

Closing the Gap: Measuring Food Insecurity in the Capital Area

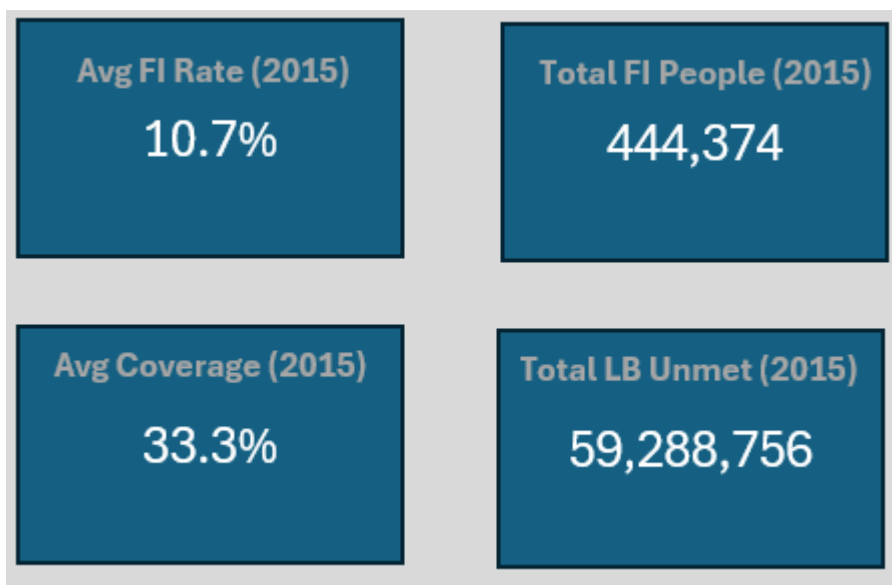
An Excel dashboard analysis for DC, Maryland, and Virginia (2014–2015). Dataset provided by Downtown Evening Soup Kitchen (DESK), New Haven, CT.

Executive Summary

In 2015 the region faced an estimated **93,318,521 lb** of food need, with **34,029,765 lb** distributed and **59,288,756 lb** unmet. The average tract-level food insecurity rate was **10.7%**, and average coverage (distributed ÷ needed) was **33.3%**. A Top-15 list of census tracts by unmet pounds highlights hotspots for priority action.

2015 KPI Snapshot

- Avg FI Rate (2015): **10.7%**
- Total FI People (2015): **444,374**
- Avg Coverage (2015): **33.3%**
- Total LB Unmet (2015): **59,288,756**



Data & Method

- Tract-level CAFB hunger estimates for 2014 & 2015 loaded to Excel.
 - **2014 Pounds Needed** reconstructed as **Distributed + Unmet** (not present in source).
 - **Coverage = Distributed / Needed.**
 - Two PivotTables drive the visuals: state rollup and Top-15 unmet tracts.
 - A filled map summarizes 2015 coverage by state.
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Charts

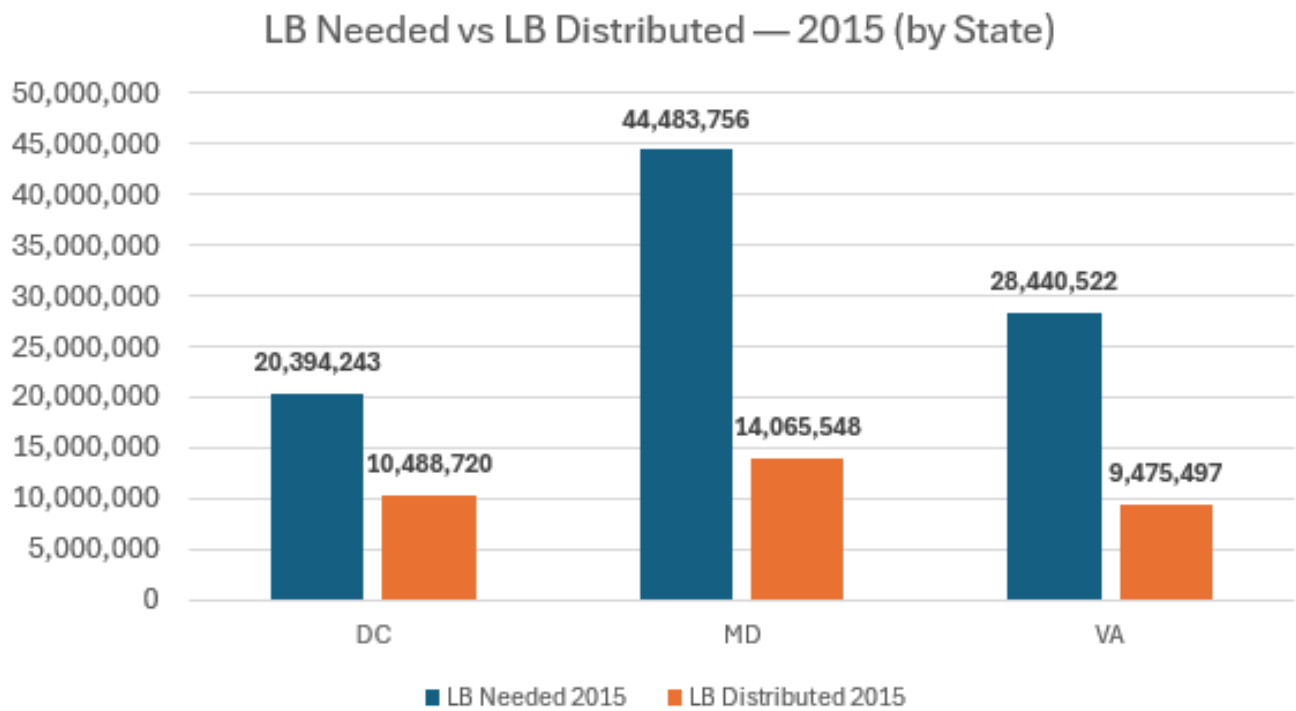


Chart 1 — LB Needed vs LB Distributed — 2015 (by State)

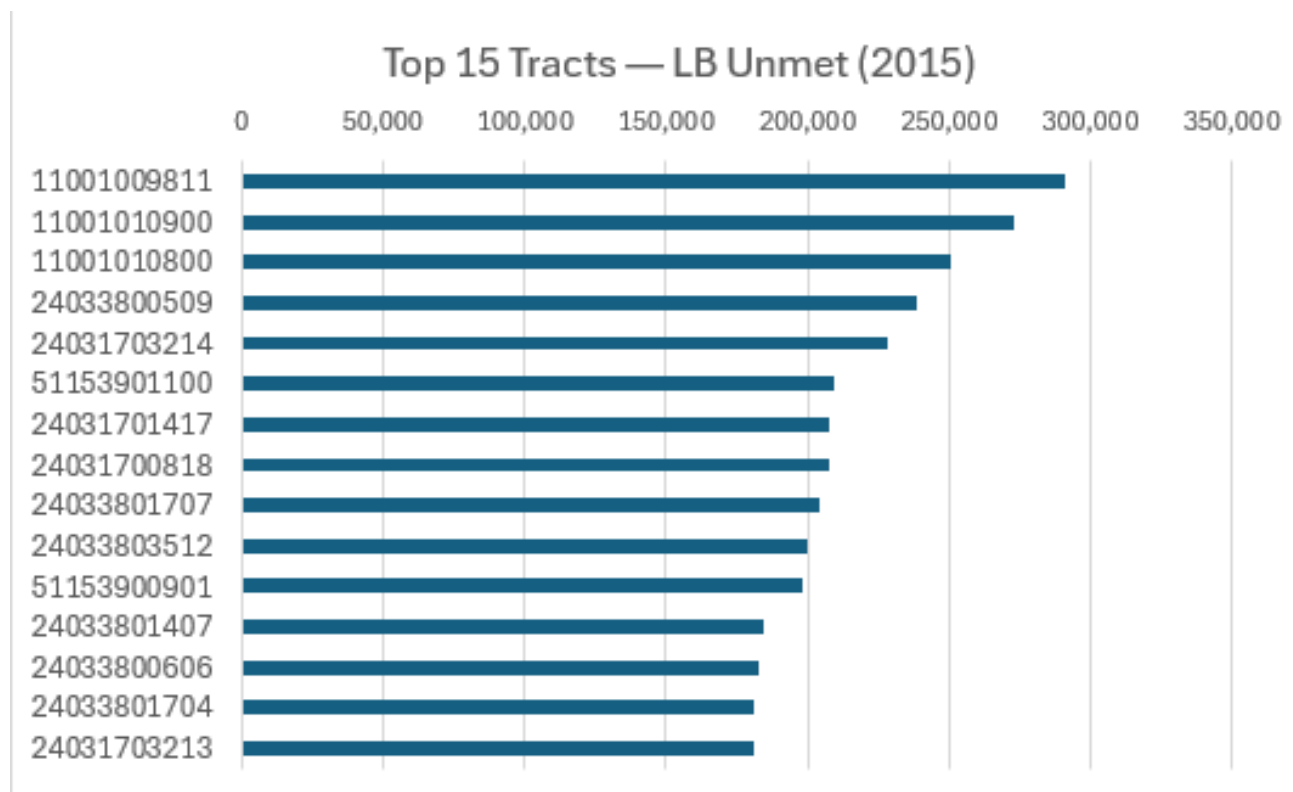


Chart 2 — Top 15 Tracts — LB Unmet (2015)

Coverage by State — 2014 vs 2015

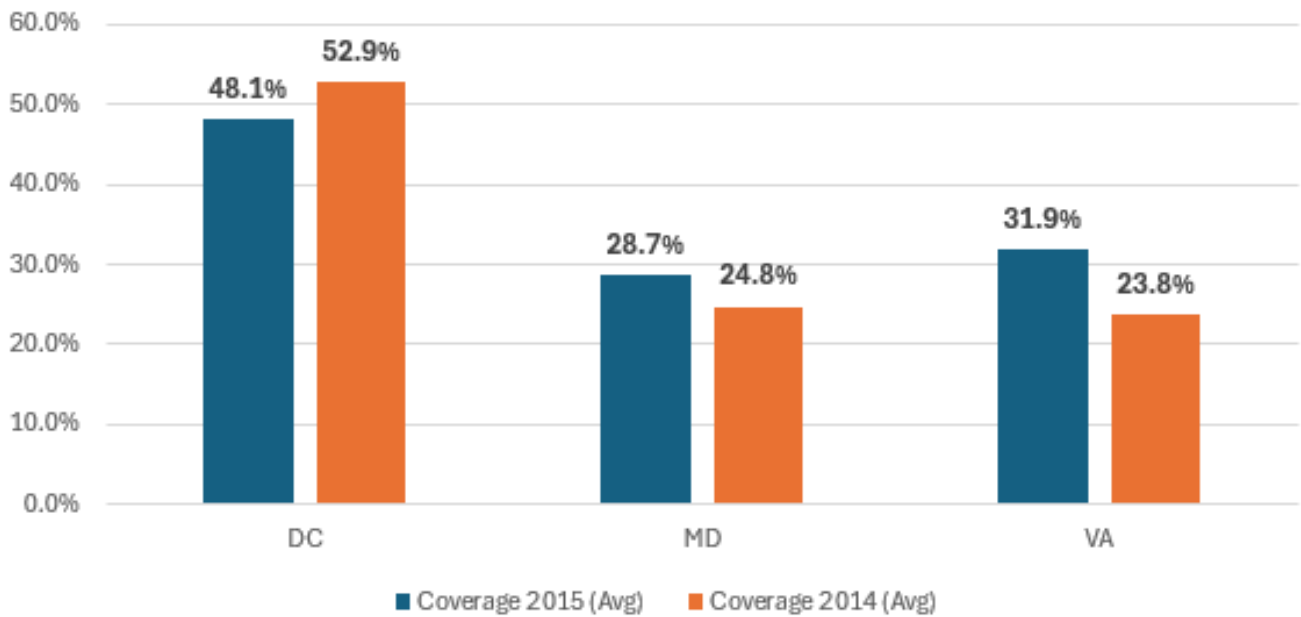


Chart 3 — Coverage by State — 2014 vs 2015

Coverage % (2015) by State

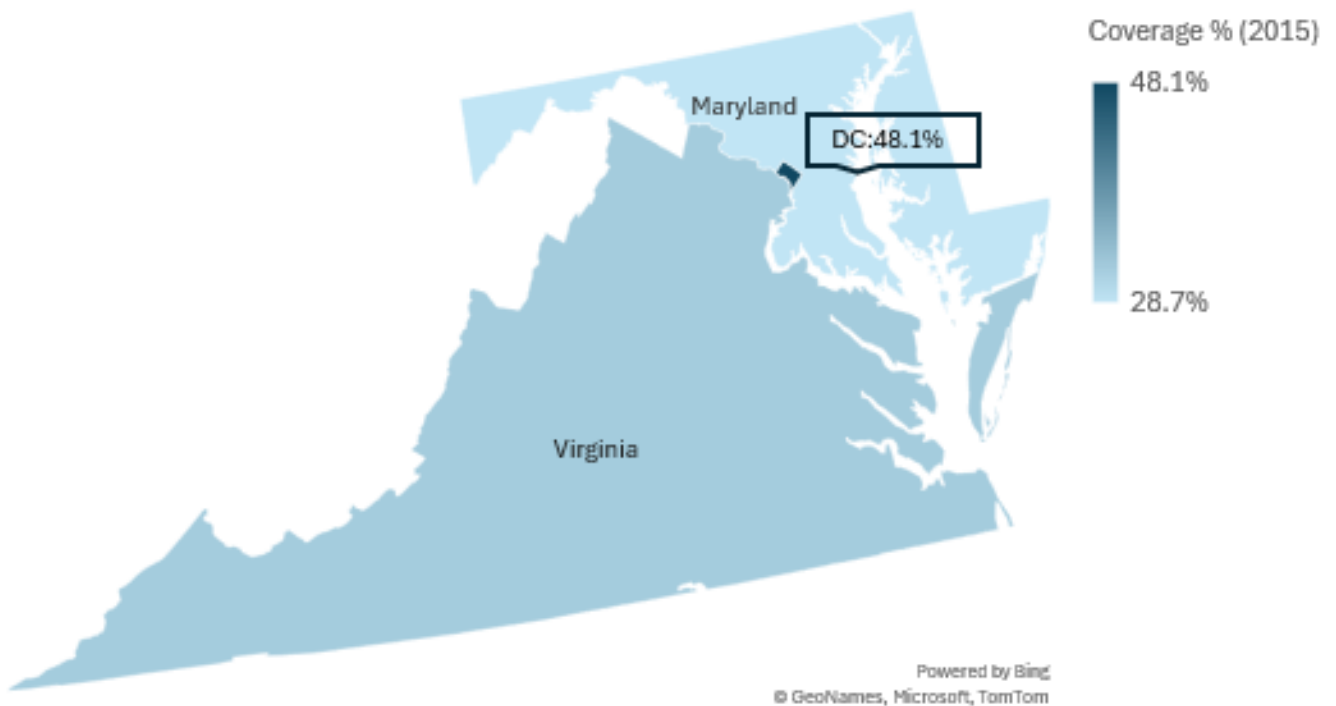


Chart 4 — Coverage % (2015) by State (Map)

State Detail (2015)

State	LB Needed	LB Distributed	Coverage (Avg)
DC	20,394,243	10,488,720	48.1%
MD	44,483,756	14,065,548	28.7%
VA	28,440,522	9,475,497	31.9%

Findings

1. **Region totals (2015):** 93.3M lb needed; 34.0M lb distributed; **59.3M lb unmet.**
2. **Average tract FI rate \approx 10.7%; average coverage \approx 33.3%** across DC–MD–VA.
3. Need exceeds distribution in all three states; by pounds, **Maryland** shows the largest gap.
4. **DC** has the **highest average coverage**; **MD** the lowest on average; **VA** sits between.
5. **Coverage trend (2014→2015):** DC **52.9% → 48.1%**, MD **24.8% → 28.7%**, VA **23.8% → 31.9%**.
6. The **Top-15 Unmet** chart flags specific tract GEOIDs to prioritize for additional supply.
7. **Unmet per person** varies widely by tract, revealing inequities that state averages hide.
8. Allocating pounds **proportional to FI People** aligns resources better than uniform allocation.
9. Tracking **Needed / Distributed / Unmet** enables clear, month-to-month and year-over-year **progress checks**.

Answers to the Assigned Questions

1) What is food insecurity and how prevalent is it in the DC area (2015)?

Food insecurity is limited or uncertain access to enough food. In 2015, the Capital Area had about 444,374 food-insecure people and 59.3M lb unmet need. DC's average tract coverage \approx 48%, indicating roughly half of need met on average.

2) Describe any correlation that relates services to census tracts by demographics.

Using tract FI People and FI Rate as need proxies and Pounds Distributed / Coverage as service proxies, the dashboard shows:

- Areas with more food-insecure people generally receive more pounds (positive association).
- Coverage is uneven—some high-rate tracts still show high unmet pounds.
The Top-15 Unmet list pinpoints where service is misaligned with need at the tract level.

3) Is there any insight to be gained by tracking food poundage?

Yes. Pounds Needed, Distributed, and Unmet yield a clear Coverage % metric, expose gaps by tract/state, and allow trend tracking across years. Poundage-based targeting (plus the Top-15 list) directly supports routing, scheduling, and partner decisions.