Developing and Evaluating Alternative Editing Strategies in the Survey of Income and Program Participation (SIPP)

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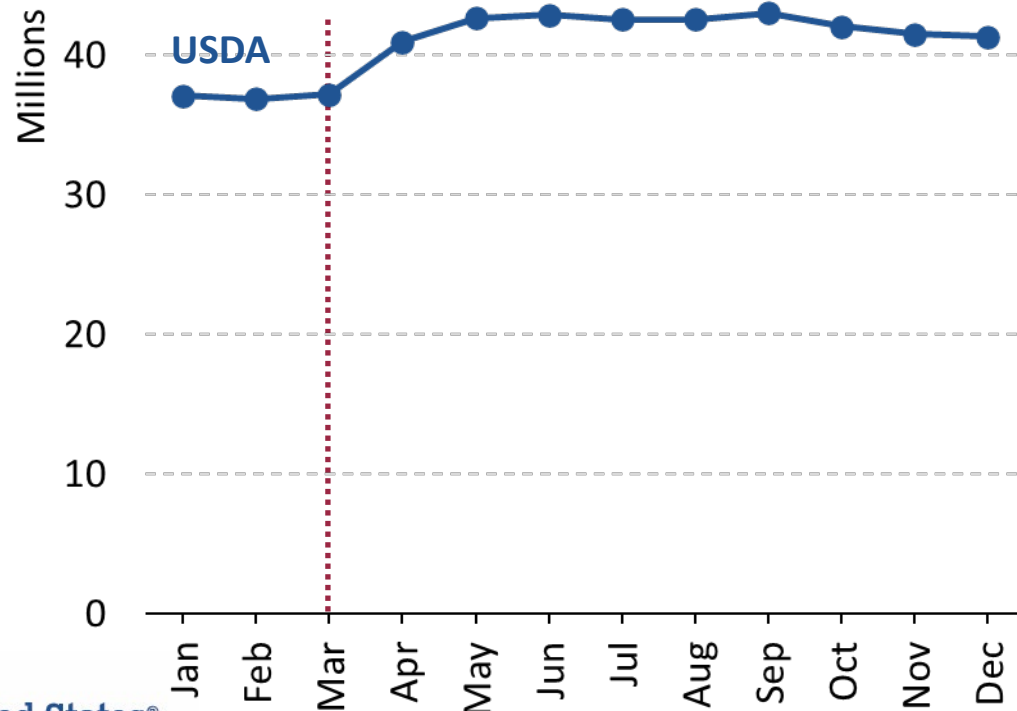Adrianne R. Brown

U.S. Census Bureau

United States® Census Bureau

Large changes in enrollment midyear in SNAP and Unemployment Insurance (UI) …

SNAP Recipients

UI Recipients

Source: U.S. Department of Agriculture (USDA), Food and Nutrition Service; U.S. Department of Labor (DOL), Education and Training Administration.

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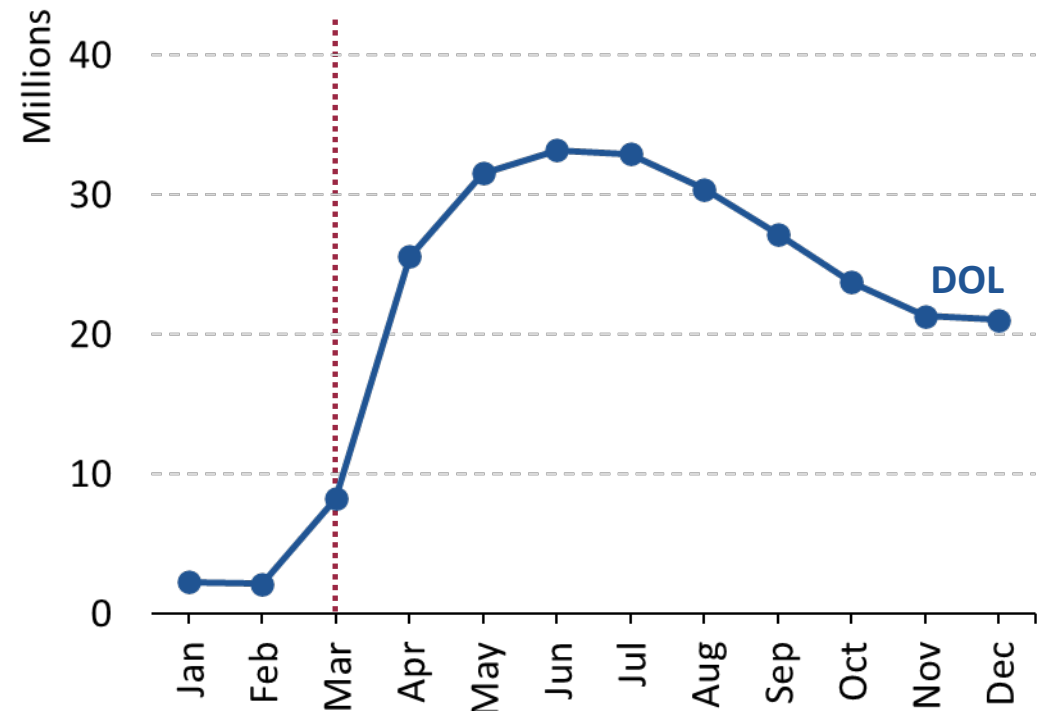
... but SIPP data do not show the expected patterns

SNAP Recipients

UI Recipients

Source: U.S. Census Bureau, 2021 Survey of Income and Program Participation public-use file; U.S. Department of Agriculture (USDA), Food and Nutrition Service; U.S. Department of Labor (DOL), Education and Training Administration.
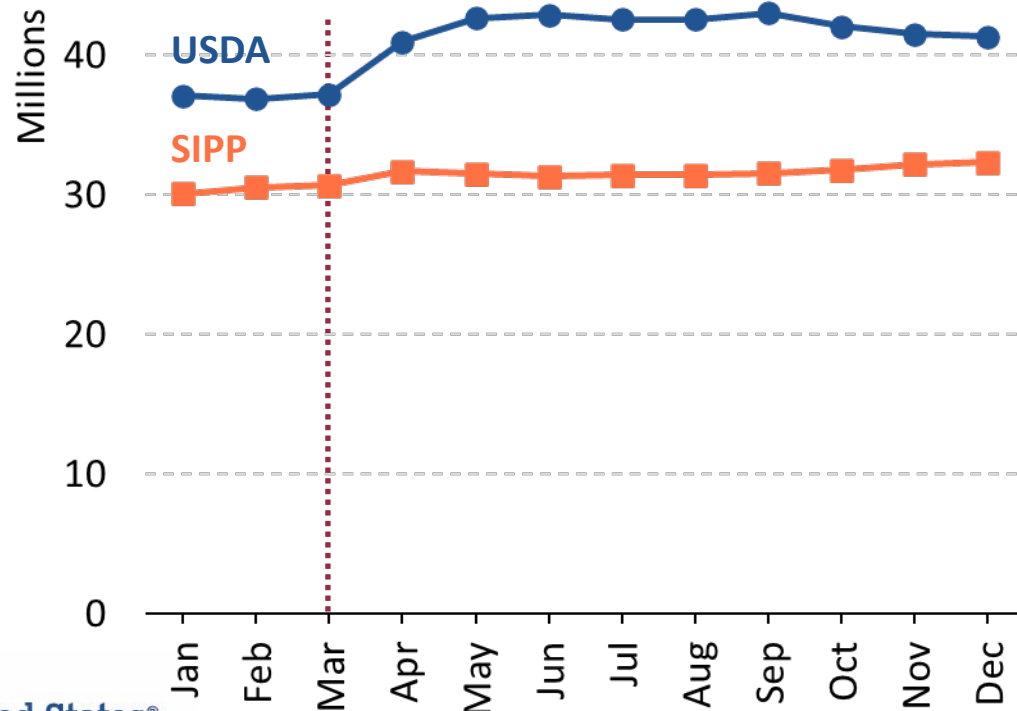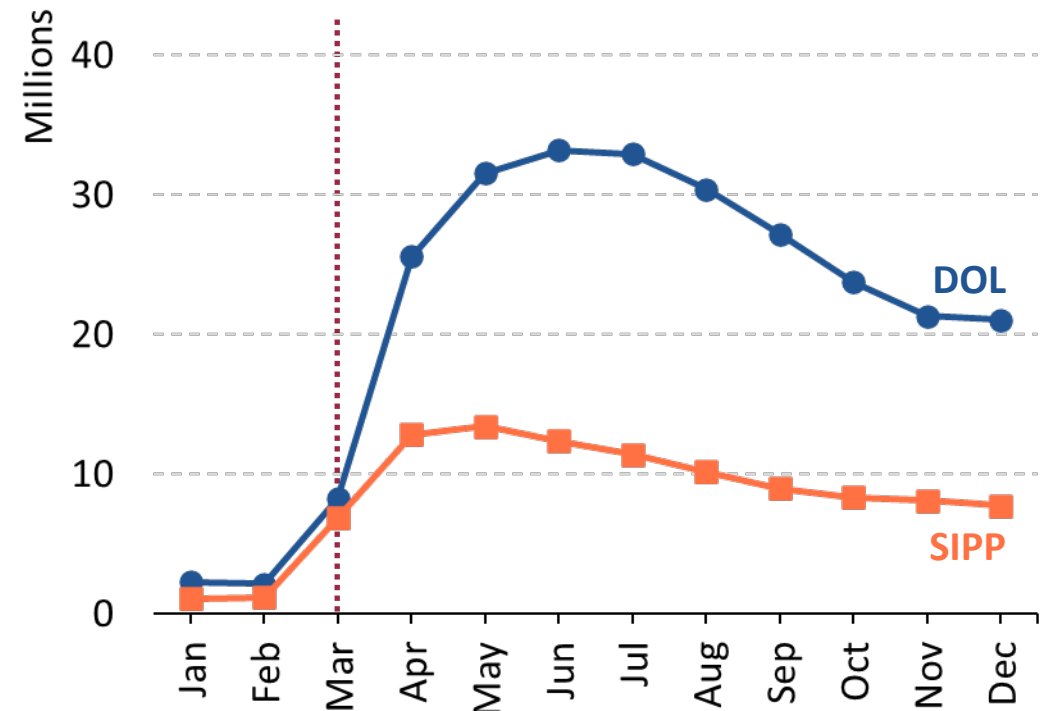
These challenges extend to benefit amounts

- Massive, nationwide investments in these programs resulted in substantial increases in benefits during the pandemic:
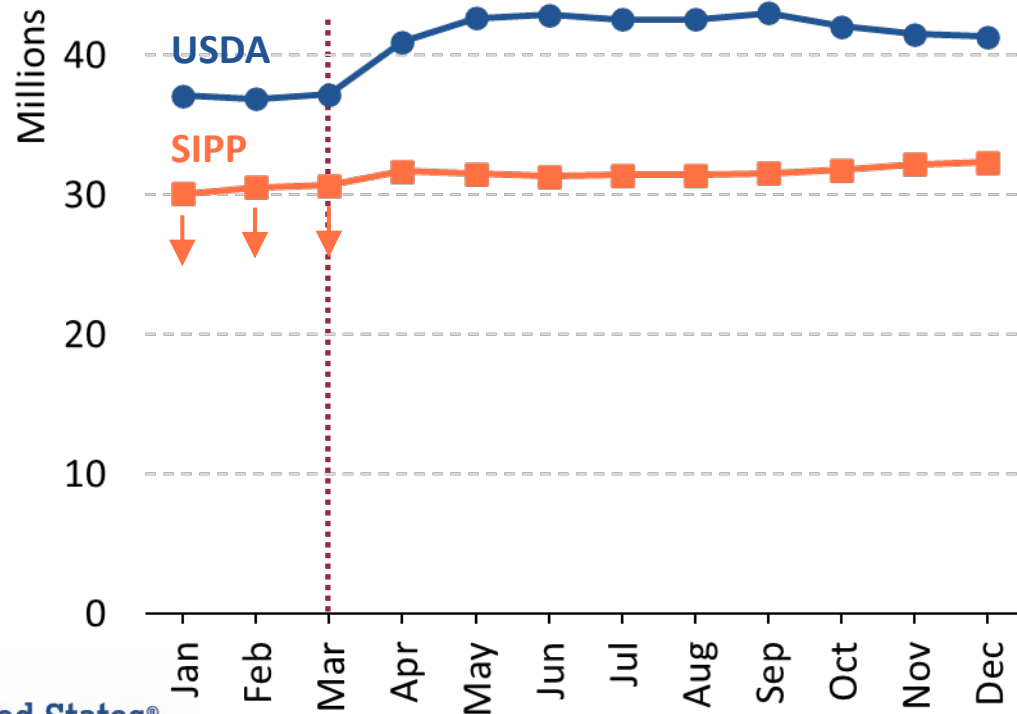
  - As much as $2,400/month *additional* UI benefits in some months.

  - SNAP recipient benefits were maxed out.

- … but again, the 2021 SIPP data do not always show benefit amounts we would expect given these changes.
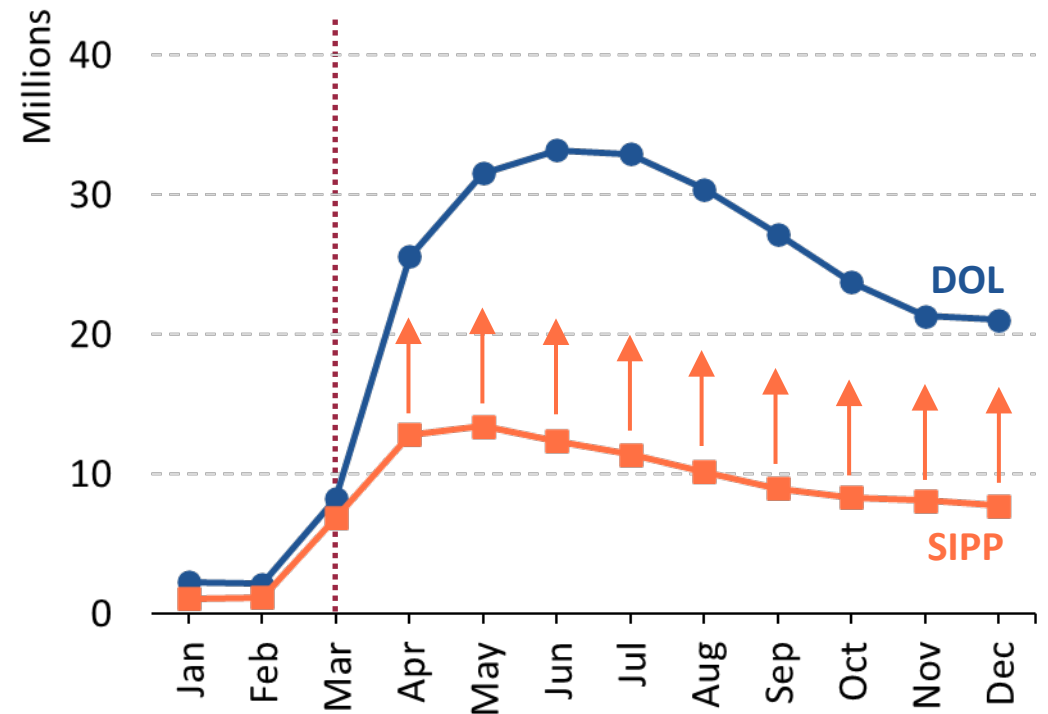
So what could be done?

- Different challenges for SNAP and UI receipt.

- For SNAP, we believed reports were unexpectedly high for SIPP prior to the pandemic.

- For UI, we believed reports were unexpectedly low after the onset of the pandemic.

United States® Census Bureau

So what could be done? (part 2)

SNAP Recipients

UI Recipients

Source: U.S. Census Bureau, 2021 Survey of Income and Program Participation public-use file; U.S. Department of Agriculture (USDA), Food and Nutrition Service; U.S. Department of Labor (DOL), Education and Training Administration.

So what could be done? (part 3)

- Rely on known policies to help bring amounts closer to expectations.

- For SNAP, known maximum allotment based on number of people in SNAP unit.

- For UI, known minimum and maximum benefits and wage replacement rates for each state.

What did we actually do?

- Generated new variable values in a traditional edit process.

- Worked within production framework for coding these new edits.

- Used released production data as inputs.

- No modeling and no administrative records.

SIPP lifecycle
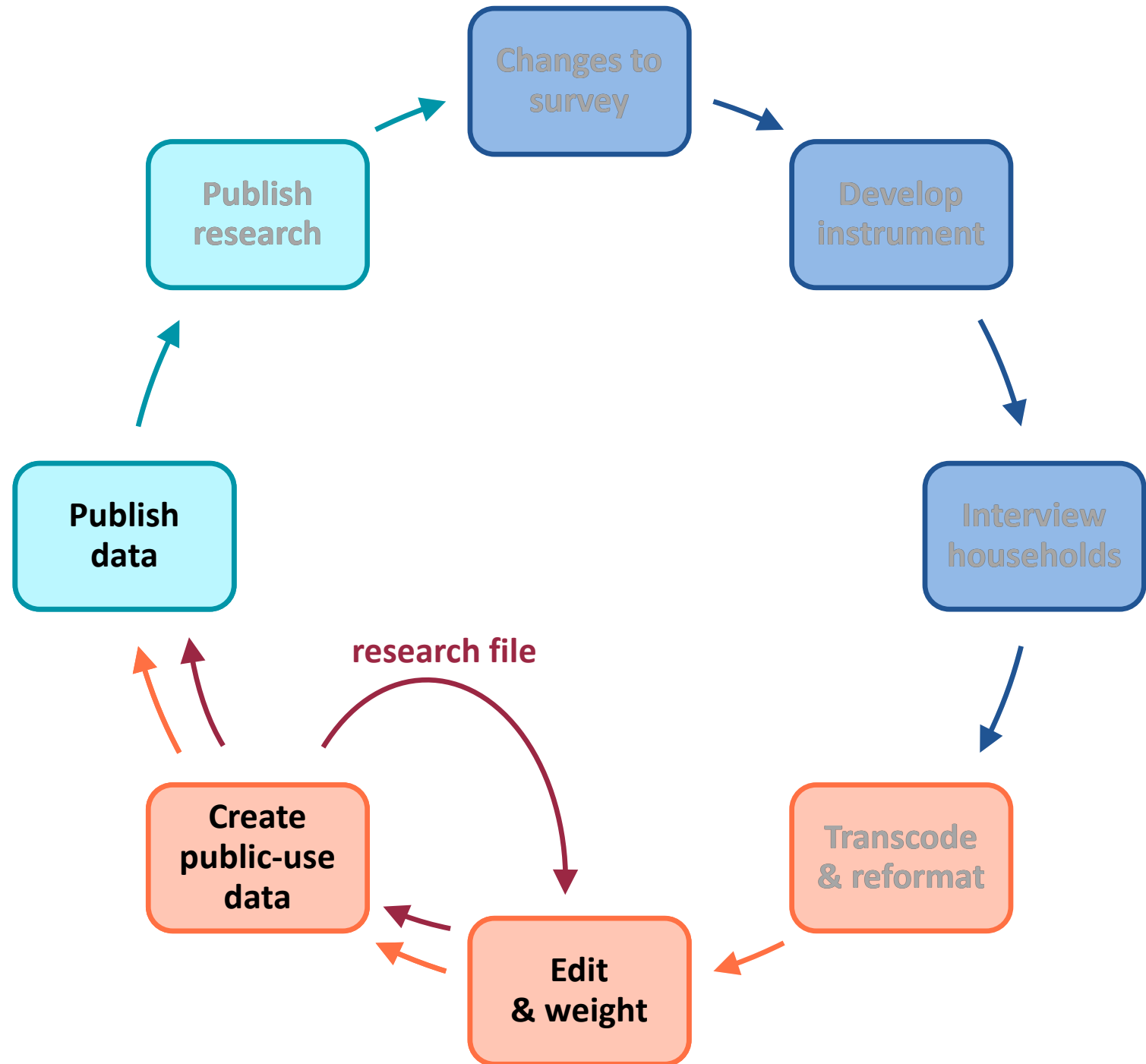
What did we actually do? (part 2)

- SNAP
  - Looked for inconsistencies between SNAP reports from prior year and current year.
  - Used unit size and maximum allotment information from Food and Nutrition Service (FNS) to set amounts .
- UI
  - Identified cases that experienced job separations longer than 1 week and assigned UI in months that job separation continued.
  - Used available wage data from pre-pandemic and state policies to estimate UI amounts.
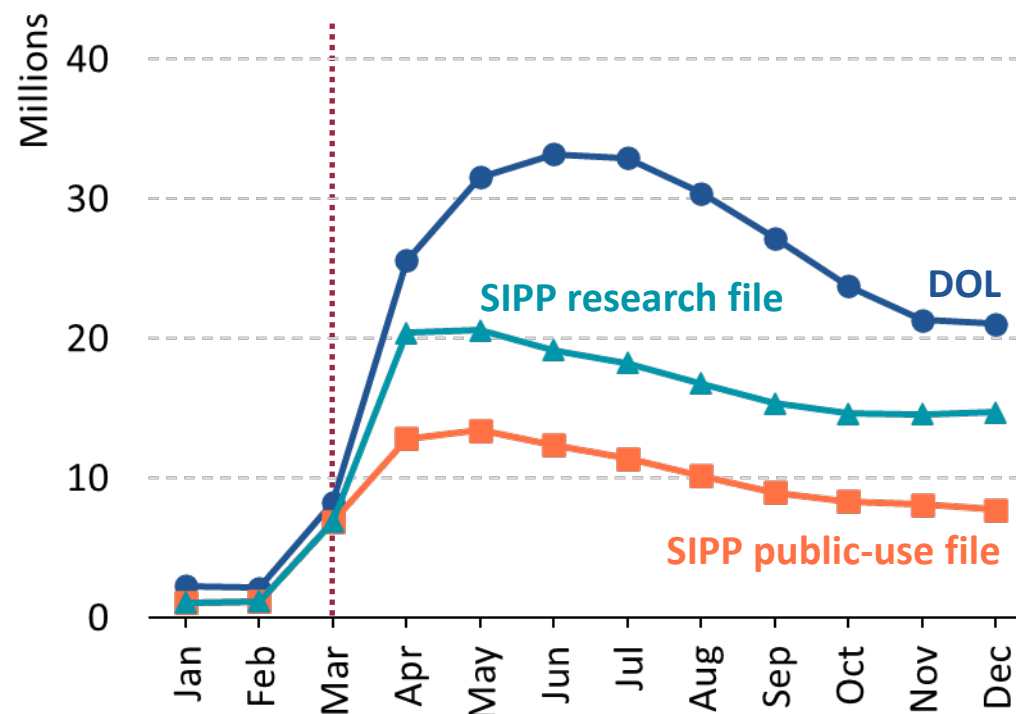
What did we actually do? (part 3)

	Persons Changed	Person-Months Changed
Receipt		
SNAP	426	1,533
UI	2,394	28,179
Amounts		
SNAP	3,459	28,890
UI	3,714	31,615

How well did the alternative edits do?

SNAP Recipients
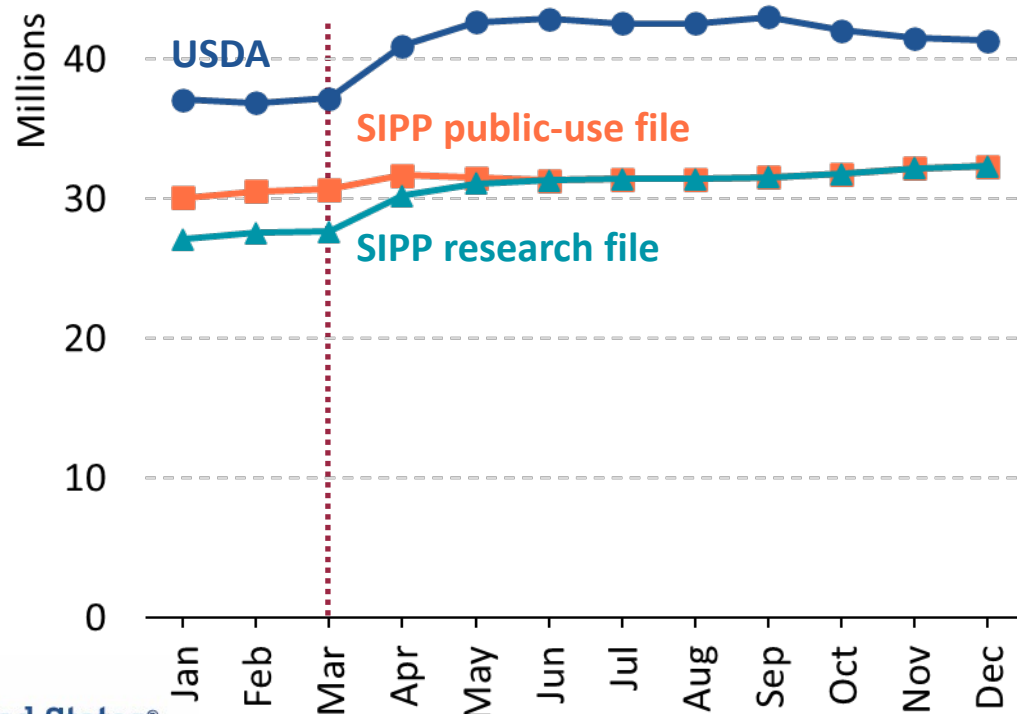
UI Recipients

How well did the alternative edits do? (part 2)

- SNAP data matched to limited number of SNAP state administrative records.

- UI data matched to 1099-G administrative records.

- Mixed results from these comparisons.

What did we learn?

- Working within production environment came with constraints.
- New edits more complex than expected.

- Did get closer to aggregate benchmarks and patterns.
- Accuracy of individual changes difficult to evaluate.
- Some core assumptions flawed.

What's next?

- Falling response rates and rising imputation rates remain universal challenges.

- Logical, edit-based imputations have limits.

- Further explore model-based options.

- Consider question wording.
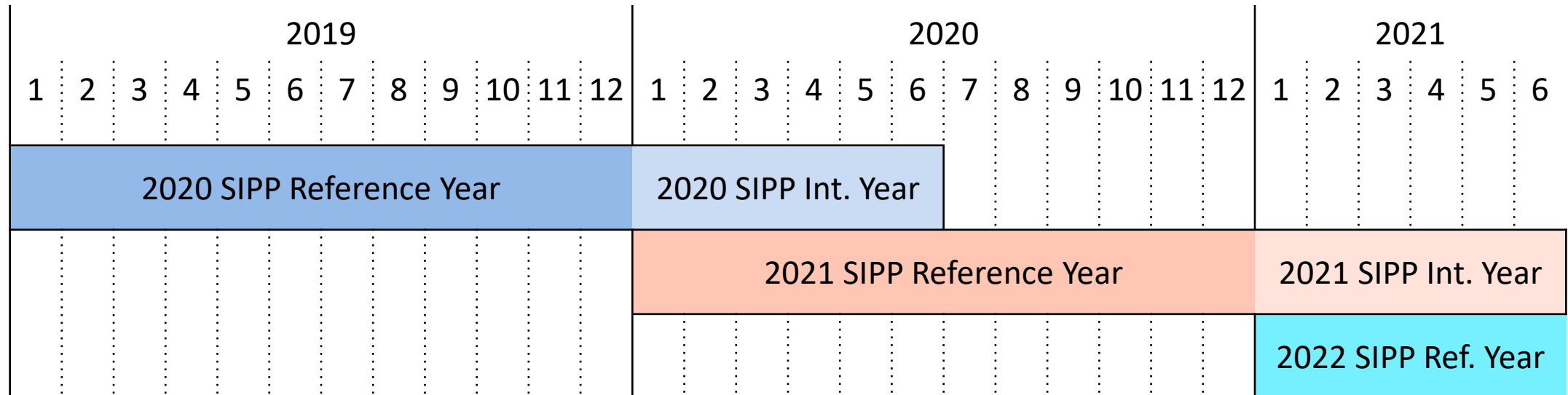
Thank you

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How do we do it? – SNAP

- Look for inconsistencies between SNAP reports from prior year and current year.

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