

# *HUD's Enterprise Data Management Practice (EDMP) Today*



enterprise  
DATA MANAGEMENT  
PRACTICE

<http://www.hud.gov/offices/cio/ea/>

•July, 2007



## ***Vision 2010 and Technology Investment Principals***

### ***HUD Strategic Plan FY2006 – FY2011: “Capitalize on Modernized Technology to Improve the Delivery of HUD’s Core Business Functions”***

- Create Value, Not Just Reduce Costs
- Build Once, Service Many
- Strengthen performance and compliance
- Reduce complexity
- Increase flexibility and agility
- Capitalize on Multi-Sourcing Where it Makes Business Sense

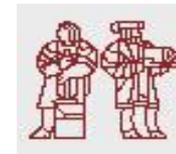


***Business First, Customer Always***



# The MIT Information Quality Industry Symposium, 2007

## ***HUD Vision 2010: Strategic Goals***



1

**Rapidly modernize HUD's Information Technology to support key HUD business initiatives**



2

**Transform the information technology Infrastructure to adapt to and adopt emerging technologies**



3

**Develop a cadre of highly capable IT professionals with mission critical core competencies needed to meet the Department's goals**



4

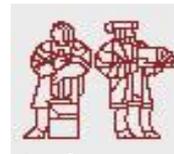
**Provide secure, rapid, and reliable data and information to our customers, citizens, and business partners**



**EDMP's  
Focus**

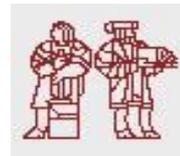


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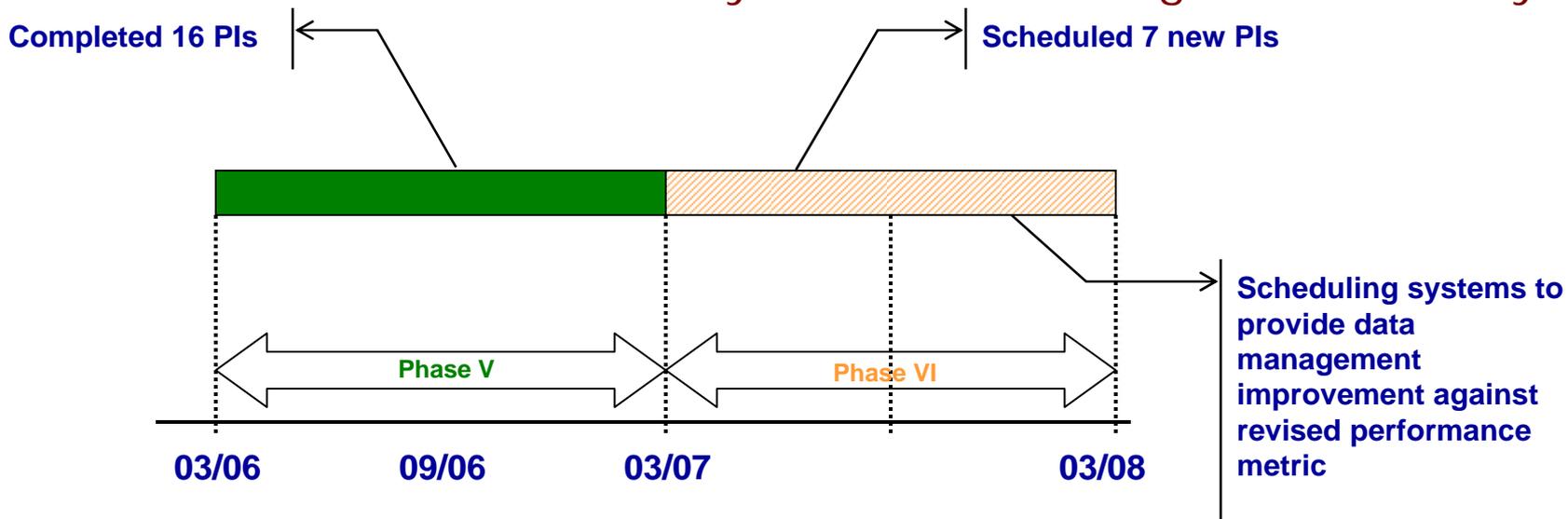
## *Four Drivers for Success - Enabling HUD's Accountability to Public & to Congress*

1. Continue with Data Quality Improvement Program (DQIP) to ensure that Office of Inspector General's (OIG) Corrective Action Plan is being followed
  - Report annually to OIG regarding progress in certifying Annual Performance Plan (APP) data at 4 sigma
2. Provide ongoing services to assist Program Areas in the APP reporting process and Data Management best practices
  - Assist HUD Program Areas to build data quality in at the source (*EDMG becomes more of service than an assessment*)
3. Enterprise-wide Data Architecture
  - Develop HUD's DRM and extend Data Control Board governance to embrace the sharing of data within and outside of HUD
4. Create a HUD-wide Repository of Data and Information Artifacts
  - Provide Department-wide support for access to critical HUD performance data



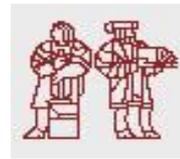
# 1. Continue OIG Corrective Action Plan (CAP)

- OIG Report – 2006-FO-0003 Nov. 15, 2005 pg. 5  
 “..requires ongoing extensive data quality initiative to ensure the accuracy of the cost aspects of its performance measures as they are derived from sources outside the core financial system.”
- Certification focused – assessing additional Performance Indicators (PI) to meet OCIO’s current data quality assessment targets
- Looking beyond – modifying OCIO’s performance metric to measure evolution of HUD systems’ data management maturity

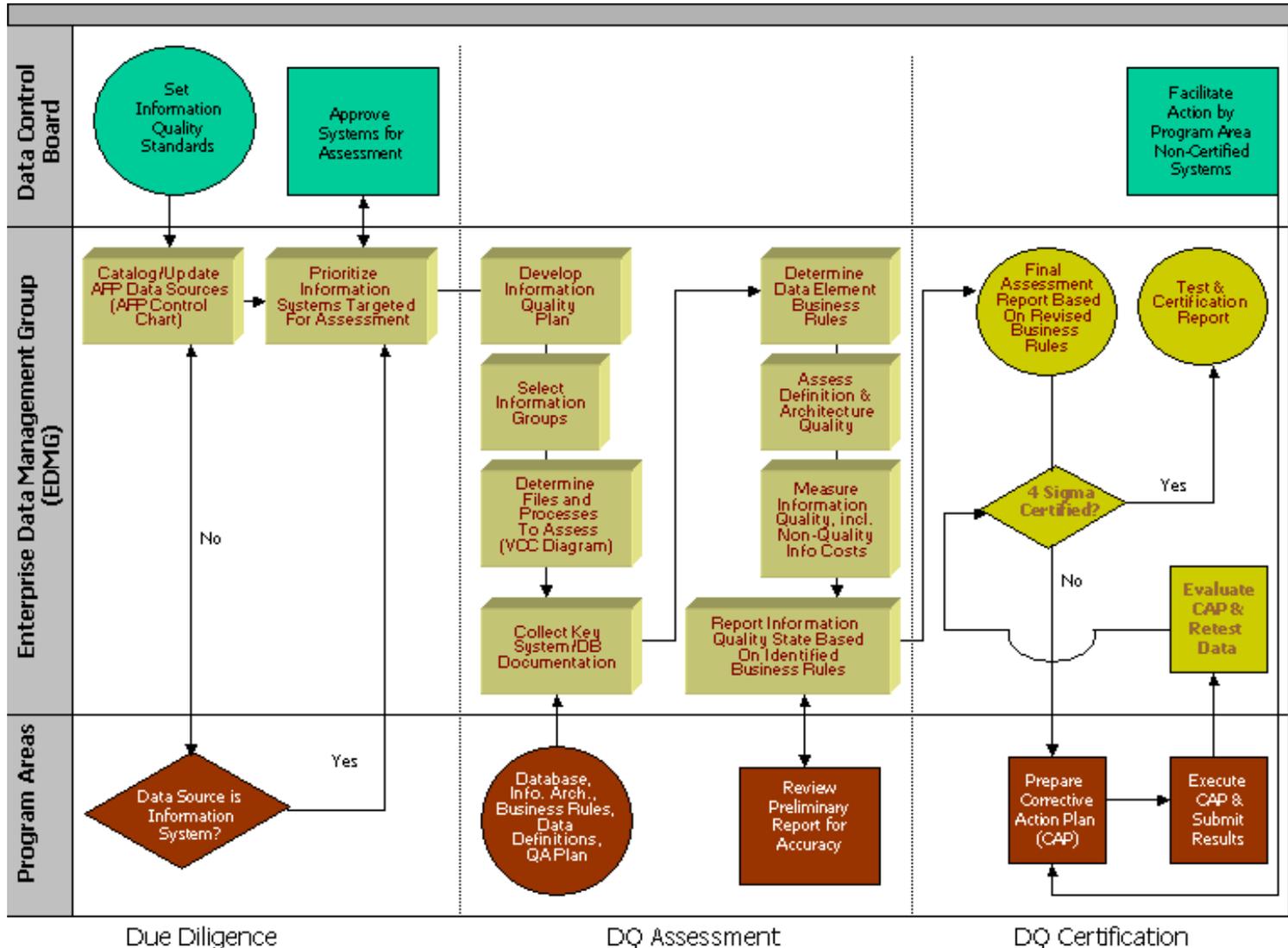


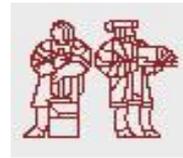


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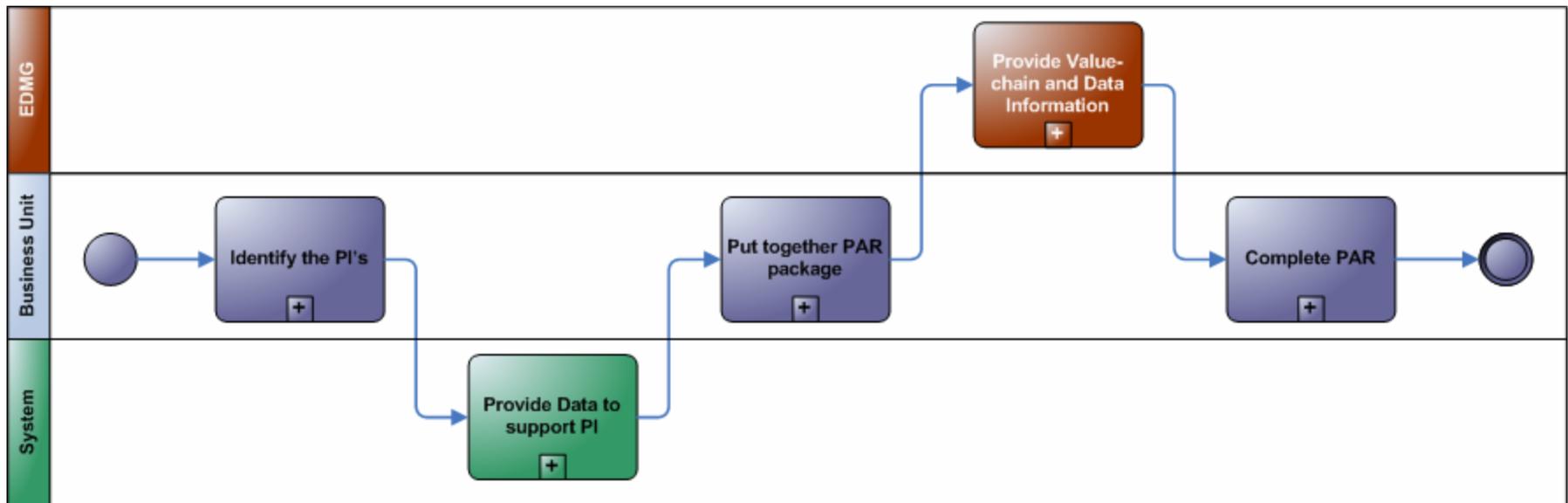
## *DQIP Process: Meeting OIG's CAP*





## 2. Assistance to the APP Process

- APP process requires “Data Discussion”
- Assist the Program Areas in getting to the right data from the right systems at the beginning of the process
- Document the data validation process to ensure repeatability and efficiency





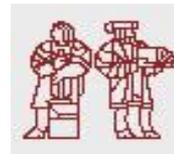
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## Data Validation Checklist: Providing Accuracy towards HUD's APP Data Discussion

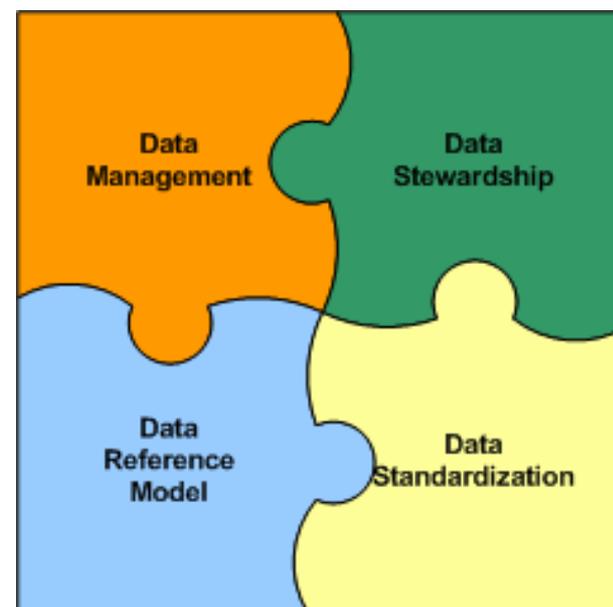
APPENDIX E SAMPLE PERFORMANCE INDICATOR DATA VALIDATION CHECKLIST								
Program Area Name: Single Family Housing								
Fiscal Year: 2004								
						[APP Preparation] _____ (Date) _____ PA Manager _____ (Date) _____ IT Specialist [PAR Preparation] _____ (Date) _____ PA Manager _____ (Date) _____ IT Specialist		
APP Performance Indicator and Description	Information Group Description	Supplier Data Source (HUD System Name/Number or External)	*Database Table Name; or Filename	*Name of Query Used to Perform Calculation (or description of procedure if query Not used)	*Source if not Database (i.e., manual counts, website stats, external data)	*Performance Indicator Calculation Test Results	*Limitations of the Data	Comments
C.2.5: Endorse FHA single-family mortgages in underserved communities.	FHA Single family mortgage underwriting rates within underserved areas.	F42	F42B1A	See Supplement D (attached) for detailed data element and query description.	N/A	Test scripts run 8/15/04 and are stable and consistent with the results of last cycle.  All data elements scored above 93.319% (3 sigma) for all of the criteria assessed, and also passed at the 6 sigma standard.	Measure may fluctuate when the census tracts constituting underserved areas are redefined using the latest Census data.	Tests run on FY 2004 data for 2005 APP. Indicator identical to APP 2004 version. No change in query script, DB location, or data element names.

Figure E.1 - Performance Indicator Data Validation Checklist

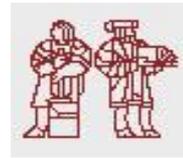


### 3. Enterprise-wide Data Architecture

- Data Reference Model
  - Develop HUD's Subject Areas, Information Classes and Entities as guided by Federal EA requirements
  - Recommendations toward updating HUD's SDM and Segment Architect Blueprints
- Data Standardization
  - Extend Data Standards & Governance
  - Charter a Data Advisory Committee for oversight
- Data Stewardship
  - Principal Data Stewards
  - Ensures data supports Line of Business (LOB) functions
  - Include a new Business Data Steward position on the Data Control Board for data quality oversight



## Enterprise-wide Data Architecture



## *4. Enterprise-wide Data Management Repository*

- The DQIP has four years of extremely valuable information regarding:
  - Source system of record
  - Value Chains and Data Flows
  - Metadata, database schema, data element repository
  - Data business rules
- Create and load the HUD Data Management Repository
  - Provides bi-directional traceability of data to HUD performance measurements and back
  - Provides an enterprise view of systems/data and value chain for performance indicators
  - Can be mined to determine authoritative data sources for APP performance indicator reporting

