

The Impact on Health Insurance Affordability for Maine Households If Enhanced Tax Credits Expire: Data Appendix

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BACKGROUND

The Patient Protection and Affordable Care Act (ACA) established premium tax credits (PTCs) to help eligible households lower their payments for qualified health plans offered through the health insurance exchanges, including Maine's state-based marketplace (CoverME.gov). Individuals and families who enroll in a Marketplace plan and who are eligible for PTCs can claim the full subsidy amount when filing their income taxes. PTCs are also advanceable, meaning that eligible individuals and families can receive advanced monthly PTC amounts, in effect lowering their premium costs throughout the year. Under the 2021 American Rescue Plan Act (ARPA), both eligibility for and PTC amounts were expanded for tax years 2021 and 2022. The enhanced subsidy schedule established through ARPA was then extended for three additional years (2023 through 2025) through the Inflation Reduction Act (IRA). Without congressional action, enhanced subsidies will expire at the end of 2025, resulting in lower PTC amounts for Marketplace consumers beginning in 2026. This analysis examines the potential impact of allowing enhanced subsidies to expire on Maine consumers.

DATA

To assess the impact of allowing enhanced subsidies to expire on Maine consumers, this analysis uses 2025 Open Enrollment data as of January 15, 2025. These data contain individual- and household-level information, including the following data:

Individual-level fields:

- Enrollee birth date
- Enrollee zip code and county of residence
- Indicator for pregnancy status

Household-level fields:

- Plan coverage start date
- Plan metal level
- One-month retrospective modified adjusted gross income (MAGI)
- 12-month prospective MAGI

- Plan cost fields:
 - Monthly premium cost
 - Maximum premium tax credit (PTC) amount
 - Monthly advanced PTC (APTC) amount selected and applied
 - Monthly net premium amount (after APTC applied)

We link to the 2025 open enrollment data the following data files:

1. County-level information from the Maine Bureau of Insurance (BOI) on the second lowest-cost silver plan (SLCSP) for plan year 2025.¹
2. Individual-level age curve data from BOI, used to adjust premium amounts to account for enrollee age.
3. Data on 2024 poverty level by household size from the Office of the Assistant Secretary for Planning and Evaluation.²
4. 2010 (most recent) Zip Code Rural-Area Commuting Area codes the US Department of Agriculture Economic Research Service.³
 - a. We classify Maine zip codes as either “metro” or “rural” based on methodology first developed by the WWAMI Rural Health Research Center and further tailored to New England areas by the New England Rural Health Roundtable.^{4,5} In addition to classifying Maine zip codes into metro and rural areas, we further stratify by tiers of rurality into “large rural,” “small rural,” and “isolated rural” areas. This methodology is based on secondary RUCA codes, which classify zip codes based on commuting patterns and flows. Zip codes classified as metro areas have primary commuting flows in an urbanized area, while zip codes classified as isolated rural have a primary flow outside of an urbanized area or a large urban cluster. Zip codes classified as small rural and large rural capture a

continuum of metropolitan and micropolitan areas with varying secondary flows to urbanized areas and urban clusters.

Figure A1 presents the geographic distribution of metro and rural zip codes throughout the state. Metro areas of the state are concentrated around Maine's most populous cities, including Portland, Lewiston, Bangor, and Biddeford. Counties with zip codes classified as metro also have large populations of individuals residing in zip codes classified as large rural areas, including Androscoggin County, Cumberland County, Penobscot County, and York County. In addition, all zip codes that comprise Kennebec County and Sagadahoc County are classified as large rural areas. Counties with the highest proportions of their respective populations in zip codes classified as small rural areas include Aroostook County, Hancock County, and Knox County, with the remainder of their populations generally in zip codes classified as isolated rural areas. Counties with the highest proportions of individuals who reside in zip codes classified as isolated rural areas include Franklin County, Piscataquis County, and Washington County. While all zip codes in Somerset County and Waldo County are classified as rural, these counties both have balanced populations of individuals who reside in large rural, small rural, and isolated rural areas.

5. A list of zip codes defined as having a high proportion of employment in the fishing and lobstering industries.
 - a. We identified these zip codes by linking 2021 tax return data and 2021 data on Maine fishing and lobstering licenses to calculating the ratio of fishing and lobstering licenses to tax returns.^{6,7} Zip codes with a ratio of fishing and lobstering licenses that exceeded 10% of tax returns in 2021 were deemed as having a high proportion of employment in the fishing and lobstering industries. We also deemed zip codes with no corresponding tax returns for 2021 and at least 20 fishing

and lobstering licenses as having a high proportion of employment in these industries. Zip codes with the highest ratios include Swans Island (43%), Cutler (41%), Jonesport (31%), Vinalhaven (31%), and Machiasport (27%).

METHODS

This analysis consists of three components. First, we calculate the maximum eligible premium tax credit (PTC) amount for each enrolled household in 2025 under the enhanced subsidy schedule. We compare these calculated PTC amounts against actual PTC amounts and exclude households with calculated and actual PTCs that do not align. This step is taken to ensure that our methodology and data fields account for all relevant factors in the calculation of PTCs. Second, we calculate what household PTC amounts would have been had the enhanced subsidies not been in effect among the sample of households included in the analysis. Third, we apply PTCs corresponding to the lower subsidy schedule to consumer's plan selections to calculate net premiums without enhanced PTCs. We convert the PTC amounts into monthly figures and compare the calculated enhanced and lower PTC amounts, both in total terms and as a percentage of monthly premiums and household income, to assess what the impact of a lower subsidy schedule would have been on Maine consumers in 2025.

At a high level, an eligible household's PTC amount is calculated as the household's SLCSP less the household's (expected) income contribution. For household h with n members enrolled in a Marketplace plan and m (tax) household members, the maximum eligible PTC amount is:

$$PTC_h = \sum_{i=1}^n SLCSP_{i(c)} * AgeCurve_i - ExpectedContribution_{h(m)}$$

The household's SLCSP is calculated as the sum of SLCSP amounts corresponding to all family members enrolled in a Marketplace plan, after adjusting for enrolled family member ages. The expected income contribution is a function of the household's (expected) MAGI for the corresponding plan year, and the number of household tax members, which includes the tax filer, spouse, and any tax dependents. The number of household members who enrolled in a Marketplace plan (n) and the number of household tax members (m) are not always equivalent.

A household's (expected) income contribution is determined by household income level and the applicable subsidy schedule. For household h with m family members, the expected income contribution is calculated as:

$$\text{Expected Contribution}_{h(m)} = \text{MAGI}_{h(m)} * \text{IncomeContribution\%(FPL)}_{h(m)}$$

In this analysis, differences between the enhanced and lower PTC amounts derive from the final term, which represents the income contribution percentage. This term is a function of the household's income level in relation to the federal poverty level and the current subsidy schedule. Table A1 summarizes the differences in income contribution percentages across the enhanced and lower subsidy schedules in 2025. Under the enhanced schedule, eligible households with incomes less than 150% FPL have no required income contribution in 2025. Had the lower subsidy schedule been in effect, households with incomes less than 138% FPL would have been required to contribute 1.82% of household income, while households with incomes between 138% and 150% FPL would have been required to contribute between 2.73% and 3.64% of household income, based on a sliding scale. For all income brackets in Table A1, the income contribution percentage required under the enhanced subsidy schedule is below the required amount under the lower subsidy schedule. Under the lower subsidy schedule, households with incomes over 400% FPL would not have been eligible for PTCs in 2025; however, under the enhanced subsidy schedule these households are required to contribute 8.5% of their incomes in 2025.

We make several adjustments to the SLCSP field to account for enrollees who are ineligible for PTCs because of Medicaid (MaineCare) eligibility. This field is reset to \$0 for the following groups of enrollees:

- Infants and children aged 0–20 in households with incomes up to 305% FPL.
- Pregnant women in households with incomes less than 214% FPL.
- Individuals who indicated that they are eligible for coverage through either Medicaid or the Children's Health Insurance Program.

Since PTCs are calculated at the household-level, adjusting for Medicaid eligibility will not necessarily result in a household PTC of \$0, depending on the size and composition of the household.

TABLE A1: **Maximum Household Contributions as a Percentage of Income by Federal Poverty Level with the Original and Enhanced Schedules**

Household income (% of FPL)	Original (ACA) schedule, 2025*	Enhanced (ARPA/ IRA) schedule**
<138	1.82	0.0
138–150	2.73–3.64	0.0
150–200	3.64–5.73	0.0–2.0
200–250	5.73–7.33	2.0–4.0
250–300	7.33–8.65	4.0–6.0
300–400	8.65	6.0–8.5
>400	n/a	8.5

*Congressional Budget Office: <https://www.cbo.gov/system/files/2024-06/60437-Arrington-Smith-Letter.pdf>

**Internal Revenue Service: <https://www.irs.gov/pub/irs-drop/rp-24-35.pdf>

DATA PROCESSING STEPS

The 2025 open enrollment data derive from a point-in-time data pull from the CoverME.gov eligibility and enrollment data platform. Because of the point-in-time nature of these data, as well as the complexities of the data platform from which these data are pulled, there are some missing field entries corresponding to a subset of enrolled Marketplace households. These missing entries are the result of three factors; first, some of the data fields correspond to information that is not required to determine eligibility and enrollment determinations. For example, household income is not required for those households that do not apply for PTCs and/or cost-sharing reductions. Second, given the point-in-time nature of the data pull, there are instances where household data is temporarily missing, and the Marketplace is working to resolve these missing entries. Third, because of the complexities of the eligibility and enrollment platform, there are instances where the point-in-time data may reflect an incorrect value that has or is currently being resolved. To balance both the need for timely analysis and to account for any missing or inaccurate data entries that stem from the point-in-time nature of the data pull, we employ data cleaning steps and conduct sensitivity analyses.

To ensure accuracy in our calculation of what household PTCs would have been under the lower subsidy schedule, we exclude from the analysis the following households:

- 3,799 households with a missing household size or a household size of zero. Because a household's expected income contribution is a function of household MAGI in proximity to FPL, which is determined by household size, we are unable to calculate a PTC amount for these households.
- 3,735 households with missing household income information. These households are excluded from the analysis because we are unable to calculate an expected income contribution amount.
- 527 households with a difference in the calculated expected annual income contribution amount and a provided expected annual income contribution amount that exceeds \$15.
- In comparing the actual and expected PTC amounts, we exclude the following households:
 - 3,196 households with an absolute difference that exceeds both 5% and \$10 across metrics.
 - 64 households with a missing entry corresponding to either the actual or calculated amount.
 - 1,127 households where either the actual or calculated amount is \$0 and the difference between these metrics exceeds \$10.
- 6 households with a missing premium amount.

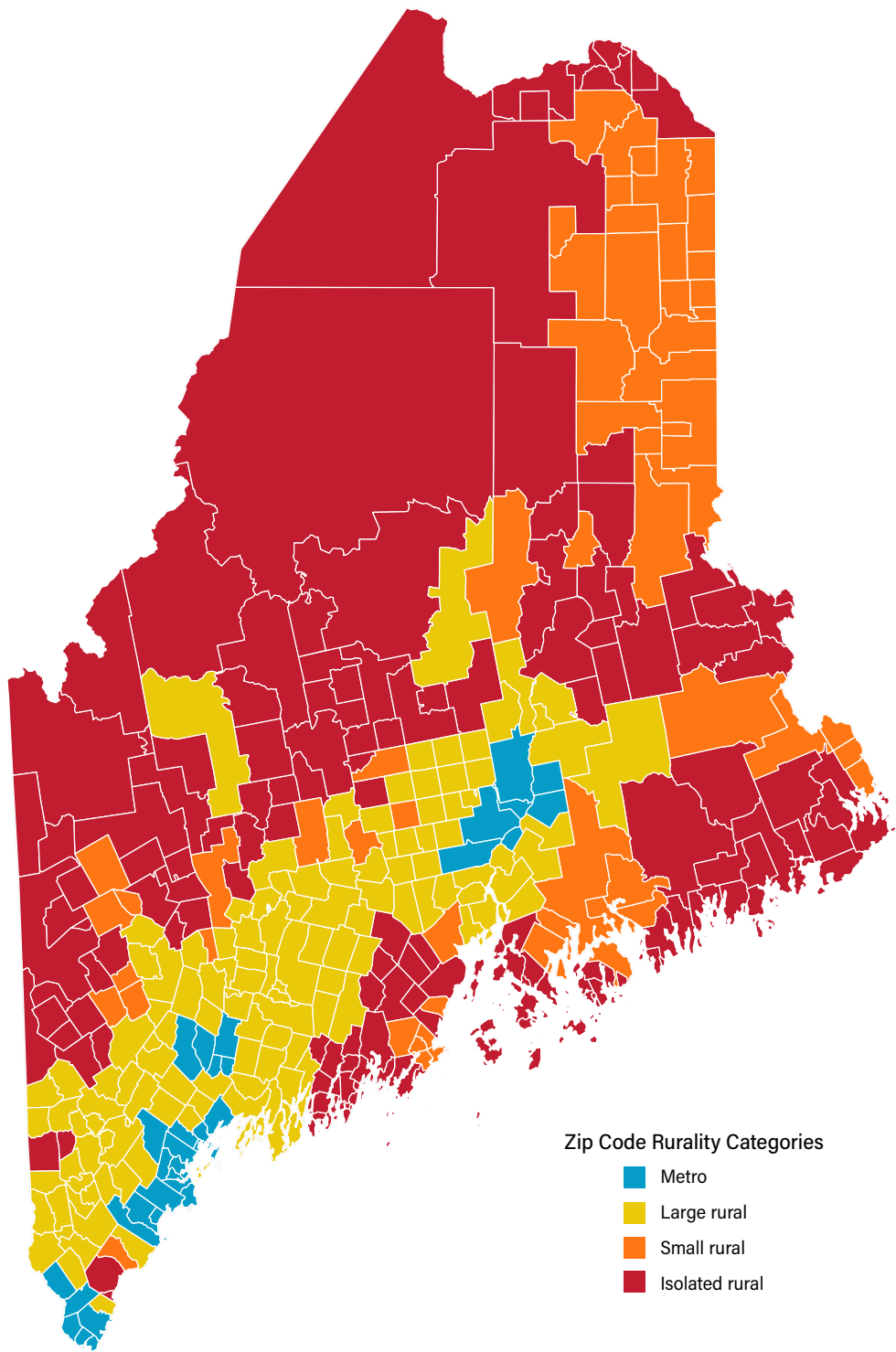
Some households have enrolled family members who reside in different counties. In instances of a “tie,” we assign these counties a “missing” entry. For example, if a household consists of two family members with Marketplace coverage who reside in different counties, the assigned household value is “missing.” These households constitute a small percentage of total Marketplace enrollment.

Table A2 presents the sample construction. Of the 44,369 households enrolled in a Marketplace plan as of January 15, 2025, we exclude from the analysis 8,116 households (18%). Excluded households are generally evenly distributed across household characteristics, suggesting that excluded households are unlikely to impact

the results. However, a relatively higher share of households with child enrollees are excluded through the data processing steps (51%). We find that many of these exclusions stem from actual PTC amounts exceeding calculated PTC amounts across these households. This is likely driven by the interaction between essential health benefits (EHB) and coverage for children; a higher percentage of the child's premium goes to the EHB-portion of the SLCS term in the PTC calculation. Because we are unable to adjust for relative EHB-portions by age, our calculated PTC amounts will not capture these higher subsidy amounts for households with child enrollees. However, because these differences stem from the SLCS term, rather than the income contribution term, the exclusion/inclusion of these households does not impact the findings.

We conducted several sensitivity analyses to ensure that omitting excluded households with children, as well as other excluded households, does not impact our findings. First, we conducted the analysis by income groups without applying any exclusion criteria, relying on the full sample of calculated subsidies under the enhanced and lower premium schedules. A comparison of these results is presented in Tables A3 and A4. While the excluded households generate some differences in the value of the subsidies and premiums, the overall findings and takeaways of the analysis are unchanged. Table A5 presents premium and subsidies across three categories of households; the sample of households with exclusions applied; the sample of households without exclusions and with the calculated tax credits applied; and the full sample of households for which tax credits and premiums are available at the time of the data pull. While there are again some differences in tax credits and premiums across household categories, the overall patterns across income groups are unchanged. The findings from these sensitivity analyses indicate that the sample of households used in our primary analysis captures trends across the full population of 2025 open enrollment Marketplace households.

FIGURE A1: **Maine Zip Code Rural Classification**



Sources: United States Department of Agriculture (USDA) and the 2014 New England Rural Health Roundtable.

TABLE A2: 2025 Open Enrollment Sample Construction

	All households	Included households	Excluded households	% excluded
Household count	44,369	36,253	8,116	18.29%
Household size (average)*	1.8	1.7	2.8	
Any child (< 18)	4,520	2,235	2,285	50.55%
Any older member (> 59)	12,524	11,302	1,222	9.76%
Rural	29,311	24,249	5,062	17.27%
Fishing/lobster community	1,420	1,166	254	17.89%
County				
Androscoggin	2,400	1,956	444	18.50%
Aroostook	1,841	1,580	261	14.18%
Cumberland	11,974	9,370	2,604	21.75%
Franklin	953	824	129	13.54%
Hancock	2,493	2,080	413	16.57%
Kennebec	2,888	2,387	501	17.35%
Knox	2,107	1,704	403	19.13%
Lincoln	1,657	1,377	280	16.90%
Oxford	2,098	1,767	331	15.78%
Penobscot	3,363	2,816	547	16.27%
Piscataquis	491	427	64	13.03%
Sagadahoc	1,278	1,031	247	19.33%
Somerset	1,277	1,108	169	13.23%
Waldo	1,462	1,239	223	15.25%
Washington	943	798	145	15.38%
York	7,079	5,749	1,330	18.79%
Missing	65	40	25	38.46%
FPL (%)*				
< 150**	5,764	4,283	1,481	25.69%
150–200	9,238	8,659	579	6.27%
200–250	7,236	6,727	509	7.03%
250–300	5,678	5,209	469	8.26%
300–400	6,762	6,186	576	8.52%
> 400	5,892	5,189	703	11.93%

*Excludes households with missing information. **Households with \$0 expected income for 2025 are included in this income bracket. Some of the excluded households in this bracket likely correspond to entries with information that has or will be updated after the point-in-time data pull.

Sources: 2025 open enrollment data, as of January 15, 2025, from the Maine Office of the Health Insurance Marketplace; Maine Bureau of Insurance; United States Department of Agriculture (USDA); Internal Revenue Service (IRS); and Maine Department of Labor.

TABLE A3: **Comparison of 2025 Maine Marketplace Enrollees' Subsidies and Premiums under Enhanced and Lower Subsidy Schedules (With Household Exclusions)**

	All households	Household income level		
		<200% FPL	200–400% FPL	>400% FPL
Average monthly subsidy				
Current (enhanced) subsidy schedule	\$825.99	\$863.63	\$865.17	\$595.24
Lower subsidy schedule	\$657.61	\$784.45	\$755.33	\$0.00
\$ difference	-\$168.38	-\$79.18	-\$109.84	-\$595.24
% change	-20.39%	-9.17%	-12.70%	-100.00%
Average monthly income	\$4,502.54	\$2,248.03	\$4,405.78	\$10,463.46
Average monthly premium				
Current (enhanced) subsidy schedule	\$279.78	\$160.85	\$232.73	\$740.68
Lower subsidy schedule	\$444.91	\$235.28	\$339.52	\$1,335.78
\$ difference	\$165.13	\$74.43	\$106.79	\$595.10
% change	59.02%	46.27%	45.89%	80.35%
% of monthly income	3.67%	3.31%	2.42%	5.69%

Notes: The unit of analysis is the household. Household income and household income levels are based on 2025 expected modified adjusted gross income (MAGI).

Sources: 2025 open enrollment data, as of January 15, 2025, from the Maine Office of the Health Insurance Marketplace; Maine Bureau of Insurance.

TABLE A4: **Comparison of 2025 Maine Marketplace Enrollees' Subsidies and Premiums under Enhanced and Lower Subsidy Schedules (No Household Exclusions)**

	All households	Household income level		
		<200% FPL	200–400% FPL	>400% FPL
Average monthly subsidy				
Current (enhanced) subsidy schedule	\$802.58	\$839.55	\$853.39	\$574.31
Lower subsidy schedule	\$639.03	\$765.72	\$742.27	\$0.00
\$ difference	-\$163.55	-\$73.83	-\$111.12	-\$574.31
% change	-20.38%	-8.79%	-13.02%	-100.00%
Average monthly income	\$4,552.76	\$2,211.03	\$4,523.15	\$10,608.77
Average monthly premium				
Current (enhanced) subsidy schedule	\$316.31	\$206.01	\$261.87	\$780.89
Lower subsidy schedule	\$476.69	\$275.14	\$370.01	\$1,355.07
\$ difference	\$160.38	\$69.13	\$108.14	\$574.18
% change	50.70%	33.56%	41.30%	73.53%
% of monthly income	3.52%	3.13%	2.39%	5.41%

Note: The unit of analysis is the household. Household income and household income levels are based on 2025 expected modified adjusted gross income (MAGI).

Sources: 2025 open enrollment data, as of January 15, 2025, from the Maine Office of the Health Insurance Marketplace; Maine Bureau of Insurance.

TABLE A5: **Comparison of 2025 Maine Marketplace Enrollees' Subsidies and Premiums by Exclusion Criteria**

	All households	Household Income Level		
		<200% FPL	200–400% FPL	>400% FPL
Average monthly subsidy				
Provided, maximum APTC applied (N = 40,634)	\$821.33	\$843.49	\$873.87	\$594.75
Calculated, no exclusions (N = 40,827)	\$802.58	\$839.55	\$853.40	\$574.22
Calculated, exclusions (N = 36,253)	\$825.99	\$863.63	\$865.18	\$595.14
Average monthly premium				
Provided, maximum APTC applied (N = 40,634)	\$311.13	\$211.64	\$250.28	\$764.68
Calculated, no exclusions (N = 40,827)	\$316.31	\$206.01	\$261.90	\$780.87
Calculated, exclusions (N = 36,253)	\$279.78	\$160.85	\$232.77	\$740.66

Note: The unit of analysis is the household. Household income and household income levels are based on 2025 expected modified adjusted gross income (MAGI).
Sources: 2025 open enrollment data, as of January 15, 2025, from the Maine Office of the Health Insurance Marketplace; Maine Bureau of Insurance.

NOTES

- 1 Maine Department of Professional and Financial Regulation, Bureau of Insurance, <https://www.maine.gov/pfr/insurance/home>
- 2 US Department of Health and Human Services, Assistant Secretary for Planning and Evaluation, 2024 Poverty Guidelines Computations, <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/prior-hhs-poverty-guidelines-federal-register-references/2024-poverty-guidelines-computations>
- 3 USDA, Economic Research Service, Rural-Urban Commuting Area Codes, <https://www.ers.usda.gov/data-products/rural-urban-commuting-area-codes>
- 4 WWAMI Rural Health Research Center, University of Washington, <https://familymedicine.uw.edu/rhrc/>
- 5 RHRT-DataBook-2014-final.pdf
- 6 IRS, SOI Tax Stats - Individual Income Tax Statistics - 2021 ZIP Code Data (SOI), <https://www.irs.gov/statistics/soi-tax-stats-individual-income-tax-statistics-2021-zip-code-data-soi-0>
- 7 Maine Department of Marine Resources, Licenses, <https://www.maine.gov/dmr/fisheries/commercial/licenses>