

Issue # 7: Numerator Data - Descriptive Statistics

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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

| Food at Home | Food Away from Home |
|--|----------------------------|
| 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

| Soda Category |
|----------------------------|
| 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 | 2023 | 2024 |
|-----------------------------------|--------|--------|
| Household affected in Jan 2026 | | |
| FL | 13497 | 13497 |
| IA | 1293 | 1293 |
| ID | 526 | 526 |
| IN | 3222 | 3222 |
| LA | 2297 | 2297 |
| NE | 968 | 968 |
| OK | 1554 | 1554 |
| UT | 1303 | 1303 |
| WV | 742 | 742 |
| Subtotal | 25402 | 25402 |
| Household affected after Jan 2026 | | |
| AK | 200 | 200 |
| CO | 983 | 983 |
| TX | 6854 | 6854 |
| Subtotal | 8037 | 8037 |
| Treated States | 33439 | 33439 |
| Control States | 78751 | 78751 |
| Total | 104153 | 104153 |

Table 4: User-Month Panel - Demographics

| | Treated States | Mean (SD) Control States | Total | Min | Max |
|-------------------|------------------------|-----------------------------|------------------------|----------|-----------|
| Income | 86616.46 (63565.00) | 90254.05 (65669.11) | 89815.25 (65429.60) | 10000.00 | 275000.00 |
| Household Size | 2.71 (1.44) | 2.82 (1.48) | 2.80 (1.47) | 1.00 | 7.00 |
| Age | 51.05 (13.80) | 49.07 (13.56) | 49.31 (13.61) | 19.00 | 67.00 |
| Married | 1.09 (0.74) | 1.01 (0.73) | 1.02 (0.73) | 0.00 | 3.00 |
| Education (years) | 13.88 (1.31) | 13.89 (1.35) | 13.89 (1.34) | 10.00 | 16.00 |
| White | 0.74 (0.44) | 0.68 (0.47) | 0.68 (0.46) | 0.00 | 1.00 |
| Black | 0.10 (0.30) | 0.11 (0.32) | 0.11 (0.31) | 0.00 | 1.00 |
| Asian | 0.03 (0.16) | 0.07 (0.25) | 0.06 (0.24) | 0.00 | 1.00 |
| Hispanic | 0.12 (0.32) | 0.13 (0.33) | 0.13 (0.33) | 0.00 | 1.00 |
| Ever Child | 0.22 (0.41) | 0.24 (0.43) | 0.24 (0.43) | 0.00 | 1.00 |
| Number of States | 9 | 39 | 48 | | |
| Number of Users | 25,402 | 185,387 | 210,789 | | |

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 | 628.52 (642.55) | 604.93 (668.94) | 607.78 (665.86) | 0.00 | 47053.16 |
| Total Spending | 2699.27 (2439.40) | 2676.77 (2474.50) | 2679.48 (2470.31) | 0.00 | 205170.24 |
| Prop. of Food Spending | 0.26 (0.18) | 0.25 (0.18) | 0.25 (0.18) | 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 SNAP | 0.05 (0.16) | 0.06 (0.18) | 0.05 (0.18) | 0.00 | 1.00 |
| Prop. of FAH on SNAP | 0.95 (0.12) | 0.94 (0.13) | 0.94 (0.13) | 0.00 | 1.00 |
| Prop. of FAFH on SNAP | 0.05 (0.12) | 0.06 (0.13) | 0.06 (0.13) | 0.00 | 1.00 |
| Ever SNAP | 0.14 (0.35) | 0.16 (0.37) | 0.16 (0.37) | 0.00 | 1.00 |
| Number of States | 9 | 39 | 48 | | |
| Number of Users | 25,402 | 185,387 | 210,789 | | |

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 | 11.20 (30.34) | 11.09 (30.89) | 11.10 (30.83) | 0.00 | 2890.20 |
| Prop. of Soda Spending | 0.02 (0.05) | 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 SNAP | 0.03 (0.09) | 0.03 (0.10) | 0.03 (0.10) | 0.00 | 1.00 |
| Number of Users | 25,402 | 185,387 | 2,306,511 | | |

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 | 2023 | 2024 |
|------------|----------|----------|
| 50% | 402.14 | 449.12 |
| 60% | 524.58 | 594.48 |
| 70% | 675.64 | 780.08 |
| 80% | 879.68 | 1044.40 |
| 90% | 1217.60 | 1519.16 |
| 95% | 1555.54 | 2038.26 |
| 96% | 1665.16 | 2216.93 |
| 97% | 1807.32 | 2457.08 |
| 98% | 2013.34 | 2809.41 |
| 99% | 2392.08 | 3452.33 |
| 99.5% | 2823.00 | 4147.73 |
| 100% | 34672.40 | 47053.16 |

Table 8: User-Month Panel - Soda Spending Percentiles

| percentile | 2023 | 2024 |
|------------|---------|---------|
| 50% | 0.00 | 0.00 |
| 60% | 0.00 | 0.00 |
| 70% | 4.56 | 4.56 |
| 80% | 13.28 | 14.56 |
| 90% | 31.38 | 37.16 |
| 95% | 52.94 | 65.52 |
| 96% | 61.08 | 75.96 |
| 97% | 71.90 | 90.04 |
| 98% | 88.72 | 113.82 |
| 99% | 120.60 | 159.40 |
| 99.5% | 156.58 | 212.30 |
| 100% | 1909.32 | 2890.20 |

Figure 1: Proportion of Food Spending

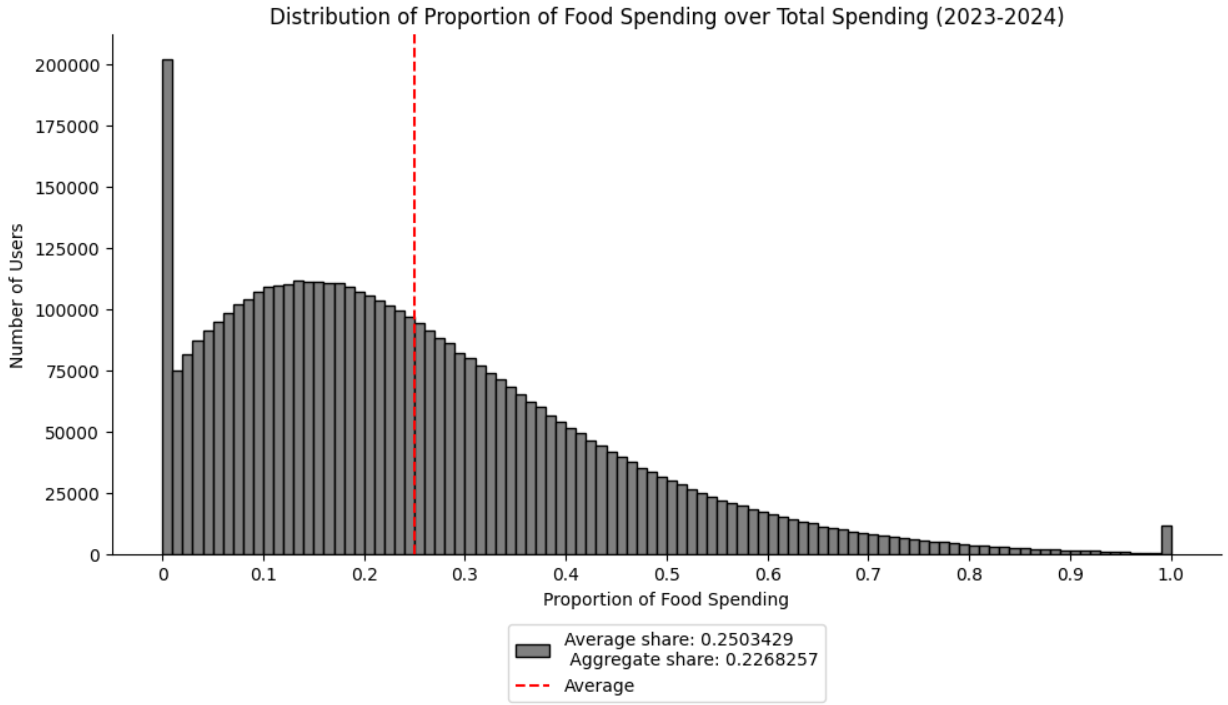


Figure 2: Proportion of FAH/FAFH Spending out of total food spending

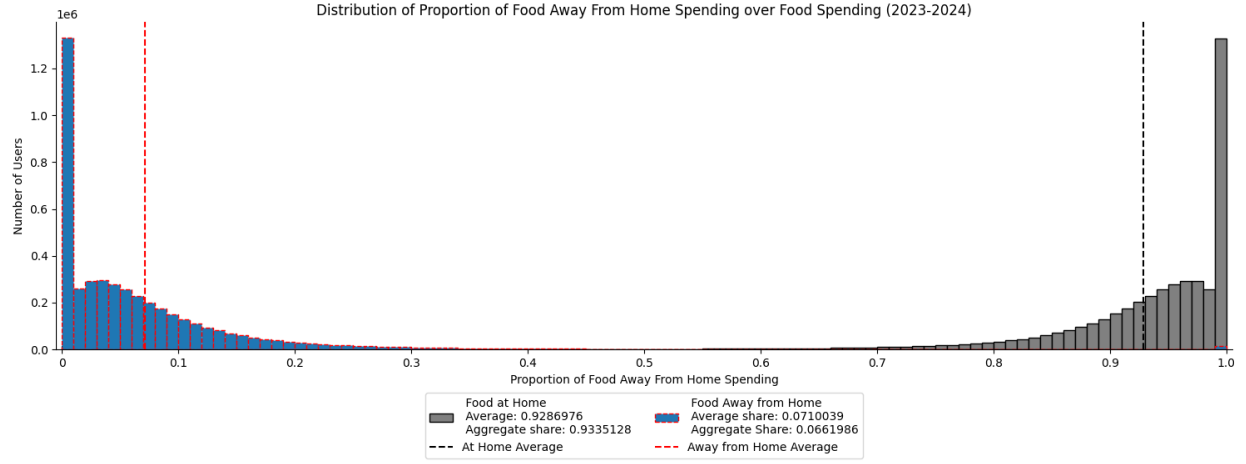
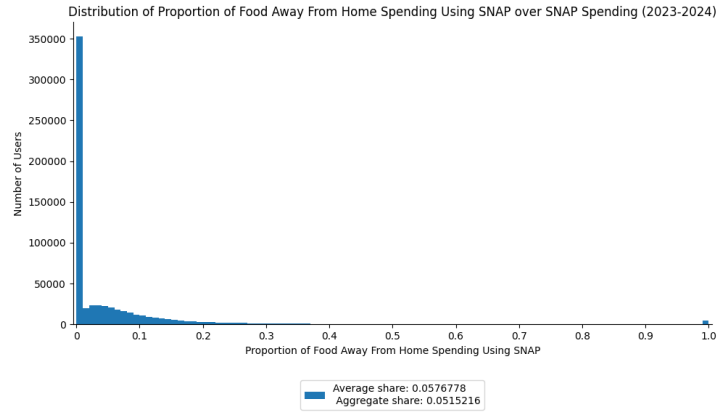


Figure 3: Proportion of FAH/FAFH SNAP Spending out of total SNAP spending

(a) Food Away



(b) Food at Home

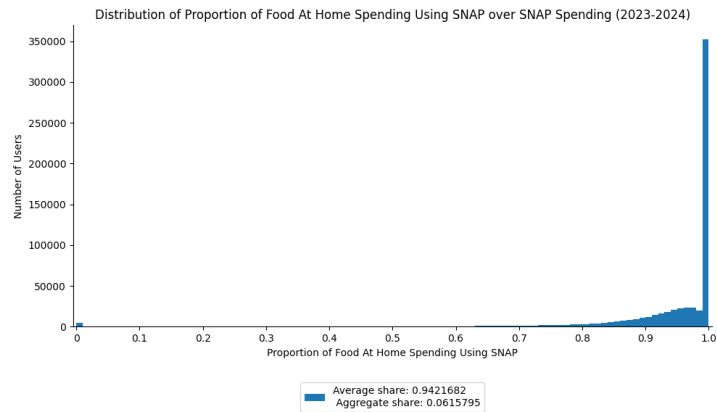
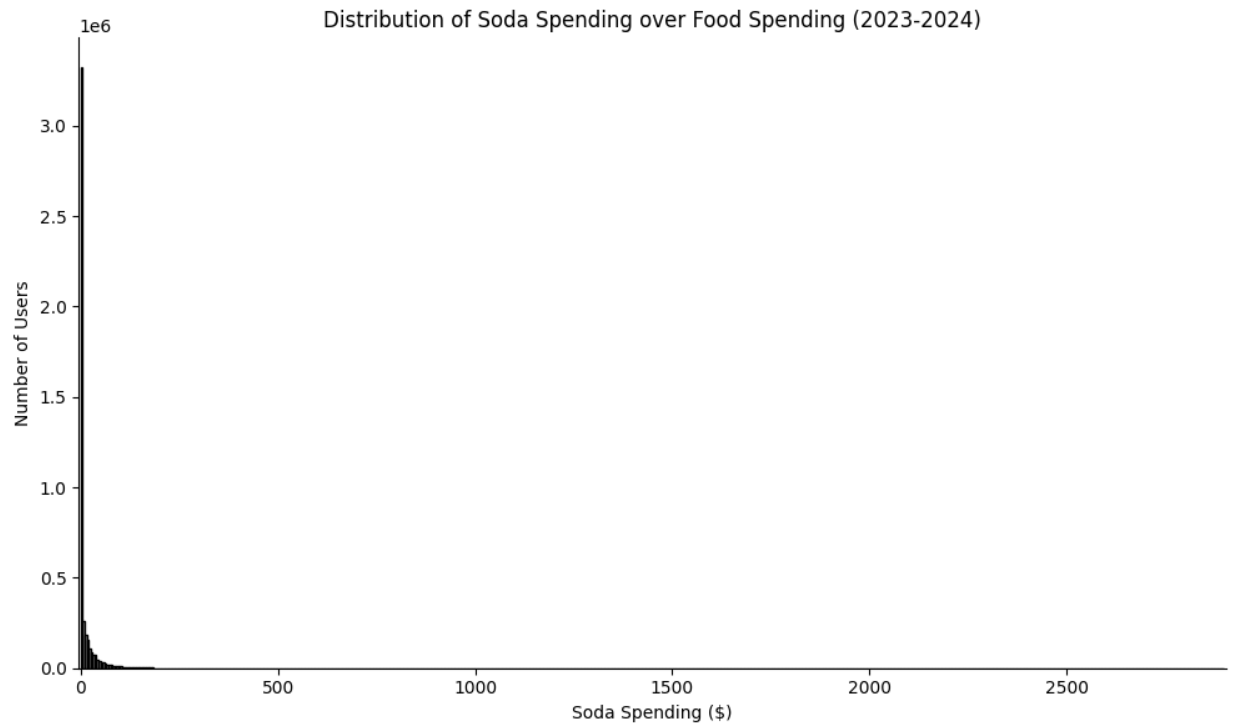


Figure 4: Soda Spending

(a) unwinsorized



(b) winsorized at 99.5%



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

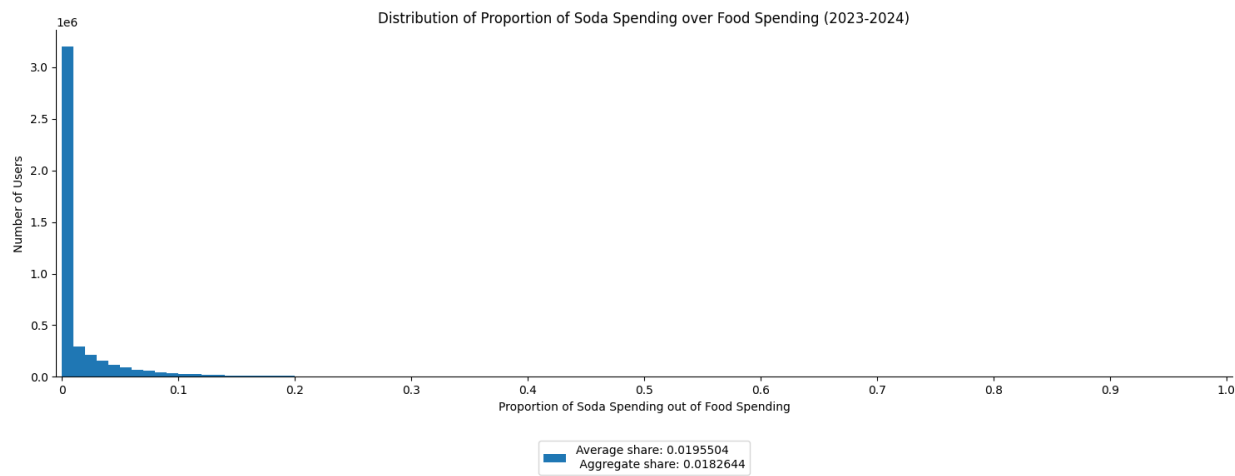


Figure 6: Proportion of Soda SNAP Spending out of total SNAP spending

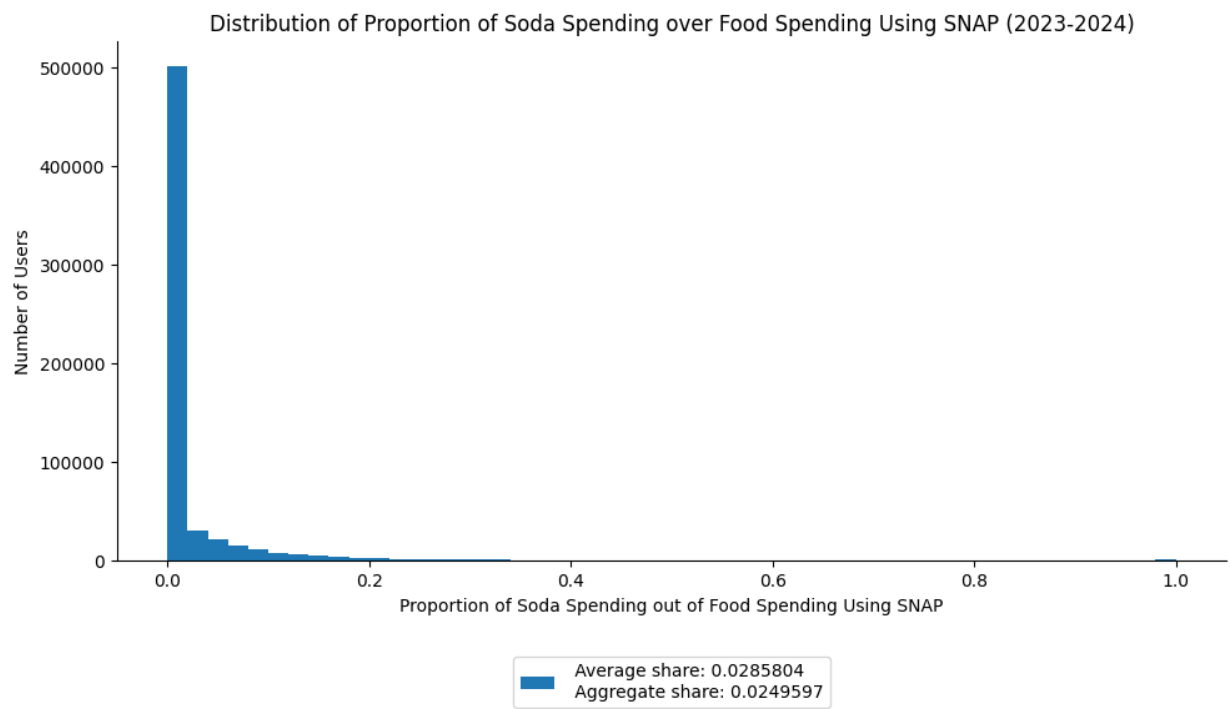


Figure 7: Proportion of Soda FAH/FAFH Spending out of total soda spending

