

# \$596,398,739 Government National Mortgage Association

# **GINNIE MAE®**

# Guaranteed REMIC Pass-Through Securities and MX Securities Ginnie Mae REMIC Trust 2022-083

#### The Securities

The Trust will issue the Classes of Securities listed on the front cover of this offering circular supplement.

#### The Ginnie Mae Guaranty

Ginnie Mae will guarantee the timely payment of principal and interest on the securities. The Ginnie Mae Guaranty is backed by the full faith and credit of the United States of America.

#### The Trust and its Assets

The Trust will own (1) Ginnie Mae Certificates and (2) certain previously issued certificates.

The securities may not be suitable investments for you. You should consider carefully the risks of investing in them.

See "Risk Factors" beginning on page S-9 which highlights some of these risks.

The Sponsor and the Co-Sponsor will offer the securities from time to time in negotiated transactions at varying prices. We expect the closing date to be May 27, 2022.

You should read the Base Offering Circular as well as this Supplement.

The securities are exempt from registration under the Securities Act of 1933 and are "exempted securities" under the Securities Exchange Act of 1934.

| Class of<br>REMIC Securities   | Original<br>Principal<br>Balance(2)  | Interest<br>Rate   | Principal<br>Type(3)  | Interest<br>Type(3)  | CUSIP<br>Number  | Final<br>Distribution<br>Date(4)   |
|--|--|--|---|--|--|--|
| Security Group 1   | \$ 10,000,000  | (5)  | PT  | FLT  | 38383RYZ4  | May 2052   |
| FASA   | 10,000,000   | (5)  | NTL(PT)   | INV/IO   | 38383RZA8  | May 2052   |
| GA   | 76,364,000   | 3.00%  | SEQ   | FIX  | 38383RZB6  | November 2044  |
|  | 13,817,000   | 3.00   | SEQ/AD  | FIX  | 38383RZC4  | September 2033   |
|  | 34,293,443   | 3.00   | SEQ   | FIX/Z  | 38383RZD2  | May 2052   |
| Security Group 3   | 53,655,403   | 3.50   | SEQ   | FIX  | 38383RZE0  | December 2044  |
| JAJB   | 36,069,353   | 3.50   | SEQ   | FIX  | 38383RZF7  | May 2052   |
| Security Group 4<br>AS   | 31,409,367   | (5)  | NTL(SC/PT)  | INV/IO   | 38383RZG5  | June 2050  |
| Security Group 5 EAEZ  | 121,775,435  | 3.50   | SEQ/AD  | FIX  | 38383RZH3  | November 2049  |
|  | 7,497,159  | 3.50   | SEQ   | FIX/Z  | 38383RZJ9  | May 2052   |
| Security Group 6 F   | 30,000,000   | (5)  | PT  | FLT  | 38383RZK6  | May 2052   |
|  | 30,000,000   | (5)  | NTL(PT)   | INV/IO   | 38383RZL4  | May 2052   |
| Security Group 7 IM(1) III(1) MH MJ ML(1) MP MY(1) MY IN MI MI MI MI MY MY(1) MZ NI(1) | 14,612,444<br>1,638,888<br>5,000,000<br>16,500,000<br>1,612,300<br>29,500,000<br>13,143,700<br>19,209,891<br>277,777 | 4.50<br>4.50<br>3.25<br>3.50<br>3.50<br>3.25<br>3.50<br>4.50<br>4.50 | NTL(PAC/AD) NTL(PAC/AD) PAC/AD PAC/AD PAC/AD PAC/AD PAC/AD PAC/AD SUP NTL(PAC/AD) | FIX/IO<br>FIX/IO<br>FIX<br>FIX<br>FIX<br>FIX<br>FIX<br>FIX/Z<br>FIX/IO | 38383RZM2<br>38383RZN0<br>38383RZP5<br>38383RZQ3<br>38383RZR1<br>38383RZS9<br>38383RZT7<br>38383RZU4<br>38383RZV4<br>38383RZV2 | May 2052<br>October 2049<br>July 2049<br>October 2049<br>May 2052<br>October 2049<br>May 2052<br>May 2052<br>July 2049     |
| Security Group 8 KA KM KV(1) KZ(1)   | 53,433,000   | 3.50   | SEQ   | FIX  | 38383RZW0  | August 2042  |
|  | 40,000,000   | 3.50   | SEQ   | FIX  | 38383RZX8  | May 2050   |
|  | 4,291,000  | 3.50   | AD/SEQ  | FIX  | 38383RZY6  | August 2033  |
|  | 8,952,055  | 3.50   | SEQ   | FIX/Z  | 38383RZZ3  | May 2052   |
| Security Group 9   | 664,849,005  | 2.50   | NTL(SC/PT)  | FIX/IO   | 38383RA23  | November 2051  |
| Security Group 10 FB FJ SJ TI ZJ   | 10,000,000<br>10,000,000<br>20,000,000<br>222,222<br>1,285,000   | (5)<br>(5)<br>(5)<br>(5)<br>4.50                                     | PAC/AD<br>PAC/AD<br>NTL(PAC/AD)<br>NTL(PAC/AD)<br>SUP                             | FLT<br>FLT<br>INV/IO<br>INV/IO<br>FIX/Z                                | 38383RA31<br>38383RA49<br>38383RA56<br>38383RA64<br>38383RA72  | May 2052<br>May 2052<br>May 2052<br>May 2052<br>May 2052<br>May 2052   |
| Residuals R1 R2 R3 R4 R5 R6 R7 R8 R8 R9 R8   | 0<br>0<br>0<br>0<br>0<br>0<br>0<br>0   | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.0          | NPR<br>NPR<br>NPR<br>NPR<br>NPR<br>NPR<br>NPR<br>NPR<br>NPR                       | NPR<br>NPR<br>NPR<br>NPR<br>NPR<br>NPR<br>NPR<br>NPR<br>NPR            | 38383RA98<br>38383RB22<br>38383RB30<br>38383RB48<br>38383RB55<br>38383RB63<br>38383RB71<br>38383RB99<br>38383RB97<br>38383RB97 | May 2052<br>May 2052<br>May 2052<br>June 2050<br>May 2052<br>May 2052<br>May 2052<br>May 2052<br>November 2051<br>May 2052 |

- (1) These Securities may be exchanged for MX Securities described in Schedule I to this Supplement.
- (2) Subject to increase as described under "Increase in Size" in this Supplement. The amount shown for each Notional Class (indicated by "NTL" under Principal Type) is its original Class Notional Balance and does not represent principal that will be paid.
- (3) As defined under "Class Types" in Appendix I to the Base Offering Circular. The Class Notional Balance of each Notional Class will be reduced as shown under "Terms Sheet Notional Classes" in this Supplement.
- (4) See "Yield, Maturity and Prepayment Considerations Final Distribution Date" in this Supplement.
- $(5) \quad \textit{See "Terms Sheet} -- \textit{Interest Rates" in this Supplement}.$

# Goldman Sachs & Co. LLC

Ramirez & Co., Inc.

The date of this Offering Circular Supplement is May 23, 2022.

#### **AVAILABLE INFORMATION**

You should purchase the securities only if you have read and understood the following documents:

- this Offering Circular Supplement (this "Supplement"),
- the Base Offering Circular and
- in the case of the Group 4 and 9 securities, each disclosure document relating to the Underlying Certificates (the "Underlying Certificate Disclosure Documents").

The Base Offering Circular and the Underlying Certificate Disclosure Documents are available on Ginnie Mae's website located at http://www.ginniemae.gov ("ginniemae.gov").

If you do not have access to the internet, call BNY Mellon, which will act as information agent for the Trust, at (800) 234-GNMA, to order copies of the Base Offering Circular. In addition, you can obtain copies of any other document listed above by contacting BNY Mellon at the telephone number listed above.

Please consult the standard abbreviations of Class Types included in the Base Offering Circular as Appendix I and the glossary included in the Base Offering Circular as Appendix II for definitions of capitalized terms.

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#### **TERMS SHEET**

This terms sheet contains selected information for quick reference only. You should read this Supplement, particularly "Risk Factors," and each of the other documents listed under "Available Information."

**Sponsor:** Goldman Sachs & Co. LLC

Co-Sponsor: Samuel A. Ramirez & Co., Inc.

Trustee: U.S. Bank National Association

**Tax Administrator:** The Trustee

Closing Date: May 27, 2022

Distribution Date: The 20th day of each month or, if the 20th day is not a Business Day, the first

Business Day thereafter, commencing in June 2022.

# **Trust Assets:**

| Trust Asset<br>Group | Trust Asset Type        | Certificate Rate | To Maturity (in years) |  |
|----------------------|-------------------------|------------------|------------------------|--|
| 1                    | Ginnie Mae II           | 4.000%           | 30                     |  |
| 2                    | Ginnie Mae II           | 3.000%           | 30                     |  |
| 3                    | Ginnie Mae II           | 3.500%           | 30                     |  |
| 4                    | Underlying Certificates | (1)              | (1)                    |  |
| 5                    | Ginnie Mae II           | 3.500%           | 30                     |  |
| 6                    | Ginnie Mae II           | 4.500%           | 30                     |  |
| 7                    | Ginnie Mae II           | 4.500%           | 30                     |  |
| 8                    | Ginnie Mae II           | 3.500%           | 30                     |  |
| 9                    | Underlying Certificates | (1)              | (1)                    |  |
| 10                   | Ginnie Mae II           | 4.500%           | 30                     |  |
|                      |                         |                  |                        |  |

<sup>(1)</sup> Certain information regarding the Underlying Certificates is set forth in Exhibit A to this Supplement.

**Security Groups:** This series of Securities consists of multiple Security Groups (each, a "Group"), as shown on the front cover of this Supplement and on Schedule I to this Supplement. Payments on each Group will be based solely on payments on the Trust Asset Group with the same numerical designation.

Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 5, 6, 7, 8 and 10 Trust Assets<sup>(1)</sup>:

| Principal<br>Balance                                     | Weighted Average<br>Remaining Term<br>to Maturity<br>(in months) | Weighted Average<br>Loan Age<br>(in months) | Weighted<br>Average<br>Mortgage Rate <sup>(2)</sup> |
|--|--|---|---|
| Group 1 Trust Assets<br>\$10,000,000                     | 358  | 1   | 4.700%  |
| <b>Group 2 Trust Assets</b> \$124,474,443 <sup>(3)</sup> | 287  | 68  | 3.440   |
| <b>Group 3 Trust Assets</b> \$89,724,756 <sup>(3)</sup>  | 304  | 51  | 3.929   |
| <b>Group 5 Trust Assets</b> \$129,272,594 <sup>(3)</sup> | 313  | 46  | 3.930   |
| <b>Group 6 Trust Assets</b> \$30,000,000                 | 359  | 0   | 4.950   |
| <b>Group 7 Trust Assets</b> \$84,965,891                 | 359  | 0   | 4.961   |
| <b>Group 8 Trust Assets</b> \$106,676,055                | 358  | 1   | 3.918   |
| <b>Group 10 Trust Assets</b> \$21,285,000                | 355  | 4   | 4.937   |

<sup>(1)</sup> As of May 1, 2022.

The actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans underlying the Group 1, 2, 3, 5, 6, 7, 8 and 10 Trust Assets will differ from the weighted averages shown above, perhaps significantly. See "The Trust Assets — The Mortgage Loans" in this Supplement.

**Characteristics of the Group 4 and 9 Trust Assets:** See Exhibit A to this Supplement for certain information regarding the characteristics of the related Underlying Certificates.

**Issuance of Securities:** The Securities, other than the Residual Securities, will initially be issued in book-entry form through the book-entry system of the U.S. Federal Reserve Banks (the "Fedwire Book-Entry System"). The Residual Securities will be issued in fully registered, certificated form. *See "Description of the Securities — Form of Securities" in this Supplement.* 

**Modification and Exchange:** If you own exchangeable Securities you will be able, upon notice and payment of an exchange fee, to exchange them for a proportionate interest in the related Securities shown on Schedule I to this Supplement. See "Description of the Securities — Modification and Exchange" in this Supplement.

<sup>&</sup>lt;sup>(2)</sup> The Mortgage Loans underlying the Group 1, 2, 3, 5, 6, 7, 8 and 10 Trust Assets may bear interest at rates ranging from 0.25% to 1.50% per annum above the related Certificate Rate.

<sup>(3)</sup> The Mortgage Loans underlying the Group 2, 3 and 5 Trust Assets may be reperforming Mortgage Loans that were previously repurchased from one or more pools of Mortgage Loans underlying one or more Ginnie Mae MBS Certificates.

**Increased Minimum Denomination Classes:** Each Class that constitutes an Interest Only Class. *See "Description of the Securities" — Form of Securities" in this Supplement.* 

**Interest Rates:** The Interest Rates for the Fixed Rate Classes are shown on the front cover of this Supplement or on Schedule I to this Supplement.

The Floating Rate and Inverse Floating Rate Classes will bear interest at per annum rates based on one-month LIBOR (hereinafter referred to as "LIBOR") or a 30-day compounded average of the Secured Overnight Financing Rate ("SOFR") (hereinafter referred to as "Compounded SOFR") as follows:

I IDOD on

| Class             | Interest<br>Rate Formula <sup>(1)</sup> | Initial<br>Interest<br>Rate <sup>(2)</sup> | Minimum<br>Rate | Maximum<br>Rate |   | Compounded<br>SOFR for<br>Minimum<br>Interest Rate |
|-------------------|---|--|-----------------|-----------------|---|--|
| Security Group 1  |   |  |                 |                 |   |  |
| FA                | Compounded SOFR + 1.30%                 | 1.58737%                                   | 1.30%           | 4.00%           | 0 | 0.00%  |
| SA                | 2.70% - Compounded SOFR                 | 2.41263%                                   | 0.00%           | 2.70%           | 0 | 2.70%  |
| Security Group 4  |   |  |                 |                 |   |  |
| AS                | 6.15% — LIBOR                           | 5.22271%                                   | 0.00%           | 6.15%           | 0 | 6.15%  |
| Security Group 6  |   |  |                 |                 |   |  |
| F                 | Compounded SOFR + 1.05%                 | 1.90000%                                   | 1.05%           | 4.50%           | 0 | 0.00%  |
| S                 | 3.45% - Compounded SOFR                 | 2.60000%                                   | 0.00%           | 3.45%           | 0 | 3.45%  |
| Security Group 10 |   |  |                 |                 |   |  |
| FB                | Compounded SOFR + 1.20%                 | 1.98000%                                   | 1.20%           | 4.50%           | 0 | 0.00%  |
| FJ                | Compounded SOFR + 1.30%                 | 2.08000%                                   | 1.30%           | 4.50%           | 0 | 0.00%  |
| SJ                | 3.20% - Compounded SOFR                 | 2.42000%                                   | 0.00%           | 3.20%           | 0 | 3.20%  |
| TI 148.509        | % − (Compounded SOFR x 45.000045)       | 4.50000%                                   | 0.00%           | 4.50%           | 0 | 3.30%  |

LIBOR and Compounded SOFR will be established as described under "Description of the Securities — Interest Distributions — Floating Rate and Inverse Floating Rate Classes" in this Supplement.

**Allocation of Principal:** On each Distribution Date for a Security Group, the following distributions will be made to the related Securities:

## **SECURITY GROUP 1**

The Group 1 Principal Distribution Amount will be allocated to FA, until retired

#### **SECURITY GROUP 2**

The Group 2 Principal Distribution Amount and the GZ Accrual Amount will be allocated as follows:

- The GZ Accrual Amount, sequentially, to GV and GZ, in that order, until retired
- The Group 2 Principal Distribution Amount, sequentially, to GA, GV and GZ, in that order, until retired

<sup>(2)</sup> The initial Interest Rate will be in effect during the first Accrual Period; the Interest Rate will adjust monthly thereafter.

#### **SECURITY GROUP 3**

The Group 3 Principal Distribution Amount will be allocated, sequentially, to JA and JB, in that order, until retired

# **SECURITY GROUP 5**

The Group 5 Principal Distribution Amount and the EZ Accrual Amount will be allocated, sequentially, to EA and EZ, in that order, until retired

#### **SECURITY GROUP 6**

The Group 6 Principal Distribution Amount will be allocated to F, until retired

#### **SECURITY GROUP 7**

The Group 7 Principal Distribution Amount and the MZ Accrual Amount will be allocated in the following order of priority:

- 1. To MH, MJ, ML, MP and MY, until reduced to their Aggregate Schedule Principal Balance for that Distribution Date, concurrently, as follows:
  - a. 89.9441876027% in the following order of priority:
    - i. Concurrently, to MJ and MP, pro rata, while outstanding
    - ii. To MY, while outstanding
  - b. 10.0558123973% sequentially, to MH and ML, in that order, while outstanding
  - 2. To MZ, until retired
- 3. To MH, MJ, ML, MP and MY, in the same manner and order of priority as described in step 1. above, but without regard to their Aggregate Scheduled Principal Balance, until retired

#### **SECURITY GROUP 8**

The Group 8 Principal Distribution Amount and the KZ Accrual Amount will be allocated as follows:

- The KZ Accrual Amount, sequentially, to KV and KZ, in that order, until retired
- The Group 8 Principal Distribution Amount, sequentially, to KA, KM, KV and KZ, in that order, until retired

# **SECURITY GROUP 10**

The Group 10 Principal Distribution Amount and the ZJ Accrual Amount will be allocated in the following order of priority:

- 1. Concurrently, to FB and FJ, pro rata, until reduced to their Aggregate Scheduled Principal Balance for that Distribution Date
  - 2. To ZJ, until retired
- 3. Concurrently, to FB and FJ, pro rata, without regard to their Aggregate Scheduled Principal Balance, until retired

**Scheduled Principal Balances:** The Aggregate Scheduled Principal Balances for the Classes listed below are included in Schedule II to this Supplement. They were calculated using among other things the following Structuring Ranges:

| Group |  | Structuring Ranges        |
|-------|--|---------------------------|
|       | PAC Classes                              |                           |
| 7     | MH, MJ, ML, MP and MY (in the aggregate) | 200% PSA through 450% PSA |
| 10    | FB and FJ (in the aggregate)             | 250% PSA through 310% PSA |

**Accrual Classes:** Interest will accrue on each Accrual Class identified on the front cover of this Supplement at the per annum rate set forth on that page. However, no interest will be distributed to the Accrual Classes as interest. Interest so accrued on each Accrual Class on each Distribution Date will constitute an Accrual Amount, which will be added to the Class Principal Balance of that Class on each Distribution Date and will be distributable as principal as set forth in this Terms Sheet under "Allocation of Principal."

**Notional Classes:** The Notional Classes will not receive distributions of principal but have Class Notional Balances for convenience in describing their entitlements to interest. The Class Notional Balance of each Notional Class represents the percentage indicated below of, and reduces to that extent with, the Class Principal Balances or the outstanding notional balance of the related Trust Asset Group indicated:

| Class             | Original Class<br>Notional Balance | Represents Approximately  |
|-------------------|------------------------------------|---|
| Security Group 1  |                                    |   |
| SA                | \$ 10,000,000                      | 100% of FA (PT Class)   |
| Security Group 4  |                                    |   |
| AS                | \$ 31,409,367                      | 100% of the Group 4 Trust Assets  |
| Security Group 6  |                                    |   |
| S                 | \$ 30,000,000                      | 100% of F (PT Class)  |
| Security Group 7  |                                    |   |
| IM                | \$ 14,612,444                      | 22.22222222% of MH, MJ, ML, MP and MY (in the aggregate) (PAC/AD Classes) |
| JI                | 1,638,888                          | 5.555555556% of MP (PAC/AD Class)   |
| MI                | \$ 6,945,777                       | 22.22222222% of MJ, ML and MY (in the aggregate) (PAC/AD Classes)         |
|                   | 1,388,888                          | 27.77777778% of MH (PAC/AD Class)   |
|                   | 8,194,444                          | 27.77777778% of MP (PAC/AD Class)   |
|                   | \$ 16,529,109                      |   |
| NI                | 277,777                            | 5.555555556% of MH (PAC/AD Class)   |
| Security Group 9  |                                    |   |
| IO                | \$664,849,005                      | 100% of the Group 9 Trust Assets  |
| Security Group 10 |                                    |   |
| SJ                | \$ 20,000,000                      | 100% of FB and FJ (in the aggregate) (PAC/AD Classes)                     |
| TI                | 222,222                            | 2.2222222222% of FB (PAC/AD Class)  |

**Tax Status:** Single REMIC Series as to the Group 1 Trust Assets (the "Group 1 REMIC"), the Group 2 Trust Assets (the "Group 2 REMIC"), the Group 3 Trust Assets (the "Group 3 REMIC"), the Group 4 Trust Assets (the "Group 4 REMIC"), the Group 5 Trust Assets (the "Group 5 REMIC"), the Group 6 Trust Assets (the "Group 6 REMIC"), the Group 8 Trust Assets (the "Group 8 REMIC") and the Group 9 Trust Assets (the "Group 9 REMIC"). Double REMIC Series as to the Group 7 Trust Assets and the Group 10 Trust Assets. Separate REMIC elections will be made as to the Group 1 REMIC, the Group 2 REMIC, the Group 3 REMIC, the Group 4 REMIC, the Group 5 REMIC, the Group 6 REMIC, the Issuing REMIC and

the Pooling REMIC with respect to the Group 7 Trust Assets (the "Group 7 Issuing REMIC" and the "Group 7 Pooling REMIC," respectively), the Group 8 REMIC, the Group 9 REMIC and the Issuing REMIC and the Pooling REMIC with respect to Group 10 Trust Assets (the "Group 10 Issuing REMIC" and the "Group 10 Pooling REMIC," respectively). See "Certain United States Federal Income Tax Consequences" in this Supplement and in the Base Offering Circular. Regular and Residual Classes: Classes R1, R2, R3, R4, R5, R6, RR7, R8, R9 and RR10 are Residual Classes. Class R1 represents the Residual Interest of the Group 1 REMIC. Class R2 represents the Residual Interest of the Group 2 REMIC. Class R3 represents the Residual Interest of the Group 3 REMIC. Class R4 represents the Residual Interest of the Group 4 REMIC. Class R5 represents the Residual Interest of the Group 5 REMIC. Class R6 represents the Residual Interest of the Group 6 REMIC. Class RR7 represents the Residual Interest of the Group 7 Issuing and Pooling REMICs. Class R8 represents the Residual Interest of the Group 8 REMIC. Class R9 represents the Residual Interest of the Group 9 REMIC. Class RR10 represents the Residual Interest of the Group 10 Issuing and Pooling REMICs. All other Classes of REMIC Securities are Regular Classes.

#### **RISK FACTORS**

You should purchase securities only if you understand and are able to bear the associated risks. The risks applicable to your investment depend on the principal and interest type of your securities. This section highlights certain of these risks.

The rate of principal payments on the underlying mortgage loans will affect the rate of principal payments on your securities. The rate at which you will receive principal payments will depend largely on the rate of principal payments, including prepayments, on the mortgage loans underlying the related trust assets. Any historical data regarding mortgage loan prepayment rates may not be indicative of the rate of future prepayments on the underlying mortgage loans, and no assurances can be given about the rates at which the underlying mortgage loans will prepay. We expect the rate of principal payments on the underlying mortgage loans to vary. Borrowers generally may prepay their mortgage loans at any time without penalty.

The terms of the mortgage loans may be modified to permit, among other things, a partial release of security, which releases a portion of the mortgaged property from the lien securing the related mortgage loan. Partial releases of security may reduce the value of the remaining security and also allow the related borrower to sell the released property and generate proceeds that may be used to prepay the related mortgage loan in whole or in part.

In addition to voluntary prepayments, mortgage loans can be prepaid as a result of governmental mortgage insurance claim payments, loss mitigation arrangements, repurchases or liquidations of defaulted mortgage loans. Although under certain circumstances Ginnie Mae issuers have the option to repurchase defaulted mortgage loans from the related pool underlying a Ginnie Mae MBS certificate, they are not obligated to do so. Defaulted mortgage loans that remain in pools backing Ginnie Mae MBS certificates may be subject to governmental mortgage insurance claim payments, loss mitigation arrangements or foreclosure, which could have the same effect as voluntary prepayments on the cash flow available to pay the securities.

A catastrophic weather event, pandemic or other natural disaster may affect the rate of principal payments, including prepayments, on the underlying mortgage loans. Any such event may damage the related mortgaged properties that secure the mortgage loans or may lead to a general economic downturn in the affected regions, including job losses and declines in real estate values. A general economic downturn may increase the rate of defaults on the mortgage loans in such areas resulting in prepayments on the related securities due to governmental mortgage insurance claim payments, loss mitigation arrangements, repurchases or liquidations of defaulted mortgage loans. Insurance payments on damaged or destroyed homes may also lead to prepayments on the underlying mortgage loans. Further, in connection with presidentially declared major disasters, Ginnie Mae may authorize optional special assistance to issuers, including expanded buyout authority which allows issuers, upon receiving written approval from Ginnie Mae, to repurchase eligible loans from the related pool underlying a Ginnie Mae MBS certificate, even if such loans are not delinquent or do not otherwise meet the standard conditions for removal or repurchase.

No assurances can be given as to the timing or frequency of any governmental mortgage insurance claim payments, issuer repurchases, loss mitigation arrangements or foreclosure proceedings with respect to defaulted mortgage loans and the resulting effect on the timing or rate of principal payments on your securities.

Rates of principal payments can reduce your yield. The yield on your securities probably will be lower than you expect if:

• you bought your securities at a premium (interest only securities, for example) and principal payments are faster than you expected, or

 you bought your securities at a discount and principal payments are slower than you expected.

In addition, if your securities are interest only securities or securities purchased at a significant premium, you could lose money on your investment if prepayments occur at a rapid rate.

Under certain circumstances, a Ginnie Mae issuer has the right to repurchase a defaulted mortgage loan from the related pool of mortgage loans underlying a particular Ginnie Mae MBS certificate, the effect of which would be comparable to a prepayment of such mortgage loan. At its option and without Ginnie Mae's prior consent, a Ginnie Mae issuer may repurchase any mortgage loan at an amount equal to par less any amounts previously advanced by such issuer in connection with its responsibilities as servicer of such mortgage loan to the extent that (i) in the case of a mortgage loan included in a pool of mortgage loans underlying a Ginnie Mae MBS certificate issued on or before December 1, 2002, such mortgage loan has been delinquent for four consecutive months, and at least one delinquent payment remains uncured or (ii) in the case of a mortgage loan included in a pool of mortgage loans underlying a Ginnie Mae MBS certificate issued on or after January 1, 2003, no payment has been made on such mortgage loan for three consecutive months. Any such repurchase will result in prepayment of the principal balance or reduction in the notional balance of the securities ultimately backed by such mortgage loan. No assurances can be given as to the timing or frequency of any such repurchases.

The levels of LIBOR and Compounded SOFR, as applicable, will affect the yields on floating rate and inverse floating rate securities. If LIBOR or Compounded SOFR, as applicable, performs differently from what you expect, the yield on the floating rate and inverse floating rate securities may be lower than you expect. Lower levels of Compounded SOFR will generally reduce the yield on floating rate securities; higher levels of LIBOR or Compounded SOFR, as applicable, will generally reduce the yield on inverse

floating rate securities. You should bear in mind that the timing of changes in the level of LIBOR or Compounded SOFR, as applicable, may affect your yield: generally, the earlier a change, the greater the effect on your yield. It is doubtful that LIBOR or Compounded SOFR will remain constant.

An investment in the securities is subject to significant reinvestment risk. The rate of principal payments on your securities is uncertain. You may be unable to reinvest the payments on your securities at the same returns provided by the securities. Lower prevailing interest rates may result in an unexpected return of principal. In that interest rate climate, higher yielding reinvestment opportunities may be limited. Conversely, higher prevailing interest rates may result in slower returns of principal, and you may not be able to take advantage of higher yielding investment opportunities. The final payment on your security may occur much earlier than the final distribution date.

Support securities will be more sensitive to rates of principal payments than other securities. If principal prepayments result in principal distributions on any distribution date equal to or less than the amount needed to produce scheduled payments on the PAC classes, the related support class will not receive any principal distribution on that date. If prepayments result in principal distributions on any distribution date greater than the amount needed to produce scheduled payments on the PAC classes for that distribution date, this excess will be distributed to the related support class.

The rate of payments on the underlying certificates will directly affect the rate of payments on the group 4 and 9 securities. The underlying certificates will be sensitive in varying degrees to:

- the rate of payments of principal (including prepayments) of the related mortgage loans, and
- the priorities for the distribution of principal among the classes of the related underlying series.

As described in the related underlying certificate disclosure documents, the reductions in notional balances of certain of the underlying certificates included in trust asset group 4 on any payment date are calculated, directly or indirectly, on the basis of schedules; no assurance can be given that the underlying certificates will adhere to their schedules. Further, prepayments on the related mortgage loans may have occurred at rates faster or slower than those initially assumed.

This supplement contains no information as to whether the related classes with which the notional underlying certificates reduce have adhered to any applicable principal balance schedules, whether any related supporting classes remain outstanding or whether the underlying certificates otherwise have performed as originally anticipated. Additional information as to the underlying certificates may be obtained by performing an analysis of current principal factors of the underlying certificates in light of applicable information contained in the related underlying certificate disclosure documents.

Up to 10% of the mortgage loans underlying the group 1, 2, 3, 5, 6, 7, 8 and 10 trust assets and up to 100% of the mortgage loans underlying the group 4 and 9 trust assets may be higher balance mortgage loans. Subject to special pooling parameters set forth in the Ginnie Mae Mortgage-Backed Securities Guide, qualifying federally-insured or guaranteed mortgage loans that exceed certain balance thresholds established by Ginnie Mae ("higher balance mortgage loans") may be included in Ginnie Mae guaranteed pools. There are no historical performance data regarding the prepayment rates for higher balance mortgage loans. If the higher balance mortgage loans prepay faster or slower than expected, the weighted average lives and yields of the related securities are likely to be affected, perhaps significantly. Furthermore, higher balance mortgage loans tend to be concentrated in certain geographic areas, which may experience relatively higher rates of defaults in the event of adverse economic conditions. No assurances can be given about the prepayment experience or performance of the higher balance mortgage loans.

Changes to, the elimination of, and uncertainty with respect to, LIBOR could adversely affect your investment. As discussed under "Description of the Securities -Interest Rate Indices — Determination of LIBOR — ICE LIBOR" in the base offering circular, all LIBOR tenors relevant to the securities will cease to be published or will no longer be representative after June 30, 2023. Investors in financial instruments linked to LIBOR will likely experience disparate outcomes based on relevant contractual terms and related amendment provisions, market or product type, jurisdiction, and a host of other factors. There can be no assurance that legislative or regulatory actions will dictate what happens when LIBOR ceases to be available or is no longer representative or if such actions will provide a viable alternative or substitute rate for LIBOR. In addition, although the Alternative Reference Rates Committee ("ARRC") was created to identify best practices for market participants regarding alternative interest rates, there can be no assurance that broadly accepted industry practices will develop either before or after LIBOR ceases to be available or is no longer representative. It is not possible to predict the impact that disparate outcomes, the availability or unavailability of LIBOR or alternative rates, divergent industry practices or any other reforms related to LIBOR that may be adopted in the U.S., U.K. or elsewhere will have on the performance, trading market or value of financial instruments, including securities with an interest rate based on LIBOR ("LIBOR classes").

With respect to the LIBOR classes, on March 8, 2021 the ARRC confirmed that a "benchmark transition event" occurred on March 5, 2021, when the U.K. Financial Conduct Authority and ICE Benchmark Administration announced that the LIBOR tenors relevant to the LIBOR classes will cease to be published or will no longer be representative after June 30, 2023. Consequently, effective June 30, 2023 (the related "benchmark replacement date"), Ginnie Mae will select a replacement interest rate, including index, methodology, spread or other related adjustment, in accordance with the ARRC Endorsed Terms, as described under "Description of the Securities — Interest Rate Indices — Determination of LIBOR"

in the base offering circular. The ARRC Endorsed Terms, however, generally rely on actions to be taken by regulators or the ARRC, and there can be no assurance whether or when those actions will be taken. Further, there can be no assurance that those actions or related events will align with similar events in the market generally or in other parts of the financial markets, such as the derivatives market.

The ARRC Endorsed Terms provide for various alternative benchmarks based on availability: the first two alternatives involve SOFR, and the last two alternatives are not currently specified. SOFR is a secured, risk-free, overnight rate that is calculated based on different criteria than LIBOR, which is an unsecured rate reflecting counterparty risk. See "Description of the Securities - Interest Rate Indices — Determination of SOFR — General" in the base offering circular for more information about SOFR and the market for securities indexed to SOFR. Accordingly, SOFR and LIBOR may diverge, particularly in times of macroeconomic stress. The Federal Reserve Bank of New York began to publish SOFR in April 2018 and has published historical indicative SOFR and accompanying volumes from August 2014 to March 2018. The Federal Reserve Bank of New York also began to publish 30-, 90- and 180-day compounded averages of SOFR in March 2020. Investors should not rely on historical changes or trends in SOFR as indicative of future changes. Over the lives of LIBOR classes, SOFR may diverge from historical or indicative data.

Term SOFR, which is the first alternative benchmark specified in the ARRC Endorsed Terms, is a prospective term rate based on SOFR that is expected to be the CME Term SOFR Reference Rate published by the CME Group. CME Group's term SOFR rate is a relatively new rate recommended by the ARRC on July 29, 2021. If CME Group's term SOFR rate is available and recommended for the applicable tenor as of the benchmark replacement date and is operationally feasible, Ginnie Mae will select CME Group's term SOFR rate as the benchmark replacement for LIBOR classes in accordance with the ARRC Endorsed Terms. If term SOFR is unavailable as of the benchmark replacement date, the next alternative benchmark is compounded SOFR. As

a benchmark replacement for LIBOR, compounded SOFR is a compounded average for which there are multiple methodologies that may also diverge from LIBOR. In addition, the methodology for calculating compounded SOFR as a LIBOR replacement may differ from the methodology for calculating Compounded SOFR SOFR classes, as described "Description of the Securities - Interest Distributions — Floating Rate and Inverse Floating Rate Classes" in this supplement. There can be no assurance that compounded SOFR as a LIBOR replacement will be the same as, or similar to, Compounded SOFR for SOFR classes.

If a benchmark replacement other than term SOFR is chosen because term SOFR is not available, term SOFR would become the benchmark replacement if it later becomes available, which could lead to further volatility in the interest rates on LIBOR classes. Moreover, a benchmark replacement adjustment will be applied to compensate for the foregoing effects of any benchmark replacement. However, no assurance can be provided that any benchmark replacement adjustment will be sufficient to produce the economic equivalent of the then-current benchmark, either at the benchmark replacement date or over the lives of LIBOR classes. Additionally, Ginnie Mae cannot anticipate how long it will take to develop the systems and processes necessary to adopt a specific benchmark replacement, which may delay and contribute to uncertainty and volatility surrounding any benchmark transition for LIBOR classes.

Ginnie Mae will have sole discretion with respect to certain elements of the benchmark replacement process, including determining which benchmark replacement is available, determining the earliest practicable index determination date for using the benchmark replacement, selecting a benchmark replacement in the event term SOFR or compounded SOFR is unavailable, determining benchmark replacement adjustments (if not otherwise determined by applicable governing bodies or authorities) and making benchmark replacement conforming changes (including potential changes affecting the business day convention and index determination date). If

Ginnie Mae, in its sole discretion, determines that an alternative rate is not administratively feasible, including as a result of technical, administrative or operational issues, then such alternative rate will be deemed not determinable as of such date. Ginnie Mae may determine an alternative not to be administratively feasible even if such alternative rate has been adopted by other market participants in similar products. Furthermore, if Ginnie Mae does not select an alternative rate on any date as a result of its determination that an alternative higher on the list of ARRC Endorsed Terms is not administratively feasible as of such date and such higher alternative subsequently becomes administratively feasible (as determined by Ginnie Mae in its sole discretion), then Ginnie Mae may elect to replace the previously selected alternative with such higher alternative. Any of the foregoing determinations will be at the sole discretion of Ginnie Mae and may adversely affect the return on LIBOR classes, the trading market for such classes and the value of such classes. None of the foregoing determinations, or the application thereof to payment calculations on LIBOR classes, will be subject to the approval of security holders.

Notwithstanding the foregoing, Ginnie Mae will select only an alternative rate as to which it and the trustee will receive an opinion of counsel that the selection of such alternative rate will not cause any related Trust REMIC to lose its classification as a REMIC for United States federal income tax purposes.

An investment in the group 1, 6 and 10 floating rate and inverse floating rate securities entails risks not associated with an investment in conventional fixed rate securities or securities linked to established market indices. The Federal Reserve Bank of New York began to publish SOFR in April 2018 and compounded averages of SOFR in March 2020. Although the Federal Reserve Bank of New York has also published historical indicative SOFR from August 2014 to March 2018, such prepublication data necessarily involves assumptions, estimates and approximations. You should not rely on any historical changes or trends in SOFR as an indicator of future changes in SOFR.

Daily shifts in SOFR have been, and may in the future be, greater than those in comparable market indices. Because the interest rate applicable to any accrual period for securities with an interest rate based on SOFR will be calculated by reference to the daily rates of SOFR during an approximate 30-day period commencing and ending before the related accrual period as described under "Description of the Securities — Interest Distributions — Floating Rate and Inverse Floating Rate Classes" in this supplement, the return on and value of the group 1, 6 and 10 floating rate and inverse floating rate securities may fluctuate more than debt securities linked to less volatile indices.

SOFR is a relatively new market index, and the group 1, 6 and 10 floating rate and inverse floating rate securities will likely have no established trading market when issued, and an established trading market may never develop or, if developed, may not be liquid. Investment in the group 1, 6 and 10 floating rate and inverse floating rate securities carries additional pricing volatility, illiquidity and market risk, as discussed in more detail under "Description of the Securities — Interest Rate Indices — Determination of SOFR — General" in the base offering circular.

The interest rates of the group 1, 6 and 10 floating rate and inverse floating rate securities will be based on Compounded SOFR. Ginnie Mae may, in its sole discretion and without the consent of security holders or any other party, convert the interest rates of the group 1, 6 and 10 floating rate and inverse floating rate securities from Compounded SOFR to term SOFR. In connection with that conversion, Ginnie Mae may, in its sole discretion and without the consent of security holders or any other party, change the calculation methodology or spread, add or subtract a rate adjustment and make other conforming changes with respect to the group 1, 6 and 10 floating rate and inverse floating rate securities, as described under "Description of the Securities -Interest Rate Indices — Replacement Rate Conforming Changes" in the base offering circular. There can be no assurance that the interest rates of the group 1, 6 and 10 floating rate and inverse floating rate securities will ever be based on term

SOFR or, if based on term SOFR in the future, that the resulting interest rates will yield the same or similar economic results over the lives of the affected securities relative to the results that would have occurred had the interest rates remained based on Compounded SOFR or that the market value will not decrease due to the move from Compounded SOFR to term SOFR.

All aspects of the conversion will be at the sole discretion of Ginnie Mae, which could lead to volatility in the interests rates of or adversely affect the return on the group 1, 6 and 10 floating rate and inverse floating rate securities, the trading market for such securities and the value of such securities.

You should consult your own financial and legal advisors about the risks associated with an investment in the group 1, 6 and 10 floating rate and inverse floating rate securities and the suitability of investing in the group 1, 6 and 10 floating rate and inverse floating rate securities in light of your particular circumstances.

Interest on the group 1, 6 and 10 floating rate and inverse floating rate securities will be determined using a replacement rate if SOFR is no longer available, which could adversely affect the value of your investment in the group 1, 6 and 10 floating rate and inverse floating rate securities. Because SOFR is published by the Federal Reserve Bank of New York based on data received from other sources, neither Ginnie Mae nor the trustee has any control over its determination, calculation or publication. The Federal Reserve Bank of New York has noted that it may alter the methods of calculation, publication schedule, rate revision practices or availability of SOFR at any time without notice. There can be no assurance that SOFR will not be discontinued or fundamentally altered in a manner that is materially adverse to the interests of investors in the group 1, 6 and 10 floating rate and inverse floating rate securities.

If SOFR is no longer published or cannot be used, the amount of interest payable on the group 1, 6 and 10 floating rate and inverse floating rate securities will be determined using a

replacement described rate, as "Description of the Securities - Interest Rate Indices — Determination of SOFR" in the base offering circular. Ginnie Mae will have the sole discretion to make conforming changes in connection with any replacement rate without the consent of security holders or any other party, as described under "Description of the Securities — Interest Rate Indices" in the base offering circular. This could reduce the amount of interest payable on the group 1, 6 and 10 floating rate and inverse floating rate securities, which could adversely affect the return on, value of, and market for, the group 1, 6 and 10 floating rate and inverse floating rate securities. Furthermore, there can be no assurance that the characteristics of any replacement rate will be similar to SOFR or that any replacement rate will produce the economic equivalent of SOFR.

The securities may not be a suitable investment for you. The securities, especially the group 4 and 9 securities and, in particular, the support, interest only, accrual and residual classes, are not suitable investments for all investors.

In addition, although the sponsor intends to make a market for the purchase and sale of the securities after their initial issuance, it has no obligation to do so. There is no assurance that a secondary market will develop, that any secondary market will continue, or that the price at which you can sell an investment in any class will enable you to realize a desired yield on that investment.

You will bear the market risks of your investment. The market values of the classes are likely to fluctuate. These fluctuations may be significant and could result in significant losses to you.

The secondary markets for mortgage-related securities have experienced periods of illiquidity and can be expected to do so in the future. Illiquidity can have a severely adverse effect on the prices of classes that are especially sensitive to prepayment or interest rate risk or that have been structured to meet the investment requirements of limited categories of investors.

The residual securities may experience significant adverse tax timing consequences. Accordingly, you are urged to consult tax advisors and to consider the after-tax effect of ownership of a residual security and the suitability of the residual securities to your investment objectives. See "Certain United States Federal Income Tax Consequences" in this supplement and in the base offering circular.

You are encouraged to consult advisors regarding the financial, legal, tax and other aspects of an investment in the securities. You should not purchase the securities of any class unless you understand and are able to bear the prepayment, yield, liquidity and market risks associated with that class.

# The actual characteristics of the underlying mortgage loans will affect the weighted average lives and yields of your securities.

The yield and decrement tables in this supplement are based on assumed characteristics which are likely to be different from the actual characteristics. As a result, the yields on your securities could be lower than you expected, even if the mortgage loans prepay at the constant prepayment rates set forth in the applicable table.

It is highly unlikely that the underlying mortgage loans will prepay at any of the prepayment rates assumed in this supplement, or at any constant prepayment rate.

#### THE TRUST ASSETS

#### General

The Sponsor intends to acquire the Trust Assets in privately negotiated transactions prior to the Closing Date and to sell them to the Trust according to the terms of a Trust Agreement between the Sponsor and the Trustee. The Sponsor will make certain representations and warranties with respect to the Trust Assets. All Trust Assets, regardless of whether the assets consist of Trust MBS or the Underlying Certificates, will evidence, directly or indirectly, Ginnie Mae Certificates.

# The Trust MBS (Groups 1, 2, 3, 5, 6, 7, 8 and 10)

The Trust MBS are either:

- 1. Ginnie Mae II MBS Certificates guaranteed by Ginnie Mae, or
- 2. Ginnie Mae Platinum Certificates backed by Ginnie Mae II MBS Certificates and guaranteed by Ginnie Mae.

Each Mortgage Loan underlying a Ginnie Mae II MBS Certificate issued prior to July 1, 2003 bears interest at a Mortgage Rate 0.50% to 1.50% per annum greater than the related Certificate Rate. Each Mortgage Loan underlying a Ginnie Mae II MBS Certificate issued on or after July 1, 2003 bears interest at a Mortgage Rate 0.25% to 0.75% per annum greater than the related Certificate Rate. Ginnie Mae receives a fee (the "Ginnie Mae Certificate Guaranty Fee") for its guaranty of each Ginnie Mae II MBS Certificate of 0.06% per annum of the outstanding principal balance of each related Mortgage Loan. The difference between (a) the Mortgage Rate and (b) the sum of the Certificate Rate and the rate of the Ginnie Mae Certificate Guaranty Fee is used to pay the related servicers of the Mortgage Loans a monthly servicing fee.

#### The Underlying Certificates (Groups 4 and 9)

The Group 4 and 9 Trust Assets are Underlying Certificates that represent beneficial ownership interests in one or more separate trusts, the assets of which evidence direct or indirect beneficial ownership interests in certain Ginnie Mae Certificates. Each Underlying Certificate constitutes all or a portion of a class of a separate Series of certificates described in the related Underlying Certificate Dis-

closure Document. Each Underlying Certificate Disclosure Document may be obtained from the Information Agent as described under "Available Information" in this Supplement or on ginniemae.gov. Investors are cautioned that material changes in facts and circumstances may have occurred since the date of each Underlying Certificate Disclosure Document, including changes in prepayment rates, prevailing interest rates and other economic factors, which may limit the usefulness of, and be directly contrary to the assumptions used in preparing the information included in, the offering document. See "Underlying Certificates" in the Base Offering Circular.

Each Underlying Certificate provides for monthly distributions and is further described in the table contained in Exhibit A to this Supplement.

# The Mortgage Loans

The Mortgage Loans underlying the Group 1, 2, 3, 5, 6, 7, 8 and 10 Trust Assets are expected to have, on a weighted average basis, the characteristics set forth in the Terms Sheet under "Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 5, 6, 7, 8 and 10 Trust Assets" and the general characteristics described in the Base Offering Circular. The Mortgage Loans will consist of first lien, single-family, fixed rate, residential mortgage loans that are insured or guaranteed by the Federal Housing Administration, the United States Department of Veterans Affairs, Rural Development (formerly the Rural Housing Service) or the United States Department of Housing and Urban Development ("HUD"). See "The Ginnie Mae Certificates — General" in the Base Offering Circular.

Specific information regarding the characteristics of the Mortgage Loans underlying the Trust MBS is not available. For purposes of this Supplement, certain assumptions have been made regarding the remaining terms to maturity, loan ages and Mortgage Rates of the Mortgage Loans underlying the Trust MBS. However, the actual remaining terms to maturity, loan ages and Mortgage Rates of many of the Mortgage Loans will differ from the characteristics assumed, perhaps significantly. This will be the case even if the weighted average characteristics of the Mortgage Loans are the same as the assumed characteristics. Small differences in the characteristics of the Mortgage Loans can have a significant effect on the Weighted Average Lives and yields of the Securities. See "Risk Factors" and "Yield, Maturity and Prepayment Considerations" in this Supplement.

#### The Trustee Fee

The Sponsor will contribute certain Ginnie Mae Certificates in respect of the Trustee Fee. On each Distribution Date, the Trustee will retain all principal and interest distributions received on such Ginnie Mae Certificates in payment of the Trustee Fee.

#### **GINNIE MAE GUARANTY**

The Government National Mortgage Association ("Ginnie Mae"), a wholly-owned corporate instrumentality of the United States of America within HUD, guarantees the timely payment of principal and interest on the Securities. The General Counsel of HUD has provided an opinion to the effect that Ginnie Mae has the authority to guarantee multiclass securities and that Ginnie Mae guaranties will constitute general obligations of the United States, for which the full faith and credit of the United States is pledged. See "Ginnie Mae Guaranty" in the Base Offering Circular.

#### **DESCRIPTION OF THE SECURITIES**

#### General

The description of the Securities contained in this Supplement is not complete and is subject to, and is qualified in its entirety by reference to, all of the provisions of the Trust Agreement. See "Description of the Securities" in the Base Offering Circular.

#### Form of Securities

Each Class of Securities other than the Residual Securities initially will be issued and maintained, and may be transferred only on the Fedwire Book-Entry System. Beneficial Owners of Book-Entry Securities will ordinarily hold these Securities through one or more financial intermediaries, such as banks, brokerage firms and securities clearing organizations that are eligible to maintain book-entry accounts on the Fedwire Book-Entry System. By request accompanied by the payment of a transfer fee of \$25,000 per Certificated Security to be issued, a Beneficial Owner may receive a Regular Security in certificated form.

The Residual Securities will not be issued in book-entry form but will be issued in fully registered, certificated form and may be transferred or exchanged, subject to the transfer restrictions applicable to Residual Securities set forth in the Trust Agreement, at the Corporate Trust Office of the Trustee. See "Description of the Securities — Forms of Securities; Book-Entry Procedures" in the Base Offering Circular.

Each Regular and MX Class (other than the Increased Minimum Denomination Classes) will be issued in minimum dollar denominations of initial principal balance of \$1,000 and integral multiples of \$1 in excess of \$1,000. The Increased Minimum Denomination Classes will be issued in minimum denominations that equal \$100,000 in initial notional balance.

#### Distributions

Distributions on the Securities will be made on each Distribution Date as specified under "Terms Sheet — Distribution Date" in this Supplement. On each Distribution Date for a Security, or in the case of the Certificated Securities, on the first Business Day after the related Distribution Date, the Distribution Amount will be distributed to the Holders of record as of the related Record Date. Beneficial Owners of Book-Entry Securities will receive distributions through credits to accounts maintained for their benefit on the books and records of the appropriate financial intermediaries. Holders of Certificated Securities will receive distributions by check or, subject to the restrictions set forth in the Base Offering Circular, by wire transfer. See "Description of the Securities — Distributions" and "— Method of Distributions" in the Base Offering Circular.

#### **Interest Distributions**

The Interest Distribution Amount will be distributed on each Distribution Date to the Holders of all Classes of Securities entitled to distributions of interest.

- Interest will be calculated on the basis of a 360-day year consisting of twelve 30-day months.
- Interest distributable (or accrued in the case of an Accrual Class) on any Class for any Distribution Date will consist of 30 days' interest on its Class Principal Balance (or Class Notional Balance) as of the related Record Date.
- Investors can calculate the amount of interest to be distributed (or accrued in the case of an Accrual Class) on each Class of Securities for any Distribution Date by using the Class Factors published in the preceding month. See "— Class Factors" below.

# Categories of Classes

For purposes of interest distributions, the Classes will be categorized as shown under "Interest Type" on the front cover of this Supplement and on Schedule I to this Supplement. The abbreviations used in this Supplement to describe the interest entitlements of the Classes are explained under "Class Types" in Appendix I to the Base Offering Circular.

#### Accrual Periods

The Accrual Period for each Regular and MX Class is set forth in the table below:

| Class                     | Accrual Period  |  |  |  |
|---------------------------|---|--|--|--|
| Fixed Rate Classes        | The calendar month preceding the related Distribution Date        |  |  |  |
| Floating Rate and Inverse | From the 20th day of the month preceding the month of the related |  |  |  |
| Floating Rate Classes     | Distribution Date through the 19th day of the month of that       |  |  |  |
|                           | Distribution Date   |  |  |  |

#### Fixed Rate Classes

Each Fixed Rate Class will bear interest at the per annum Interest Rate shown on the front cover of this Supplement or on Schedule I to this Supplement.

#### Floating Rate and Inverse Floating Rate Classes

The Floating Rate and Inverse Floating Rate Classes will bear interest as shown under "Terms Sheet — Interest Rates" in this Supplement. The Interest Rate for Class AS will be based on LIBOR. The Trustee or its agent will determine LIBOR on the basis of the ICE LIBOR method, as described under "Description of the Securities — Interest Rate Indices — Determination of LIBOR" in the Base Offering Circular. In the case of the Group 4 Securities, the Trustee or its agent will use the same values of LIBOR as are used for the related Underlying Certificates.

We can provide no assurance that LIBOR for a Distribution Date accurately represents the offered rate at which one-month U.S. dollar deposits are being quoted to prime banks in the London interbank market, nor that the procedures for calculating LIBOR on the basis of the ICE LIBOR method for one-month U.S. dollar deposits will not change. Any change in LIBOR values resulting from any change in reporting or in the determination of LIBOR may cause LIBOR to fluctuate disproportionately to changes in other market lending rates. When LIBOR ceases to be published or becomes no longer representative, a replacement rate will be selected, as described under "Description of the Securities — Interest Rate Indices —Determination of LIBOR" in the Base Offering Circular.

The Interest Rate for the Floating Rate and Inverse Floating Rate Classes (other than Class AS) will be based initially on Compounded SOFR with a Corresponding Tenor of 30 days. The Trustee or its agent will determine Compounded SOFR as described under "Description of the Securities — Interest Rate Indices — Determination of SOFR" in the Base Offering Circular.

At any time, Ginnie Mae may, in its sole discretion and without the consent of security holders or any other party, designate Term SOFR and related positive or negative adjustments, spreads or methodology changes as a Replacement Rate for the Floating Rate and Inverse Floating Rate Classes (other than Class AS) and instruct the Trustee in writing to replace Compounded SOFR with such Replacement Rate for all purposes relating to such Classes in respect of such determination on such date and all determinations on subsequent dates. Ginnie Mae will not do so unless Ginnie Mae and the Trustee receive a Replacement Rate Tax Opinion. In connection with the implementation of Term SOFR as a Replacement

Rate for SOFR Classes, Ginnie Mae will have the right to make other Conforming Changes from time to time without the consent of security holders or any other party, as described under "Description of the Securities — Interest Rate Indices" and " — Interest Rate Indices — Determination of SOFR — Conversion of Simple SOFR and Compounded SOFR Classes to Term SOFR" in the Base Offering Circular.

If SOFR ceases to be available or is no longer representative, a replacement rate will be selected, as described under "Description of the Securities — Interest Rate Indices — Determination of SOFR" in the Base Offering Circular.

The Trustee's determination of LIBOR and Compounded SOFR and its calculation of the Interest Rates will be final except in the case of clear error. Investors can obtain LIBOR and Compounded SOFR levels and Interest Rates for the current and preceding Accrual Periods on ginniemae.gov or by calling the Information Agent at (800) 234-GNMA.

#### Accrual Classes

Each of Classes EZ, GZ, KZ, MZ and ZJ is an Accrual Class. Interest will accrue on the Accrual Classes and be distributed as described under "Terms Sheet — Accrual Classes" in this Supplement.

# **Principal Distributions**

The Principal Distribution Amount for each Group and each Accrual Amount will be distributed to the Holders entitled thereto as described under "Terms Sheet — Allocation of Principal" in this Supplement. Investors can calculate the amount of principal to be distributed with respect to any Distribution Date by using the Class Factors published in the preceding and current months. See "— Class Factors" below.

#### Categories of Classes

For purposes of principal distributions, the Classes will be categorized as shown under "Principal Type" on the front cover of this Supplement and on Schedule I to this Supplement. The abbreviations used in this Supplement to describe the principal entitlements of the Classes are explained under "Class Types" in Appendix I to the Base Offering Circular.

# Notional Classes

The Notional Classes will not receive principal distributions. For convenience in describing interest distributions, the Notional Classes will have the original Class Notional Balances shown on the front cover of this Supplement and on Schedule I to this Supplement. The Class Notional Balances will be reduced as shown under "Terms Sheet — Notional Classes" in this Supplement.

#### **Residual Securities**

The Class R1 Securities, Class R2 Securities, Class R3 Securities, Class R4 Securities, Class R5 Securities, Class R6 Securities, Class R8 Securities and Class R9 Securities will represent the beneficial ownership of the Residual Interest in the Group 1 REMIC, the Group 2 REMIC, the Group 3 REMIC, the Group 4 REMIC, the Group 5 REMIC, the Group 6 REMIC, the Group 8 REMIC and the Group 9 REMIC, respectively, as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular. The Class RR7 Securities will represent the beneficial ownership of the Residual Interest in the Group 7 Issuing REMIC and the beneficial ownership of the Residual Interest in the Group 10 Issuing REMIC and the beneficial ownership of the Residual Interest in the Group 10 Pooling REMIC, as described in "Certain United States Federal Income Tax Consequences" in

the Base Offering Circular. The Class R1, R2, R3, R4, R5, R6, RR7, R8, R9 and RR10 Securities have no Class Principal Balance and do not accrue interest. The Class R1, R2, R3, R4, R5, R6, RR7, R8, R9 and RR10 Securities will be entitled to receive the proceeds of the disposition of any assets remaining in the related Trust REMIC or Trust REMICs, as applicable, after the Class Principal Balance or Class Notional Balance of each Class of Regular Securities in the related Security Group has been reduced to zero. However, any remaining proceeds are not likely to be significant. The Residual Securities may not be transferred to a Plan Investor, a Non-U.S. Person or a Disqualified Organization.

#### **Class Factors**

The Trustee will calculate and make available for each Class of Securities, no later than the day preceding the Distribution Date, the factor (carried out to eight decimal places) that when multiplied by the Original Class Principal Balance (or original Class Notional Balance) of that Class, determines the Class Principal Balance (or Class Notional Balance) after giving effect to the distribution of principal to be made on the Securities (and any addition to the Class Principal Balance of an Accrual Class) or any reduction of Class Notional Balance on that Distribution Date (each, a "Class Factor").

- The Class Factor for any Class of Securities for each month following the issuance of the Securities will reflect its remaining Class Principal Balance (or Class Notional Balance) after giving effect to any principal distribution (or addition to principal) to be made or any reduction of Class Notional Balance on the Distribution Date occurring in that month.
- The Class Factor for each Class for the month of issuance is 1.00000000.
- The Class Factors for the MX Classes and the Classes of REMIC Securities that are exchangeable for the MX Classes will be calculated assuming that the maximum possible amount of each Class is outstanding at all times, regardless of any exchanges that may occur.
- Based on the Class Factors published in the preceding and current months (and Interest Rates), investors in any Class (other than an Accrual Class) can calculate the amount of principal and interest to be distributed to that Class and investors in an Accrual Class can calculate the total amount of principal to be distributed to (or interest to be added to the Class Principal Balance of) that Class on the Distribution Date in the current month.
- Investors may obtain current Class Factors on ginniemae.gov.

See "Description of the Securities — Distributions" in the Base Offering Circular.

#### **Termination**

The Trustee, at its option, may purchase or cause the sale of the Trust Assets and thereby terminate the Trust on any Distribution Date on which the aggregate of the Class Principal Balances of the Securities is less than 1% of the aggregate Original Class Principal Balances of the Securities. On any Distribution Date upon the Trustee's determination that the REMIC status of any Trust REMIC has been lost or that a substantial risk exists that this status will be lost for the then current taxable year, the Trustee will terminate such Trust REMIC and any related Trust REMIC and retire the related Securities.

For these purposes, the Trust REMICs and the Securities with corresponding numerical designations are related as follows:

| Trust REMICs                        | Related Securities  |
|-------------------------------------|---------------------|
| Group 1 REMIC                       | Group 1 Securities  |
| Group 2 REMIC                       | Group 2 Securities  |
| Group 3 REMIC                       | Group 3 Securities  |
| Group 4 REMIC                       | Group 4 Securities  |
| Group 5 REMIC                       | Group 5 Securities  |
| Group 6 REMIC                       | Group 6 Securities  |
| Group 7 Issuing and Pooling REMICs  | Group 7 Securities  |
| Group 8 REMIC                       | Group 8 Securities  |
| Group 9 REMIC                       | Group 9 Securities  |
| Group 10 Issuing and Pooling REMICs | Group 10 Securities |

Upon any termination of the Trust (or one or more related Trust REMICs), the Holder of any related outstanding Security (other than a Residual or Notional Class Security) will be entitled to receive that Holder's allocable share of the Class Principal Balance of that Class plus any accrued and unpaid interest thereon at the applicable Interest Rate, and any Holder of any related outstanding Notional Class Security will be entitled to receive that Holder's allocable share of any accrued and unpaid interest thereon at the applicable Interest Rate. The Residual Holders will be entitled to their pro rata share of any assets remaining in the related Trust REMIC or Trust REMICs, as applicable, after payment in full of the amounts described in the foregoing sentence. However, any remaining assets are not likely to be significant.

With respect to each of Security Groups 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10, a Holder of all of the outstanding Regular Securities of any such Security Group and the related Class of Residual Securities will have the right to purchase the related Trust Assets upon three Business Days' notice (the "Notice Period"). The purchase will be for cash in an amount equal to (A)(i) the aggregate remaining principal balance of the assets of such Security Group, but in no event less than the aggregate outstanding principal amount of the Securities of such Security Group, plus (ii) accrued interest on the Securities of such Security Group, less (B) amounts on deposit in the related Trust REMIC or Trust REMICs, as applicable, for distribution on the Securities of such Security Group, plus (C) a \$5,000 termination fee payable to the Trustee in connection with each Security Group to be terminated. After the Notice Period, and upon such purchase, the Trustee will terminate the related Trust REMIC or Trust REMICs, as applicable. Upon such termination, the Trustee will distribute the cash proceeds of the sale of the related Trust Assets to the Holder of the related Securities (which distribution may be offset against amounts due on the sale of such assets), will cancel the Securities of the related Security Group and cause the removal from the Book-Entry Depository Account of all Classes of the related Security Group, will cancel the related Class of Residual Securities, and will credit the remaining Trust Assets in the related Security Group to the account of the surrendering Holder. Notwithstanding anything to the contrary contained herein, no such termination will be allowed unless the Trustee and Ginnie Mae are provided, at no cost to either the Trustee or Ginnie Mae, an Opinion of Counsel, acceptable to the Trustee and Ginnie Mae, to the effect that such termination constitutes a "qualified liquidation" under the REMIC Provisions, including Section 860F(a)(4) of the Code, and such termination will not result in a disqualification of any Trust REMIC that is not terminated at such time or the imposition of any "prohibited transactions" or "contributions" tax under the REMIC Provisions on any Trust REMIC that is not terminated at such time.

# **Modification and Exchange**

All or a portion of the Classes of REMIC Securities specified on the front cover may be exchanged for a proportionate interest in the related MX Class shown on Schedule I to this Supplement. Similarly, all or a portion of the related MX Class may be exchanged for proportionate interests in the related Classes of REMIC Securities. This process may occur repeatedly.

Each exchange may be effected only in proportions that result in the principal and interest entitlements of the Securities received being equal to the entitlements of the Securities surrendered.

A Beneficial Owner proposing to effect an exchange must notify the Trustee through the Beneficial Owner's Book-Entry Depository participant. This notice must be received by the Trustee not later than two Business Days before the proposed exchange date. The exchange date can be any Business Day other than the last Business Day of the month. The notice must contain the outstanding principal or notional balances of the Securities to be included in the exchange and the proposed exchange date. The notice is required to be delivered to the Trustee by email to USBGNMATeam@USBank.com or in writing at its Corporate Trust Office at U.S. Bank National Association, One Federal Street, 3rd Floor, Boston, MA 02110, Attention: Ginnie Mae REMIC Program Agency Group 2022-083. The Trustee may be contacted by telephone at (617) 603-6451 and by fax at (617) 603-6644.

A fee will be payable to the Trustee in connection with each exchange equal to  $\frac{1}{32}$  of 1% of the outstanding principal balance (or notional balance) of the Securities surrendered for exchange (but not less than \$2,000 or more than \$25,000); provided, however, that no fee will be payable in respect of an interest only security unless all securities involved in the exchange are interest only securities. The fee must be paid concurrently with the exchange.

The first distribution on a REMIC Security or an MX Security received in an exchange will be made on the Distribution Date in the month following the month of the exchange. The distribution will be made to the Holder of record as of the Record Date in the month of exchange.

See "Description of the Securities — Modification and Exchange" in the Base Offering Circular.

#### YIELD, MATURITY AND PREPAYMENT CONSIDERATIONS

#### General

The prepayment experience of the Mortgage Loans will affect the Weighted Average Lives of and the yields realized by investors in the related Securities.

- The Mortgage Loans do not contain "due-on-sale" provisions, and any Mortgage Loan may be prepaid in full or in part at any time without penalty.
- The rate of payments (including prepayments and payments in respect of liquidations) on the Mortgage Loans is dependent on a variety of economic, geographic, social and other factors, including prevailing market interest rates and general economic factors.

The rate of prepayments with respect to single-family mortgage loans has fluctuated significantly in recent years. Although there is no assurance that prepayment patterns for the Mortgage Loans will conform to patterns for more traditional types of conventional fixed rate mortgage loans, generally:

• if mortgage interest rates fall materially below the Mortgage Rates on any of the Mortgage Loans (giving consideration to the cost of refinancing), the rate of prepayment of those Mortgage Loans would be expected to increase; and

• if mortgage interest rates rise materially above the Mortgage Rates on any of the Mortgage Loans, the rate of prepayment of those Mortgage Loans would be expected to decrease.

In addition, following any Mortgage Loan default and the subsequent liquidation of the underlying Mortgaged Property, the principal balance of the Mortgage Loan will be distributed through a combination of liquidation proceeds, advances from the related Ginnie Mae Issuer and, to the extent necessary, proceeds of Ginnie Mae's guaranty of the Ginnie Mae Certificates. As a result, defaults experienced on the Mortgage Loans will accelerate the distribution of principal of the Securities.

The terms of the Mortgage Loans may be modified to permit, among other things, a partial release of security, which releases a portion of the mortgaged property from the lien securing the related Mortgage Loan. Partial releases of security may allow the related borrower to sell the released property and generate proceeds that may be used to prepay the related Mortgage Loan in whole or in part.

Under certain circumstances, the Trustee has the option to purchase the Trust Assets, thereby effecting early retirement of the Securities. See "Description of the Securities — Termination" in this Supplement.

Investors in the Group 4 and 9 Securities are urged to review the discussion under "Risk Factors — The rate of payments on the underlying certificates will directly affect the rate of payments on the group 4 and 9 securities" in this Supplement.

#### **Accretion Directed Classes**

Classes EA, FB, FJ, GV, KV, MH, MJ, ML, MP and MY are Accretion Directed Classes. The related Accrual Amounts will be applied to making principal distributions on those Classes as described in this Supplement. Each of Classes IM, JI, NI, SJ and TI is a Notional Class whose Class Notional Balance is determined by reference to the Class Principal Balance of the related Accretion Directed Class or Classes shown under "Terms Sheet — Notional Classes" in this Supplement.

Each of the Accretion Directed Classes (other than Class KV) has the AD designation in the suffix position, rather than the prefix position, in its class principal type because it does not have principal payment stability through the applicable pricing prepayment assumption. Classes GV and KV will have principal payment stability only through the prepayment rate shown in the table below. The remaining Accretion Directed Classes are not listed in the table below because, although they are entitled to receive payments from the related Accrual Amounts, they do not have principal payment stability through any constant prepayment rate significantly higher than 0% PSA, except within any applicable Effective Ranges.

The Accretion Directed Classes are entitled to principal payments in an amount equal to interest accrued on the related Accrual Classes. With respect to the Classes listed in the table below, the Weighted Average Life of each such Class cannot exceed its Weighted Average Life as shown in the following table under any constant prepayment scenario, even a scenario where there are no prepayments.

• Moreover, based on the Modeling Assumptions, if the related Mortgage Loans prepay at any constant rate at or below the rate for an Accretion Directed Class shown in the table below, the Class Principal Balance of such Class would be reduced to zero on, but not before, its Final Distribution Date, and the Weighted Average Life of such Class would equal its maximum Weighted Average Life shown in the table below.

• However, the Weighted Average Lives of Classes GV and KV will be reduced at prepayment speeds higher than the constant rates shown in the table below. See "Yield, Maturity and Prepayment Considerations — Decrement Tables" in this Supplement.

#### **Accretion Directed Classes**

| Group | Class | Maximum Weighted<br>Average Life<br>(in years) <sup>(1)</sup> | Final Distribution Date | Prepayment Rate<br>at or below |
|-------|-------|---|-------------------------|--------------------------------|
| 2     | GV    | 6.0   | September 2033          | 70% PSA                        |
| 8     | KV    | 6.0   | August 2033             | 274% PSA                       |

<sup>(1)</sup> The maximum Weighted Average Life for each Class shown in this table is based on the Modeling Assumptions and the assumption that the related Mortgage Loans prepay at any constant rate at or below the rate shown in the table for such Class.

The Mortgage Loans will have characteristics that differ from those of the Modeling Assumptions. Therefore, even if the related Mortgage Loans prepay at a rate at or somewhat below the "at or below" rate shown for Class GV or KV, the Class Principal Balance of such Class could be reduced to zero before its Final Distribution Date, and its Weighted Average Life could be shortened.

# Securities that Receive Principal on the Basis of Schedules

As described in this Supplement, each PAC Class will receive principal payments in accordance with a schedule calculated on the basis of, among other things, a Structuring Range. See "Terms Sheet — Scheduled Principal Balances." However, whether any such Class will adhere to its schedule and receive "Scheduled Payments" on a Distribution Date will largely depend on the level of prepayments experienced by the related Mortgage Loans.

Each PAC Class exhibits an Effective Range of constant prepayment rates at which such Class will receive Scheduled Payments. That range may differ from the Structuring Range used to create the related principal balance schedule. Based on the Modeling Assumptions, the *initial* Effective Ranges for the PAC Classes are as follows:

| Security<br>Group |  | Initial Effective Ranges  |
|-------------------|--|---------------------------|
|                   | PAC Classes                              |                           |
| 7                 | MH, MJ, ML, MP and MY (in the aggregate) | 200% PSA through 450% PSA |
| 10                | FB and FJ (in the aggregate)             | 250% PSA through 310% PSA |

 The principal payment stability of the PAC Classes will be supported by the related Support Class.

If the Class supporting a given Class is retired before the Class being supported is retired, the outstanding Class will no longer have an Effective Range and will become more sensitive to prepayments on the related Mortgage Loans.

There is no assurance that the related Mortgage Loans will have the characteristics assumed in the Modeling Assumptions, which were used to determine the initial Effective Ranges. If the initial Effective Ranges were calculated using the actual characteristics of the related Mortgage Loans, the initial Effective Ranges could differ from those shown in the above table. Therefore, even if the Mortgage Loans were to

prepay at a constant rate within the initial Effective Range shown for any Class in the above table, that Class could fail to receive Scheduled Payments.

Moreover, the related Mortgage Loans will not prepay at any *constant* rate. Non-constant prepayment rates can cause any PAC Class not to receive Scheduled Payments, even if prepayment rates remain within the initial Effective Range for that Class. Further, the Effective Range for any PAC Class can narrow, shift over time or cease to exist depending on the actual characteristics of the related Mortgage Loans.

If the related Mortgage Loans prepay at rates that are generally below the Effective Range for any PAC Class, the amount available to pay principal on the Securities may be insufficient to produce Scheduled Payments on such related PAC Class, and its Weighted Average Life may be extended, perhaps significantly.

If the related Mortgage Loans prepay at rates that are generally above the Effective Range for any PAC Class, its supporting Class may be retired earlier than that PAC Class, and its Weighted Average Life may be shortened, perhaps significantly.

## **Assumability**

Each Mortgage Loan may be assumed, subject to HUD review and approval, upon the sale of the related Mortgaged Property. See "Yield, Maturity and Prepayment Considerations — Assumability of Government Loans" in the Base Offering Circular.

#### **Final Distribution Date**

The Final Distribution Date for each Class, which is set forth on the front cover of this Supplement or on Schedule I to this Supplement, is the latest date on which the related Class Principal Balance or Class Notional Balance will be reduced to zero.

- The actual retirement of any Class may occur earlier than its Final Distribution Date.
- According to the terms of the Ginnie Mae Guaranty, Ginnie Mae will guarantee payment in full of the Class Principal Balance of each Class of Securities no later than its Final Distribution Date.

#### **Modeling Assumptions**

Unless otherwise indicated, the tables that follow have been prepared on the basis of the characteristics of the Underlying Certificates, the priorities of distributions on the Underlying Certificates and the following assumptions (the "Modeling Assumptions"), among others:

- 1. The Mortgage Loans underlying the Group 1, 2, 3, 5, 6, 7, 8 and 10 Trust Assets have the assumed characteristics shown under "Assumed Characteristics of the Mortgage Loans Underlying the Group 1, 2, 3, 5, 6, 7, 8 and 10 Trust Assets" in the Terms Sheet, except in the case of information set forth under the 0% PSA Prepayment Assumption Rate, for which each Mortgage Loan underlying a Group 1, 2, 3, 5, 6, 7, 8 or 10 Trust Asset is assumed to have an original and a remaining term to maturity of 360 months and a Mortgage Rate of 1.50% per annum higher than the related Certificate Rate.
- 2. The Mortgage Loans prepay at the constant percentages of PSA (described below) shown in the related table.
- 3. Distributions on the Securities are always received on the 20th day of the month, whether or not a Business Day, commencing in June 2022.
  - 4. A termination of the Trust, any Trust REMIC or any Underlying Trust does not occur.

- 5. The Closing Date for the Securities is May 27, 2022.
- 6. No expenses or fees are paid by the Trust other than the Trustee Fee, which is paid as described under "The Trust Assets The Trustee Fee" in this Supplement.
- 7. Distributions on the Underlying Certificates are made as described in the related Underlying Certificate Disclosure Documents.
  - 8. Each Class is held from the Closing Date and is not exchanged in whole or in part.

When reading the tables and the related text, investors should bear in mind that the Modeling Assumptions, like any other stated assumptions, are unlikely to be entirely consistent with actual experience.

- For example, most of the Mortgage Loans will not have the characteristics assumed, many Distribution Dates will occur on a Business Day after the 20th day of the month and the Trustee may cause a termination of the Trust as described under "Description of the Securities Termination" in this Supplement.
- In addition, distributions on the Securities are based on Certificate Factors and Calculated Certificate Factors, as applicable, which may not reflect actual receipts on the Trust Assets.

See "Description of the Securities — Distributions" in the Base Offering Circular.

#### **Decrement Tables**

Prepayments of mortgage loans are commonly measured by a prepayment standard or model. The model used in this Supplement, Prepayment Speed Assumption ("PSA"), is the standard prepayment assumption model of The Securities Industry and Financial Markets Association. PSA represents an assumed rate of prepayment each month relative to the then outstanding principal balance of the Mortgage Loans to which the model is applied. See "Yield, Maturity and Prepayment Considerations — Standard Prepayment Assumption Models" in the Base Offering Circular.

The decrement tables set forth below are based on the assumption that the Mortgage Loans prepay at the indicated percentages of PSA (the "PSA Prepayment Assumption Rates"). As used in the tables, each of the PSA Prepayment Assumption Rates reflects a percentage of the 100% PSA assumed prepayment rate. The Mortgage Loans will not prepay at any of the PSA Prepayment Assumption Rates, and the timing of changes in the rate of prepayments actually experienced on the Mortgage Loans will not follow the pattern described for the PSA assumption.

The decrement tables set forth below illustrate the percentage of the Original Class Principal Balance (or, in the case of a Notional Class, the original Class Notional Balance) that would remain outstanding following the distribution made each specified month for each Regular or MX Class, based on the assumption that the related Mortgage Loans prepay at the PSA Prepayment Assumption Rates. The percentages set forth in the following decrement tables have been rounded to the nearest whole percentage (including rounding down to zero).

The decrement tables also indicate the Weighted Average Life of each Class under each PSA Prepayment Assumption Rate. The Weighted Average Life of each Class is calculated by:

(a) multiplying the net reduction, if any, of the Class Principal Balance (or the net reduction of the Class Notional Balance, in the case of a Notional Class) from one Distribution Date to the next Distribution Date by the number of years from the date of issuance thereof to the related Distribution Date,

- (b) summing the results, and
- (c) dividing the sum by the aggregate amount of the assumed net reductions in principal balance or notional balance, as applicable, referred to in clause (a).

The information shown for each Notional Class is for illustrative purposes only, as a Notional Class is not entitled to distributions of principal and has no Weighted Average Life. The Weighted Average Life shown for each Notional Class has been calculated on the assumption that a reduction in the Class Notional Balance thereof is a distribution of principal.

The Weighted Average Lives are likely to vary, perhaps significantly, from those set forth in the tables below due to the differences between the actual characteristics of the Mortgage Loans underlying the related Trust Assets and the Modeling Assumptions.

# Percentages of Original Class Principal (or Class Notional) Balances and Weighted Average Lives

Security Group 1 PSA Prepayment Assumption Rates

|                   |      | Cla  | asses FA and | SA   |                  |
|-------------------|------|------|--------------|------|------------------|
| Distribution Date | 0%   | 100% | 250%         | 400% | 500%             |
| Initial Percent   | 100  | 100  | 100          | 100  | 100              |
| May 2023          | 99   | 97   | 95           | 92   | 91               |
| May 2024          | 97   | 92   | 84           | 77   | 72               |
| May 2025          | 96   | 85   | 70           | 58   | 50               |
| May 2026          | 94   | 78   | 59           | 43   | 34               |
| May 2027          | 92   | 72   | 49           | 32   | 24               |
| May 2028          | 91   | 66   | 41           | 24   | 16               |
| May 2029          | 89   | 61   | 34           | 18   | 11               |
| May 2030          | 87   | 56   | 28           | 13   | 8                |
| May 2031          | 85   | 51   | 23           | 10   | 5                |
| May 2032          | 83   | 46   | 19           | 7    | 5<br>3<br>2<br>2 |
| May 2033          | 80   | 42   | 16           | 5    | 2                |
| May 2034          | 78   | 38   | 13           | 4    | 2                |
| May 2035          | 75   | 35   | 11           | 3    | 1                |
| May 2036          | 72   | 31   | 9            | 2    | 1                |
| May 2037          | 69   | 28   | 7            | 2    | 0                |
| May 2038          | 66   | 25   | 6            | 1    | 0                |
| May 2039          | 63   | 23   | 5            | 1    | 0                |
| May 2040          | 60   | 20   | 4            | 1    | 0                |
| May 2041          | 56   | 18   | 3            | 0    | 0                |
| May 2042          | 52   | 15   | 2            | 0    | 0                |
| May 2043          | 48   | 13   | 2            | 0    | 0                |
| May 2044          | 44   | 11   | 1            | 0    | 0                |
| May 2045          | 40   | 9    | 1            | 0    | 0                |
| May 2046          | 35   | 8    | 1            | 0    | 0                |
| May 2047          | 30   | 6    | 1            | 0    | 0                |
| May 2048          | 24   | 5    | 0            | 0    | 0                |
| May 2049          | 19   | 3    | 0            | 0    | 0                |
| May 2050          | 13   | 2    | 0            | 0    | 0                |
| May 2051          | 7    | 1    | 0            | 0    | 0                |
| May 2052          | 0    | 0    | Õ            | Õ    | 0                |
| Weighted Average  |      |      |              |      |                  |
| Life (years)      | 19.0 | 10.9 | 6.3          | 4.4  | 3.7              |

Security Group 2 PSA Prepayment Assumption Rates

|                                  |      |      | Class GA |      |      |     |      | Class GV | 7    |      |      |      | Class GZ |      |      |
|----------------------------------|------|------|----------|------|------|-----|------|----------|------|------|------|------|----------|------|------|
| Distribution Date                | 0%   | 100% | 150%     | 300% | 400% | 0%  | 100% | 150%     | 300% | 400% | 0%   | 100% | 150%     | 300% | 400% |
| Initial Percent                  | 100  | 100  | 100      | 100  | 100  | 100 | 100  | 100      | 100  | 100  | 100  | 100  | 100      | 100  | 100  |
| May 2023                         | 97   | 86   | 81       | 67   | 57   | 92  | 92   | 92       | 92   | 92   | 103  | 103  | 103      | 103  | 103  |
| May 2024                         | 95   | 73   | 64       | 40   | 26   | 85  | 85   | 85       | 85   | 85   | 106  | 106  | 106      | 106  | 106  |
| May 2025                         | 92   | 61   | 49       | 19   | 2    | 77  | 77   | 77       | 77   | 77   | 109  | 109  | 109      | 109  | 109  |
| May 2026                         | 89   | 50   | 36       | 2    | 0    | 68  | 68   | 68       | 68   | 0    | 113  | 113  | 113      | 113  | 107  |
| May 2027                         | 86   | 39   | 24       | 0    | 0    | 60  | 60   | 60       | 0    | 0    | 116  | 116  | 116      | 115  | 78   |
| May 2028                         | 82   | 29   | 13       | 0    | 0    | 51  | 51   | 51       | 0    | 0    | 120  | 120  | 120      | 91   | 57   |
| May 2029                         | 79   | 20   | 3        | 0    | 0    | 42  | 42   | 42       | 0    | 0    | 123  | 123  | 123      | 71   | 42   |
| May 2030                         | 75   | 12   | 0        | 0    | 0    | 33  | 33   | 3        | 0    | 0    | 127  | 127  | 127      | 56   | 30   |
| May 2031                         | 71   | 4    | 0        | 0    | 0    | 23  | 23   | 0        | 0    | 0    | 131  | 131  | 111      | 44   | 22   |
| May 2032                         | 68   | 0    | 0        | 0    | 0    | 13  | 0    | 0        | 0    | 0    | 135  | 133  | 96       | 34   | 16   |
| May 2033                         | 63   | 0    | 0        | 0    | 0    | 3   | 0    | 0        | 0    | 0    | 139  | 118  | 82       | 26   | 11   |
| May 2034                         | 59   | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 140  | 104  | 70       | 20   | 8    |
| May 2035                         | 55   | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 140  | 91   | 59       | 15   | 6    |
| May 2036                         | 50   | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 140  | 79   | 50       | 12   | 4    |
| May 2037                         | 45   | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 140  | 68   | 42       | 9    | 3    |
| May 2038                         | 40   | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 140  | 57   | 34       | 6    | 2    |
| May 2039                         | 34   | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 140  | 48   | 28       | 5    | 1    |
| May 2040                         | 29   | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 140  | 39   | 22       | 3    | 1    |
| May 2041                         | 23   | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 140  | 31   | 17       | 2    | 1    |
| May 2042                         | 17   | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 140  | 24   | 12       | 2    | 0    |
| May 2043                         | 10   | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 140  | 17   | 9        | 1    | 0    |
| May 2044                         | 3    | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 140  | 11   | 5        | 1    | 0    |
| May 2045                         | 0    | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 132  | 5    | 2        | 0    | 0    |
| May 2046                         | 0    | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 116  | 0    | 0        | 0    | 0    |
| May 2047                         | 0    | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 99   | 0    | 0        | 0    | 0    |
| May 2048                         | 0    | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 81   | 0    | 0        | 0    | 0    |
| May 2049                         | 0    | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 62   | 0    | 0        | 0    | 0    |
| May 2050                         | 0    | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 42   | 0    | 0        | 0    | 0    |
| May 2051                         | 0    | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 22   | 0    | 0        | 0    | 0    |
| May 2052                         | 0    | 0    | 0        | 0    | 0    | 0   | 0    | 0        | 0    | 0    | 0    | 0    | 0        | 0    | 0    |
| Weighted Average<br>Life (years) | 13.1 | 4.2  | 3.2      | 1.8  | 1.3  | 6.0 | 5.9  | 5.3      | 3.8  | 3.0  | 26.5 | 15.6 | 13.5     | 8.9  | 7.0  |

Security Group 3 PSA Prepayment Assumption Rates

|                   |      |      | Class JA |      |      |      |      | Class JB |      |      |
|-------------------|------|------|----------|------|------|------|------|----------|------|------|
| Distribution Date | 0%   | 100% | 175%     | 300% | 400% | 0%   | 100% | 175%     | 300% | 400% |
| Initial Percent   | 100  | 100  | 100      | 100  | 100  | 100  | 100  | 100      | 100  | 100  |
| May 2023          | 98   | 86   | 79       | 67   | 57   | 100  | 100  | 100      | 100  | 100  |
| May 2024          | 95   | 73   | 60       | 40   | 25   | 100  | 100  | 100      | 100  | 100  |
| May 2025          | 92   | 61   | 44       | 18   | 1    | 100  | 100  | 100      | 100  | 100  |
| May 2026          | 89   | 50   | 29       | 1    | 0    | 100  | 100  | 100      | 100  | 75   |
| May 2027          | 86   | 40   | 17       | 0    | 0    | 100  | 100  | 100      | 80   | 55   |
| May 2028          | 83   | 30   | 5        | 0    | 0    | 100  | 100  | 100      | 64   | 40   |
| May 2029          | 80   | 21   | 0        | 0    | 0    | 100  | 100  | 93       | 50   | 30   |
| May 2030          | 76   | 13   | 0        | 0    | 0    | 100  | 100  | 80       | 40   | 22   |
| May 2031          | 73   | 5    | 0        | 0    | 0    | 100  | 100  | 69       | 31   | 16   |
| May 2032          | 69   | 0    | 0        | 0    | 0    | 100  | 96   | 59       | 25   | 11   |
| May 2033          | 65   | 0    | 0        | 0    | 0    | 100  | 86   | 50       | 19   | 8    |
| May 2034          | 60   | 0    | 0        | 0    | 0    | 100  | 77   | 42       | 15   | 6    |
| May 2035          | 56   | 0    | 0        | 0    | 0    | 100  | 68   | 36       | 11   | 4    |
| May 2036          | 51   | 0    | 0        | 0    | 0    | 100  | 60   | 30       | 9    | 3    |
| May 2037          | 46   | 0    | 0        | 0    | 0    | 100  | 52   | 25       | 7    | 2    |
| May 2038          | 41   | 0    | 0        | 0    | 0    | 100  | 45   | 21       | 5    | 2    |
| May 2039          | 36   | 0    | 0        | 0    | 0    | 100  | 38   | 17       | 4    | 1    |
| May 2040          | 30   | 0    | 0        | 0    | 0    | 100  | 32   | 13       | 3    | 1    |
| May 2041          | 24   | 0    | 0        | 0    | 0    | 100  | 27   | 11       | 2    | 0    |
| May 2042          | 17   | 0    | 0        | 0    | 0    | 100  | 22   | 8        | 1    | 0    |
| May 2043          | 11   | 0    | 0        | 0    | 0    | 100  | 17   | 6        | 1    | 0    |
| May 2044          | 4    | 0    | 0        | 0    | 0    | 100  | 12   | 4        | 1    | 0    |
| May 2045          | 0    | 0    | 0        | 0    | 0    | 94   | 8    | 3        | 0    | 0    |
| May 2046          | 0    | 0    | 0        | 0    | 0    | 83   | 5    | 1        | 0    | 0    |
| May 2047          | 0    | 0    | 0        | 0    | 0    | 71   | 1    | 0        | 0    | 0    |
| May 2048          | 0    | 0    | 0        | 0    | 0    | 58   | 0    | 0        | 0    | 0    |
| May 2049          | 0    | 0    | 0        | 0    | 0    | 45   | 0    | 0        | 0    | 0    |
| May 2050          | 0    | 0    | 0        | 0    | 0    | 30   | 0    | 0        | 0    | 0    |
| May 2051          | 0    | 0    | 0        | 0    | 0    | 16   | 0    | 0        | 0    | 0    |
| May 2052          | 0    | 0    | 0        | 0    | 0    | 0    | 0    | 0        | 0    | 0    |
| Weighted Average  |      |      |          |      |      |      |      |          |      |      |
| Life (years)      | 13.3 | 4.3  | 2.8      | 1.8  | 1.3  | 26.5 | 16.0 | 12.2     | 8.2  | 6.3  |

Security Group 4
PSA Prepayment Assumption Rates

|                   |      |      | Class AS |      |        |
|-------------------|------|------|----------|------|--------|
| Distribution Date | 0%   | 100% | 150%     | 300% | 400%   |
| Initial Percent   | 100  | 100  | 100      | 100  | 100    |
| May 2023          | 98   | 92   | 89       | 81   | 75     |
| May 2024          | 96   | 85   | 79       | 65   | 56     |
| May 2025          | 93   | 78   | 71       | 52   | 42     |
| May 2026          | 91   | 71   | 63       | 41   | 31     |
| May 2027          | 88   | 65   | 55       | 33   | 23     |
| May 2028          | 86   | 59   | 49       | 26   | 17     |
| May 2029          | 83   | 54   | 43       | 21   | 12     |
| May 2030          | 80   | 49   | 38       | 17   | 9      |
| May 2031          | 77   | 44   | 33       | 13   | 7      |
| May 2032          | 74   | 40   | 29       | 10   | 5<br>4 |
| May 2033          | 71   | 36   | 25       | 8    | 4      |
| May 2034          | 68   | 32   | 22       | 6    | 3 2    |
| May 2035          | 64   | 29   | 19       | 5    | 2      |
| May 2036          | 61   | 26   | 16       | 4    | 1      |
| May 2037          | 57   | 23   | 14       | 3    | 1      |
| May 2038          | 54   | 20   | 12       | 2    | 1      |
| May 2039          | 50   | 17   | 10       | 2    | 0      |
| May 2040          | 46   | 15   | 8        | 1    | 0      |
| May 2041          | 42   | 13   | 7        | 1    | 0      |
| May 2042          | 38   | 11   | 6        | 1    | 0      |
| May 2043          | 33   | 9    | 5        | 1    | 0      |
| May 2044          | 29   | 7    | 4        | 0    | 0      |
| May 2045          | 24   | 6    | 3        | 0    | 0      |
| May 2046          | 19   | 4    | 2        | 0    | 0      |
| May 2047          | 14   | 3 2  | 1        | 0    | 0      |
| May 2048          | 9    |      | 1        | 0    | 0      |
| May 2049          | 4    | 1    | 0        | 0    | 0      |
| May 2050          | 0    | 0    | 0        | 0    | 0      |
| May 2051          | 0    | 0    | 0        | 0    | 0      |
| Weighted Average  |      |      |          |      |        |
| Life (years)      | 16.0 | 9.4  | 7.6      | 4.4  | 3.4    |

Security Group 5 PSA Prepayment Assumption Rates

|                   |      |      | Class EA |      |      |      |      | Class EZ |      |      |
|-------------------|------|------|----------|------|------|------|------|----------|------|------|
| Distribution Date | 0%   | 100% | 175%     | 300% | 400% | 0%   | 100% | 175%     | 300% | 400% |
| Initial Percent   | 100  | 100  | 100      | 100  | 100  | 100  | 100  | 100      | 100  | 100  |
| May 2023          | 98   | 91   | 87       | 79   | 72   | 104  | 104  | 104      | 104  | 104  |
| May 2024          | 96   | 83   | 75       | 62   | 52   | 107  | 107  | 107      | 107  | 107  |
| May 2025          | 94   | 75   | 64       | 48   | 36   | 111  | 111  | 111      | 111  | 111  |
| May 2026          | 92   | 68   | 55       | 36   | 25   | 115  | 115  | 115      | 115  | 115  |
| May 2027          | 90   | 61   | 46       | 27   | 16   | 119  | 119  | 119      | 119  | 119  |
| May 2028          | 88   | 55   | 39       | 20   | 10   | 123  | 123  | 123      | 123  | 123  |
| May 2029          | 85   | 49   | 32       | 14   | 5    | 128  | 128  | 128      | 128  | 128  |
| May 2030          | 83   | 43   | 27       | 9    | 1    | 132  | 132  | 132      | 132  | 132  |
| May 2031          | 80   | 38   | 21       | 5    | 0    | 137  | 137  | 137      | 137  | 111  |
| May 2032          | 78   | 33   | 17       | 2    | 0    | 142  | 142  | 142      | 142  | 81   |
| May 2033          | 75   | 28   | 13       | 0    | 0    | 147  | 147  | 147      | 136  | 59   |
| May 2034          | 72   | 24   | 9        | 0    | 0    | 152  | 152  | 152      | 106  | 42   |
| May 2035          | 69   | 20   | 6        | 0    | 0    | 158  | 158  | 158      | 82   | 30   |
| May 2036          | 65   | 16   | 3        | 0    | 0    | 163  | 163  | 163      | 63   | 22   |
| May 2037          | 62   | 13   | 1        | 0    | 0    | 169  | 169  | 169      | 48   | 15   |
| May 2038          | 58   | 9    | 0        | 0    | 0    | 175  | 175  | 149      | 37   | 11   |
| May 2039          | 54   | 6    | 0        | 0    | 0    | 181  | 181  | 122      | 28   | 8    |
| May 2040          | 50   | 3    | 0        | 0    | 0    | 188  | 188  | 99       | 21   | 5    |
| May 2041          | 46   | 0    | 0        | 0    | 0    | 194  | 194  | 79       | 15   | 4    |
| May 2042          | 41   | 0    | 0        | 0    | 0    | 201  | 166  | 62       | 11   | 2    |
| May 2043          | 37   | 0    | 0        | 0    | 0    | 208  | 133  | 47       | 8    | 2    |
| May 2044          | 32   | 0    | 0        | 0    | 0    | 216  | 102  | 35       | 5    | 1    |
| May 2045          | 27   | 0    | 0        | 0    | 0    | 223  | 74   | 24       | 3    | 1    |
| May 2046          | 21   | 0    | 0        | 0    | 0    | 231  | 48   | 15       | 2    | 0    |
| May 2047          | 15   | 0    | 0        | 0    | 0    | 240  | 24   | 7        | 1    | 0    |
| May 2048          | 9    | Ŏ    | Ŏ        | Ŏ    | Ŏ    | 248  | 2    | Ó        | 0    | Ŏ    |
| May 2049          | 3    | 0    | 0        | 0    | 0    | 257  | 0    | 0        | 0    | 0    |
| May 2050          | Ő    | 0    | 0        | 0    | Õ    | 211  | 0    | 0        | 0    | 0    |
| May 2051          | Õ    | Ŏ    | Ŏ        | Ŏ    | Ŏ    | 108  | Ŏ    | Ŏ        | Ŏ    | Ŏ    |
| May 2052          | Õ    | 0    | 0        | 0    | Õ    | 0    | 0    | 0        | 0    | 0    |
| Weighted Average  | ~    | _    | _        | ~    | ~    | -    | ~    | _        | ~    |      |
| Life (years)      | 16.7 | 7.7  | 5.4      | 3.5  | 2.7  | 28.8 | 22.3 | 19.3     | 14.4 | 11.5 |

Security Group 6
PSA Prepayment Assumption Rates

|                                  |      | C    | lasses F and | S    |      |
|----------------------------------|------|------|--------------|------|------|
| Distribution Date                | 0%   | 100% | 280%         | 450% | 600% |
| Initial Percent                  | 100  | 100  | 100          | 100  | 100  |
| May 2023                         | 99   | 97   | 95           | 93   | 91   |
| May 2024                         | 97   | 92   | 84           | 76   | 69   |
| May 2025                         | 96   | 85   | 69           | 55   | 45   |
| May 2026                         | 95   | 79   | 56           | 40   | 28   |
| May 2027                         | 93   | 73   | 46           | 28   | 18   |
| May 2028                         | 91   | 67   | 37           | 20   | 11   |
| May 2029                         | 90   | 61   | 30           | 14   | 7    |
| May 2030                         | 88   | 56   | 25           | 10   | 4    |
| May 2031                         | 86   | 52   | 20           | 7    | 3    |
| May 2032                         | 84   | 47   | 16           | 5    | 2    |
| May 2033                         | 81   | 43   | 13           | 4    | 1    |
| May 2034                         | 79   | 39   | 11           | 3    | 1    |
| May 2035                         | 77   | 35   | 8            | 2    | 0    |
| May 2036                         | 74   | 32   | 7            | 1    | 0    |
| May 2037                         | 71   | 29   | 5            | 1    | 0    |
| May 2038                         | 68   | 26   | 4            | 1    | 0    |
| May 2039                         | 65   | 23   | 3            | 0    | 0    |
| May 2040                         | 61   | 20   | 3            | 0    | 0    |
| May 2041                         | 58   | 18   | 2            | 0    | 0    |
| May 2042                         | 54   | 16   | 2            | 0    | 0    |
| May 2043                         | 50   | 14   | 1            | 0    | 0    |
| May 2044                         | 46   | 12   | 1            | 0    | 0    |
| May 2045                         | 41   | 10   | 1            | 0    | 0    |
| May 2046                         | 36   | 8    | 0            | 0    | 0    |
| May 2047                         | 31   | 6    | 0            | 0    | 0    |
| May 2048                         | 26   | 5    | 0            | 0    | 0    |
| May 2049                         | 20   | 4    | 0            | 0    | 0    |
| May 2050                         | 14   | 2    | 0            | 0    | 0    |
| May 2051                         | 7    | 1    | 0            | 0    | 0    |
| May 2052                         | 0    | 0    | 0            | 0    | 0    |
| Weighted Average<br>Life (years) | 19.3 | 11.0 | 5.9          | 4.1  | 3.3  |
| (, 0.00)                         | -/.5 | 11.0 | 2.7          | ***  | 5.5  |

Security Group 7
PSA Prepayment Assumption Rates

|                                  |      |      | Class IM Classes JI, MJ and MP Class MC |      |      |     |      |      |      |      |      |      |      |      |      |
|----------------------------------|------|------|---|------|------|-----|------|------|------|------|------|------|------|------|------|
| Distribution Date                | 0%   | 200% | 280%                                    | 450% | 600% | 0%  | 200% | 280% | 450% | 600% | 0%   | 200% | 280% | 450% | 600% |
| Initial Percent                  | 100  | 100  | 100                                     | 100  | 100  | 100 | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  | 100  |
| May 2023                         | 97   | 93   | 93                                      | 93   | 93   | 96  | 92   | 92   | 92   | 92   | 100  | 100  | 100  | 100  | 100  |
| May 2024                         | 94   | 81   | 81                                      | 81   | 81   | 92  | 76   | 76   | 76   | 76   | 100  | 100  | 100  | 100  | 100  |
| May 2025                         | 91   | 65   | 65                                      | 65   | 58   | 88  | 55   | 55   | 55   | 46   | 100  | 100  | 100  | 100  | 100  |
| May 2026                         | 87   | 50   | 50                                      | 50   | 36   | 84  | 36   | 36   | 36   | 18   | 100  | 100  | 100  | 100  | 100  |
| May 2027                         | 84   | 37   | 37                                      | 37   | 23   | 79  | 19   | 19   | 19   | 1    | 100  | 100  | 100  | 100  | 99   |
| May 2028                         | 80   | 26   | 26                                      | 26   | 14   | 74  | 5    | 5    | 5    | 0    | 100  | 100  | 100  | 100  | 64   |
| May 2029                         | 76   | 19   | 19                                      | 19   | 9    | 69  | 0    | 0    | 0    | 0    | 100  | 83   | 83   | 83   | 40   |
| May 2030                         | 72   | 13   | 13                                      | 13   | 6    | 63  | 0    | 0    | 0    | 0    | 100  | 59   | 59   | 59   | 25   |
| May 2031                         | 67   | 9    | 9                                       | 9    | 3    | 58  | 0    | 0    | 0    | 0    | 100  | 42   | 42   | 42   | 15   |
| May 2032                         | 62   | 7    | 7                                       | 7    | 2    | 52  | 0    | 0    | 0    | 0    | 100  | 30   | 30   | 30   | 10   |
| May 2033                         | 57   | 5    | 5                                       | 5    | 1    | 45  | 0    | 0    | 0    | 0    | 100  | 21   | 21   | 21   | 6    |
| May 2034                         | 52   | 3    | 3                                       | 3    | 1    | 38  | 0    | 0    | 0    | 0    | 100  | 15   | 15   | 15   | 4    |
| May 2035                         | 47   | 2    | 2                                       | 2    | 1    | 31  | 0    | 0    | 0    | 0    | 100  | 11   | 11   | 11   | 2    |
| May 2036                         | 41   | 2    | 2                                       | 2    | 0    | 24  | 0    | 0    | 0    | 0    | 100  | 7    | 7    | 7    | 1    |
| May 2037                         | 35   | 1    | 1                                       | 1    | 0    | 16  | 0    | 0    | 0    | 0    | 100  | 5    | 5    | 5    | 1    |
| May 2038                         | 28   | 1    | 1                                       | 1    | 0    | 7   | 0    | 0    | 0    | 0    | 100  | 4    | 4    | 4    | 1    |
| May 2039                         | 21   | 1    | 1                                       | 1    | 0    | 0   | 0    | 0    | 0    | 0    | 94   | 2    | 2    | 2    | 0    |
| May 2040                         | 14   | 0    | 0                                       | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 62   | 2    | 2    | 2    | 0    |
| May 2041                         | 6    | 0    | 0                                       | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 27   | 1    | 1    | 1    | 0    |
| May 2042                         | 0    | 0    | 0                                       | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 1    | 1    | 1    | 1    | 0    |
| May 2043                         | 0    | 0    | 0                                       | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 1    | 1    | 1    | 1    | 0    |
| May 2044                         | 0    | 0    | 0                                       | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| May 2045                         | 0    | 0    | 0                                       | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| May 2046                         | 0    | 0    | 0                                       | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| May 2047                         | 0    | 0    | 0                                       | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| May 2048                         | 0    | 0    | 0                                       | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| May 2049                         | 0    | 0    | 0                                       | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| May 2050                         | 0    | 0    | 0                                       | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| May 2051                         | 0    | 0    | 0                                       | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| May 2052                         | 0    | 0    | 0                                       | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Weighted Average<br>Life (years) | 11.6 | 4.7  | 4.7                                     | 4.7  | 3.8  | 9.7 | 3.3  | 3.3  | 3.3  | 2.8  | 18.4 | 9.4  | 9.4  | 9.4  | 7.2  |

| PSA | Prepayment | Assumption | Rates |
|-----|------------|------------|-------|
|     |            |            |       |

|                   | Classes MH and NI |      |      |      |      | Class MI |      |      |      |      | Class ML |      |      |      |      |
|-------------------|-------------------|------|------|------|------|----------|------|------|------|------|----------|------|------|------|------|
| Distribution Date | 0%                | 200% | 280% | 450% | 600% | 0%       | 200% | 280% | 450% | 600% | 0%       | 200% | 280% | 450% | 600% |
| Initial Percent   | 100               | 100  | 100  | 100  | 100  | 100      | 100  | 100  | 100  | 100  | 100      | 100  | 100  | 100  | 100  |
| May 2023          | 96                | 91   | 91   | 91   | 91   | 97       | 93   | 93   | 93   | 93   | 100      | 100  | 100  | 100  | 100  |
| May 2024          | 92                | 75   | 75   | 75   | 75   | 94       | 80   | 80   | 80   | 80   | 100      | 100  | 100  | 100  | 100  |
| May 2025          | 88                | 53   | 53   | 53   | 44   | 90       | 64   | 64   | 64   | 56   | 100      | 100  | 100  | 100  | 100  |
| May 2026          | 83                | 34   | 34   | 34   | 16   | 87       | 48   | 48   | 48   | 34   | 100      | 100  | 100  | 100  | 100  |
| May 2027          | 78                | 16   | 16   | 16   | 0    | 83       | 35   | 35   | 35   | 20   | 100      | 100  | 100  | 100  | 93   |
| May 2028          | 73                | 2    | 2    | 2    | 0    | 79       | 24   | 24   | 24   | 13   | 100      | 100  | 100  | 100  | 58   |
| May 2029          | 68                | 0    | 0    | 0    | 0    | 75       | 17   | 17   | 17   | 8    | 100      | 77   | 77   | 77   | 37   |
| May 2030          | 62                | 0    | 0    | 0    | 0    | 71       | 12   | 12   | 12   | 5    | 100      | 55   | 55   | 55   | 23   |
| May 2031          | 56                | 0    | 0    | 0    | 0    | 66       | 8    | 8    | 8    | 3    | 100      | 39   | 39   | 39   | 14   |
| May 2032          | 50                | 0    | 0    | 0    | 0    | 61       | 6    | 6    | 6    | 2    | 100      | 28   | 28   | 28   | 9    |
| May 2033          | 44                | 0    | 0    | 0    | 0    | 56       | 4    | 4    | 4    | 1    | 100      | 20   | 20   | 20   | 5    |
| May 2034          | 37                | 0    | 0    | 0    | 0    | 50       | 3    | 3    | 3    | 1    | 100      | 14   | 14   | 14   | 3    |
| May 2035          | 29                | 0    | 0    | 0    | 0    | 45       | 2    | 2    | 2    | 0    | 100      | 10   | 10   | 10   | 2    |
| May 2036          | 22                | Õ    | Õ    | Õ    | Õ    | 39       | 1    | 1    | 1    | Õ    | 100      | 7    | 7    | 7    | 1    |
| May 2037          | 13                | 0    | 0    | 0    | 0    | 32       | 1    | 1    | 1    | 0    | 100      | 5    | 5    | 5    | 1    |
| May 2038          | 5                 | Õ    | Õ    | Õ    | Õ    | 26       | 1    | 1    | 1    | Õ    | 100      | 3    | 3    | 3    | 0    |
| May 2039          | Ó                 | Õ    | Ő    | Ő    | Ö    | 19       | 0    | 0    | 0    | Ŏ    | 86       | 2    | 2    | 2    | Õ    |
| May 2040          | Õ                 | Ő    | Õ    | Õ    | Õ    | 12       | 0    | 0    | 0    | Õ    | 57       | 2    | 2    | 2    | Õ    |
| May 2041          | Õ                 | Ő    | Õ    | Õ    | Õ    | 5        | 0    | 0    | 0    | Õ    | 25       | 1    | 1    | 1    | Õ    |
| May 2042          | Ŏ                 | Ŏ    | Ŏ    | Ŏ    | Ŏ    | Ó        | Ŏ    | Ŏ    | Ŏ    | ŏ    | 1        | 1    | 1    | 1    | Ŏ    |
| May 2043          | Õ                 | Ő    | Õ    | Õ    | Õ    | Ŏ        | 0    | 0    | 0    | Õ    | 0        | 0    | 0    | 0    | Õ    |
| May 2044          | Õ                 | Õ    | Õ    | Õ    | Õ    | Ŏ        | 0    | 0    | 0    | Õ    | Ŏ        | Õ    | Õ    | Õ    | Õ    |
| May 2045          | ŏ                 | ŏ    | ŏ    | ŏ    | Ŏ    | ŏ        | Ŏ    | Ŏ    | Ŏ    | ŏ    | Ŏ        | Ŏ    | Ő    | Ŏ    | Ŏ    |
| May 2046          | Õ                 | Õ    | Õ    | Õ    | Õ    | Õ        | 0    | 0    | 0    | 0    | Õ        | 0    | Õ    | 0    | Õ    |
| May 2047          | Õ                 | Õ    | Õ    | Õ    | Õ    | Ŏ        | 0    | 0    | 0    | Õ    | Ŏ        | Õ    | Õ    | Õ    | Õ    |
| May 2048          | Ŏ                 | ŏ    | Ŏ    | Ŏ    | Ŏ    | ŏ        | ŏ    | Ŏ    | Ŏ    | ŏ    | ŏ        | ŏ    | ŏ    | ŏ    | ŏ    |
| May 2049          | Ő                 | Ŏ    | ő    | ő    | Ő    | ŏ        | Ő    | Ő    | Ő    | ő    | ő        | ő    | ő    | ŏ    | ő    |
| May 2050          | Ő                 | ő    | ő    | ő    | Ŏ    | ŏ        | Ő    | Ő    | Ő    | ő    | ŏ        | ő    | ő    | Ő    | Õ    |
| May 2051          | ő                 | ő    | ő    | ő    | ő    | ŏ        | ő    | ő    | ő    | ő    | Õ        | ő    | ŏ    | ő    | ŏ    |
| May 2052          | ő                 | ő    | 0    | 0    | 0    | ő        | ő    | ő    | ő    | 0    | 0        | ő    | ő    | ő    | 0    |
| Weighted Average  | U                 | · ·  | U    | U    | V    | 0        | · ·  | · ·  | Ü    | 0    | Ü        | Ü    | · ·  | · ·  | · ·  |
| Life (years)      | 9.5               | 3.2  | 3.2  | 3.2  | 2.8  | 11.4     | 4.5  | 4.5  | 4.5  | 3.7  | 18.2     | 9.2  | 9.2  | 9.2  | 7.0  |

Security Group 7
PSA Prepayment Assumption Rates

|                   |      |      | Class MY |      |      |      |      | Class MZ |      |      |
|-------------------|------|------|----------|------|------|------|------|----------|------|------|
| Distribution Date | 0%   | 200% | 280%     | 450% | 600% | 0%   | 200% | 280%     | 450% | 600% |
| Initial Percent   | 100  | 100  | 100      | 100  | 100  | 100  | 100  | 100      | 100  | 100  |
| May 2023          | 100  | 100  | 100      | 100  | 100  | 105  | 105  | 100      | 90   | 82   |
| May 2024          | 100  | 100  | 100      | 100  | 100  | 109  | 109  | 93       | 59   | 30   |
| May 2025          | 100  | 100  | 100      | 100  | 100  | 114  | 114  | 83       | 23   | 0    |
| May 2026          | 100  | 100  | 100      | 100  | 100  | 120  | 120  | 78       | 5    | 0    |
| May 2027          | 100  | 100  | 100      | 100  | 100  | 125  | 125  | 78       | 0    | 0    |
| May 2028          | 100  | 100  | 100      | 100  | 64   | 131  | 126  | 76       | 0    | 0    |
| May 2029          | 100  | 84   | 84       | 84   | 40   | 137  | 122  | 71       | 0    | 0    |
| May 2030          | 100  | 60   | 60       | 60   | 25   | 143  | 114  | 64       | 0    | 0    |
| May 2031          | 100  | 43   | 43       | 43   | 16   | 150  | 104  | 56       | 0    | 0    |
| May 2032          | 100  | 30   | 30       | 30   | 10   | 157  | 94   | 49       | 0    | 0    |
| May 2033          | 100  | 21   | 21       | 21   | 6    | 164  | 84   | 42       | 0    | 0    |
| May 2034          | 100  | 15   | 15       | 15   | 4    | 171  | 74   | 35       | 0    | 0    |
| May 2035          | 100  | 11   | 11       | 11   | 2    | 179  | 64   | 29       | 0    | 0    |
| May 2036          | 100  | 7    | 7        | 7    | 1    | 188  | 55   | 24       | 0    | 0    |
| May 2037          | 100  | 5    | 5        | 5    | 1    | 196  | 47   | 20       | 0    | 0    |
| May 2038          | 100  | 4    | 4        | 4    | 1    | 205  | 40   | 16       | 0    | 0    |
| May 2039          | 95   | 3    | 3        | 3    | 0    | 215  | 34   | 13       | Ŏ    | Õ    |
| May 2040          | 62   | 2    | 2        | 2    | 0    | 224  | 29   | 10       | 0    | 0    |
| May 2041          | 28   | 1    | 1        | 1    | 0    | 235  | 24   | 8        | 0    | 0    |
| May 2042          | 1    | 1    | 1        | 1    | Ŏ    | 238  | 20   | 6        | Ŏ    | Õ    |
| May 2043          | 1    | 1    | 1        | 1    | 0    | 220  | 16   | 5        | 0    | 0    |
| May 2044          | 0    | 0    | 0        | 0    | 0    | 202  | 13   | 4        | 0    | Õ    |
| May 2045          | Õ    | Õ    | Õ        | Õ    | Ŏ    | 181  | 10   | 3        | Ŏ    | Õ    |
| May 2046          | 0    | 0    | 0        | 0    | 0    | 160  | 8    | 2        | 0    | 0    |
| May 2047          | Õ    | 0    | 0        | Õ    | 0    | 137  | 6    | 1        | 0    | Õ    |
| May 2048          | Õ    | Õ    | Õ        | Ŏ    | Ŏ    | 113  | 4    | 1        | Ö    | Õ    |
| May 2049          | Õ    | 0    | Õ        | Õ    | 0    | 87   | 3    | 1        | 0    | Õ    |
| May 2050          | Õ    | 0    | Õ        | Õ    | 0    | 60   | 2    | 0        | 0    | Õ    |
| May 2051          | Ŏ    | Ŏ    | Ŏ        | Ŏ    | Õ    | 31   | 1    | ŏ        | Ŏ    | Ŏ    |
| May 2052          | Ő    | ő    | ő        | ő    | Ő    | 0    | 0    | ŏ        | Ő    | Õ    |
| Weighted Average  |      | ~    | ~        | ~    |      | v    | ~    | ~        |      |      |
| Life (years)      | 18.4 | 9.4  | 9.4      | 9.4  | 7.2  | 25.4 | 14.2 | 10.1     | 2.3  | 1.6  |

Security Group 8 PSA Prepayment Assumption Rates

|                   |      |      | Class KA |      |      | Class KL |      |      |      |      |      | -    | Class KM | í    |      |
|-------------------|------|------|----------|------|------|----------|------|------|------|------|------|------|----------|------|------|
| Distribution Date | 0%   | 100% | 175%     | 300% | 400% | 0%       | 100% | 175% | 300% | 400% | 0%   | 100% | 175%     | 300% | 400% |
| Initial Percent   | 100  | 100  | 100      | 100  | 100  | 100      | 100  | 100  | 100  | 100  | 100  | 100  | 100      | 100  | 100  |
| May 2023          | 97   | 93   | 91       | 88   | 85   | 100      | 100  | 100  | 100  | 100  | 100  | 100  | 100      | 100  | 100  |
| May 2024          | 94   | 82   | 75       | 62   | 53   | 100      | 100  | 100  | 100  | 100  | 100  | 100  | 100      | 100  | 100  |
| May 2025          | 91   | 68   | 54       | 31   | 15   | 100      | 100  | 100  | 100  | 100  | 100  | 100  | 100      | 100  | 100  |
| May 2026          | 87   | 55   | 35       | 5    | 0    | 100      | 100  | 100  | 100  | 100  | 100  | 100  | 100      | 100  | 81   |
| May 2027          | 84   | 42   | 18       | 0    | 0    | 100      | 100  | 100  | 100  | 100  | 100  | 100  | 100      | 79   | 51   |
| May 2028          | 80   | 30   | 3        | 0    | 0    | 100      | 100  | 100  | 100  | 100  | 100  | 100  | 100      | 57   | 30   |
| May 2029          | 76   | 20   | 0        | 0    | 0    | 100      | 100  | 100  | 100  | 100  | 100  | 100  | 86       | 39   | 13   |
| May 2030          | 72   | 9    | 0        | 0    | 0    | 100      | 100  | 100  | 100  | 100  | 100  | 100  | 71       | 24   | 1    |
| May 2031          | 67   | 0    | 0        | 0    | 0    | 100      | 100  | 100  | 100  | 76   | 100  | 100  | 57       | 13   | 0    |
| May 2032          | 63   | 0    | 0        | 0    | 0    | 100      | 100  | 100  | 100  | 56   | 100  | 88   | 45       | 3    | 0    |
| May 2033          | 58   | 0    | 0        | 0    | 0    | 100      | 100  | 100  | 87   | 41   | 100  | 77   | 35       | 0    | 0    |
| May 2034          | 53   | 0    | 0        | 0    | 0    | 100      | 100  | 100  | 68   | 30   | 100  | 66   | 25       | 0    | 0    |
| May 2035          | 47   | 0    | 0        | 0    | 0    | 100      | 100  | 100  | 54   | 22   | 100  | 57   | 17       | 0    | 0    |
| May 2036          | 42   | 0    | 0        | 0    | 0    | 100      | 100  | 100  | 42   | 16   | 100  | 48   | 10       | 0    | 0    |
| May 2037          | 36   | 0    | 0        | 0    | 0    | 100      | 100  | 100  | 33   | 12   | 100  | 39   | 4        | 0    | 0    |
| May 2038          | 30   | 0    | 0        | 0    | 0    | 100      | 100  | 94   | 26   | 8    | 100  | 31   | 0        | 0    | 0    |
| May 2039          | 23   | 0    | 0        | 0    | 0    | 100      | 100  | 80   | 20   | 6    | 100  | 24   | 0        | 0    | 0    |
| May 2040          | 16   | 0    | 0        | 0    | 0    | 100      | 100  | 67   | 15   | 4    | 100  | 17   | 0        | 0    | 0    |
| May 2041          | 9    | 0    | 0        | 0    | 0    | 100      | 100  | 56   | 12   | 3    | 100  | 11   | 0        | 0    | 0    |
| May 2042          | 1    | 0    | 0        | 0    | 0    | 100      | 100  | 46   | 9    | 2    | 100  | 5    | 0        | 0    | 0    |
| May 2043          | 0    | 0    | 0        | 0    | 0    | 100      | 100  | 38   | 7    | 1    | 91   | 0    | 0        | 0    | 0    |
| May 2044          | 0    | 0    | 0        | 0    | 0    | 100      | 85   | 31   | 5    | 1    | 80   | 0    | 0        | 0    | 0    |
| May 2045          | 0    | 0    | 0        | 0    | 0    | 100      | 71   | 24   | 4    | 1    | 68   | 0    | 0        | 0    | 0    |
| May 2046          | 0    | 0    | 0        | 0    | 0    | 100      | 58   | 19   | 3    | 0    | 56   | 0    | 0        | 0    | 0    |
| May 2047          | 0    | 0    | 0        | 0    | 0    | 100      | 46   | 14   | 2    | 0    | 43   | 0    | 0        | 0    | 0    |
| May 2048          | 0    | 0    | 0        | 0    | 0    | 100      | 35   | 10   | 1    | 0    | 29   | 0    | 0        | 0    | 0    |
| May 2049          | 0    | 0    | 0        | 0    | 0    | 100      | 25   | 7    | 1    | 0    | 15   | 0    | 0        | 0    | 0    |
| May 2050          | 0    | 0    | 0        | 0    | 0    | 99       | 15   | 4    | 0    | 0    | 0    | 0    | 0        | 0    | 0    |
| May 2051          | 0    | 0    | 0        | 0    | 0    | 51       | 7    | 2    | 0    | 0    | 0    | 0    | 0        | 0    | 0    |
| May 2052          | 0    | 0    | 0        | 0    | 0    | 0        | 0    | 0    | 0    | 0    | 0    | 0    | 0        | 0    | 0    |
| Weighted Average  |      |      |          |      |      |          |      |      |      |      |      |      |          |      |      |
| Life (years)      | 11.8 | 4.5  | 3.3      | 2.4  | 2.0  | 29.0     | 24.9 | 20.4 | 14.4 | 11.3 | 24.3 | 14.1 | 10.0     | 6.7  | 5.3  |

Security Group 8 PSA Prepayment Assumption Rates

|                   |     |      | Class KV |      |      |      |      | Class KZ |      |      |
|-------------------|-----|------|----------|------|------|------|------|----------|------|------|
| Distribution Date | 0%  | 100% | 175%     | 300% | 400% | 0%   | 100% | 175%     | 300% | 400% |
| Initial Percent   | 100 | 100  | 100      | 100  | 100  | 100  | 100  | 100      | 100  | 100  |
| May 2023          | 93  | 93   | 93       | 93   | 93   | 104  | 104  | 104      | 104  | 104  |
| May 2024          | 85  | 85   | 85       | 85   | 85   | 107  | 107  | 107      | 107  | 107  |
| May 2025          | 77  | 77   | 77       | 77   | 77   | 111  | 111  | 111      | 111  | 111  |
| May 2026          | 69  | 69   | 69       | 69   | 69   | 115  | 115  | 115      | 115  | 115  |
| May 2027          | 60  | 60   | 60       | 60   | 60   | 119  | 119  | 119      | 119  | 119  |
| May 2028          | 51  | 51   | 51       | 51   | 51   | 123  | 123  | 123      | 123  | 123  |
| May 2029          | 42  | 42   | 42       | 42   | 42   | 128  | 128  | 128      | 128  | 128  |
| May 2030          | 33  | 33   | 33       | 33   | 33   | 132  | 132  | 132      | 132  | 132  |
| May 2031          | 23  | 23   | 23       | 23   | 0    | 137  | 137  | 137      | 137  | 113  |
| May 2032          | 13  | 13   | 13       | 13   | 0    | 142  | 142  | 142      | 142  | 83   |
| May 2033          | 2   | 2    | 2        | Ö    | 0    | 147  | 147  | 147      | 128  | 61   |
| May 2034          | 0   | 0    | 0        | 0    | 0    | 148  | 148  | 148      | 101  | 45   |
| May 2035          | 0   | 0    | 0        | 0    | 0    | 148  | 148  | 148      | 80   | 33   |
| May 2036          | 0   | 0    | 0        | 0    | 0    | 148  | 148  | 148      | 63   | 24   |
| May 2037          | 0   | 0    | 0        | 0    | 0    | 148  | 148  | 148      | 49   | 17   |
| May 2038          | 0   | 0    | 0        | 0    | 0    | 148  | 148  | 139      | 38   | 12   |
| May 2039          | 0   | 0    | 0        | 0    | 0    | 148  | 148  | 118      | 30   | 9    |
| May 2040          | 0   | 0    | 0        | 0    | 0    | 148  | 148  | 99       | 23   | 6    |
| May 2041          | 0   | 0    | 0        | 0    | 0    | 148  | 148  | 83       | 17   | 4    |
| May 2042          | 0   | 0    | 0        | 0    | 0    | 148  | 148  | 68       | 13   | 3    |
| May 2043          | 0   | 0    | 0        | 0    | 0    | 148  | 148  | 56       | 10   | 2    |
| May 2044          | 0   | 0    | 0        | 0    | 0    | 148  | 126  | 45       | 7    | 2    |
| May 2045          | 0   | 0    | 0        | 0    | 0    | 148  | 105  | 36       | 5    | 1    |
| May 2046          | 0   | 0    | 0        | 0    | 0    | 148  | 86   | 28       | 4    | 1    |
| May 2047          | 0   | 0    | 0        | 0    | 0    | 148  | 68   | 21       | 3    | 0    |
| May 2048          | Ŏ   | Ŏ    | Ŏ        | Ŏ    | Ŏ    | 148  | 52   | 15       | 2    | Ŏ    |
| May 2049          | 0   | 0    | 0        | 0    | 0    | 148  | 37   | 10       | 1    | 0    |
| May 2050          | 0   | 0    | 0        | 0    | 0    | 146  | 23   | 6        | 1    | 0    |
| May 2051          | Ŏ   | Ŏ    | Ŏ        | Ŏ    | Ŏ    | 75   | 10   | 3        | 0    | Ŏ    |
| May 2052          | Õ   | 0    | 0        | 0    | Õ    | 0    | 0    | 0        | 0    | 0    |
| Weighted Average  | ~   | _    | _        | ~    | ~    | -    | -    | _        | ~    |      |
| Life (years)      | 6.0 | 6.0  | 6.0      | 6.0  | 5.5  | 29.0 | 24.9 | 20.4     | 14.5 | 11.6 |

Security Group 9
PSA Prepayment Assumption Rates

|                   |      |      | Class IO |      |      |
|-------------------|------|------|----------|------|------|
| Distribution Date | 0%   | 100% | 125%     | 250% | 400% |
| Initial Percent   | 100  | 100  | 100      | 100  | 100  |
| May 2023          | 98   | 93   | 92       | 86   | 80   |
| May 2024          | 95   | 86   | 83       | 72   | 59   |
| May 2025          | 93   | 78   | 75       | 60   | 44   |
| May 2026          | 90   | 72   | 67       | 49   | 32   |
| May 2027          | 88   | 65   | 61       | 41   | 24   |
| May 2028          | 85   | 60   | 54       | 34   | 18   |
| May 2029          | 82   | 54   | 49       | 28   | 13   |
| May 2030          | 80   | 49   | 44       | 23   | 10   |
| May 2031          | 77   | 45   | 39       | 19   | 7    |
| May 2032          | 74   | 40   | 34       | 15   | 5    |
| May 2033          | 71   | 36   | 31       | 12   | 4    |
| May 2034          | 67   | 33   | 27       | 10   | 3    |
| May 2035          | 64   | 29   | 24       | 8    | 2    |
| May 2036          | 61   | 26   | 21       | 7    | 1    |
| May 2037          | 57   | 23   | 18       | 5    | 1    |
| May 2038          | 54   | 20   | 16       | 4    | 1    |
| May 2039          | 50   | 18   | 14       | 3    | 1    |
| May 2040          | 46   | 15   | 12       | 3    | 0    |
| May 2041          | 42   | 13   | 10       | 2    | 0    |
| May 2042          | 38   | 11   | 8        | 2    | 0    |
| May 2043          | 34   | 10   | 7        | 1    | 0    |
| May 2044          | 30   | 8    | 6        | 1    | 0    |
| May 2045          | 26   | 6    | 4        | 1    | 0    |
| May 2046          | 21   | 5    | 3        | 0    | 0    |
| May 2047          | 17   | 4    | 2        | 0    | 0    |
| May 2048          | 12   | 2    | 2        | 0    | 0    |
| May 2049          | 7    | 1    | 1        | 0    | 0    |
| May 2050          | 2    | 0    | 0        | 0    | 0    |
| May 2051          | 0    | Ö    | Ö        | Õ    | Õ    |
| May 2052          | 0    | 0    | 0        | 0    | 0    |
| Weighted Average  |      |      |          | -    | _    |
| Life (years)      | 16.1 | 9.6  | 8.5      | 5.4  | 3.6  |

Security Group 10 PSA Prepayment Assumption Rates

|                   | Classes FB, FJ, SJ and TI |      |      |      |      |      | Class ZJ |      |      |      |  |
|-------------------|---------------------------|------|------|------|------|------|----------|------|------|------|--|
| Distribution Date | 0%                        | 250% | 280% | 310% | 600% | 0%   | 250%     | 280% | 310% | 600% |  |
| Initial Percent   | 100                       | 100  | 100  | 100  | 100  | 100  | 100      | 100  | 100  | 100  |  |
| May 2023          | 98                        | 93   | 93   | 93   | 91   | 105  | 105      | 94   | 84   | 0    |  |
| May 2024          | 97                        | 80   | 80   | 80   | 66   | 109  | 109      | 80   | 51   | 0    |  |
| May 2025          | 95                        | 65   | 65   | 65   | 41   | 114  | 114      | 67   | 20   | 0    |  |
| May 2026          | 93                        | 53   | 53   | 53   | 26   | 120  | 120      | 61   | 4    | 0    |  |
| May 2027          | 91                        | 42   | 42   | 42   | 16   | 125  | 125      | 60   | 0    | 0    |  |
| May 2028          | 89                        | 34   | 34   | 34   | 10   | 131  | 127      | 61   | 0    | 0    |  |
| May 2029          | 87                        | 27   | 27   | 27   | 6    | 137  | 124      | 59   | 0    | 0    |  |
| May 2030          | 84                        | 21   | 21   | 21   | 4    | 143  | 118      | 55   | 0    | 0    |  |
| May 2031          | 82                        | 17   | 17   | 17   | 2    | 150  | 109      | 50   | 0    | 0    |  |
| May 2032          | 79                        | 13   | 13   | 13   | 2    | 157  | 99       | 45   | 0    | 0    |  |
| May 2033          | 76                        | 11   | 11   | 11   | 1    | 164  | 89       | 40   | 0    | 0    |  |
| May 2034          | 73                        | 8    | 8    | 8    | 1    | 171  | 79       | 35   | 0    | 0    |  |
| May 2035          | 70                        | 6    | 6    | 6    | 0    | 179  | 69       | 30   | 0    | 0    |  |
| May 2036          | 67                        | 5    | 5    | 5    | 0    | 188  | 60       | 26   | 0    | 0    |  |
| May 2037          | 63                        | 4    | 4    | 4    | 0    | 196  | 51       | 22   | 0    | 0    |  |
| May 2038          | 59                        | 3    | 3    | 3    | 0    | 205  | 44       | 18   | 0    | 0    |  |
| May 2039          | 55                        | 2    | 2    | 2    | 0    | 215  | 37       | 15   | 0    | 0    |  |
| May 2040          | 51                        | 2    | 2    | 2    | 0    | 224  | 31       | 13   | 0    | 0    |  |
| May 2041          | 46                        | 1    | 1    | 1    | 0    | 235  | 25       | 10   | 0    | 0    |  |
| May 2042          | 42                        | 1    | 1    | 1    | 0    | 246  | 21       | 8    | 0    | 0    |  |
| May 2043          | 37                        | 1    | 1    | 1    | 0    | 257  | 17       | 7    | 0    | 0    |  |
| May 2044          | 31                        | 1    | 1    | 1    | 0    | 269  | 13       | 5    | 0    | 0    |  |
| May 2045          | 26                        | 0    | 0    | 0    | 0    | 281  | 10       | 4    | 0    | 0    |  |
| May 2046          | 20                        | 0    | 0    | 0    | 0    | 294  | 8        | 3    | 0    | 0    |  |
| May 2047          | 13                        | 0    | 0    | 0    | 0    | 307  | 6        | 2    | 0    | 0    |  |
| May 2048          | 7                         | 0    | 0    | 0    | 0    | 321  | 4        | 1    | 0    | 0    |  |
| May 2049          | 0                         | 0    | 0    | 0    | 0    | 325  | 3        | 1    | 0    | 0    |  |
| May 2050          | 0                         | 0    | 0    | 0    | 0    | 223  | 1        | 1    | 0    | 0    |  |
| May 2051          | 0                         | 0    | 0    | 0    | 0    | 115  | 0        | 0    | 0    | 0    |  |
| May 2052          | 0                         | 0    | 0    | 0    | 0    | 0    | 0        | 0    | 0    | 0    |  |
| Weighted Average  |                           |      |      |      |      |      |          |      |      |      |  |
| Life (years)      | 16.8                      | 5.4  | 5.4  | 5.4  | 3.2  | 28.5 | 14.5     | 9.2  | 2.1  | 0.6  |  |

#### **Yield Considerations**

An investor seeking to maximize yield should make a decision whether to invest in any Regular or MX Class based on:

- the anticipated yield of that Class resulting from its purchase price,
- the investor's own projection of Mortgage Loan prepayment rates under a variety of scenarios,
- in the case of the Group 4 and 9 Securities, the investor's own projection of payment rates on the Underlying Certificates under a variety of scenarios, and
- in the case of a Floating Rate Class or an Inverse Floating Rate Class, the investor's own projection of levels of LIBOR or Compounded SOFR, as applicable, under a variety of scenarios.

No representation is made regarding Mortgage Loan prepayment rates, Underlying Certificate payment rates, LIBOR levels, Compounded SOFR levels or the yield of any Class.

Prepayments: Effect on Yields

The yields to investors will be sensitive in varying degrees to the rate of prepayments on the related Mortgage Loans.

- In the case of Regular Securities or MX Securities purchased at a premium (especially the Interest Only Classes), faster than anticipated rates of principal payments could result in actual yields to investors that are lower than the anticipated yields.
- Investors in the Interest Only Classes should also consider the risk that rapid rates of principal payments could result in the failure of investors to recover fully their investments.

• In the case of Regular Securities or MX Securities purchased at a discount, slower than anticipated rates of principal payments could result in actual yields to investors that are lower than the anticipated yields.

See "Risk Factors — Rates of principal payments can reduce your yield" in this Supplement.

Rapid rates of prepayments on the Mortgage Loans are likely to coincide with periods of low prevailing interest rates.

During periods of low prevailing interest rates, the yields at which an investor may be able to reinvest amounts received as principal payments on the investor's Class of Securities may be lower than the yield on that Class.

Slow rates of prepayments on the Mortgage Loans are likely to coincide with periods of high prevailing interest rates.

During periods of high prevailing interest rates, the amount of principal payments available to an investor for reinvestment at those high rates may be relatively low.

The Mortgage Loans will not prepay at any constant rate until maturity, nor will all of the Mortgage Loans underlying any Trust Asset Group prepay at the same rate at any one time. The timing of changes in the rate of prepayments may affect the actual yield to an investor, even if the average rate of principal prepayments is consistent with the investor's expectation. In general, the earlier a prepayment of principal on the Mortgage Loans, the greater the effect on an investor's yield. As a result, the effect on an investor's yield of principal prepayments occurring at a rate higher (or lower) than the rate anticipated by the investor during the period immediately following the Closing Date is not likely to be offset by a later equivalent reduction (or increase) in the rate of principal prepayments.

# LIBOR and Compounded SOFR: Effect on Yields of the Floating Rate and Inverse Floating Rate Classes

Low levels of Compounded SOFR can reduce the yield of the Floating Rate Classes. High levels of LIBOR and Compounded SOFR, as applicable, can significantly reduce the yield of the Inverse Floating Rate Classes. In addition, the Floating Rate Classes will not necessarily benefit from a higher yield at high levels of Compounded SOFR and Class TI may not benefit from particularly low levels of Compounded SOFR because the rate on such Classes is capped at a maximum rate described under "Terms Sheet — Interest Rates."

#### Payment Delay: Effect on Yields of the Fixed Rate Classes

The effective yield on any Fixed Rate Class will be less than the yield otherwise produced by its Interest Rate and purchase price because, on each Distribution Date, 30 days' interest will be payable on (or added to the principal amount of) that Class even though interest began to accrue approximately 50 days earlier.

#### **Yield Tables**

The following tables show the pre-tax yields to maturity on a corporate bond equivalent basis of specified Classes at various constant percentages of PSA and, in the case of the Inverse Floating Rate Classes, at various constant levels of LIBOR and Compounded SOFR, as applicable.

The Mortgage Loans will not prepay at any constant rate until maturity, and it is unlikely that LIBOR or Compounded SOFR will remain constant. Moreover, it is likely that the Mortgage Loans will

experience actual prepayment rates that differ from those of the Modeling Assumptions. Therefore, the actual pre-tax yield of any Class may differ from those shown in the applicable table below for that Class even if the Class is purchased at the assumed price shown.

The yields were calculated by

- determining the monthly discount rates that, when applied to the applicable assumed streams
  of cash flows to be paid on the applicable Class, would cause the discounted present value of
  the assumed streams of cash flows to equal the assumed purchase price of that Class plus
  accrued interest, and
- 2. converting the monthly rates to corporate bond equivalent rates.

These calculations do not take into account variations that may occur in the interest rates at which investors may be able to reinvest funds received by them as distributions on their Securities and consequently do not purport to reflect the return on any investment in any Class when those reinvestment rates are considered.

The information set forth in the following tables was prepared on the basis of the Modeling Assumptions and the assumptions that (1) the Interest Rate applicable to each Inverse Floating Rate Class for each Accrual Period following the first Accrual Period will be based on the indicated level of LIBOR or Compounded SOFR, as applicable, and (2) the purchase price of each Class (expressed as a percentage of original Class Notional Balance) plus accrued interest is as indicated in the related table. **The assumed purchase price is not necessarily that at which actual sales will occur.** 

#### **SECURITY GROUP 1**

# Sensitivity of Class SA to Prepayments Assumed Price 1.0%\*

|                    | PSA    | A Prepayment | Assumption R | ates   |
|--------------------|--------|--------------|--------------|--------|
| Compounded SOFR    | 100%   | 250%         | 400%         | 500%   |
| 0.10000%           | 431.6% | 426.0%       | 420.4%       | 416.7% |
| 0.28737%           | 390.7% | 385.3%       | 379.8%       | 376.0% |
| 1.49369%           | 163.5% | 158.1%       | 152.5%       | 148.8% |
| 2.70000% and above | **     | **           | **           | ***    |

#### **SECURITY GROUP 4**

# Sensitivity of Class AS to Prepayments Assumed Price 15.25%\*

|                    | PSA   | Prepaymen | t Assumption | Rates   |
|--------------------|-------|-----------|--------------|---------|
| LIBOR              | 100%  | 150%      | 300%         | 400%    |
| 0.10000%           | 32.9% | 29.3%     | 18.2%        | 10.5%   |
| 0.92729%           | 26.9% | 23.4%     | 12.5%        | 4.9%    |
| 3.53865%           | 7.9%  | 4.7%      | (5.5)%       | (12.6)% |
| 6.15000% and above | **    | **        | **           | **      |

#### **SECURITY GROUP 6**

# Sensitivity of Class S to Prepayments Assumed Price 2.5%\*

|                 | PSA    | Prepayment. | Assumption R | ates   |
|-----------------|--------|-------------|--------------|--------|
| Compounded SOFR | 100%   | 280%        | 450%         | 600%   |
| 0.10%           | 167.4% | 161.4%      | 155.7%       | 150.5% |
| 0.85%           | 123.3% | 116.9%      | 110.8%       | 105.3% |
| 2.15%           | 53.7%  | 46.0%       | 38.6%        | 32.0%  |
| 3.45% and above | **     | **          | **           | **     |

### **SECURITY GROUP 7**

# Sensitivity of Class IM to Prepayments Assumed Price 15.0%\*

# **PSA Prepayment Assumption Rates**

| 200%  | 280%  | 450%  | 600% | 703% |
|-------|-------|-------|------|------|
| 10.8% | 10.8% | 10.8% | 4.8% | 0.0% |

<sup>\*</sup> The price does not include accrued interest. Accrued interest has been added to the price in calculating the yields set forth in the table.

<sup>\*\*</sup> Indicates that investors will suffer a loss of virtually all of their investment.

# Sensitivity of Class JI to Prepayments Assumed Price 15.0%\*

**PSA Prepayment Assumption Rates** 

| 192% | 200%   | 280%   | 450%   | 600%   |
|------|--------|--------|--------|--------|
| 0.0% | (0.8)% | (0.8)% | (0.8)% | (9.5)% |

# Sensitivity of Class MI to Prepayments Assumed Price 15.0%\*

**PSA Prepayment Assumption Rates** 

| 200% | 280% | 450% | 600% | 677% |
|------|------|------|------|------|
| 9.9% | 9.9% | 9.9% | 3.6% | 0.0% |

# Sensitivity of Class NI to Prepayments Assumed Price 15.0%\*

**PSA Prepayment Assumption Rates** 

| 182% | 200%   | 280%   | 450%   | 600%    |
|------|--------|--------|--------|---------|
| 0.1% | (2.1)% | (2.1)% | (2.1)% | (10.9)% |

# **SECURITY GROUP 9**

# Sensitivity of Class IO to Prepayments Assumed Price 14.0%\*

**PSA Prepayment Assumption Rates** 

|      |      | 1 /  |        |         |
|------|------|------|--------|---------|
| 100% | 125% | 233% | 250%   | 400%    |
| 8.6% | 7.0% | 0.0% | (1.1)% | (11.2)% |

#### **SECURITY GROUP 10**

# Sensitivity of Class SJ to Prepayments Assumed Price 2.457%\*

**PSA Prepayment Assumption Rates** 

| Compounded SOFR | 250%   | 280%   | 310%   | 600%   |
|-----------------|--------|--------|--------|--------|
| 0.10%           | 145.0% | 145.0% | 145.0% | 136.3% |
| 0.78%           | 105.2% | 105.2% | 105.2% | 95.1%  |
| 1.99%           | 39.8%  | 39.8%  | 39.8%  | 26.1%  |
| 3.20% and above | **     | **     | **     | **     |

<sup>\*</sup> The price does not include accrued interest. Accrued interest has been added to the price in calculating the yields set forth in the table.

<sup>\*\*</sup> Indicates that investors will suffer a loss of virtually all of their investment.

# Sensitivity of Class TI to Prepayments Assumed Price 6.0%\*

|                 | PSA 1 | Prepayment . | Assumption | Rates |
|-----------------|-------|--------------|------------|-------|
| Compounded SOFR | 250%  | 280%         | 310%       | 600%  |
| 3.20% and below | 71.7% | 71.7%        | 71.7%      | 60.0% |
| 3.25%           | 24.3% | 24.3%        | 24.3%      | 9.4%  |
| 3.30% and above | **    | **           | **         | **    |

<sup>\*</sup> The price does not include accrued interest. Accrued interest has been added to the price in calculating the yields set forth in the table.

#### CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES

The following tax discussion, when read in conjunction with the discussion of "Certain United States Federal Income Tax Consequences" in the Base Offering Circular, describes the material United States federal income tax considerations for investors in the Securities. However, these two tax discussions do not purport to deal with all United States federal tax consequences applicable to all categories of investors, some of which may be subject to special rules.

#### **REMIC Elections**

In the opinion of Cleary Gottlieb Steen & Hamilton LLP, the Trust will constitute a Single REMIC Series as to the Group 1 Trust Assets, the Group 2 Trust Assets, the Group 3 Trust Assets, the Group 4 Trust Assets, the Group 5 Trust Assets, the Group 6 Trust Assets, the Group 8 Trust Assets and the Group 9 Trust Assets and a Double REMIC Series as to the Group 7 Trust Assets and the Group 10 Trust Assets, each for United States federal income tax purposes. Separate REMIC elections will be made for the Group 1 REMIC, the Group 2 REMIC, the Group 3 REMIC, the Group 4 REMIC, the Group 5 REMIC, the Group 6 REMIC, the Group 7 Pooling REMIC, the Group 7 Issuing REMIC, the Group 8 REMIC, the Group 9 REMIC, the Group 10 Pooling REMIC and the Group 10 Issuing REMIC.

#### **Regular Securities**

The Regular Securities will be treated as debt instruments issued by the Group 1 REMIC, the Group 2 REMIC, the Group 3 REMIC, the Group 4 REMIC, the Group 5 REMIC, the Group 6 REMIC, the Group 7 Issuing REMIC, the Group 8 REMIC, the Group 9 REMIC and the Group 10 Issuing REMIC, as applicable, for United States federal income tax purposes. Income on the Regular Securities must be reported under an accrual method of accounting.

The Notional and Accrual Classes of Regular Securities will be issued with original issue discount ("OID"), and certain other Classes of Regular Securities may be issued with OID. See "Certain United States Federal Income Tax Consequences — Tax Treatment of Regular Securities — Original Issue Discount," "— Variable Rate Securities" and "— Interest Weighted Securities and Non-VRDI Securities" in the Base Offering Circular.

<sup>\*\*</sup> Indicates that investors will suffer a loss of virtually all of their investment.

The prepayment assumption that should be used in determining the rates of accrual of OID, if any, on the Regular Securities (as described in "Yield, Maturity and Prepayment Considerations" in this Supplement) is as follows:

| Group(s)    | <u>PSA</u> |
|-------------|------------|
| 1           | 250%       |
| 2 and 4     | 150%       |
| 3, 5 and 8  | 175%       |
| 6, 7 and 10 | 280%       |
| 9           | 125%       |

In the case of the Floating Rate Classes, the interest rate values to be used for these determinations are the initial Interest Rates as set forth in the Terms Sheet under "Interest Rates." No representation is made, however, about the rate at which prepayments on the Mortgage Loans underlying any Group of Trust Assets actually will occur or the level of LIBOR or Compounded SOFR at any time after the date of this Supplement. See "Certain United States Federal Income Tax Consequences" in the Base Offering Circular.

The Regular Securities generally will be treated as "regular interests" in a REMIC for domestic building and loan associations and "real estate assets" for real estate investment trusts ("REITs") as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular. Similarly, interest on the Regular Securities will be considered "interest on obligations secured by mortgages on real property" for REITs as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular.

#### **Residual Securities**

The Class R1 Securities will represent the beneficial ownership of the Residual Interest in the Group 1 REMIC. The Class R2 Securities will represent the beneficial ownership of the Residual Interest in the Group 2 REMIC. The Class R3 Securities will represent the beneficial ownership of the Residual Interest in the Group 3 REMIC. The Class R4 Securities will represent the beneficial ownership of the Residual Interest in the Group 4 REMIC. The Class R5 Securities will represent the beneficial ownership of the Residual Interest in the Group 5 REMIC. The Class R6 Securities will represent the beneficial ownership of the Residual Interest in the Group 6 REMIC. The Class RR7 Securities will represent the beneficial ownership of the Residual Interest in the Group 7 Issuing REMIC and the beneficial ownership of the Residual Interest in the Group 7 Pooling REMIC. The Class R8 Securities will represent the beneficial ownership of the Residual Interest in the Group 8 REMIC. The Class R9 Securities will represent the beneficial ownership of the Residual Interest in the Group 9 REMIC. The Class RR10 Securities will represent the beneficial ownership of the Residual Interest in the Group 10 Issuing REMIC and the beneficial ownership of the Residual Interest in the Group 10 Pooling REMIC. The Residual Securities, i.e., the Class R1, R2, R3, R4, R5, R6, RR7, R8, R9 and RR10 Securities, generally will be treated as "residual interests" in a REMIC for domestic building and loan associations and as "real estate assets" for REITs, as described in "Certain United States Federal Income Tax Consequences" in the Base Offering Circular, but will not be treated as debt for United States federal income tax purposes. Instead, the Holders of the Residual Securities will be required to report, and will be taxed on, their pro rata shares of the taxable income or loss of the related Trust REMIC or Trust REMICs, as applicable, and these requirements will continue until there are no outstanding regular interests in the respective Trust REMIC or Trust REMICs, as applicable. Thus, Residual Holders will have taxable income attributable to the Residual Securities even though they will not receive principal or interest distributions with respect to the Residual Securities, which could result in a negative after-tax return for the Residual Holders. Even

though the Holders of the Residual Securities are not entitled to any stated principal or interest payments on the Residual Securities, the related Trust REMIC or Trust REMICs, as applicable, may have substantial taxable income in certain periods, and offsetting tax losses may not occur until much later periods. Accordingly, the Holders of the Residual Securities may experience substantial adverse tax timing consequences. Prospective investors are urged to consult their own tax advisors and consider the after-tax effect of ownership of the Residual Securities and the suitability of the Residual Securities to their investment objectives.

Prospective Holders of Residual Securities should be aware that, at issuance, based on the expected prices of the Regular and Residual Securities and the prepayment assumption described above, the residual interests represented by the Residual Securities will be treated as "noneconomic residual interests" as that term is defined in Treasury regulations.

OID accruals on the Underlying Certificates will be computed using the same prepayment assumption as set forth under "Certain United States Federal Income Tax Consequences — Regular Securities" in this Supplement.

#### **MX Securities**

For a discussion of certain United States federal income tax consequences applicable to the MX Classes, see "Certain United States Federal Income Tax Consequences — Tax Treatment of MX Securities", "— Exchanges of MX Classes and Regular Classes" and "— Taxation of Foreign Holders of REMIC Securities and MX Securities" in the Base Offering Circular.

Investors should consult their own tax advisors in determining the United States federal, state, local, foreign and any other tax consequences to them of the purchase, ownership and disposition of the Securities.

#### **ERISA MATTERS**

Ginnie Mae guarantees distributions of principal and interest with respect to the Securities. The Ginnie Mae Guaranty is supported by the full faith and credit of the United States of America. The Regular and MX Securities will qualify as "guaranteed governmental mortgage pool certificates" within the meaning of a Department of Labor regulation, the effect of which is to provide that mortgage loans and participations therein underlying a "guaranteed governmental mortgage pool certificate" will not be considered assets of an employee benefit plan subject to the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), or subject to Section 4975 of the Code (each, a "Plan"), solely by reason of the Plan's purchase and holding of that certificate.

Prospective Plan Investors should consult with their advisors to determine whether the purchase, holding or resale of a Security could give rise to a transaction that is prohibited or is not otherwise permissible under either ERISA or the Code.

Governmental plans and certain church plans, while not subject to the fiduciary responsibility provisions of ERISA or the prohibited transaction provisions of ERISA and the Code, may nevertheless be subject to local, state or other federal laws that are substantially similar to the foregoing provisions of ERISA and the Code ("Similar Law").

Fiduciaries of any such Plans or governmental or church plans subject to Similar Law should consult with their counsel before purchasing any of the Securities.

See "ERISA Considerations" in the Base Offering Circular.

The Residual Securities are not offered to, and may not be transferred to, a Plan Investor.

#### LEGAL INVESTMENT CONSIDERATIONS

Institutions whose investment activities are subject to legal investment laws and regulations or to review by certain regulatory authorities may be subject to restrictions on investment in the Securities. No representation is made about the proper characterization of any Class for legal investment or other purposes, or about the permissibility of the purchase by particular investors of any Class under applicable legal investment restrictions.

Investors should consult their own legal advisors regarding applicable investment restrictions and the effect of any restrictions on the liquidity of the Securities prior to investing in the Securities.

See "Legal Investment Considerations" in the Base Offering Circular.

#### PLAN OF DISTRIBUTION

Subject to the terms and conditions of the Sponsor Agreement, the Sponsor has agreed to purchase all of the Securities if any are sold and purchased. The Sponsor proposes to offer the Regular and MX Classes to the public from time to time for sale in negotiated transactions at varying prices to be determined at the time of sale, plus accrued interest from (1) May 1, 2022 on the Fixed Rate Classes and (2) May 20, 2022 on the Floating Rate and Inverse Floating Rate Classes. The Sponsor may effect these transactions by sales to or through certain securities dealers. These dealers may receive compensation in the form of discounts, concessions or commissions from the Sponsor and/or commissions from any purchasers for which they act as agents. Some of the Securities may be sold through dealers in relatively small sales. In the usual case, the commission charged on a relatively small sale of securities will be a higher percentage of the sales price than that charged on a large sale of securities.

#### **INCREASE IN SIZE**

Before the Closing Date, Ginnie Mae, the Trustee and the Sponsor may agree to increase the size of this offering. In that event, the Securities will have the same characteristics as described in this Supplement, except that (1) the Original Class Principal Balance (or original Class Notional Balance) and (2) the Aggregate Scheduled Principal Balances of each Class receiving principal distributions or interest distributions based upon a notional balance from the same Trust Asset Group will increase by the same proportion. The Trust Agreement, the Final Data Statement, the Final Schedules and the Supplemental Statement, if any, will reflect any increase in the size of the transaction.

#### **LEGAL MATTERS**

Certain legal matters will be passed upon for Ginnie Mae by Hunton Andrews Kurth LLP, for the Trust by Cleary Gottlieb Steen & Hamilton LLP and Marcell Solomon & Associates, P.C., and for the Trustee by Faegre Drinker Biddle & Reath LLP.

Available Combinations(1)

| REMIC Securities |  |                     |   | MX Securities        | ırities          |                  |                    |                                  |
|------------------|--|---------------------|---|----------------------|------------------|------------------|--------------------|----------------------------------|
|                  | Original Class Principal Balance or Class Notional Balance | Related<br>MX Class | Maximum Original Class Principal Balance or Class Notional Balance(2) | Principal<br>Type(3) | Interest<br>Rate | Interest Type(3) | CUSIP<br>Number    | Final<br>Distribution<br>Date(4) |
|                  |  |                     |   |                      |                  |                  |                    |                                  |
|                  | \$ 1,612,300   | MC                  | \$14,756,000  | PAC/AD               | 3.50%            | FIX              | 38383RC47 May 2052 | May 2052                         |
|                  | 13,143,700   |                     |   |                      |                  |                  |                    |                                  |
|                  | \$14,612,444   | MI                  | \$16,529,109  | NTL(PAC/AD)          | 4.50%            | 4.50% FIX/IO     | 38383RC54          | May 2052                         |
|                  | 1,638,888 277,777  |                     |   |                      |                  |                  |                    |                                  |
|                  |  |                     |   |                      |                  |                  |                    |                                  |
|                  | \$ 4,291,000   | KL                  | \$13,243,055  | SEQ                  | 3.50%            | FIX              | 38383RC62          | May 2052                         |
|                  | 8,952,055  |                     |   |                      |                  |                  |                    |                                  |

(1) All exchanges must comply with minimum denomination restrictions.

(2) The amount shown for each MX Class represents the maximum Original Class Principal Balance (or original Class Notional Balance) of that Class, assuming it were to be issued on the Closing Date.

(3) As defined under "Class Types" in Appendix I to the Base Offering Circular.

See "Yield, Maturity and Prepayment Considerations — Final Distribution Date" in this Supplement. (4)

# Schedule II

# SCHEDULED PRINCIPAL BALANCES

| Distribution Date | Classes MH, MJ,<br>ML, MP and MY<br>(in the aggregate) | Classes FB and FJ<br>(in the aggregate) |
|-------------------|--|---|
| Initial Balance   | \$65,756,000.00  | \$20,000,000.00                         |
| June 2022         | 65,552,245.70  | 19,923,803.73                           |
| July 2022         | 65,319,472.92  | 19,838,630.35                           |
| August 2022       | 65,057,726.52  | 19,744,535.96                           |
| September 2022    | 64,767,080.56  | 19,641,588.17                           |
| October 2022      | 64,447,638.34  | 19,529,866.07                           |
| November 2022     | 64,099,532.49  | 19,409,460.13                           |
| December 2022     | 63,722,924.88  | 19,280,472.15                           |
| January 2023      | 63,318,006.56  | 19,143,015.09                           |
| February 2023     | 62,884,997.66  | 18,997,212.97                           |
| March 2023        | 62,424,147.18  | 18,843,200.68                           |
| April 2023        | 61,935,732.79  | 18,681,123.80                           |
| May 2023          | 61,420,060.53  | 18,511,138.35                           |
| June 2023         | 60,877,464.50  | 18,333,410.62                           |
| July 2023         | 60,308,306.48  | 18,148,116.82                           |
| August 2023       | 59,712,975.50  | 17,955,442.86                           |
| September 2023    | 59,091,887.39  | 17,755,584.03                           |
| October 2023      | 58,445,484.22  | 17,548,744.63                           |
| November 2023     | 57,774,233.78  | 17,335,137.68                           |
| December 2023     | 57,078,628.90  | 17,114,984.50                           |
| January 2024      | 56,359,186.87  | 16,888,514.38                           |
| February 2024     | 55,616,448.67  | 16,655,964.08                           |
| March 2024        | 54,850,978.27  | 16,417,577.51                           |
| April 2024        | 54,063,361.81  | 16,173,605.21                           |
| May 2024          | 53,254,206.80  | 15,924,303.95                           |
| June 2024         | 52,424,141.22  | 15,669,936.21                           |
| July 2024         | 51,573,812.65  | 15,410,769.74                           |
| August 2024       | 50,703,887.32  | 15,155,224.95                           |
| September 2024    | 49,815,049.13  | 14,903,250.66                           |
| October 2024      | 48,907,998.67  | 14,654,796.38                           |
| November 2024     | 47,983,452.15  | 14,409,812.34                           |
| December 2024     | 47,068,195.30  | 14,168,249.44                           |
| January 2025      | 46,162,121.14  | 13,930,059.27                           |
| February 2025     | 45,265,123.87  | 13,695,194.07                           |
| March 2025        | 44,377,098.83  | 13,463,606.77                           |
| April 2025        | 43,497,942.45  | 13,235,250.92                           |
| May 2025          | 42,627,552.29  | 13,010,080.74                           |
| June 2025         | 41,765,826.99  | 12,788,051.07                           |
| July 2025         | 40,912,666.30  | 12,569,117.36                           |
| August 2025       | 40,067,971.02  | 12,353,235.71                           |
| September 2025    | 39,231,643.00  | 12,140,362.79                           |
| October 2025      | 38,403,585.17  | 11,930,455.90                           |
| November 2025     | 37,583,701.48  | 11,723,472.91                           |
| December 2025     | 36,771,896.91  | 11,519,372.29                           |
|                   |  |   |

| Distribution Date | Classes MH, MJ,<br>ML, MP and MY<br>(in the aggregate) | Classes FB and FJ<br>(in the aggregate) |
|-------------------|--|---|
| January 2026      | \$35,968,077.45  | \$11,318,113.07                         |
| February 2026     | 35,172,150.10  | 11,119,654.85                           |
| March 2026        | 34,384,022.85  | 10,923,957.79                           |
| April 2026        | 33,603,604.68  | 10,730,982.62                           |
| May 2026          | 32,830,805.53  | 10,540,690.57                           |
| June 2026         | 32,065,536.31  | 10,353,043.45                           |
| July 2026         | 31,307,708.89  | 10,168,003.59                           |
| August 2026       | 30,557,236.06  | 9,985,533.81                            |
| September 2026    | 29,814,031.55  | 9,805,597.49                            |
| October 2026      | 29,078,010.03  | 9,628,158.48                            |
| November 2026     | 28,349,087.04  | 9,453,181.15                            |
| December 2026     | 27,627,179.05  | 9,280,630.37                            |
| January 2027      | 26,912,203.43  | 9,110,471.48                            |
| February 2027     | 26,204,078.39  | 8,942,670.30                            |
| March 2027        | 25,502,723.06  | 8,777,193.14                            |
| April 2027        | 24,808,057.40  | 8,614,006.76                            |
| May 2027          | 24,125,072.40  | 8,453,078.39                            |
| June 2027         | 23,460,658.64  | 8,294,844.46                            |
| July 2027         | 22,814,315.91  | 8,139,488.97                            |
| August 2027       | 22,185,557.36  | 7,986,960.52                            |
| September 2027    | 21,573,909.17  | 7,837,208.66                            |
| October 2027      | 20,978,910.18  | 7,690,183.80                            |
| November 2027     | 20,400,111.58  | 7,545,837.22                            |
| December 2027     | 19,837,076.56  | 7,404,121.08                            |
| January 2028      | 19,289,380.01  | 7,264,988.37                            |
| February 2028     | 18,756,608.18  | 7,128,392.91                            |
| March 2028        | 18,238,358.40  | 6,994,289.33                            |
| April 2028        | 17,734,238.78  | 6,862,633.07                            |
| May 2028          | 17,243,867.94  | 6,733,380.36                            |
| June 2028         | 16,766,874.70  | 6,606,488.18                            |
| July 2028         | 16,302,897.81  | 6,481,914.29                            |
| August 2028       | 15,851,585.71  | 6,359,617.18                            |
| September 2028    | 15,412,596.27  | 6,239,556.10                            |
| October 2028      | 14,985,596.52  | 6,121,690.99                            |
| November 2028     | 14,570,262.41  | 6,005,982.51                            |
| December 2028     | 14,166,278.58  | 5,892,392.01                            |
| January 2029      | 13,773,338.13  | 5,780,881.53                            |
| February 2029     | 13,391,142.38  | 5,671,413.78                            |
| March 2029        | 13,019,400.69  | 5,563,952.12                            |
| April 2029        | 12,657,830.17  | 5,458,460.56                            |
| May 2029          | 12,306,155.57  | 5,354,903.76                            |
| June 2029         | 11,964,108.98  | 5,253,246.99                            |
| July 2029         | 11,631,429.73  | 5,153,456.14                            |
| August 2029       | 11,307,864.11  | 5,055,497.70                            |
| September 2029    | 10,993,165.24  | 4,959,338.76                            |
| October 2029      | 10,687,092.86  | 4,864,946.98                            |
| November 2029     | 10,389,413.18  | 4,772,290.61                            |

| Distribution Date | Classes MH, MJ,<br>ML, MP and MY<br>(in the aggregate) | Classes FB and FJ<br>(in the aggregate) |
|-------------------|--|---|
| December 2029     | \$10,099,898.68  | \$ 4,681,338.44                         |
| January 2030      | 9,818,327.95   | 4,592,059.83                            |
| February 2030     | 9,544,485.53   | 4,504,424.68                            |
| March 2030        | 9,278,161.78   | 4,418,403.42                            |
| April 2030        | 9,019,152.65   | 4,333,967.00                            |
| May 2030          | 8,767,259.62   | 4,251,086.90                            |
| June 2030         | 8,522,289.49   | 4,169,735.08                            |
| July 2030         | 8,284,054.25   | 4,089,884.01                            |
| August 2030       | 8,052,370.97   | 4,011,506.67                            |
| September 2030    | 7,827,061.62   | 3,934,576.47                            |
| October 2030      | 7,607,952.99   | 3,859,067.35                            |
| November 2030     | 7,394,876.51   | 3,784,953.66                            |
| December 2030     | 7,187,668.15   | 3,712,210.24                            |
| January 2031      | 6,986,168.32   | 3,640,812.35                            |
| February 2031     | 6,790,221.70   | 3,570,735.72                            |
| March 2031        | 6,599,677.18   | 3,501,956.49                            |
| April 2031        | 6,414,387.72   | 3,434,451.22                            |
| May 2031          | 6,234,210.22   | 3,368,196.90                            |
| June 2031         | 6,059,005.47   | 3,303,170.93                            |
| July 2031         | 5,888,637.99   | 3,239,351.09                            |
| August 2031       | 5,722,975.97   | 3,176,715.58                            |
| September 2031    | 5,561,891.15   | 3,115,242.98                            |
| October 2031      | 5,405,258.73   | 3,054,912.24                            |
| November 2031     | 5,252,957.28   | 2,995,702.69                            |
| December 2031     | 5,104,868.64   | 2,937,594.04                            |
| January 2032      | 4,960,877.86   | 2,880,566.34                            |
| February 2032     | 4,820,873.08   | 2,824,600.02                            |
| March 2032        | 4,684,745.47   | 2,769,675.83                            |
| April 2032        | 4,552,389.13   | 2,715,774.89                            |
| May 2032          | 4,423,701.03   | 2,662,878.63                            |
| June 2032         | 4,298,580.93   | 2,610,968.84                            |
| July 2032         | 4,176,931.28   | 2,560,027.60                            |
| August 2032       | 4,058,657.20   | 2,510,037.35                            |
| September 2032    | 3,943,666.35   | 2,460,980.80                            |
| October 2032      | 3,831,868.89   | 2,412,841.00                            |
| November 2032     | 3,723,177.43   | 2,365,601.29                            |
| December 2032     | 3,617,506.94   | 2,319,245.31                            |
| January 2033      | 3,514,774.67   | 2,273,756.99                            |
| February 2033     | 3,414,900.14   | 2,229,120.55                            |
| March 2033        | 3,317,805.03   | 2,185,320.48                            |
| April 2033        | 3,223,413.16   | 2,142,341.56                            |
| May 2033          | 3,131,650.40   | 2,100,168.84                            |
| June 2033         | 3,042,444.64   | 2,058,787.63                            |
| July 2033         | 2,955,725.71   | 2,018,183.51                            |
| August 2033       | 2,871,425.36   | 1,978,342.32                            |
| September 2033    | 2,789,477.19   | 1,939,250.14                            |
| October 2033      | 2,709,816.59   | 1,900,893.31                            |

| Distribution Date | Classes MH, MJ,<br>ML, MP and MY<br>(in the aggregate) | Classes FB and FJ<br>(in the aggregate) |
|-------------------|--|---|
| November 2033     | \$ 2,632,380.70  | \$ 1,863,258.41                         |
| December 2033     | 2,557,108.40   | 1,826,332.26                            |
| January 2034      | 2,483,940.19   | 1,790,101.92                            |
| February 2034     | 2,412,818.21   | 1,754,554.68                            |
| March 2034        | 2,343,686.16   | 1,719,678.04                            |
| April 2034        | 2,276,489.28   | 1,685,459.77                            |
| May 2034          | 2,211,174.30   | 1,651,887.80                            |
| June 2034         | 2,147,689.37   | 1,618,950.32                            |
| July 2034         | 2,085,984.10   | 1,586,635.71                            |
| August 2034       | 2,026,009.42   | 1,554,932.57                            |
| September 2034    | 1,967,717.63   | 1,523,829.70                            |
| October 2034      | 1,911,062.32   | 1,493,316.09                            |
| November 2034     | 1,855,998.33   | 1,463,380.95                            |
| December 2034     | 1,802,481.76   | 1,434,013.67                            |
| January 2035      | 1,750,469.86   | 1,405,203.83                            |
| February 2035     | 1,699,921.10   | 1,376,941.19                            |
| March 2035        | 1,650,795.03   | 1,349,215.71                            |
| April 2035        | 1,603,052.34   | 1,322,017.53                            |
| May 2035          | 1,556,654.77   | 1,295,336.94                            |
| June 2035         | 1,511,565.12   | 1,269,164.45                            |
| July 2035         | 1,467,747.20   | 1,243,490.70                            |
| August 2035       | 1,425,165.80   | 1,218,306.51                            |
| September 2035    | 1,383,786.67   | 1,193,602.88                            |
| October 2035      | 1,343,576.51   | 1,169,370.95                            |
| November 2035     | 1,304,502.92   | 1,145,602.04                            |
| December 2035     | 1,266,534.40   | 1,122,287.62                            |
| January 2036      | 1,229,640.27   | 1,099,419.29                            |
| February 2036     | 1,193,790.75   | 1,076,988.84                            |
| March 2036        | 1,158,956.82   | 1,054,988.18                            |
| April 2036        | 1,125,110.28   | 1,033,409.37                            |
| May 2036          | 1,092,223.70   | 1,012,244.63                            |
| June 2036         | 1,060,270.40   | 991,486.31                              |
| July 2036         | 1,029,224.43   | 971,126.88                              |
| August 2036       | 999,060.55   | 951,158.98                              |
| September 2036    | 969,754.21   | 931,575.35                              |
| October 2036      | 941,281.54   | 912,368.89                              |
| November 2036     | 913,619.31   | 893,532.60                              |
| December 2036     | 886,744.95   | 875,059.63                              |
| January 2037      | 860,636.48   | 856,943.25                              |
| February 2037     | 835,272.55   | 839,176.83                              |
| March 2037        | 810,632.39   | 821,753.89                              |
| April 2037        | 786,695.78   | 804,668.05                              |
| May 2037          | 763,443.08   | 787,913.04                              |
| June 2037         | 740,855.19   | 771,482.73                              |
| July 2037         | 718,913.51   | 755,371.07                              |
| August 2037       | 697,599.98   | 739,572.13                              |
| September 2037    | 676,897.03   | 724,080.10                              |

| Distribution Date | M  | asses MH, MJ,<br>L, MP and MY<br>the aggregate) | Cla | usses FB and FJ<br>the aggregate) |
|-------------------|----|---|-----|-----------------------------------|
| October 2037      | \$ | 656,787.55                                      | \$  | 708,889.26                        |
| November 2037     |    | 637,254.93                                      |     | 693,994.01                        |
| December 2037     |    | 618,283.01                                      |     | 679,388.82                        |
| January 2038      |    | 599,856.06                                      |     | 665,068.30                        |
| February 2038     |    | 581,958.81                                      |     | 651,027.12                        |
| March 2038        |    | 564,576.38                                      |     | 637,260.09                        |
| April 2038        |    | 547,694.34                                      |     | 623,762.07                        |
| May 2038          |    | 531,298.61                                      |     | 610,528.05                        |
| June 2038         |    | 515,375.55                                      |     | 597,553.07                        |
| July 2038         |    | 499,911.84                                      |     | 584,832.31                        |
| August 2038       |    | 484,894.58                                      |     | 572,361.00                        |
| September 2038    |    | 470,311.20                                      |     | 560,134.46                        |
| October 2038      |    | 456,149.48                                      |     | 548,148.13                        |
| November 2038     |    | 442,397.54                                      |     | 536,397.48                        |
| December 2038     |    | 429,043.83                                      |     | 524,878.10                        |
| January 2039      |    | 416,077.12                                      |     | 513,585.66                        |
| February 2039     |    | 403,486.48                                      |     | 502,515.88                        |
| March 2039        |    | 391,261.30                                      |     | 491,664.59                        |
| April 2039        |    | 379,391.25                                      |     | 481,027.67                        |
| May 2039          |    | 367,866.29                                      |     | 470,601.11                        |
| June 2039         |    | 356,676.68                                      |     | 460,380.93                        |
| July 2039         |    | 345,812.90                                      |     | 450,363.25                        |
| August 2039       |    | 335,265.75                                      |     | 440,544.26                        |
| September 2039    |    | 325,026.25                                      |     | 430,920.20                        |
| October 2039      |    | 315,085.68                                      |     | 421,487.41                        |
| November 2039     |    | 305,435.56                                      |     | 412,242.28                        |
| December 2039     |    | 296,067.65                                      |     | 403,181.25                        |
| January 2040      |    | 286,973.93                                      |     | 394,300.85                        |
| February 2040     |    | 278,146.62                                      |     | 385,597.66                        |
| March 2040        |    | 269,578.14                                      |     | 377,068.34                        |
| April 2040        |    | 261,261.13                                      |     | 368,709.59                        |
| May 2040          |    | 253,188.43                                      |     | 360,518.17                        |
| June 2040         |    | 245,353.07                                      |     | 352,490.92                        |
| July 2040         |    | 237,748.31                                      |     | 344,624.72                        |
| August 2040       |    | 230,367.56                                      |     | 336,916.52                        |
| September 2040    |    | 223,204.43                                      |     | 329,363.31                        |
| October 2040      |    | 216,252.70                                      |     | 321,962.15                        |
| November 2040     |    | 209,506.34                                      |     | 314,710.15                        |
| December 2040     |    | 202,959.47                                      |     | 307,604.47                        |
| January 2041      |    | 196,606.39                                      |     | 300,642.32                        |
| February 2041     |    | 190,441.55                                      |     | 293,820.97                        |
| March 2041        |    | 184,459.55                                      |     | 287,137.74                        |
| April 2041        |    | 178,655.16                                      |     | 280,589.98                        |
| May 2041          |    | 173,023.28                                      |     | 274,175.12                        |
| June 2041         |    | 167,558.95                                      |     | 267,890.61                        |
| July 2041         |    | 162,257.37                                      |     | 261,733.96                        |
| August 2041       |    | 157,113.86                                      |     | 255,702.72                        |

| Distribution Date | Classes MH, MJ,<br>ML, MP and MY<br>(in the aggregate) | Classes FB and FJ<br>(in the aggregate) |
|-------------------|--|---|
| September 2041    | \$ 152,123.87  | \$ 249,794.50                           |
| October 2041      | 147,282.97   | 244,006.94                              |
| November 2041     | 142,586.88   | 238,337.71                              |
| December 2041     | 138,031.42   | 232,784.57                              |
| January 2042      | 133,612.54   | 227,345.26                              |
| February 2042     | 129,326.28   | 222,017.61                              |
| March 2042        | 125,168.82   | 216,799.48                              |
| April 2042        | 121,136.44   | 211,688.74                              |
| May 2042          | 117,225.51   | 206,683.34                              |
| June 2042         | 113,432.53   | 201,781.25                              |
| July 2042         | 109,754.06   | 196,980.46                              |
| August 2042       | 106,186.78   | 192,279.03                              |
| September 2042    | 102,727.48   | 187,675.04                              |
| October 2042      | 99,373.02  | 183,166.61                              |
| November 2042     | 96,120.34  | 178,751.88                              |
| December 2042     | 92,966.49  | 174,429.04                              |
| January 2043      | 89,908.58  | 170,196.31                              |
| February 2043     | 86,943.82  | 166,051.95                              |
| March 2043        | 84,069.50  | 161,994.23                              |
| April 2043        | 81,282.97  | 158,021.48                              |
| May 2043          | 78,581.67  | 154,132.05                              |
| June 2043         | 75,963.10  | 150,324.30                              |
| July 2043         | 73,424.85  | 146,596.66                              |
| August 2043       | 70,964.56  | 142,947.56                              |
| September 2043    | 68,579.95  | 139,375.47                              |
| October 2043      | 66,268.79  | 135,878.88                              |
| November 2043     | 64,028.92  | 132,456.33                              |
| December 2043     | 61,858.26  | 129,106.36                              |
| January 2044      | 59,754.76  | 125,827.55                              |
| February 2044     | 57,716.44  | 122,618.51                              |
| March 2044        | 55,741.39  | 119,477.87                              |
| April 2044        | 53,827.73  | 116,404.28                              |
| May 2044          | 51,973.66  | 113,396.44                              |
| June 2044         | 50,177.41  | 110,453.05                              |
| July 2044         | 48,437.27  | 107,572.84                              |
| August 2044       | 46,751.57  | 104,754.56                              |
| September 2044    | 45,118.70  | 101,997.00                              |
| October 2044      | 43,537.10  | 99,298.95                               |
| November 2044     | 42,005.24  | 96,659.25                               |
| December 2044     | 40,521.64  | 94,076.73                               |
| January 2045      | 39,084.86  | 91,550.27                               |
| February 2045     | 37,693.50  | 89,078.75                               |
| March 2045        | 36,346.22  | 86,661.09                               |
| April 2045        | 35,041.69  | 84,296.21                               |
| May 2045          | 33,778.63  | 81,983.07                               |
| June 2045         | 32,555.81  | 79,720.64                               |
| July 2045         | 31,372.01  | 77,507.91                               |
|                   |  |   |

| Distribution Date | Classes MH, MJ,<br>ML, MP and MY<br>(in the aggregate) | Classes FB and FJ<br>(in the aggregate) |
|-------------------|--|---|
| August 2045       | \$ 30,226.07   | \$ 75,343.89                            |
| September 2045    | 29,116.85  | 73,227.60                               |
| October 2045      | 28,043.24  | 71,158.10                               |
| November 2045     | 27,004.16  | 69,134.44                               |
| December 2045     | 25,998.59  | 67,155.71                               |
| January 2046      | 25,025.51  | 65,221.02                               |
| February 2046     | 24,083.93  | 63,329.46                               |
| March 2046        | 23,172.90  | 61,480.19                               |
| April 2046        | 22,291.50  | 59,672.35                               |
| May 2046          | 21,438.82  | 57,905.10                               |
| June 2046         | 20,614.00  | 56,177.64                               |
| July 2046         | 19,816.18  | 54,489.14                               |
| August 2046       | 19,044.55  | 52,838.84                               |
| September 2046    | 18,298.31  | 51,225.95                               |
| October 2046      | 17,576.67  | 49,649.72                               |
| November 2046     | 16,878.89  | 48,109.41                               |
| December 2046     | 16,204.24  | 46,604.28                               |
| January 2047      | 15,552.00  | 45,133.63                               |
| February 2047     | 14,921.49  | 43,696.74                               |
| March 2047        | 14,312.04  | 42,292.94                               |
| April 2047        | 13,723.01  | 40,921.55                               |
| May 2047          | 13,153.75  | 39,581.90                               |
| June 2047         | 12,603.67  | 38,273.35                               |
| July 2047         | 12,072.16  | 36,995.27                               |
| August 2047       | 11,558.66  | 35,747.02                               |
| September 2047    | 11,062.59  | 34,527.99                               |
| October 2047      | 10,583.43  | 33,337.59                               |
| November 2047     | 10,120.65  | 32,175.22                               |
| December 2047     | 9,673.72   | 31,040.31                               |
| January 2048      | 9,242.17   | 29,932.29                               |
| February 2048     | 8,825.50   | 28,850.60                               |
| March 2048        | 8,423.25   | 27,794.71                               |
| April 2048        | 8,034.98   | 26,764.07                               |
| May 2048          | 7,660.23   | 25,758.16                               |
| June 2048         | 7,298.58   | 24,776.47                               |
| July 2048         | 6,949.62   | 23,818.49                               |
| August 2048       | 6,612.95   | 22,883.73                               |
| September 2048    | 6,288.18   | 21,971.71                               |
| October 2048      | 5,974.93   | 21,081.95                               |
| November 2048     | 5,672.83   | 20,213.98                               |
| December 2048     | 5,381.53   | 19,367.35                               |
| January 2049      | 5,100.69   | 18,541.60                               |
| February 2049     | 4,829.97   | 17,736.31                               |
| March 2049        | 4,569.05   | 16,951.03                               |
| April 2049        | 4,317.60   | 16,185.35                               |
| May 2049          | 4,075.33   | 15,438.85                               |
| June 2049         | 3,841.95   | 14,711.13                               |

| Distribution Date            | Classes MH, MJ,<br>ML, MP and MY<br>(in the aggregate) | Classes FB and FJ<br>(in the aggregate) |
|------------------------------|--|---|
| July 2049                    | \$ 3,617.16  | \$ 14,001.79                            |
| August 2049                  | 3,400.68   | 13,310.43                               |
| September 2049               | 3,192.25   | 12,636.68                               |
| October 2049                 | 2,991.60   | 11,980.16                               |
| November 2049                | 2,798.48   | 11,340.50                               |
| December 2049                | 2,612.65   | 10,717.34                               |
| January 2050                 | 2,433.86   | 10,110.33                               |
| February 2050                | 2,261.89   | 9,519.12                                |
| March 2050                   | 2,096.51   | 8,943.37                                |
| April 2050                   | 1,937.50   | 8,382.75                                |
| May 2050                     | 1,784.66   | 7,836.94                                |
| June 2050                    | 1,637.77   | 7,305.61                                |
| July 2050                    | 1,496.64   | 6,788.44                                |
| August 2050                  | 1,361.08   | 6,285.14                                |
| September 2050               | 1,230.90   | 5,795.39                                |
| October 2050                 | 1,105.93   | 5,318.92                                |
| November 2050                | 985.98   | 4,855.41                                |
| December 2050                | 870.89   | 4,404.60                                |
| January 2051                 | 760.49   | 3,966.20                                |
| February 2051                | 654.63   | 3,539.94                                |
| March 2051                   | 553.15   | 3,125.56                                |
| April 2051                   | 455.90   | 2,722.78                                |
| May 2051                     | 362.74   | 2,331.36                                |
| June 2051                    | 273.53   | 1,951.05                                |
| July 2051                    | 188.12   | 1,581.59                                |
| August 2051                  | 106.40   | 1,222.74                                |
| September 2051               | 28.23  | 874.28                                  |
| October 2051                 | 0.00   | 535.96                                  |
| November 2051                | 0.00   | 207.57                                  |
| December 2051 and thereafter | 0.00   | 0.00                                    |

# **Underlying Certificates**

| Ginnie<br>Mae<br>I or II                    | п              | =             | ш               | П                  | П                | П                | П                | П                | П                 | П                 | П                 | П                | П                | П                | П                | П                | п                 | ш              | П               | П                  | П                  | П                 |
|---|----------------|---------------|-----------------|--------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------|------------------|------------------|-------------------|----------------|-----------------|--------------------|--------------------|-------------------|
| Percentage<br>of Class<br>in Trust          | 45.7161182606% | 48.8159989896 | 100.0000000000  | 70.6926706692      | 18.1184668990    | 100.0000000000   | 17.3188947487    | 29.1636661622    | 12.9731261129     | 100.0000000000    | 25.6224304762     | 26.9565778543    | 3.2409999652     | 71.7797913652    | 72.22222222      | 5.6478675157     | 67.1681893339     | 100.0000000000 | 100.0000000000  | 55.5220544571      | 100.0000000000     | 25.0000019776     |
| Notional<br>Balance<br>in Trust             | \$ 12,209,242  | 19,200,125    | 36,751,733      | 16,722,794         | 44,275,566       | 48,315,581       | 10,697,365       | 10,597,420       | 24,343,664        | 13,171,532        | 21,634,220        | 20,950,409       | 5,966,846        | 105,477,949      | 27,795,270       | 16,868,074       | 117,222,500       | 19,076,612     | 51,352,593      | 26,494,199         | 41,010,912         | 6,123,766         |
| Underlying<br>Certificate<br>Factor(2)      | 0.72487024     | 0.66077129    | 0.81670519      | 0.86660405         | 0.85145319       | 0.80525969       | 0.80474140       | 0.84183433       | 0.81416937        | 0.82322078        | 0.80413990        | 0.84648116       | 0.84265222       | 0.81955100       | 0.85523907       | 0.82961865       | 0.86130564        | 0.87323191     | 0.93185751      | 0.90863183         | 0.94822637         | 0.96881865        |
| Original<br>Notional<br>Balance<br>of Class | \$ 36,843,349  | 59,523,809    | 45,000,000      | 27,296,926         | 287,000,000      | 000,000,009      | 76,753,876       | 43,164,964       | 230,476,446       | 16,000,000        | 105,000,000       | 91,814,325       | 218,482,878      | 179,301,325      | 45,000,000       | 359,999,999      | 202,623,610       | 21,845,986     | 55,107,774      | 52,516,686         | 43,250,128         | 25,283,434        |
| Principal<br>Type(1)                        | NTL(PT/PAC/AD) | NTL(PT)       | NTL(PT)         | NTL(PT)            | NTL(PT)          | NTL(PT)          | NTL(PT)          | NTL(PT)          | NTL(PT)           | NTL(PT)           | NTL(PT)           | NTL(PT)          | NTL(PT)          | NTL(PT)          | NTL(PT)          | NTL(PT)          | NTL(PT)           | NTL(PT)        | NTL(PT)         | NTL(PT)            | NTL(PT)            | NTL(PT)           |
| Final<br>Distribution<br>Date               | June 2050      | June 2050     | August 2050     | September 2050     | October 2050     | October 2050     | October 2050     | October 2050     | November 2050     | November 2050     | December 2050     | January 2051     | February 2051     | May 2051       | August 2051     | September 2051     | September 2051     | November 2051     |
| Interest<br>Type(1)                         |                |               |                 |                    |                  |                  |                  |                  |                   |                   |                   |                  |                  |                  |                  |                  |                   |                |                 |                    |                    |                   |
| Interest<br>Rate                            | (2)            | (2)           | 2.50%           | 2.50               | 2.50             | 2.50             | 2.50             | 2.50             | 2.50              | 2.50              | 2.50              | 2.50             | 2.50             | 2.50             | 2.50             | 2.50             | 2.50              | 2.50           | 2.50            | 2.50               | 2.50               | 2.50              |
| CUSIP                                       | 38382FZ98      | 38382FZ64     | 38382HS76       | 38382JE36          | 38382KXY4        | 38382KM42        | 38382KG56        | 38382KL68        | 38382LBH3         | 38382LBQ3         | 38382LX48         | 38382MT58        | 38382MJ83        | 38382L7S4        | 38382M5D7        | 38382M3D9        | 38382NXV4         | 38382QV23      | 38382XBQ7       | 38383ATD6          | 38382X4U6          | 38383DHJ0         |
| Issue Date                                  | June 30, 2020  | June 30, 2020 | August 28, 2020 | September 30, 2020 | October 30, 2020 | October 30, 2020 | October 30, 2020 | October 30, 2020 | November 30, 2020 | November 30, 2020 | December 30, 2020 | January 29, 2021 | February 26, 2021 | May 28, 2021   | August 30, 2021 | September 30, 2021 | September 30, 2021 | November 30, 2021 |
| Class                                       | AS(3)(4)       | SQ(4)         | IN(3)(4)        | GI(4)              | IW(3)(4)         | AI(3)(4)         | IE(4)            | IY(3)(4)         | BI(4)             | NI(4)             | ID(4)             | IH(4)            | IA(4)            | BI(3)(4)         | IG(4)            | BI(3)(4)         | DI(4)             | IQ(4)          | AI(3)(4)        | HI(3)(4)           | IQ(3)(4)           | DI(3)(4)          |
| Series                                      | 2020-078       | 2020-078      | 2020-123        | 2020-133           | 2020-146         | 2020-160         | 2020-160         | 2020-160         | 2020-167          | 2020-167          | 2020-188          | 2021-001         | 2021-001         | 2021-006         | 2021-007         | 2021-015         | 2021-030          | 2021-077       | 2021-135        | 2021-156           | 2021-158           | 2021-194          |
| Issuer                                      | Ginnie Mae     | Ginnie Mae    | Ginnie Mae      | Ginnie Mae         | Ginnie Mae       | Ginnie Mae       | Ginnie Mae       | Ginnie Mae       | Ginnie Mae        | Ginnie Mae        | Ginnie Mae        | Ginnie Mae       | Ginnie Mae       | Ginnie Mae       | Ginnie Mae       | Ginnie Mae       | Ginnie Mae        | Ginnie Mae     | Ginnie Mae      | Ginnie Mae         | Ginnie Mae         | Ginnie Mae        |
| Trust<br>Asset<br>Group                     | 4              | 4             | 6               | 6                  | 6                | 6                | 6                | 6                | 6                 | 6                 | 6                 | 6                | 6                | 6                | 6                | 6                | 6                 | 6              | 6               | 6                  | 6                  | 6                 |

As defined under "Class Types" in Appendix I to the Base Offering Circular.

Underlying Certificate Factors are as of May 2022.

More than 10% of the Mortgage Loans underlying this Underlying Certificate may be higher balance Mortgage Loans. See "Risk Factors" in this Supplement. 284

The Interest Rate will be calculated as described under "Terms Sheet - Interest Rates" in the related Underlying Certificate Disclosure Document. (5)



\$596,398,739

**Government National Mortgage Association** 

# **GINNIE MAE**®

Guaranteed REMIC
Pass-Through Securities
and MX Securities
Ginnie Mae REMIC Trust 2022-083

OFFERING CIRCULAR SUPPLEMENT May 23, 2022

Goldman Sachs & Co. LLC Ramirez & Co., Inc.