Section 2:
Overview of 50058 Module & Status of PIC-NG Development

February 21, 2018
Section Focus

• Background and Status of PIC-NG Development
• HUD / Vendor IT Solution and New Platform – 50058 Module
• Initial Code Release (1.0)
• Next Step – Focus on 50058 Business Process
IMS/PIC

- Inventory Management System - PIH Information Center
  Receives millions of data points from more than 4,250 PHAs
  - Used by HUD to:
    - Calculate Operating Subsidy / Capital Fund
    - Validate Section 8 HAP and Admin Fees
    - Support program oversight for PHAS and SEMAP
    - Maintain inventory of developments, buildings, and units
    - Maintain household and tenant demographics (50058)
  - One of HUD’s most used systems
    - ~4,250 HUD users
    - ~44,200 PHA users
    - ~10,000 users per week
    - ~60 software vendors supporting PHAs
    - ~10 million 50058 annual submissions
Rationale for PIC Next Generation (PIC-NG) Development

• IMS/PIC developed in 1999 – 2000
  – No significant changes since 2007
  – Approximately 400 outstanding enhancement requests

• Availability (CY 2016)
  • Average 96% availability for the data center (M-F, 7am-9pm EST)
  • 10 days below 80% availability

• Integration with PHA applications
  – Difficult/Impossible to integrate PIC information into the PHAs’ respective applications
  – Batched data and fatal errors cause heavy administrative burden
  – Many PHAs use multiple vendors applications to manage their developments (e.g. mixed-finance, Rental Assistance Demonstration)
Issues with IMS/PIC

- Accuracy of 50058 information
  - Multiple OIG audit findings because of inaccurate information
  - 1.3 million of 10 million 50058 submissions rejected annually
  - Average error resolution: 1 hour = 1.3 million hours administrative burden
  - Significant lag between data input and data validation
  - No data validation prior to submission
  - Correcting/voiding records significantly effects PHA accounting software
  - Not all tenants have a social security number
  - Significant risk of Personally Identifiable Information (PII) exposure
Vision: PIC-NG Development

• Enterprise-ready, government-to-government (G2G) and business-to-government (B2G) solution which:
  – Improves quality, availability, timeliness, and delivery of information supporting HUD’s affordable housing programs
    ▪ Fully cloud-based – 24/7, no reliance on legacy data centers
    ▪ Micro services/application programming interfaces to enable full integration of IMS/PIC with PHA applications and facilitate interagency collaboration
  – Flexible to support evolving program changes (i.e., rental reform, HOTMA, RAD, MTW Expansion, FSS, and potential deregulation)
  – Significantly reduce administrative burden for PHAs and HUD staff
  – Integrate collection of housing information
    • Section 8 and 9 Tenant Information (50058, 50059)
    • Abatement, FSS
    • Operating Fund (52722/23)
    • Request for Tenancy Approval (52517)
    • UPCS-V Physical Condition
    • Demolition/Disposition of Public Housing properties
    • Inventory of Public Housing units/buildings
    • Financial Statements, FDS
PIC-NG Approach

• Stakeholder involvement
  – More than 90% of IMS/PIC information comes from PHAs
  – PHA vendors must update their respective software applications
  – PIC-NG necessary to facilitate business process improvements and regulatory burden relief

• Software development partnership between REAC and OCIO
  – OCIO Infrastructure, Enterprise Architecture, and Information Security
  – REAC Federal software development team (35 FTEs)
  – Utilizes HUD’s new cloud infrastructure
PIC-NG Approach

• Development methodology
  – AGILE- Incremental software delivery with increased functionality

• Stakeholder involvement and feedback
  – Monthly industry calls
  – Industry listening sessions
  – Joint development collaboration tools
  – Feedback on development and transition needs
## Status of PIC-NG Development

<table>
<thead>
<tr>
<th>Business Functionality</th>
<th>Current State</th>
<th>Spring 2018</th>
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<th>Fall 2018</th>
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What Will Change?

• New IT Platform and Solution which allows for greatly enhanced 50058 business processing
• New IT Design includes Micro Services / Application Programming Interface (API) (Allows PHA users to work exclusively in their own applications)
• Real time interfaces between PHA systems and PIC-NG
  ▪ Allows for both synchronous and asynchronous processing
• Improvements made to 50058 Submission Process and 50058 Correction Process
• Ability to handle Fatal Errors and Warnings Prior to submission of 50058
• Reduced risk of personally identifiable information (PII) exposure

What Will Not Change?

• No changes to the 50058 – same business rules, fields, edits, etc.
• File layout / field for 50058 submission are still the same (same Technical Reference Guide – TRG, e.g., fatal edits, warnings, batch layout, etc.)
New IT Platform - Solution
Code Release 1.0 (continued)

PHA Users to Work Exclusively in their System

**Systems**
- Business Intelligence (BI/STR)
- Financial Assessment Submission (FASPHA)
- Financial Assessment System (FASS)
- MARK-TO-MARKET
- Multifamily Deficiency Reporting System (MDOR)
- Public Housing Assessment Scores and Status (NASS)
- Physical Assessment
- PHA Information Center (PIC)
- Test Site for PHA Information Center Test (PICTST)
- Quality Assurance Subsystem (QASS)
- Voucher Management System (VMS)

**Diagram**

1. **PHA System**
2. **HUD Databases**
3. **Software Vendor Modifies their Code**
4. **PHA System Updated with New Functionality**

** HUD Code Release**
Expected Benefits of Solution to PHAs

Code Release 1.0 (continued)

In Your Daily Life

Application Programming Interfaces/ Synchronous

PHA System

HUD Databases

Other Federal Databases

Other Databases
Expected Benefits of Solution to PHAs

Code Release 1.0 (continued)

Pre-submission Edit Checks

• Completed 50058 data is bounced against all the 50058 business rules prior to actual submission of the 50058 data (i.e., no more fatal errors)
Improvement 50058 Submission Error Correction Process

- To correct errors, PHAs no longer have to use void / resubmission process. Instead, PHAs will be able to re-submit the 50058 that needs to be corrected with the same effective date. All records are retained.
Expected Benefits of Solution to PHAs
Code Release 1.0 (continued)

Reduced Risk of PII Exposure

1. PHA provides SSN Information once
2. HUD creates, stores and provides PHA a unique identifier
3. Unique identifier used instead of SSN

Note: SSN, TIN, EIN are all treated equally
Next Steps – Focus on 50058 Business Process

• With the new design and IT platform in place, the emphasis shifts to:
  – Improvements & possible changes to Form 50058 data fields submitted
  – Continue to relax fatal errors to absolute minimum
  – Added efficiencies
  – Reduction of reporting burden
  – Enhanced Business Intelligence
  – Geocoding, mapping
  – Accurate information for accurate program funding
  – Phase out of batch processing and legacy system
PIC-NG: 50058 vs Legacy System

PIC-NG 50058 Development

- Code Release 4.0, etc.
- Code Release 3.0
- Code Release 2.0
- Code Release 1.0

Future

PIC 50058 Legacy System

Today

Target, Release 1.0 → June 2018
Target, Release 2.0 → January 2019
Shaping Code Release 2.0 and Future Releases

• The focus of this listening session is to help HUD understand:
  – What overall business processing changes do PHAs feel are needed?
  – What specific business processing changes do PHAs feel are needed?
  – What should be the priority of the changes?

• Future releases will focus on changes to the 50058 Business Process:
  – How can 50058 business processing be improved?
  – How do PHAs and HUD use the 50058?
  – What are PHA and HUD reporting needs?
  – How should changes be implemented?
    ▪ What is the strategy and schedule for implementation?

• The next few slides provide examples of how 50058 business processing could possibly change due to the new IT environment
Possible Functionality

Example 1 – New Admissions

**Example of Benefits**
(1) Is this a valid SS#?
(2) Is the SS# currently in PH or HCV unit in any other PHA in the nation?
(3) Does this person owe funds to another PHA (EIV)?
Possible Functionality
Example 2 – Enhanced Data Edits

Example of Benefit
Real-Time Data Entry Edits
Possible Functionality
Example 3 – Increased Usage of API / Web-services

2. Action

<table>
<thead>
<tr>
<th>2a. Type of action</th>
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<tr>
<td>2b. Effective date (mm/dd/yyyy) of action</td>
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Example of Benefits
2 - Annual Reexamination: EIV Income Information
4/5 - Port Move In/Out:
- Has the Initial PHA completed the Move-out Action
- Initial PHA contact information
- Transfer of program participant data
6 - End of Participation: Amount owed in EIV Debts Owed Module