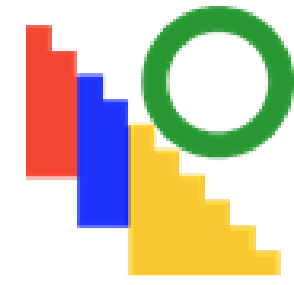


# PAX Rejection Memo Reduction

Industry Initiative

Annual Report - 2022



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**The Passenger Rejection Memo Reduction initiative is endorsed by the IATA Financial Committee to reduce the number of unnecessary passenger rejection memos in the industry. The IBSOPS WG and Rejection Reduction Team have undertaken several actions to reduce the number of passenger rejections:**

- **New validations in SIS**
- **Changes in the RAM**
- **Multiple presentations/workshops at industry meetings**
- **Continuous reporting and communications to the industry**
- **Publication of Best Practices Document**

**The purpose of this report is to track the trend of passenger rejection memos in SIS and provide a comparative analysis of the rejection memo counts of 2021 versus the counts of the base year 2015. Due to COVID-19 impacts, the target of 32% was put on hold in February 2020 due to the impact on volumes.**

**All values in this report exclude ACH billings (settlement through ACH using ACH rules). Also, the report covers Sampling and Non-Sampling analysis separately.**

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# 1. Highlight 2022

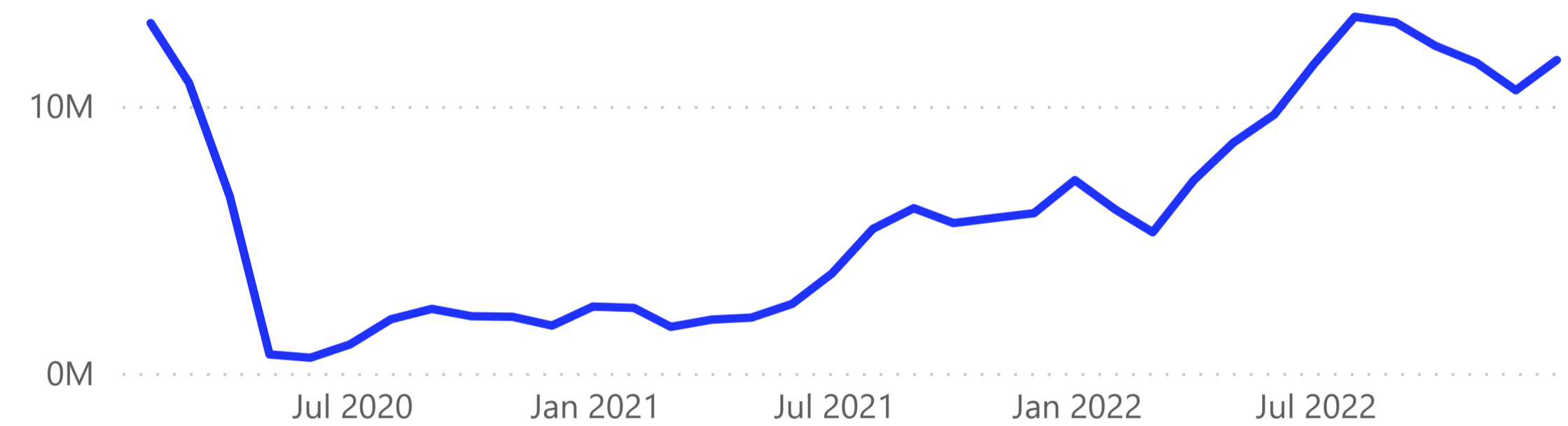
## Prime Billings & Rejection Memos - 2022 vs 2015

Prime Billings	Rejection Memos	RMs Stage 1	RMs Stage 2	RMs Stage 3	Rejection Rate
121.13M	6.00M	4.40M	1.19M	412.61K	4.95%
-3%	-51%	-51%	-52%	-54%	-50%

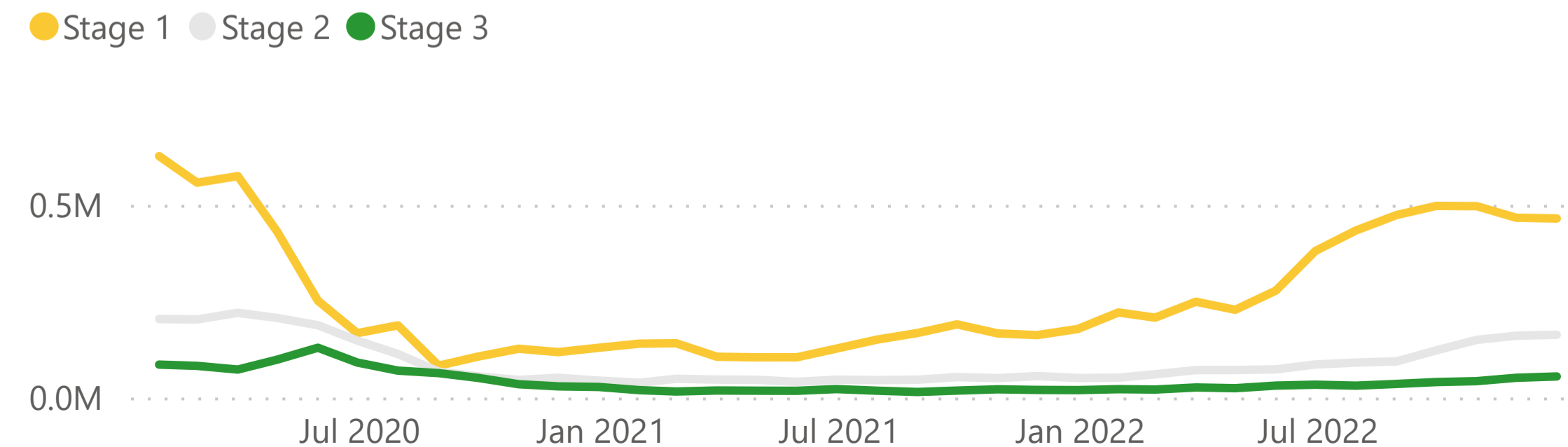
## Summary - 2022

- Prime Billings decreased by 3% in 2022, in comparison to 2015.
- Rejection Billings decreased by 51% in 2022, in comparison to 2015.
- Stage 1 rejection counts have decreased by 51% in 2022, stage 2 by 52% and stage 3 by 54%.
- There was an important recovery on Prime Billing volumes in summer 2022. This positive trend at Rejection Memos level was also seen in fall 2022.
- Fare related reasons (reason codes "1B, 1S, 1Z, 2S") are the number one reason for stage1 and stage 2 rejection memos. Tax related reason ("1G, 1I, 1T, 1Y") are the number one reason at stage 3.

Prime Billings (Jan 2020 - Dec 2022)



Rejection Memos per Stage (Jan 2020 - Dec 2022)

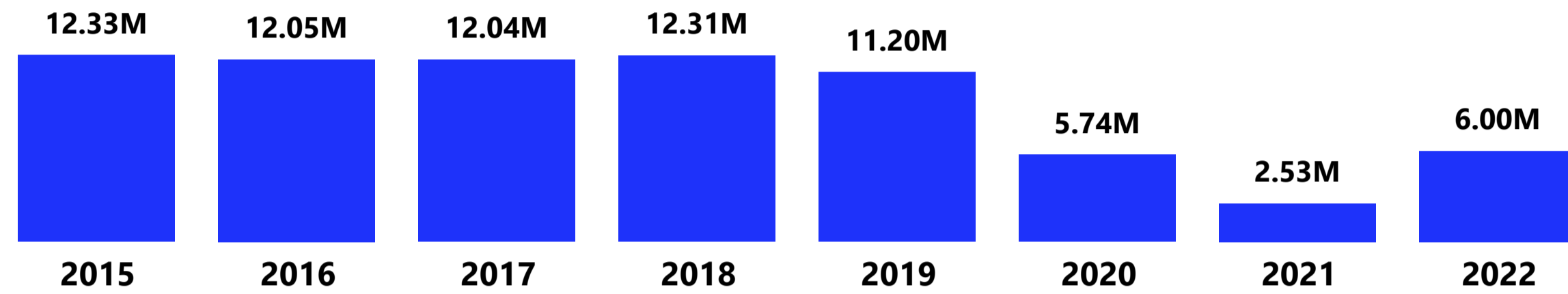


## 2. Global Non-Sampling Analysis

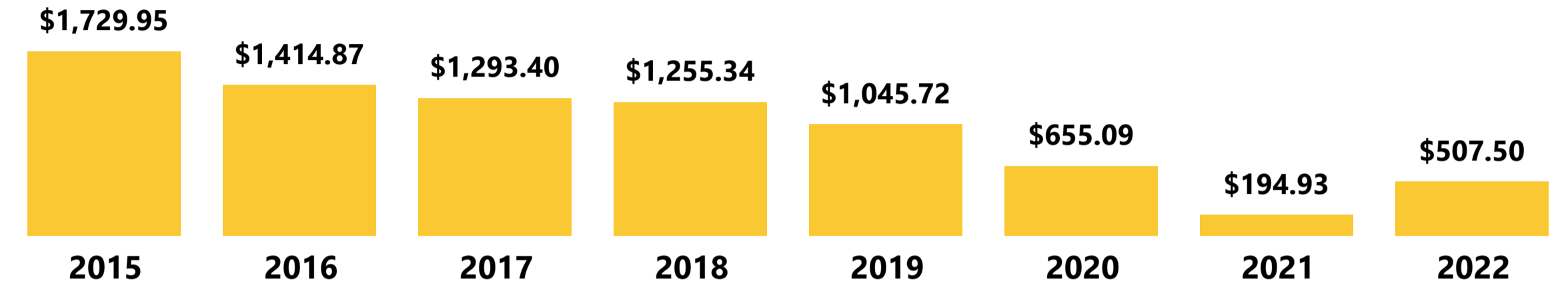
### Total Rejection Memo Count and USD Value per Year

In 2022, the Rejection Memo count has decreased by **6.3 million** in comparison to the 2015 count. Additionally, the USD value has been decreasing and is now **71%** lower. The primary reason for the large reduction in rejection memo count and USD value is due to lower prime billing volumes due to the COVID-19 pandemic.

#### Rejection Memo Count



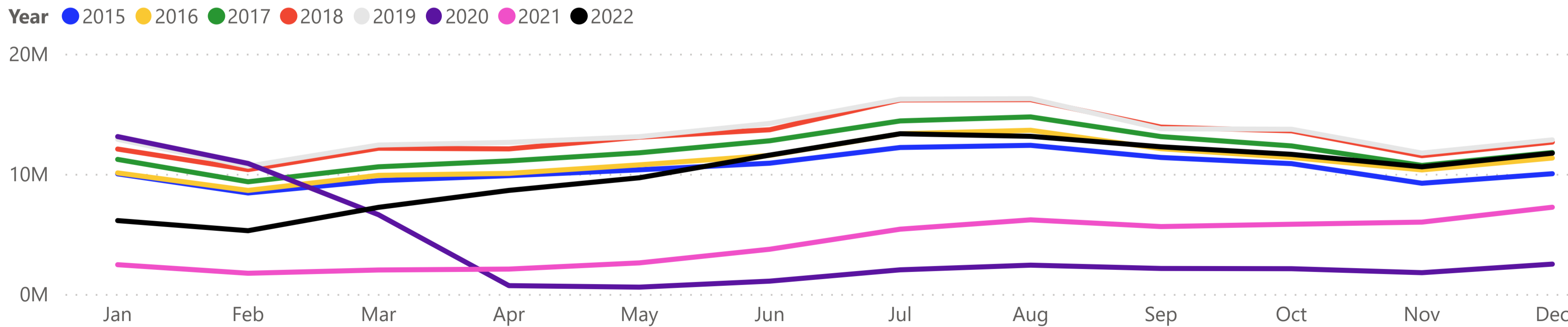
#### Rejection Memo Value (USD Million)



### Total Prime Billing Counts

The below graph illustrates the trend of non-sampling prime billings per month for the past 8 years. For the year 2022, the prime billing counts have consistently increased from February to July to reach 82% of 2019 prime billing counts. Generally, expected seasonal trends were observed throughout the year with the highest counts in July and August.

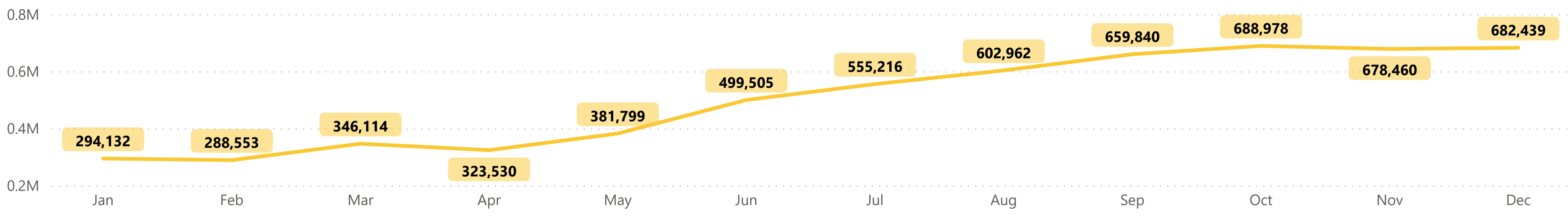
#### Prime Billings Count



Year	Prime Billings	% Variation vs 2015
2015	124,965,120	
2016	133,004,194	6.43%
2017	143,807,432	15.08%
2018	157,354,093	25.92%
2019	160,339,228	28.31%
2020	45,856,996	-63.30%
2021	50,788,550	-59.36%
2022	121,133,951	-3.07%

## Total Rejection Memo Count by Month - 2022

The below graph shows the total count of non-sampling rejection memos per month in 2022. October was the month that contained the highest rejection memo count of the year.



## Total Rejection Memo Count by Stage

The below chart shows a comparison of rejections counts for each stage between 2015 and 2022.

Stage 1 Var. % vs 2015

**-51%**

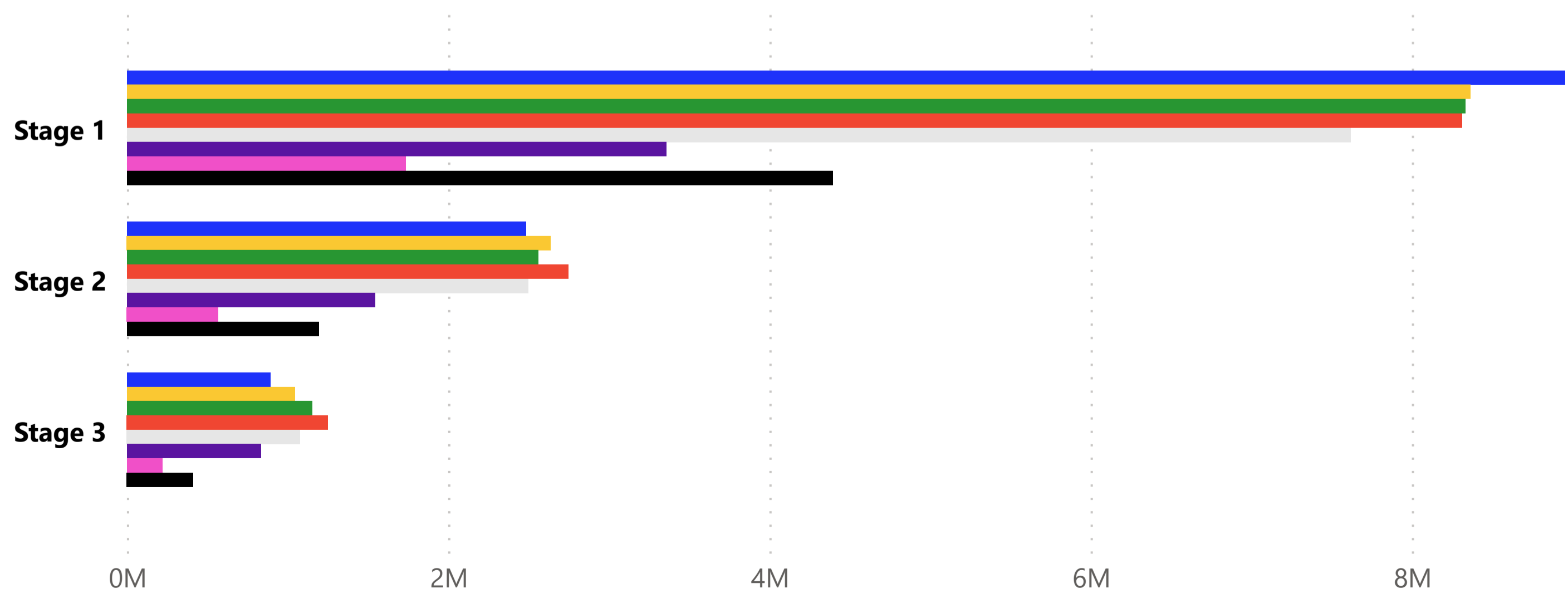
Stage 2 Var. % vs 2015

**-52%**

Stage 3 Var. % vs 2015

**-54%**

Year ● 2015 ● 2016 ● 2017 ● 2018 ● 2019 ● 2020 ● 2021 ● 2022



Year	Stage 1	% Var. vs 2015	Stage 2	% Var. vs 2015	Stage 3	% Var. vs 2015
2015	8,954,055		2,485,300		894,364	
2016	8,364,691	-7%	2,638,520	6%	1,045,825	17%
2017	8,332,938	-7%	2,558,982	3%	1,152,795	29%
2018	8,312,757	-7%	2,747,008	11%	1,251,724	40%
2019	7,619,238	-15%	2,499,479	1%	1,078,478	21%
2020	3,358,353	-62%	1,545,387	-38%	834,672	-7%
2021	1,736,807	-81%	568,774	-77%	221,511	-75%
2022	4,395,290	-51%	1,193,625	-52%	412,613	-54%

### 3. Rejection Reduction Target & Progress

#### Target

The industry target of **32%** reduction of the rejection rate by the year 2020 was put on hold in 2020 due to Covid-19. The rejection rate is calculated as follows:

$$\text{Rejection Rate} = \frac{\text{Sum of Rejection Memos of Past 12 months}}{\text{Sum of Prime Billings of Past 12 months}} \times 100\%$$

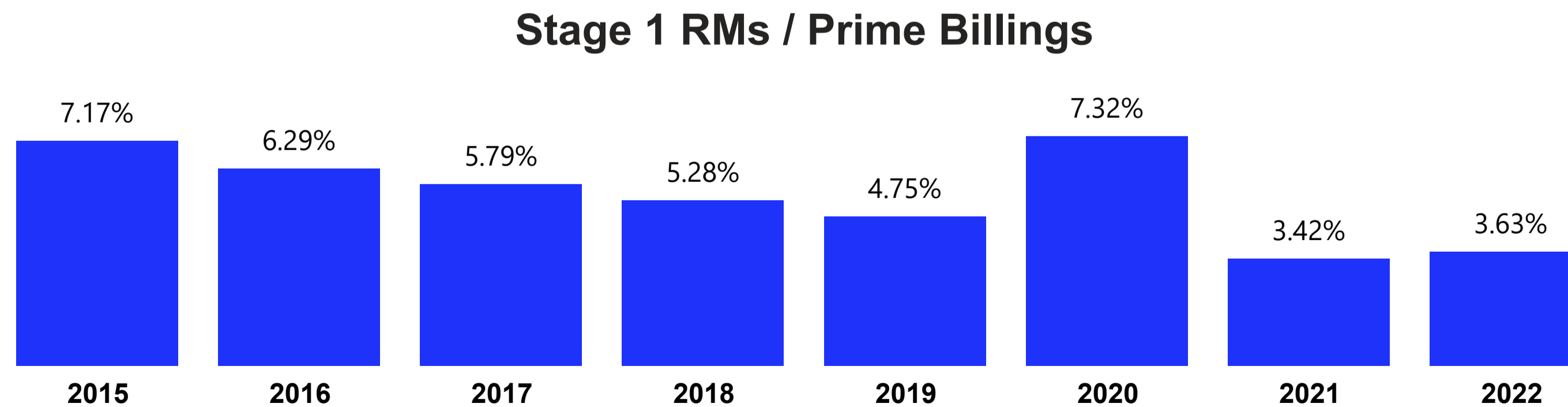
The table on the right shows the decrease in the rejection rate at the end of each year. By December 2022, the rejection rate decreased by **49.80%** in comparison to the base year 2015.

Year	Rejection Rate	% Var. vs 2015
2015	9.87%	
2016	9.06%	-8.21%
2017	8.38%	-15.14%
2018	7.82%	-20.73%
2019	6.98%	-29.24%
2020	12.51%	26.79%
2021	4.98%	-49.59%
2022	4.95%	-49.80%

#### Stage 1 Analysis - Estimated Percentage of Rejected Prime Billings

The chart below illustrates the trend of the estimated percentage of rejected prime billings. Based on this calculation, approximately **3.63%** of the prime billings in 2022 were rejected, a consistent decrease since 2015. The percentage is calculated using the following formula:

$$\text{Estimated \% of rejected prime billings} = \frac{\text{Sum of Stage 1 RMs of past 12 months}}{\text{Sum of Prime Billings of Past 12 months}} \times 100\%$$



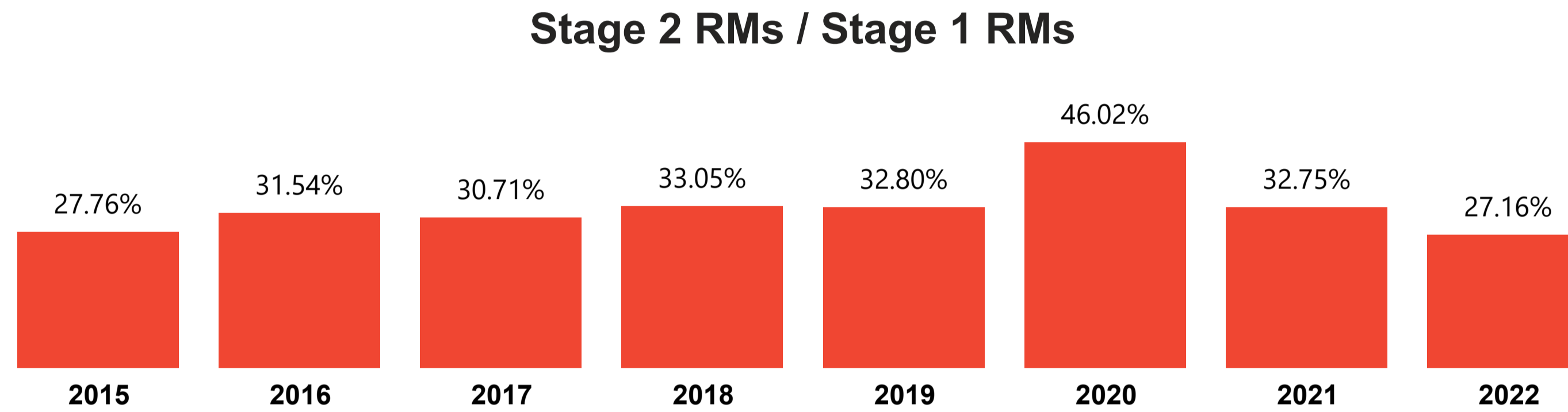
## Stage 2 & 3 Analysis - Estimated Percentage of Re-Rejected Stage 1 and Stage 2 Rejections

The percentages are calculated using the following formulae:

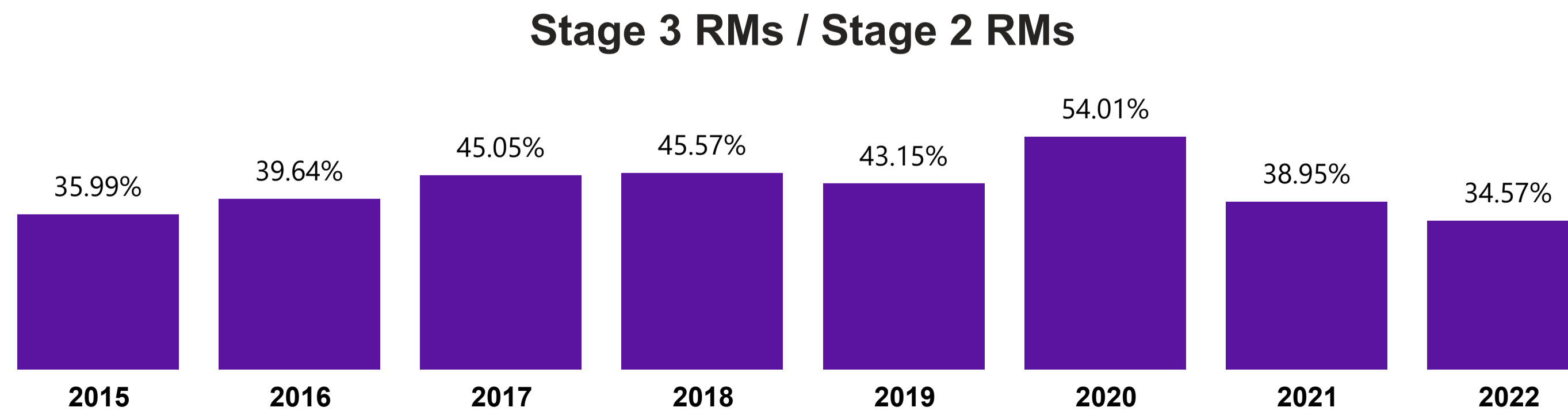
$$\text{Estimated \% of rejected Stage 1 RMs} = \frac{\text{Sum of Stage 2 RMs of past 12 months}}{\text{Sum of Stage 1 RMs of past 12 month}} \times 100\%$$

$$\text{Estimated \% of rejected Stage 2 RMs} = \frac{\text{Sum of Stage 3 RMs of past 12 months}}{\text{Sum of Stage 2 RMs of past 12 month}} \times 100\%$$

The estimated percentage of rejected Stage 1 Rejection Memos is plotted in the graph below and show a decrease in 2022 in comparison to previous years. Approximately **27.16%** of the Stage 1 rejection in 2022 were rejected back 2<sup>nd</sup> stage.



The estimated percentage of rejected Stage 1 Rejection Memos is plotted in the graph below and show a decrease in 2022 in comparison to previous years. Approximately **34.57%** of the Stage 1 rejection in 2022 were rejected back 2<sup>nd</sup> stage.



# 4. Rejection Memos Analysis by SMI

## SMI - I/M Analysis

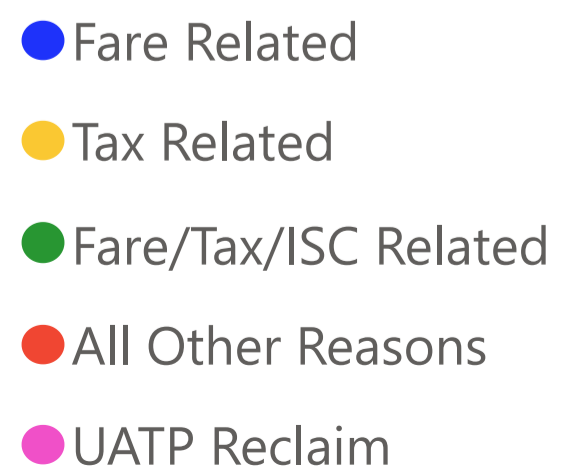
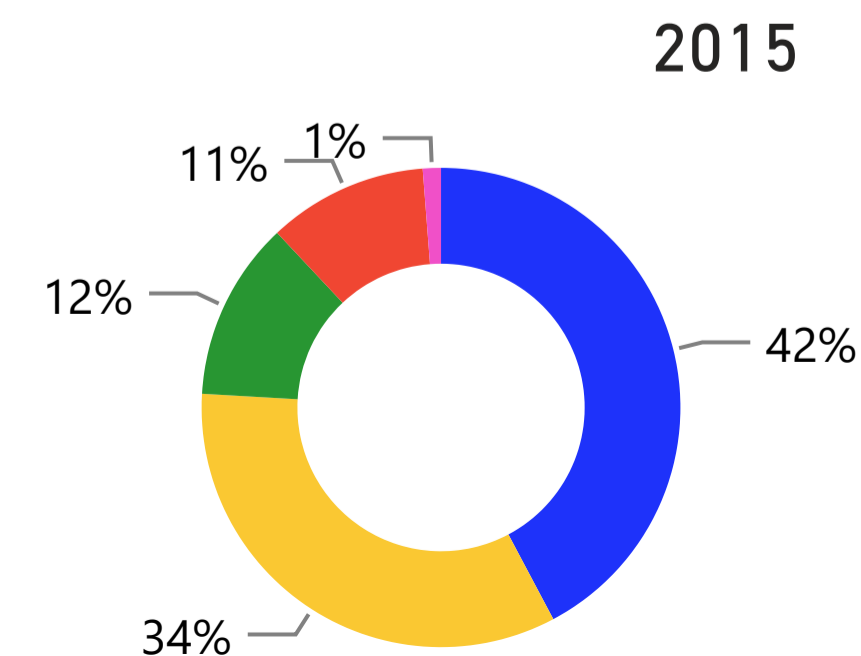
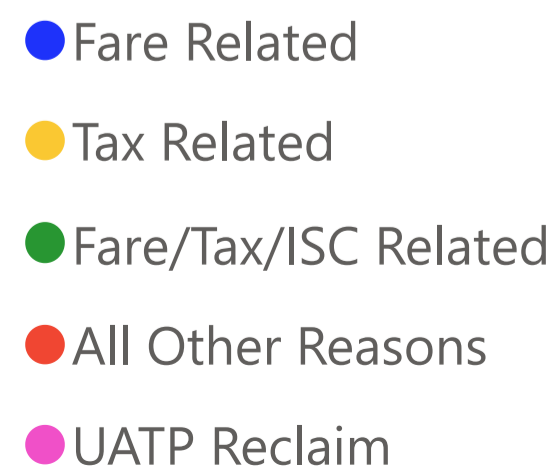
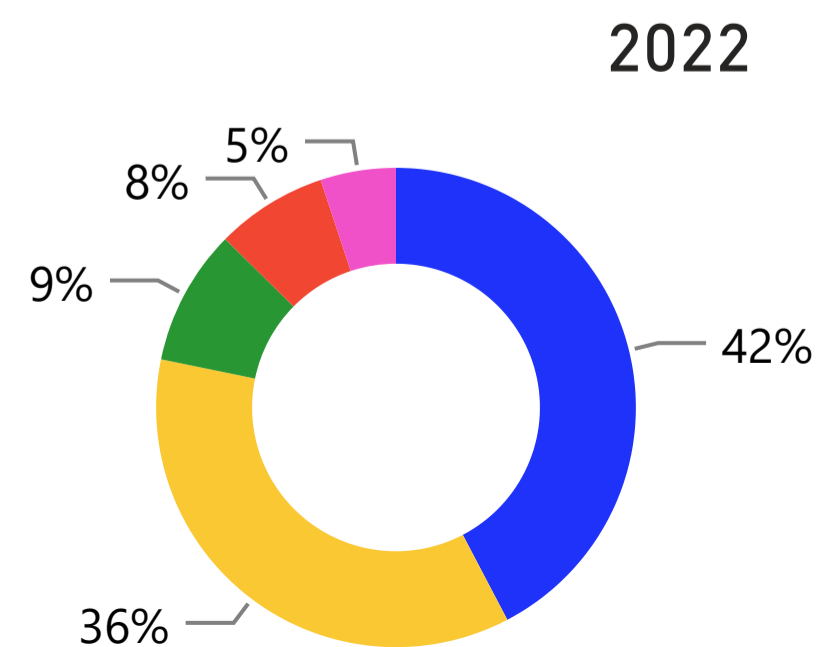
The table below shows the counts of SMI I and SMI M rejections per stage (2022 vs 2015). In 2022 all different rejection stages have decreased, in comparison to the base year 2015.

Year	1st Stage	% Var. vs 2015	2nd Stage	% Var. vs 2015	3rd Stage	% Var. vs 2015	Total RM Count
2015	7,692,894		2,425,398		863,209		10,981,501
2022	4,187,640	-46%	1,140,292	-53%	401,331	-54%	5,729,263

### 1st Stage Reason Code Analysis

The table below shows the Top 7 Reason Codes, sorted by 2022 stage 1 rejection counts. The top 7 reason codes represent **98%** of all SMI-I/M stage 1 rejections. Fare related reasons account for the highest count of 1st stage rejections in 2022.

Reason Codes	Reason Code Description	1st Stage 2022	1st Stage 2021	1st Stage 2020	1st Stage 2019	1st Stage 2018	1st Stage 2017	1st Stage 2016	1st Stage 2015	% Variation 2022 vs 2015
1B, 1S, 1Z, 2S	Fare Related	1,772,129	654,937	1,220,844	2,509,370	2,872,253	3,054,911	3,025,507	3,248,605	-45%
1G, 1I, 1T, 1Y	Tax Related	1,503,663	602,133	1,209,088	3,022,945	3,157,875	2,785,137	2,836,874	2,591,444	-42%
1A, 1R	Fare/Tax/ISC Related	384,053	127,693	339,374	816,108	824,711	835,804	926,496	929,403	-59%
1E	UATP Reclaim	213,060	66,659	121,873	251,541	259,154	352,210	256,828	94,152	126%
1C	ISC Reclaim	152,287	66,278	116,719	265,126	226,634	207,161	200,262	264,514	-42%
5Z	Others	67,802	41,584	92,072	141,340	146,653	155,389	185,735	243,756	-72%
2B	Duplicate Billing	28,254	10,826	35,769	61,045					0%

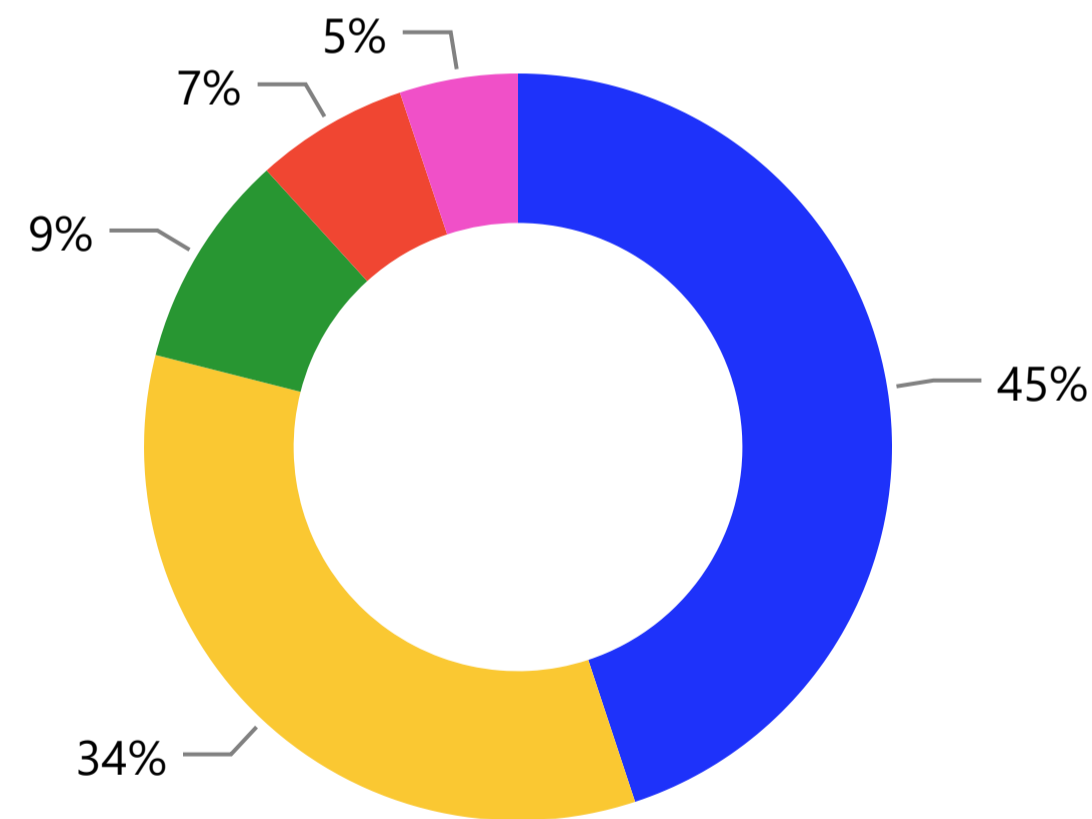


## 2nd Stage Reason Code Analysis

The table below shows the Top 7 Reason Codes, sorted by 2022 stage 2 rejection counts. The top 7 reason codes represent **99%** of all SMI-I/M stage 2 rejections. Fare related reasons account for the highest count of 2nd stage rejections in 2022.

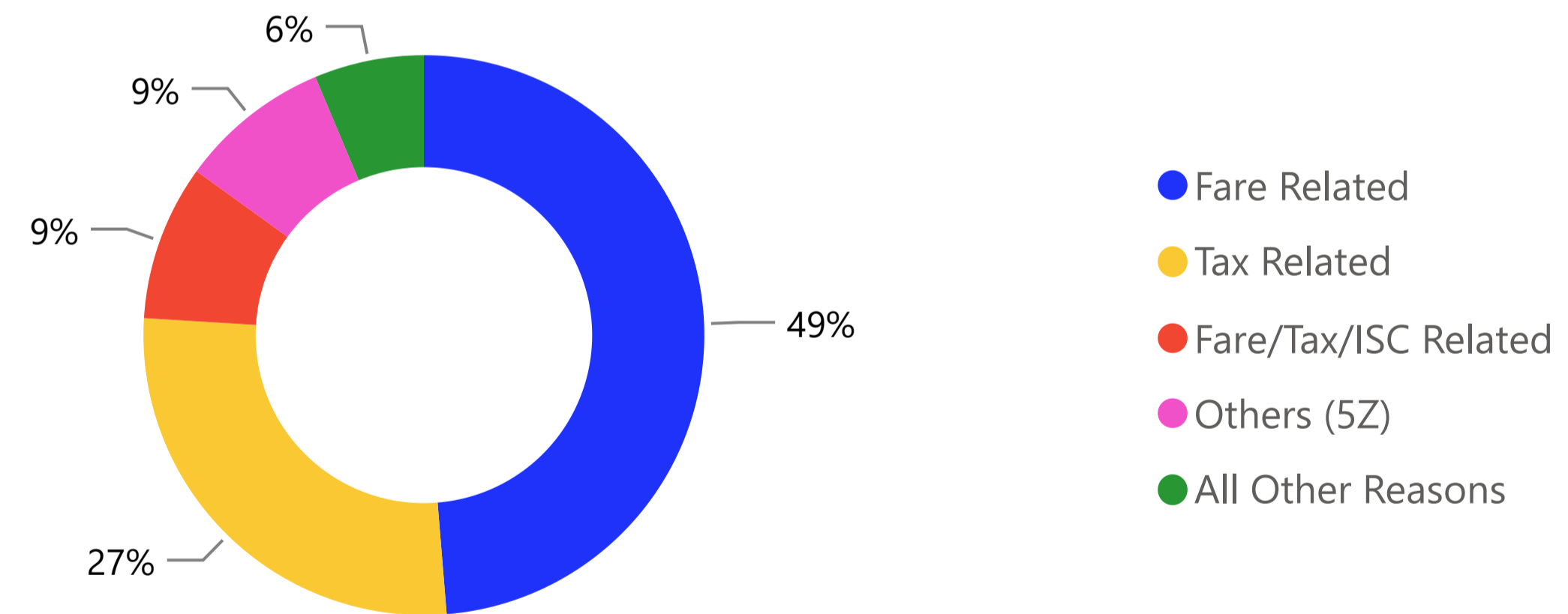
Reason Codes	Reason Code Description	2nd Stage 2022	2nd Stage 2021	2nd Stage 2020	2nd Stage 2019	2nd Stage 2018	2nd Stage 2017	2nd Stage 2016	2nd Stage 2015	% Variation 2022 vs 2015
1B, 1S, 1Z, 2S	Fare Related	512,345	249,034	678,735	1,150,983	1,236,554	1,193,123	1,217,942	1,181,272	-57%
1G, 1I, 1T, 1Y	Tax Related	388,093	187,332	504,537	796,531	759,512	733,642	721,209	661,343	-41%
1A, 1R	Fare/Tax/ISC Related	106,077	46,093	155,190	237,291	227,178	231,577	242,609	218,045	-51%
5Z	Others	58,309	34,695	96,458	121,034	172,854	184,575	221,913	211,451	-72%
1C	ISC Reclaim	55,528	16,847	53,660	87,480	99,128	106,640	104,675	102,918	-46%
1E	UATP Reclaim	9,940	2,338	7,804	13,113	11,783	18,659	18,659	11,783	-16%
5C	FIM Bilateral Agreement	3,223	1,231	1,420	3,816					0%

2022



- Fare Related
- Tax Related
- Fare/Tax/ISC Related
- All Other Reasons
- Others (5Z)

2015



- Fare Related
- Tax Related
- Fare/Tax/ISC Related
- Others (5Z)
- All Other Reasons

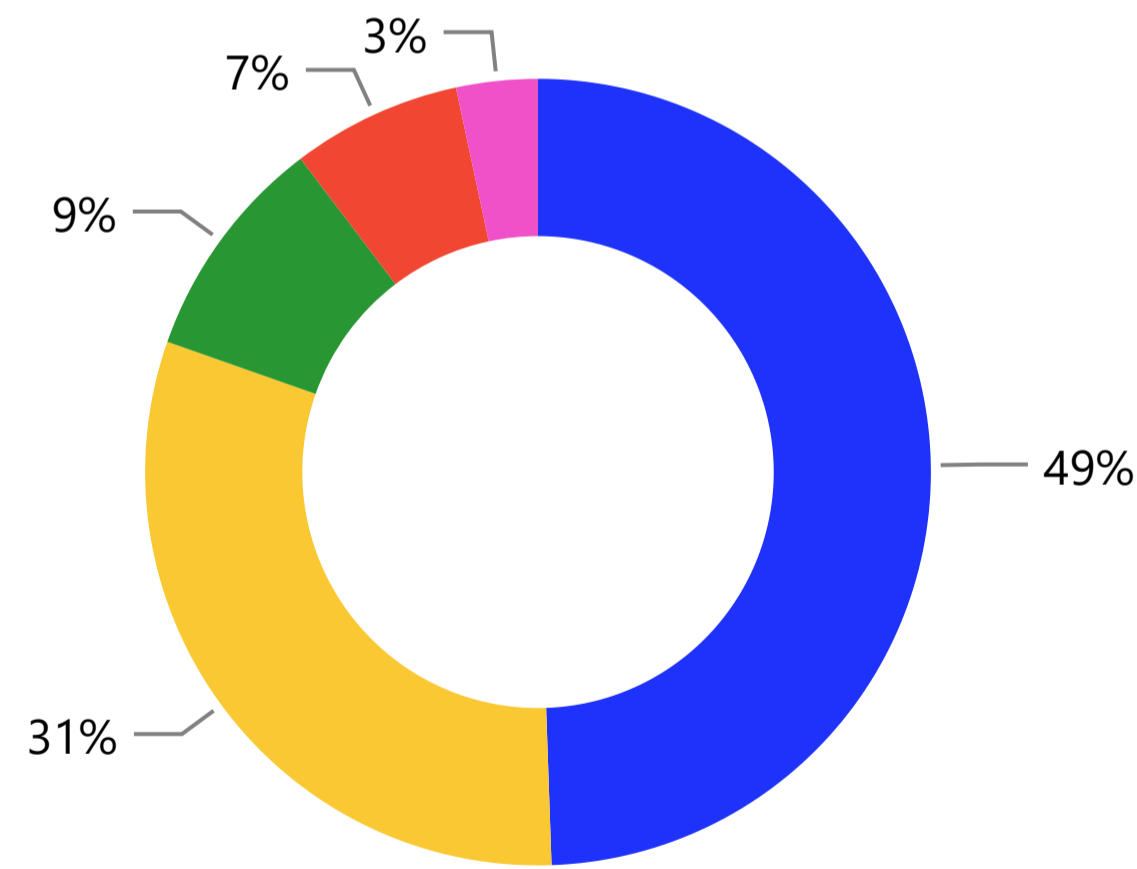


### 3rd Stage Reason Code Analysis

The table below shows the Top 7 Reason Codes, sorted by 2022 stage 3 rejection counts. The top 7 reason codes represent **99%** of all SMI-I/M stage 3 rejections. Fare related reasons account for the highest count of 3rd stage rejections in 2022.

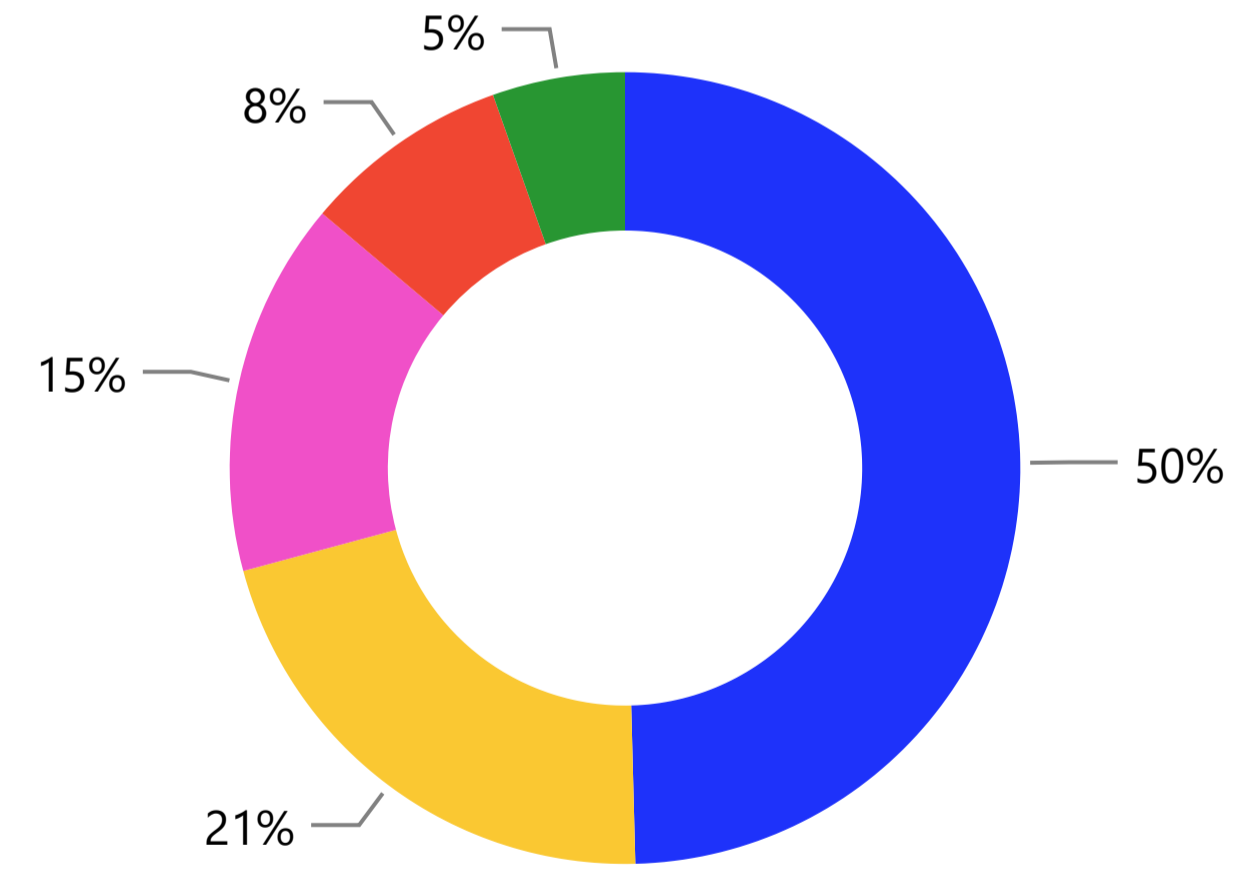
Reason Codes	Reason Code Description	3rd Stage 2022	3rd Stage 2021	3rd Stage 2020	3rd Stage 2019	3rd Stage 2018	3rd Stage 2017	3rd Stage 2016	3rd Stage 2015	% Variation 2022 vs 2015
1B, 1S, 1Z, 2S	Fare Related	198,460	118,805	425,711	474,398	597,059	554,115	543,865	428,002	-54%
1G, 1I, 1T, 1Y	Tax Related	124,114	49,918	221,588	387,393	369,129	302,771	206,564	183,276	-32%
1A, 1R	Fare/Tax/ISC Related	37,301	19,206	83,670	101,013	110,966	114,919	106,127	73,045	-49%
1C	ISC Reclaim	20,524	5,707	26,597	22,810	42,078	39,081	41,681	25,210	-19%
5Z	Others	13,448	9,827	41,687	46,630	62,479	99,763	95,065	132,107	-90%
1E	UATP Reclaim	4,024	1,357	6,746	7,083	11,252	10,772	6,232	4,416	-9%
1D	Other Commission Reclaim	1,711	1,924	796	1,533					0%

2022



- Fare Related
- Tax Related
- Fare/Tax/ISC Related
- All Other Reasons
- Others (5Z)

2015



- Fare Related
- Tax Related
- Others (5Z)
- Fare/Tax/ISC Related
- All Other Reasons

## SMI - B Analysis

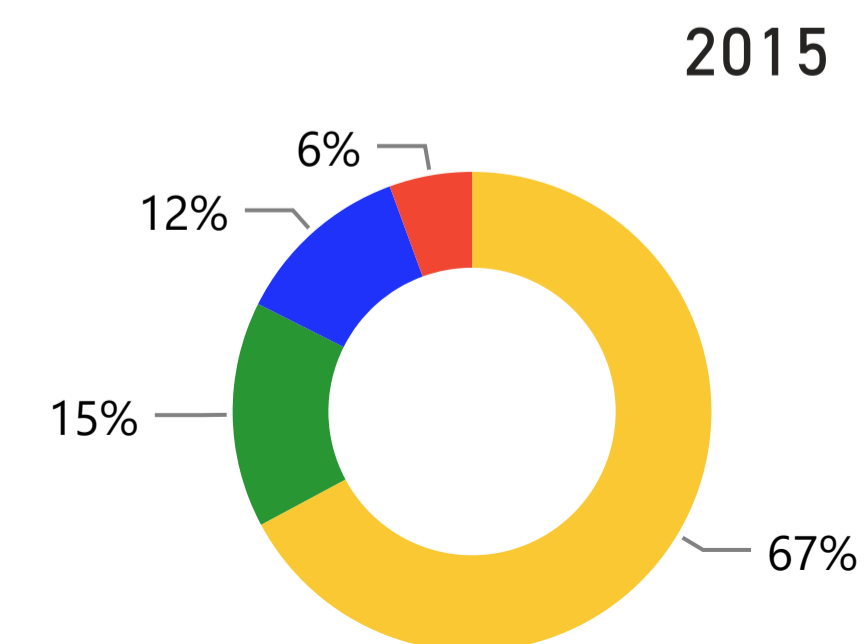
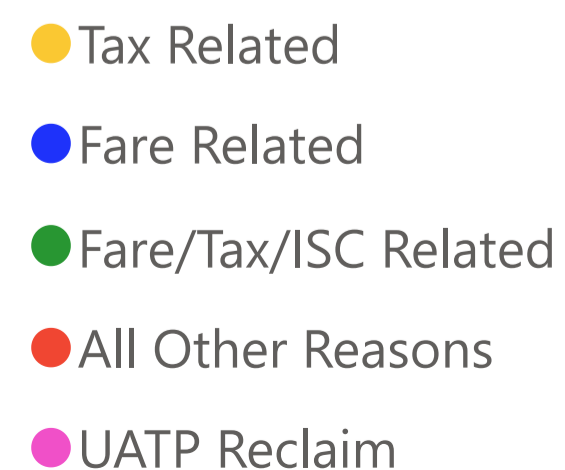
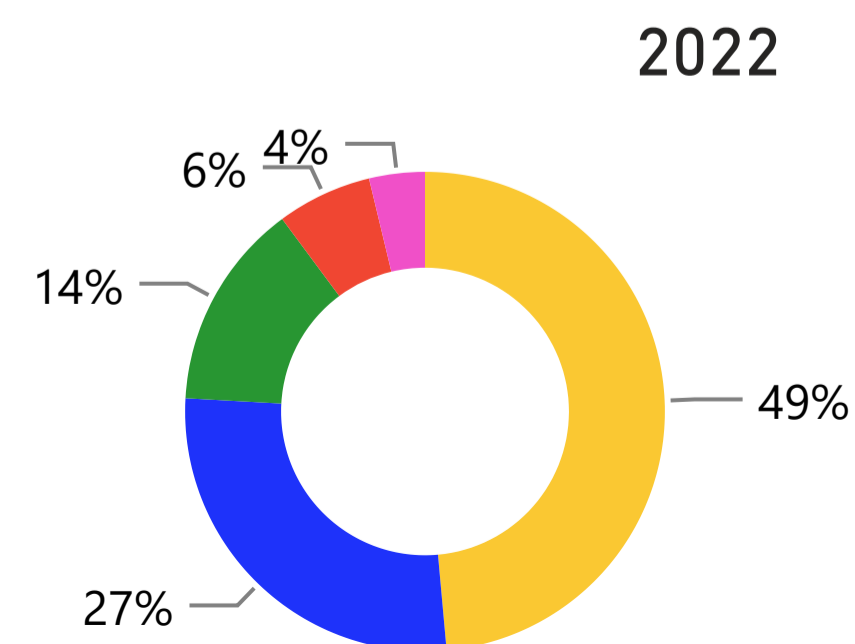
The table below shows the counts of SMI I and SMI M rejections per stage (2022 vs 2015). In 2022 all counts of different stage of rejections have decreased in comparison to the base year 2015.

Year	1st Stage	% Var. vs 2015	2nd Stage	% Var. vs 2015	3rd Stage	% Var. vs 2015	Total RM Count
2015	1,261,159		59,902		31,155		1,352,216
2022	207,650	-84%	53,333	-11%	11,282	-64%	272,265

### 1st Stage Reason Code Analysis

The table below shows the Top 7 Reason Codes, sorted by 2022 stage 1 rejection counts. The top 7 reason codes represent **99%** of all SMI-I/M stage 1 rejections. Tax related reasons account for the highest count of 1st stage rejections in 2022.

Reason Codes	Reason Code Description	1st Stage 2022	1st Stage 2021	1st Stage 2020	1st Stage 2019	1st Stage 2018	1st Stage 2017	1st Stage 2016	1st Stage 2015	% Variation 2022 vs 2015
1G, 1I, 1T, 1Y	Tax Related	100,844	49,018	76,135	148,263	287,330	513,834	470,669	847,088	-88%
1B, 1S, 1Z, 2S	Fare Related	56,726	30,965	48,043	134,203	209,544	128,096	105,694	151,458	-63%
1A, 1R	Fare/Tax/ISC Related	29,000	17,736	16,466	38,145	56,476	59,326	79,521	192,204	-85%
1E	UATP Reclaim	7,793	4,117	4,885	2,836	0	0	0	0	0%
5Z	Others	7,538	4,753	6,966	25,611	8,059	4,367	5,737	12,955	-42%
1C	ISC Reclaim	2,028	1,077	623	7,525	12,680	2,638	3,515	11,390	-82%
1D	Other Commission Reclaim	1,743	7,368	609	2,893	2,072	134	3,666	4,432	-61%

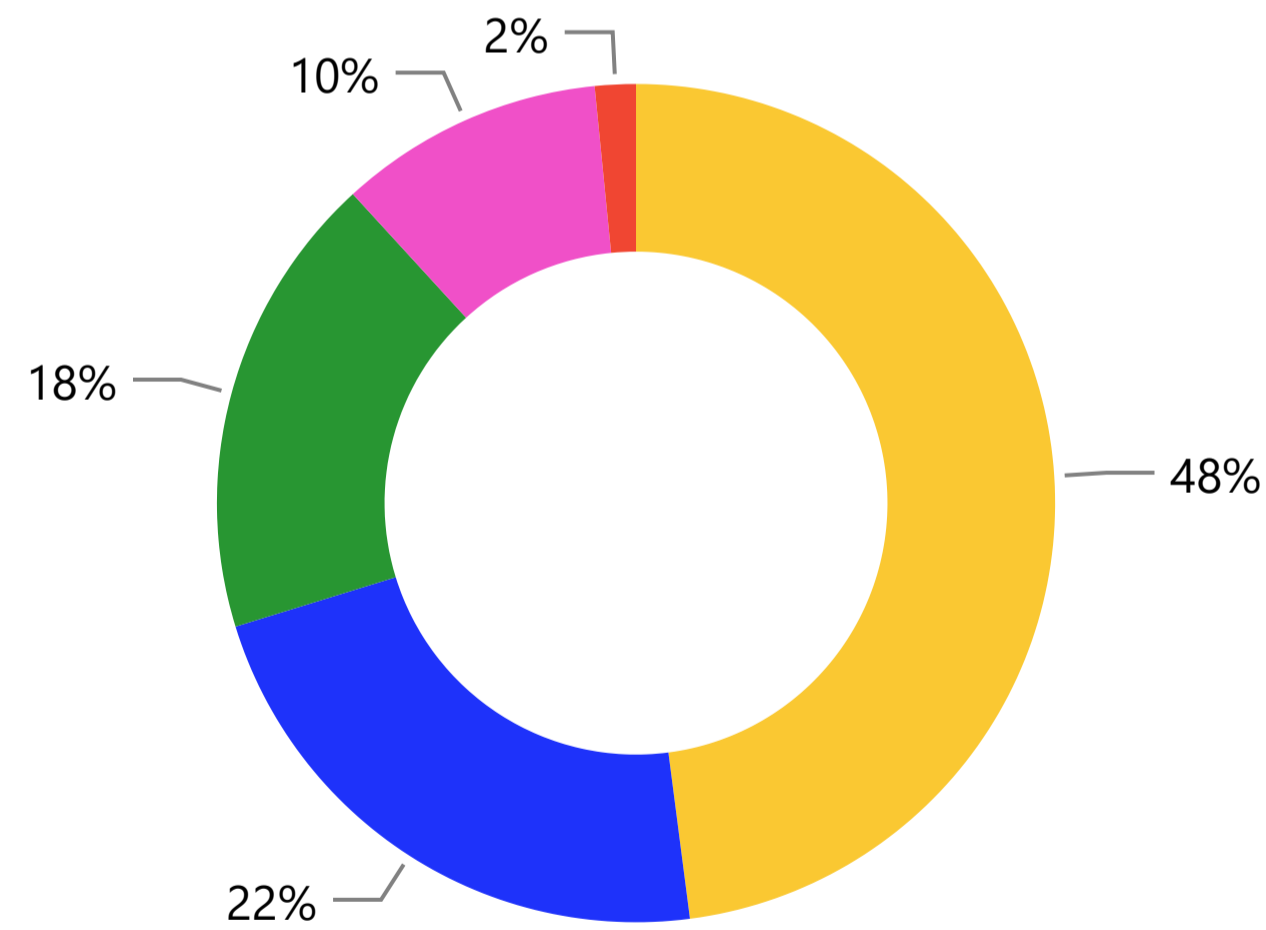


## 2nd Stage Reason Code Analysis

The table below shows the Top 7 Reason Codes, sorted by 2022 stage 2 rejection counts. The top 7 reason codes represent **99%** of all SMI-I/M stage 2 rejections. Tax related reasons account for the highest count of 2nd stage rejections in 2022.

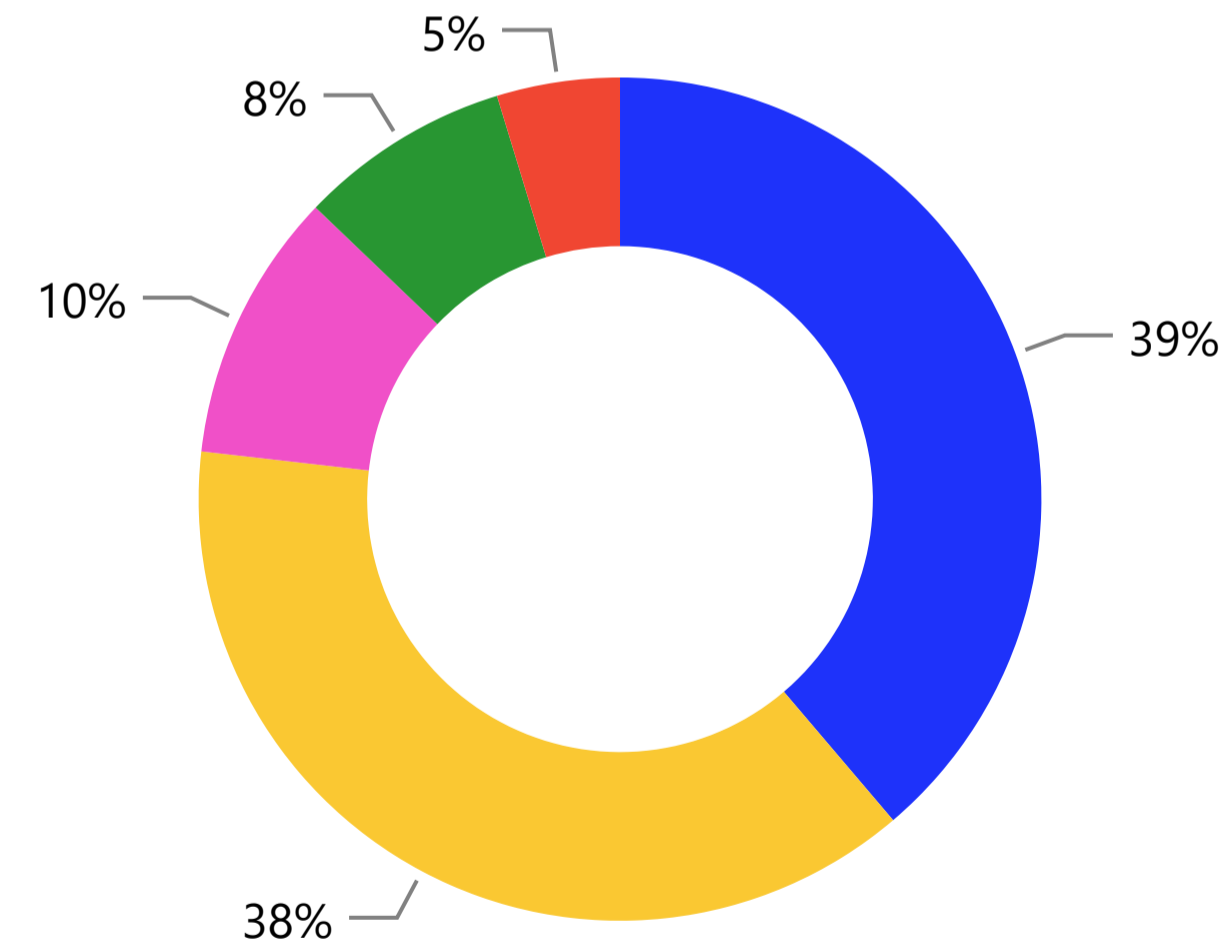
Reason Codes	Reason Code Description	2nd Stage 2022	2nd Stage 2021	2nd Stage 2020	2nd Stage 2019	2nd Stage 2018	2nd Stage 2017	2nd Stage 2016	2nd Stage 2015	% Variation 2022 vs 2015
1G, 1I, 1T, 1Y	Tax Related	25,571	10,940	8,498	17,973	34,858	31,200	34,594	22,781	12%
1B, 1S, 1Z, 2S	Fare Related	11,890	7,739	14,601	28,882	123,916	21,824	22,794	23,228	-49%
1A, 1R	Fare/Tax/ISC Related	9,576	3,040	3,993	4,352	5,120	4,063	4,795	2,825	239%
5Z	Others	5,456	1,371	5,801	5,251	3,699	2,911	2,927	6,198	-12%
1C	ISC Reclaim	530	181	178	1,951	9,623	329	605	56	846%
2C	Endorsement Required	141	26		2					0%
1E	UATP Reclaim	58	4	19	11	0	0	0	0	0%

2022



- Tax Related
- Fare Related
- Fare/Tax/ISC Related
- Others (5Z)
- All Other Reasons

2015



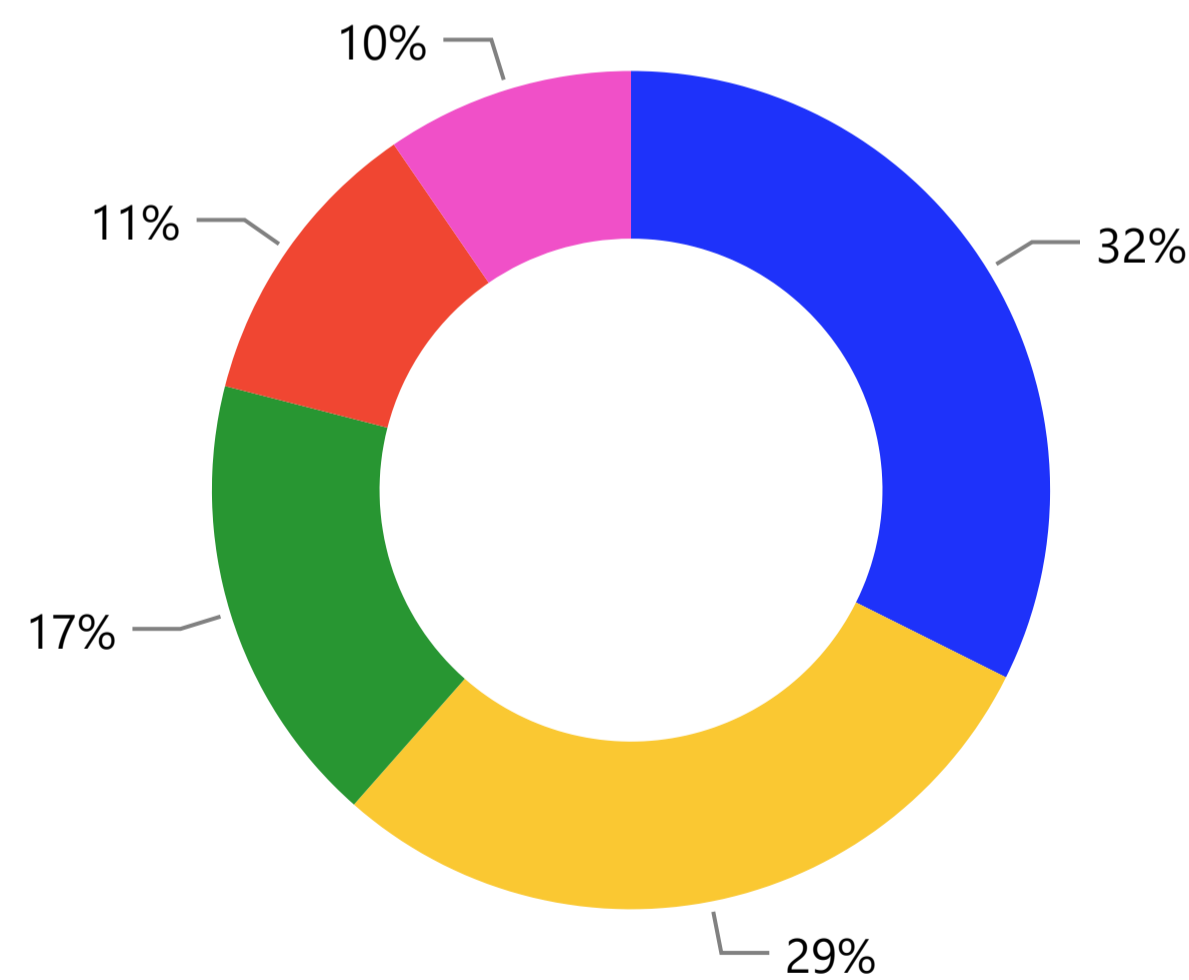
- Fare Related
- Tax Related
- Others (5Z)
- All Other Reasons
- Fare/Tax/ISC Related

### 3rd Stage Reason Code Analysis

The table below shows the Top 7 Reason Codes, sorted by 2022 stage 3 rejection counts. The top 7 reason codes represent **99%** of all SMI-I/M stage 3 rejections. Fare related reasons account for the highest count of 3rd stage rejections in 2022.

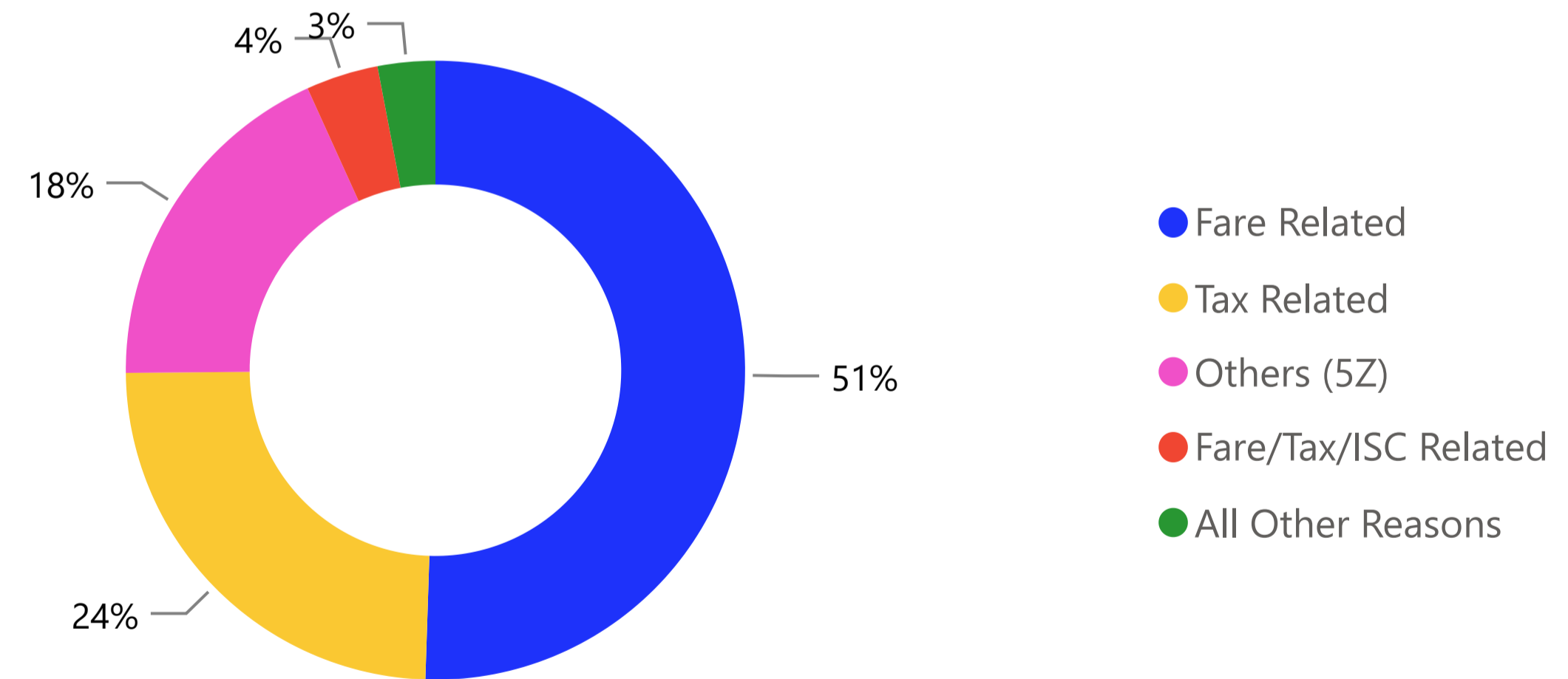
Reason Codes	Reason Code Description	3rd Stage 2022	3rd Stage 2021	3rd Stage 2020	3rd Stage 2019	3rd Stage 2018	3rd Stage 2017	3rd Stage 2016	3rd Stage 2015	% Variation 2022 vs 2015
1B, 1S, 1Z, 2S	Fare Related	3,652	3,560	9,878	17,695	16,104	11,131	15,398	15,739	-77%
1G, 1I, 1T, 1Y	Tax Related	3,286	6,969	3,265	8,016	7,065	8,545	5,503	7,585	-57%
1A, 1R	Fare/Tax/ISC Related	1,974	1,460	1,672	2,204	1,518	1,526	1,807	1,176	68%
5Z	Others	1,080	548	2,757	1,384	962	1,049	1,505	5,720	-81%
2B	Duplicate Billing	1,028	3	52	4					0%
2C	Endorsement Required	133	15							0%
1E	UATP Reclaim	96	3	15	1	0	0	0	0	0%

2022



- Fare Related
- Tax Related
- Fare/Tax/ISC Related
- All Other Reasons
- Others (5Z)

2015



- Fare Related
- Tax Related
- Others (5Z)
- Fare/Tax/ISC Related
- All Other Reasons

## 5. Source Code 31 (Involuntary Reroute) Analysis

### Rejection Counts per Month

The table below shows the count of Involuntary Reroute rejections per month from January 2022 until December 2022. The columns in the table represent the months in which the prime billings of these rejections were billed, and the rows represent the months in which the prime billings were rejected. The table also shows the Total number of SC31 prime billings per month.

There were **243,436** rejections raised against **1,918,379** SC 31 prime billings that were issued over the period September 2021 to August 2022.

The last row represents the percentage of SC31 prime billings which are rejected.

Month of Rejections	Month of Prime Billings												Total	
	September 2021	October 2021	November 2021	December 2021	January 2022	February 2022	March 2022	April 2022	May 2022	June 2022	July 2022	August 2022		
January 2022	784	853	2,676	9,735	1,389									<b>15,437</b>
February 2022		729	534	6,094	11,336	816								<b>19,509</b>
March 2022	1		1,308	1,838	6,834	7,386	1,639							<b>19,006</b>
April 2022			14	1,875	2,265	3,634	6,898	1,757						<b>16,443</b>
May 2022			15	34	2,047	1,458	3,894	8,876	1,507					<b>17,831</b>
June 2022				15	2	1,603	1,783	5,816	9,368	2,751				<b>21,338</b>
July 2022					3	1	1,900	1,200	6,825	12,286	3,774			<b>25,989</b>
August 2022						1		1,848	2,292	11,268	13,406	2,730		<b>31,545</b>
September 2022							22		3,611	4,891	10,368	10,956		<b>29,848</b>
October 2022								2		7,435	5,316	6,491		<b>19,244</b>
November 2022									2	28	12,416	7,075		<b>19,521</b>
December 2022										17	2	7,706		<b>7,725</b>
<b>Total RM's</b>	<b>785</b>	<b>1,582</b>	<b>4,547</b>	<b>19,591</b>	<b>23,876</b>	<b>14,899</b>	<b>16,136</b>	<b>19,499</b>	<b>23,605</b>	<b>38,676</b>	<b>45,282</b>	<b>34,958</b>		<b>243,436</b>
<b>Total Prime Billings</b>	<b>66,385</b>	<b>72,975</b>	<b>81,776</b>	<b>139,982</b>	<b>155,186</b>	<b>114,571</b>	<b>121,213</b>	<b>158,280</b>	<b>175,052</b>	<b>269,416</b>	<b>313,668</b>	<b>249,875</b>		<b>1,918,379</b>
<b>Rejection %</b>	<b>13%</b>	<b>13%</b>	<b>13%</b>	<b>15%</b>	<b>15%</b>	<b>13%</b>	<b>13%</b>	<b>12%</b>	<b>13%</b>	<b>14%</b>	<b>14%</b>	<b>14%</b>		<b>14%</b>

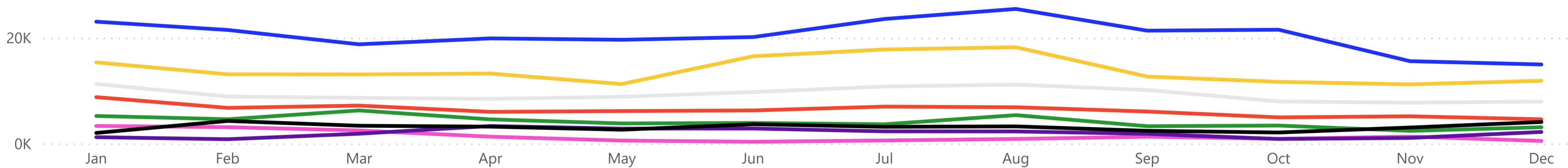
**Note:** The above table represents up to prime billing month August 2022, before which no further rejections can be raised. Source code 31 coupons issued from September 2022 and onwards are still within the rejection time limits and hence not included in the table.

# 6. FIMS

## Prime Billings Counts by Month

The graph shows a decrease in FIM prime billings starting towards the end of 2015 due to the IATA Paper Out project to eliminate all paper documents.

Year ● 2015 ● 2016 ● 2017 ● 2018 ● 2019 ● 2020 ● 2021 ● 2022



## Prime Billings Counts & FIM Rejections Memos by Source Code - 2021 vs 2015

In comparison to the base year 2015, the total FIM prime billings have decreased by **82%** and the total FIM rejection billings have decreased by **93%**. The tables below contain the counts split by SMI.

### SMI - I/M

Year	FIM Prime Billings	% Var. vs 2015	SC 44	% Var. vs 2015	SC 45	% Var. vs 2015	SC 46	% Var. vs 2015	Total RM Count	% Var. vs 2015
2015	197,600		134,704		27,983		16,660		179,347	
2022	36,161	-82%	8,428	-94%	3,564	-87%	440	-97%	12,432	-93%

### SMI - B

Year	FIM Prime Billings	% Var. vs 2015	SC 44	% Var. vs 2015	SC 45	% Var. vs 2015	SC 46	% Var. vs 2015	Total RM Count	% Var. vs 2015
2015	27,717		4,167		888		644		5,699	
2022	681	-98%	105	-97%	25	-97%	10	-98%	140	-98%

## 7. Sampling Billing Analysis

### Total Sampling Count - 2022 vs 2015

#### SMI - I/M

Year	A/B Form	% Var. vs 2015	Form D/E	% Var. vs 2015	Form F	% Var. vs 2015	Form XF	% Var. vs 2015
2015	12,798,285		166,634		19,736		9,433	
2021	1,157,846	-91%	23,269	-86%	1,872	-91%	638	-93%

## 8. Glossary

Term	Definition
<b>ACH</b>	Airlines Clearing House. It is the A4A's Clearing House for Interline Billings
<b>BM</b>	Billing Memo
<b>CM</b>	Credit Memo
<b>IBSOPS WG</b>	Interline Billing and Settlement Operation working group
<b>ICH</b>	IATA Clearing House
<b>ISC</b>	Interline Service Charge
<b>RAM</b>	IATA Revenue Accounting Manual
<b>RM</b>	Rejection Memo
<b>SMI</b>	Settlement Method Indicator - In SIS it indicates the clearing house to be used for settlement as well as the Revenue Accounting rules to be followed SMI I - Settlement through the ICH using the RAM rules SMI M - Inter clearance settlement of a billing from an ACH member to an ICH member using RAM rules. It could also be a billing from an ACH member to another ACH member using RAM rules SMI - A Settlement through the ACH using ACH rules SMI - Bilateral settlement using RAM rules
<b>SIS</b>	Simplified Invoicing and Settlement
<b>SIS SG</b>	The SIS Steering Group that overlooks the governance of SIS
<b>SC</b>	Source Code
<b>UATP</b>	Universal Air Travel Plan

# 8. Introduction to the New IATA Passenger Interline Rejection Reduction Dashboard

The Interline Billing and Settlement Operations ("IBS OPS") Working Group and Simplified Invoicing and Settlement ("SIS") Operations Team are pleased to continue publishing the **New Passenger Interline Rejection Billings Quarterly Dashboard**. This dashboard is a quarterly publication from the IATA Passenger Rejection Memo Reduction Initiative, which is endorsed by the IATA Financial Advisory Committee to reduce the number of unnecessary passenger rejection billings in the industry. The purpose of this new quarterly dashboard is to maintain industry awareness of passenger interline rejection billings and encourage airlines to track the trend of their own passenger interline rejection billings by generating the **report in SIS** titled, "**Non Sampling RM Analysis Comparison to the Industry**".

Below is the dashboard for the 4th Quarter of 2022 (Q4-2022). Keep updated with these quarterly dashboards via the [PAX Rejection Memo Reduction Website](#)

