



BUREAU OF THE  
**Fiscal Service**  
U.S. DEPARTMENT OF THE TREASURY

# Debt Collection, Improper Payments, and Analytics

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Assistant Commissioner  
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# Agenda

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- Debt Management Services Mission
- Debt Management Services Business Lines
- Improper Payments
- Debt Collection Analytics
- Student Loan Pilot

# Debt Management Services Mission

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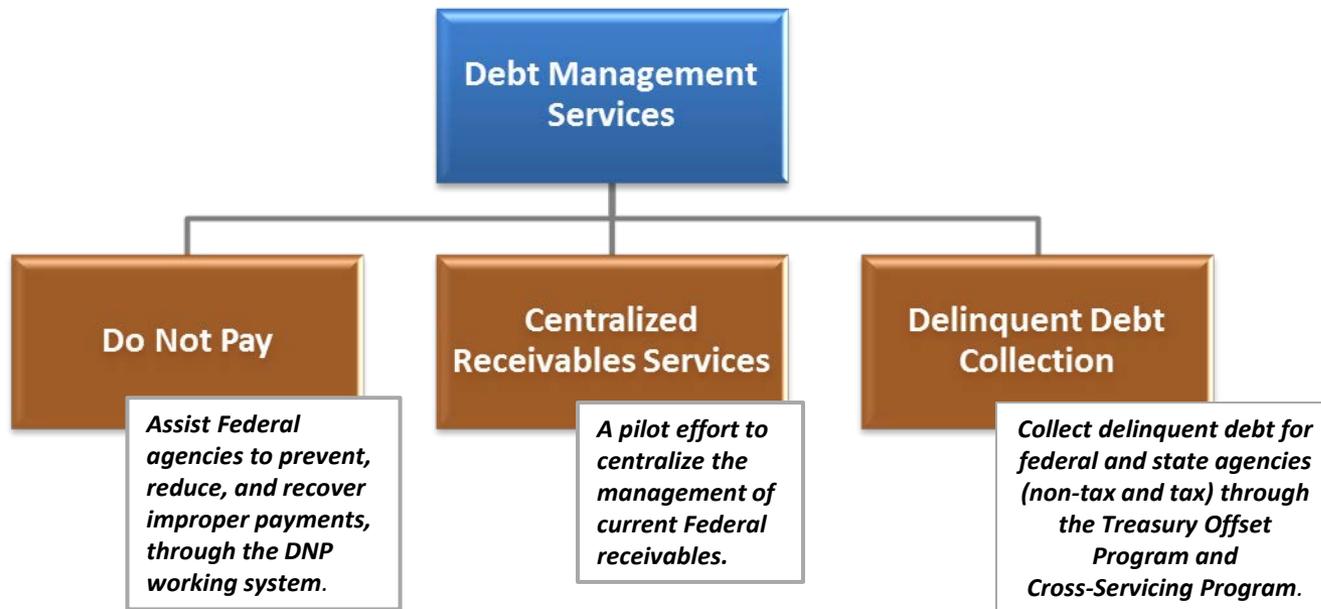
## Debt Management Services Mission

-To identify, prevent, collect, and resolve debt owed to government agencies.

DMS's mission is to work with Federal government agencies to provide a comprehensive debt management program. Additionally, we provide debt collection services to the states. By serving our mission, we protect the financial interests of the American people by continuously improving the financial performance of the government through identification and prevention of improper payments, efficient receivables management, and collection of delinquent debt.

# DMS Business Lines

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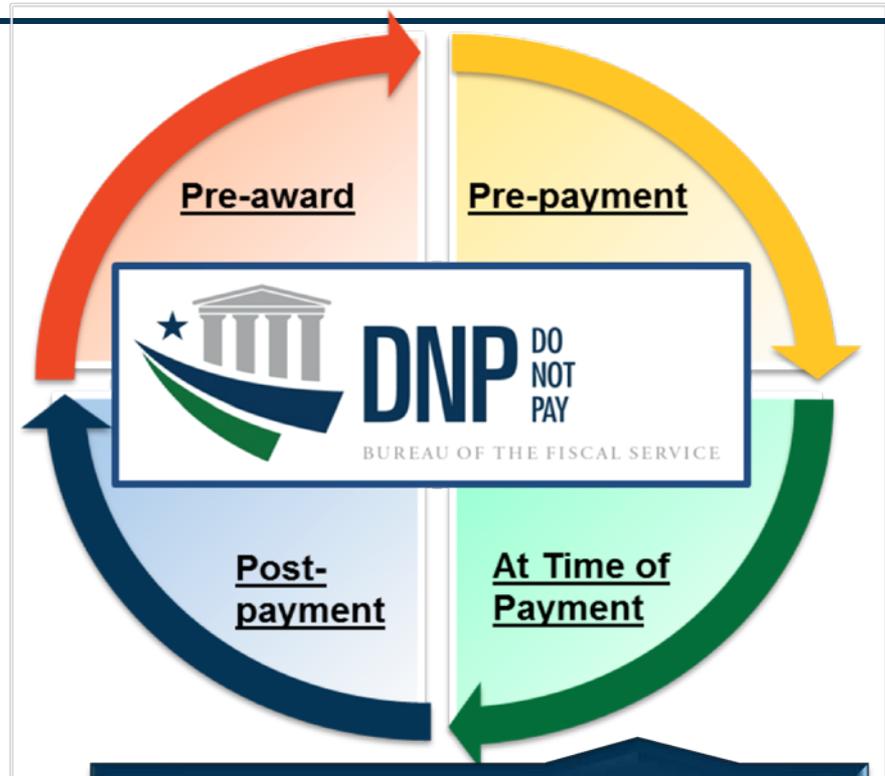


# Improper Payments - Do Not Pay(DNP)



**\$125 billion in  
improper  
payments issued  
in FY 2014**

**The Problem**



**(part of) The  
Solution**

# DNP's Goals

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- Provide timely, accurate, and actionable information about payees and payments to assist agencies to verify award eligibility in order to reduce improper payments.
- Provide clear and understandable information using data analytics, as appropriate, about the nature, causes, and magnitude of improper payments to a range of stakeholders to inform agency payment processing improvement.
- Provide timely, accurate, and actionable information about potential fraud to law enforcement agencies that facilitate investigations and prosecutions.

# Detecting & Preventing Improper Payments Through the DNP Portal

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- Pre-Award / Pre-Payment Eligibility Verification
  - 50 agencies; 175 programs/groups
- At time of payment (payment integration)
  - For FY 15 (October – June)
    - 207.5M payments screened equaling \$941.4B
    - \$5.7M identified as improper by the issuing agency
      - Death Master File
      - Excluded Parties List

# Detecting & Preventing Improper Payments Through DNP Analytics

Capability	Output
Agency Payment Matching	Matches of payments data with multiple data sources (including the application of program-specific business rules) to identify patterns, linkages, impropriety, and suspect data/payments
Basic Eligibility	Comparisons of recipients/payees to entities included in a <b>single data source</b> (before award /payment or to monitor award/payment)
Complex/Contingent Eligibility	Comparisons recipients/payees to entities included on <b>multiple data sources</b> (before award /payment or to monitor award/payment)
Anomaly Detection	Reports describing payee or payment characteristics <b>outside of normal</b> (e.g., multiple payments to the same person or account; payment size significantly varies for similar payments)
Descriptive modeling	Smaller insights regarding payments and their attributes created from condensing “big data”
Probabilistic Risk Assessment	<b>Risk scores</b> created from the combined evaluation of eligibility and anomaly analysis
Predictive modeling	Models created to best predict the probability of payment impropriety
Advanced data matching algorithms	Improved data matching via use of data standardization, predictive, deterministic, and probabilistic record linkage methods
Prescriptive modeling	Recommended courses of action (e.g., stop payments, data correction) showing the likely outcome of each decision created using descriptive and predictive models

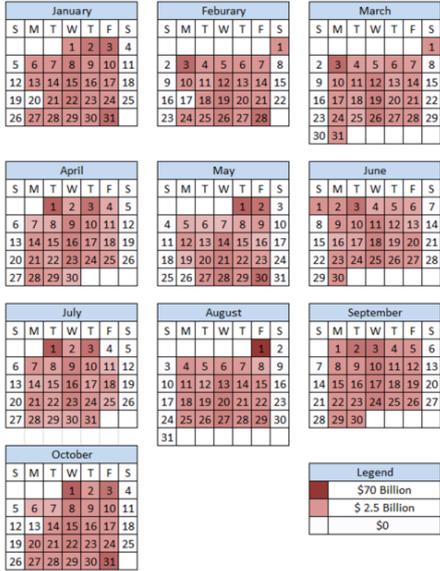
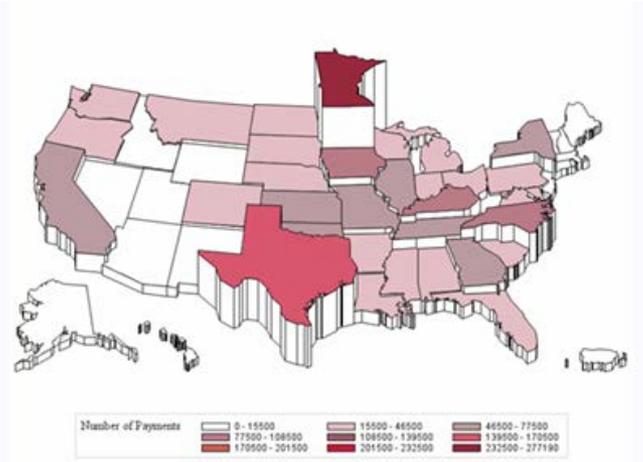
# Agency Insight Report (AIR)

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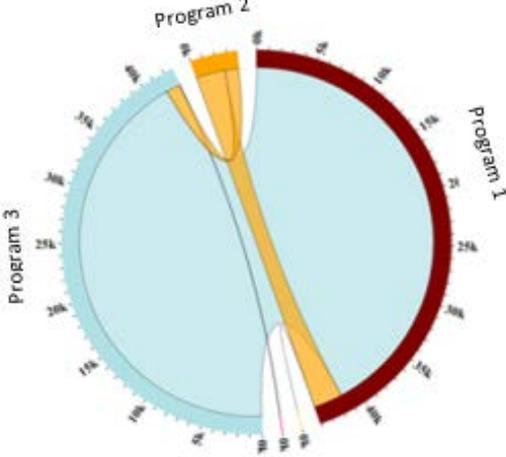
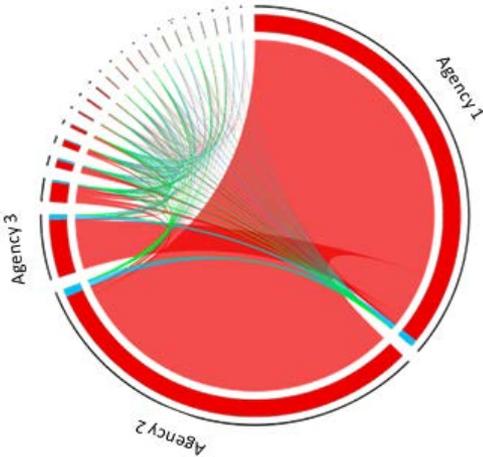
- Report capturing key insights and findings from exploratory data analytics, which includes, but not limited to:
  - Data quality assessments
  - Data pattern analysis and profiling
  - Advanced matching
  - Anomaly detection and analysis
  - Potential business/stop payment rule identification
- Analytics focus project to assist in identifying potential in-depth analytics projects that could be of assistance to the agencies

# AIR Data Visualizations

## Payment Calendar and Heatmaps



## Circos Graphs



# Delinquent Debt Collection

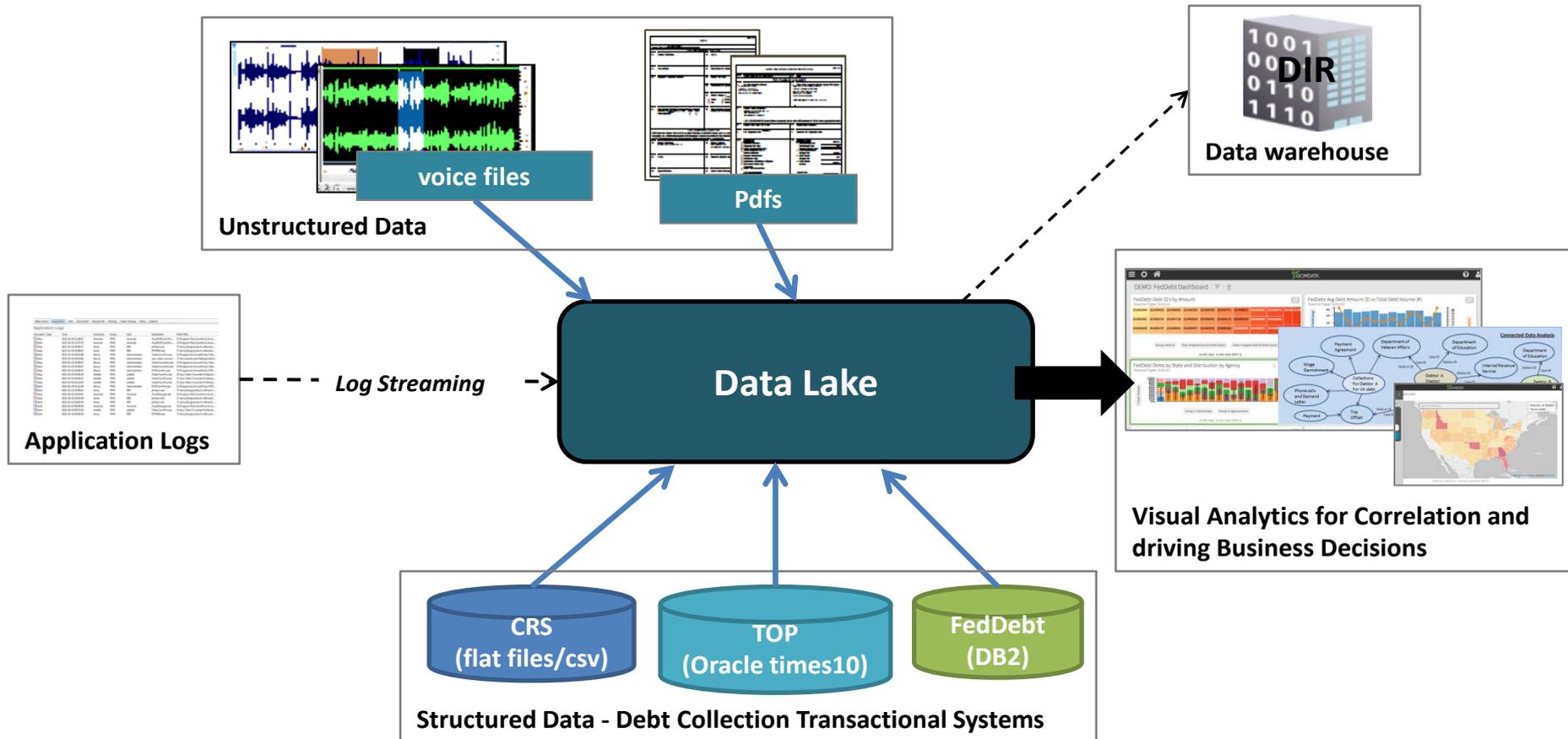
## Analytics to Improve Collections

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- DataLake Proof of Concept
  - Proof of Concept to be completed Nov. 2015
    - POC focused on Data Ingestion, Data Accessibility, Security, and Governance
  - Initiate DataLake Pilot
- Debt Segmentation
  - Completed debt segmentation model and strategies for pilot agency
  - Implement/Operationalize model to test efficacy

# DataLake

## Debt Collection Data Lake



# Centralized Receivables Service Pilot Analysis

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- Pilot began Jan 1, 2013 – now includes 41 programs from 10 federal agencies
- Total # of cases : 43,981 cases/debt value \$88M
- Total collections: \$38M
- Key Results
  - Avg days to close case: 35
  - 66% of cases closed by payment, 25% referred to X-serv, while 9% are cancelled due to bankruptcy, death, etc.
- FY 2015 – Analyzing data to determine effectiveness of pilot

# Delinquent Debt Collection

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- Total FY 2015 delinquent debt collections through July 31, 2015 equal \$6.9 billion.
- Debt collections include:
  - Federal Nontax
  - Unemployment Insurance Compensation
  - Child Support
  - State Tax (State Reciprocal Program)
  - Federal tax

# Student Loan Background

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- The United States (U.S.) Federal Government provides Federal Direct Student loans to colleges and universities through the Department of Education (ED)
- Students can receive multiple loans
- Payments are deferred until graduation
- Currently there are four student loan servicers which are under contract to ED
- If a student loan becomes delinquent, loan servicers attempt to bring a borrower current
- After a loan is 270 days delinquent, it is considered defaulted
- There is \$1.3T of student loan debt, of that \$110B is delinquent

# Student Loan Background (cont'd)

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- Defaulted loans are transferred from the loan servicer to ED then referred to Private Collection Agencies (PCA) contracted with ED
- While at PCAs, various debt collection tools are utilized.
- Debt Collection tools include: rehabilitation agreements, installment agreements, compromises, Treasury Offset Program, Administrative Wage Garnishment, litigation
- There are various income repayment plans offered to borrowers:
  - Rehabilitation agreements being the most prevalent
  - Borrower must pay 9 payments over 10 months before being rehabilitated
  - Borrower's financial information must be provided
- Once a loan is rehabilitated, it is classified as current and returned to the loan servicer. Enforced collection tools will not take place, and the defaulted status will be removed from the credit report

# Student Loan Pilot

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- Currently ED does not refer student loans to Fiscal Service for debt collection
- In February 2015, ED and Fiscal Service (FS) entered into a Memorandum of Understanding (MOU) to conduct a two year Pilot between ED and FS
- The Pilot began in February 2015 consisting of roughly 12,000 loans
- Pilot Goals:
  - Learn the student loan debt collection process
  - Provide short term/long term recommendations for improvements
  - Determine metrics to evaluate current process
  - Better understand the rehabilitation process
  - Learn how FS can assist in improving the collection process

# Contact Information

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