

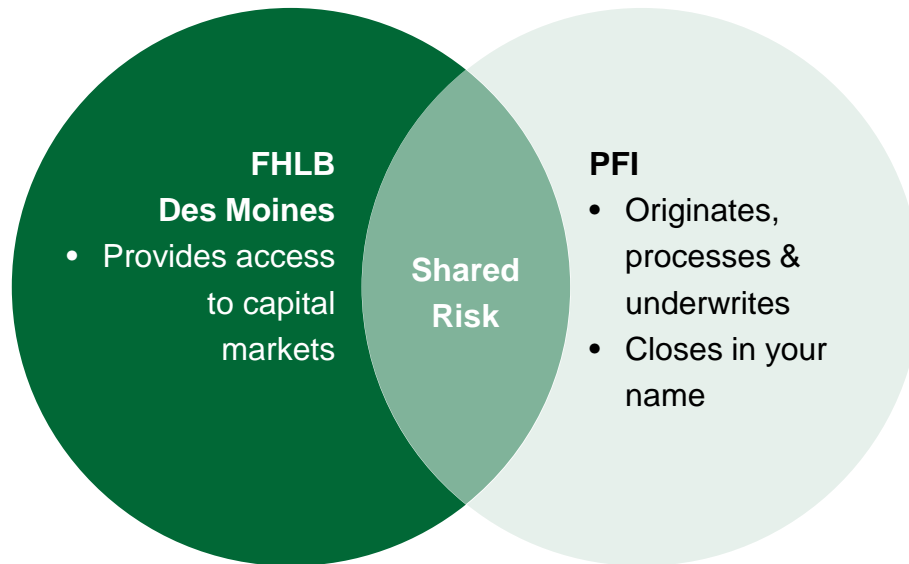


# Federal Home Loan Bank of Des Moines

MPF Traditional Economics

# MPF Traditional

Credit risk sharing for additional profitability



**Investor:** FHLB Des Moines

**Loan Types:**

- Conventional/Conforming
- 1-4 Unit Residential
- Owner-occupied primary/second homes

**Desktop Underwriter (DU)**

**Maximum LTV: 95%**

- CLTV Exceptions Home\$start DPA

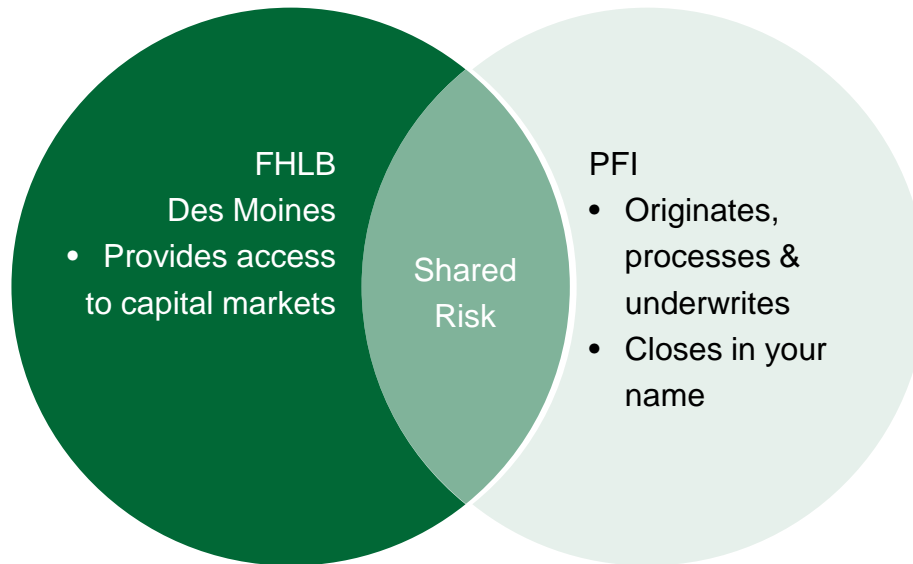
**Minimum Credit Score: 620**

**Delegated/Fulfillment Assistance Allowed**



# MPF Traditional

Revenue Benefits



## No Loan Level Price Adjustments

(examples)

### Additional Fee Income Stream—Post Purchase

- “Credit Enhancement Fee”
- Paid for assuming credit risk
- 7-9 basis points annually / outstanding loan balances
- Paid monthly over the life of the loans on total unpaid balances

# All-in Secondary Market Comparison

FHLB vs. GSE (45 day settlement): 30YR Fixed, Purchase, 730 Credit Score, 80% LTV  
(as of 4/2/2019)

| DESCRIPTION  | MPF 125<br>30 Year<br>4.500% | MPF Xtra<br>30 Year<br>4.500% | Difference  |
|--|------------------------------|-------------------------------|-------------|
| Base Price   | 101.80                       | 101.39                        |             |
| Service Released Premium or MSR value                  | 1.11                         | 1.14                          |             |
| Base + SRP or MSR value                                | 102.91                       | 102.53                        | 0.38        |
| FHLB Traditional Additional Economic Factors:          |                              |                               |             |
| Loan Level Price Adjustment                            | 0.00                         | -0.75                         |             |
| Secondary Market Execution                             | 102.91                       | 101.78                        | 1.13        |
| FHLB Traditional Additional Economic Factors:          |                              |                               |             |
| FHLB Pricing Value Adjustments:                        |                              |                               |             |
| NPV of Annual Credit Enhancement (CE) Fee <sup>1</sup> | 0.47                         |                               |             |
| NPV of Annual Activity Stock Dividend <sup>2</sup>     | 0.91                         |                               |             |
| Estimated Credit Enhancement Results                   | -0.03                        |                               |             |
| <b>All-in Price</b>                                    | <b>104.26</b>                | <b>101.78</b>                 | <b>2.48</b> |

<sup>1</sup> Assumes 8.3 year life of loan

<sup>2</sup> Activity Stock Dividend assumes 5.75% Dividend Rate



DISCLAIMER: The potential dividend impact discussed above and shown in the rate sheet is for illustrative purposes only. FHLBank Des Moines makes no commitment regarding payment of any dividends or the level of dividends. This valuation is illustrative only; actual valuation will vary depending on the pricing, applicable activity-stock purchase and dividend percentages in effect on any given day at a specified time.

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# MPF Traditional

Revenue Benefits



## Shared Credit Risk

- Credit Enhancement Obligation



## Shared Reward

- Credit Enhancement Fee Income
- Activity Based Stock Dividend



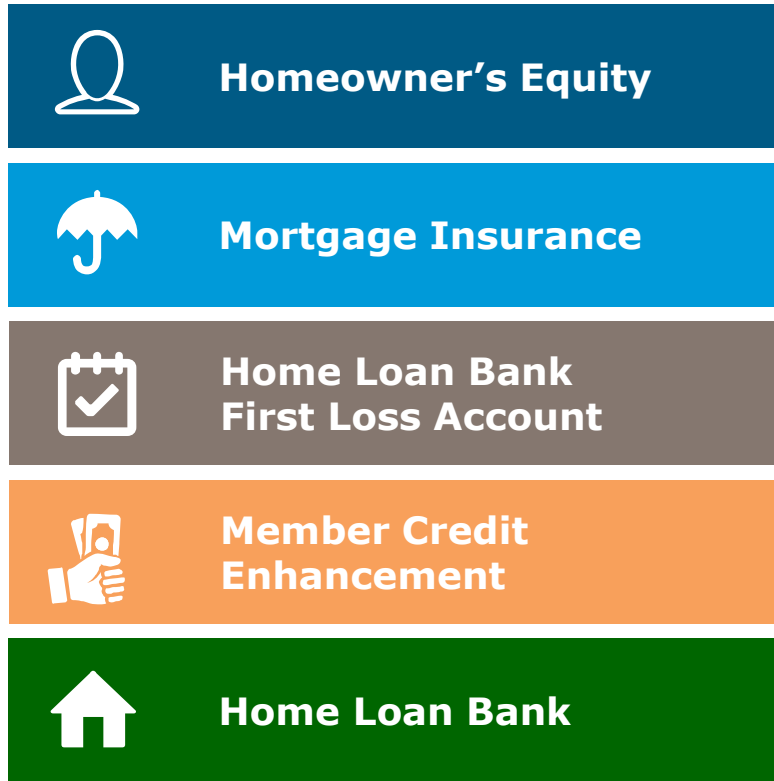
# MPF Traditional

Original / 125 Comparison

|                              | Original                      | 125                           |
|------------------------------|-------------------------------|-------------------------------|
| First Loss Account (FLA)     | 4 bps<br>Accrues annually UPB | 100 bps<br>1% of funded loans |
| Credit Enhancement Fee (bps) | 9<br>Guaranteed               | 7<br>Performance Based        |
| Servicing Fee (bps)          | 25                            | 25                            |

# MPF Traditional

Loss Absorption Progression



Credit enhancement fee may be performance based – i.e., losses paid from the FLA will be recaptured by MPF from future credit enhancement fee payments



# MPF 125 - SAMPLE

Loan Pool

| Funded       | CE %  | CE \$      | Funded       | CE %  | CE \$      | Funded                            | CE %        | CE \$                |
|--------------|-------|------------|--------------|-------|------------|-----------------------------------|-------------|----------------------|
| \$114,000.00 | 0.792 | \$903.16   | \$196,700.00 | 3.109 | \$6,115.65 | \$120,800.00                      | 8.008       | \$9,673.97           |
| \$326,800.00 | 0.498 | \$1,627.69 | \$120,000.00 | 0.919 | \$1,102.98 | \$225,500.00                      | 0.214       | \$483.14             |
| \$93,000.00  | 0.000 | \$0.00     | \$89,000.00  | 3.726 | \$3,315.71 | \$83,000.00                       | 0.000       | \$0.00               |
| \$57,200.00  | 1.401 | \$801.60   | \$82,000.00  | 0.276 | \$226.61   | \$68,000.00                       | 1.062       | \$722.28             |
| \$55,000.00  | 0.000 | \$0.00     | \$100,400.00 | 5.716 | \$5,739.03 | \$372,000.00                      | 1.210       | \$4,502.77           |
| \$88,000.00  | 0.307 | \$269.88   | \$190,000.00 | 5.031 | \$9,558.51 | \$90,250.00                       | 2.830       | \$2,553.69           |
| \$205,000.00 | 0.598 | \$1,224.88 | \$81,000.00  | 1.895 | \$1,535.22 | \$107,550.00                      | 3.782       | \$4,067.62           |
| \$258,000.00 | 1.229 | \$3,170.27 | \$103,550.00 | 6.006 | \$6,218.99 | \$117,000.00                      | 0.837       | \$979.83             |
| \$135,000.00 | 5.587 | \$7,541.98 | \$394,250.00 | 1.874 | \$7,388.20 | \$189,000.00                      | 0.601       | \$1,136.13           |
| \$240,000.00 | 1.294 | \$3,106.30 | \$70,000.00  | 0.190 | \$132.81   | \$232,000.00                      | 3.287       | \$7,626.95           |
| \$99,750.00  | 6.018 | \$6,003.18 | \$275,405.00 | 3.193 | \$8,792.53 | \$174,600.00                      | 0.727       | \$1,270.14           |
| \$229,900.00 | 1.065 | \$2,447.56 | \$87,000.00  | 0.267 | \$232.05   | <b>\$6,076,135.00</b>             | <b>2.11</b> | <b>\$125,251.42</b>  |
| \$192,280.00 | 5.065 | \$9,738.34 | \$135,200.00 | 3.307 | \$4,470.54 | <b>Less First Loss Account:</b>   |             | <b>(\$60,761.35)</b> |
| \$128,000.00 | 0.446 | \$571.23   | \$150,000.00 | 0.000 | \$0.00     | <b>Member Credit Enhancement:</b> |             | <b>\$64,490.07</b>   |

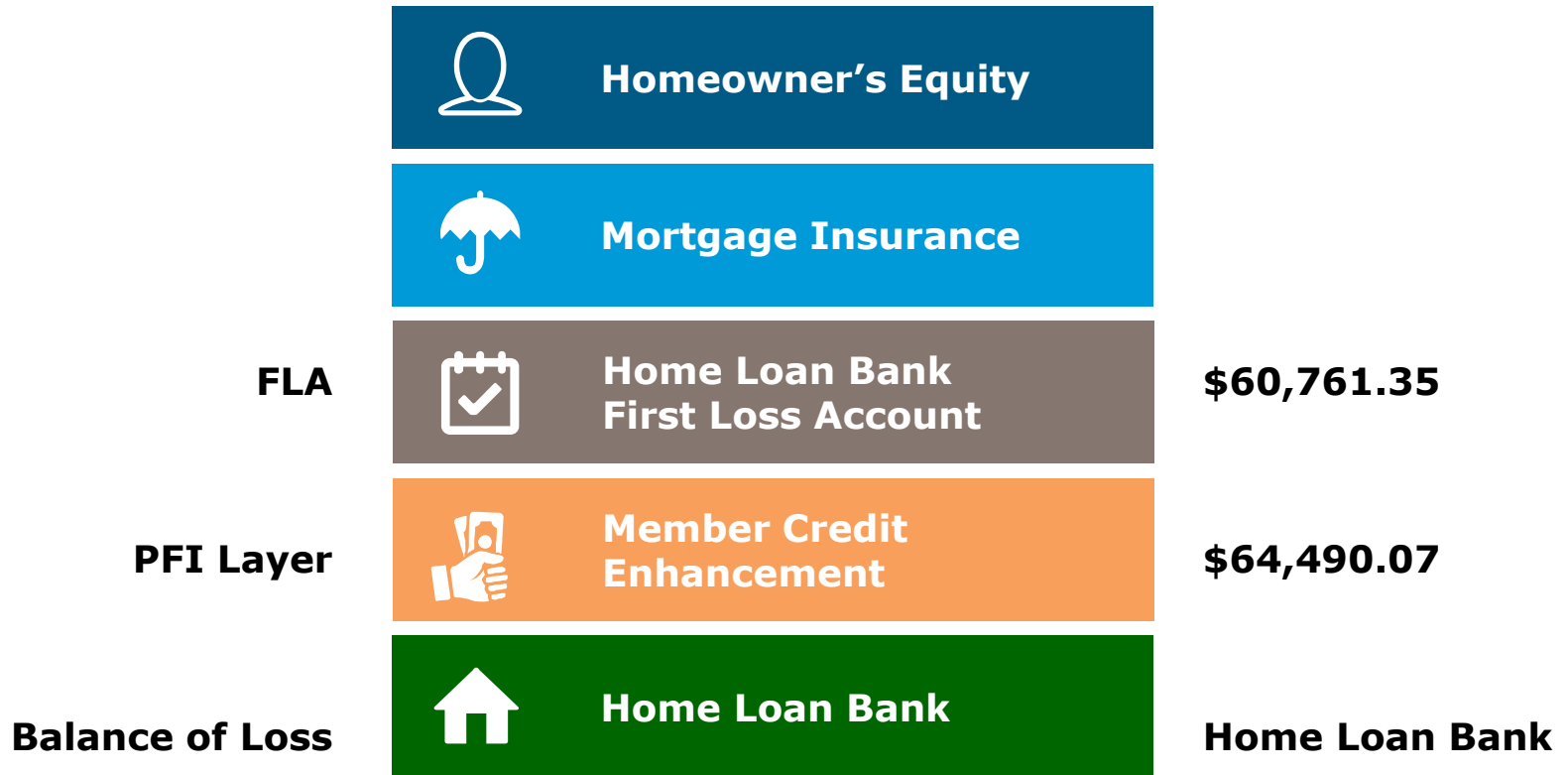
**(Minimum credit enhancement requirement of 25 basis points)**





# MPF 125 - SAMPLE

Loss Absorption Progression



Credit enhancement fee is performance based – i.e., losses paid from the FLA will be recaptured by MPF from future credit enhancement fee payments



# MPF Traditional

What is Credit Enhancement Obligation

- Loan level CE Obligation is determined by S&P LEVELS model
- Loan credit enhanced to target risk rating
  - What is a Pool (aka Master Commitment)
  - Loan level - Calculated
  - Pool level - Accumulated
- Off balance sheet contingent liability (RBC may apply)
- Credit Enhancement Obligation is secured by the member's collateral pledged to FHLB Des Moines



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