

# MIP Refinance Case Study

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# Case Study #1

- Existing building Refinance MAP 223(F)
  - 3 Stories Garden Style with 480 units built in 2014
  - Common Space (Clubhouse, Pool, Gym)
  - Individual Meters with a Tenant Landlord Agreement
- Energy Star Score 65
- ASHRAE Energy Audit completed ECMs identified
  - Time of day lock out schedule for common spaces
  - Minimum and maximum apartment setpoints
  - Reduction of site lighting
  - Changing HW heater setpoint and placing on a schedule

# Case Study #1 Cont

- Benefit to Owner
  - Achieved MIP Reduction
  - Reduced Maintenance Costs for building operation
    - Approximate saving 16% of operations cost
  - Extended life of HVAC and Plumbing equipment on average by 2 years
  - Was able to use energy success to market building with an Energy Star score to tenants

# Case Study #2

- ❑ Existing Building Refinance with a Green Certification
  - ❑ MAP 223(A7)
  - ❑ 5 Stories Garden Style with 775 units built in 2012
  - ❑ Mixed Use space (Retail, Pool, Gym)
  - ❑ Individual Meters
  - ❑ Was not able to get 100% of utility bills from the Electric Provider
- ❑ Energy Star Score of 79
- ❑ 25% sample of utility bills accepted thru Energy Star
  - ❑ Must be representatively sampled:
    - ❑ Unit types
    - ❑ Buildings
    - ❑ Each size (sq ft) and direction (N,S,E,W) of unit exterior wall
    - ❑ Each building floor or level
    - ❑ Each materially different HVAC package

# Case Study #3

MAP 221 D4 SR

- ❑ Existing Building Refinance/Rehab
  - ❑ 3 Stories Garden style with 310 units
  - ❑ Common Space (Clubhouse, Pool, Gym)
  - ❑ Individual Meters (Currently)
  - ❑ Was able to get 100% of utility bills from utility provider
- ❑ 75% of building being remodeled from major gut rehab (over \$1500 per unit)
  - ❑ Changing floor layout
  - ❑ HVAC systems
  - ❑ Electrical distribution systems (installing sub metering)
  - ❑ Plumbing system updated to current code
- ❑ Seeking to obtain a LEED Home/LO/MID Rise Certification
- ❑ Required to deliver SEP with 70% occupancy + 15 months, then must be maintained annual
  - ❑ Utility Linked data or a Professional Engineer or Architect stamp



# **Green MIP 221-d4 NC**

**January 25, 2017**

# Project teams leverage the energy modeling process to identify the most cost-effective approaches to meeting the target score of 75+

## Case Study:

- 18 low-rise garden style buildings
- 380 dwelling units located
- South Region (~3,200 HDD, ~900 CDD)



ENERGY STAR® Statement of Energy Design Intent (SEDI)<sup>1</sup>

Original Design	Improved Design	Additional Options
R-38 Fiberglass Batt insulation at top-floor ceiling	R-49 Blown Insulation (air-sealing/Grade 1)	High Performance Windows and additional air sealing
HVAC 14.5 SEER / 8.2 HSPF	HVAC 16 SEER / 9+ HSPF	Incorporate Natural Gas
Few Energy Star Appliances	All Appliances Energy Star	Additional LED Lighting
<b>Portfolio Manager SEDI Score</b> <b>72</b>	<b>Portfolio Manager SEDI Score</b> <b>78</b>	<b>Portfolio Manager SEDI Score</b> <b>80+</b>

# Projects must select and obtain a green building certification

## National



## Regional



## Niche Super Green



### Considerations for green building certifications

- Cost and feasibility
- Local regional incentives
- Architect and developer experience
- Marketability





## Several requirements at closing commit the project to obtain the green certification and to conduct annual energy benchmarking

- **Form HUD-92013-D: Owner's Certification and Acknowledgement for Program Obligation For Broadly Affordable, Affordable, Green/Energy Efficient Multifamily Housing Mortgage Insurance Premiums**
- **Statement of Energy Design Intent (SEDI) showing EPA Portfolio Manager score or 75 or higher**
- **Evidence of green building certification in drawings and schedules**
  - Green Building scoring spreadsheet
  - Required milestones for the green building standard incorporated into the construction schedule (e.g. onsite verification)
- **Green Rider: Borrower's Obligation to Maintain Project's Energy Performance as Consideration for MIP Reduction**
- **Energy Data Acquisition Plan demonstrates the owner's plan to obtain energy data and complete annual Statement of Energy Performance (SEP) benchmarking in EPA Portfolio Manager**

# Green MIP participation spans a project's full lifecycle

