer of the Dreyfus Family of Funds and BNY Mellon Funds Trust since January 2016; from May 2015 to December 2015, Interim Anti-Money Laundering Compliance Officer of the Dreyfus Family of Funds and BNY Mellon Funds Trust and the Distributor; from January 2012 to May 2015, AML Surveillance Officer of the Distributor and from 2007 to December 2011, Financial Processing Manager of the Distributor. She is an officer of 57 investment companies (comprised of 143 portfolios) managed by the Manager. She is 49 years old and has been an employee of the Distributor since 1997.

NOTES

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For More Information

Dreyfus Institutional Treasury Securities Cash Advantage Fund

200 Park Avenue
New York, NY 10166

Manager

The Dreyfus Corporation
200 Park Avenue
New York, NY 10166

Custodian

The Bank of New York Mellon
225 Liberty Street
New York, NY 10286

Transfer Agent & Dividend Disbursing Agent

Dreyfus Transfer, Inc.
200 Park Avenue
New York, NY 10166

Distributor

MBSC Securities Corporation
200 Park Avenue
New York, NY 10166

Ticker Symbols: Institutional: DUPXX Hamilton: DHMXX Premier: DMEXX

Telephone Call your Dreyfus Cash Investment Services Division representative or 1-800-346-3621

Mail Dreyfus Investment Division, 144 Glenn Curtiss Boulevard, Uniondale, NY 11556-0144

E-mail Send your request to info@dreyfus.com

Internet Access Dreyfus Investment Division at www.dreyfus.com

The fund will disclose daily, on www.dreyfus.com, the fund's complete schedule of holdings as of the end of the previous business day. The schedule of holdings will remain on the website until the fund files its Form N-Q or Form N-CSR for the period that includes the date of the posted holdings.

The fund files its complete schedule of portfolio holdings with the Securities and Exchange Commission ("SEC") for the first and third quarters of each fiscal year on Form N-Q. The fund's Forms N-Q are available on the SEC's website at www.sec.gov and may be reviewed and copied at the SEC's Public Reference Room in Washington, D.C. (phone 1-800-SEC-0330 for information).

Information regarding how the fund voted proxies related to portfolio securities for the most recent 12-month period ended June 30 is available at www.dreyfus.com and on the SEC's website at www.sec.gov and without charge, upon request, by calling 1-800-DREYFUS.

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