



# ***Revenue Solutions, Inc. Refund Fraud Deterrence***

**Presentation for:**

***Federation of Tax Administrators –***

***Solution Track Series***

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# Introduction



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# Agenda



- RSI Overview
- Refund fraud “patterns”
- Goals of MA DOR deterrence program
- Solution Approach
- Results (2007 & 2008)
- Looking towards the future



# Revenue Solutions, Inc.



## *Mission Statement*

“Assist revenue agencies to maximize collections, increase compliance, improve customer service and streamline operations through the use of enabling technologies, in particular, integrated tax and tax data warehouse solutions”



[www.RevenueSolutionsInc.com](http://www.RevenueSolutionsInc.com)

- Incorporated in May, 1996
- Headquartered in Pembroke, MA with a Solution Center in Roseville, CA
- Dedicated exclusively to providing products & services to tax agencies
- Approximately 200 consultants with over 700 combined years of revenue systems consulting
- Deep tax administration domain expertise

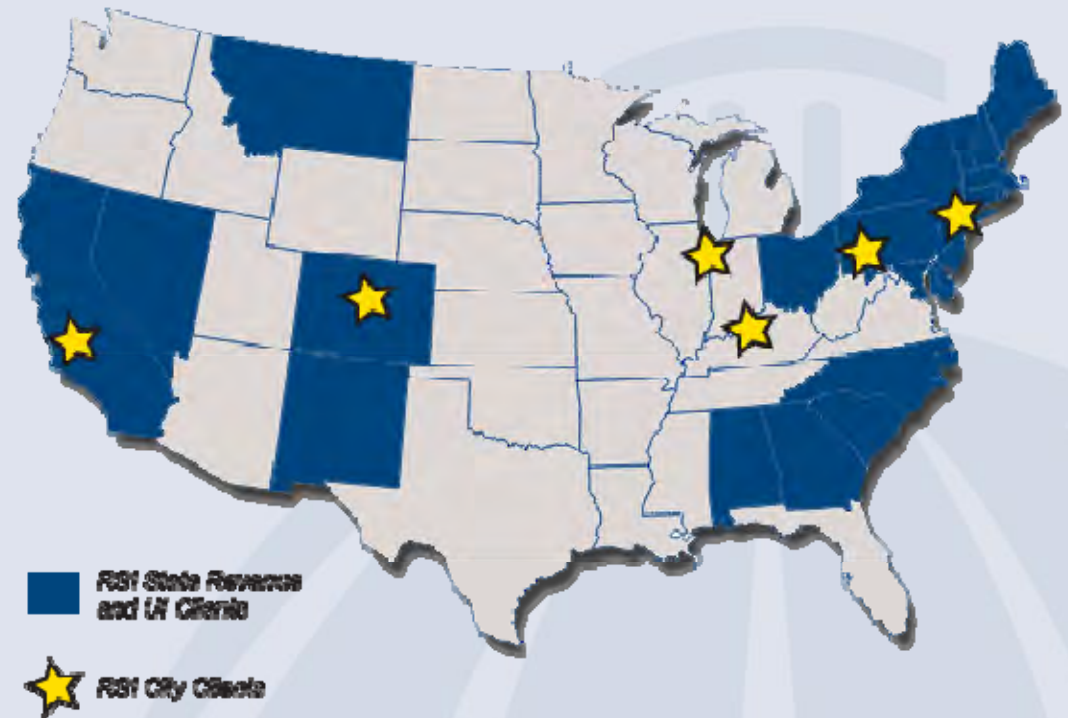


# Proven Tax and Revenue Experience



- Partnered with over twenty-five (25) revenue agencies since inception – Federal, State and Local
- Currently working with nine (9) revenue agencies/associations on fourteen (14) projects
- Over twenty-five (25) Integrated Tax Systems Planning, BPR, Design, Implementation and Maintenance Projects for Tax & Labor
- DiscoverTax® is licensed by seven (7) state revenue agencies: CT, GA, MA, NV, NM, RI, SC
- TaxMaster® is licensed by 5 states and over 25 counties
- Dedicated Solution Center and support help desk – Roseville, CA

*RSI brings a wealth of tax processing & compliance systems experience to **our clients***



# RSI Practice Lines



- Revenue Management
  - Legacy Systems Support
  - Legacy Systems Modernization
  - Revenue Administration - *Integrated Tax System*
  - Labor Administration - *UI Tax System*
  
- Compliance Management
  - Data Warehousing and Business Intelligence
  - Accounts Receivable Management
  - Decision Analytics
  - Audit Management



# Refund Fraud Patterns: Audit-“Type” Cases



- Someone using their true identity, but changing data to meet refundable credit thresholds in order to create or increase their refund
  - Claiming Earned Income Credit (EIC) eligibility without having worked (or earned enough) by inflating or fabricating self-employment or other income
  - Creating losses to offset wages to qualify for credits or increase refunds
  - Many cases become traditional desk audits of income and expenses



# Refund Fraud Patterns: Criminal Cases

- Criminal referrals in situations where someone is using a false identity and falsified tax information in order to fraudulently get a refund check
  - Entirely false claims of Earned Income Credit and/or Withholdings in order to establish a refundable credit (e.g., false W2s, etc.)
  - Using someone else's SSN (possible identity theft)
  - Cases may be from out-of-state addresses and may be part of larger, coordinated schemes involving several participants
  - Sometimes these refund requests are from real identities, but people who are unsuspecting participants or only vaguely aware that they may be engaging in criminal activity



# Refund Fraud History at MA DOR

- Various criminal schemes have been uncovered and prosecuted over the years
- Anecdotal evidence that fraud is becoming more widespread and sophisticated
- Several programs have been in place to stop suspicious refund claims before a check is issued:
  - Returns filed under known suspicious SSNs
  - Returns filed from known suspicious addresses
  - Returns requesting direct deposits to known suspicious bank accounts
  - Reports of multiple refunds issued to same address (post refund)
  - Select manual reviews of paper returns

# Primary Goal of New Solution



## *Stop fraudulent refund claims by:*

1. Identifying suspicious returns at several points in processing flow
2. Holding those returns for a more detailed evaluation – both automated and manual
3. Corresponding with those taxpayers to request further information to substantiate/validate:
  - Identity – by requesting copy of Social Security card or ITIN letter
  - Employment – by requesting a copy W2 (if filed electronically) when wages are being claimed for EIC, or a withholding credit is claimed
4. Where there is no response from the taxpayer, assume that the return was fraudulent or that the credits were invalid and either:
  - Archive the imaged return but do not post to the tax system, or
  - Post the return without the credits (resulting in liability or \$0 balance)

# Secondary Goals



- Limit complexity and implementation risk within the critical returns processing flow
- Provide enough flexibility so that rules can be adjusted throughout the filing season and annually
- Limit impact on vast majority of compliant taxpayers and maintain overall refund turnaround time
- Use the large set of data available in the warehouse
- Limit the procedural impact on DOR staff



# Solution Approach

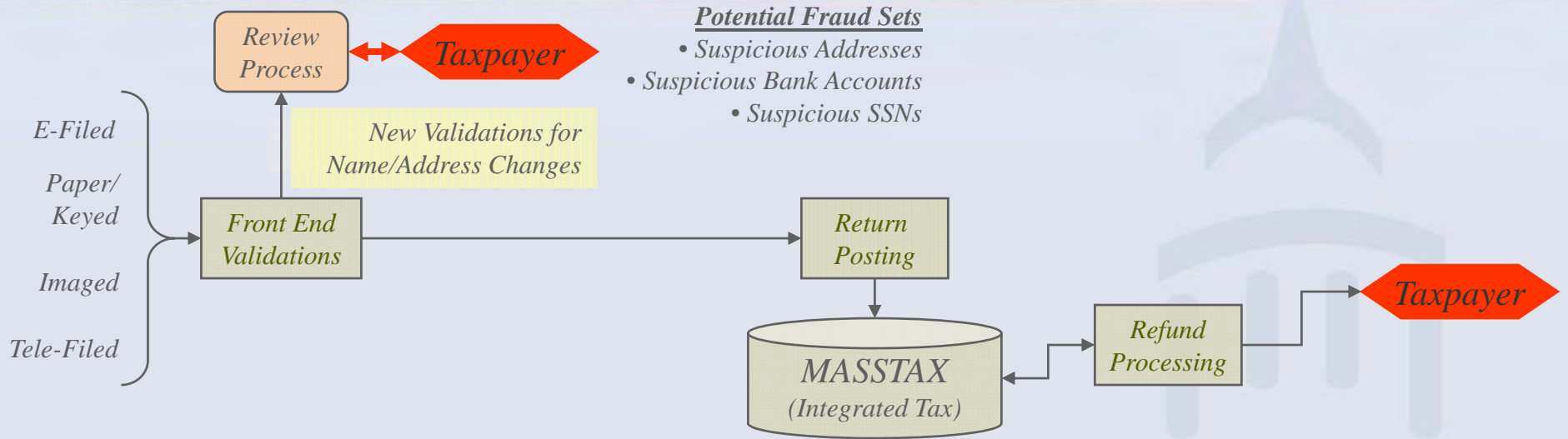
- Some process changes in the returns processing flow
  - Stop allowing changes to name and address at the same time
  - Check each ID/Name on refund request returns against a defined set that was confirmed in advance
- “Pre-validate” the majority of taxpayers based on prior returns and other data (internal and external) known to the DOR
- Evaluate the remainder (i.e., those not pre-validated) with decision rules to issue notices, release for refund, or hold for manual review

# Front End Returns Processing



- Some procedural changes implemented to stop suspicious returns “at the front door” and before posting to the tax system:
  - Do not allow returns to post without a valid tax ID (use of “temporary” numbers to issue refunds has been suspended)
  - Do not allow both name and address changes on an existing SSN (could be a simple “mis-keying” or could be identity theft)
  - Manually inspect some paper returns for suspicious patterns
  - Correspond with some taxpayers prior to posting the return; if there is no response, archive an image for record-keeping but purge return from the system without posting to the tax system

# Fraud Processing – Overall Context

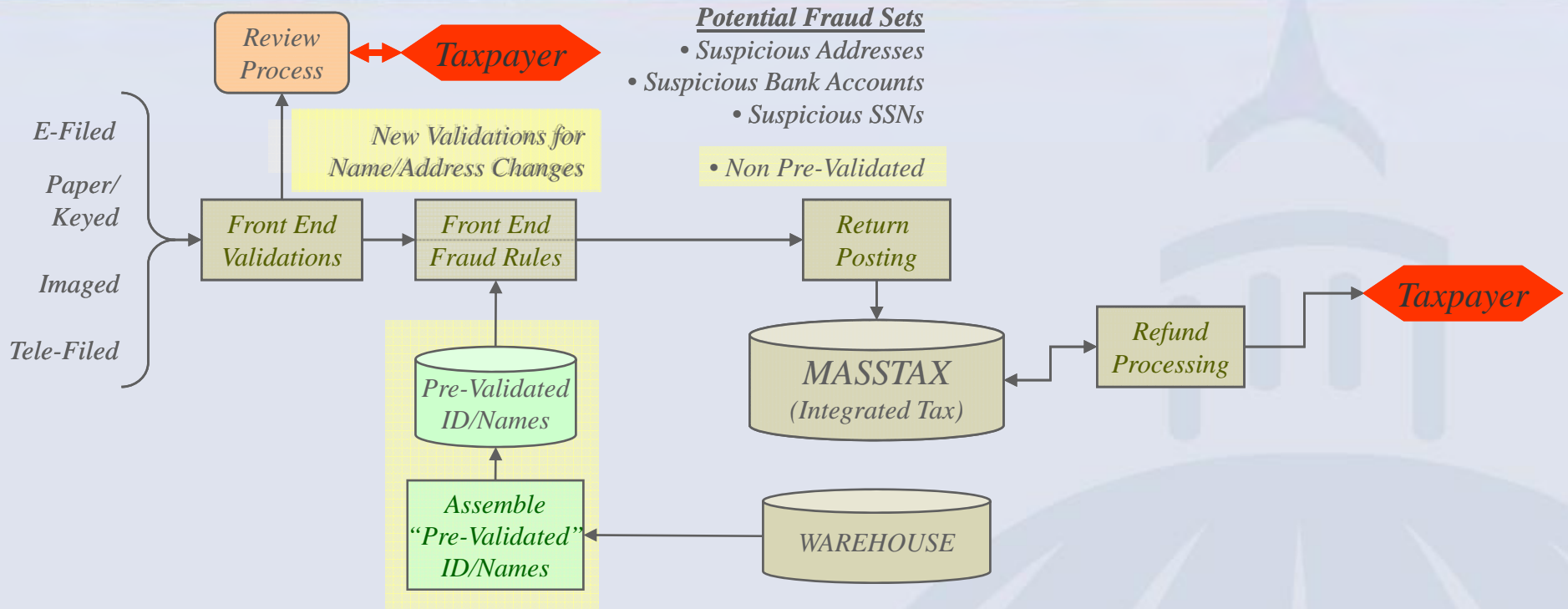


# Pre-Validated List



- List of known ID/Name combinations used during processing to confirm returns from “known” taxpayers
  - ID (SSN or ITIN) must match, along with a reasonable name match (to accommodate some spelling errors and “swaps”)
  - *There may still be audit issues with these returns identified later, but there is no reason to suspect refund fraud*
- Assembled from warehouse data and updated during the filing season to include new rules or more current data
- If taxpayer is requesting a refund and is not found on the pre-validated list, their return is temporarily “suspended” in the ITS for more detailed evaluation

# Fraud Processing – Overall Context



# Fraud Model Processing



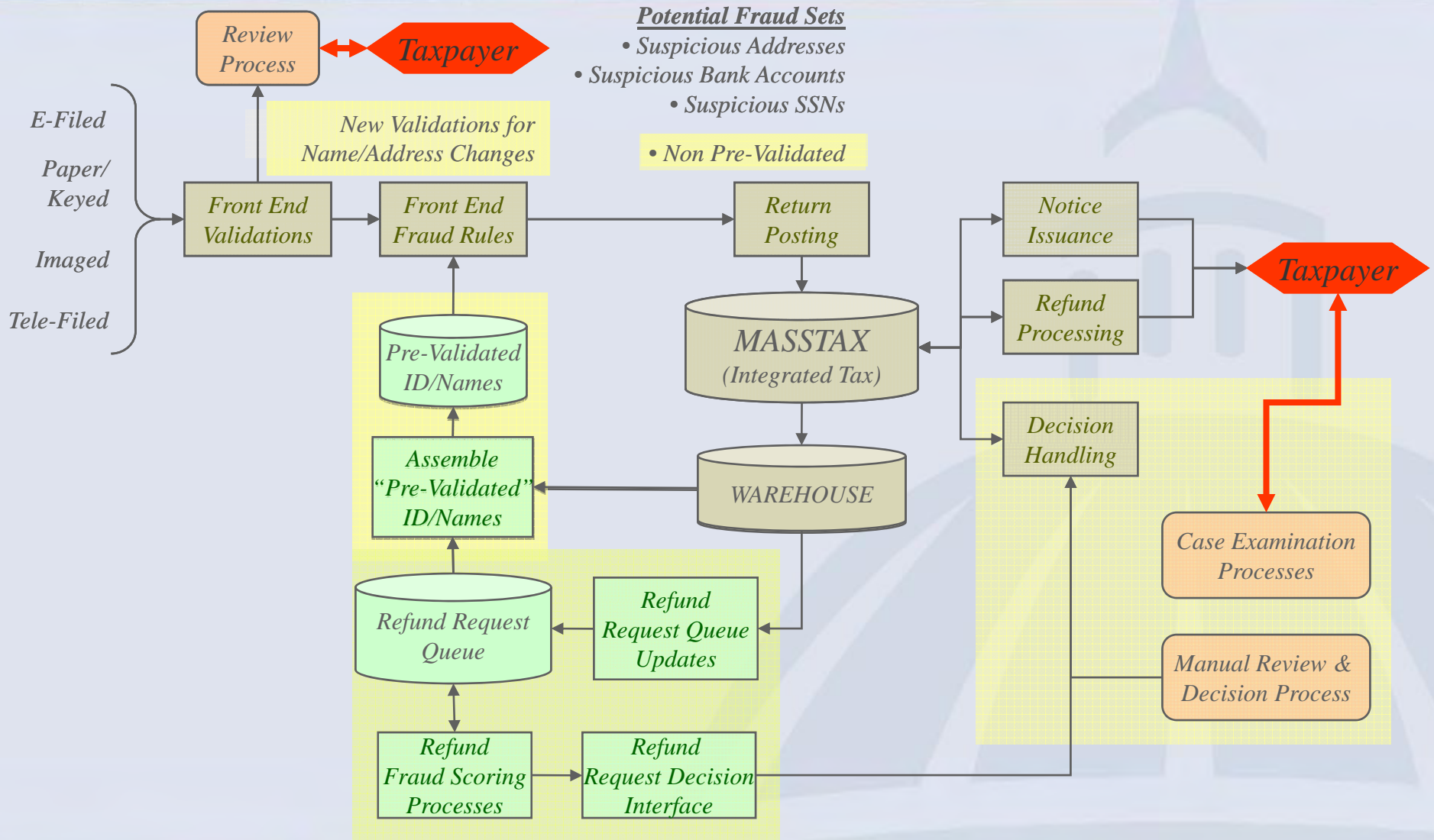
- For those refund requests that are not Pre-Validated:
  - Returns are held, loaded to a Refund Request Queue, and evaluated against a set of Refund Fraud Model rules:
    - Reasons for releasing returns for refund
    - Reasons for holding a return and issuing a specific notice to the taxpayer requesting additional information
    - Reasons for holding a return for further manual review
  - Refund Request Queue maintains all information related to the fraud evaluation process:
    - Date/time stamps, keys for interfacing (ITS and warehouse), derived attributes, scores, decisions, processing results, etc.
  
- Decisions from model are then issued to the ITS

# Data Being Used



- Registry of Motor Vehicles driver's license data
- Federal returns with name information and ID validity indicators (via SSA) from several prior years
- MA returns, payments, and registration data - including business Withholding accounts and payments
- Wage Reports from MA employers
- Other sources of “pre-validated” ID/Names because identities have been confirmed by another agency
- Recipients of state benefits and lottery winnings
- Various other sources of data continue to be explored (W2s, 1099s, other licenses, etc.)

# Fraud Processing – Overall Context





# Manual Review Process

- *Link to full entity portfolio for review*
- *Review “proposed” model decision*
- *Mark decisions manually (which are then passed in batch, daily to ITS)*
- *Supports “model” vs. “examiner” comparisons*

DiscoverTaxWebClient - Microsoft Internet Explorer

DiscoverTax - Selection Result Details

Manually Review Refund Queue and Apply Decision Result Details (#3728)- Locked

Filter Results +

Sort Results +

Update Selection Codes +

Entity ID	Selection Codes	PROPOSED	CITY	STATE	CREDIT1	WH_CREDIT...	REFUND_REQUEST
<a href="#">2440688</a>		PS118Notic	LEOMINSTER	MA	\$435.00	\$2,381.00	\$435.00
<a href="#">2440613</a>			PROVIDENCE	RI	\$998.00	\$679.00	\$998.00
<a href="#">2441284</a>		PS118Notic	MARLBOROUGH	MA	\$267.00	\$687.00	\$267.00
<a href="#">2446904</a>	Release for Refund	PS118Notic	WOONSOCKET	RI	\$932.00	\$7,085.00	\$932.00
<a href="#">2442663</a>		PS103Maybe	LYNN	MA	\$1,019.00	\$363.00	\$1,019.00
<a href="#">2436662</a>		PS118Notic	SALEM	MA	\$265.00	\$685.00	\$265.00
<a href="#">2435685</a>		Release	BRIGHTON	MA	\$350.00	\$288.00	\$350.00
<a href="#">2437899</a>	Issue PS103 Notice	PS103Maybe	W SPRINGFIELD	MA	\$182.00	\$745.00	\$182.00
<a href="#">2439345</a>		PS118Maybe	WOODBOURNE	NY	\$49.00	\$49.00	\$49.00
<a href="#">2438138</a>	Issue PS118 Notice	PS118Notic	LYNN	MA	\$692.00	\$1,287.00	\$692.00

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# Lessons Learned



- Follow a pro-active and consistent communication plan for informing both taxpayers and tax professionals
  - *“In an effort to stop refund fraud, the DOR is asking some taxpayers for more information to validate their identity, income, or employment.”*
- Data accuracy and currency are critical
- Various data-matching questions need to be carefully examined
  - Name misspellings and first/last name “swaps”
  - Transposed numbers in SSNs
- Handling first time filers and recent residents presents special challenges:
  - Limited data (no prior filing history)
  - Non-resident first time filers of 1099 income may have no other data known to the DOR from other available sources
  - New residents with only non-wage income

# Lessons Learned



- A process to fully address refund fraud will naturally evolve through a series of phases, and will become more refined over time
- Fully automated models are not recommended, without first building a base of data from patterns developed subjectively and confirmed with actual outcomes from prior years
- With each new year, the pre-validated criteria, model rules, and noticing approaches should reflect outcomes from the prior year
  - Zero in on the most likely fraud patterns
  - Adapt to new patterns and new schemes
  - Maintain the refund turnaround time that is expected



## Results at MA DOR – 2007

- System and procedural changes were adopted in early January, 2007 at the start of the TY2006 filing season
- 94% of returns were “pre-validated”
- 22,000 refunds for \$16M denied in 2007:

	Cases	Withholding Credit Inactivated	Average	Earned Income Credit Inactivated	Average
<i>Claimed Withholding Credit</i>	8,279	\$7,307,213.16	\$882.62		
<i>Claimed Earned Income Credit</i>	9,339			\$4,825,476.45	\$516.70
<i>Claimed Both</i>	4,699	\$1,912,526.92	\$407.01	\$1,948,071.30	\$414.57



# Results at MA DOR – 2008

- Partial results through majority of filing season indicate some reduction in cases
  - Refinement to decision rules
  - Lower abatement rate after inactivated credits
  - Improvements to case turnaround time with reduction in number of manual review cases

	Cases	Withholding Credit Inactivated	Average	Earned Income Credit Inactivated	Average
Claimed Withholding Credit	4,041	\$3,582,860.00	\$886.63		
Claimed Earned Income Credit	8,002			\$4,090,013.00	\$511.12
Claimed Both	2,867	\$1,147,043.00	\$400.08	\$1,157,187.00	\$403.62

# Changes Applied for 2008



- More recent data for all external data sources
- Refining the pre-validated list
  - Adding those specific taxpayers who received a notice during the 2007 filing season, but whose refunds were subsequently released for an amount within a tolerance range of the original requested amount
- Improvements to use of Wage Reporting data (form WR-1)
  - A more refined matching technique for ID and name
  - Specialized handling of situations where the ID on the taxpayer's return does not match the ID on the data provided by the employer, but other data confirms the ID as valid
  - Additional lists of “suspicious SSNs”, where a single SSN is reported on multiple WR-1s for different individuals
- New rules to combat what may be the next target for refund fraud, the Senior Circuit Breaker Credit

# Looking Towards the Future – Integrated Decision Management



- Intercept “events” and hold for a decision; *alongside the ITS*
- Queue requests and process asynchronously to accommodate:
  - Volumes and throttling of peak processing
  - Adaptability and changes to rules without disruptions
- Assemble data, derive elements, and evaluate model/decision rules
- Provide techniques for manual review and intervention
- Integrate back to requesting service or system to execute decision
  - For example: Hold for review, Release for refund, Issue notice
- Maintain audit trail history of all queued events and decisions made
- Discern various downstream outcomes
  - For example: No response, Adjusted return, Refund issued
- Provide analysis to assess decision effectiveness
  - Model decision vs. manual decision
  - Various outcomes/results by decision



# Looking Towards the Future – Advances in Refund Fraud Detection

- Optimism that early attempts or “trials” of different schemes have been stopped and criminals “move on”; the full impact may be greater than what can be measured
- However, more sophisticated fraud schemes will require more advanced deterrence
- Recommendations:
  - Matching employer tax IDs provided on returns (e.g., from electronic W2s) with Withholding Tax accounts
  - Increased refinement in automated rules to isolate potential fraud from compliant taxpayers to improve overall customer service
  - Increased cross-state sharing and cooperation (both schemes and data)
  - More timely Fed/State sharing to confirm ITIN and SSN validity from IRS and SSA
  - Require businesses to report actual Withholding payments at the employee level on a quarterly basis with either wage reports or Withholding reconciliation returns (i.e., have employer issue “estimated” W2s for each employee every quarter)
  - Issue “Withholding Vouchers” by the DOR rather than Employers issuing W-2’s
  - Amend Legislation to restrict eligibility for EIC for Schedule C Filers

# Questions and Contact Information



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