

## Issue # 7: Numerator Data - Descriptive Statistics 2021-2022

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This Write-up contains tables and plots for the descriptive analysis of the Numerator data. The original user-trip-item level data is transformed to user-month level data, with variables summarized at the monthly level for each user.

### 1. Tables

- FAH/FAFH department codes (less granular grouping) and soda category (more granular grouping) codes
- Number of users by state-year
- Demographics by treatment status
- Spending by treatment status
- Soda spending by treatment status
- Food and soda spending percentiles

### 2. Figures: Distribution of ...

- proportion of food spending out of total spending
- proportion of FAH/FAFH spending out of total food spending
- proportion of FAH/FAFH on SNAP out of SNAP spending
- soda spending/winsorized spending
- Proportion of soda spending out of total food spending
- proportion of soda on SNAP out of total SNAP spending
- proportion soda at home/away from home

Table 1: Food at Home vs. Food Away from Home Categories

<b>Food at Home</b>	<b>Food Away from Home</b>
Snack	Shelf Stable Meals
Canned	Deli & Prepared Foods
Dairy	LSR Beverages
Beverages	LSR Breakfast
Alcohol Beverages	LSR Snack & Sides
Packaged Bakery (Bread & Alternatives)	LSR Sauces & Condiments
Condiments	Resto Beverages
Frozen Foods	LSR Italian
Candy (Snacks)	LSR Sandwiches & Wraps
Meat	LSR Salads
Seafood & Fish	LSR Mexican
Breakfast	LSR Entrees
In-Store Bakery (Bread & Alternatives)	LSR Mexican
Herbs & Spices	
Balanced Nutrition and Snacks	
Cooking, Food & Beverages	
Cannabis Beverages	
Baking & Cooking	
Cake Supplies	
Kitchen & Dining	
Pasta & Noodles	
Beans & Grains	
Refrigerated Foods	

Table 2: Soda Categories

<b>Soda Category</b>
LSR Citrus & Berry Soda
Citrus & Berry Soda
Pepper & Skipper Soda
Club Soda
Root Beer & Cream Soda
LSR Pepper-Style Soda
LSR Root Beer & Cream Soda
Specialty & Natural Soda

Table 3: Number of Users in Affected and Unaffected States

State	2021	2022
Household affected in Jan 2026		
FL	20330	22440
IA	2740	3010
ID	1216	1329
IN	7044	7667
LA	3807	4144
NE	1805	1929
OK	3063	3333
UT	2137	2271
WV	2148	2330
Subtotal	44290	48453
Household affected after Jan 2026		
AK	520	554
CO	3993	4241
TX	22371	24203
Subtotal	26884	28998
Treated States	71174	77451
Control States	197911	214066
Total	269085	291517

Table 4: User-Month Panel - Demographics

	Treated States	Mean (SD) Control States	Total	Min	Max
Income	79528.40 (59444.77)	84913.28 (63529.06)	84028.03 (62907.51)	10000.00	275000.00
Household Size	2.94 (1.48)	2.99 (1.50)	2.98 (1.49)	1.00	7.00
Age	48.98 (12.87)	47.61 (12.68)	47.84 (12.72)	19.00	67.50
Married	0.58 (0.49)	0.56 (0.50)	0.57 (0.50)	0.00	1.00
Education (years)	13.82 (1.33)	13.87 (1.35)	13.86 (1.35)	10.00	16.00
White	0.76 (0.43)	0.69 (0.46)	0.71 (0.46)	0.00	1.00
Black	0.08 (0.27)	0.10 (0.30)	0.10 (0.30)	0.00	1.00
Asian	0.03 (0.16)	0.08 (0.26)	0.07 (0.25)	0.00	1.00
Hispanic	0.11 (0.31)	0.11 (0.31)	0.11 (0.31)	0.00	1.00
Ever Child	0.27 (0.44)	0.28 (0.45)	0.28 (0.45)	0.00	1.00
Number of States	9	42	51		
Number of Users	48,676	244,310	292,986		

*Notes:* NJ and NH have no data points. Income's 'less than 20000' category is coded as 10000, and 'more than 250000' is coded as 275000. Other income buckets are coded as the mean of a bucket. Education's 'advanced' category is coded as 16, and 'less than high school' is coded as 10.

Table 5: User-Month Panel - Spending

	Treated States	Mean (SD) Control States	Total	Min	Max
Food Spending	459.92 (489.99)	429.95 (495.03)	434.88 (494.33)	0.00	58273.02
Total Spending	1841.23 (1822.00)	1846.32 (1795.10)	1845.48 (1799.55)	0.00	141545.72
Prop. of Food Spending	0.28 (0.21)	0.26 (0.20)	0.26 (0.20)	0.00	1.00
Prop. of FAH Spending	0.93 (0.10)	0.93 (0.11)	0.93 (0.11)	0.00	1.00
Prop. of FAFH Spending	0.07 (0.10)	0.07 (0.11)	0.07 (0.11)	0.00	1.00
Prop of Food on EBT	0.44 (0.34)	0.44 (0.35)	0.44 (0.35)	0.00	1.00
Prop. of FAH on EBT	0.94 (0.11)	0.94 (0.12)	0.94 (0.12)	0.00	1.00
Prop. of FAFH on EBT	0.06 (0.11)	0.06 (0.12)	0.06 (0.12)	0.00	1.00
Ever SNAP	0.16 (0.36)	0.17 (0.37)	0.16 (0.37)	0.00	1.00
Number of States	9	42	51		
Number of Users	48,676	244,310	292,986		

*Notes:* Prop. of food spending is calculated out of total spending. Prop. of FAH/FAFH spending and food on SNAP is calculated out of total food spending. Prop. of FAH/FAFH on SNAP is calculated out of total SNAP spending. Means are calculated by averaging users' monthly spending/proportion, pooled over time and users. No winsorization.

Table 6: User-Month Panel - Soda Spending

	Treated States	Mean (SD) Control States	Total	Min	Max
Soda Spending	8.85 (24.63)	7.79 (22.98)	7.96 (23.26)	0.00	5606.84
Prop. of Soda Spending	0.02 (0.06)	0.02 (0.06)	0.02 (0.06)	0.00	1.00
Prop. of Soda FAH Spending	1.00 (0.01)	1.00 (0.01)	1.00 (0.01)	0.00	1.00
Prop. of Soda FAFH Spending	0.00 (0.01)	0.00 (0.01)	0.00 (0.01)	0.00	1.00
Prop of Soda on EBT	0.03 (0.09)	0.03 (0.09)	0.03 (0.09)	0.00	1.00
Prop of Soda on EBT out of Total Soda Spending	0.40 (0.43)	0.42 (0.44)	0.42 (0.44)	0.00	1.00
Number of Users	48,676	244,310	292,986		

*Notes:* Prop. of soda spending is calculated out of total food spending. Prop. of soda FAH/FAFH spending is calculated out of total food spending. Prop. of soda on SNAP is calculated out of total SNAP spending. Means are calculated by averaging users' monthly spending/proportion, pooled over time and users. No winsorization.

Table 7: User-Month Panel - Food Spending Percentiles

percentile	food <sub>s</sub> pending <sub>2021</sub>	food <sub>s</sub> pending <sub>2022</sub>
50%	268.86	315.68
60%	367.38	427.72
70%	491.90	568.80
80%	664.78	761.76
90%	954.44	1082.06
95%	1244.64	1402.10
96%	1339.42	1505.90
97%	1462.96	1641.62
98%	1643.02	1837.22
99%	1971.38	2198.54
99.5%	2348.42	2611.06
100%	58273.02	43549.92

Table 8: User-Month Panel - Soda Spending Percentiles

percentile	soda <sub>s</sub> pending <sub>2021</sub>	soda <sub>s</sub> pending <sub>2022</sub>
50%	0.00	0.00
60%	0.00	0.00
70%	3.38	4.00
80%	8.88	11.36
90%	22.00	26.76
95%	38.38	46.38
96%	44.40	53.50
97%	52.66	63.32
98%	65.60	78.34
99%	90.18	107.54
99.5%	118.54	140.40
100%	3920.88	5606.84

Figure 1: Proportion of Food Spending

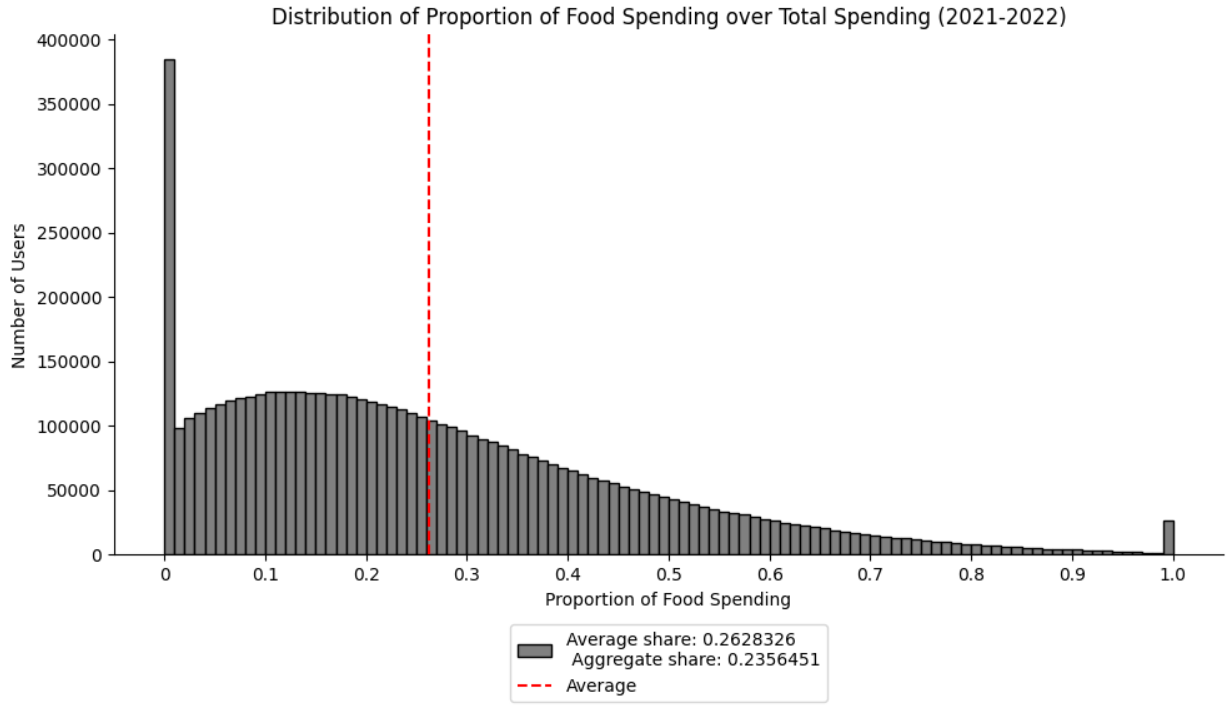


Figure 2: Proportion of FAH/FAFH Spending out of total food spending

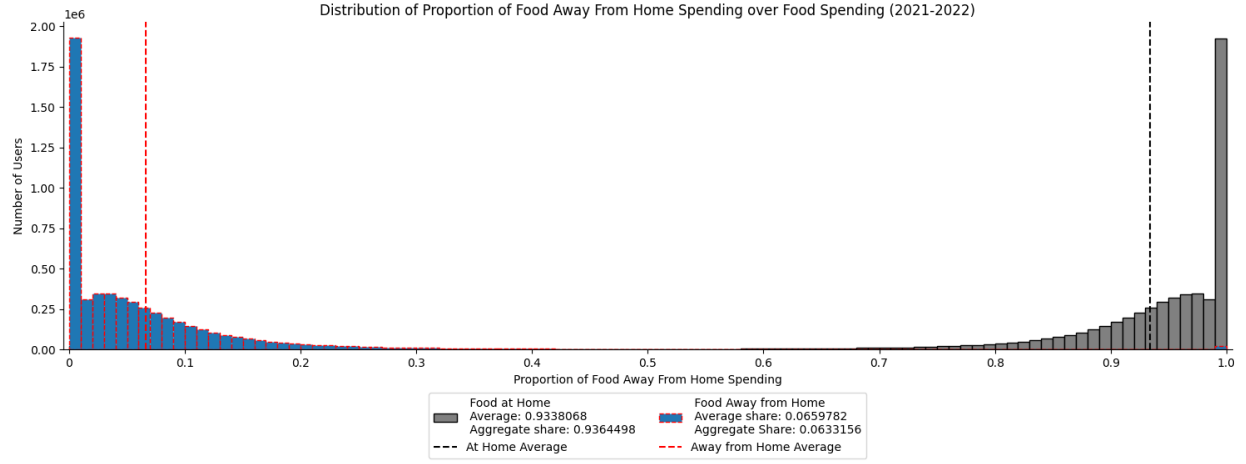
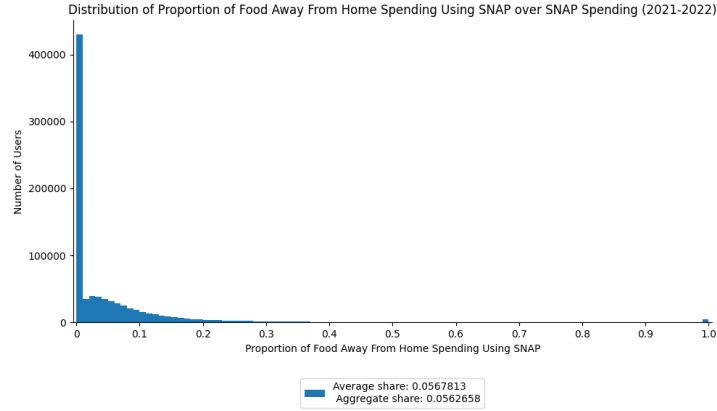


Figure 3: Proportion of FAH/FAFH SNAP Spending out of total SNAP spending

(a) Food Away



(b) Food at Home

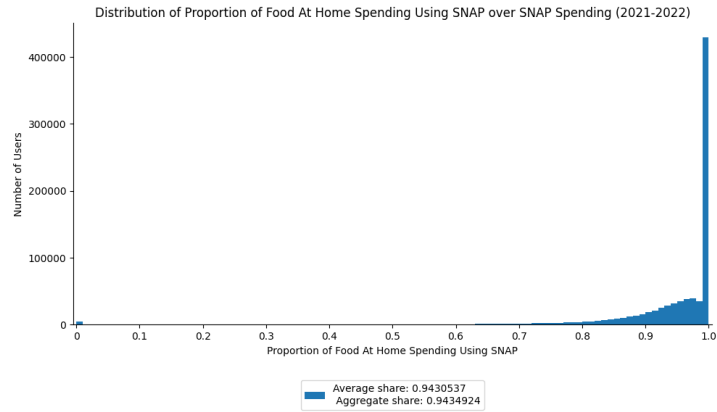
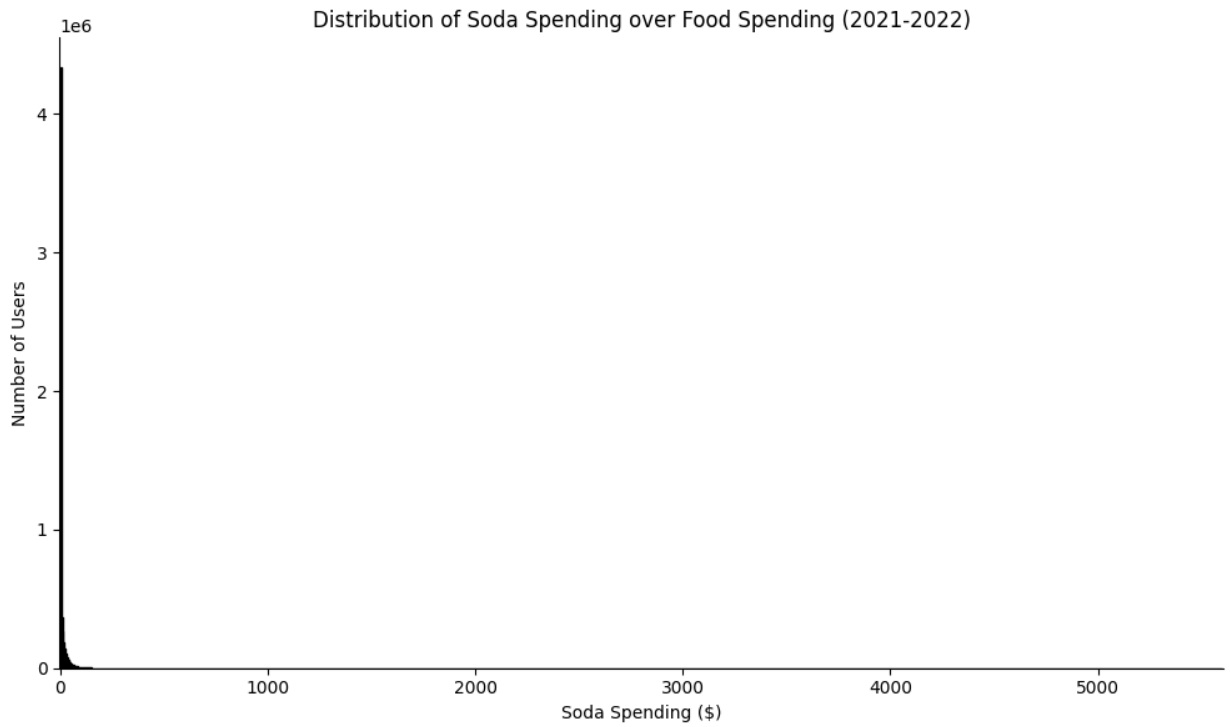




Figure 4: Soda Spending

(a) unwinsorized



(b) winsorized at 99.5%

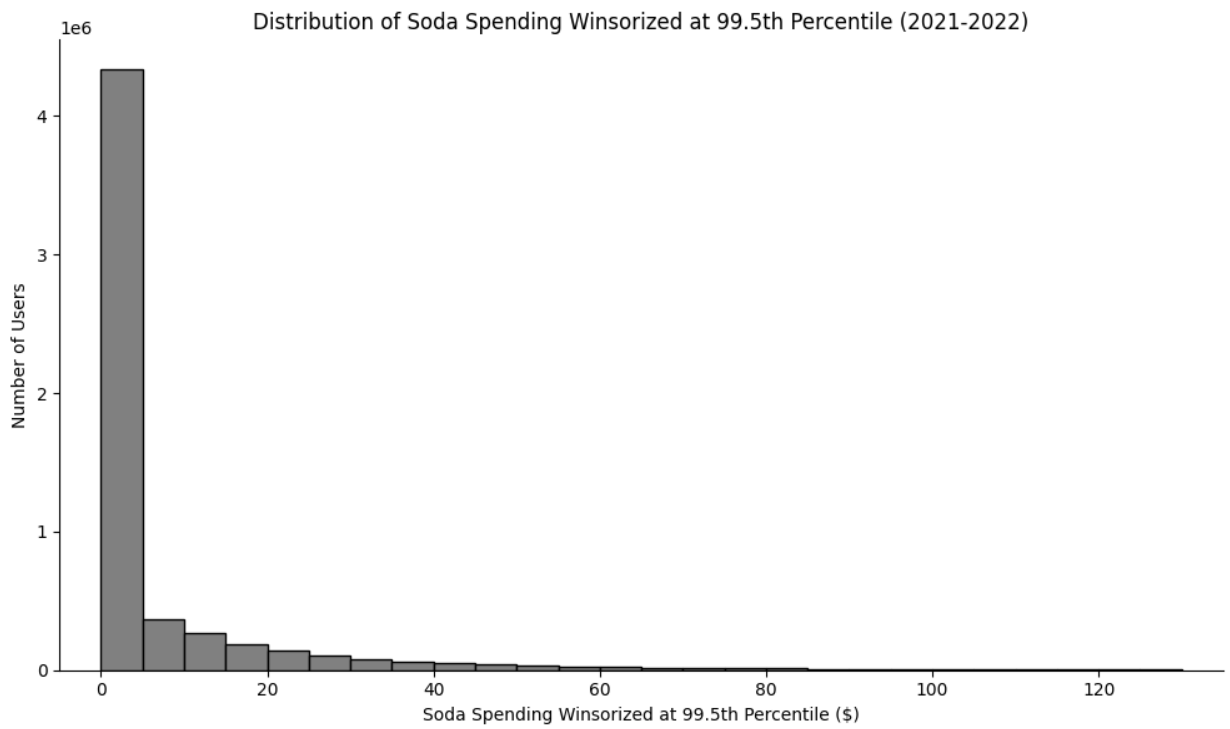


Figure 5: Proportion of Soda Spending out of total food spending

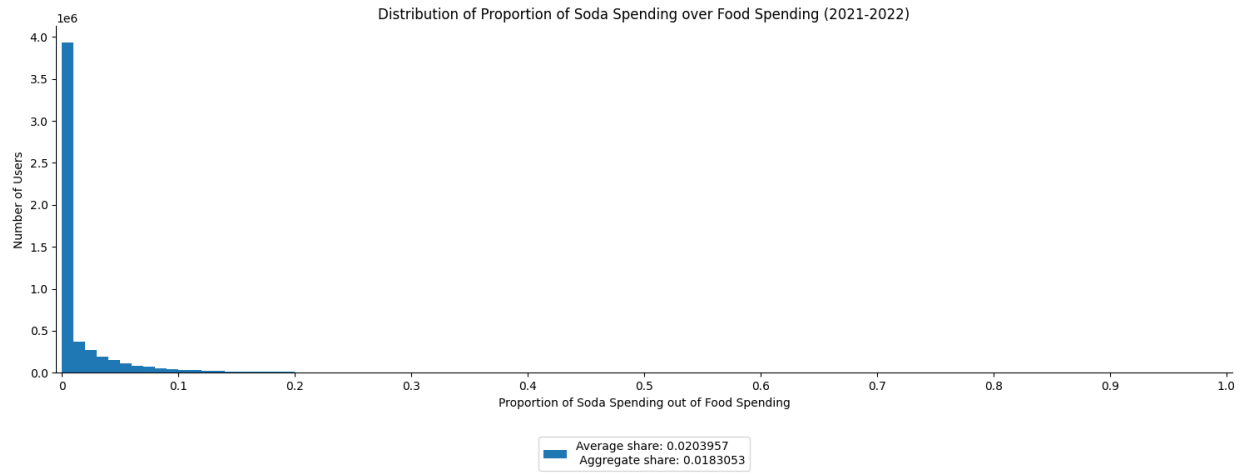


Figure 6: Proportion of Soda SNAP Spending out of total SNAP spending

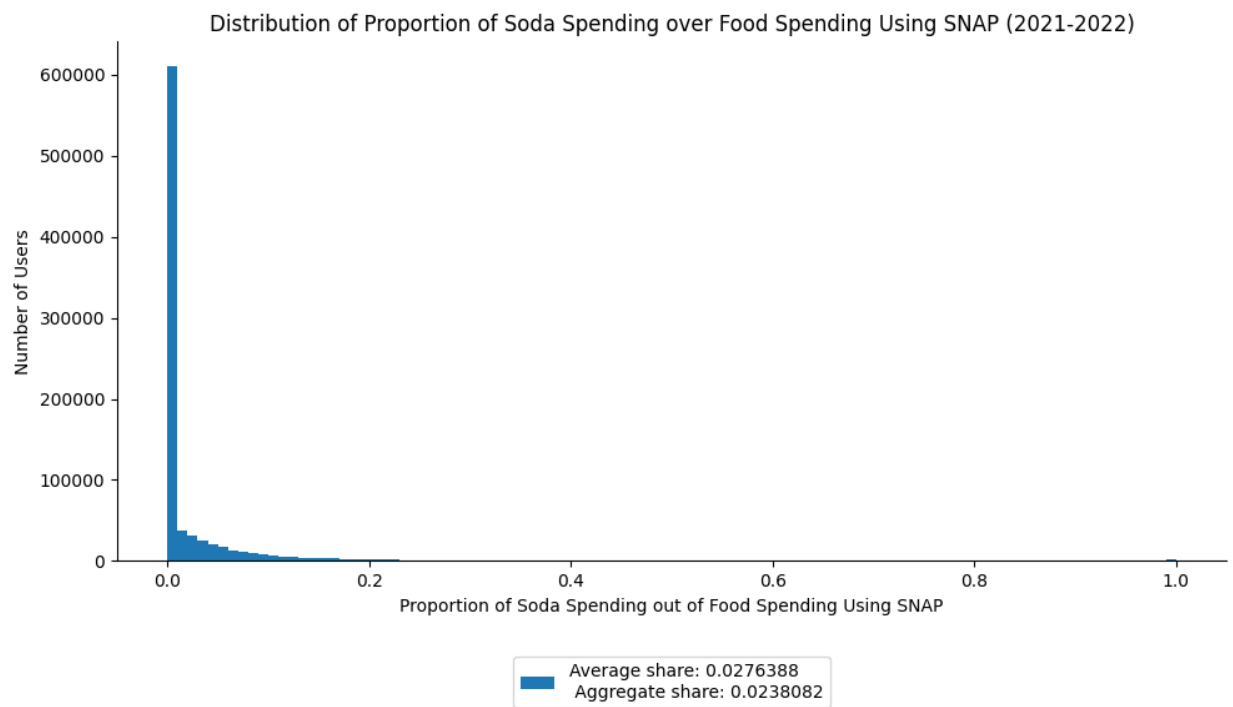


Figure 7: Proportion of Soda FAH/FAFH Spending out of total soda spending

