

# SNAP Receipt in the Survey of Income and Program Participation (SIPP): Using Administrative Records to Evaluate Data Quality

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The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product. Data Management System (DMS) number: P-7503064, Disclosure Review Board (DRB) approval number: CBDRB-FY22-SEHSD003-056.

# Disclaimer

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# Supplemental Nutrition Assistance Program (SNAP)



- Provides low-income households with monthly benefits to purchase food
- Prior to the COVID-19 pandemic, SNAP covered more than 35 million people each month

# Accuracy of Survey Reports

- Aggregate program receipt totals tend to be low in national surveys
- SIPP historically produces higher receipt rates than other surveys (e.g., CPS ASEC), but still underestimates official records
- Most common misreporting are those who appear in adrecs as recipients but who do not report that receipt in the survey
  - 40–50% of individuals in CPS ASEC (2009–2015)
  - 25% of households in ACS (2008–2012)
  - 17% of individuals and 18% of households in 2008 SIPP panel (2007–2012)

# Building On Prior Work

- Examination of redesigned SIPP survey
- Administrative records from 12 states
- Annual *and* monthly comparisons
  - How do *annual*, person-level SNAP reports in SIPP compare to administrative records?
  - How does annual report accuracy compare to prior research?
  - How do *monthly*, person-level SNAP reports in SIPP compare to administrative records?

# Data – SIPP

- Nationally representative, longitudinal survey
  - Employment, income, household composition, and eligibility for and participation in government assistance programs
- 2014–2020 SIPP (calendar years 2013–2019)
- Individual annual and monthly indicators of SNAP receipt

# Data – SNAP Administrative Records

- State-specific
- Each state-year harmonized and benchmarked
- Individual, monthly-level data

# Data – SNAP Administrative Records

	2013	2014	2015	2016	2017	2018	2019
Connecticut	●	●	●	○	○	○	–
Hawaii	●	●	●	●	●	●	●
Idaho	●	●	●	●	●	●	●
Indiana	●	●	●	●	●	●	●
Maryland	●	●	●	●	–	–	–
Michigan	○	○	○	○	–	–	–
Mississippi	●	●	●	●	●	●	●
Nevada	●	●	●	●	●	●	●
New York	●	●	●	●	●	●	●
North Dakota	–	●	●	●	●	●	○
Oregon	●	●	●	●	●	○	○
Tennessee	●	●	●	●	●	●	●
Utah	●	●	●	●	●	●	●
Wyoming	○	○	○	○	○	○	○

- Data not available at Census
- Data available but not used
- Data available and used



# Linked Data

- Linked with Protected Identification Key (PIK)
- Data restrictions (cases removed from analytic sample)
  - No PIK available
  - PIK and survey ID variables not uniquely identifying over time
  - State mismatches
  - SIPP records with imputed SNAP receipt
  - SIPP records in states or years where AdRecs were unavailable
  - SIPP records with less than 12 months of available data

# Linked Data

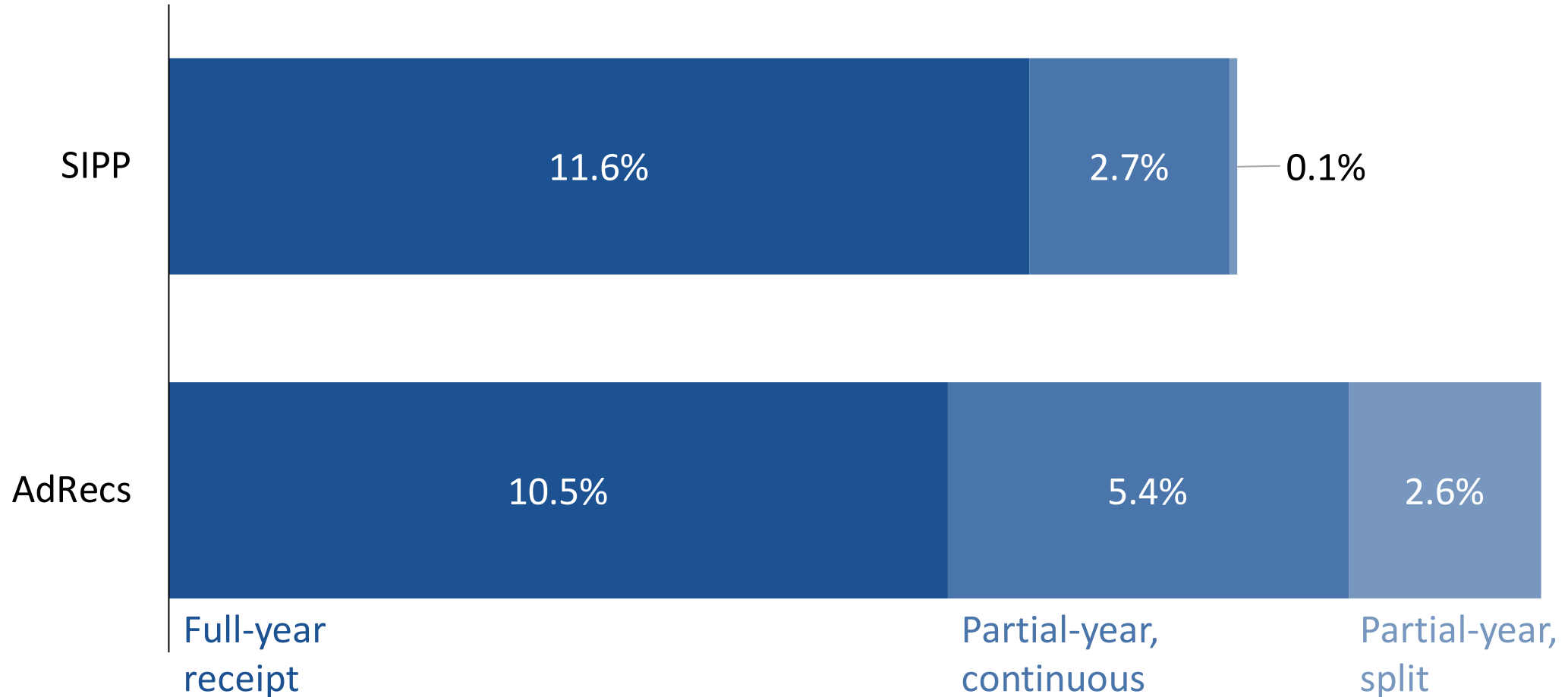
- Analytic sample  
54,500 person-years and  
654,000 person-months
  - All analyses *unweighted*
- Each case has a “yes” or “no”  
value for SNAP receipt from *both*  
SIPP and administrative records
  - Monthly
  - Annual

ID	Yr	Mo	SNAP SIPP (monthly)	SNAP SIPP (annual)	SNAP AdRec (monthly)	SNAP AdRec (annual)
1	2013	1	0	0	0	1
1	2013	2	0	0	1	1
1	2013	3	0	0	1	1
1	2013	4	0	0	1	1
1	2013	5	0	0	1	1
1	2013	6	0	0	1	1
1	2013	7	0	0	0	1
1	2013	8	0	0	0	1
1	2013	9	0	0	0	1
1	2013	10	0	0	0	1
1	2013	11	0	0	0	1
1	2013	12	0	0	0	1

# Annual SNAP Receipt Rates in Linked Data



# Annual SNAP Receipt Rates in Linked Data

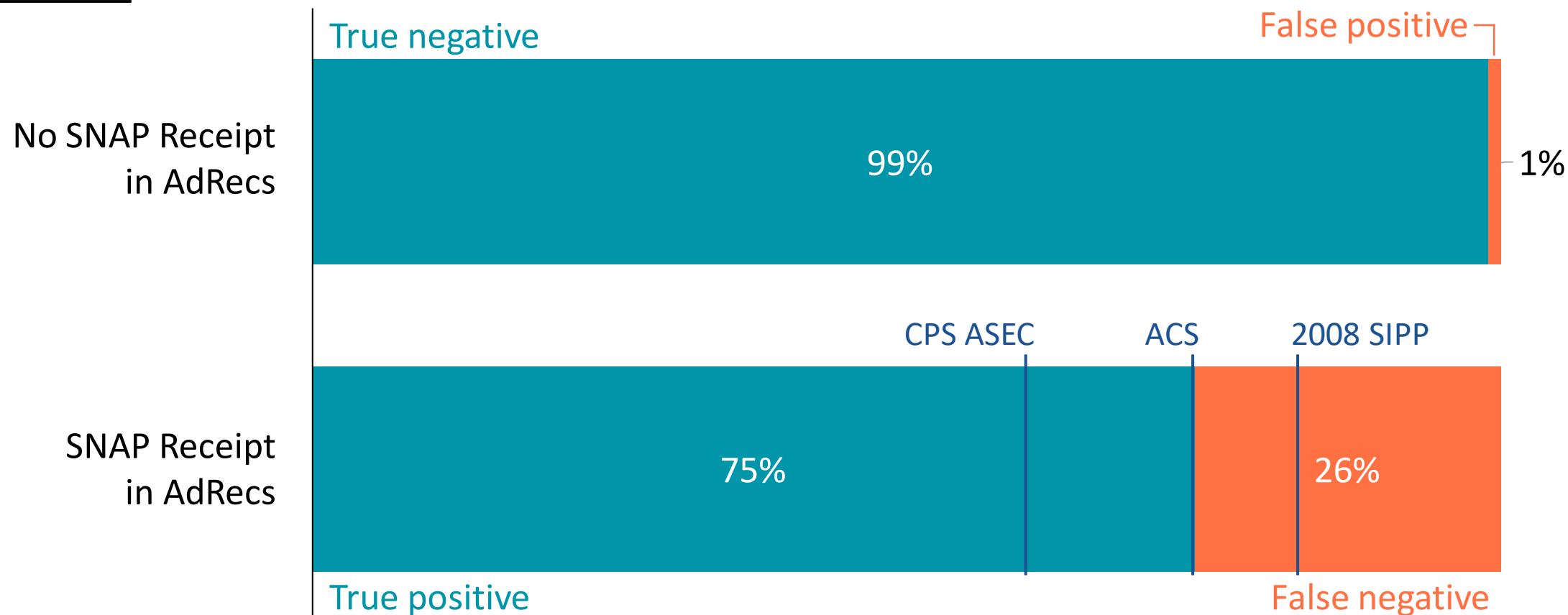


# Reporting Accuracy

		Survey Data	
		No SNAP Receipt in SIPP	SNAP Receipt in SIPP
Administrative Data			
No SNAP Receipt in AdRecs	True Negative	False Positive	
SNAP Receipt in AdRecs	False Negative	True Positive	

# Reporting Accuracy

## Annual



# Reporting Accuracy

## Annual

No SNAP Receipt  
in AdRecs

True negative

99%

False positive

1%

SNAP Receipt  
in AdRecs

75%

26%

True positive

False negative

## Monthly

No SNAP Receipt  
in AdRecs

True negative

98%

False positive

2%

SNAP Receipt  
in AdRecs

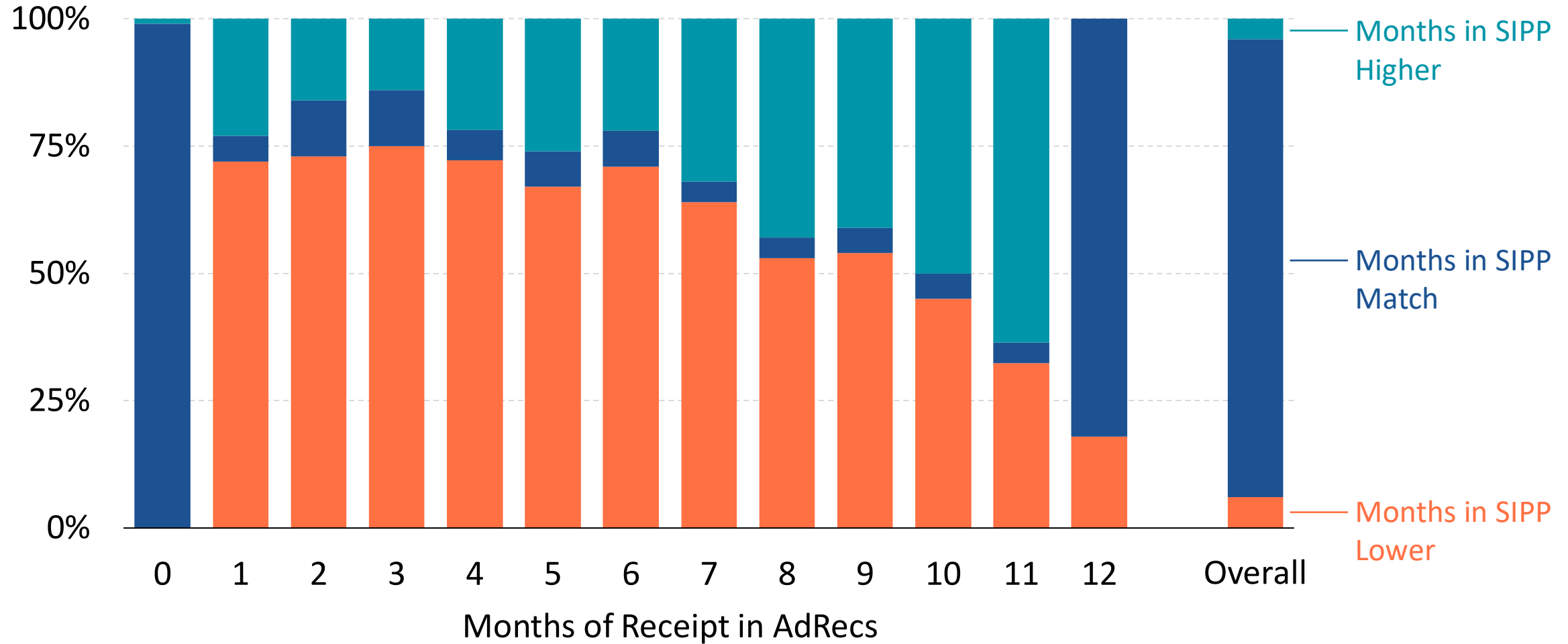
77%

23%

True positive

False negative

# Total Months of Receipt, AdRecs vs. SIPP





# Summary

- SIPP accurately captures non-receipt (low false positives)
- Among those receiving SNAP, SIPP does a better job capturing receipt than some surveys, but still underestimates aggregate totals
- Cases where SNAP was received for only part of the year are still a challenge

# Next Steps

- Benefit-unit analyses (unit composition, amounts)
- Leverage longitudinal nature of SIPP (up to 48 months of observations per person)
- Analysis of imputed SNAP receipt
- Examination of other social safety net programs (e.g., WIC and TANF)

# Thank you

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# Thank you

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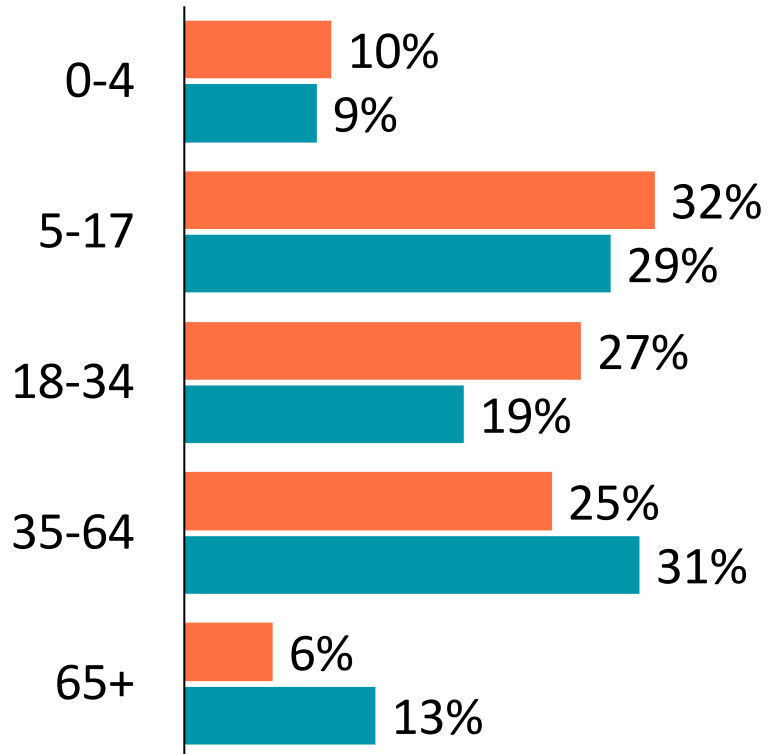
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# Annual Receipt Demographics: False Negatives vs. True Positives

## Age Distribution



## Poverty Status Distribution

