

Dreyfus Premier GNMA Fund

ANNUAL REPORT December 31, 2004



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Contents

THE FUND

2	Letter from the Chairman
3	Discussion of Fund Performance
6	Fund Performance
8	Understanding Your Fund's Expenses
8	Comparing Your Fund's Expenses With Those of Other Funds
9	Statement of Investments
11	Statement of Financial Futures
12	Statement of Assets and Liabilities
13	Statement of Operations
14	Statement of Changes in Net Assets
16	Financial Highlights
19	Notes to Financial Statements
27	Report of Independent Registered Public Accounting Firm
28	Board Members Information
30	Officers of the Fund

FOR MORE INFORMATION

Back Cover



LETTER FROM THE CHAIRMAN

Dear Shareholder:

We are pleased to present this annual report for Dreyfus Premier GNMA Fund covering the 12-month period from January 1, 2004, through December 31, 2004. Inside, you'll find valuable information about how the fund was managed during the reporting period, including a discussion with Gerald E. Thunelius, portfolio manager for the fund during its recently completed fiscal year.

Despite a moderately growing economy and rising interest rates over the second half of the year, the yield of the benchmark 10-year U.S. Treasury bond ended 2004 virtually unchanged from where it began. At the same time, corporate bonds generally continued to gain value as business conditions improved, and mortgage-backed securities benefited from waning prepayment activity among homeowners.

Can bonds continue to deliver positive results in 2005? No one knows for certain. However, with short-term interest rates rising and the economy gaining momentum, we believe that some areas of the fixed-income market are likely to be stronger than others. What's required for success, in our view, is strong fundamental research and keen professional judgment.

As always, we urge our shareholders to view the financial markets from a long-term perspective, measured in years rather than weeks or months. One of the best ways to ensure a long-term perspective is to establish an investment plan with the help of your financial advisor, and review it periodically to track your progress toward your financial goals.

Thank you for your continued confidence and support.

Sincerely,

Stephen E. Canter
Chairman and Chief Executive Officer
The Dreyfus Corporation
February 1, 2005



DISCUSSION OF FUND PERFORMANCE

How did Dreyfus Premier GNMA Fund perform relative to its benchmark?

For the 12-month period ended December 31, 2004, the fund achieved total returns of 2.71% for Class A shares, 2.10% for Class B shares and 1.97% for Class C shares. The fund also produced aggregate income dividends of approximately \$0.6619, \$0.5812 and \$0.5521 for its Class A, B and C shares, respectively.¹ In comparison, the fund's benchmark, the Lehman Brothers GNMA Index (the "Index"), achieved a total return of 4.35%.²

Despite rising interest rates, mortgage-backed securities generally produced positive total returns in 2004. The mortgage-related market was positively influenced by strong demand from foreign investors and a decline in prepayment activity as fewer homeowners refinanced their existing mortgages. Strong foreign demand helped boost GNMA prices broadly. The fund produced lower returns than its benchmark, primarily due to weakness among adjustable-rate and lower-coupon GNMA's owned by the fund during the reporting period.

What is the fund's investment approach?

The fund seeks to maximize total return consisting of capital appreciation and current income.

The fund invests at least 80% of its assets in Government National Mortgage Association ("Ginnie Mae" or "GNMA") securities. The fund may also purchase other securities issued or guaranteed by the U.S. government, such as U.S. Treasury securities. The fund is not permitted to invest in any other type of security. The fund may, but is not required to, use derivatives, such as futures and options, as a substitute for taking a position in an underlying asset, to increase returns, to manage interest-rate risk, or as part of a hedging strategy. The fund's forward roll transactions will increase its portfolio turnover rate.

What other factors influenced the fund's performance?

The fund was influenced by a recovering economy, higher short-term interest rates, persistently low inflation and a steep decline in prepayment activity among homeowners. In fact, stronger economic growth and intensified inflation concerns in the spring of 2004 led to a sharp correction in most sectors of the U.S. bond market, which occurred in advance of the Federal Reserve Board's first move toward higher interest rates in more than four years. However, mortgage-backed securities fared better than other types of interest-sensitive fixed-income securities, primarily because higher mortgage rates tend to suppress prepayment activity, which had reached record levels in 2003.

Mortgage-backed securities continued to perform relatively well even after investors' inflation concerns eased and long-term bond yields moderated, apparently because most homeowners who intended to refinance their mortgages already had done so. In addition, prices of mortgage-backed securities issued by U.S. government agencies were supported by strong demand from foreign investors, principally governments of countries in Asia.

Early in the year, with mortgage rates near historically low levels, we emphasized GNMA securities that we believed would be relatively resistant to prepayment activity, including bonds from pools of mortgages with relatively low loan balances and securities backed by mortgages from single states, such as Florida, New York and Texas, where taxes and fees create relatively high barriers to refinancing activity. Later, as interest rates began to rise, we shifted our focus to securities that historically have tended to fare better in such environments, including shorter-term, higher-coupon pass-through securities.

At times during the year, we enhanced the fund's returns during periods of market volatility by shifting a portion of the fund's assets between GNMA securities and U.S. Treasury securities. The fund's

underperformance can be attributed principally to its relatively heavy exposure to adjustable-rate mortgages, which lagged “generic” GNMA’s during the reporting period’s second half when interest rates rose.

What is the fund’s current strategy?

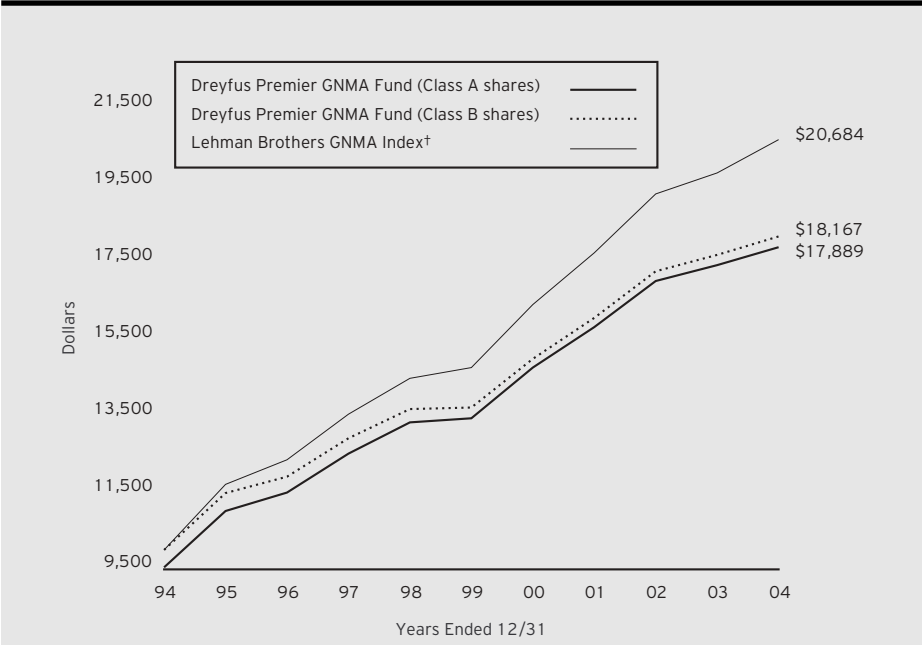
Effective January 31, 2005, Marc Seidner became primary portfolio manager of the fund. Robert Bayston was appointed as an additional portfolio manager. Mr. Seidner also is the Director of Active Core Strategies, responsible for the development, implementation and execution of investment strategy for all core fixed-income portfolios managed by Standish Mellon Asset Management, LLC — an affiliate of Dreyfus. Mr. Bayston also is a Portfolio Manager for the TIPS strategy and a Derivatives Trader for Standish Mellon. Each manages the fund under a dual-employee relationship with Dreyfus, using the proprietary investment processes of Standish Mellon, and will manage the fund accordingly.

February 1, 2005

¹ *Total return includes reinvestment of dividends and any capital gains paid, and does not take into consideration the maximum initial sales charge in the case of Class A shares, or the applicable contingent deferred sales charges imposed on redemptions in the case of Class B and Class C shares. Had these charges been reflected, returns would have been lower. Past performance is no guarantee of future results. Share price, yield and investment return fluctuate such that upon redemption, fund shares may be worth more or less than their original cost.*

² *SOURCE: LIPPER INC. — Reflects reinvestment of dividends and, where applicable, capital gain distributions. The Lehman Brothers GNMA Index (unhedged) is an unmanaged, total return performance benchmark for the GNMA market consisting of 15- and 30-year fixed-rate securities backed by mortgage pools of the Government National Mortgage Association.*

FUND PERFORMANCE



Comparison of change in value of \$10,000 investment in Dreyfus Premier GNMA Fund Class A shares and Class B shares and the Lehman Brothers GNMA Index

† Source: Lipper Inc.

Past performance is not predictive of future performance.

The above graph compares a \$10,000 investment made in Class A shares and Class B shares of Dreyfus Premier GNMA Fund on 12/31/94 to a \$10,000 investment made in the Lehman Brothers GNMA Index (the "Index") on that date. All dividends and capital gain distributions are reinvested. Performance for Class C shares will vary from the performance of both Class A and Class B shares shown above due to differences in charges and expenses. The fund's performance shown in the line graph takes into account the maximum initial sales charge on Class A shares and all other applicable fees and expenses for Class A shares and Class B shares. The Index is an unmanaged, unhedged total return performance benchmark for the GNMA market, consisting of 15- and 30-year fixed-rate GNMA securities backed by mortgage pools of the Government National Mortgage Association. All issues have at least one year to maturity and an outstanding par value of at least \$100 million. The Index does not take into account charges, fees and other expenses. These factors can contribute to the Index potentially outperforming the fund. Further information relating to fund performance, including expense reimbursements, if applicable, is contained in the Financial Highlights section of the prospectus and elsewhere in this report.

Average Annual Total Returns *as of 12/31/04*

	Inception Date	1 Year	5 Years	10 Years	From Inception
Class A shares					
<i>with maximum sales charge (4.5%)</i>		(1.94)%	4.93%	5.99%	
<i>without sales charge</i>		2.71%	5.90%	6.48%	
Class B shares					
<i>with applicable redemption charge [†]</i>		(1.83)%	5.02%	6.15%	
<i>without redemption</i>		2.10%	5.35%	6.15%	
Class C shares					
<i>with applicable redemption charge ^{††}</i>	10/16/95	0.99%	5.11%	–	4.89%
<i>without redemption</i>	10/16/95	1.97%	5.11%	–	4.89%

Past performance is not predictive of future performance. The fund's performance shown in the graph and table does not reflect the deduction of taxes that a shareholder would pay on fund distributions or the redemption of fund shares. Performance for Class B shares assumes the conversion of Class B shares to Class A shares at the end of the sixth year following the date of purchase.

[†] The maximum contingent deferred sales charge for Class B shares is 4%. After six years Class B shares convert to Class A shares.

^{††} The maximum contingent deferred sales charge for Class C shares is 1% for shares redeemed within one year of the date of purchase.

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 Premier GNMA Fund from July 1, 2004 to December 31, 2004. 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 December 31, 2004			
	Class A	Class B	Class C
Expenses paid per \$1,000†	\$ 5.66	\$ 8.40	\$ 9.37
Ending value (after expenses)	\$1,028.90	\$1,026.10	\$1,025.20

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 December 31, 2004			
	Class A	Class B	Class C
Expenses paid per \$1,000†	\$ 5.63	\$ 8.36	\$ 9.32
Ending value (after expenses)	\$1,019.56	\$1,016.84	\$1,015.89

† Expenses are equal to the fund's annualized expense ratio of 1.11% for Class A, 1.65% for Class B and 1.84% for Class C; multiplied by the average account value over the period, multiplied by 184/366 (to reflect the one-half year period).

STATEMENT OF INVESTMENTS

December 31, 2004

Bonds and Notes—88.9%	Principal Amount (\$)	Value (\$)
U.S. Government Agencies/Mortgage-Backed—88.9%		
Government National Mortgage Association I:		
5%	23,410,000 ^a	23,410,000
5.5%, 3/15/2033-1/15/2034	26,922,111	27,550,861
6%, 2/15/2029-9/15/2034	25,820,675	26,816,085
6.5%, 11/15/2007-10/15/2033	11,822,609	12,477,320
7.5%, 2/15/2022-12/15/2023	811,942	878,274
8%, 4/15/2008-12/15/2022	1,306,127	1,402,338
8.5%, 10/15/2016-11/15/2022	532,757	586,943
9%, 11/15/2019-12/15/2022	422,099	474,801
9.5%, 5/15/2018-1/15/2025	316,774	357,832
Project Loans:		
6.32%, 10/15/2033	1,446,621	1,515,005
6.625%, 11/15/2033	1,639,678	1,692,961
Government National Mortgage Association II:		
3.375%, 4/20/2030-6/20/2032	2,932,486 ^b	2,984,072
3.5%, 7/20/2030-7/20/2032	1,210,814 ^b	1,235,591
5.5%	16,636,000 ^a	16,953,124
6.5%, 5/20/2031	3,201,237	3,366,292
7%, 1/20/2028-4/20/2032	3,888,310	4,120,651
7.5%, 9/20/2030	30,444	32,575
9%, 7/20/2025	238,357	266,512
Total Bonds and Notes		
(cost \$ 125,559,850)		126,121,237

STATEMENT OF INVESTMENTS (continued)

Short-Term Investments–16.5%	Principal Amount (\$)	Value (\$)
U.S. Treasury Bills:		
1.65%, 1/27/2005	5,075,000	5,068,859
2.10%, 2/17/2005	18,350,000 ^c	18,305,226
Total Short-Term Investments (cost \$ 23,368,735)		23,374,085
Total Investments (cost \$ 148,928,585)	105.4%	149,495,322
Liabilities, Less Cash and Receivables	(5.4%)	(7,721,482)
Net Assets	100.0%	141,773,840

- ^a Purchased on a forward commitment basis.
- ^b Variable rate security-interest rate subject to periodic change.
- ^c Partially held by a broker as collateral for open financial futures positions.

Portfolio Summary [†]		
	Value (%)	Value (%)
U.S. Government Agencies/ Mortgage-Backed	88.9	Futures Contracts .1
U.S. Treasury Bills	16.5	105.5

[†] Based on net assets.
See notes to financial statements.

STATEMENT OF FINANCIAL FUTURES

December 31, 2004

	Contracts	Market Value Covered by Contracts (\$)	Expiration	Unrealized Appreciation at 12/31/2004 (\$)
Financial Futures Long				
U.S. Treasury 10 Year Notes	3	335,813	March 2005	2,789
U.S. Treasury 30 Year Bonds	63	7,087,500	March 2005	140,766
Financial Futures Short				
U.S. Treasury 5 Year Notes	28	3,066,875	March 2005	6,562
				150,117

See notes to financial statements.

STATEMENT OF ASSETS AND LIABILITIES

December 31, 2004

	Cost	Value
Assets (\$):		
Investments in securities—See Statement of Investments	148,928,585	149,495,322
Receivable for investment securities sold		33,304,154
Interest receivable		577,219
Receivable for shares of Beneficial Interest subscribed		31,272
Receivable for futures variation margin—Note 4		44,109
Prepaid expenses		32,570
		183,484,646
Liabilities (\$):		
Due to The Dreyfus Corporation and affiliates—Note 3(c)		164,547
Cash overdraft due to Custodian		688,338
Payable for investment securities purchased		40,559,826
Payable for shares of Beneficial Interest redeemed		200,939
Accrued expenses		97,156
		41,710,806
Net Assets (\$)		141,773,840
Composition of Net Assets (\$):		
Paid-in capital		143,268,955
Accumulated undistributed investment income—net		23,872
Accumulated net realized gain (loss) on investments		(2,235,841)
Accumulated net unrealized appreciation (depreciation) on investments (including \$150,117 net unrealized appreciation on financial futures)		716,854
Net Assets (\$)		141,773,840

Net Asset Value Per Share			
	Class A	Class B	Class C
Net Assets (\$)	75,295,201	46,198,739	20,279,900
Shares Outstanding	4,977,257	3,052,746	1,340,761
Net Asset Value Per Share (\$)	15.13	15.13	15.13

See notes to financial statements.

STATEMENT OF OPERATIONS

Year Ended December 31, 2004

Investment Income (\$):

Income:

Interest	6,903,923
Income from securities lending	1,889

Total Income	6,905,812
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Expenses:

Management fee—Note 3(a)	892,444
Shareholder servicing costs—Note 3(c)	673,772
Distribution fees—Note 3(b)	472,306
Professional fees	69,557
Custodian fees—Note 3(c)	50,027
Registration fees	44,140
Prospectus and shareholders' reports	27,381
Trustees' fees and expenses—Note 3(d)	8,678
Loan commitment fees—Note 2	1,311
Miscellaneous	28,769

Total Expenses	2,268,385
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Investment Income—Net	4,637,427
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Realized and Unrealized Gain (Loss) on Investments—Note 4 (\$):

Net realized gain (loss) on investments	2,619,151
Net realized gain (loss) on financial futures	(1,294,433)

Net Realized Gain (Loss)	1,324,718
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Net unrealized appreciation (depreciation) on investments (including \$228,078 net unrealized appreciation on financial futures)	(2,461,371)
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Net Realized and Unrealized Gain (Loss) on Investments	(1,136,653)
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Net Increase in Net Assets Resulting from Operations	3,500,774
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See notes to financial statements.

STATEMENT OF CHANGES IN NET ASSETS

	Year Ended December 31,	
	2004	2003
Operations (\$):		
Investment income—net	4,637,427	4,255,305
Net realized gain (loss) on investments	1,324,718	2,357,881
Net unrealized appreciation (depreciation) on investments	(2,461,371)	(2,408,411)
Net Increase (Decrease) in Net Assets Resulting from Operations	3,500,774	4,204,775
Dividends to Shareholders from (\$):		
Investment income—net:		
Class A shares	(3,532,678)	(3,918,719)
Class B shares	(2,092,881)	(2,733,480)
Class C shares	(970,363)	(1,152,572)
Net realized gain on investments:		
Class A shares	(77,035)	—
Class B shares	(55,935)	—
Class C shares	(29,259)	—
Total Dividends	(6,758,151)	(7,804,771)
Beneficial Interest Transactions (\$):		
Net proceeds from shares sold:		
Class A shares	12,420,482	43,713,827
Class B shares	3,525,992	17,267,638
Class C shares	4,468,862	23,789,253
Dividends reinvested:		
Class A shares	2,533,055	2,651,969
Class B shares	1,389,035	1,751,700
Class C shares	665,631	730,718
Cost of shares redeemed:		
Class A shares	(26,606,246)	(56,548,021)
Class B shares	(23,114,364)	(30,295,567)
Class C shares	(18,072,257)	(19,135,769)
Increase (Decrease) in Net Assets from Beneficial Interest Transactions	(42,789,810)	(16,074,252)
Total Increase (Decrease) in Net Assets	(46,047,187)	(19,674,248)
Net Assets (\$):		
Beginning of Period	187,821,027	207,495,275
End of Period	141,773,840	187,821,027
Undistributed investment income—net	23,872	23,236

	Year Ended December 31,	
	2004	2003
Capital Share Transactions:		
Class A^a		
Shares sold	817,133	2,813,029
Shares issued for dividends reinvested	166,689	171,465
Shares redeemed	(1,750,274)	(3,647,431)
Net Increase (Decrease) in Shares Outstanding	(766,452)	(662,937)
Class B^a		
Shares sold	230,615	1,109,812
Shares issued for dividends reinvested	91,348	113,146
Shares redeemed	(1,520,202)	(1,960,555)
Net Increase (Decrease) in Shares Outstanding	(1,198,239)	(737,597)
Class C		
Shares sold	291,946	1,532,160
Shares issued for dividends reinvested	43,771	47,280
Shares redeemed	(1,190,836)	(1,238,329)
Net Increase (Decrease) in Shares Outstanding	(855,119)	341,111

^a During the period ended December 31, 2004, 222,779 Class B shares representing \$3,384,987 were automatically converted to 222,914 Class A shares and during the period ended December 31, 2003, 155,874 Class B shares representing \$2,409,479 were automatically converted to 155,950 Class A shares. See notes to financial statements.

FINANCIAL HIGHLIGHTS

The following tables describe the performance for each share class for the fiscal periods indicated. All information (except portfolio turnover rate) 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.

Class A Shares	Year Ended December 31,				
	2004	2003	2002	2001 ^a	2000
Per Share Data (\$):					
Net asset value, beginning of period	15.40	15.66	15.10	14.76	14.23
Investment Operations:					
Investment income—net	.47 ^b	.37 ^b	.53 ^b	.68 ^b	.81
Net realized and unrealized gain (loss) on investments	(.07)	.01	.60	.35	.54
Total from Investment Operations	.40	.38	1.13	1.03	1.35
Distributions:					
Dividends from investment income—net	(.66)	(.64)	(.57)	(.69)	(.82)
Dividends from net realized gain on investments	(.01)	—	—	—	—
Total Distributions	(.67)	(.64)	(.57)	(.69)	(.82)
Net asset value, end of period	15.13	15.40	15.66	15.10	14.76
Total Return (%)^c	2.71	2.46	7.60	7.12	9.82
Ratios/Supplemental Data (%):					
Ratio of total expenses to average net assets	1.10	1.09	1.06	1.04	1.08
Ratio of net investment income to average net assets	3.12	2.37	3.41	4.57	5.67
Portfolio Turnover Rate	444.53 ^d	442.18 ^d	366.50	507.76	693.19
Net Assets, end of period (\$ X 1,000)	75,295	88,481	100,311	93,701	87,494

^a As required, effective January 1, 2001, the fund has adopted the provisions of the AICPA Audit and Accounting Guide for Investment Companies and began accreting discount or amortizing premium on fixed income securities on a scientific basis and including paydown gains and losses in interest income. The effect of these changes for the period ended December 31, 2001 was to decrease net investment income per share by \$.01, increase net realized and unrealized gain (loss) on investments per share by \$.01, and decrease the ratio of net investment income to average net assets from 4.61% to 4.57%. Per share data and ratios/supplemental data for periods prior to January 1, 2001 have not been restated to reflect these changes in presentation.

^b Based on average shares outstanding at each month end.

^c Exclusive of sales charge.

^d The portfolio turnover rates excluding mortgage dollar roll transactions for the years ended December 31, 2004 and December 31, 2003, were 233.47% and 193.58%, respectively.

See notes to financial statements.

Class B Shares	Year Ended December 31,				
	2004	2003	2002	2001 ^a	2000
Per Share Data (\$):					
Net asset value, beginning of period	15.41	15.67	15.11	14.77	14.24
Investment Operations:					
Investment income—net	.40 ^b	.29 ^b	.44 ^b	.60 ^b	.74
Net realized and unrealized gain (loss) on investments	(.09)	.01	.61	.36	.54
Total from Investment Operations	.31	.30	1.05	.96	1.28
Distributions:					
Dividends from investment income—net	(.58)	(.56)	(.49)	(.62)	(.75)
Dividends from net realized gain on investments	(.01)	—	—	—	—
Total Distributions	(.59)	(.56)	(.49)	(.62)	(.75)
Net asset value, end of period	15.13	15.41	15.67	15.11	14.77
Total Return (%)^c	2.10	1.96	7.05	6.58	9.27
Ratios/Supplemental Data (%):					
Ratio of total expenses to average net assets	1.63	1.58	1.57	1.55	1.59
Ratio of net investment income to average net assets	2.64	1.88	2.88	3.99	5.17
Portfolio Turnover Rate	444.53 ^d	442.18 ^d	366.50	507.76	693.19
Net Assets, end of period (\$ X 1,000)	46,199	65,520	78,150	42,121	27,080

^a As required, effective January 1, 2001, the fund has adopted the provisions of the AICPA Audit and Accounting Guide for Investment Companies and began accreting discount or amortizing premium on fixed income securities on a scientific basis and including paydown gains and losses in interest income. The effect of these changes for the period ended December 31, 2001 was to decrease net investment income per share and increase net realized and unrealized gain (loss) on investments per share by less than \$.01, and decrease the ratio of net investment income to average net assets from 4.03% to 3.99%. Per share data and ratios/supplemental data for periods prior to January 1, 2001 have not been restated to reflect these changes in presentation.

^b Based on average shares outstanding at each month end.

^c Exclusive of sales charge.

^d The portfolio turnover rates excluding mortgage dollar roll transactions for the years ended December 31, 2004 and December 31, 2003, were 233.47% and 193.58%, respectively.

See notes to financial statements.

Class C Shares	Year Ended December 31,				
	2004	2003	2002	2001 ^a	2000
Per Share Data (\$):					
Net asset value, beginning of period	15.40	15.65	15.10	14.76	14.24
Investment Operations:					
Investment income—net	.38 ^b	.26 ^b	.40 ^b	.56 ^b	.70
Net realized and unrealized gain (loss) on investments	(.09)	.02	.60	.36	.53
Total from Investment Operations	.29	.28	1.00	.92	1.23
Distributions:					
Dividends from investment income—net	(.55)	(.53)	(.45)	(.58)	(.71)
Dividends from net realized gain on investments	(.01)	—	—	—	—
Total Distributions	(.56)	(.53)	(.45)	(.58)	(.71)
Net asset value, end of period	15.13	15.40	15.65	15.10	14.76
Total Return (%)^c	1.97	1.81	6.73	6.32	8.90
Ratios/Supplemental Data (%):					
Ratio of total expenses to average net assets	1.83	1.78	1.80	1.79	1.85
Ratio of net investment income to average net assets	2.50	1.66	2.63	3.68	4.90
Portfolio Turnover Rate	444.53 ^d	442.18 ^d	366.50	507.76	693.19
Net Assets, end of period (\$ X 1,000)	20,280	33,820	29,035	10,874	4,644

^a As required, effective January 1, 2001, the fund has adopted the provisions of the AICPA Audit and Accounting Guide for Investment Companies and began accreting discount or amortizing premium on fixed income securities on a scientific basis and including paydown gains and losses in interest income. The effect of these changes for the period ended December 31, 2001 was to decrease net investment income per share and increase net realized and unrealized gain (loss) on investments per share by less than \$.01 and decrease the ratio of net investment income to average net assets from 3.72% to 3.68%. Per share data and ratios/supplemental data for periods prior to January 1, 2001 have not been restated to reflect these changes in presentation.

^b Based on average shares outstanding at each month end.

^c Exclusive of sales charge.

^d The portfolio turnover rates excluding mortgage dollar roll transactions for the years ended December 31, 2004 and December 31, 2003, were 233.47% and 193.58%, respectively.

See notes to financial statements.

NOTE 1—Significant Accounting Policies:

Dreyfus Premier GNMA Fund (the “fund”) is registered under the Investment Company Act of 1940, as amended (the “Act”), as a diversified open-end management investment company. The fund’s investment objective is to seek to maximize total return, consisting of capital appreciation and current income. To pursue this goal, the fund normally invests at least 80% of its assets in GNMA certificates, which are guaranteed as to timely payment of principal and interest by the Government National Mortgage Association. The fund has adopted a policy to provide its shareholders with at least 60 days prior written notice of any change in its policy to so invest its assets. The Dreyfus Corporation (the “Manager” or “Dreyfus”) serves as the fund’s investment adviser. The Manager is a wholly-owned subsidiary of Mellon Financial Corporation (“Mellon Financial”).

Dreyfus Service Corporation (the “Distributor”), a wholly-owned subsidiary of the Manager, is the distributor of the fund’s shares. The fund is authorized to issue an unlimited number of \$.001 par value shares in each of the following classes of shares: Class A, Class B and Class C. Class A shares are subject to a sales charge imposed at the time of purchase, Class B shares are subject to a contingent deferred sales charge (“CDSC”) imposed on Class B share redemptions made within six years of purchase and Class C shares are subject to a CDSC imposed on Class C shares redeemed within one year of purchase. Class B shares automatically convert to Class A shares after six years. 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’s financial statements are prepared in accordance with U.S. generally accepted accounting principles, which may require the use of management estimates and assumptions. Actual results could differ from those estimates.

The fund 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 (excluding short-term investments other than U.S. Treasury Bills, options and financial futures) are valued each business day by an independent pricing service (the "Service") approved by the Board of Trustees. Investments for which quoted bid prices are readily available and are representative of the bid side of the market in the judgment of the Service are valued at the mean between the quoted bid prices (as obtained by the Service from dealers in such securities) and asked prices (as calculated by the Service based upon its evaluation of the market for such securities). Other investments (which constitute a majority of the portfolio securities) are valued as determined by the Service, based on methods which include consideration of: yields or prices of securities of comparable quality, coupon, maturity and type; indications as to values from dealers; and general market conditions. Securities for which there are no such valuations are valued at fair value as determined in good faith under the direction of the Board of Trustees. Restricted securities, as well as securities or other assets for which recent market quotations are not readily available, are not valued by a pricing service approved by the Board of Trustees, or are determined by the fund not to reflect accurately fair value (such as when an event occurs after the close of the exchange on which the security is principally traded and that is determined by the fund to have changed the value of the security), are valued at fair value as determined in good faith under the direction of the Board of Trustees. The factors that may be considered when fair valuing a security include fundamental analytical data, the nature and duration of restrictions on dispositions, an evaluation of the forces that influence the market in which the securities are purchased and sold, and public trading in similar securities of the issuer or comparable issuers. Short-term investments, excluding U.S. Treasury Bills, are carried at amortized cost, which approximates value. Investments in registered investment companies are valued at their net asset value.

Financial futures and options, which are traded on an exchange are valued at the last sales price on the securities exchange on which such securities are primarily traded or at the last sales price on the national securities market on each business day.

(b) Securities transactions and investment income: Securities transactions are recorded on a trade date basis. Realized gain and loss from securities transactions are recorded on the identified cost basis. Interest income including, where applicable, accretion of discount and amortization of premium on investments, is recognized on the accrual basis.

The fund has an arrangement with the custodian bank whereby the fund receives earnings credits from the custodian when positive cash balances are maintained, which are used to offset custody fees. For financial reporting purposes, the fund includes net earnings credits, if any, as an expense offset in the Statement of Operations.

Pursuant to a securities lending agreement with Mellon Bank, N.A., an affiliate of the Manager, the fund may lend securities to qualified institutions. At origination, all loans are secured by collateral of at least 102% of the value of U.S. securities loaned and 105% of the value of foreign securities loaned. Collateral equivalent to at least 100% of the market value of securities on loan will be maintained at all times. Cash collateral is invested in certain money market mutual funds managed by the Manager. The fund will be entitled to receive all income on securities loaned, in addition to income earned as a result of the lending transaction. Although each security loaned is fully collateralized, the fund would bear the risk of delay in recovery of, or loss of rights in, the securities loaned should a borrower fail to return the securities in a timely manner.

(c) Affiliated issuers: Investments in other investment companies advised by the Manager are defined as “affiliated” in the Act.

(d) Dividends 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 gain, 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 gain can be offset by capital loss carryovers, it is the policy of the fund not to distribute such gain. Income and capital gain distributions are determined in accordance with income tax regulations, which may differ from U.S. generally accepted accounting principles.

(e) 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.

At December 31, 2004, the components of accumulated earnings on a tax basis were as follows: undistributed ordinary income \$23,872, accumulated capital losses \$1,244,345 and unrealized appreciation \$566,296. In addition, the fund had \$840,938 of capital losses realized after October 31, 2004, which were deferred for tax purposes to the first day of the following fiscal year.

The accumulated capital loss carryover is available to be applied against future net securities profits, if any, realized subsequent to December 31, 2004. If not applied, the carryover expires in fiscal 2012.

The tax character of distributions paid to shareholders during the fiscal periods ended December 31, 2004 and December 31, 2003, were as follows: ordinary income \$6,758,151 and \$7,804,771, respectively.

During the period ended December 31, 2004, as a result of permanent book to tax differences primarily due to the tax treatment for amortization of premiums and paydown gains and losses, the fund increased accumulated undistributed investment income-net by \$1,959,131, decreased accumulated net realized gain (loss) on investments by \$3,547,205 and increased paid-in capital by \$1,588,074. Net assets were not affected by this reclassification.

NOTE 2—Bank Line of Credit:

The fund participates with other Dreyfus-managed funds in a \$350 million redemption credit facility (the “Facility”) to be utilized for tem-

porary or emergency purposes, including the financing of redemptions. In connection therewith, the fund has agreed to pay commitment fees on its pro rata portion of the Facility. Interest is charged to the fund based on prevailing market rates in effect at the time of borrowings. During the period ended December 31, 2004, the fund did not borrow under the Facility.

NOTE 3—Management Fee and Other Transactions With Affiliates:

(a) Pursuant to a management agreement with the Manager, the management fee is computed at the annual rate of .55 of 1% of the value of the fund's average daily net assets and is payable monthly.

During the period ended December 31, 2004, the Distributor retained \$4,859 from commissions earned on sales of the fund's Class A shares and \$231,038 and \$9,251 from contingent deferred sales charges on redemptions of the fund's Class B and Class C shares, respectively.

(b) Under the Distribution Plan (the "Plan") adopted pursuant to Rule 12b-1 under the Act, Class B and Class C shares pay the Distributor for distributing their shares at an annual rate of .50 of 1% of the value of the average daily net assets of Class B shares and .75 of 1% of the value of the average daily net assets of Class C shares. During the period ended December 31, 2004, Class B and Class C shares were charged \$272,987 and \$199,319, respectively, pursuant to the Plan.

(c) Under the Shareholder Services Plan, Class A, Class B and Class C shares pay the Distributor at an annual rate of .25 of 1% of the value of their average daily net assets for the provision of certain services. The services provided may include personal services relating to shareholder accounts, such as answering shareholder inquiries regarding the fund and providing reports and other information, and services related to the maintenance of shareholder accounts. The Distributor may make payments to Service Agents (a securities dealer, financial institution or other industry professional) in respect of these services. The Distributor determines the amounts to be paid to Service Agents. During the

period ended December 31, 2004, Class A, Class B and Class C shares were charged \$202,724, \$136,493 and \$66,440, respectively, pursuant to the Shareholder Services Plan.

The fund compensates Dreyfus Transfer, Inc., a wholly-owned subsidiary of the Manager, under a transfer agency agreement for providing personnel and facilities to perform transfer agency services for the fund. During the period ended December 31, 2004, the fund was charged \$150,972 pursuant to the transfer agency agreement.

The fund compensates Mellon Bank, N.A., an affiliate of the Manager, under a custody agreement for providing custodial services for the fund. During the period ended December 31, 2004, the fund was charged \$50,027 pursuant to the custody agreement.

The components of Due to The Dreyfus Corporation and affiliates in the Statement of Assets and Liabilities consist of: management fees \$67,011, Rule 12b-1 distribution plan fees \$33,070, shareholder services plan fees \$30,460, custodian fees \$9,806 and transfer agency per account fees \$24,200.

(d) 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.

NOTE 4—Securities Transactions:

The aggregate amount of purchases and sales (including paydowns) of investment securities, excluding short-term securities and financial futures, during the period ended December 31, 2004, amounted to \$782,905,826 and \$876,078,494, respectively, of which \$371,712,115 in purchases and \$372,963,440 in sales were from dollar roll transactions.

A mortgage dollar roll transaction involves a sale by the fund of mortgage related securities that it holds with an agreement by the fund to repurchase similar securities at an agreed upon price and date. The securities purchased will bear the same interest rate as those sold, but generally will be collateralized by pools of mortgages with different prepayment histories than those securities sold.

The fund may invest in financial futures contracts in order to gain exposure to or protect against changes in the market. The fund is exposed to market risk as a result of changes in the value of the underlying financial instruments. Investments in financial futures require the fund to “mark to market” on a daily basis, which reflects the change in market value of the contracts at the close of each day’s trading. Accordingly, variation margin payments are received or made to reflect daily unrealized gains or losses. When the contracts are closed, the fund recognizes a realized gain or loss. These investments require initial margin deposits with a broker, which consist of cash or cash equivalents. The amount of these deposits is determined by the exchange or Board of Trade on which the contract is traded and is subject to change. Contracts open at December 31, 2004, are set forth in the Statement of Financial Futures.

At December 31, 2004, the cost of investments for federal income tax purposes was \$148,929,026; accordingly, accumulated net unrealized appreciation on investments was \$566,296, consisting of \$1,196,315 gross unrealized appreciation and \$630,019 gross unrealized depreciation.

NOTE 5—Legal Matters:

In early 2004, two purported class and derivative actions were filed against Mellon Financial, Mellon Bank, N.A., Dreyfus, Founders Asset Management LLC, and certain directors of the Dreyfus Funds and the Dreyfus Founders Funds (together, the “Funds”). In September 2004, plaintiffs served a Consolidated Amended Complaint (the “Amended Complaint”) on behalf of a purported class of all persons who acquired interests in any of the Funds between January 30, 1999 and November 17, 2003, and derivatively on behalf of the Funds. The Amended Complaint in the newly styled In re Dreyfus Mutual Funds Fee Litigation also named the Distributor, Premier Mutual Fund Services, Inc. and two additional Fund directors as defendants and alleges violations of the Investment Company Act of 1940, the Investment Advisers Act of 1940, the Pennsylvania Unfair Trade Practices and Consumer Protection Law and common-law claims.

Plaintiffs seek to recover allegedly improper and excessive Rule 12b-1 and advisory fees allegedly charged to the Funds for marketing and distribution services. More specifically, plaintiffs claim, among other things, that 12b-1 fees and directed brokerage were improperly used to pay brokers to recommend the Funds over other funds, and that such payments were not disclosed to investors. In addition, plaintiffs assert that economies of scale and soft-dollar benefits were not passed on to the Funds. Plaintiffs further allege that 12b-1 fees were improperly charged to certain of the Funds that were closed to new investors. The Amended Complaint seeks compensatory and punitive damages, rescission of the advisory contracts, and an accounting and restitution of any unlawful fees, as well as an award of attorneys' fees and litigation expenses. As noted, some of the claims in this litigation are asserted derivatively on behalf of the Funds that have been named as nominal defendants. With respect to such derivative claims, no relief is sought against the Funds. Dreyfus believes the allegations to be totally without merit and intends to defend the action vigorously. Defendants filed motions to dismiss the Amended Complaint on November 12, 2004, and those motions are pending.

Additional lawsuits arising out of these circumstances and presenting similar allegations and requests for relief may be filed against the defendants in the future. Neither Dreyfus nor the Funds believe that any of the pending actions will have a material adverse effect on the Funds or Dreyfus' ability to perform its contract with the Funds.

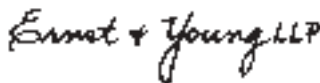
REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Shareholders and Board of Trustees Dreyfus Premier GNMA Fund

We have audited the accompanying statement of assets and liabilities of Dreyfus Premier GNMA Fund, including the statements of investments and financial futures, as of December 31, 2004, and the related statement of operations for the year then ended, the statement of changes in net assets for each of the two years in the period then ended, and financial highlights for each of the years indicated therein. These financial statements and financial highlights are the responsibility of the Fund's management. Our responsibility is to express an opinion on these financial statements and financial highlights based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and financial highlights are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements and financial highlights. Our procedures included verification by examination of securities held by the custodian as of December 31, 2004 and confirmation of securities not held by the custodian by correspondence with others. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements and financial highlights referred to above present fairly, in all material respects, the financial position of Dreyfus Premier GNMA Fund at December 31, 2004, 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 the financial highlights for each of the indicated years, in conformity with U.S. generally accepted accounting principles.

The signature of Ernst & Young LLP is written in a cursive, handwritten style in black ink.

New York, New York
February 11, 2005

BOARD MEMBERS INFORMATION (Unaudited)

Joseph S. DiMartino (61)
Chairman of the Board (1995)

Principal Occupation During Past 5 Years:

- Corporate Director and Trustee

Other Board Memberships and Affiliations:

- The Muscular Dystrophy Association, Director
- Levcor International, Inc., an apparel fabric processor, Director
- Century Business Services, Inc., a provider of outsourcing functions for small and medium size companies, Director
- The Newark Group, a provider of a national market of paper recovery facilities, paperboard mills and paperboard converting plants, Director
- Azimuth Trust, an institutional asset management firm, Member of Board of Managers and Advisory Board

No. of Portfolios for which Board Member Serves: 186

Clifford L. Alexander, Jr. (71)
Board Member (1986)

Principal Occupation During Past 5 Years:

- President of Alexander & Associates, Inc., a management consulting firm (January 1981-present)
- Chairman of the Board of Moody's Corporation (October 2000-October 2003)
- Chairman of the Board and Chief Executive Officer of The Dun and Bradstreet Corporation (October 1999-September 2000)

Other Board Memberships and Affiliations:

- Wyeth (formerly, American Home Products Corporation), a global leader in pharmaceuticals, consumer healthcare products and animal health products, Director
- Mutual of America Life Insurance Company, Director

No. of Portfolios for which Board Member Serves: 65

Peggy C. Davis (61)
Board Member (1990)

Principal Occupation During Past 5 Years:

- Shad Professor of Law, New York University School of Law (1983-present)
- Writer and teacher in the fields of evidence, constitutional theory, family law, social sciences and the law, legal process and professional methodology and training

No. of Portfolios for which Board Member Serves: 26

Ernest Kafka (72)
Board Member (1986)

Principal Occupation During Past 5 Years:

- Physician engaged in private practice specializing in the psychoanalysis of adults and adolescents (1962-present)
- Instructor, The New York Psychoanalytic Institute (1981-present)
- Associate Clinical Professor of Psychiatry at Cornell Medical School (1987-2002)

No. of Portfolios for which Board Member Serves: 26

Nathan Leventhal (61)
Board Member (1989)

Principal Occupation During Past 5 Years:

- A management consultant for various non-profit organizations (May 2004-present)
- Chairman of the Avery-Fischer Artist Program (November 1997-present)
- President of Lincoln Center for the Performing Arts, Inc. (March 1984-December 2000)

Other Board Memberships and Affiliations:

- Movado Group, Inc., Director

No. of Portfolios for which Board Member Serves: 26

Once elected all Board Members serve for an indefinite term. The address of the Board Members and Officers is in 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: 1-800-554-4611.

Saul B. Klamane, Emeritus Board Member

OFFICERS OF THE FUND (Unaudited)

STEPHEN E. CANTER, President since March 2000.

Chairman of the Board, Chief Executive Officer and Chief Operating Officer of the Manager, and an officer of 92 investment companies (comprised of 185 portfolios) managed by the Manager. Mr. Canter also is a Board member and, where applicable, an Executive Committee Member of the other investment management subsidiaries of Mellon Financial Corporation, each of which is an affiliate of the Manager. He is 59 years old and has been an employee of the Manager since May 1995.

STEPHEN R. BYERS, Executive Vice President since November 2002.

Chief Investment Officer, Vice Chairman and a director of the Manager, and an officer of 92 investment companies (comprised of 185 portfolios) managed by the Manager. Mr. Byers also is an officer, director or an Executive Committee Member of certain other investment management subsidiaries of Mellon Financial Corporation, each of which is an affiliate of the Manager. He is 51 years old and has been an employee of the Manager since January 2000. Prior to joining the Manager, he served as an Executive Vice President-Capital Markets, Chief Financial Officer and Treasurer at Gruntal & Co., L.L.C.

MARK N. JACOBS, Vice President since March 2000.

Executive Vice President, Secretary and General Counsel of the Manager, and an officer of 93 investment companies (comprised of 201 portfolios) managed by the Manager. He is 58 years old and has been an employee of the Manager since June 1977.

JANETTE E. FARRAGHER, Assistant Secretary since March 2000.

Associate General Counsel of the Manager, and an officer of 12 investment companies (comprised of 23 portfolios) managed by the Manager. She is 42 years old and has been an employee of the Manager since February 1984.

STEVEN F. NEWMAN, Assistant Secretary since March 2000.

Associate General Counsel and Assistant Secretary of the Manager, and an officer of 93 investment companies (comprised of 201 portfolios) managed by the Manager. He is 55 years old and has been an employee of the Manager since July 1980.

MICHAEL A. ROSENBERG, Assistant Secretary since March 2000.

Associate General Counsel of the Manager, and an officer of 90 investment companies (comprised of 194 portfolios) managed by the Manager. He is 44 years old and has been an employee of the Manager since October 1991.

JAMES WINDELS, Treasurer since November 2001.

Director – Mutual Fund Accounting of the Manager, and an officer of 93 investment companies (comprised of 201 portfolios) managed by the Manager. He is 46 years old and has been an employee of the Manager since April 1985.

**ERIK D. NAVILOFF, Assistant Treasurer
since December 2002.**

Senior Accounting Manager – Taxable Fixed Income Funds of the Manager, and an officer of 19 investment companies (comprised of 75 portfolios) managed by the Manager. He is 36 years old and has been an employee of the Manager since November 1992.

**KENNETH J. SANDGREN, Assistant
Treasurer since November 2001.**

Mutual Funds Tax Director of the Manager, and an officer of 93 investment companies (comprised of 201 portfolios) managed by the Manager. He is 50 years old and has been an employee of the Manager since June 1993.

**WILLIAM GERMENIS, Anti-Money
Laundering Compliance Officer since
October 2002.**

Vice President and Anti-Money Laundering Compliance Officer of the Distributor, and the Anti-Money Laundering Compliance Officer of 88 investment companies (comprised of 196 portfolios) managed by the Manager. He is 34 years old and has been an employee of the Distributor since October 1998.

For More Information

Dreyfus Premier**GNMA Fund**

200 Park Avenue
New York, NY 10166

Manager

The Dreyfus Corporation

200 Park Avenue
New York, NY 10166

Custodian

Mellon Bank, N.A.
One Mellon Bank Center
Pittsburgh, PA 15258

Transfer Agent &**Dividend Disbursing Agent**

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

Distributor

Dreyfus Service Corporation
200 Park Avenue
New York, NY 10166

Telephone Call your financial representative or 1-800-554-4611

Mail The Dreyfus Premier Family of Funds

144 Glenn Curtiss Boulevard, Uniondale, NY 11556-0144

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 <http://www.sec.gov> and may be reviewed and copied at the SEC's Public Reference Room in Washington, DC. Information on the operation of the Public Reference Room may be obtained by calling 1-800-SEC-0330.

A description of the policies and procedures that the fund uses to determine how to vote proxies relating to portfolio securities, and information regarding how the fund voted these proxies for the 12-month period ended June 30, 2004, is available through the fund's website at <http://www.dreyfus.com> and on the SEC's website at <http://www.sec.gov>. The description of the policies and procedures is also available without charge, upon request, by calling 1-800-645-6561.

