

**ADC '10**

ADC 2010  
**WINTER FORUM**  
FEBRUARY 21-24 | ALBUQUERQUE, NEW MEXICO



***Credit Enhancement of  
MHPI Projects  
Budget Scoring***



ALVAREZ & MARSAL

# ***Credit Enhancement of MHPI Projects***

## ***Budget Scoring***

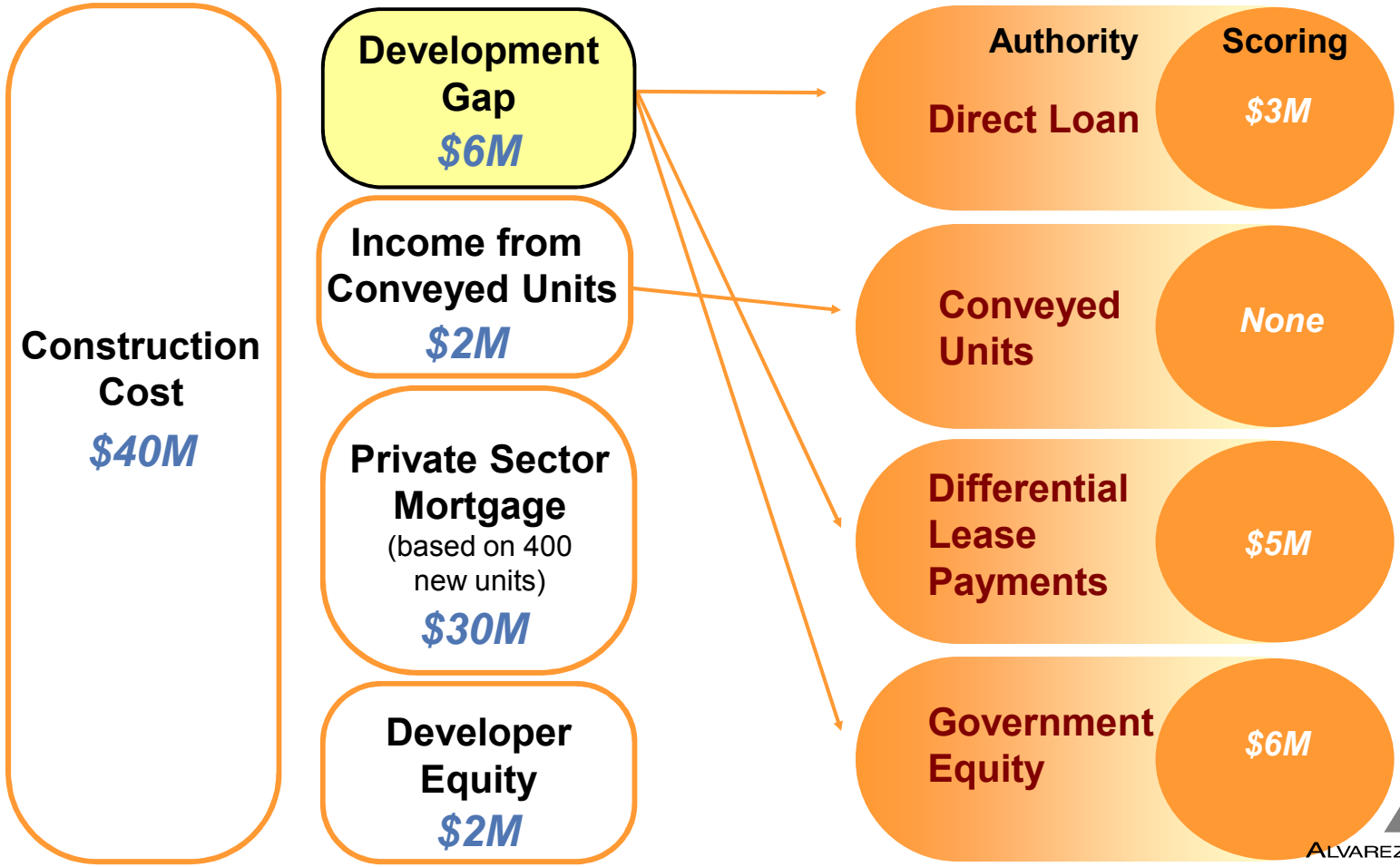
# Agenda

- **Military Housing Privatization Initiative (MHPI) Overview**
- **Reason for Government Contribution**
- **Impact of Credit Crisis**
- **MHPI Financial Products and Credit Scoring Model**
- **Risk and Recovery Assessment Factors and Categories**
- **Debt Service Reserve Fund Challenge**
- **Proposed New Guarantee Financial Product**
- **Concept Budget Scoring Analysis: ABC Air Force Group**

## MHPI Overview

- Created to provide quality affordable housing to service members and their families at costs that are generally lower than MILCON
- Relies on private sector expertise and resources
- As of June 2009, the Department of Defense (DoD) had awarded 97 projects involving approximately 190,000 housing units to private sector developers
- Approximately \$24 billion in private sector financing generated to construct new or renovate existing housing

# Reason for Government Contribution



## Impact of the Credit Crisis

***The continuing credit and liquidity crisis have affected the ability of MHPI projects to secure competitive private sector financing:***

- Downgrading of Bond Insurers and Surety Providers Bonds have resulted in 32.9% of the MHPI bonds either with ratings below A or with no ratings at all.
- The value of the bonds when marked to market have resulted in a substantial discount to the MHPI bond investors, reducing their appetite for further investments.
- While Bonds financing MHPI projects are eligible to achieve high investment-grade ratings, the interest rates are not commensurate with the risk and the bonds are trading below Bonds issued with similar credit characteristics.
- One component of achieving a high rating is the establishment of a debt service reserve fund (DSRF) equal to 6-12 months of the maximum debt service (principle and interest) on the bonds. There are no credit enhancement vehicles available today and the DSRF must be funded with cash, causing an increase in costs to the financing of the MHPI projects.

# Existing MHPI Financial Products

## *Government Direct Loans (GDL)*

- DoD has the authority to provide GDLs to a MHPI project for the acquisition or construction of housing for Service member
- Used to support development, facilitate private sector financing, and cover any development financing gaps

## *Limited Loan Guarantees*

- DoD has the authority to provide a Limited Loan Guarantee on a private loan to a MHPI project to protect the private lender
- Government is only required to guarantee the value of the outstanding private loan in the event of a government action relating to based closure, downsizing or development

# Scoring Model and Methodology

## *Credit Scoring Calculator (CSC2)*

- Discounted cash flow analysis to determine the net present value of the government's exposure resulting from the direct loans and loan guarantees for a specific project
- The net present value is calculated by discounting the cash flows at the average interest rate on marketable Treasury securities of similar maturity to the direct or guaranteed loan when the loans are disbursed
- Risk and recovery is assessed for each project to determine the cash flows of the government's exposure

# Scoring Model and Methodology

## *Risk and Recovery Assessment Factors*

- Each project is assessed in terms of risk of default and expected recovery if a default occurs
- The factors used to make this assessment represent metrics associated within four key risk determinants:
  - Project Location
  - Financial Factors
  - Occupancy
  - Quality of Housing
- These metrics are assigned points, which total to a maximum of 100.
- The higher the points, the lower the project's expected risk and losses

# Scoring Model and Methodology

## *Risk and Recovery Assessment Categories*

- The point total from the Risk and Recovery Assessment determines the Risk and Recovery Category of a project (Category 1 through 4)
- Risk and recovery rates are associated with each category
- Political Risk
  - Risk due to political factors (such as base closure, significant downsizing or significant deployment),
  - 10% for all categories
  - Spread evenly over 20 years beginning sixth year after disbursement
- Project Risk
  - Risk based on the project's location, financial factors, occupancy and quality of housing determined through the Risk and Recovery Assessment
  - Percent depends on what category the project is assigned
  - Distributed over year 1 through 20 of the loan term along a curve that is derived from private sector multifamily experience

# Scoring Model and Methodology

## *Risk and Recovery Assessment Categories (Continued)*

- Recovery
  - Estimated recoveries for all losses are calculated by multiplying the estimated loss amount from the prior year by the recovery rate for the project based on its category

# Scoring Model and Methodology

## *Government Direct Loan*

- The credit subsidy represents the net present value of:
  - 1) The difference between the interest rate on the loan and the interest rate on U.S. Treasury securities of comparable maturity to the loan term, plus
  - 2) The estimated cost of defaults, net of recoveries
- Risk and Recovery rates assumed in the model are indicated below:

	<b>Category 1</b>	<b>Category 2</b>	<b>Category 3</b>	<b>Category 4</b>
Range of Points	75 - 100	65-74	50-64	< 50
Political Risk	10%	10%	10%	10%
Project Risk	10%	17%	25%	50%
Recoveries	75%	54%	50%	25%

# Scoring Model and Methodology

## *Limited Loan Guarantee*

- The credit subsidy represents the net present value of:
  - 1) The difference between the interest rate on the loan and the interest rate on U.S. Treasury securities of comparable maturity to the loan term, plus
  - 2) The estimated cost of defaults, net of recoveries
- Risk and Recovery rates assumed in the model are indicated below:
- *Project Risk is 0% because the guarantee does not cover economic or market risk*
- The guarantee only protects lenders from risk of base closure, downsizing and deployment

	Category 1	Category 2	Category 3	Category 4
Range of Points	75 - 100	65-74	50-64	< 50
Political Risk	10%	10%	10%	10%
Project Risk	0%	0%	0%	0%
Recoveries	75%	54%	50%	25%

# Debt Service Reserve Fund Challenge

- Credit Crisis Impact on the Debt Service Reserve Fund
  - Investors are currently purchasing AA /Aa rated bonds and they are requiring ratings from 2 rating agencies.. The limited liquidity in the capital markets has caused investors to seek lower risk investments
  - In order to obtain a AA rating, the senior debt must have a 1.5x debt service coverage and fund a Debt Service Reserve Fund (DSRF) equal to 6-12 months of the maximum debt service (principle and interest) on the bonds
  - Rather than fund the DSRF with cash, MHPI projects traditionally purchased a surety from a highly rated insurance company to guarantee the debt service for up to 12 months
  - However, due to the recent credit crisis, surety providers are no longer able to make these guarantees
- As a result, a MHPI project now has to fund the DSRF with cash from the project in order to maintain a high investment grade bond rating
  - A cash-funded DSRF is an added burden on the project due to the high cost of capital
  - In addition, less cash is available to build military housing

# Proposed Guarantee Financial Product

## *Proposed Debt Service Reserve Fund (DSRF) Guarantee*

- Type of loan guarantee that will be structured to allow the bonds issued to finance a project to achieve ratings that are commensurate with the strength of the underlying collateral
- The credit subsidy represents the net present value of the estimated cost of defaults, net of recoveries and an upfront fee
- Debt service of the loan subject to the same Political and Project Risks of a GDL
- However, the DSRF Guarantee recovery rate is higher than the recovery rate used for the GDL since the government would have a pari passu first lien position on the project cash flow and the collateral

	Category 1	Category 2	Category 3	Category 4
Range of Points	75 - 100	65-74	50-64	< 50
Political Risk	10%	10%	10%	10%
Project Risk	10%	17%	25%	50%
Recoveries	95%	95%	95%	95%

# Concept Budget Scoring Analysis: ABC Air Force Group

- Provide rental housing for 2,185 military families across four Air Force installations at a cost-effective price to the Government
- Total Development Costs: \$278 million
- Financed by a combination of public and private resources:
 

\$10.4 Million	Developer Equity Contribution
\$128.0 Million	Private 1 <sup>st</sup> Mortgage
\$108.4 Million	Government Direct Loan
\$6.7 Million	Interest Income
<u>\$24.5</u> Million	NOI Contributed to Construction
\$278.0 Million	Total Financing
- MHPI Financial Tools utilized:
  - Government Direct Loan
  - Limited Loan Guarantee
  - DRFG Guarantee
- The overall project receives a total of 52.88 points through the Risk and Recovery Assessment, placing it in the Risk and Recovery **Category 3**

# Concept Budget Scoring Analysis: ABC Air Force Group

## *Government Direct Loan*

- Risk and Recovery

	Category 1	Category 2	Category 3	Category 4
Range of Points	75 - 100	65-74	50-64	< 50
Political Risk	10%	10%	10%	10%
Project Risk	10%	17%	25%	50%
Recoveries	75%	54%	50%	25%

- Loan Input Data for the Model

Amount	Interest	Term	Deferral	Interest During Deferral
\$108.4 M	2.87%	35 years	1 year	2.87%

- Subsidy Rate per the CSC2

Interest	Default	Total Subsidy
-0.05%	12.51%	12.56%

- Subsidy Amount (Scoring) for the government direct loan equals **\$13.6 million** (12.56% x \$108.4 million)

# Concept Budget Scoring Analysis: ABC Air Force Group

## *Limited Loan Guarantee*

- Risk and Recovery

	Category 1	Category 2	Category 3	Category 4
Range of Points	75 - 100	65-74	50-64	< 50
Political Risk	10%	10%	10%	10%
Project Risk	0%	0%	0%	0%
Recoveries	75%	54%	50%	25%

- Loan Input Data for the Model

Amount	Interest	Term	Deferral	Interest During Deferral
\$128.0 M	7.80%	35 years	5 years	7.80%

- Subsidy Rate per the CSC2

Fees	Default	Total Subsidy
0.00%	3.09%	3.09%

- Subsidy Amount ((Scoring) for the limited loan guarantee equals **\$4.0 million** (3.09% x \$128.0 million)

# Concept Budget Scoring Analysis: ABC Air Force Group

## *DSRF Guarantee*

- Risk and Recovery

	Category 1	Category 2	Category 3	Category 4
Range of Points	75 - 100	65-74	50-64	< 50
Political Risk	10%	10%	10%	10%
Project Risk	10%	17%	25%	50%
Recoveries	95%	95%	95%	95%

- Loan Input Data for the Model

Maximum Annual Debt Service	Percent Guaranteed	Term	Upfront Fee
\$10.7 million	100%	40 years	2.10%

- Subsidy Rate per the CSC2

Default	Fee Component	Total Subsidy
2.11%	-2.12%	-0.02%

- Subsidy Amount ((Scoring) for the DSRF guarantee equals **\$0**

# Concept Budget Scoring Analysis: ABC Air Force Group

## *Conclusion*

- Using a combination of MHPI credit enhancement tools the Air Force can provide the credit enhancement necessary for a private developer to build 2,185 housing units
- The combined scoring cost of a government direct loan, a limited loan guarantee and a DSRF guarantee equals \$17.6 million
- The proposed DSRF guarantee frees up over \$10 million for the project since it does not have to sit in a debt service reserve fund.