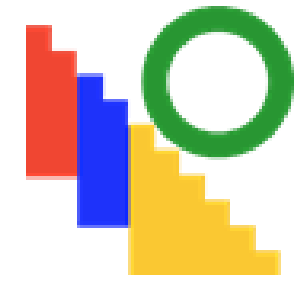# PAX Rejection Memo Reduction

Industry Initiative

Annual Report - 2021

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. The formula used to calculate the rejection rates was also modified to consider the time lag between the prime billing and the raising of the rejection. Since August 2021, the original formula was used going forward as the Prime Billing amounts reached back volumes from early stage of the pandemic.

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

1. Highlight 2021

| Prime Billings	Rejection Memos		RMs Stage 1	RMs Stage 2	RMs Stage 3		Rejection Rate
50.79M	**2.53M**		**1.74M**	**568.77K**	**221.51K**		**4.98%**
−59%	−80%		−81%	−77%	−75%		−50%

Summary - 2021

- Prime Billings decreased by 59% in 2021, in comparison to 2015.

- Rejection Billings decreased by 80% in 2021, in comparison to 2015.

- Stage 1 rejection counts have decreased by 81% in 2021, stage 2 by 77% and stage 3 by 75%.

- There was a slight recovery on Prime Billing volumes starting in summer of 2021 due to worldwide vaccination campaign against COVID-19. This positive trend at Rejection Memos level should be seen in early 2022.

- Fare related reasons (reason codes "1B, 1S, 1Z, 2S") are the number one reason for all stages.

Prime Billings (Jan 2020 - Dec 2021)
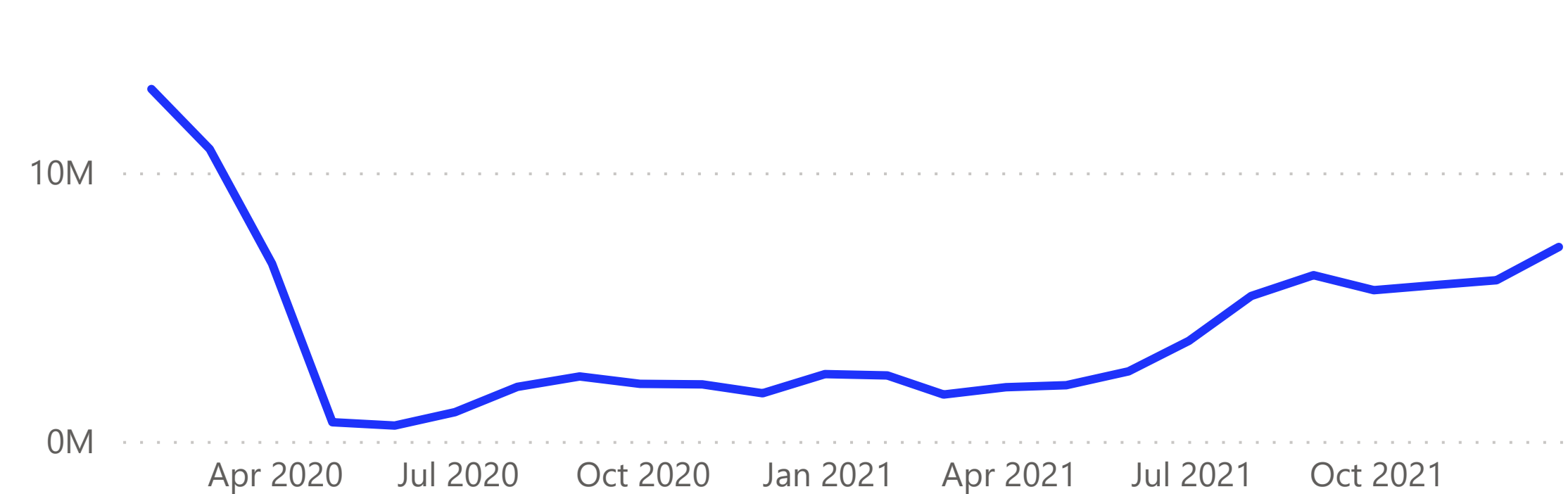
Rejection Memos per Stage (Jan 2020 - Dec 2021)
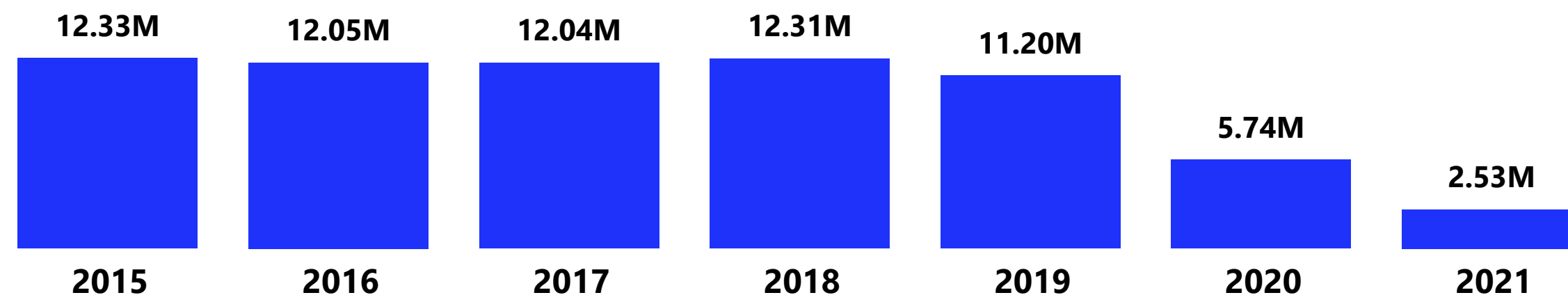
● Stage 1 ● Stage 2 ● Stage 3
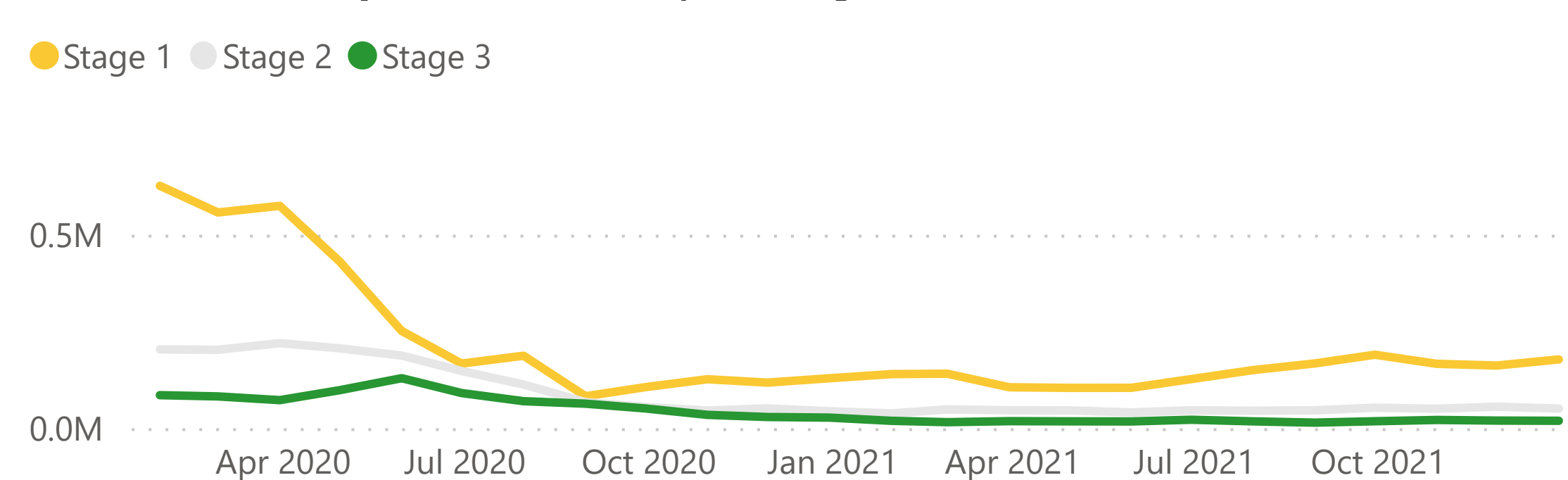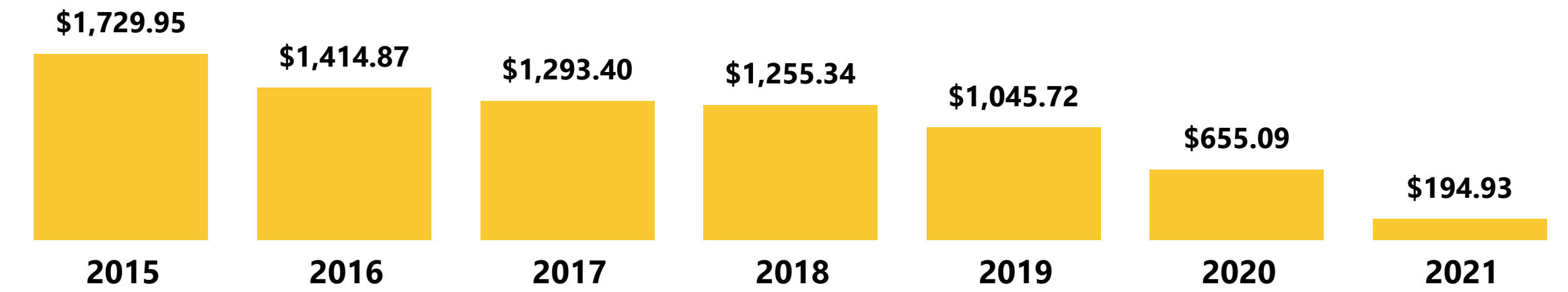
2. Global Non-Sampling Analysis

Total Rejection Memo Count and USD Value per Year

In 2021, the Rejection Memo count has decreased by **9.8 million** in comparison to the 2015 count. Additionally, the USD value has been decreasing consistently since 2015 and is now **89%** 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

Year	Count
2015	12.33M
2016	12.05M
2017	12.04M
2018	12.31M
2019	11.20M
2020	5.74M
2021	2.53M

Rejection Memo Value (USD Million)

| Year	Value
2015	$1,729.95
2016	$1,414.87
2017	$1,293.40
2018	$1,255.34
2019	$1,045.72
2020	$655.09
2021	$194.93

Total Prime Billing Counts

The below graph illustrates the trend of non-sampling prime billings per month for the past 7 years. For the year 2021, the prime billing counts have consistently increased to nearly 32% of 2019 prime billing counts. Generally, expected seasonal trends were observed throughout the year with the highest counts in August and December.

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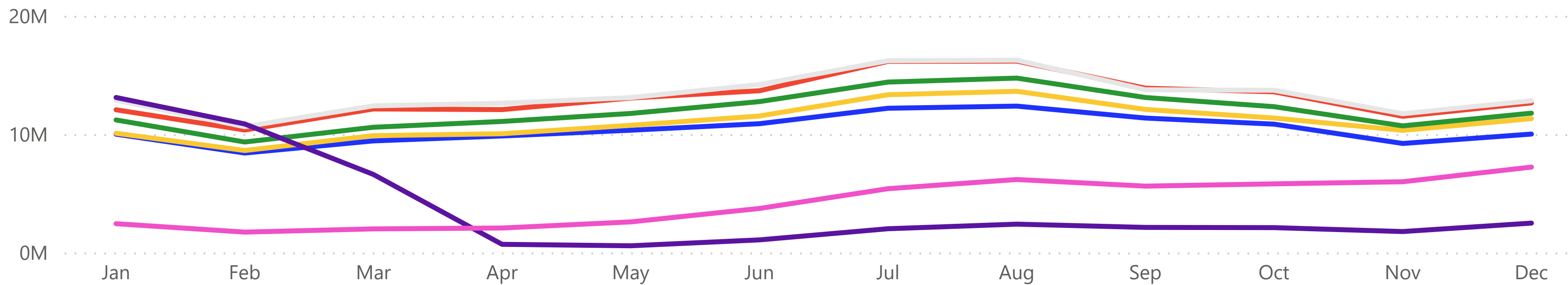
Year	Prime Billings	% Variation vs 2015
2015	124,965,120	
2016	133,004,194	6.43%
2017	143,807,432	15.08%
2018	157,354,093	25.92%
2019	160,339,228	28.31%
2020	45,856,996	-63.30%
2021	50,788,550	-59.36%

Total Rejection Memo Count by Month - 2021

The below graph shows the total count of non-sampling rejection memos per month in 2021. September was the month that contained the highest rejection memo count of the year.
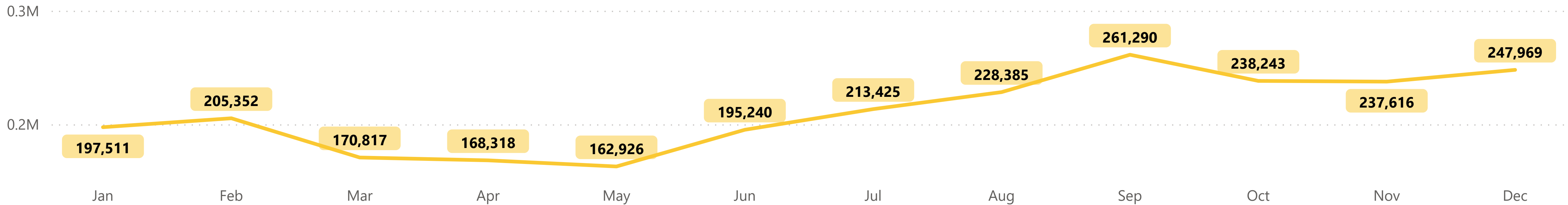
Total Rejection Memo Count by Stage

The below chart shows a comparison of rejections counts for each stage between 2015 and 2021.

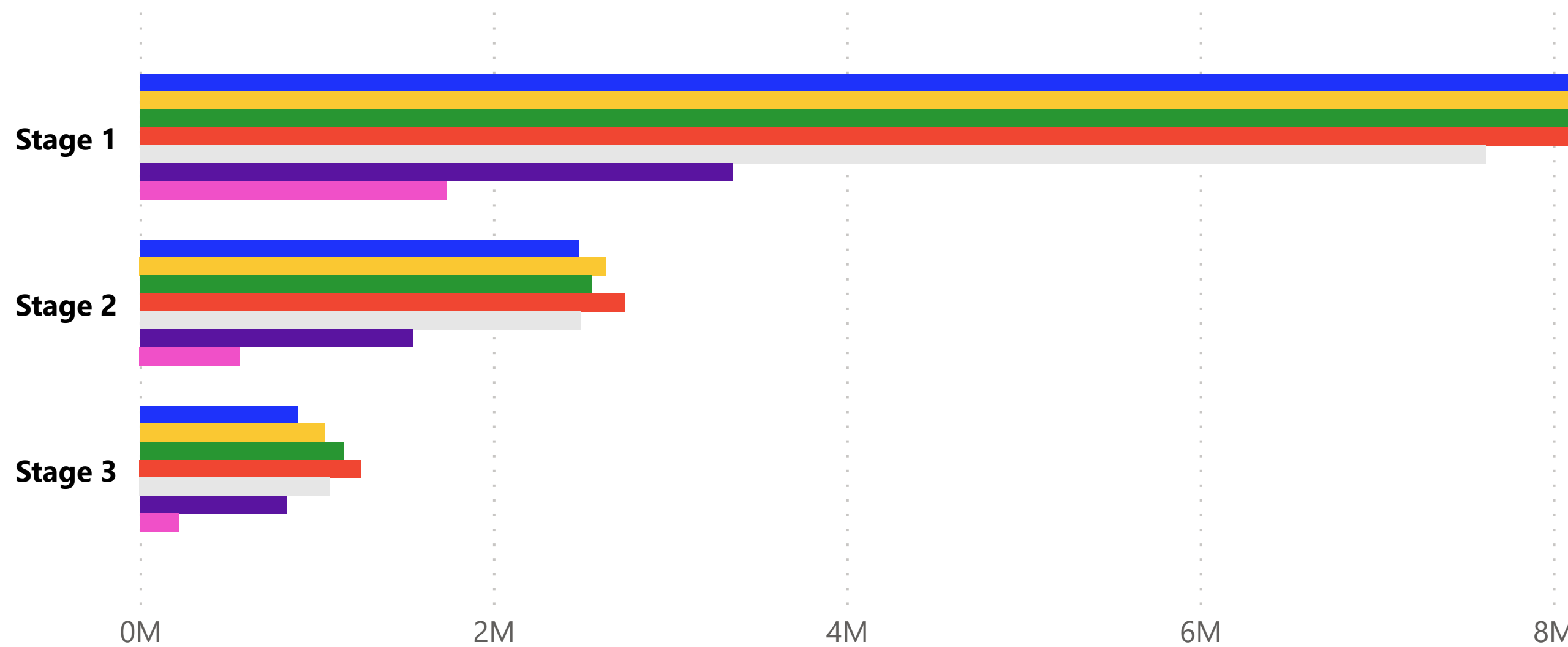| Stage 1 Var. % vs 2015	Stage 2 Var. % vs 2015	Stage 3 Var. % vs 2015
-81%	-77%	-75%

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

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%

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:

$$\text{Rejection Rate} = \frac{\text{Sum of Rejection Memos of Past 12 months}}{\text{Sum of Prime Billings of Past 12 months}} \times 100\%$$
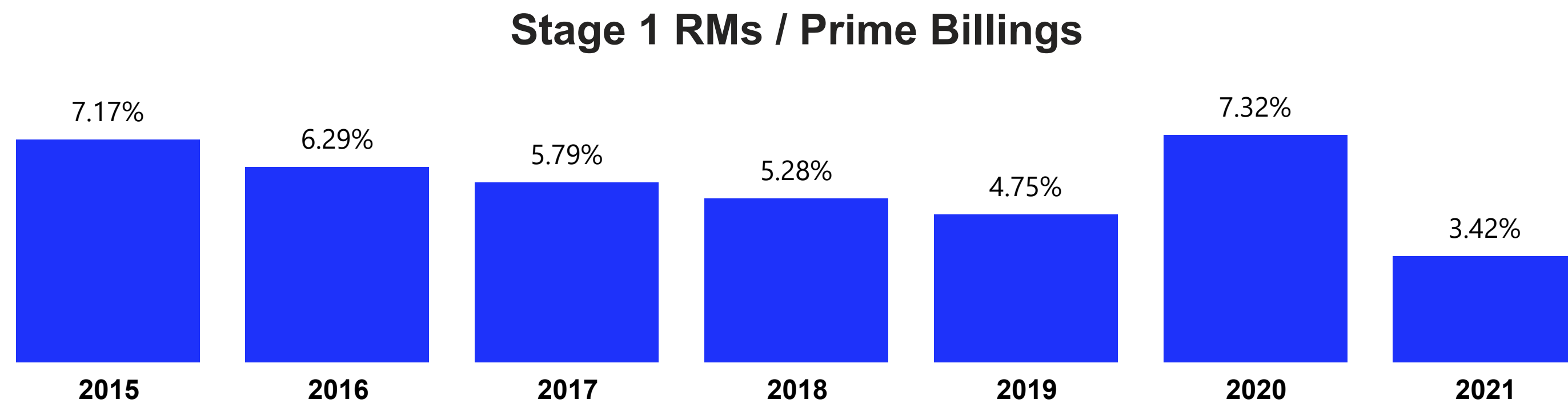
The table on the right shows the decrease in the rejection rate at the end of each year.
By December 2021, the rejection rate decreased by **49.59%** in comparison to the base year 2015.

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%

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 **3.42%** of the prime billings in 2021 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 1 RMs / Prime Billings

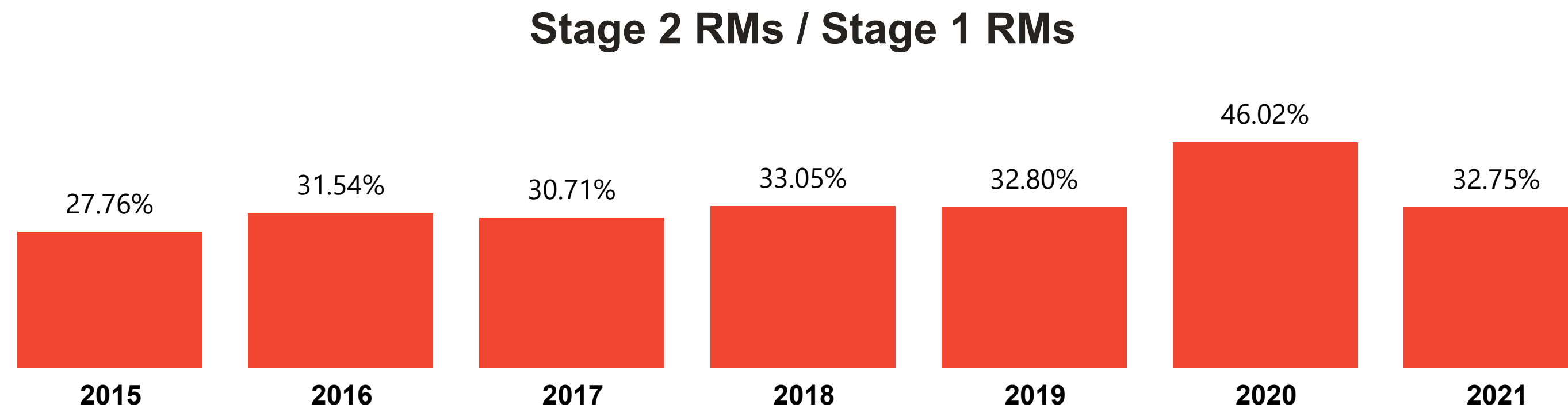| Year	2015	2016	2017	2018	2019	2020	2021
Value	7.17%	6.29%	5.79%	5.28%	4.75%	7.32%	3.42%

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

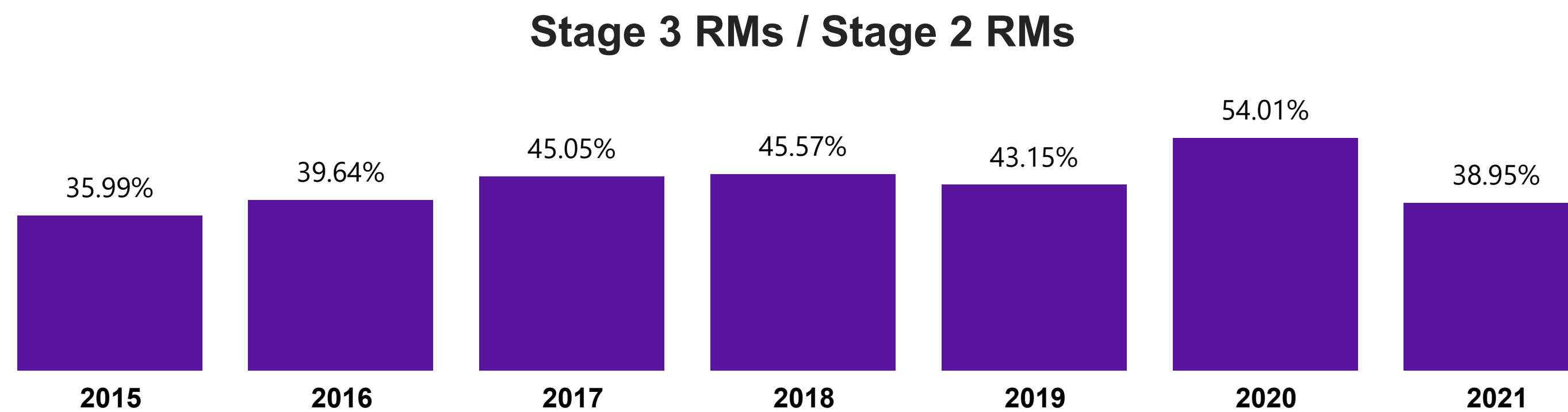The percentages are calculated using the following formulae:

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

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

The estimated percentage of rejected Stage 1 Rejection Memos is plotted in the graph below and show a decrease in 2021 in comparison to previous years. Approximately **32.75%** of the Stage 1 rejection in 2021 were rejected back 2nd stage.

Stage 2 RMs / Stage 1 RMs

Year	Percentage
2015	27.76%
2016	31.54%
2017	30.71%
2018	33.05%
2019	32.80%
2020	46.02%
2021	32.75%

The estimated percentage of rejected Stage 1 Rejection Memos is plotted in the graph below and show a decrease in 2021 in comparison to previous years. Approximately **38.95%** of the Stage 1 rejection in 2021 were rejected back 2nd stage.

Stage 3 RMs / Stage 2 RMs

Year	Percentage
2015	35.99%
2016	39.64%
2017	45.05%
2018	45.57%
2019	43.15%
2020	54.01%
2021	38.95%

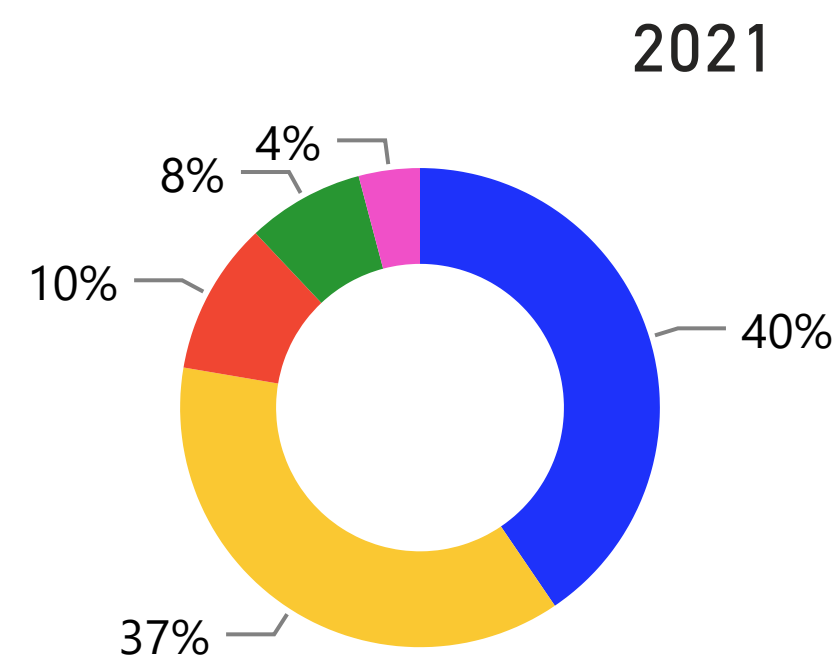# 4. Rejection Memos Analysis by SMI

SMI - I/M Analysis

The table below shows the counts of SMI I and SMI M rejections per stage (2021 vs 2015). In 2021 all different rejection stages have decreased, in comparison to the base year 2015.

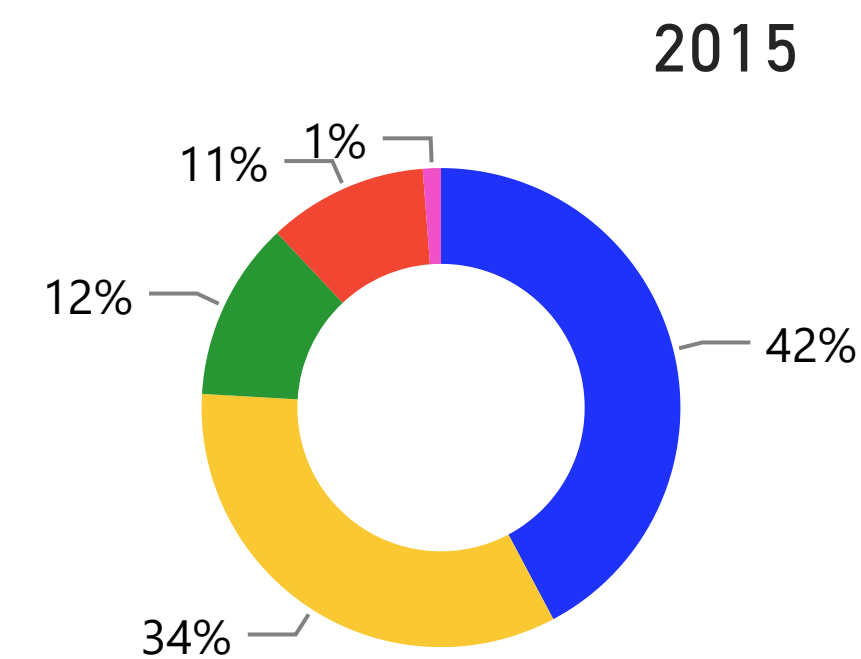| Year	1st Stage	% Var. vs 2015	2nd Stage	% Var. vs 2015	3rd Stage	% Var. vs 2015	Total RM Count
2015	7,692,894		2,425,398		863,209		10,981,501
2021	1,617,251	-79%	545,392	-78%	208,865	-76%	2,371,508

1st Stage Reason Code Analysis

The table below shows the Top 7 Reason Codes, sorted by 2021 stage 1 rejection counts. The top 7 reason codes represent **97%** of all SMI-I/M stage 1 rejections. Fare related reasons account for the highest count of 1st stage rejections in 2021.

| Reason Codes	Reason Code Description	1st Stage 2021	1st Stage 2020	1st Stage 2019	1st Stage 2018	1st Stage 2017	1st Stage 2016	1st Stage 2015	% Variation 2021 vs 2015
1B, 1S, 1Z, 2S	Fare Related	654,937	1,220,844	2,509,370	2,872,253	3,054,911	3,025,507	3,248,605	-80%
1G, 1T, 1Y	Tax Related	601,339	1,205,215	3,017,920	3,157,875	2,785,137	2,836,874	2,591,444	-77%
1A, 1R	Fare/Tax/ISC Related	127,693	339,374	816,108	824,711	835,804	926,496	929,403	-86%
1E	UATP Reclaim	66,659	121,873	251,541	259,154	352,210	256,828	94,152	-29%
1C	ISC Reclaim	66,278	116,719	265,126	226,634	207,161	200,262	264,514	-75%
5Z	Others	41,584	92,072	141,340	146,653	155,389	185,735	243,756	-83%
2A	Unmatched Sale	3,459	14,657	74,664	52,317	26,928	22,601	17,669	-80%

2nd Stage Reason Code Analysis

The table below shows the Top 7 Reason Codes, sorted by 2021 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 2021.

Reason Codes	Reason Code Description	2nd Stage 2021	2nd Stage 2020	2nd Stage 2019	2nd Stage 2018	2nd Stage 2017	2nd Stage 2016	2nd Stage 2015	% Variation 2021 vs 2015
1B, 1S, 1Z, 2S	Fare Related	249,034	678,735	1,150,983	1,236,554	1,193,123	1,217,942	1,181,272	-79%
1G, 1T, 1Y	Tax Related	187,320	504,537	796,520	759,512	733,642	721,209	661,343	-72%
1A, 1R	Fare/Tax/ISC Related	46,093	155,190	237,291	227,178	231,577	242,609	218,045	-79%
5Z	Others	34,695	96,458	121,034	172,854	184,575	221,913	211,451	-84%
1C	ISC Reclaim	16,847	53,660	87,480	99,128	106,640	104,675	102,918	-84%
1D	Other Commission Reclaim	4,851	4,421	13,835	12,709	6,412	4,563	5,297	-8%
1E	UATP Reclaim	2,338	7,804	13,113	11,783	18,659	18,659	11,783	-80%
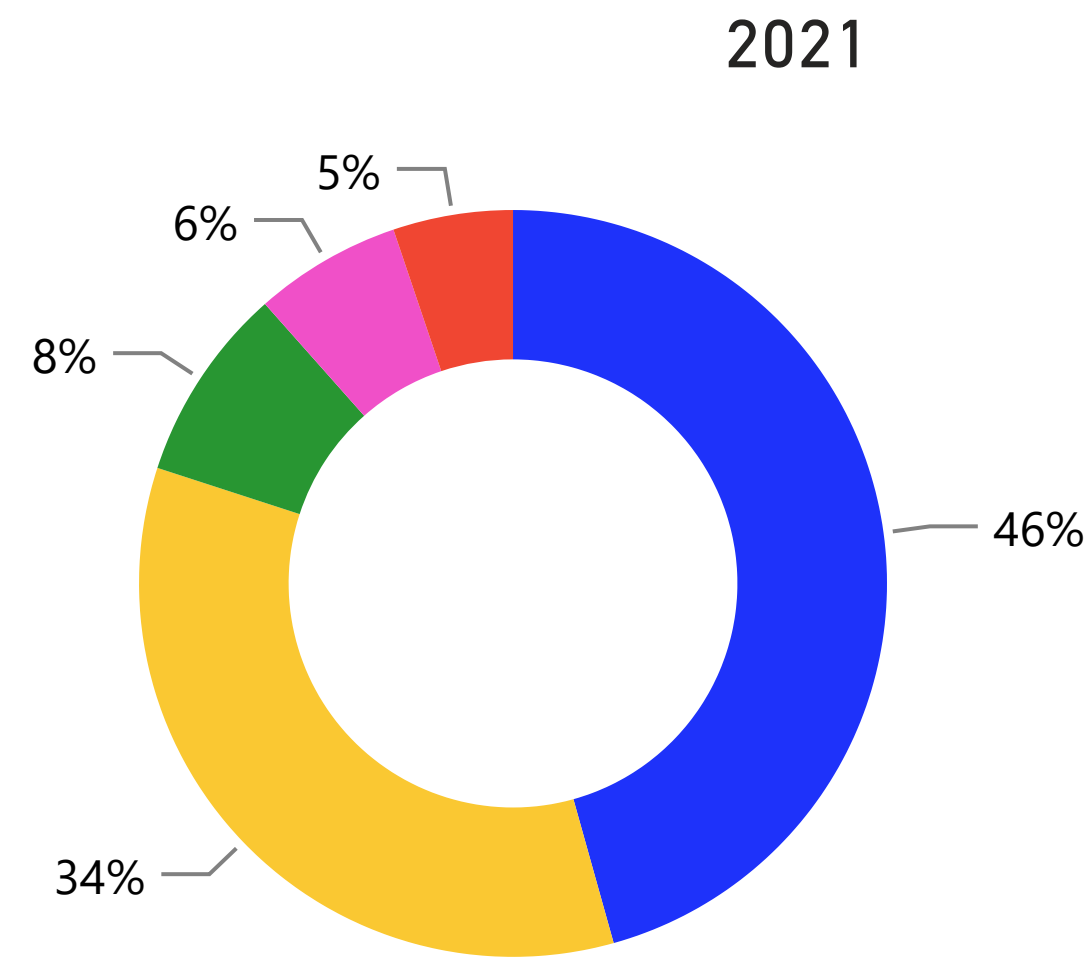
2021

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

46% — Fare Related, 34% — Tax Related, 8%, 6%, 5%

2015

- Fare Related
- Tax Related
- Fare/Tax/ISC Related
- Others (5Z)
- All Other Reasons
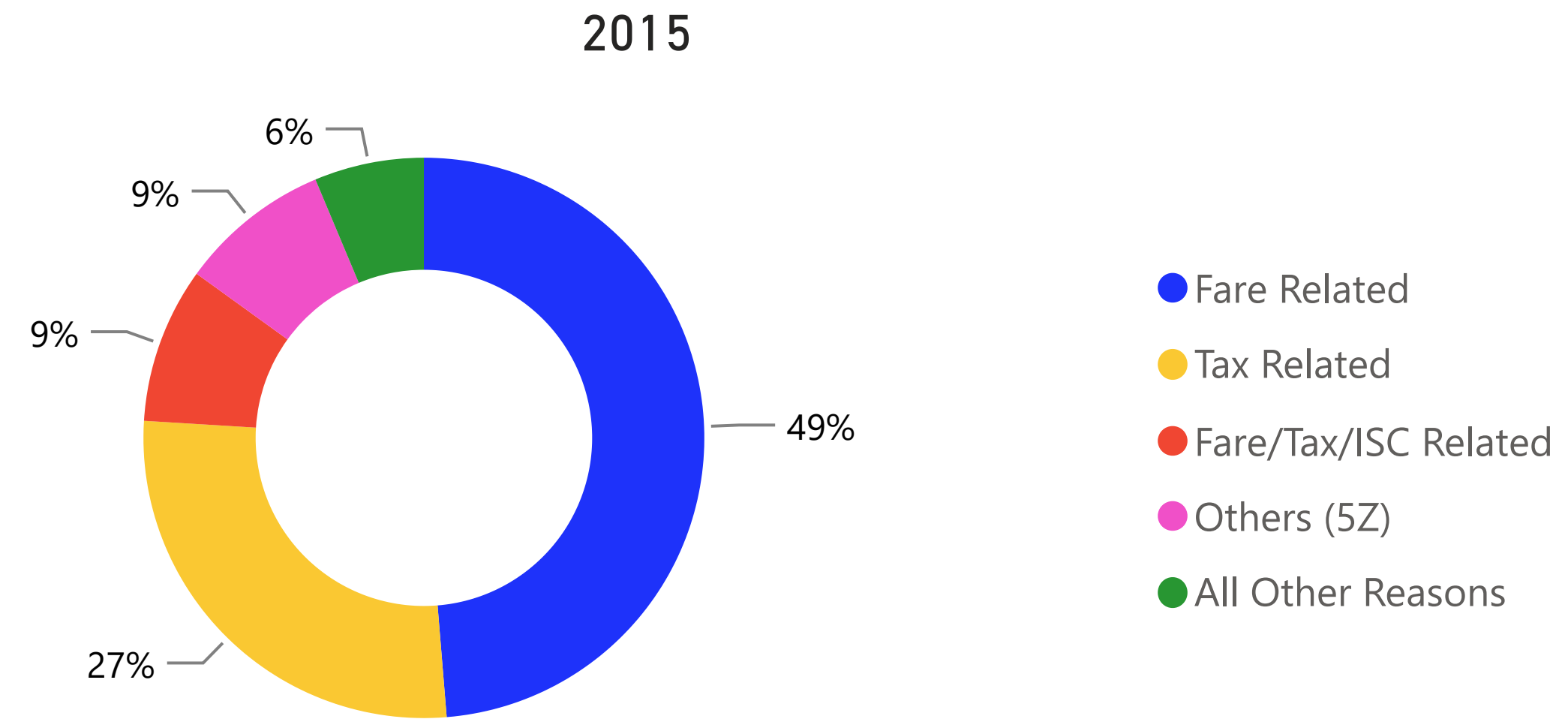
49% — Fare Related, 27% — Tax Related, 9%, 9%, 6%

3rd Stage Reason Code Analysis

The table below shows the Top 7 Reason Codes, sorted by 2021 stage 3 rejection counts. The top 7 reason codes represent **98%** of all SMI-I/M stage 3 rejections. Fare related reasons account for the highest count of 3rd stage rejections in 2021.

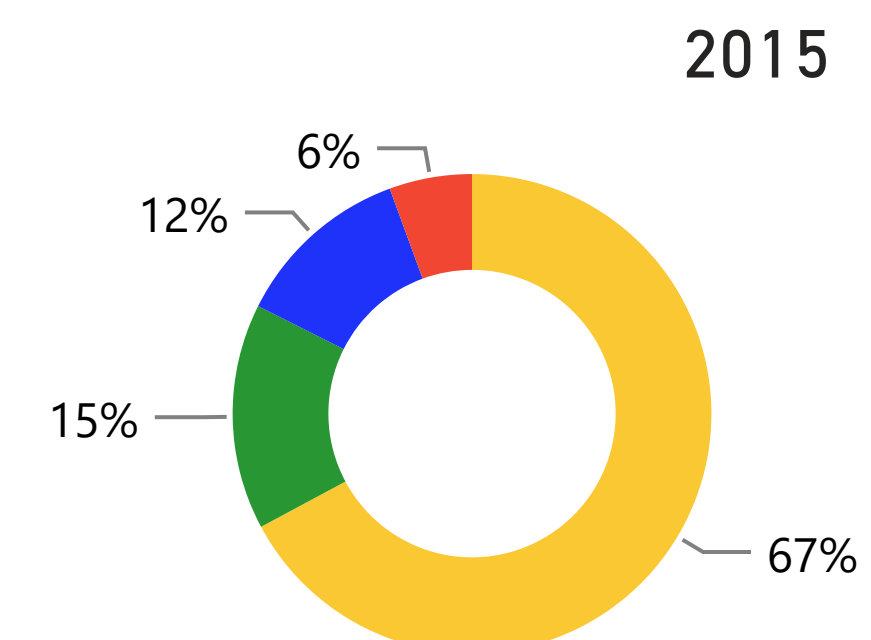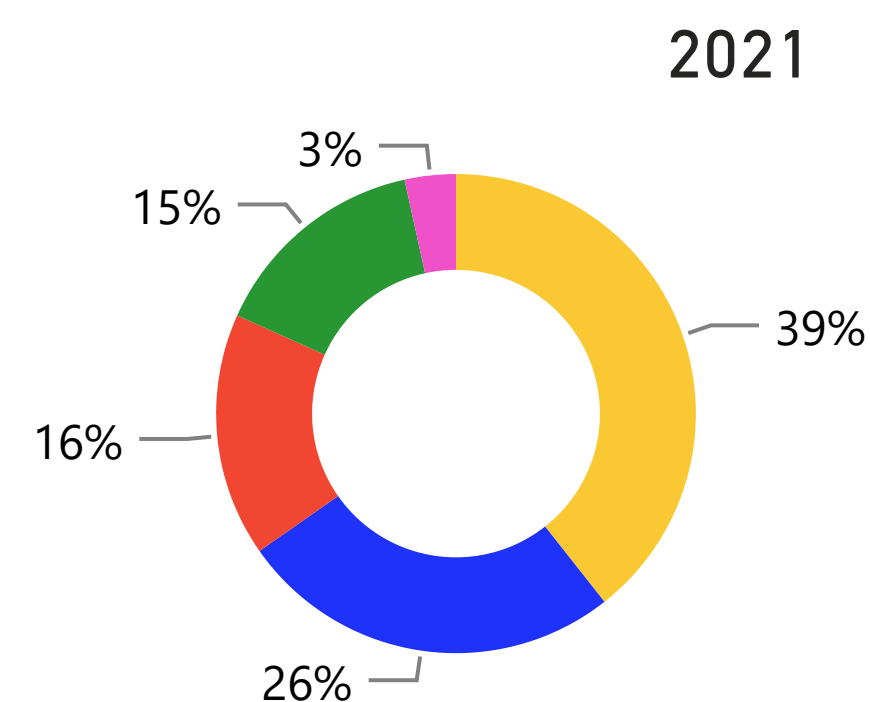| Reason Codes	Reason Code Description	3rd Stage 2021	3rd Stage 2020	3rd Stage 2019	3rd Stage 2018	3rd Stage 2017	3rd Stage 2016	3rd Stage 2015	% Variation 2021 vs 2015
1B, 1S, 1Z, 2S	Fare Related	118,805	425,711	474,398	597,059	554,115	543,865	428,002	-72%
1G, 1T, 1Y	Tax Related	49,881	221,588	386,948	369,129	302,771	206,564	183,276	-73%
1A, 1R	Fare/Tax/ISC Related	19,206	83,670	101,013	110,966	114,919	106,127	73,045	-74%
5Z	Others	9,827	41,687	46,630	62,479	99,763	95,065	132,107	-93%
1C	ISC Reclaim	5,707	26,597	22,810	42,078	39,081	41,681	25,210	-77%
1E	UATP Reclaim	1,357	6,746	7,083	11,252	10,772	6,232	4,416	-69%
5B	FIM Rejection	104	939	1,871	2,406	4,231	8,534	9,108	-99%
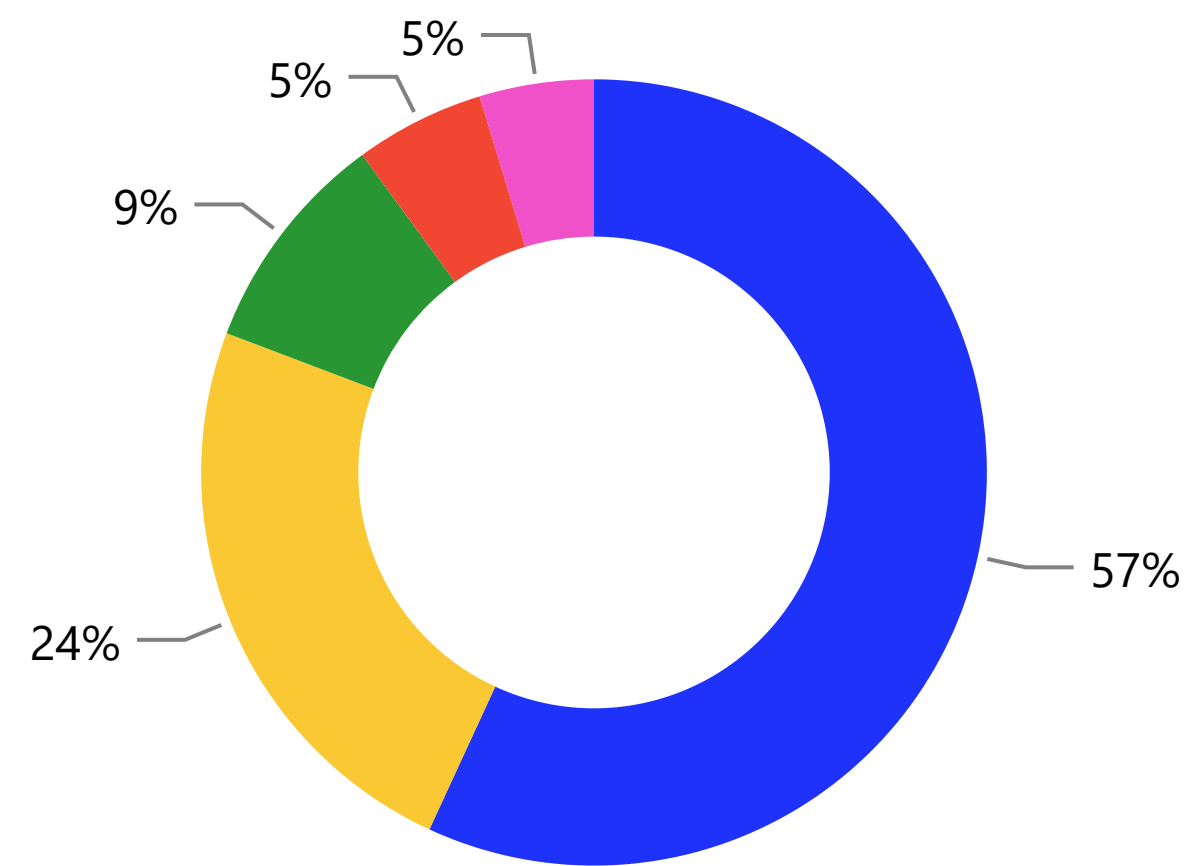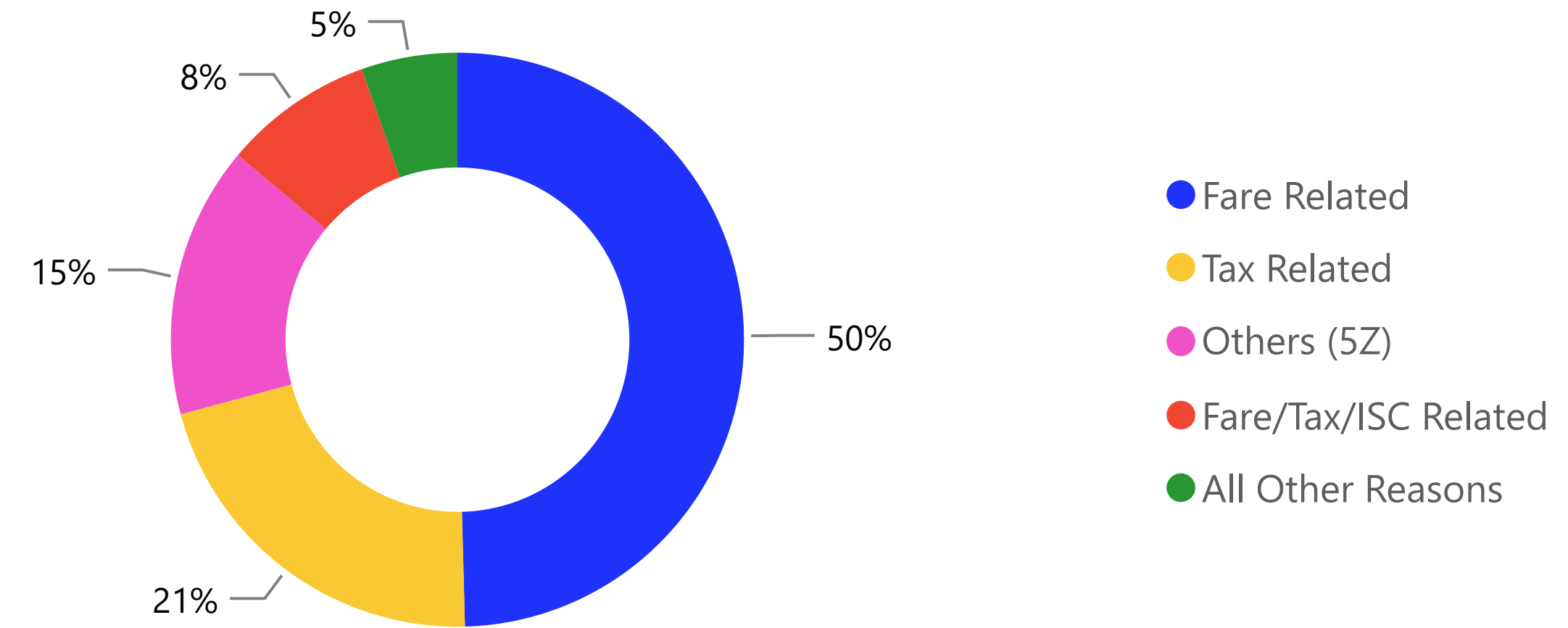
SMI - B Analysis

The table below shows the counts of SMI I and SMI M rejections per stage (2021 vs 2015). In 2021 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
2021	119,556	-91%	23,382	-61%	12,646	-59%	155,584

1st Stage Reason Code Analysis

The table below shows the Top 7 Reason Codes, sorted by 2021 stage 1 rejection counts. The top 7 reason codes represent **95%** of all SMI-I/M stage 1 rejections. Tax related reasons account for the highest count of 1st stage rejections in 2021.

Reason Codes	Reason Code Description	1st Stage 2021	1st Stage 2020	1st Stage 2019	1st Stage 2018	1st Stage 2017	1st Stage 2016	1st Stage 2015	% Variation 2021 vs 2015
1G, 1T, 1Y	Tax Related	47,080	76,135	148,263	287,330	513,834	470,669	847,088	-94%
1B, 1S, 1Z, 2S	Fare Related	30,965	48,043	134,203	209,544	128,096	105,694	151,458	-80%
1A, 1R	Fare/Tax/ISC Related	17,736	16,466	38,145	56,476	59,326	79,521	192,204	-91%
1D	Other Commission Reclaim	7,368	609	2,893	2,072	134	3,666	4,432	66%
5Z	Others	4,753	6,966	25,611	8,059	4,367	5,737	12,955	-63%
1E	UATP Reclaim	4,117	4,885	2,836	0	0	0	0	0%
1C	ISC Reclaim	1,077	623	7,525	12,680	2,638	3,515	11,390	-91%

2021

- Tax Related — 39%
- Fare Related — 26%
- All Other Reasons — 16%
- Fare/Tax/ISC Related — 15%
- UATP Reclaim — 3%

2015

- Tax Related — 67%
- Fare/Tax/ISC Related — 15%
- Fare Related — 12%
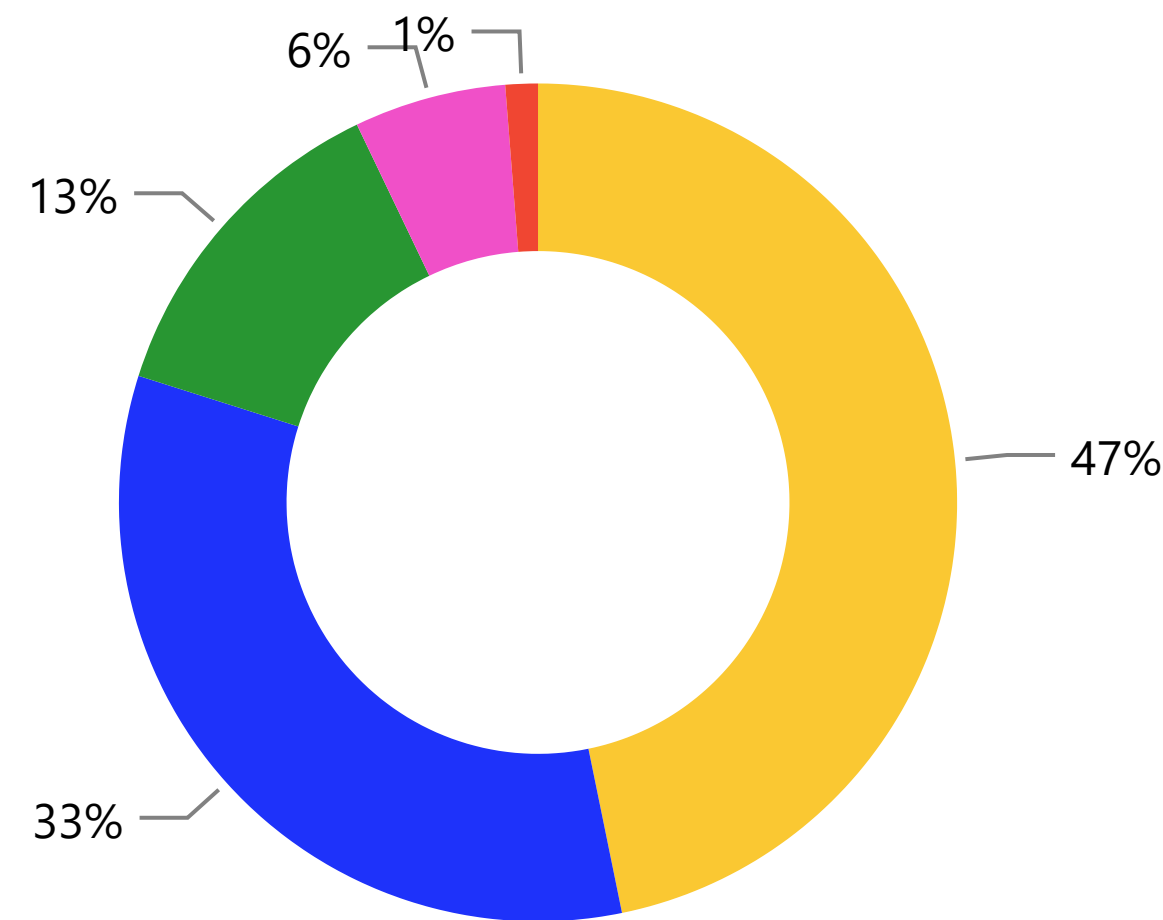- All Other Reasons — 6%
- UATP Reclaim

2nd Stage Reason Code Analysis

The table below shows the Top 7 Reason Codes, sorted by 2021 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 2021.

Reason Codes	Reason Code Description	2nd Stage 2021	2nd Stage 2020	2nd Stage 2019	2nd Stage 2018	2nd Stage 2017	2nd Stage 2016	2nd Stage 2015	% Variation 2021 vs 2015
1G, 1T, 1Y	Tax Related	10,940	8,498	17,973	34,858	31,200	34,594	22,781	-52%
1B, 1S, 1Z, 2S	Fare Related	7,739	14,601	28,882	123,916	21,824	22,794	23,228	-67%
1A, 1R	Fare/Tax/ISC Related	3,040	3,993	4,352	5,120	4,063	4,795	2,825	8%
5Z	Others	1,371	5,801	5,251	3,699	2,911	2,927	6,198	-78%
1C	ISC Reclaim	181	178	1,951	9,623	329	605	56	223%
2A	Unmatched Sale	15	269	660	162	75	605	56	-73%
1E	UATP Reclaim	4	19	11	0	0	0	0	0%

2021

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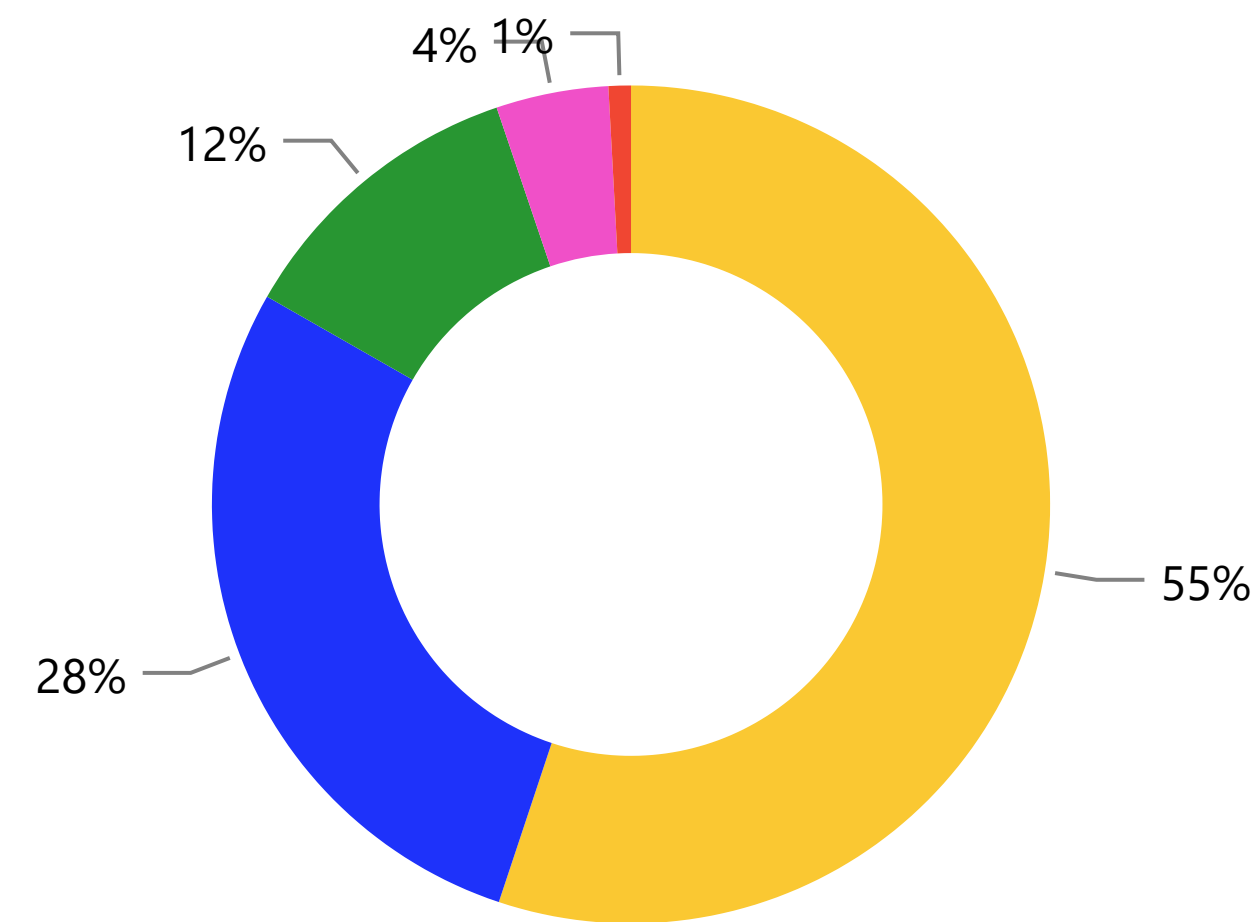- Fare/Tax/ISC Related
- Others (5Z)
- All Other Reasons

47%
33%
13%
6%
1%

2015
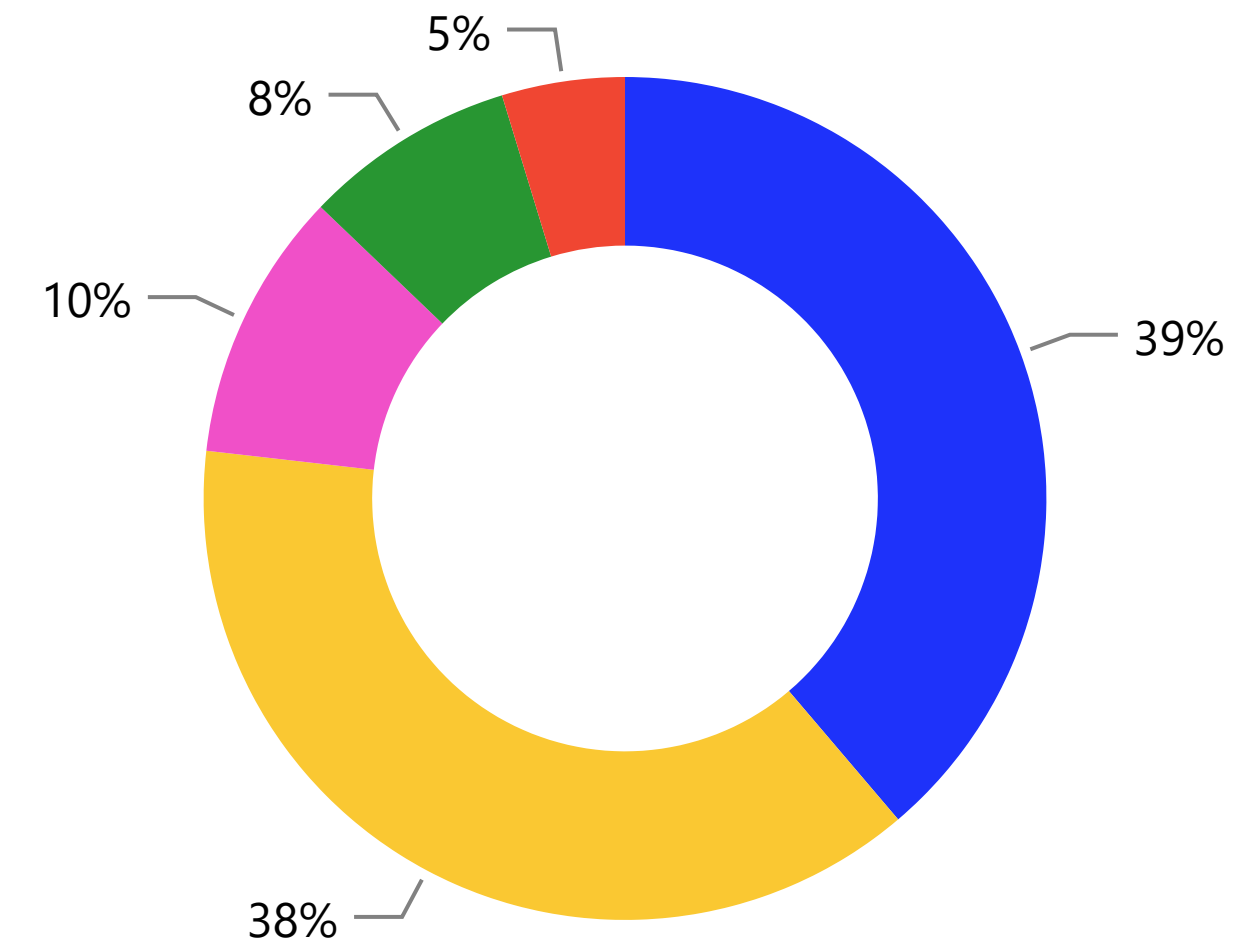
- Fare Related
- Tax Related
- Others (5Z)
- All Other Reasons
- Fare/Tax/ISC Related

39%
38%
10%
8%
5%

3rd Stage Reason Code Analysis

The table below shows the Top 7 Reason Codes, sorted by 2021 stage 3 rejection counts. The top 7 reason codes represent **99%** of all SMI-I/M stage 3 rejections. Tax related reasons account for the highest count of 3rd stage rejections in 2021.

Reason Codes	Reason Code Description	3rd Stage 2021	3rd Stage 2020	3rd Stage 2019	3rd Stage 2018	3rd Stage 2017	3rd Stage 2016	3rd Stage 2015	% Variation 2021 vs 2015
1G, 1T, 1Y	Tax Related	6,969	3,265	8,016	7,065	8,545	5,503	7,585	-8%
1B, 1S, 1Z, 2S	Fare Related	3,560	9,878	17,695	16,104	11,131	15,398	15,739	-77%
1A, 1R	Fare/Tax/ISC Related	1,460	1,672	2,204	1,518	1,526	1,807	1,176	24%
5Z	Others	548	2,757	1,384	962	1,049	1,505	5,720	-90%
2A	Unmatched Sale	15	428	502	102	443	1,484	55	-73%
1C	ISC Reclaim	5	113	422	7,445	143	119	135	-96%
5B	FIM Rejection	4	8	169	195	206	337	121	-97%

2021

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

2015
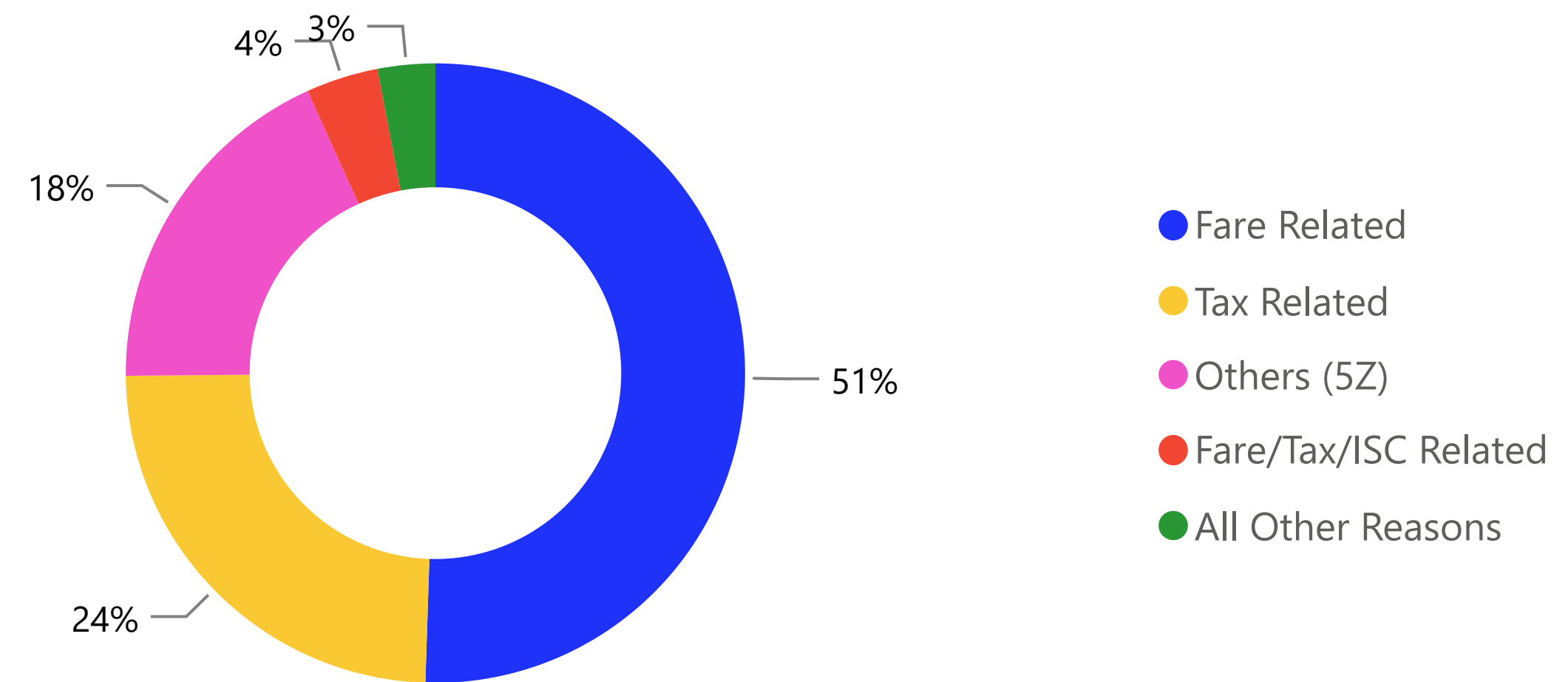
Legend:
- Fare Related
- Tax Related
- Others (5Z)
- Fare/Tax/ISC Related
- All Other Reasons

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 2021 until December 2021. 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 **89,009** rejections raised against **583,723** SC 31 prime billings that were issued over the period September 2020 to August 2021.

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

Month of Prime Billings

| Month of Rejections	September 2020	October 2020	November 2020	December 2020	January 2021	February 2021	March 2021	April 2021	May 2021	June 2021	July 2021	August 2021	Total
January 2021	247	524	613	7,665	1,011								**10,060**
February 2021		329	509	2,236	6,161	1,751							**10,986**
March 2021	1	1	331	1,088	2,154	3,849	1,074						**8,498**
April 2021				597	1,034	2,468	3,935	1,249					**9,283**
May 2021				3	614	499	1,192	4,510	757				**7,575**
June 2021						316	504	760	3,853	1,340			**6,773**
July 2021							127	136	950	5,476	2,133		**8,822**
August 2021								144	104	1,444	7,113	1,710	**10,515**
September 2021									138	104	3,828	6,519	**10,589**
October 2021										250	595	2,301	**3,146**
November 2021											713	946	**1,659**
December 2021												1,103	**1,103**
Total RM's	**248**	**854**	**1,453**	**11,589**	**10,974**	**8,883**	**6,832**	**6,799**	**5,802**	**8,614**	**14,382**	**12,579**	**89,009**
Total Prime Billings	**23,005**	**26,146**	**32,675**	**57,314**	**51,768**	**38,033**	**36,541**	**36,016**	**40,052**	**59,461**	**91,851**	**90,861**	**583,723**
Rejection %	**29%**	**28%**	**25%**	**25%**	**21%**	**23%**	**19%**	**19%**	**14%**	**14%**	**16%**	**14%**	**19%**

Note: The above table represents up to prime billing month August 2021, before which no further rejections can be raised. Source code 31 coupons issued from September 2021 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.
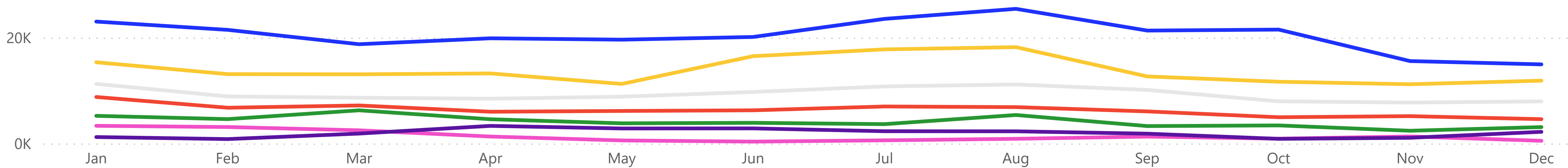
Prime Billings Counts & FIM Rejections Memos by Source Code - 2021 vs 2015

In comparison to the base year 2015, the total FIM prime billings have decreased by **89%** and the total FIM rejection billings have decreased by **97%**. 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	
2021	22,642	-89%	3,502	-97%	1,496	-95%	251	-98%	5,249	-97%

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	197,600		134,704		27,983		16,660		179,347	
2021	22,642	-89%	3,502	-97%	1,496	-95%	251	-98%	5,249	-97%

7. Sampling Billing Analysis

Total Sampling Count - 2021 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
ACH	Airlines Clearing House. It is the A4A's Clearing House for Interline Billings
BM	Billing Memo
CM	Credit Memo
IBSOPS WG	Interline Billing and Settlement Operation working group
ICH	IATA Clearing House
ISC	Interline Service Charge
RAM	IATA Revenue Accounting Manual
RM	Rejection Memo
SMI	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
SIS	Simplified Invoicing and Settlement
SIS SG	The SIS Steering Group that overlooks the governance of SIS
SC	Source Code
UATP	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 2021 (Q4-2021). Keep updated with these quarterly dashboards via the   PAX Rejection Memo Reduction Website