



# *THE SAVER'S MATCH SIMULATION*



## Modeling the Future of the Saver's Match Program

Insights from a 10-Year Discrete Event Simulation

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## **FAST FINDINGS**

The Saver's Match Simulation (SMS), developed by Retirement Clearinghouse (RCH), models the anticipated operation of the federal Saver's Match Program over a ten-year period (2027-2036), simulating millions of annual matching contributions. Using a discrete-event simulation framework, the model evaluates how a specific solutions framework - paired with alternative taxpayer claiming behavior and industry market-hub adoption assumptions - influence the successful delivery of federal matching contributions to qualified retirement accounts.

Across four modeled scenarios, the SMS validates the use of a clearinghouse model, paired with a transitional Saver's Match IRA (SMIRA), while revealing that end-to-end system outcomes are highly sensitive to both eligible taxpayers' claiming rates and the retirement market's adoption of a centralized matching solution.

### **Finding #1: A Clearinghouse Model is a Prerequisite to Program Success**

A clearinghouse model had insurmountable advantages of being:

- **Able to handle the projected volumes** of matching contributions from the U.S. Treasury
  - **Highly adaptable to the needs of a mobile workforce**
  - **Able to identify and handle error conditions**
  - **Proven and in production**
  - **Already accepted and implemented** by a large sub-set of defined contribution recordkeepers
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### **Finding #2: Throughput Is Highly Sensitive to Claiming & Adoption**

The SMS demonstrates that end-to-end system performance is primarily driven by two key variables:

- **Taxpayer claiming behavior** (50-60% low curve; 75-80% high curve)
- **Market hub adoption** among retirement plan providers (25-50% low; 70-90% high)

Higher adoption, combined with higher claiming, generates a dramatically greater volume of matching contributions that quickly reach target qualified retirement accounts.

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### **Finding #3: Match Rates Exceed Adoption Rates**

Across all modeled scenarios, match rates consistently outperformed underlying market adoption levels due to:

- Alternating between event-driven and data-driven matching methods
  - High rates of job-changing ("savers in motion"), which create new match opportunities
  - Multi-year overlap of claiming filers, enabling matches in later years as adoption and employment statuses change.
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### **Finding #4: A Saver's Match IRA (SMIRA) Is Central to Program Success**

In our simulation, the Saver's Match IRA (SMIRA) plays a pivotal operational role by:

- Receiving and safeguarding federal matching contributions immediately upon IRS return processing
  - Serving as a buffer between Treasury processes and private-sector plan providers
  - Supporting automated, accurate, multi-method account location & matching
  - Preserving matching contributions until they can be delivered to a confirmed retirement account
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### **Finding #5: The Influence of Proactive Policy**

The SMS underscores the importance of policy in:

- Simplifying the claiming process
- Enhancing taxpayer awareness of the Saver's Match
- Improving availability and timing of W-2 and Form 5498 data to the program provider
- Encouraging broad adoption among DC and IRA providers

Based on our scenario outcomes, these policy interventions will directly influence the proportion of federal matching dollars that reach valid, target retirement accounts.

# I. ABOUT THE SAVER'S MATCH SIMULATION (SMS)

## What is the Saver's Match Simulation?

- The SMS is a discrete event simulation model developed by Retirement Clearinghouse (RCH) that simulates the operation of the Saver's Match Program over a period of ten tax years, from 2027 to 2036.
  - The SMS simulates the Saver's Match Program under a specific solutions model envisioned by its authors, which includes financial technology that moves contributions forward via a transitional Saver's Match IRA (SMIRA), an operational hub that communicates with multiple market hubs, and automated movement of balances to qualified plans, once a target account has been definitively located.
  - The SMS simulates the operation of the Saver's Match program under four separate scenarios, consisting of logical combinations of high or low claiming behavior by eligible savers, and high or low market adoption by qualified plan providers.
  - As the SMS executes millions of annual events, the simulation software tracks key metrics, including the number of eligible savers, the amount of their matching contributions, the incidence and duration of transitional SMIRAs, and the movement of SMIRAs into qualified plans via the market hubs.
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## What Framework Does the SMS Simulate?

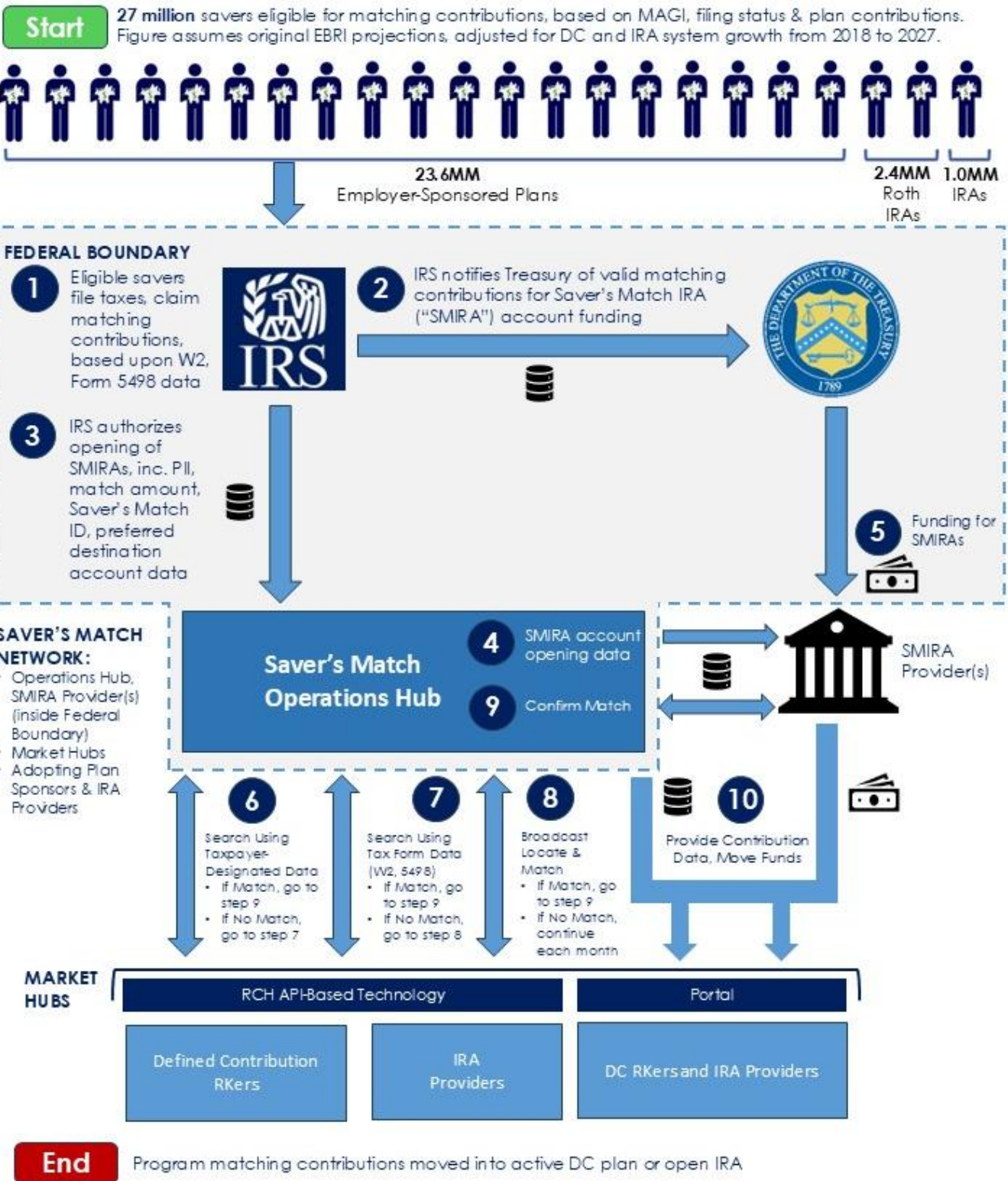
The SMS simulates the Saver's Match Program using the following general framework:

- **Requirement to File:** To qualify to receive a Saver's Match, an eligible saver must file income taxes with the IRS and must act to claim their matching contribution.
- **Use of Saver's Match IRAs:** As tax returns are accepted and approved, federal matching contributions are disbursed to Saver's Match Individual Retirement Accounts (SMIRAs), special-purpose transitional IRAs designed to temporarily house matching contributions in the name of the eligible saver. SMIRA balances can be transferred to 1) an active defined contribution (DC) plan or 2) to an open, traditional IRA. SMIRAs cannot otherwise be disbursed, except under the following exception conditions:
  - Attainment of age 59-1/2
  - Total and Permanent Disability
  - Death
- **Application of a Clearinghouse Framework:** Operated by the Program and within the Federal Boundary, a clearinghouse framework will apply proven technology to perform three essential location and matching processes to validate and/or determine the target, qualified accounts to which SMIRA balances can be directed:
  1. Target accounts are self-designated by taxpayers, at time of tax filing, and subsequently validated by locate and match technology
  2. Target accounts are determined by data from tax forms W-2, 5498
  3. Barring a match from nos. 1 and 2 above, SMIRA accountholder data is 'broadcast' to participating market hubs, who confirm a match with a qualified retirement savings account
- **Market Hubs:** An automated market hub (for both DC recordkeepers and IRA providers), along with a web-based portal represent the endpoints that will receive the simultaneous transfer of transaction data and SMIRA balances, to be applied to valid, qualified accounts.

See the diagram below for a summary of the proposed operating framework.

**Figure 1:** Simulated Saver's Match Solution Model

### Simulated Process Framework



## What Scenarios Does the SMS Execute?

The SMS executes four separate scenarios, where two critical elements are subject to sensitivity analysis - 1) the percentage of eligible savers who claim a matching contribution ("claiming behavior") and 2) the percentage of market adoption within the designated market hubs ("market adoption").

Combinations of claiming behavior and market adoption yield the four SMS scenarios that were modeled:

### **Scenario 1:** High Claiming Behavior / High Market Adoption

This scenario models the highest claiming behavior, paired with high market adoption, and was expected to result in the highest throughput of matching contributions reaching qualified retirement plans.

**High Claiming:** 75% in 2028, climbing to 80% in 2037

**High Adoption:** 70% in 2028, climbing to 90% in 2037

### **Scenario 2:** High Claiming Behavior / Low Market Adoption

This scenario models the highest claiming behavior, paired with low market adoption, and was expected to result in the largest number of residual SMIRA accounts at the end of every year.

**High Claiming:** 75% in 2028, climbing to 80% in 2037

**Low Adoption:** 25% in 2028, climbing to 50% in 2037

### **Scenario 3:** Low Claiming Behavior / High Market Adoption

This scenario models the lowest claiming behavior, paired with high assumed market adoption, and was expected to result in the lowest number of residual SMIRA accounts at the end of every year.

**Low Claiming:** 50% in 2028, climbing to 60% in 2037

**High Adoption:** 70% in 2028, climbing to 90% in 2037

### **Scenario 4:** Low Claiming Behavior / Low Market Adoption

This scenario models the lowest claiming behavior, paired with the lowest assumed market adoption, and was expected to result in a moderate number of residual SMIRA accounts at the end of every year.

**Low Claiming:** 50% in 2028, climbing to 60% in 2037

**Low Adoption:** 25% in 2028, climbing to 50% in 2037

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## What Key Outcomes Does the SMS Track?

- Number of taxpayers eligible to receive a matching contribution, based on filing status, MAGI and plan contributions
- Distribution of balances for eligible taxpayers
- Number of eligible taxpayers who claim a matching contribution (less those with balances below \$100 who elect to receive a refundable tax credit)
- Number, timing and balance of funded SMIRAs, based on filings processed

- Number, timing of downstream SMIRA location & matching events (e.g., via self-designation of accounts, searches via Form W2 or Form 5498 data, or via wider, broadcast locate-and-match operations)
  - Number, timing and balance of SMIRA funds moved to qualified plans, by market hub
  - Number, balance of unmatched SMIRA accounts that remain unmatched at the end of each calendar year
- 

## What Underlying Data is the SMS Based Upon?

### Key Data Elements

The key data elements that are supplied to the SMS include:

- Number of eligible taxpayers, broken down by DC plan savers, IRA savers and Roth IRA savers
- Claiming behavior of eligible taxpayers
- Percentage of sub-\$100 eligible taxpayers who elect to receive a refundable tax credit
- Distribution of matching contribution balances
- Timing of approved tax filings
- Savers-in-Motion Assumptions, including:
  - Annual turnover (i.e., job changes)
  - Job-changers who take position with new employer with no plan
  - Job-changers who retire
  - Job-changers who become disabled
  - Job-changers who die
- Eligible savers who self-designate an account to receive a matching contribution
- Percentage of eligible savers whose IRA contribution is made during tax filing season
- Market Hub Characteristics:
  - Market share of each market hub
  - Percentage adoption, by market hub
  - Incremental market adoption, over time

### Data Sources

The SMS relied on a “best available” data standard, prioritizing authoritative public and industry sources.

- IRS Statistics of Income (SOI)
- IRS Filing Season Statistics
- Department of Labor Private Pension Data
- EBRI Saver’s Match sizings and job-changer statistics
- Georgetown CRI state Roth IRA data
- ICI IRA sizings

Where no authoritative data source existed, the model used reasonable, speculative estimates.

Please see the following section for more information on key model input data.

## II. KEY SIMULATION MODEL INPUT DATA

### Number of Eligible Tax Filers, by Source (DC plan, IRA or Roth IRA)

**Definition:** The total, estimated number of eligible tax filers who will qualify to receive a program matching contribution, based on MAGI, filing status and contributions to a qualified plan.

**Usage in SMS:** Since this refers only to “eligible” tax filers, this value is used (along with claiming behavior) to calculate the number of tax filers who will actually claim a matching contribution.

#### Approach to Determining Data Values:

- As a starting point, we used EBRI’s projections in Issue Brief No. 602, which itself used IRS data from 2018
- For DC savers, we applied historical growth from 2018-2022 (DOL Private Pension Data) to grow this value by 2.7% per year until 2027, then 1% per year thereafter
- We estimated significant growth in Roth IRAs due to state-based initiatives, and modest growth in traditional IRAs (0.5% per year)

#### Data Values:

The figures highlighted in yellow in the table below represent the total number of taxpayers who would be eligible to claim a Program matching contribution

Tax Year	Number Eligible			Total	Annual Growth		
	DC PPTs	Roth IRA	Trad IRA		DC PPTs	Roth IRA	Trad IRA
2018	18,930,743	2,009,826	1,011,131	21,951,700			
2019	19,413,911	2,019,875	1,016,187	22,449,973	2.6%	0.5%	0.5%
2020	19,365,322	2,029,975	1,021,268	22,416,564	-0.3%	0.5%	0.5%
2021	19,958,156	2,040,124	1,026,374	23,024,655	3.1%	0.5%	0.5%
2022	21,025,531	2,050,325	1,031,506	24,107,362	5.3%	0.5%	0.5%
2023	21,588,563	2,060,577	1,036,663	24,685,803	2.7%	0.5%	0.5%
2024	22,166,672	2,344,677	1,041,847	25,553,195	2.7%	Auto IRA	0.5%
2025	22,760,262	2,373,087	1,047,056	26,180,404	2.7%	Auto IRA	0.5%
2026	23,369,747	2,404,338	1,052,291	26,826,376	2.7%	Auto IRA	0.5%
<b>2027</b>	23,603,445	2,431,839	1,057,553	<b>27,092,836</b>	1.0%	8.0%	0.5%
<b>2028</b>	23,839,479	2,461,539	1,062,840	<b>27,363,859</b>	1.0%	8.0%	0.5%
<b>2029</b>	24,077,874	2,485,597	1,068,155	<b>27,631,626</b>	1.0%	6.0%	0.5%
<b>2030</b>	24,318,653	2,506,848	1,073,495	<b>27,898,996</b>	1.0%	5.0%	0.5%
<b>2031</b>	24,561,839	2,529,162	1,078,863	<b>28,169,864</b>	1.0%	5.0%	0.5%
<b>2032</b>	24,807,458	2,552,591	1,084,257	<b>28,444,306</b>	1.0%	5.0%	0.5%
<b>2033</b>	25,055,532	2,577,192	1,089,678	<b>28,722,402</b>	1.0%	5.0%	0.5%
<b>2034</b>	25,306,087	2,603,023	1,095,127	<b>29,004,237</b>	1.0%	5.0%	0.5%
<b>2035</b>	25,559,148	2,630,145	1,100,602	<b>29,289,896</b>	1.0%	5.0%	0.5%
<b>2036</b>	25,814,740	2,658,623	1,106,105	<b>29,579,469</b>	1.0%	5.0%	0.5%

## Claiming Behavior of Eligible Tax Filers

**Definition:** The percentage of eligible taxpayers who will claim to receive a program matching contribution.

**Usage in SMS:** This value is used (along with estimated number of qualifying taxpayers) to calculate the total number of tax filers who claim matching contributions.

### Approach to Determining Data Values:

- A range of potential causes were identified for low claiming behavior, including:
  - Unaware of program
  - Filing via paper
  - Filing complexity
  - Filing barriers (ex. - encounters fee)
  - Haven't received Form 5498 for IRA contributions
- While a "bottom-up" model to calculate claiming behavior was considered, a "top-down" approach was employed, as described below.

### Data Values:

- **50% to 60%:** "Low" claiming behavior is characterized as starting at 50% for tax year 2027, and growing to 60% for tax year 2036, increasing in a straight line
  - **75% to 80%:** "High" claiming behavior is characterized as starting at 75% for tax year 2027, and growing to 80% for tax year 2036, increasing in a straight line
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## Percentage Sub-\$100 Recipients Electing Refundable Tax Credit

**Definition:** The percentage of eligible taxpayers who claim a matching contribution with a value of less than \$100, who optionally elect to receive a refundable tax credit.

**Usage in SMS:** Those who claim a matching contribution with a value of less than \$100 but elect to receive a refundable tax credit are excluded from downstream SMS events (e.g., establishment of a SMIRA, location & matching, etc.)

### Approach to Determining Data Values:

- For the purposes of the SMS, we made a global assumption for those who qualify for a sub-\$100 matching contribution will elect to receive a refundable tax credit.

### Data Values:

- **50%:** Percentage of those who qualify for a sub-\$100 matching contribution who will elect to receive a refundable tax credit.

## Distribution of Matching Contribution Balances

**Definition:** The estimated distribution of amounts of matching contributions, by source - DC, Roth IRA and Traditional IRA.

**Usage in SMS:** Used to assign values to matching contributions as the simulation executes.

### Approach to Determining Data Values:

- For DC balances, we utilized data from EBRI's DC Participants (by AGI, derived from IRS data), combined with Vanguard's How America Saves (HAS) contribution rates
- For Roth IRA and Traditional IRA balances, we utilized EBRI's data (by AGI, derived from IRS data) and IRA Statistics of Income (SOI) data to derive average contributions

### Data Values (after adjustment for sub-\$100 Refundable Tax Credits)

As shown in the table values below, the average matching contribution - across all sources (DC plans, Roth IRAs and traditional IRAs) is projected to be \$672. This average figure excludes the 50% of eligible taxpayers qualifying for a sub-\$100 matching contribution who elect to receive a refundable tax credit.

#### DEFINED CONTRIBUTION-ORIGINATED MATCHING CONTRIBUTIONS

<u>Range</u>	<u>No. Matches</u>	<u>% of Matching</u>		<u>Avg. Matching Contribution</u>	<u>\$ Contributions</u>
		<u>Contributions</u>	<u>Contribution</u>		
<\$100	1,045,923	5.8%		\$95	\$99,269,708
\$100-\$400	3,518,614	19.7%		\$238	\$837,334,152
\$400-\$700	4,685,934	26.2%		\$562	\$2,631,351,431
\$700-\$1000	8,634,349	48.3%		\$954	\$8,241,234,650
<b>Sub-Total</b>	<b>17,884,820</b>	<b>100.0%</b>		<b>\$660.29</b>	<b>\$11,809,189,941</b>

#### ROTH IRA-ORIGINATED MATCHING CONTRIBUTIONS

<u>Range</u>	<u>No. Matches</u>	<u>% of Matching</u>		<u>Avg. Matching Contribution</u>	<u>\$ Contributions</u>
		<u>Contributions</u>	<u>Contribution</u>		
<\$100	118,075	6.2%		\$47	\$5,525,664
\$100-\$400	240,616	12.7%		\$278	\$66,900,942
\$400-\$700	238,451	12.6%		\$537	\$128,162,007
\$700-\$1000	1,294,608	68.4%		\$940	\$1,217,545,120
<b>Sub-Total</b>	<b>1,891,751</b>	<b>100.0%</b>		<b>\$749.64</b>	<b>\$1,418,133,733</b>

#### TRADITIONAL IRA-ORIGINATED MATCHING CONTRIBUTIONS

<u>Range</u>	<u>No. Matches</u>	<u>% of Matching</u>		<u>Avg. Matching Contribution</u>	<u>\$ Contributions</u>
		<u>Contributions</u>	<u>Contribution</u>		
<\$100	64,303	6.8%		\$47	\$3,010,182
\$100-\$400	132,742	14.0%		\$278	\$36,884,147
\$400-\$700	130,872	13.8%		\$537	\$70,282,602
\$700-\$1000	618,911	65.4%		\$941	\$582,123,274
<b>Sub-Total</b>	<b>946,828</b>	<b>100.0%</b>		<b>\$731.18</b>	<b>\$692,300,205</b>

<b>GRAND TOTAL</b>	<b>20,723,398</b>	<b>100%</b>		<b>\$672</b>	<b>\$13,919,623,879</b>
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## Timing of Tax Filings Processed

**Definition:** The timing, by week of year, that taxpayers eligible to receive a matching contribution have their tax filings approved by the IRS.

**Usage in SMS:** Approved tax filings are the trigger for the process to fund a Saver's Match IRA (SMIRA).

### Approach to Determining Data Values:

- We utilized the IRS Filing Season Statistics for 2023, which provides data for all individual returns. Data in the tables allows the calculation of approved returns.
- We only used timings for the main tax filing season (i.e., through April).

### Data Values:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
-	-	1.2%	2.4%	8.4%	7.0%	7.2%	6.4%	6.1%	6.3%	5.9%	6.4%	6.6%	7.6%	11.3%	13.2%	1.6%	1.3%	1.1%	-	-

## Market Hub Adoption

**Definition:** Market Hub Adoption is a progression of several key measures that ultimately facilitate the ability of SMS model to locate-and-match SMIRAs across multiple market hubs.

These measures include:

- a. Designation of Market Hubs
- b. Market Share of Each Market Hub (DC, IRAs)
- c. Market Hub Percentage Adoption (by year)
- d. Odds of a Network Match (by year)

**Usage in SMS:** Each market hub is established in the SMS, and the odds of a broadcast locate-and-match is the key variable utilized for the purpose of matching SMIRAs with associated market hubs.

### Approach to Determining Data Values:

- **Designation of Market Hubs:** We defined two likely market hubs, including:
  - DC, IRA Recordkeepers (Automated)
  - Other Providers (Portal)
- **Market Share of Each Market Hub:** We assigned each hub a market share, based on the assumed market share that they will represent - of either the DC or the IRA market - at 100% adoption.
- **Market Hub Percentage Adoption:** We then assigned yearly, projected adoption values to each market hub, representing the portion of their market share that has adopted, up to the maximum market share that they represent.
- **Odds of a Network Match:** Finally, based on each hub's respective market share and their percentage adoption, we calculated the odds of a network match for matching contributions.

# Eligible Tax Filers Who Designate a Target Account

**Definition:** The percentage of tax filers who self-designate a qualified retirement savings account to receive their federal matching contributions. A related component identifies the percentage of those that are valid.

**Usage in SMS:** Used to drive the probabilities of a match in the initial, targeted matching phase, based on taxpayer-supplied designated accounts.

### Approach to Determining Data Values:

These are largely speculative values but are based upon the 81% of BRT-RCH Saver’s Match Survey respondents who indicated that, although they didn’t readily know details about their target account, they felt confident that they could obtain the details if required.

### Data Values:

<u>Year</u>	<u>% Designating</u>	<u>% Valid</u>
2028	80.00%	75.00%
2029	81.00%	76.00%
2030	82.00%	77.00%
2031	83.00%	78.00%
2032	84.00%	80.00%
2033	85.00%	80.00%
2034	86.00%	81.00%
2035	87.00%	81.00%
2036	88.00%	81.00%
2037	90.00%	82.00%

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## Savers-in-Motion

**Definition:** Eligible savers who experience job transitions during the tax year, the filing season, or ongoing.

**Usage in SMS:** The percentage of job-changers is identified to the SMS model. Of the total number, we also identify a subset we term “job churn” which represents the movement to a new employer, along with enrollment in a new employer’s DC plan.

### Approach to Determining Data Values:

- We utilized EBRI leave ratio data from the Auto Portability Simulation (APS), using sub-\$15,000 balances (25% per year) as a proxy for eligible tax filers.
- We then adjusted this figure to:
  - Identify those job-changers who would move to a new employer and enroll in their DC plan.
  - Express the values as monthly constants to the SMS model

### Data Values:

- **2.08%:** Job-Changing (consistent with EBRI Leave Ratio)
- **1.77%:** Job Churn

# III. SIMULATION RESULTS

## Key Findings, By Scenario

### Scenario 1: High Claiming / High Adoption

#### NUMBER OF CONTRIBUTIONS

<u>Date</u>	<u>No. SMIRAs Funded</u>	<u>No. SMIRAs Matched</u>	<u>No. Unmatched SMIRAs</u>	<u>Match Rate</u>	<u>Adoption Rate</u>
12/31/2028	19,183,967	15,886,648	3,297,320	82.8%	70.0%
12/31/2029	19,519,418	17,020,942	5,795,796	87.2%	72.2%
12/31/2030	19,855,386	18,045,017	7,606,164	90.9%	74.4%
12/31/2031	20,193,883	18,969,695	8,830,352	93.9%	76.7%
12/31/2032	20,537,734	19,836,790	9,531,296	96.6%	78.9%
12/31/2033	20,887,050	20,559,544	9,858,803	98.4%	81.1%
12/31/2034	21,241,947	21,248,237	9,852,513	100.0%	83.3%
12/31/2035	21,602,544	21,847,350	9,607,707	101.1%	85.6%
12/31/2036	21,968,965	22,399,536	9,177,136	102.0%	87.8%
12/31/2037	22,341,337	22,624,654	8,893,818	101.3%	90.0%
<b>Matching</b>	<b>207,332,232</b>	<b>198,438,414</b>		<b>95.7%</b>	

#### ASSET VALUES

<u>Date</u>	<u>\$ SMIRAs Funded</u>	<u>\$ SMIRAs Matched</u>	<u>\$ Unmatched SMIRAs</u>	<u>Match Rate</u>	<u>Adoption Rate</u>
12/31/2028	\$12,873,044,306	\$10,670,442,401	\$2,202,601,905	82.9%	70.0%
12/31/2029	\$13,098,218,318	\$11,429,354,322	\$3,871,465,901	87.3%	72.2%
12/31/2030	\$13,323,405,247	\$12,114,254,318	\$5,080,616,831	90.9%	74.4%
12/31/2031	\$13,550,109,332	\$12,732,517,225	\$5,898,208,938	94.0%	76.7%
12/31/2032	\$13,780,442,508	\$13,312,149,200	\$6,366,502,247	96.6%	78.9%
12/31/2033	\$14,014,483,520	\$13,795,671,341	\$6,585,314,426	98.4%	81.1%
12/31/2034	\$14,252,313,865	\$14,256,285,539	\$6,581,342,752	100.0%	83.3%
12/31/2035	\$14,494,017,928	\$14,657,225,374	\$6,418,135,306	101.1%	85.6%
12/31/2036	\$14,739,683,121	\$15,026,831,719	\$6,130,986,707	101.9%	87.8%
12/31/2037	\$14,989,400,022	\$15,177,728,455	\$5,942,658,273	101.3%	90.0%
<b>Matching</b>	<b>\$139,115,118,167</b>	<b>\$133,172,459,893</b>		<b>95.7%</b>	

#### Discussion:

This scenario could be characterized as the best-case scenario that was modeled, as it was expected to result in the highest throughput of matching contributions reaching qualified retirement plans. Of all scenarios modeled, it produced the strongest 10-year performance, with:

- **207.3 million:** SMIRAs funded from matching contributions, representing **\$139.1 billion**
- **198.4 million:** Matched SMIRAs, representing **\$133 billion**
- **8.9 million:** Residual, unmatched SMIRA accounts, representing **\$5.9 billion**
- **Match rates > 100%:** In years 7-10, due to cross-year matching effect
- **Synergy effect:** Strong match rates due to synergy between taxpayer behavior and provider integration

## Scenario 2: High Claiming / Low Adoption

### NUMBER OF CONTRIBUTIONS

<u>Date</u>	<u>No. SMIRAs Funded</u>	<u>No. SMIRAs Matched</u>	<u>No. Unmatched SMIRAs</u>	<u>Match Rate</u>	<u>Adoption Rate</u>
12/31/2028	19,183,967	7,856,915	11,327,052	41.0%	25.0%
12/31/2029	19,519,418	9,849,874	20,996,597	50.5%	27.8%
12/31/2030	19,855,386	11,776,613	29,075,369	59.3%	30.6%
12/31/2031	20,193,883	13,621,968	35,647,285	67.5%	33.3%
12/31/2032	20,537,734	15,410,760	40,774,259	75.0%	36.1%
12/31/2033	20,887,050	17,021,374	44,639,935	81.5%	38.9%
12/31/2034	21,241,947	18,564,139	47,317,743	87.4%	41.7%
12/31/2035	21,602,544	19,952,852	48,967,436	92.4%	44.4%
12/31/2036	21,968,965	21,230,277	49,706,123	96.6%	47.2%
12/31/2037	22,341,337	19,966,081	52,081,378	89.4%	50.0%
<b>Matching</b>	<b>207,332,232</b>	<b>155,250,854</b>	<b>74.9%</b>		

### ASSET VALUES

<u>Date</u>	<u>\$ SMIRAs Funded</u>	<u>\$ SMIRAs Matched</u>	<u>\$ Unmatched SMIRAs</u>	<u>Match Rate</u>	<u>Adoption Rate</u>
12/31/2028	\$12,873,044,306	\$5,281,498,437	\$7,591,545,869	41.0%	25.0%
12/31/2029	\$13,098,218,318	\$6,618,325,919	\$14,071,438,267	50.5%	27.8%
12/31/2030	\$13,323,405,247	\$7,910,405,898	\$19,484,437,617	59.4%	30.6%
12/31/2031	\$13,550,109,332	\$9,147,622,361	\$23,886,924,587	67.5%	33.3%
12/31/2032	\$13,780,442,508	\$10,346,486,112	\$27,320,880,983	75.1%	36.1%
12/31/2033	\$14,014,483,520	\$11,426,298,391	\$29,909,066,112	81.5%	38.9%
12/31/2034	\$14,252,313,865	\$12,460,221,708	\$31,701,158,269	87.4%	41.7%
12/31/2035	\$14,494,017,928	\$13,391,088,074	\$32,804,088,122	92.4%	44.4%
12/31/2036	\$14,739,683,121	\$14,247,284,478	\$33,296,486,765	96.7%	47.2%
12/31/2037	\$14,989,400,022	\$13,400,075,480	\$34,885,811,307	89.4%	50.0%
<b>Matching</b>	<b>\$139,115,118,167</b>	<b>\$104,229,306,860</b>	<b>74.9%</b>		

### Discussion:

This scenario was viewed as a “stress test” as it combines high front-end claiming rates (as modeled in Scenario 1) along with low back-end adoption by providers. Low market adoption suppresses match rates, meaning that the most significant volumes of contributions remain in SMIRAs unmatched. Despite this, over 10 years almost 3 out of 4 matching contributions are eventually matched and transferred to target retirement savings accounts.

- **207.3 million:** SMIRAs funded from matching contributions, representing **\$139.1 billion**
- **155.2 million:** Matched SMIRAs, representing **\$104.2 billion**
- **52.1 million:** Residual, unmatched SMIRA accounts, representing **\$34.9 billion**
- **Match rates > 90%:** In years 8-10, due to cross-year matching effect

### Scenario 3: Low Claiming / High Adoption

#### NUMBER OF CONTRIBUTIONS

<u>Date</u>	<u>No. SMIRAs Funded</u>	<u>No. SMIRAs Matched</u>	<u>No. Unmatched SMIRAs</u>	<u>Match Rate</u>	<u>Adoption Rate</u>
12/31/2028	12,789,312	10,591,099	2,198,213	82.8%	70.0%
12/31/2029	13,204,312	11,509,069	3,893,456	87.2%	72.2%
12/31/2030	13,623,403	12,367,856	5,149,004	90.8%	74.4%
12/31/2031	14,047,919	13,172,945	6,023,978	93.8%	76.7%
12/31/2032	14,479,841	13,951,852	6,551,968	96.4%	78.9%
12/31/2033	14,919,322	14,641,646	6,829,643	98.1%	81.1%
12/31/2034	15,366,515	15,318,456	6,877,702	99.7%	83.3%
12/31/2035	15,821,582	15,940,911	6,758,373	100.8%	85.6%
12/31/2036	16,284,687	16,538,244	6,504,817	101.6%	87.8%
12/31/2037	16,756,002	16,910,411	6,350,408	100.9%	90.0%
<b>Matching</b>	<b>147,292,895</b>	<b>140,942,488</b>	<b>95.7%</b>		

#### ASSET VALUES

<u>Date</u>	<u>\$ SMIRAs Funded</u>	<u>\$ SMIRAs Matched</u>	<u>\$ Unmatched SMIRAs</u>	<u>Match Rate</u>	<u>Adoption Rate</u>
12/31/2028	\$8,582,029,538	\$7,113,628,267	\$1,468,401,270	82.9%	70.0%
12/31/2029	\$8,860,559,450	\$7,728,216,951	\$2,600,743,770	87.2%	72.2%
12/31/2030	\$9,141,606,520	\$8,303,021,124	\$3,439,329,166	90.8%	74.4%
12/31/2031	\$9,426,163,014	\$8,841,796,003	\$4,023,696,177	93.8%	76.7%
12/31/2032	\$9,715,707,668	\$9,362,967,691	\$4,376,436,153	96.4%	78.9%
12/31/2033	\$10,010,345,371	\$9,824,832,722	\$4,561,948,802	98.1%	81.1%
12/31/2034	\$10,310,184,498	\$10,277,916,853	\$4,594,216,447	99.7%	83.3%
12/31/2035	\$10,615,337,074	\$10,694,814,187	\$4,514,739,334	100.7%	85.6%
12/31/2036	\$10,925,918,957	\$11,094,945,497	\$4,345,712,793	101.5%	87.8%
12/31/2037	\$11,242,050,016	\$11,344,499,355	\$4,243,263,454	100.9%	90.0%
<b>Matching</b>	<b>\$98,829,902,105</b>	<b>\$94,586,638,651</b>	<b>95.7%</b>		

#### Discussion:

Market adoption improves matching, but overall contribution volumes are materially smaller due to reduced taxpayer claiming. However, the combination of low claiming plus high market adoption did result in the lowest number of residual, unmatched SMIRAs.

- **147.3 million:** SMIRAs funded from matching contributions, representing **\$98.8 billion**
- **140.9 million:** Matched SMIRAs, representing **\$94.6 billion**
- **6.4 million:** Residual, unmatched SMIRA accounts, representing **\$4.2 billion**
- **Match rates > 100%:** In years 8-10, due to cross-year matching effect

## **Scenario 4: Low Claiming / Low Adoption**

### **NUMBER OF CONTRIBUTIONS**

<b>Date</b>	<b>No. SMIRAs Funded</b>	<b>No. SMIRAs Matched</b>	<b>No. Unmatched SMIRAs</b>	<b>Match Rate</b>	<b>Adoption Rate</b>
12/31/2028	12,789,312	5,237,943	7,551,368	41.0%	25.0%
12/31/2029	13,204,312	6,652,028	14,103,653	50.4%	27.8%
12/31/2030	13,623,403	8,048,663	19,678,393	59.1%	30.6%
12/31/2031	14,047,919	9,416,514	24,309,798	67.0%	33.3%
12/31/2032	14,479,841	10,772,035	28,017,604	74.4%	36.1%
12/31/2033	14,919,322	12,028,120	30,908,806	80.6%	38.9%
12/31/2034	15,366,515	13,260,909	33,014,412	86.3%	41.7%
12/31/2035	15,821,582	14,406,615	34,429,379	91.1%	44.4%
12/31/2036	16,284,687	15,493,812	35,220,254	95.1%	47.2%
12/31/2037	16,756,002	14,788,025	37,188,231	88.3%	50.0%
<b>Matching</b>	<b>147,292,895</b>	<b>110,104,664</b>	<b>74.8%</b>		

### **ASSET VALUES**

<b>Date</b>	<b>\$ SMIRAs Funded</b>	<b>\$ SMIRAs Matched</b>	<b>\$ Unmatched SMIRAs</b>	<b>Match Rate</b>	<b>Adoption Rate</b>
12/31/2028	\$8,582,029,538	\$3,520,998,958	\$5,061,030,579	41.0%	25.0%
12/31/2029	\$8,860,559,450	\$4,469,648,721	\$9,451,941,308	50.4%	27.8%
12/31/2030	\$9,141,606,520	\$5,406,372,355	\$13,187,175,474	59.1%	30.6%
12/31/2031	\$9,426,163,014	\$6,323,596,392	\$16,289,742,095	67.1%	33.3%
12/31/2032	\$9,715,707,668	\$7,232,251,967	\$18,773,197,796	74.4%	36.1%
12/31/2033	\$10,010,345,371	\$8,074,525,232	\$20,709,017,935	80.7%	38.9%
12/31/2034	\$10,310,184,498	\$8,900,890,472	\$22,118,311,961	86.3%	41.7%
12/31/2035	\$10,615,337,074	\$9,669,031,160	\$23,064,617,875	91.1%	44.4%
12/31/2036	\$10,925,918,957	\$10,397,897,958	\$23,592,638,874	95.2%	47.2%
12/31/2037	\$11,242,050,016	\$9,925,080,374	\$24,909,608,516	88.3%	50.0%
<b>Matching</b>	<b>\$98,829,902,105</b>	<b>\$73,920,293,589</b>	<b>74.8%</b>		

### **Discussion:**

From a public policy perspective, Scenario 4 represents a worst-case scenario, as it combines low claiming behavior, paired with low market adoption by providers. Not surprisingly, the combination produced the lowest total matches and the second-highest volume of unmatched SMIRAs (behind Scenario 2), reflecting the combination of minimal taxpayer engagement and provider participation. As was the case with Scenario 2, over 10 years almost 3 out of 4 matching contributions are eventually matched and transferred to target retirement savings accounts.

- **147.3 million:** SMIRAs funded from matching contributions, representing **\$98.8 billion**
- **110.1 million:** Matched SMIRAs, representing **\$73.9 billion**
- **37.2 million:** Residual, unmatched SMIRA accounts, representing **\$24.9 billion**

## IV. CONCLUSIONS

The Saver's Match Simulation (SMS) provides a comprehensive, data-driven view of how the federal Saver's Match Program is likely to perform under a variety of behavioral and operational conditions. Across ten years of modeled activity and more than 700 million simulated matching events, the results reveal five core insights essential to the long-term success of the program.

### **A Clearinghouse Framework Is the Foundation for Scalable, Accurate Program Operations**

The simulation validates that a centralized clearinghouse – supported by a transitional Saver's Match IRA (SMIRA) – is not simply advantageous but *necessary* for processing the program's projected volume. The clearinghouse model is the only tested, production-ready framework capable of:

- Managing millions of small-dollar transactions annually
- Locating and validating accounts across a highly mobile workforce
- Preventing errors that would otherwise strand or misroute federal dollars
- Supporting multi-step, multi-source matching (self-designated, data-driven, and market-hub-driven)

In short, the clearinghouse + SMIRA combination provides the operational backbone required for a reliable national program.

### **Claiming Behavior and Market Adoption Drive Overall Program Performance**

The SMS shows that system throughput—how many contributions ultimately reach qualified retirement accounts—is overwhelmingly determined by two variables:

- Taxpayer claiming behavior
- Market hub adoption by DC and IRA providers

High claiming, paired with high market adoption (Scenario 1) produced the strongest results by far, with more than 198 million matches and over \$133 billion delivered.

Conversely, low claiming and low adoption (Scenario 4) generated the weakest outcomes, even though roughly three-quarters of contributions eventually found a home.

These findings point to a simple truth: the Saver's Match Program succeeds when both individuals *and* providers participate.

### **Match Rates Consistently Exceed Adoption Rates – Even in Low-Adoption Scenarios**

A noteworthy SMS insight is that match rates routinely surpass underlying adoption rates. Several mechanisms create this accelerating effect:

- Multiple matching pathways (self-designation, W-2/5498 data, broadcast matching)
- High levels of job mobility, which create fresh matching opportunities
- Multi-year overlap of participating taxpayers, allowing unmatched SMIRAs to be successfully matched in future years

As adoption grows over time, this compounding effect becomes even more pronounced.

### **The Saver's Match IRA (SMIRA) Is Central to Program Stability**

SMIRAs serve as the program's "safe harbor," allowing contributions to be received instantly – even before a final destination account is confirmed.

In the simulation, SMIRAs played four essential roles:

- Protecting federal contributions while account matching occurs
- Enabling the clearinghouse to perform automated, multi-path matching
- Buffering private-sector providers from federal operational complexity
- Ensuring dollars are not lost, misapplied, or prematurely distributed

Without a transitional SMIRA, millions of matches would not occur.

### **Policy Choices Will Meaningfully Influence Outcomes**

The SMS demonstrates that the Saver's Match Program's long-term success is highly sensitive to several policy levers, including:

- Simplification of the claiming process
- Increased taxpayer visibility and education
- Improved timing and accessibility of W-2 and 5498 data
- Incentives that accelerate market-hub adoption

Strategic policymaking in these areas directly increases the proportion of federal matching dollars delivered to retirement accounts—particularly for lower-income households who benefit most.

### **A System Capable of Advancing National Retirement Security**

Across all modeled scenarios, the SMS confirms that—with sufficient adoption and engagement—the Saver's Match Program can:

- Significantly boost retirement savings for lower- and moderate-income workers
- Reduce systemic leakage and account fragmentation
- Deliver federal dollars accurately and efficiently
- Improve program economics through higher matching efficiency over time

The simulation indicates that a clearinghouse-led system anchored by SMIRAs is both operationally sound and capable of fulfilling the program's public-policy objectives at national scale.

## About the Authors

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Ricki Ingalls, Ph.D., is RCH's Executive Vice President and Chief Operating Officer, and has overall responsibility for RCH's Information Technology, Operations and Service Center. Ingalls was instrumental in developing the Auto Portability Simulation (APS), the retirement industry's first-ever discrete-event simulation model, and the basis for RCH's long-term public policy benefit projections and financial institutions cost-benefit analysis.

Ingalls is a patent holder, published author, public speaker, and industry-recognized subject matter expert in Big Data, Logistics, Artificial Intelligence, Data Visualization, Process Improvements, and ROI. He is a nationally recognized authority in the design, modeling and implementation of supply chain logistics, operations optimization, and large-scale systems scheduling for a client base that has included Anheuser Busch, Amazon and Halliburton, among many blue-chip companies. As a data-driven operations leader, Ingalls has created large-scale analytics, analysis, and modeling that have positioned enterprises for high growth, sustainability, and profitability.

Ingalls received his Ph.D. in Management Science from the University of Texas at Austin. Ingalls was previously an Associate Professor, and Chair of the Department of Computer Information Systems and Quantitative Methods, at Texas State University's McCoy College of Business Administration. Ingalls was also an Associate Professor in Oklahoma State University's School of Industrial Engineering and Management, and President of Entero Technologies, LLC. Earlier in his career, Ingalls was Senior Manager of Global Integrated Logistics at Compaq Computer Corp.

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### **Tom Hawkins**

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Prior to joining Retirement Clearinghouse, Hawkins performed multiple roles at MassMutual Financial Group, including the CEO of MassMutual Japan, Regional Executive / Latin America & Europe, and Division Head, Structured Settlements. At First Union National Bank, Hawkins led the International Division's Product Services Group, and he served as a senior consulting manager for Accenture.

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