

# WALMART SALES ANALYSIS

state\_id, store\_id

All

cat\_id, dept\_id, item\_id

All

year

All

\$192M

Total Sales \$

28%

Sales \$ YoY%

67M

Total Sales

25%

Sales YoY%

\$2.86

Average Selling Price

2%

ASP YoY%

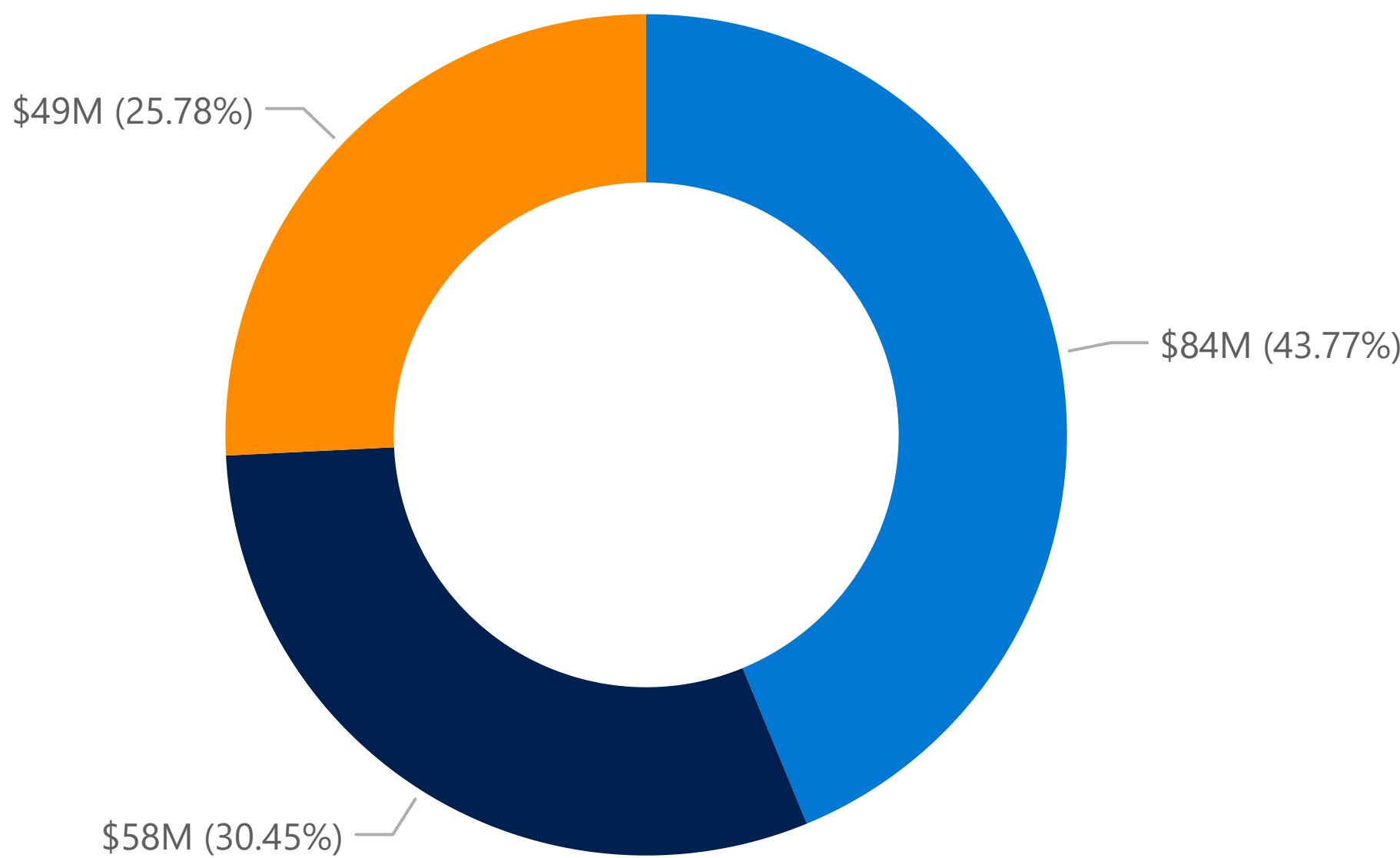
3049

Distinct Products Sold

19M

Row Count

Sales by Location



state\_id

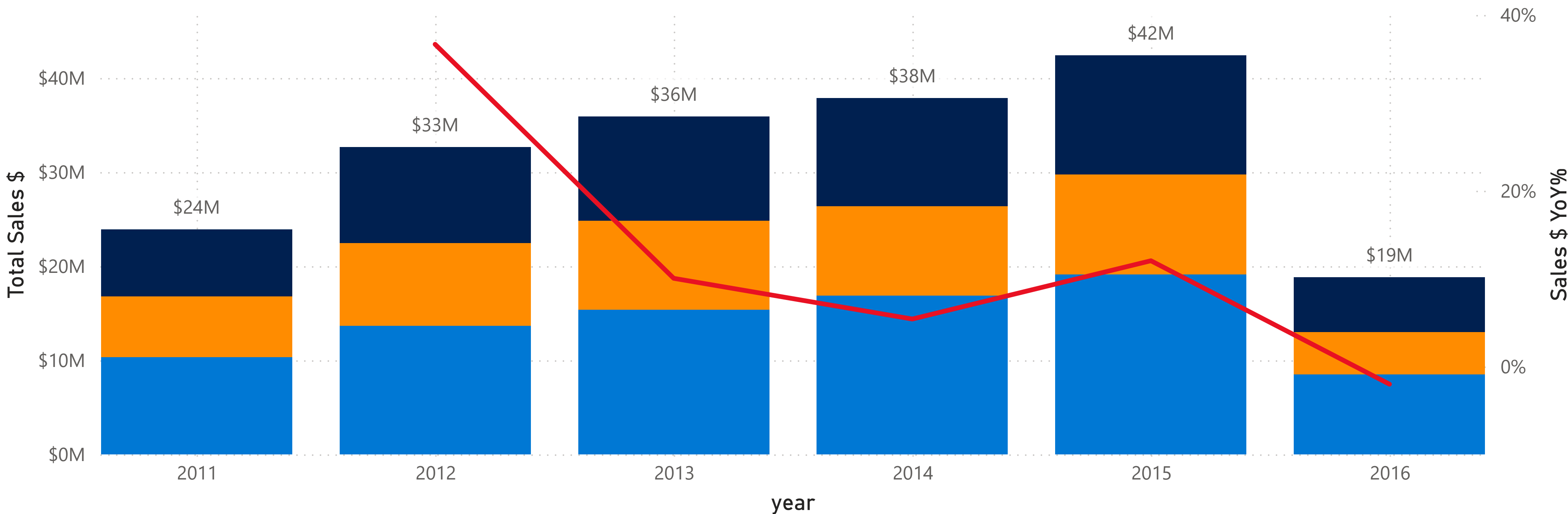
CA

WI

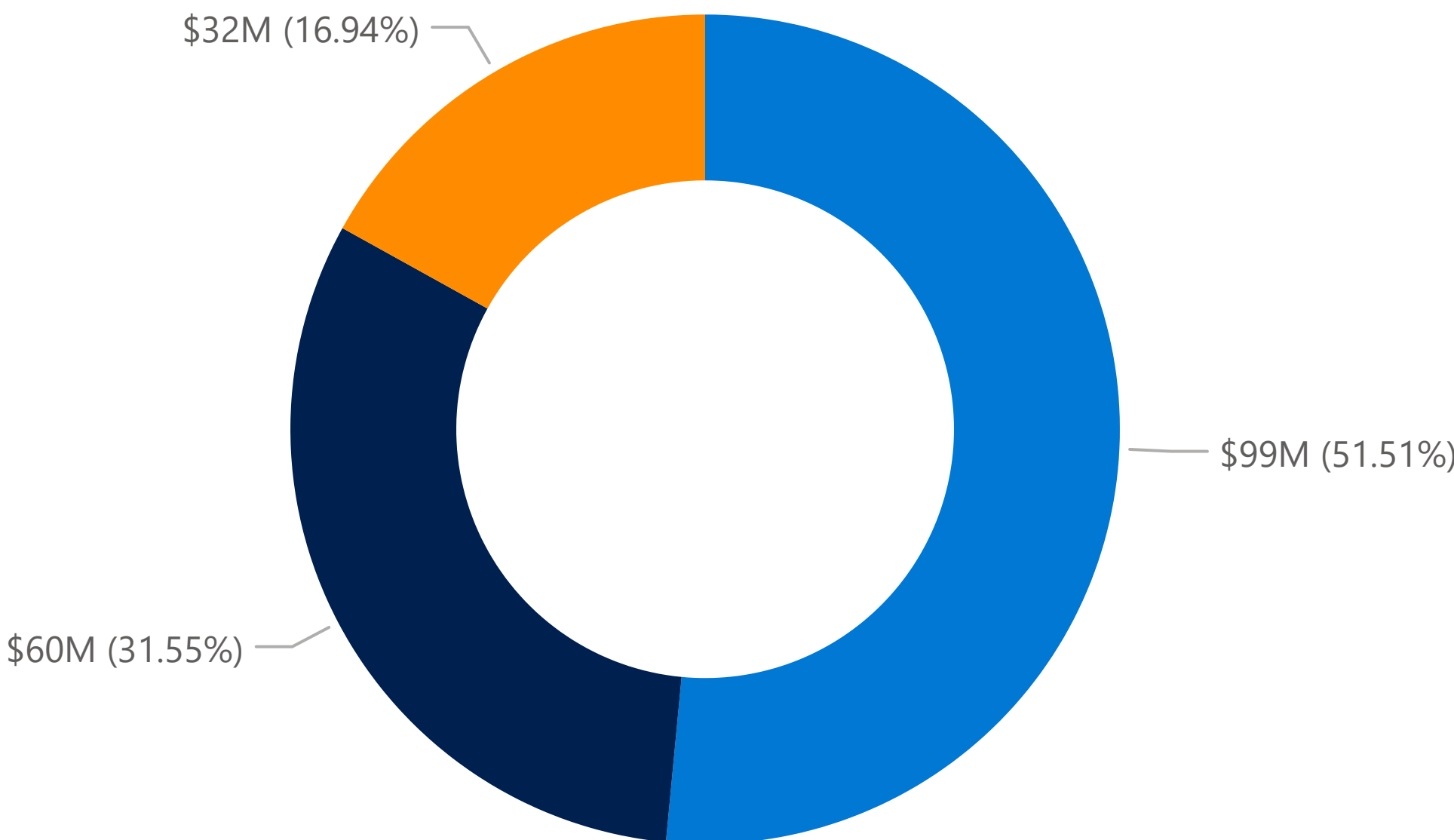
TX

Sales and YoY% by Year and Location

state\_id CA TX WI Sales \$ YoY%



Sales by Category



cat\_id

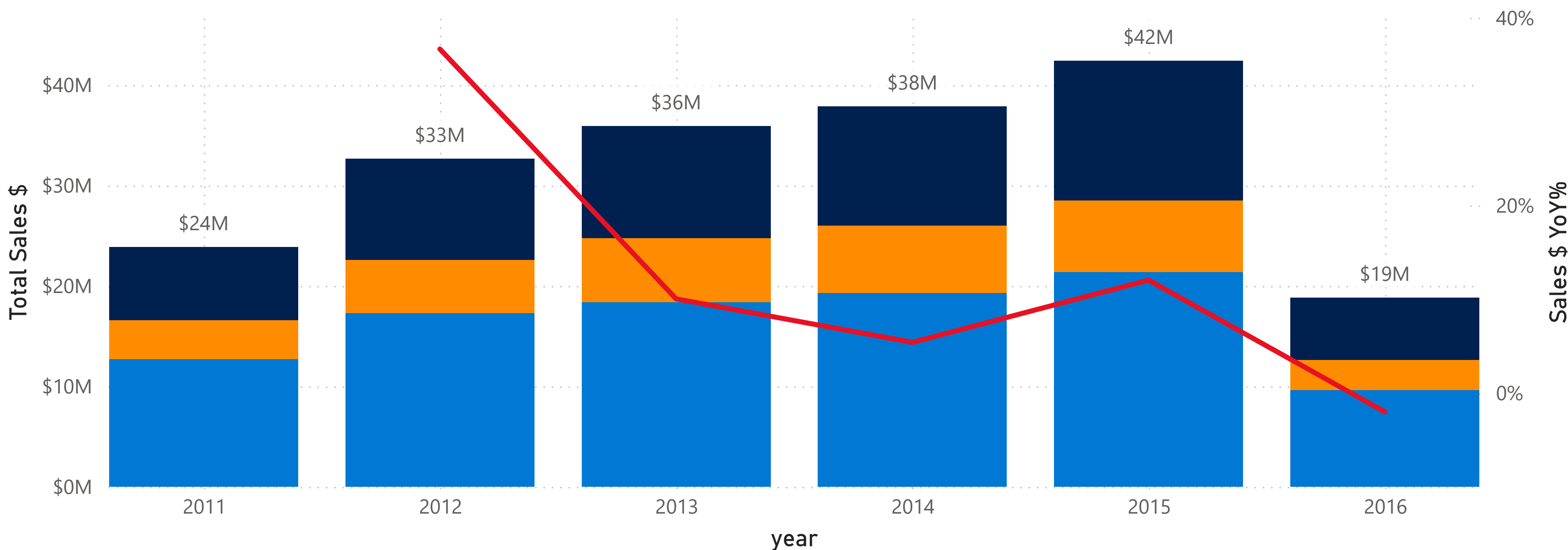
FOODS

HOUSEHOLD

HOBBIES

Sales and YoY% by Year and Category

cat\_id FOODS HOBBIES HOUSEHOLD Sales \$ YoY%



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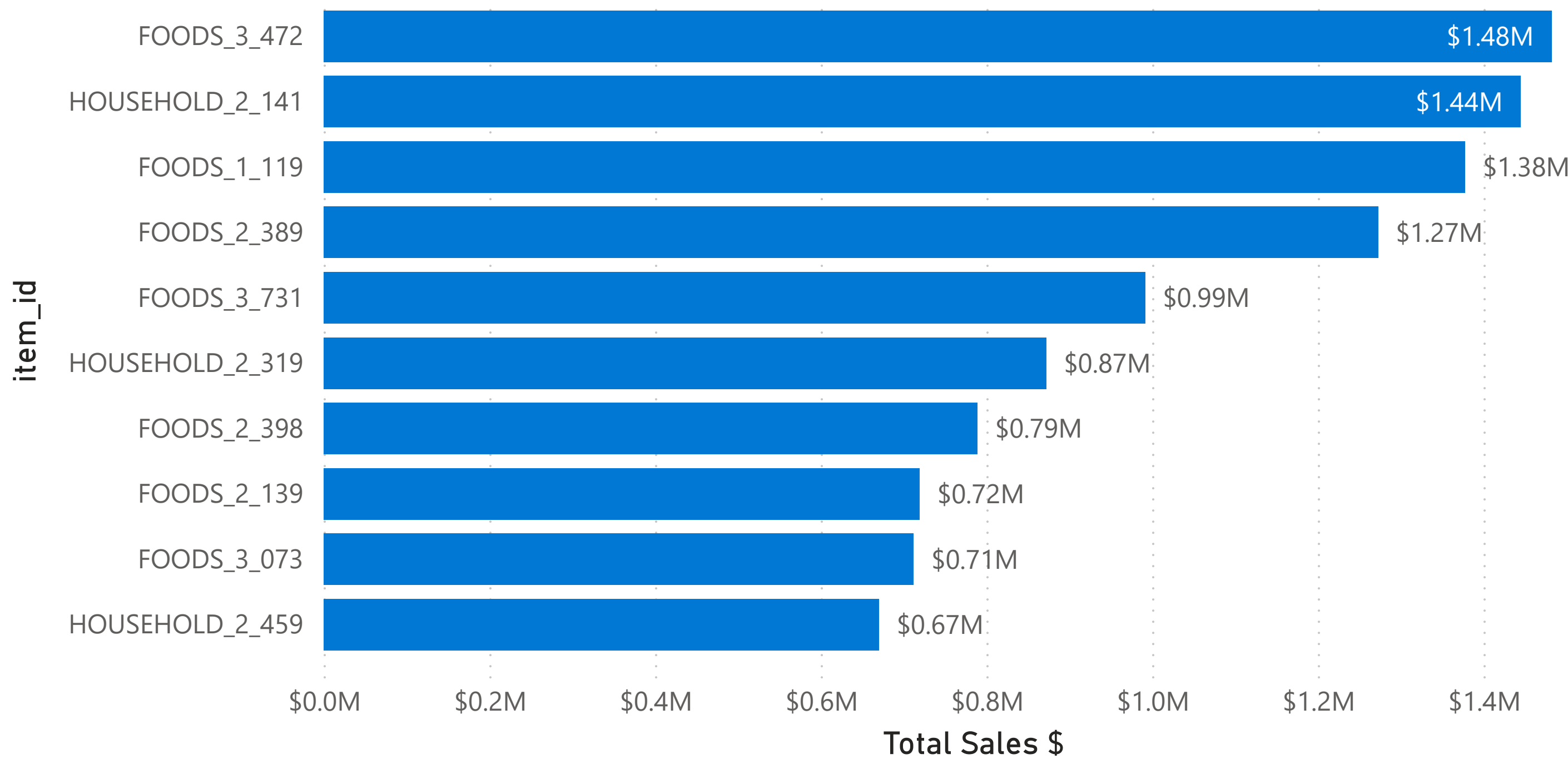
3049

Distinct Products Sold

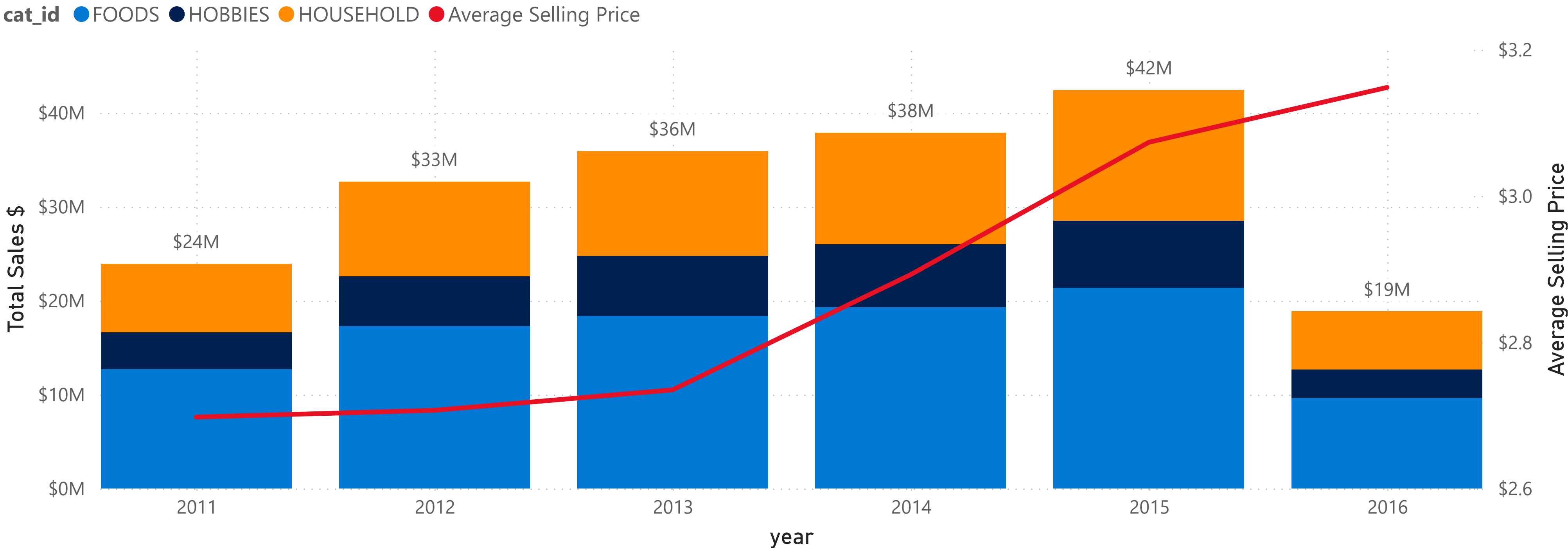
19M

Row Count

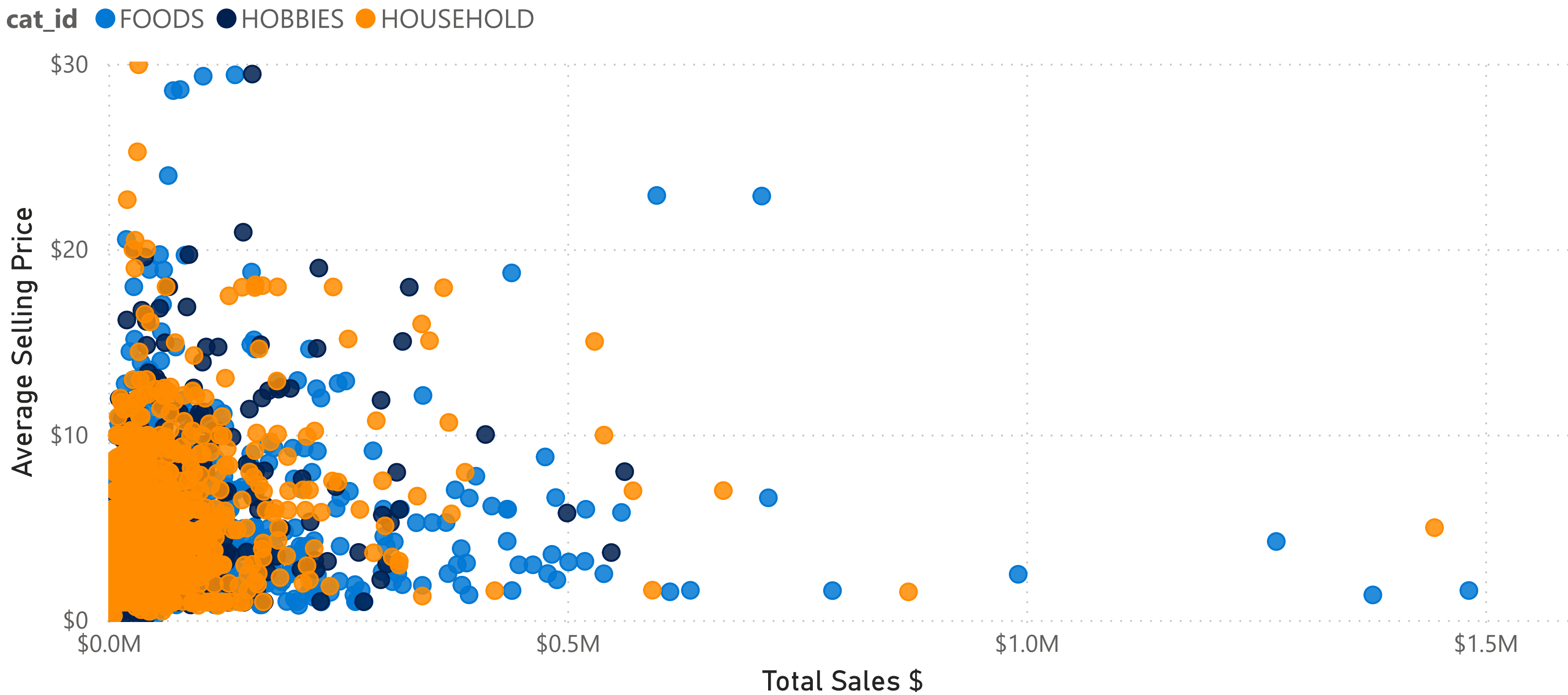
## Top 10 Products



## ASP over Year



## Sales vs ASP by Category



what is the total sales \$ by category

Showing results for what is the total sales \$



\$191,577,546

Total Sales \$

Is this useful?





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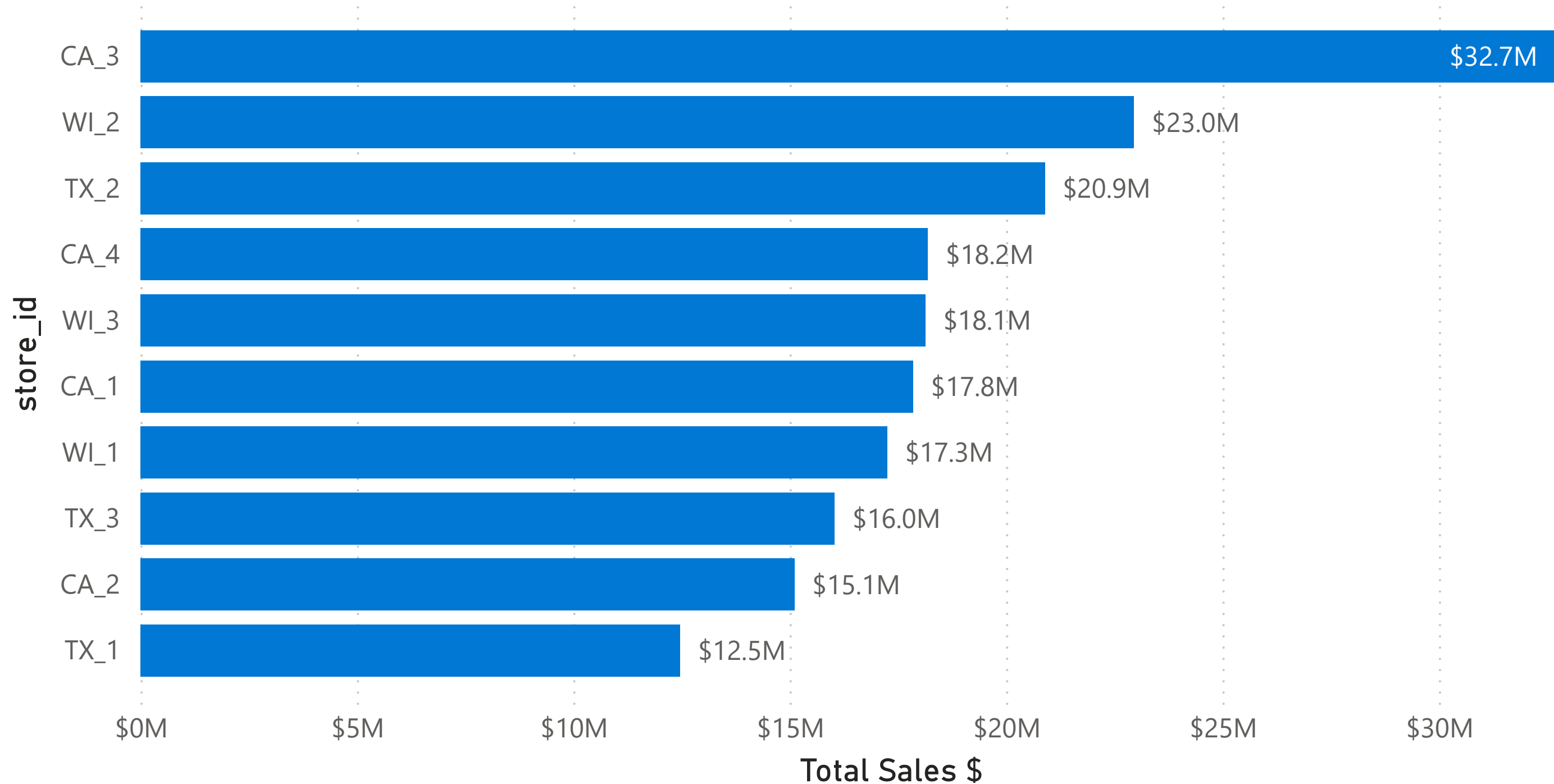
3049

Distinct Products Sold

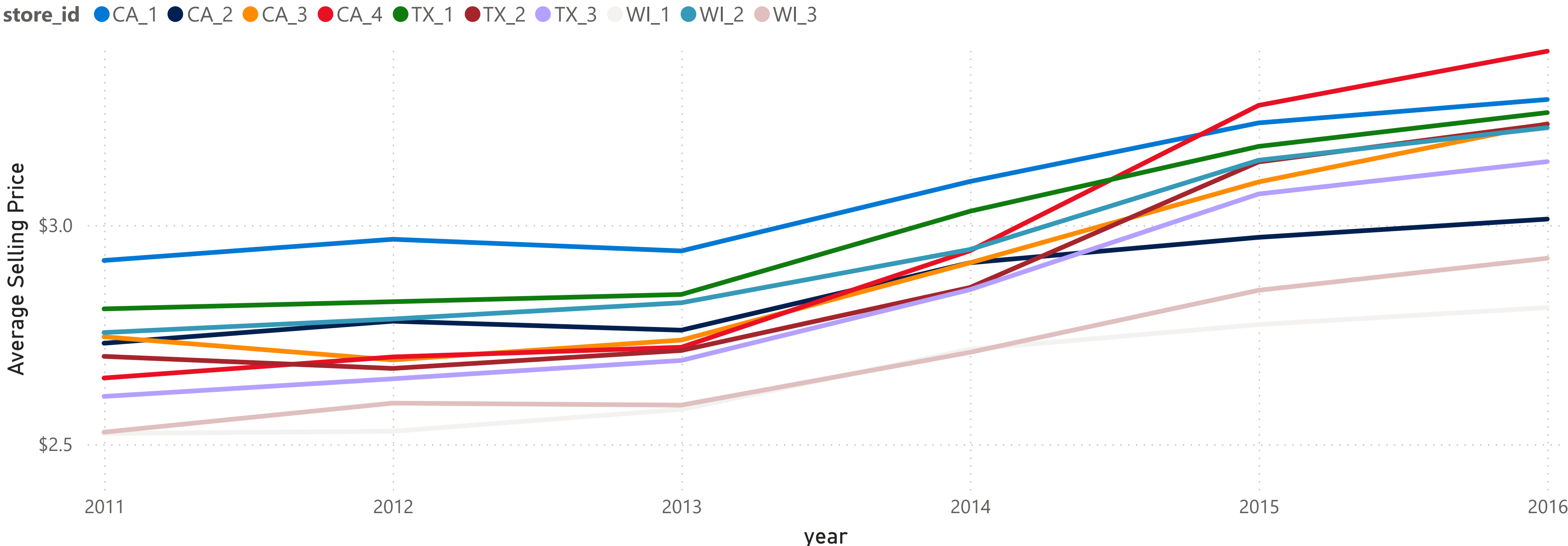
19M

Row Count

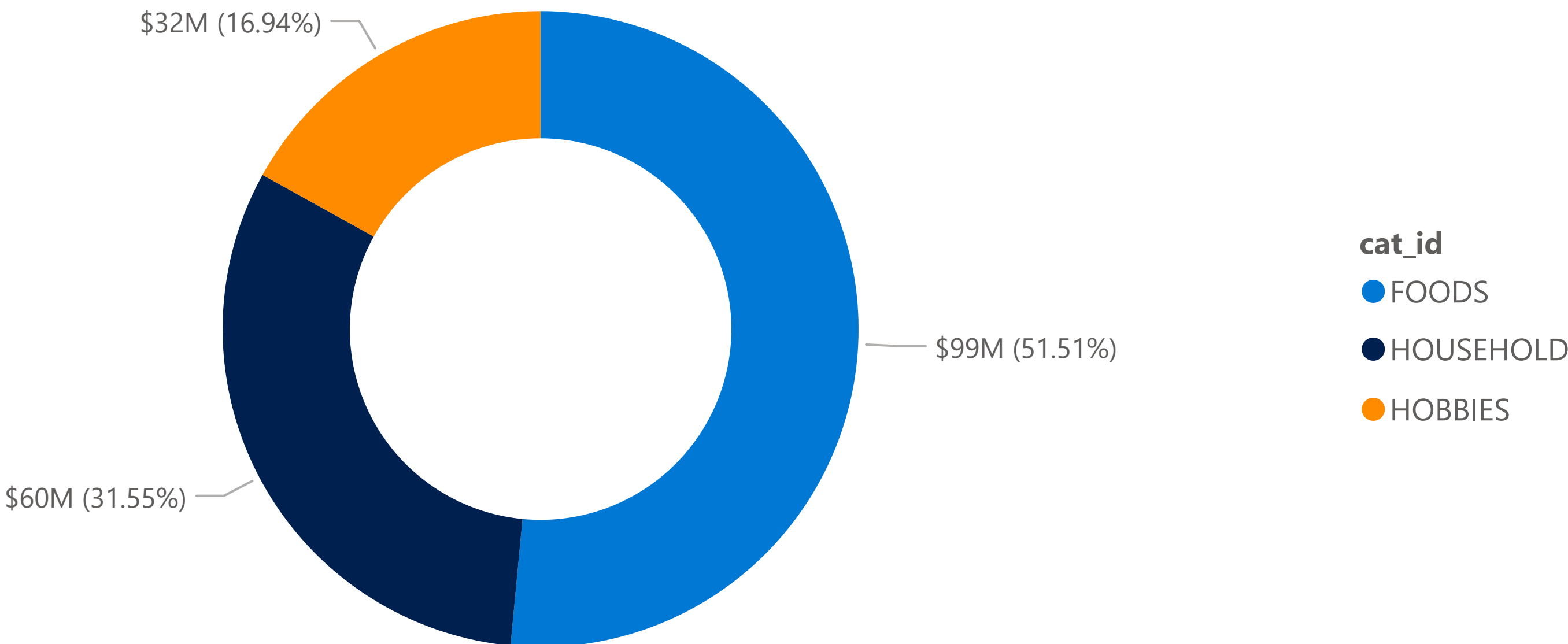
Store Sales



ASP over Year



Sales by Category



Regional Breakdown

cat_id state_id	FOODS			HOBBIES			HOUSEHOLD			Total		
	Total Sales \$	Average Selling Price	Sales YoY%	Total Sales \$	Average Selling Price	Sales YoY%	Total Sales \$	Average Selling Price	Sales YoY%	Total Sales \$	Average Selling Price	Sales YoY%
CA	\$41,996,429	\$2.62	26%	\$14,688,563	\$3.18	26%	\$27,160,088	\$3.38	28%	\$83,845,080	\$2.93	27%
CA_3	\$16,418,648	\$2.56	21%	\$5,742,113	\$3.04	24%	\$10,538,377	\$3.45	26%	\$32,699,138	\$2.88	23%
CA_4	\$9,652,867	\$2.69	24%	\$2,986,862	\$3.16	27%	\$5,550,570	\$3.32	28%	\$18,190,299	\$2.93	26%
CA_1	\$8,267,398	\$2.69	33%	\$3,321,175	\$3.40	28%	\$6,259,636	\$3.54	32%	\$17,848,209	\$3.07	32%
CA_2	\$7,657,516	\$2.62	31%	\$2,638,413	\$3.25	28%	\$4,811,505	\$3.15	31%	\$15,107,434	\$2.87	31%
WI	\$30,709,594	\$2.49	25%	\$9,352,077	\$3.04	26%	\$18,274,724	\$3.22	28%	\$58,336,395	\$2.77	26%
WI_2	\$12,047,158	\$2.64	23%	\$3,979,598	\$3.29	25%	\$6,927,529	\$3.36	26%	\$22,954,284	\$2.93	24%
WI_3	\$9,459,529	\$2.44	30%	\$2,765,708	\$2.93	29%	\$5,906,748	\$3.15	33%	\$18,131,985	\$2.71	30%
WI_1	\$9,202,907	\$2.37	22%	\$2,606,772	\$2.82	24%	\$5,440,448	\$3.13	24%	\$17,250,126	\$2.64	23%
TX	\$25,972,163	\$2.60	22%	\$8,414,959	\$3.17	25%	\$15,008,949	\$3.28	25%	\$49,396,072	\$2.87	23%
TX_2	\$11,169,510	\$2.59	21%	\$3,493,143	\$3.19	23%	\$6,230,349	\$3.25	24%	\$20,893,002	\$2.85	22%
TX_3	\$8,277,881	\$2.55	22%	\$2,749,721	\$3.07	25%	\$5,009,740	\$3.24	26%	\$16,037,341	\$2.82	23%
TX_1	\$6,524,773	\$2.71	24%	\$2,172,095	\$3.27	27%	\$3,768,861	\$3.40	27%	\$12,465,728	\$2.98	25%
Total	\$98,678,186	\$2.58	24%	\$32,455,598	\$3.13	26%	\$60,443,761	\$3.31	27%	\$191,577,546	\$2.86	25%

# WALMART SALES ANALYSIS

state\_id, store\_id

All

cat\_id, dept\_id, item\_id

All

year

Multiple selections

## Sales to Target: Current Month, Current Year, Prior Month, P...

period

Current  
Month

Current  
Year

Prior  
Month

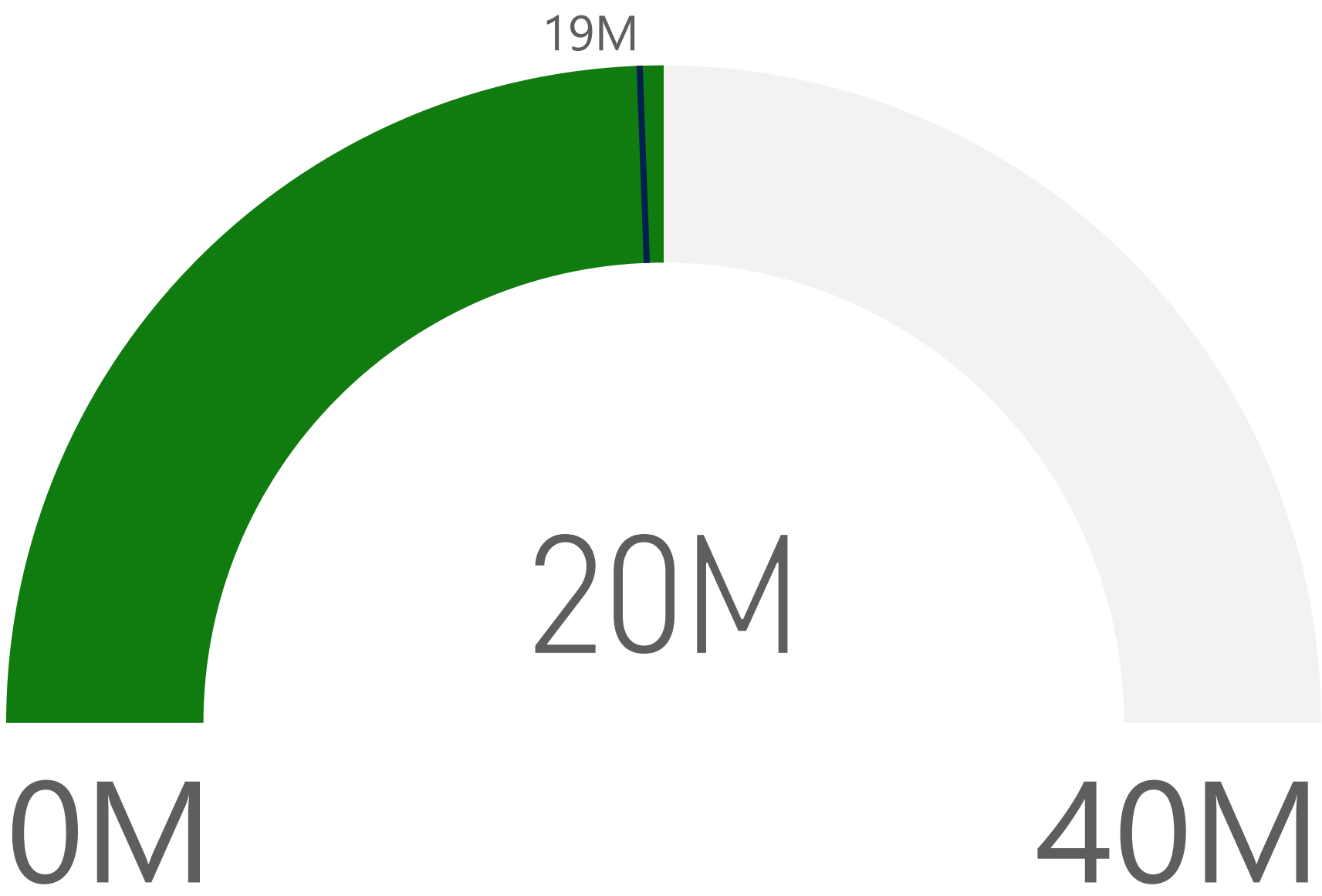
Prior Year

Rolling  
12M

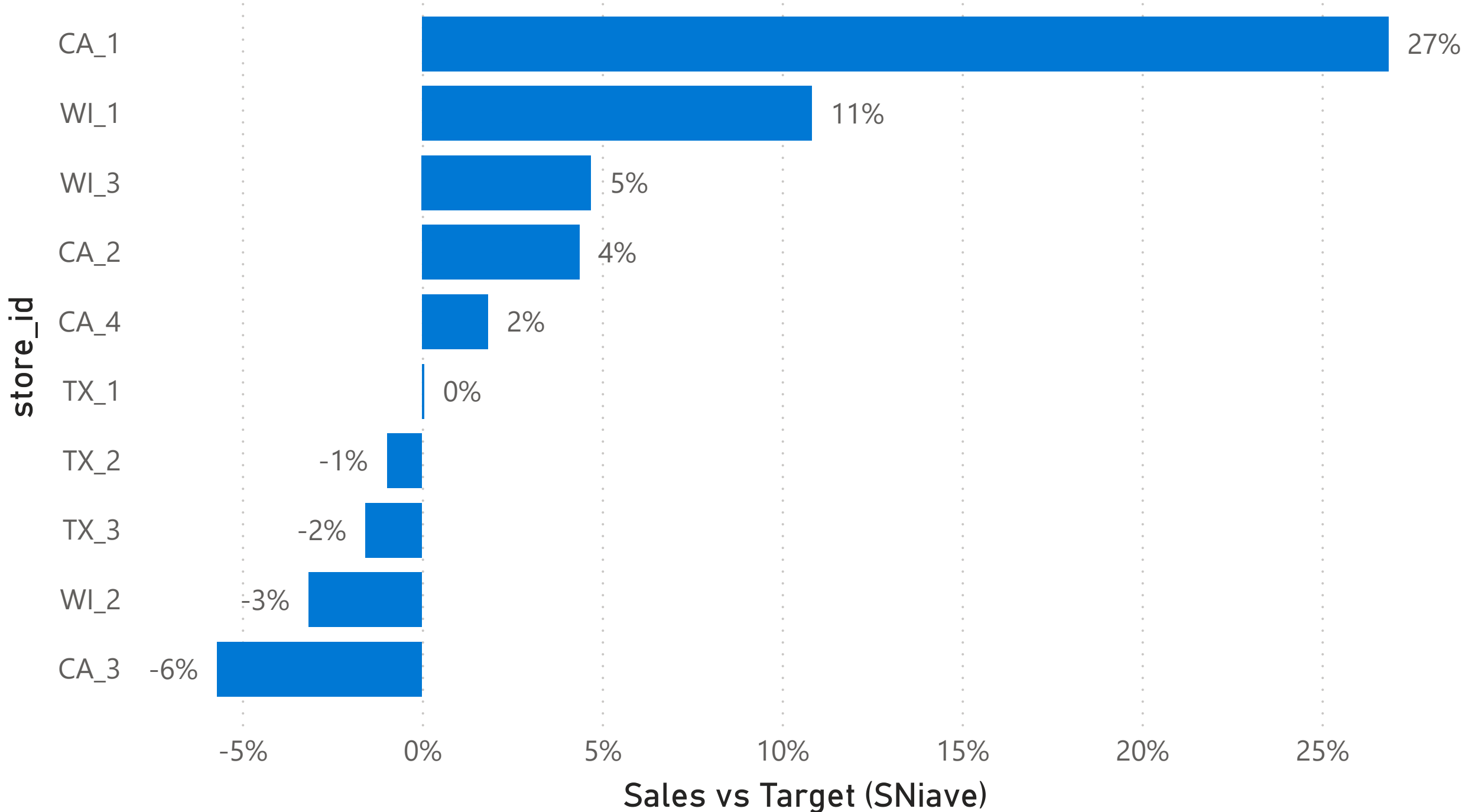
Rolling  
3M

Rolling  
6M

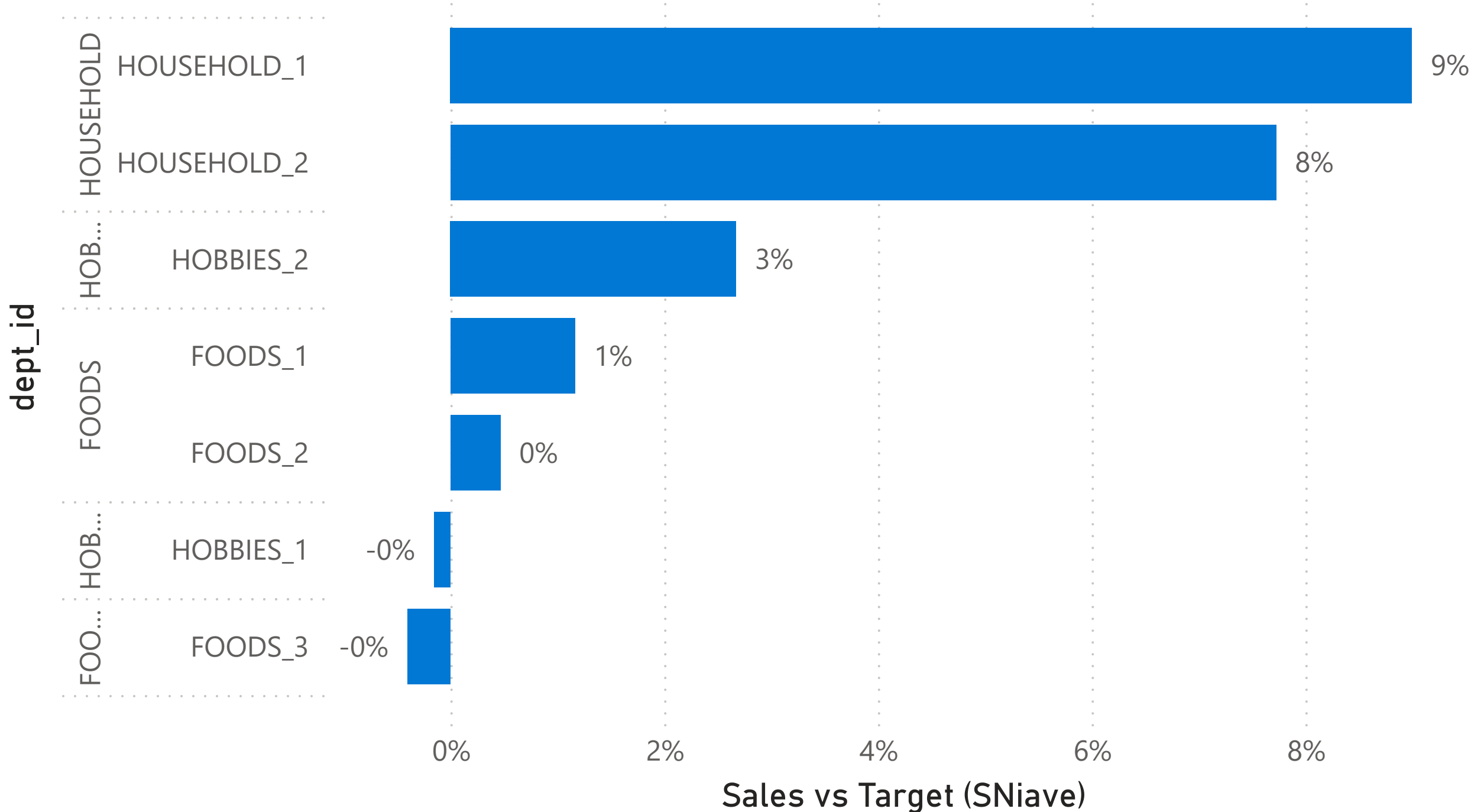
Sales to Target: Current Month, Current Year, Prior Month, Prior Year, Rolling 12M, Rolling 3M, Rolling 6M



Sales vs Target Performance by Store



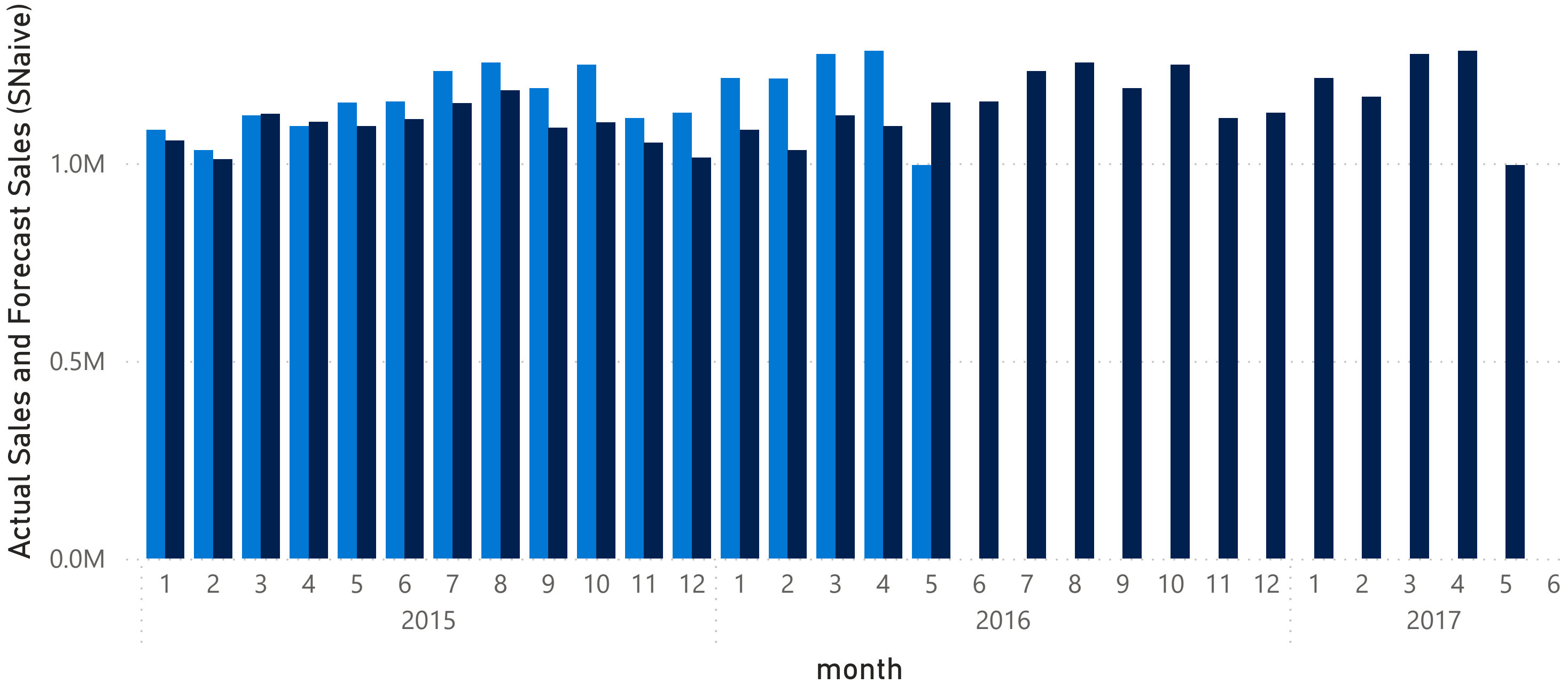
Sales vs Target Performance by Cat



cat_id	FOODS			HOBBIES			HOUSEHOLD			Total		
store_id	Sales vs Target (SNIave)	Actual Sales	Forecast Sales (SNaive)	Sales vs Target (SNIave)	Actual Sales	Forecast Sales (SNaive)	Sales vs Target (SNIave)	Actual Sales	Forecast Sales (SNaive)	Sales vs Target (SNIave)	Actual Sales	Forecast Sales (SNaive)
CA_3	-9%	1,700,599	1,875,082	-7%	548,933	590,501	3%	929,286	904,894	-6%	3,178,818	3,370,477
WI_3	2%	1,278,784	1,258,387	3%	312,646	302,176	12%	659,673	589,463	5%	2,251,103	2,150,026
WI_2	-6%	1,262,763	1,343,720	-2%	356,191	363,300	2%	629,598	614,445	-3%	2,248,552	2,321,465
TX_2	-4%	1,094,944	1,143,970	-0%	301,472	302,301	6%	544,293	513,362	-1%	1,940,709	1,959,633
CA_4	-0%	1,049,211	1,051,136	0%	299,714	299,538	7%	546,785	510,905	2%	1,895,710	1,861,579
CA_1	32%	975,274	739,367	13%	290,591	258,273	27%	562,218	443,420	27%	1,828,083	1,441,060
CA_2	4%	1,029,339	992,830	0%	258,998	257,762	8%	532,847	494,200	4%	1,821,184	1,744,792
WI_1	10%	1,010,220	918,765	9%	255,283	235,122	14%	489,240	429,313	11%	1,754,743	1,583,200
TX_3	-6%	873,000	927,597	-0%	264,262	265,063	7%	480,760	451,053	-2%	1,618,022	1,643,713
TX_1	-2%	689,787	707,117	1%	209,138	206,875	5%	347,373	331,806	0%	1,246,298	1,245,798
Total	0%	10,963,921	10,957,971	1%	3,097,228	3,080,911	8%	5,722,073	5,282,86	2%	19,783,22	19,321,743

Sales and Forecast by Month

Actual Sales Forecast Sales (SNaive)





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state\_id, store\_id

All

cat\_id, dept\_id, item\_id

All

year

All

\$192M

Total Sales \$

-0%

Sales \$ YoY%

67M

Actual Sales

0%

Sales YoY%

\$2.86

Average Selling Price

0%

ASP YoY%

3049

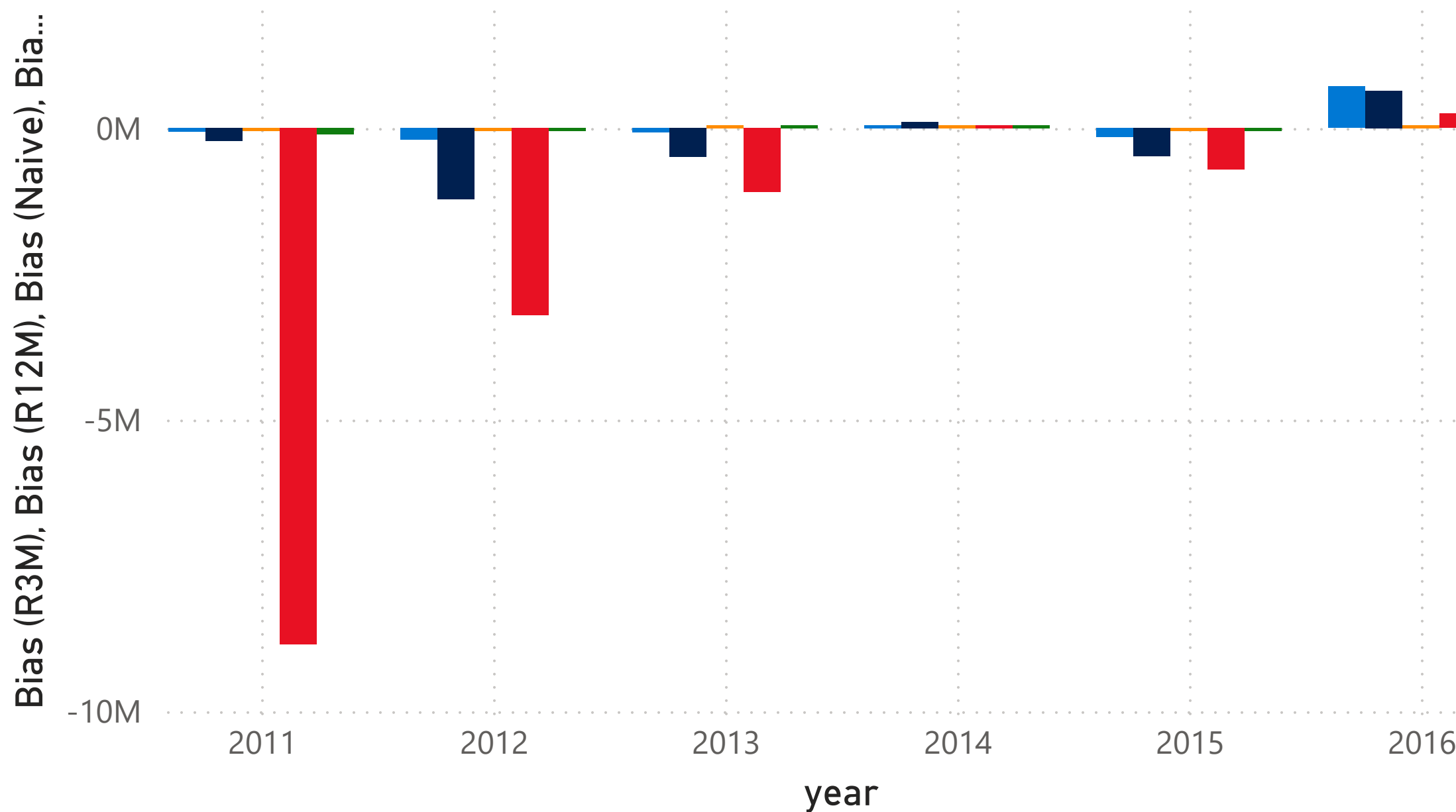
Distinct Products Sold

71.16M

Row Count

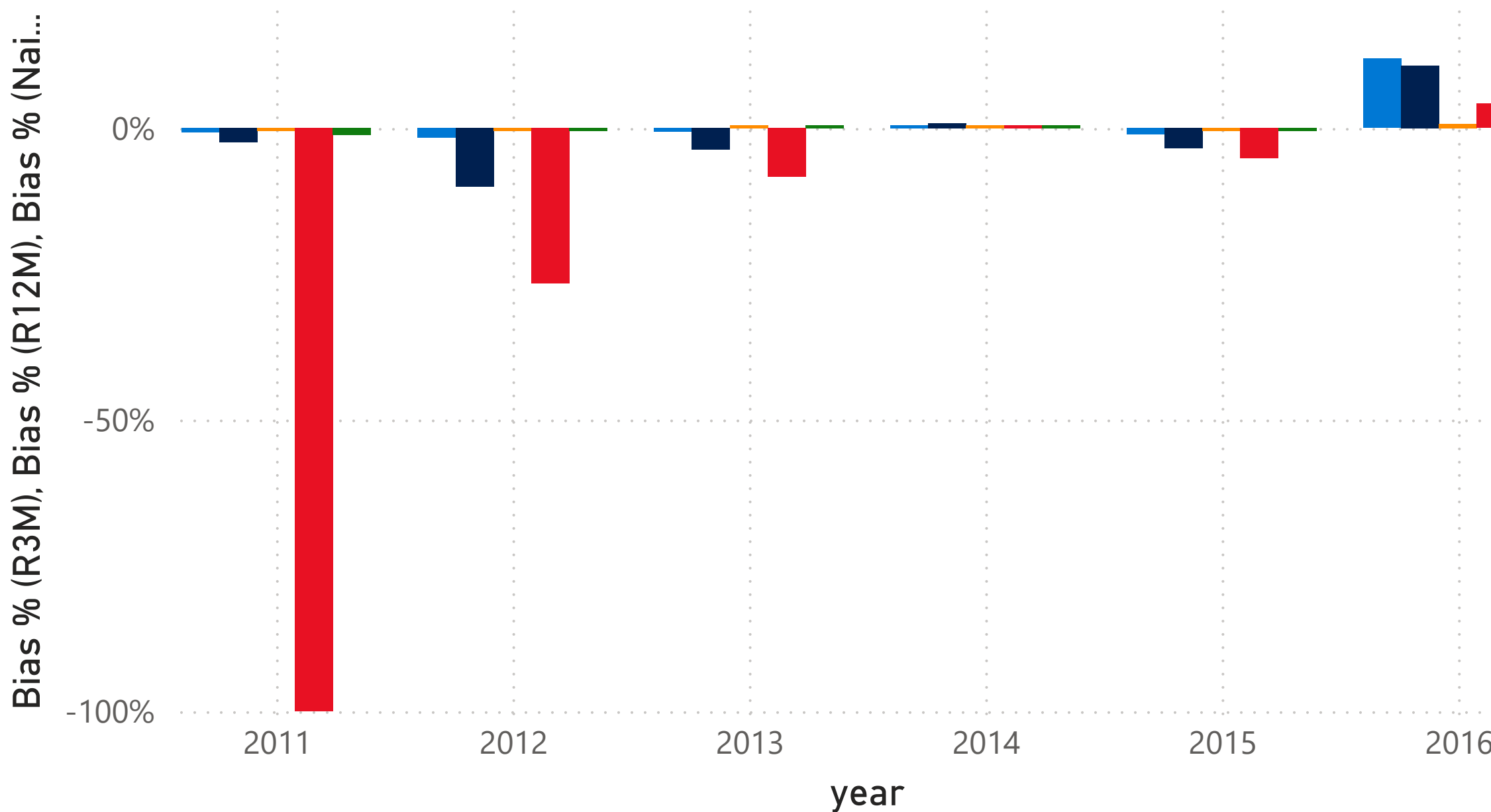
## BIAS

● Bias (R3M) ● Bias (R12M) ● Bias (Naive) ● Bias (SNaive) ● Bias (Drift)



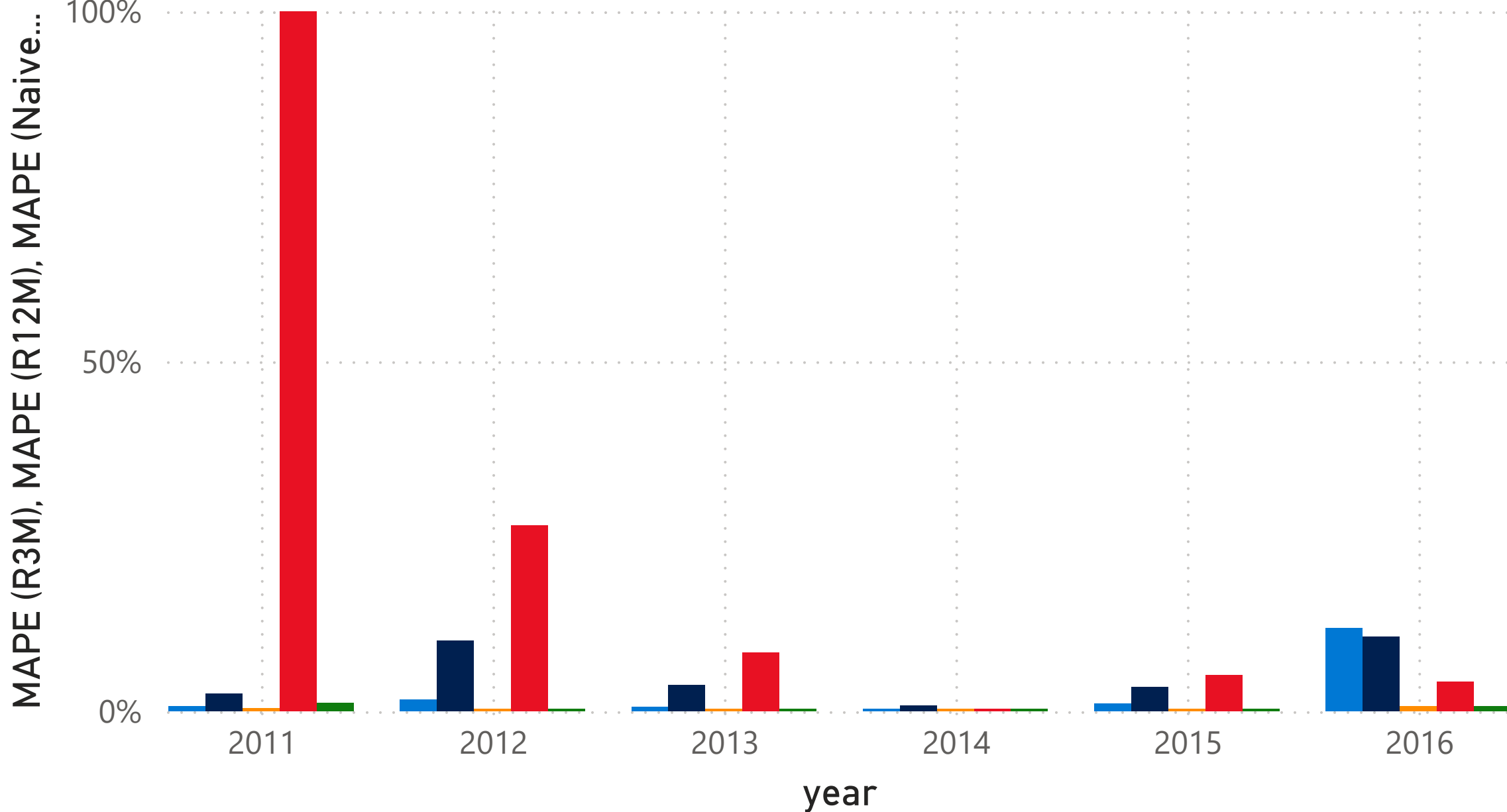
## BIAS %

● Bias % (R3M) ● Bias % (R12M) ● Bias % (Naive) ● Bias % (SNaive) ● Bias % (Drift)



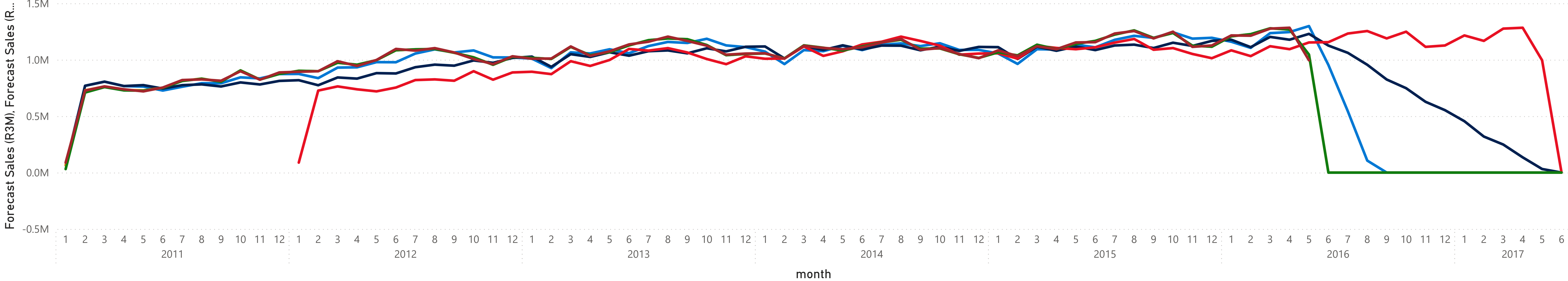
## MAPE

● MAPE (R3M) ● MAPE (R12M) ● MAPE (Naive) ● MAPE (SNaive) ● MAPE (Drift)



## Forecast Simulations

● Forecast Sales (R3M) ● Forecast Sales (R12M) ● Forecast Sales (Naive) ● Forecast Sales (SNaive) ● Forecast Sales (Drift) ● Actual Sales



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All

cat\_id, dept\_id, item\_id

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year

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Sales YoY%

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Average Selling Price

2%

ASP YoY%

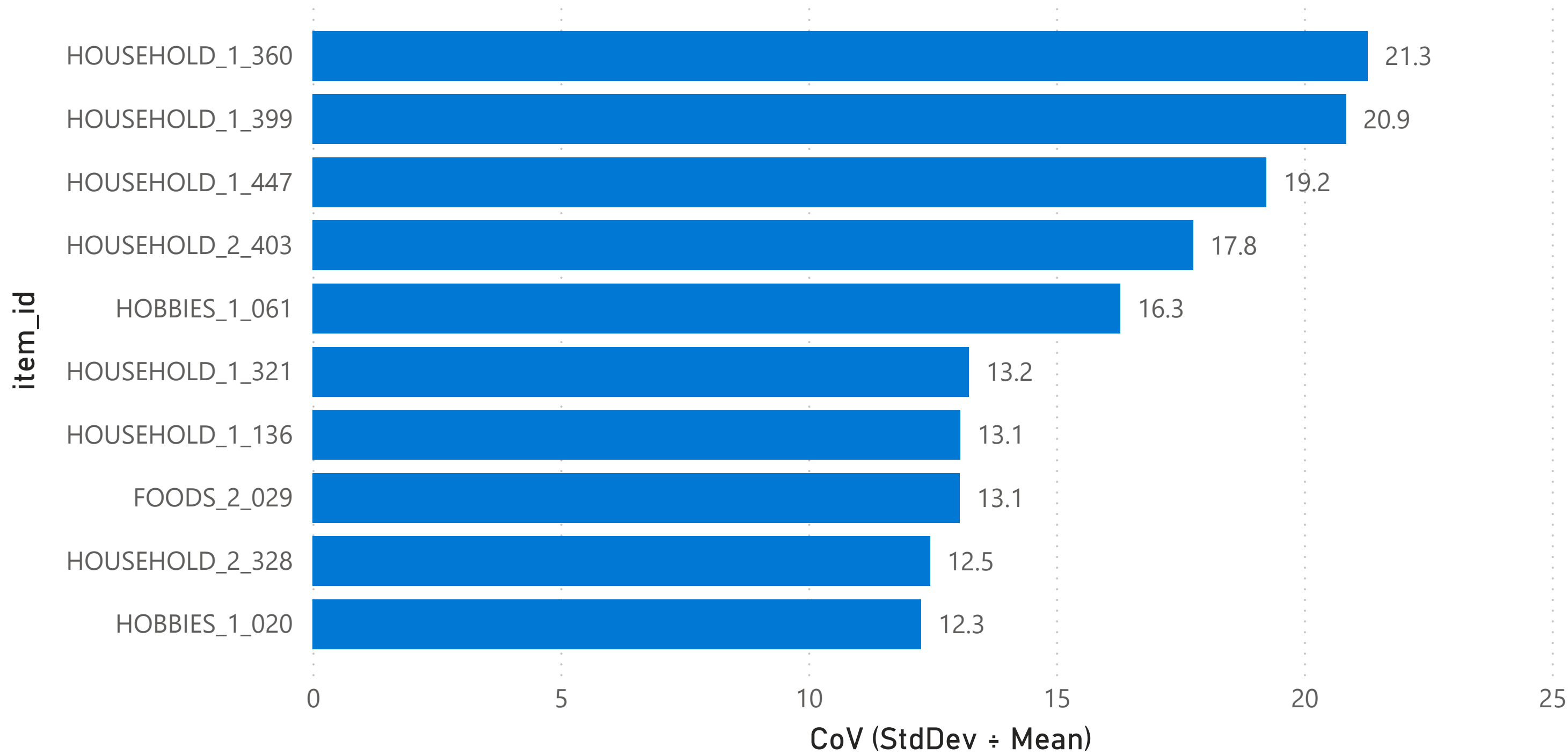
3049

Distinct Products Sold

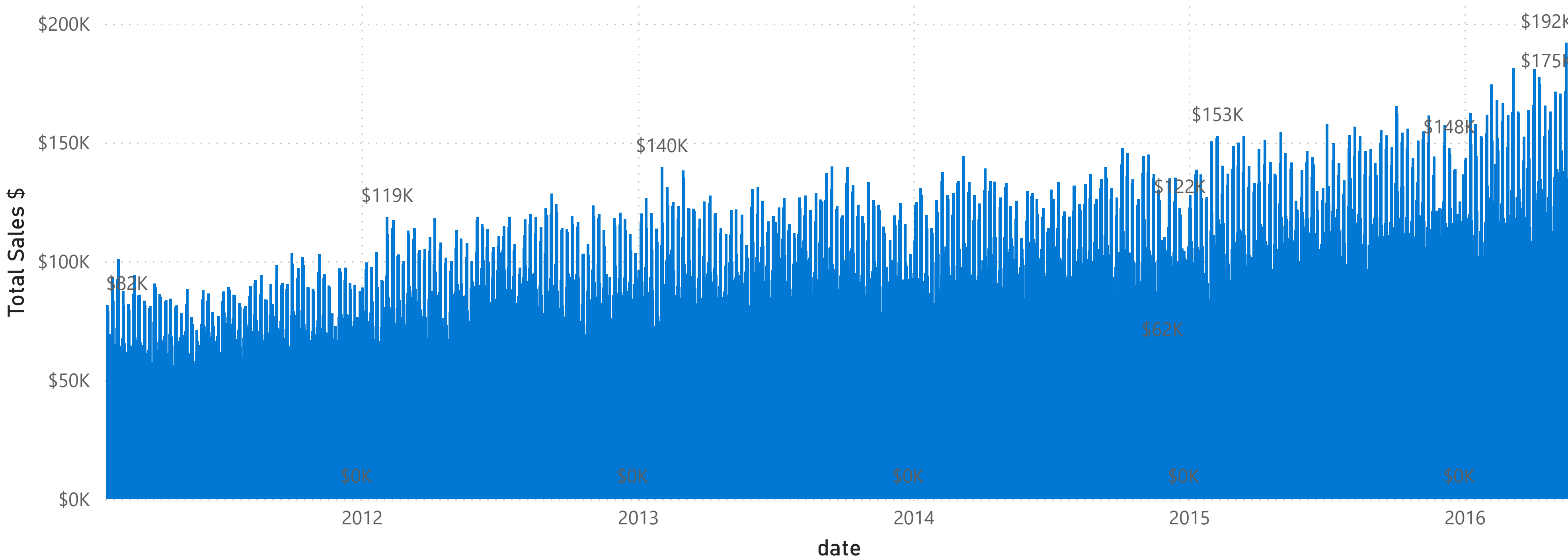
19M

Row Count

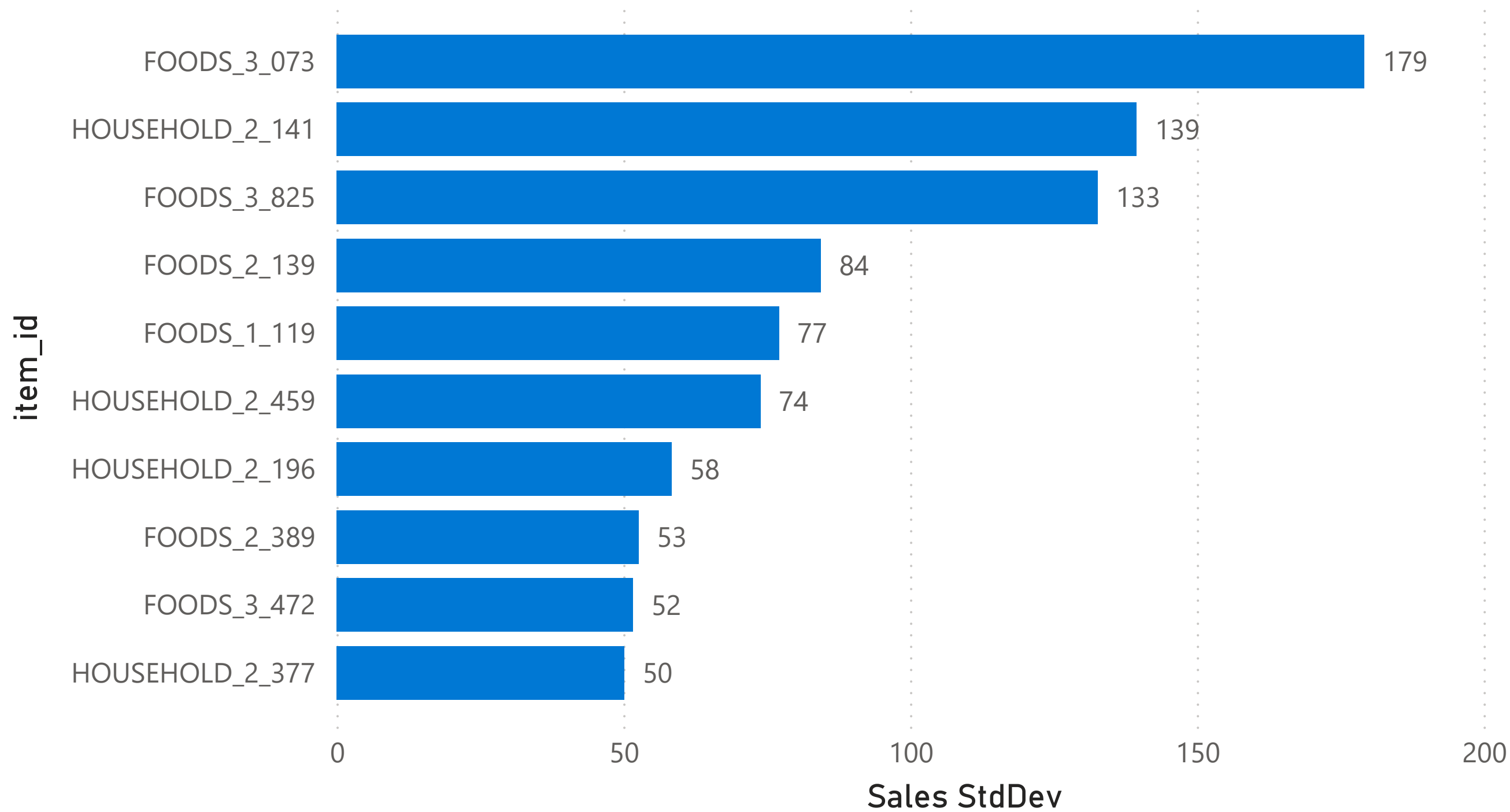
Top 10 most volatile sales by Product



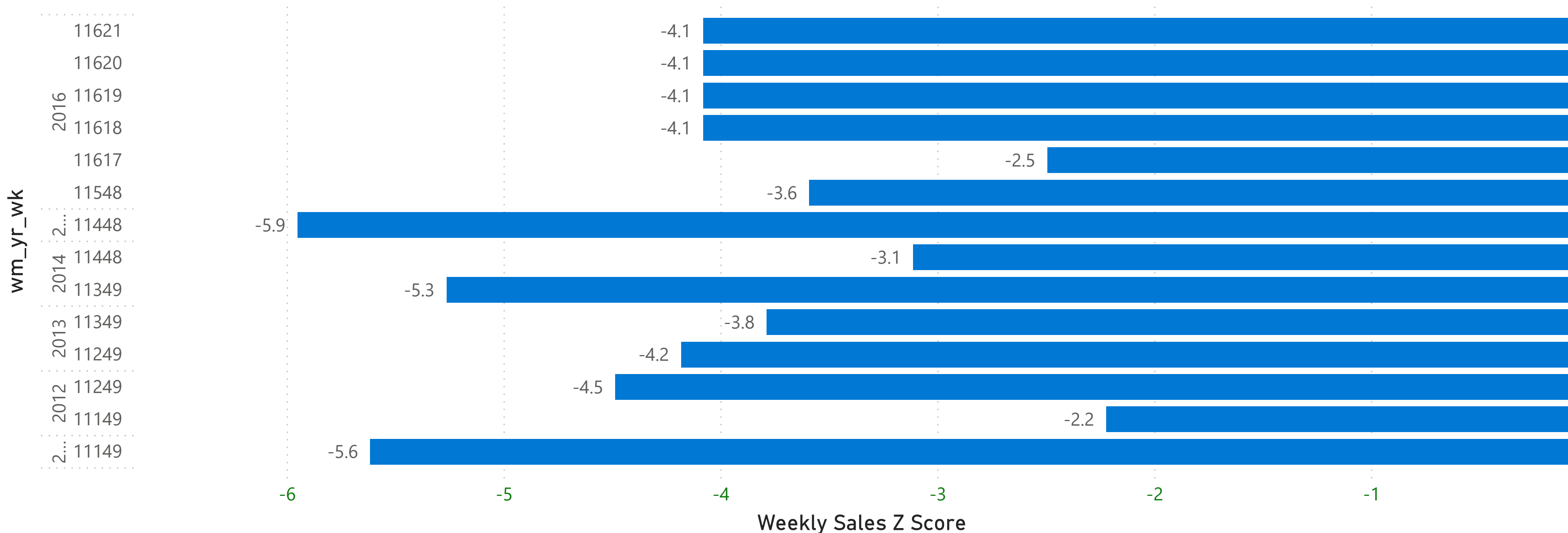
Sales by Week



Top 10 Products that have sales fluctuate from the average



Unusual Weeks (Z-score >2)



# WALMART SALES ANALYSIS

state\_id, store\_id

All

cat\_id, dept\_id, item\_id

All

result

All

layer

Select  
all

L0

L1

L2

result

Select all

FAIL

PASS

>

metric\_type

Select all

distinct\_count

dtype

max

min

null\_count

row\_count

sum

target\_table

Search

Select all

calendar

dim\_calendar

dim\_sell\_prices

l1\_sales

l2\_sales

l2\_sales\_long

sales\_train\_eval...

sales\_train\_valid...

sample\_submiss...

sell\_prices

column\_name

Search

Select all

--

cat id

d

d 1

d 10

d 100

d 1000

d 1001

d 1002

d 1003

d 1004

d 1005

d 1006

d 1007

d 1008

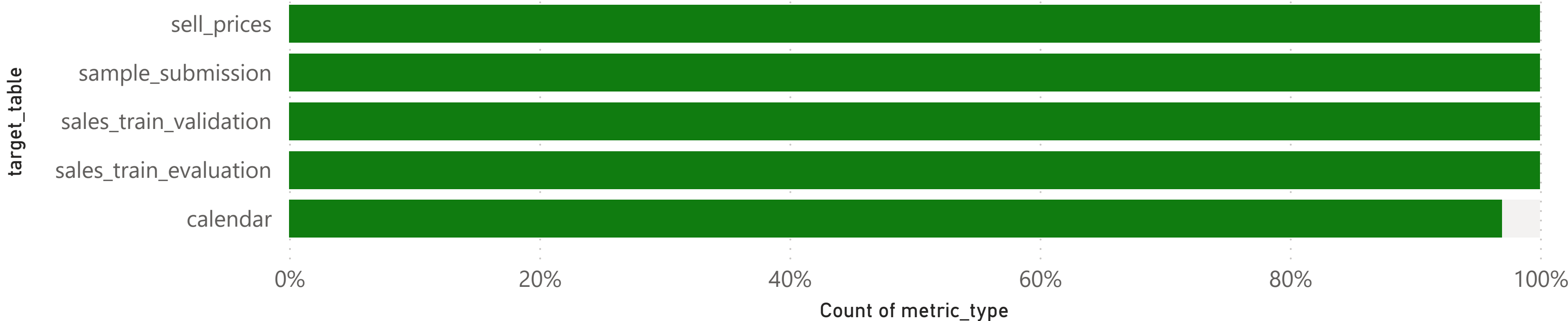
d 1009

d 101

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calendar.csv	L0	calendar	d	distinct_count	1969.0	1969.0	PASS
calendar.csv	L0	calendar	d	dtype	<NA>	<NA>	PASS
calendar.csv	L0	calendar	d	null_count	0.0	0.0	PASS
calendar.csv	L0	calendar	date	distinct_count	1969.0	1969.0	PASS
calendar.csv	L0	calendar	date	dtype	<NA>	<NA>	PASS
calendar.csv	L0	calendar	date	max		<NA>	SKIPPED
calendar.csv	L0	calendar	date	min		<NA>	SKIPPED
calendar.csv	L0	calendar	date	null_count	0.0	0.0	PASS
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calendar.csv	L0	calendar	event_name_2	dtype	<NA>	<NA>	PASS
calendar.csv	L0	calendar	event_name_2	null_count	1964.0	1964.0	PASS
calendar.csv	L0	calendar	event_type_1	distinct_count	4.0	4.0	PASS
calendar.csv	L0	calendar	event_type_1	dtype	<NA>	<NA>	PASS
calendar.csv	L0	calendar	event_type_1	null_count	1807.0	1807.0	PASS
calendar.csv	L0	calendar	event_type_2	distinct_count	2.0	2.0	PASS
calendar.csv	L0	calendar	event_type_2	dtype	<NA>	<NA>	PASS
calendar.csv	L0	calendar	event_type_2	null_count	1964.0	1964.0	PASS
calendar.csv	L0	calendar	month	distinct_count	12.0	12.0	PASS
calendar.csv	L0	calendar	month	dtype	<NA>	<NA>	PASS
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calendar.csv	L0	calendar	month	null_count	0.0	0.0	PASS
calendar.csv	L0	calendar	month	sum	12455.0	12455.0	PASS
calendar.csv	L0	calendar	snap_CA	distinct_count	2.0	2.0	PASS
calendar.csv	L0	calendar	snap_CA	dtype	<NA>	<NA>	PASS
calendar.csv	L0	calendar	snap_CA	max	1.0	1.0	PASS
calendar.csv	L0	calendar	snap_CA	min	0.0	0.0	PASS
calendar.csv	L0	calendar	snap_CA	null_count	0.0	0.0	PASS
calendar.csv	L0	calendar	snap_CA	sum	650.0	650.0	PASS
calendar.csv	L0	calendar	snap_TX	distinct_count	2.0	2.0	PASS
calendar.csv	L0	calendar	snap_TX	dtype	<NA>	<NA>	PASS
calendar.csv	L0	calendar	snap_TX	max	1.0	1.0	PASS

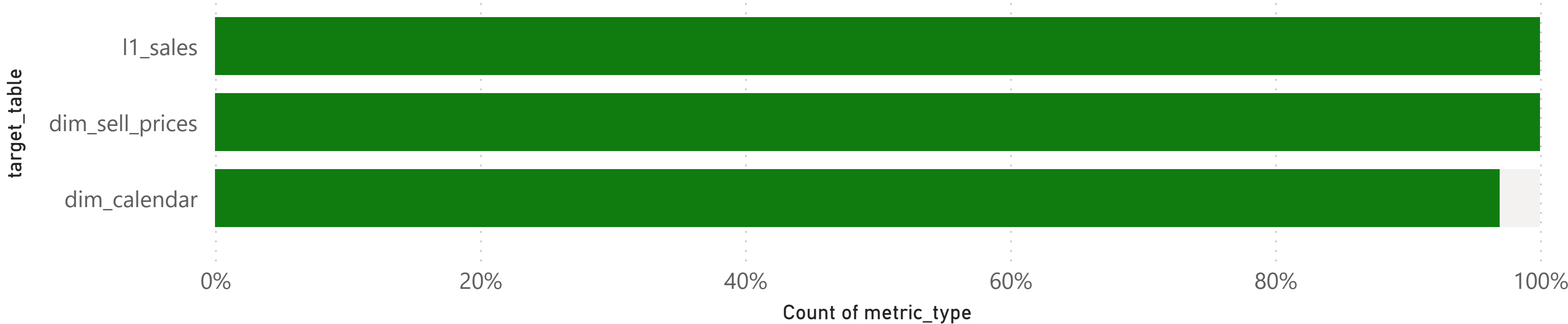
L0 DQ Tests Pass/Fail/Skipped

result ● PASS ● SKIPPED



L1 DQ Tests Pass/Fail/Skipped

result ● PASS ● SKIPPED



L2 DQ Tests Pass/Fail/Skipped

result ● FAIL ● PASS ● SKIPPED

