

# City of New York

January 15, 2023

Hon. Helene Weinstein Chair, Assembly Ways and Means Committee Room 711-A, Legislative Office Building Albany, NY 12248

Comptroller Thomas P. DiNapoli Gov. A.E. Smith Office Building Albany, NY 12236

Hon. Liz Krueger Chair, Senate Finance Committee 172 State Street, Capitol Building Room 416 Cap Albany, NY 12247

Sandra Beattie, Acting Director New York State Division of the Budget The Capitol Albany, NY 12224

Re: Quarterly Report on Interest Rate Exchange Agreements pursuant to Section 54.90 of the Local Finance Law as of December 31 2022

#### Dear Sirs and Mesdames:

The City of New York (the "City") is filing this report pursuant to Section 54.90 of the New York State Local Finance Law ("LFL"). Terms used herein that are not defined have the meanings ascribed thereto in Section 54.90 of the LFL. The City Swap Transaction Summary (the "Summary") is attached hereto as Exhibit A. The Summary indicates whether each interest rate exchange agreement described below was entered into pursuant to Section 54.90.c or 54.90.d of the LFL or Section 2926 of the Public Authorities Law of the State of New York. For information on Interest Rate Exchange Agreements ("IREAs") that have terminated, please see Exhibit C hereto.

# Description of the Interest Rate Exchange Agreements

## A. City as Counterparty

The City has entered into a separatee ISDA Master Agreement and Schedule to the Master Agreement (collectively, a "Master Agreement") with the counterparties (individually, a "Counterparty" and collectively, the "Counterparties") listed in the table below. Each Master Agreement, together with the related confirmation or confirmations, is hereinafter referred to as an "Interest Rate Exchange Agreement", "IREA" or "Swap". Details of each IREA are included in the Summary. IREAs numbered 1-4 and 6-14 have terminated and are not described in this Quarterly Report other than in exhibits hereto and certain information concerning IREA number 8 in the body of the Quarterly Report.

Transaction Number and Type	Counterparty	Notional Amount as of 12/31/2022	Initial Trade Date	Termination Date
5: Synthetic Fixed	U.S. Bank, N.A. ("USB")	\$43,450,000	January 9, 2003	August 1, 2026
8: Synthetic Fixed	Wells Fargo Bank, National Association ("WFBNA")	\$0	July 1, 2003	October 6, 2022
	( WIBINI )	Total:		

IREA number 8 was terminated on October 6, 2022. Accordingly, background information on IREA number 8 is provided in this section.

The total notional amount of IREAs outstanding as of December 31, 2022 is \$43,450,000. Exhibit A attached hereto sets forth the terms of the IREAs in greater detail.

The City's IREA number 5 was initially procured through negotiation between the City and UBS AG ("UBS"), the initial Counterparty. IREA number 8 was procured through competitive bidding. The City received an independent finding that the terms and conditions of each of the transactions reflected fair market value as of their respective pricing dates.

On April 1, 2008, the City executed a bond refunding transaction pursuant to which a portion of the bonds associated with IREA number 5 were refunded. IREA number 5 is not integrated for tax purposes and is considered an investment derivative for accounting purposes. Nevertheless, IREA number 5 remains in effect.

On March 20, 2010, the Office of the Comptroller of the Currency certified as effective the merger of Wachovia Bank, NA, the initial Counterparty, with and into WFBNA, with WFBNA becoming the resulting bank. This development relates to IREA number 8.

On March 25, 2014, October 3, 2017, and April 19, 2018, the City executed bond

refunding transactions pursuant to which a portion of the bonds associated with IREA number 8 were refunded. IREA number 8 was not integrated for tax purposes and is considered an investment derivative for accounting purposes. Nevertheless, IREA number 8 remained in effect until its termination on October 6, 2022.

On October 5, 2016, the City novated IREAs number 5 from UBS to USB. The rating of UBS was A1/A+. The rating of USB was A1/AA-.

On April 27, 2020, the City and WFBNA amended IREA number 8 such that the floating rate to be received by the City was changed from 61.85% of one-month LIBOR to SIFMA and the fixed rate to be paid by the City was changed from 2.964% to 3.175%, all effective on May 1, 2020.

On October 6, 2022, the City and WFBNA terminated IREA number 8. In connection with the termination, the City paid \$5,000,000 to WFBNA.

The estimated total mid-marked-to-market value of the remaining transaction, with USB as of December 31, 2022, as set forth in Exhibit A, is approximately (\$1,011,879). (This is the net amount the City would owe to the Counterparty if the transaction were terminated on that date exclusive of unwind costs or benefits in connection with the termination.)

# Payments under the Transactions

As of December 31, 2022, the City has received a total of \$686,063,827 from the Counterparties under the outstanding, matured and terminated IREAs which includes option premiums, upfront payments and termination receipts, including \$21,075,952 from the Counterparty under the outstanding IREA and \$664,987,875 from matured and terminated IREAs. See Exhibit A attached hereto for a full breakdown of the payments the City has received for each transaction.

As of December 31, 2022, the City has made payments of \$839,203,695 to the Counterparties under the outstanding, matured and terminated IREAs, which includes \$72,752,327 under the outstanding IREAs and \$766,451,368 under the matured and terminated IREAs.

#### Credit Enhancement

There have been no liquidity facilities or reserves provided in connection with the IREAs. In the currently outstanding IREA, the City and the Counterparty have agreed to post collateral securing the termination value of the applicable IREA. Under the Master Agreement with USB, the City is required to post collateral if the credit ratings of the City go below Baa3 and BBB-. USB is required to post collateral if one of its credit ratings goes below Aa3/AA-.

# Costs and Expenses

The aggregate costs and expenses incurred in connection with the execution of IREAs numbered 5 and 6 were approximately \$65,000, consisting of approximately \$25,000 in legal fees and \$40,000 in swap advisory fees. The costs and expenses for IREA number 5 were aggregated with costs and expenses associated with IREA number 6, which was subsequently terminated and is not included in this Quarterly Report.

The costs and expenses incurred in connection with the execution of IREA number 8

were approximately \$65,000, consisting of approximately \$25,000 in legal fees and \$40,000 in swap advisory fees.

The costs and expenses incurred in connection with the novation of IREAs numbered 4 and 5 consisted of \$7,500 in swap advisory fees. The costs and expenses in connection with the novation of IREA number 5 were aggregated with costs and expenses associated with the novation of IREA number 4, which was subsequently terminated and is not included in this Quarterly Report.

The costs and expenses in connection with the amendment of IREA number 8 consisted of \$30,000 in legal fees and \$16,240 in swap advisory fees.

The costs and expenses in connection with the termination of IREA number 8 consisted of \$30,000 in legal fees and \$7,521 in swap advisory fees

# **Description of Counterparty**

USB, a national banking association organized under the laws of the United States, is rated A1/AA-. The ratings are as of December 31, 2022.

#### Risk Assessment

Counterparty Risk: The risk is that a counterparty (or its guarantor) will not meet its obligations under the swap. If a counterparty were to default under its agreement when the counterparty would owe a termination payment to the City, the City may have to pay another entity to assume the position of the defaulting counterparty. The City has sought to limit its counterparty risk by contracting only with highly rated entities or requiring guarantees of the counterparty's obligations under the swap documents. The City also manages counterparty risk by exercising its rights under the various Master Agreements to novate IREAs to higher-rated counterparties, or terminate IREAs, as it did in November, 2012 with the Morgan Stanley Capital Services, Inc. IREA.

Termination Risk: The risk is that a counterparty will optionally terminate a swap at a time when the City owes it a termination payment. The City has mitigated this risk by specifying that the counterparty has the right to terminate only as a result of certain events, including: a payment default by the City; other City defaults which remain uncured for 30 days after notice; City bankruptcy; insolvency of the City (or similar events); or a downgrade of the City's credit rating below investment grade (i.e., Baa3/BBB-).

Basis Risk: The risk is that the City's variable rate bond payments will not equal its variable rate swap receipts because they are based on different indices. Under the terms of its LIBOR-based swap transaction (IREA number 5), the City pays a variable rate on its bonds based on the tax-exempt variable rate market but receives a variable rate based on a percentage of one month LIBOR. The City budgets sufficient amounts to cover any basis costs.

Tax Risk: The risk is that a change in Federal tax rates will alter the fundamental relationship between tax-exempt and taxable rates. A reduction in Federal tax rates, for example, could result in increases to tax-exempt variable rates, which would cause an increase in the City's payment on its underlying variable rate bonds in the synthetic fixed rate transaction. The Tax Cuts and Jobs Act ("TCJA") reduced the corporate federal income tax rate from 35% to 21% effective as of January 1, 2018, in addition to reducing certain individual income tax brackets. The outlook for future tax-exempt rates and tax-exempt/taxable ratios remains uncertain.

Discontinuation of LIBOR Risk: On March 5, 2021, ICE Benchmark Administration Limited ("IBA") and Financial Conduct Authority ("FCA") announced that the LIBOR cessation date for most USD LIBOR tenors, including 1 Month LIBOR, will be June 30, 2023 (the "LIBOR Cessation Date"). Under IREA number 5, which is scheduled to still be in effect on the LIBOR Cessation Date, the City receives a percentage of 1 Month LIBOR.

On October 23, 2020, ISDA published Fallback Supplement and Fallback Protocol. The supplement (effective since January 25, 2021) provides fallback language by amending the ISDA interbank offered rate ("IBOR") definitions (including USD LIBOR) to include a fallback rate in case of LIBOR discontinuation. This fallback language can be implemented by adhering to the Fallback Protocol or negotiating bilateral agreements. At this time the City has not yet taken action to adhere to protocol or negotiate bilateral agreements. The March 5, 2021 announcement also triggered the fixing of the USD LIBOR-SOFR fallback spread adjustment. SOFR, the Secured Overnight Financing Rate, is a broad measure of the cost of borrowing cash overnight collateralized by treasury securities. If the City were to adhere to the Protocol, IREA number 5 would convert to 60.8 percent of SOFR plus the predetermined spread of .07% after the LIBOR cessation date.

See Exhibit B for a matrix showing how changes in market conditions would affect the City's exposure (defined as "Value at Risk" in the City's Interest Rate Exchange Agreement Policy) on the outstanding IREA.

## B. Dormitory Authority of the State of New York as Counterparty:

The Dormitory Authority of the State of New York ("DASNY") entered into separate Master Agreements with each of the Counterparties listed in the table below for Transactions numbered D3 and D4. The City is obligated, subject to appropriation, to make lease payments to DASNY reflecting DASNY's obligations. IREAs numbered D1 and D2 have terminated and are not described in this Quarterly Report.

Transaction	Counterparty	Notional Amount as of 12/31 /2022	Trade Date	Termination Date
D3: Synthetic Fixed	Goldman Sachs Matsui Marine Derivative Products LP ("GSMMDP")	\$80,680,000	June 1, 2005	May 15, 2039
D4: Synthetic Fixed	JPM	\$44,820,000	June 1, 2005	May 15, 2039
		Total:		

Each of DASNY's IREAs was procured through negotiation among DASNY, the City and the Counterparties. DASNY received an independent finding that the terms and conditions of each of the transactions reflected fair market value as of their respective pricing dates.

The estimated total mid-marked-to-market value of IREAs D3 and D4, as of December

\$125,500,000

31, 2022, is approximately (\$9,321,812). The estimated mid-marked-to-market value of the IREAs by counterparty is as follows: GSMMDP (\$5,992,705); JPM (\$3,329,107).

#### Payments under the Transactions

As of December 31, 2022, DASNY received payments of \$44,436,207 under its outstanding and terminated IREAs, which includes \$20,211,207 under its outstanding IREAs and \$24,225,000 under its terminated IREAs. As of December 31, 2022, DASNY has made payments of \$65,945,352 under its outstanding IREAs. DASNY made no payments under its terminated IREAs.

#### Credit Enhancement

There are no liquidity facilities or reserves provided in connection with the DASNY IREAs. Under the Master Agreements with GSMMDP and JPM, DASNY is required to post collateral if either of the City's credit ratings goes below Baa2 or BBB. Each of GSMMDP and JPM is required to post collateral if each of its credit ratings is below Aa3 or AA- or if it has any credit rating of less than A3 or A-.

#### Costs and Expenses

The costs and expenses incurred in connection with the DASNY IREAs were paid by DASNY and consisted of \$25,000 in legal fees and \$111,000 in swap advisory fees. The costs and expenses for the DASNY IREAs numbered D3 and D4 were aggregated with the costs and expenses associated with IREAs D1 and D2, which were subsequently terminated and are not described in this Quarterly Report.

# **Description of Counterparties**

GSMMDP is a limited partnership organized under the laws of the State of Delaware. It is a joint venture of The Goldman Sachs Group and Mitsui Sumitomo Insurance Co., Ltd. GSMMDP is rated Aa2/AA-. JPM is a national bank incorporated in the State of Delaware and is rated Aa2/A+. All ratings are as of December 31, 2022.

#### Risk Assessment

The counterparty risks associated with the DASNY IREAs are comparable to those of the City in connection with its IREAs. The termination risk involves the Counterparty's ability to terminate should the City's credit rating fall below Baa3/BBB-. The transactions involve the risk of a shortfall between the variable rate paid on the underlying bonds and the variable rate received in connection with the IREAs. The tax risk and potential discontinuation of LIBOR risk associated with the DASNY IREAs are comparable to those of the City in connection with its IREAs. The steps taken by DASNY to reduce or mitigate risks on the DASNY IREAs are comparable to those taken by the City in connection with its IREAs. Similar to the City, DASNY can address the LIBOR cessation by adhering to the ISDA Fallback Protocol. If DASNY adheres to the Protocol, both DASNY IREAs D3 and D4 would convert to 64.3% of SOFR plus the fallback adjustment spread of 0.074% after the LIBOR Cessation Date.

See Exhibit B for a matrix showing how changes in market conditions would affect DASNY's exposure in connection with the DASNY IREAs.

# C. New York City Industrial Development Agency as Counterparty:

The IREAs that were entered into with the New York City Industrial Development Agency have terminated and are described in Exhibit C hereto.

This report reflects information in connection with IREAs through December 31, 2022.

A copy of the City's Interest Rate Exchange Agreement Policy (the "Policy") adopted by the Mayor and Comptroller of the City was provided to you with the quarterly report dated January 14, 2003. The Policy was amended for the first time on June 26, 2013. The Policy, as amended, was provided to you with the quarterly report dated July 15, 2013.

Yours truly,

David M. Womack

Deputy Director

New York City Office of Management and Budget Marjorie Henning
Deputy Comptroller for Public Finance
New York City Comptroller's Office

# C. New York City Industrial Development Agency as Counterparty:

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Yours truly,

David M. Womack Deputy Director New York City Office of Management and Budget Marjorie Henning

Deputy Comptroller for Public Finance New York City Comptroller's Office

# City of New York Swap Transaction Summary

Transaction	1 - Matured	2 - Matured	3 - Matured	4 - Matured	5
Current Authorizing Law	54.90.d*	54.90.c*	54.90.c*	54.90.c*	54.90.c*
Corresponding Bond Series	2003 C, D, & E	2003 C, D, & E	2003 C	2012 G-6	2012 G-6
Swap Type	Synthetic Fixed	Synthetic Fixed	Synthetic Fixed	Synthetic Fixed	Synthetic Fixed
Counterparty	J.P. Morgan Chase Bank, N.A.	Merrill Lynch Capital Services Inc	U.S. Bank National Association <sup>1</sup>	U.S. Bank National Association <sup>2</sup>	U.S. Bank National Association <sup>2</sup>
Credit Ratings (S&P / Moody's) Guarantor Credit Ratings (S&P/Moody's)	A+/Aa2 See above	NR A-/A2 (BAC) AA/Aa3 (MLDP)-for Termination Payment	AA-/A1 See above	AA-/A1 See above	AA-/A1 See above
Original Notional Amount	\$200,000,000	\$66,666,667	\$66,666,667	\$66,666,666	\$135,050,000
Current Notional Amount	\$0	\$0	\$0	\$0	\$43,450,000
Up Front Cash Payment to City	N/A	N/A	N/A	N/A	N/A
Effective Date	11/13/2002	11/13/2002	11/13/2002	11/13/2002	1/22/2003
Termination Date	8/1/2020	8/1/2020	8/1/2020	8/1/2020	8/1/2026
Option Exercise Date	N/A	N/A	N/A	N/A	Expired
Option Premium	N/A	N/A	N/A	N/A	\$7,467,000.00
City Pays	3.269%	3.269%	3.269%	3.269%	3.259%
Actual Payments Made by City as of 12/31/2022	(\$102,137,398.79)	(\$34,045,799.64)	MS: (\$21,175,855.62) USB: (\$12,869,944.02)	UBS: (\$29,681,957.03) USB: (\$4,363,842.55)	UBS: (\$57,228,080.74) USB: (\$15,524,246.51)
Actual Payments Received by City as of 12/31/2022	\$30,128,260.25	\$10,042,448.95	MS: \$8,516,785.12 USB: \$1,525,396.78	UBS: \$8,885,088.06 Novation: \$75,000 USB: \$1,157,233.05	UBS: \$17,365,971.82 Novation: \$75,000 USB: \$3,709,980.24
City Receives	62.8 % of USD-LIBOR- BBA.	62.8 % of USD-LIBOR- BBA.	62.8 % of USD-LIBOR- BBA.	62.8 % of USD-LIBOR- BBA.	60.8% of USD-LIBOR- BBA
First Counterparty Payment Date	12/2/2002	12/2/2002	MS: 12/2/2002 U.S. Bank: 12/3/2012	UBS: 12/2/2002 U.S. Bank: 11/1/2016	UBS: 2/3/2003 U.S. Bank: 11/1/2016
First City Payment Date	8/1/2003	8/1/2003	MS: 8/1/2003 U.S. Bank: 2/1/2013	UBS: 8/1/2003 U.S. Bank: 2/1/2017	UBS: 8/1/2003 U.S. Bank: 2/1/2017
Marked to Market Value as of 12/31/2022 (shown as negative number if the City would owe payment)	Matured 8/1/20	Matured 8/1/20	Matured 8/1/20	Matured 8/1/20	(\$1,011,879)

<sup>\*</sup>The City's swaps were executed under Section 54.90 of the Local Finance Law of the State of New York.

<sup>&</sup>lt;sup>1</sup>Novated to U.S. Bank from Morgan Stanley on 11/20/2012.

<sup>&</sup>lt;sup>2</sup>Novated to U.S. Bank from UBS on 10/5/2016.

# City of New York Swap Transaction Summary

Transaction	6 - Matured	7 - Terminated	8 - Terminated	9 - Terminated	10 - Terminated
Current Authorizing Law	54.90.c*	54.90.c*	54.90.c*	54.90.c*	54.90.d*
Corresponding Bond Series	2003 G-2, G-3 and H-2	2004 F-2, 2006 I-4, and 2009 B-3	2018 B-4, 2018 B-5, 2019 D-4	2004 F	1998F, 1998G, 1998H, 1999A, 1999F, 2001D, 2001G, 2002G, 2003A, 2003C-1, and 2003G-1
Swap Type	Synthetic Fixed	Basis Swap	Synthetic Fixed	Total Return	Swaption to Floating
Counterparty	UBS AG	The Bank of New York Mellon <sup>3</sup>	Wells Fargo Bank, National Association	Citigroup Financial Products Inc	J.P. Morgan Chase Bank, N.A.
Credit Ratings (S&P / Moody's) Guarantor Credit Ratings (S&P/Moody's)	A+/Aa3 See above	AA-/Aa2 See above	A+/Aa2 See above	NR BBB+/A3 (CGMH)	A+/Aa2 See above
Original Notional Amount	\$80,000,000	\$671,245,000	\$350,000,000	\$500,000,000	\$250,000,000
Current Notional Amount	\$0	\$0	\$0	\$0	\$0
Up Front Cash Payment to City	N/A	\$20,000,000	N/A	N/A	N/A
Effective Date	1/22/2003	3/14/2003	7/14/2003	12/18/2003	8/1/2007
Termination Date	8/1/2014	3/15/2029	8/1/2031	12/15/2011	8/1/2024
Option Exercise Date	Expired	N/A	N/A	N/A	8/1/2007
Option Premium	\$2,345,000	N/A	N/A	N/A	\$7,177,004.00
City Pays	3.109%4	SIFMA Index x 1.36	2.964% (to 5/1/20) 3.175% (beginning 5/1/20)	SIFMA Index + .0035	SIFMA
Actual Payments Made by City as of 12/31/2022	(\$18,945,035.01)	MS: (\$128,475,662.00) BONYM: (\$942,753.74)	WF: (\$199,257,508.33) Termination: (\$5,000,000.00)	(\$83,399,384.83)	\$0.00
Actual Payments Received by City as of 12/31/2022	\$9,704,767.21	MS: \$135,498,449.78 Termination: \$123,000.00 BONYM: \$2,359,459.17 Termination: \$2,410,000.00	WF: \$59,406,092.09	\$188,936,674.03 plus Termination Payment of \$18,708,175.28	\$0.00
City Receives	61.8% of USD-LIBOR- BBA	USD-LIBOR-BBA	SIFMA <sup>5</sup>	Adjusted Fixed Rates as Set forth in the Confirm	4.10%
First Counterparty Payment Date	2/3/2003	various dates, starting with 7/15/2003 (MS) & 2/15/2013 (BONYM)	8/1/2003	6/15/2004	N/A
First City Payment Date	8/1/2003	various dates, starting with 7/15/2003 (MS) & 2/15/2013 (BONYM)	2/4/2004	6/15/2004	N/A
Marked to Market Value as of 12/31/2022 (shown as negative number if the City would owe payment)	Matured 8/1/14	Terminated 11/19/2012 and 8/4/2015	Terminated 10/6/2022	Terminated 12/15/11	Terminated 8/1/09 (Option Expired)

<sup>\*</sup>The City's swaps were executed under Section 54.90 of the Local Finance Law of the State of New York.

<sup>&</sup>lt;sup>3</sup>The City terminated 3 of the individual basis swaps with Morgan Stanley totaling \$178,690,000 in notional amount on 11/19/2012. The remaining 3 basis swaps totaling \$364,100,000 in notional amount were novated to the Bank of New York Mellon on 11/20/2012, and were terminated on 8/4/2015.

<sup>&</sup>lt;sup>4</sup>On 4/11/07, the counterparty cancellation option was eliminated and the fixed rate payment was changed from 2.818% to 3.109% <sup>5</sup>On 4/27/20, the City amended the swap to change the floating rate received from 61.85% 1M LIBOR to SIFMA, beginning 5/1/20.

# City of New York Swap Transaction Summary

S490.d*   S490	Transaction	11 - Terminated	12 - Matured	13 - Terminated	14 - Matured
1999A, 1999F, 2001D, 2001G, 2004C, 2004D, and 2004F   2001S, 2003C-1, and 2003G-1   2001S, 2004C, 2004D, and 2004F   2004S, 2004C, 2004D, and 2004F, 2004C, 2004D, and 2004F, 2004C, 2004D, and 2004F, 2	Current Authorizing Law	54.90.d*	54.90.d*	54.90.d*	54.90.d*
Counterparty	Corresponding Bond Series	1999A, 1999F, 2001D, 2001G, 2002G, 2003A,	2005A and 2005B	2003I, 2004C, 2004D,	2005J, 2005K and 2005L
Derivative Products Inc	Swap Type	Swaption to Floating	CPI Swap to Fixed	Basis Swap	CPI Swap to Fixed
Guarantor Credit Ratings (S&P/Moody's)         NR/NR         BBB+/A3 (MS)         See above         See above           Original Notional Amount         \$100,000,000         \$50,000,000         \$500,000,000         \$44,145,000           Current Notional Amount         \$0         \$0         \$0         \$0           Up Front Cash Payment to City         N/A         N/A         \$20,885,000.00         N/A           Effective Date         \$1/2007         7/29/2004         \$1/2003         \$1/2017           Option Exercise Date         \$1/2004         \$1/2014         \$1/21033         \$1/2017           Option Exercise Date         \$1/2007         N/A         N/A         N/A         N/A           Option Exercise Date         \$1/2007         N/A         N/A         N/A         N/A           City Pays         \$IFMA         \$1,206         \$IFMA         \$1/10%           City Pays         \$IFMA         \$1,206         \$IFMA         \$1,70%           Actual Payments Made by City as of \$12/31/2022         Termination Payment (\$623,265.00)         \$(\$19,333,791.66)         \$(\$82,515,930.93)         \$(\$23,683,239.12)           Actual Payments Received by City as of \$12/31/2022         \$0.00         \$15,964,867.94         \$91,930,166.13         \$19,096,206.60	Counterparty			0	
Current Notional Amount   So   So   So   So   So	• /				
Up Front Cash Payment to City	Original Notional Amount	\$100,000,000	\$50,000,000	\$500,000,000	\$44,145,000
Effective Date	Current Notional Amount	\$0	\$0	\$0	\$0
Termination Date   S/1/2024   S/1/2014   12/1/2033   S/1/2017	Up Front Cash Payment to City	N/A	N/A	\$20,585,000.00	N/A
Option Exercise Date         8/1/2007         N/A         N/A         N/A           Option Premium         \$2,870,801.00         N/A         N/A         N/A           City Pays         SIFMA         4.120%         SIFMA         4.710%           Actual Payments Made by City as of 12/31/2022         Termination Payment (\$623,265.00)         (\$19,333,791.66)         (\$82,515,930.93)         (\$23,683,239.12)           Actual Payments Received by City as of 12/31/2022         \$0.00         \$15,964,867.94         \$91,930,166.13         \$19,096,206.60           City Receives         4.10%         CPI plus .90%         Stepped % of 1-month LIBOR         CPI plus 1.60%           First Counterparty Payment Date         N/A         2/1/2005         9/1/2004         8/1/2005           First City Payment Date         N/A         2/1/2005         9/1/2004         8/1/2005           Marked to Market Value as of 12/31/2022 (shown as negative number if the City would owe payment)         Terminated 4/20/09         Matured 8/1/14         Terminated 3/21/19         Matured 8/1/2017	Effective Date	8/1/2007	7/29/2004	8/1/2004	3/3/2005
Option Premium	Termination Date	8/1/2024	8/1/2014	12/1/2033	8/1/2017
City Pays   SIFMA   4.120%   SIFMA   4.710%	Option Exercise Date	8/1/2007	N/A	N/A	N/A
Actual Payments Made by City as of 12/31/2022    Termination Payment (\$623,265.00)   (\$19,333,791.66)   (\$82,515,930.93)   (\$23,683,239.12)     Actual Payments Received by City as of 12/31/2022     50.00   \$15,964,867.94   \$91,930,166.13   \$19,096,206.60     City Receives	Option Premium	\$2,870,801.00	N/A	N/A	N/A
Termination Payment (\$623,265.00) (\$19,333,791.66) (\$82,515,930.93) (\$23,683,239.12)  Actual Payments Received by City as of 12/31/2022 (\$100	City Pays	SIFMA	4.120%	SIFMA	4.710%
S0.00   \$15,964,867.94   \$91,930,166.13   \$19,096,206.60     City Receives   4.10%   CPI plus .90%   Stepped % of 1-month LIBOR     First Counterparty Payment Date   N/A   2/1/2005   9/1/2004   8/1/2005     First City Payment Date   N/A   2/1/2005   9/1/2004   8/1/2005     Marked to Market Value as of 12/31/2022 (shown as negative number if the City would owe payment)   Terminated 4/20/09   Matured 8/1/14   Terminated 3/21/19   Matured 8/1/2017	Actual Payments Made by City as of 12/31/2022		(\$19,333,791.66)	(\$82,515,930.93)	(\$23,683,239.12)
First Counterparty Payment Date  N/A  2/1/2005  9/1/2004  8/1/2005  First City Payment Date  N/A  2/1/2005  9/1/2004  8/1/2005  Matured 8/1/2005  Matured 8/1/14  Terminated 3/21/19  Matured 8/1/2017	Actual Payments Received by City as of 12/31/2022	\$0.00	\$15,964,867.94	\$91,930,166.13	\$19,096,206.60
First City Payment Date  N/A  2/1/2005  9/1/2004  8/1/2005  Marked to Market Value as of 12/31/2022 (shown as negative number if the City would owe payment)  Matured 8/1/14  Terminated 3/21/19  Matured 8/1/14  Matured 8/1/19	City Receives	4.10%	CPI plus .90%		CPI plus 1.60%
Marked to Market Value as of 12/31/2022 (shown as negative number if the City would owe payment)  Matured 8/1/14  Terminated 3/21/19  Matured 8/1/2017	First Counterparty Payment Date	N/A	2/1/2005	9/1/2004	8/1/2005
number if the City would owe payment)	First City Payment Date	N/A	2/1/2005	9/1/2004	8/1/2005

<sup>\*</sup>The City's swaps were executed under Section 54.90 of the Local Finance Law of the State of New York.

# DASNY Swap Transaction Summary

Transaction	D-1 - Terminated	D-2 - Terminated	D-3	D-4
Current Authorizing Law	Section 2926*	Section 2926*	Section 2926*	Section 2926*
<b>Corresponding Bond Series</b>	DASNY 2005 A & B	DASNY 2005 A & B	DASNY 2005 A & B	DASNY 2005 A & B
Swap Type	Synthetic Float	Synthetic Float	Synthetic Fixed	Synthetic Fixed
Counterparty	Goldman Sachs	JP Morgan Chase	Goldman Sachs	JP Morgan Chase
	Mitsui Marine	Chase Bank, N.A.	Mitsui Marine	Chase Bank, N.A.
	Derivative Products LP		Derivative Products LP	
Credit Ratings (S&P/Moody's)	AA-/Aa2	A+/Aa2	AA-/Aa2	A+/Aa2
Guarantor Credit Ratings (S&P/Moody's)	See above	See above	See above	See above
Original Notional Amount	\$80,680,000	\$44,820,000	\$80,680,000	\$44,820,000
Current Notional Amount	\$0	\$0	\$80,680,000	\$44,820,000
Up Front Cash Payment to DASNY	N/A	N/A	N/A	N/A
Effective Date	5/1/2013	5/1/2013	6/15/2005	6/15/2005
<b>Termination Date</b>	5/15/2032	5/15/2032	5/15/2039	5/15/2039
Option Exercise Date	N/A	N/A	N/A	N/A
Option Premium	N/A	N/A	N/A	N/A
DASNY Pays	SIFMA	SIFMA	3.017%	3.017%
Actual Payments Made by DASNY as of 12/31/2022	\$0	\$0	(\$42,394,191)	(\$23,551,161)
Actual Payments Received by DASNY as of 12/31/2022	Termination Payment	Termination Payment		
	\$15,655,000.00	\$8,570,000.00	\$12,917,953.40	\$7,293,253
DASNY Receives	4.179%	4.179%	64.3 % of USD-LIBOR-	64.3 % of USD-LIBOR-
			BBA.	BBA.
First Counterparty Payment Date	11/15/2013	11/15/2013	7/15/2005	7/15/2005
First DASNY Payment Date	11/15/2013	11/15/2013	11/15/2005	11/15/2005
Marked to Market Value as of 12/31/2022 (shown as negative	Terminated 9/27/11	Terminated 9/27/11	(\$5,992,705)	(\$3,329,107)
number if the DASNY would owe payment)				

<sup>\*</sup> DASNY swaps were executed under Section 2926 of the Public Authorities Law of the State of New York

## City of New York Value at Risk Termination Matrix

	Swap 5 (U.S. Bank)					
Rate Change from	Valuation Net of Accruals	Accruals (1) 12/31/2022	Mid-Market Valuation			
Value Date 12/31/2022	12/31/2022		12/31/2022			
0.00%	(\$519,149)	(\$492,730)	(\$1,011,879)			
0.25%	(\$348,656)	(\$492,730)	(\$841,386)			
0.50%	(\$246,513)	(\$492,730)	(\$739,243)			
0.75%	(\$145,183)	(\$492,730)	(\$637,914)			
-0.25%	(\$612,689)	(\$492,730)	(\$1,105,419)			
-0.50%	(\$774,787)	(\$492,730)	(\$1,267,517)			

<sup>(1)</sup> Accruals represent 236,005.92 of fixed rate accruals since last Fixed Rate Payer Date less \$62,100.91 of variable rate accruals since last Floating Rate Payer Date.

<sup>(2)</sup> The swap was novated to U.S. Bank from UBS on 10/5/2016.

	Swap 8 (Wells Fargo) - Terminated (2)						
Rate Change from	Valuation Net of Accruals	Accruals (1)	Mid-Market Valuation				
Value Date 12/31/2022	12/31/2022	12/31/2022	12/31/2022				
0.00%	\$0	\$0	\$0				
0.25%	\$0	\$0	\$0				
0.50%	\$0	\$0	\$0				
0.75%	\$0	\$0	\$0				
-0.25%	\$0	\$0	\$0				
-0.50%	\$0	\$0	\$0				

<sup>(1)</sup> Accruals represent \$1,852,083.33 of fixed rate accruals since last Fixed Rate Payer Date

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	,
less \$469,384.52 of variable rate accruals since last Floating Rate Payer Date.	
(2) Swap Terminated on 10/6/2022	

Swap 5 (U.S. Bank)	
Swap Cashflows Since Swap Inception	n
Total Variable Cashflows Accrued/Received by City	\$21,173,236.65
Total Fixed Accrued/Paid Outflows of City	(\$73,342,342.04)
Net Cashflows	(\$52,169,105.39)

<sup>\*</sup>City received an upfront cash payment of \$7,467,000 and a novation payment of \$75,000 which is not included above.

Swap 8 (Wells Fargo) - Terminated (1	
Swap Cashflows Since Swap Inceptio	n
Total Variable Cashflows Accrued/Received by City	\$59,406,092.09
Total Fixed Accrued/Paid Outflows of City	(\$199,257,508.33)
Net Cashflows	(\$139,851,416.24)

<sup>(1)</sup> Swap Terminated on 10/6/2022

#### City of New York Value at Risk Termination Matrix

	Swap D-3 (Goldman Sachs)					
Rate Change from						
Value Date	Valuation Net of Accruals	Accruals (1)	Mid-Market Valuation			
12/31/2022	12/31/2022	12/31/2022	12/31/2022			
0.00%	(\$5,786,831)	(\$205,873)	(\$5,992,705)			
0.25%	(\$3,981,232)	(\$205,873)	(\$4,187,106)			
0.50%	(\$2,931,821)	(\$205,873)	(\$3,137,695)			
0.75%	(\$1,914,659)	(\$205,873)	(\$2,120,532)			
-0.25%	(\$6,795,779)	(\$205,873)	(\$7,001,652)			
-0.50%	(\$8,581,301)	(\$205,873)	(\$8,787,175)			

<sup>(1)</sup> Accruals represent \$919,554.78 of fixed rate accruals since last Fixed Rate Payer Date less \$67,697.64 of variable rate accruals since last Floating Rate Payer Date.

Swap D-4 (JPMorgan Chase)				
Rate Change from				
Value Date	Valuation Net of Accruals	Accruals (1)	Mid-Market Valuation	
12/31/2022	12/31/2022	12/31/2022	12/31/2022	
0.00%	(\$3,214,738)	(\$114,368)	(\$3,329,107)	
0.25%	(\$2,211,680)	(\$114,368)	(\$2,326,048)	
0.50%	(\$1,628,704)	(\$114,368)	(\$1,743,073)	
0.75%	(\$1,063,643)	(\$114,368)	(\$1,178,012)	
-0.25%	(\$3,775,235)	(\$114,368)	(\$3,889,604)	
-0.50%	(\$4,767,140)	(\$114,368)	(\$4,881,509)	

<sup>(1)</sup> Accruals represent \$510,838.44 of fixed rate accruals since last Fixed Rate Payer Date less \$37,607.93 of variable rate accruals since last Floating Rate Payer Date.

Swap D-3 (Goldman Sachs)	
Swap Cashflows Since Swap Inception	
Total Variable Cashflows Accrued/Received by DASNY	\$13,023,105.83
Total Fixed Accrued/Paid Outflows of DASNY	(\$42,705,216.96)
Net Cashflows	(\$29,682,111.13)

Swap D-4 (JP Morgan Chase)				
Swap Cashflows Since Swap Inception				
Total Variable Cashflows Accrued/Received by DASNY	\$7,351,668.50			
Total Fixed Accrued/Paid Outflows of DASNY	(\$23,723,944.51)			
Net Cashflows	(\$16,372,276.01)			

#### Global Swap Assumptions

- 1) Swap Values evaluated using market data as of September 30, 2022
- 2) Change from Value Date represents parallel curve shifts from the base rate curve as of September 30, 2022
- 3) Valuation Net of Accrual represents swap mid-market valuation at the respective interest rates levels net of accruals on September 30, 202
- 4) Accruals represent (payments)/receipts accrued by the City at September 30, 2022 under the swap agreements. Accruals calculated as City's accrued receipts less accrued paymen 5) Mid-market valuations are indicative only and subject to change with varying market condition:
- 6) Accrual information calculated and provided by City
- 7) Swaps D-3 and D-4 are swaps executed by DASNY. The City is obligated, subject to lease appropriation, to make lease payments to DASNY

## **Exhibit C: Summary of Terminated Swaps**

Terminated Swaps with NYC as Counterparty

Transaction Number and Type	Counterparty	Original Notional Amount	Initial Trade Date	Termination Date
1: Synthetic Fixed	JP Morgan Chase Bank, N.A.	\$ 200,000,000	October 30, 2002	August 1, 2020
2: Synthetic Fixed	Merrill Lynch Capital Services, Inc.	66,666,667	October 30, 2002	August 1, 2020
3: Synthetic Fixed	U.S. Bank, N.A.	66,666,667	October 30, 2002	August 1, 2020
4: Synthetic Fixed	U.S. Bank, N.A.	66,666,666	October 30, 2002	August 1, 2020
6: Synthetic Fixed	UBS AG	80,000,000	January 9, 2003	August 1, 2014
7: Basis Swap (Partial)	Morgan Stanley Capital Services, Inc.	276,935,000	March 14, 2003	November 19, 2012
7: Basis Swap (Remainder)	Bank of New York Mellon	394,310,000	March 14, 2003	August 4, 2015
8: Synthetic Fixed	Wells Fargo Bank, National Association	350,000,000	July 1, 2003	October 6, 2022
9: Total Return	Citigroup Financial Products, Inc.	500,000,000	December 9, 2003	December 15, 2011
10: Swaption to Floating	JP Morgan Chase Bank, N.A.	250,000,000	March 4, 2004	August 15, 2009
11: Swaption to Floating	Lehman Brothers Derivative Products	100,000,000	March 4, 2004	April 20, 2009
12: CPI Swap to Fixed	Morgan Stanley Capital Services, Inc.	50,000,000	July 13, 2004	August 1, 2014
13: Basis Swap	JP Morgan Chase Bank, N.A.	500,000,000	July 29, 2004	March 21, 2019
14: CPI Swap to Fixed	JP Morgan Chase Bank, N.A.	44,145,000	February 15, 2005	August 1, 2017

Terminated Swaps with Dormitory Authority of the State of New York as Counterparty

Transaction Number and Type	Counterparty	Original Notional Amount	Initial Trade Date	Termination Date
D1: Synthetic Floating	Goldman Sachs Mitsui Marine Derivative Products	\$ 80,680,000	June 1, 2005	September 27, 2011
D2: Synthetic Floating	JP Morgan Chase Bank, N.A.	44,820,000	June 1, 2005	September 27, 2011

Terminated Swaps with New York City Industrial Development Agency as Counterparty

Transaction Number and Type	Counterparty	Original Notional Amount	Initial Trade Date	Termination Date
IDA1: Total Return	Morgan Stanley Capital Services, Inc.	\$ 18,520,000	August 6, 2003	May 29, 2008
IDA2: Total Return	Morgan Stanley Capital Services, Inc.	2,580,000	August 6, 2003	February 10, 2009
IDA3: Total Return	Morgan Stanley Capital Services, Inc.	2,710,000	August 6, 2003	February 10, 2009
IDA4: Total Return	Morgan Stanley Capital Services, Inc.	2,850,000	August 6, 2003	February 10, 2009
IDA5: Total Return	Morgan Stanley Capital Services, Inc.	3,000,000	August 6, 2003	February 10, 2009
IDA6: Total Return	Morgan Stanley Capital Services, Inc.	3,155,000	August 6, 2003	February 10, 2009
IDA7: Total Return	Morgan Stanley Capital Services, Inc.	3,325,000	August 6, 2003	February 10, 2009
IDA8: Total Return	Morgan Stanley Capital Services, Inc.	41,820,000	August 6, 2003	February 10, 2009
IDA9: Total Return	Morgan Stanley Capital Services, Inc.	11,240,000	July 15, 2008	February 10, 2009