

# EXAMPLE OF YIELD MAINTENANCE CALCULATION IN CONNECTION WITH A FULL PREPAYMENT {PRIVATE} FOR NOTE VERSIONS PRIOR TO 11/2001

#### **GIVEN:**

- (1) Date of the note (closing date) = 9/30/90
- (2) Loan term = 10 years
- (3) Yield maintenance period = 7 years (ending 9/29/97)
- (4) Note rate = "c" = 10.5% (.105)
- (5) Servicing fee = "s" = .50% (.005)
- (6) Expected date of full prepayment = 6/30/94
- (7) UPB of loan, as of date of full prepayment = "b" = \$7,340,876
- (8) Yield on pre-selected Treasury security \* = "r" = 8.4% (.084)

\*Yield on security as reported in <u>Wall Street Journal</u> on fifth business day preceding the date borrower gives formal notice of intent to prepay.

### THEN:

(a) Remaining yield maintenance period = "n" = 6/30/94 to 9/29/97

= 1187 days (actual number of days) = 3.2521 years (365/366-day years)

(b) Present value factor = "f" =  $\frac{1 - (1 + r)^{-n}}{r}$ 

 $= 1 - (1 + .084)^{-3.2521}$ .084

= 2.7467

(c) Yield maintenance premium due from borrower = (c - r) X f X b

= (.105 - .084) (2.7467) (7,340,876)

= \$423,426.87

(d) Lender's share of premium =  $s X f X b^{**}$ 

= .005 (2.7467) (7,340,876)

= \$100,815.92

\*\*To the extent that such amount does not exceed the difference between (i) the total premium due from the borrower and (ii) 1% of the UPB of the loan.

(e) Fannie Mae's share of premium = \$423,426.87 - \$100,815.92

= \$322,610.95

# EXAMPLE OF YIELD MAINTENANCE CALCULATION {PRIVATE} IN CONNECTION WITH A FULL PREPAYMENT FOR NOTES VERSIONS BETWEEN 11/2001 and 04/2003

#### **GIVEN:**

- (1) Date of the note (closing date) = 9/30/90
- (2) Loan term = 10 years
- (3) Yield maintenance period = 7 years (ending 9/29/97)
- (4) Note rate = "c" = 10.5% (.105)
- (5) Servicing fee = "s" = .50% (.005)
- (6) Expected date of full prepayment = 6/30/94
- (7) UPB of loan, as of date of full prepayment = "b" = \$7,340,876
- (8) Yield on pre-selected Treasury security \* = "r" = 8.4% (.084)

\*Yield on security as reported in <u>The Wall Street Journal</u> on the twenty-fifth Business Day preceding the Borrower's Intended Prepayment Date on the Borrower's formal notice of intent to prepay.

#### THEN:

(a) Remaining yield maintenance period = "n" = 6/30/94 to 9/29/97

= 1187 days (actual number of days) = 3.2521 years (365/366-day years)

(b) Present value factor = "f" =  $\frac{1 - (1 + r)^{-n}}{r}$ 

 $= 1 - (1 + .084)^{-3.2521}$ .084

= 2.7467

(c) Yield maintenance premium due from borrower = (c-r) X f X b

= (.105 - .084) (2.7467) (7,340,876)

= \$423,426.87

# EXAMPLE OF YIELD MAINTENANCE CALCULATION IN CONNECTION WITH A FULL PREPAYMENT FOR NOTES VERSIONS AS OF 04/2003

## **GIVEN**:

(1)	Maturity Date =	6/1/2013
(2)	Yield Maintenance End Date =	11/30/2012
(3)	Note Rate = "c" =	5.600%
(4)	Servicing Fee = "s" =	0.390%
(5)	Fannie Mae Pass-through Rate = "p" =	5.210%
(6)	UPB of Loan, as of Date of Prepayment = "b" =	\$6,161,329.00
(7)	Intended Prepayment Date* =	3/31/2010
(8)	Yield on Pre-selected Treasury Security** = "r" =	2.080%
	*Must be last day of a month	
	**As reported in <u>The Wall Street Journal</u> on the twenty-fifth Business Day preceding the intended to prepayment date.	

## THEN:

(a) Remaining Yield Maintenance Period (in months) = "n"

Yield Maintenance End Date - Intended Prepayment Date = 32 months

(b) Present value factor = "f"

$$= \frac{1 - (1 + r)^{-n/12}}{r}$$
 2.57

(c) Prepayment Premium due from Borrower = "t"

$$= (c - r) X f X b$$
 \$556,982.37

<u>or</u>

1% of the UPB

whichever is greater

greater of (\$556,982.37 or \$61,613.29)

\$556,982.37

(d) Lender's Share of Premium\*\* = "l"

= s X f X b

\$61,711.11

\*\*To the extent that such amount does not exceed the difference (i) t and (ii) 1% of the UPB.

(e) Fannie Mae's Share of Premium =

= t - l

\$495,271.25