

Charitable Remainder Unitrust — Suitability Illustration

A modeled comparison under stated assumptions. This is an illustration, not a recommendation to act, and not legal or tax advice.

California · Publicly traded securities, FMV \$1,000,000 · 2026-07-23

WHAT WAS MODELED

Trust structure	Two Life	Measuring lives	Two lives, ages 66 and 64
Asset value (FMV)	\$1,000,000	If no CRUT, you would	Hold and Draw
Payout rate illustrated	10.3% (ceiling)	\$7520 rate	5.0%
Expected return (μ)	7.0%	Volatility (σ)	12.0%
Capital-gains rate	33.1%	Monte Carlo paths	10,000
Mortality basis	Bracket		

A summary of the inputs. The full practitioner-set assumptions table and the limitations that qualify every number are in the back matter.

HEADLINE RESULT VS YOUR STATED ALTERNATIVE

If no CRUT, you indicated you would most likely: **Hold and Draw**. A CRUT at the 10.3% ceiling payout produces more present-value personal wealth than Hold and Draw in:

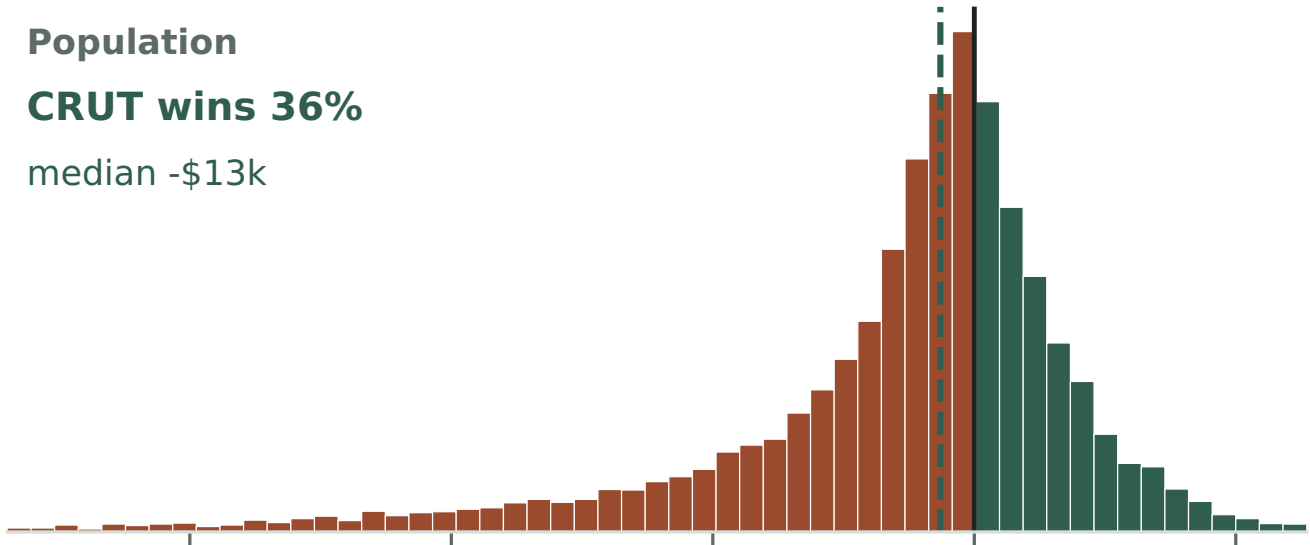
POPULATION (IRS 2010CM)	ANNUITANT (2012 IAM + SCALE G2)
35.9%	65.0%
of scenarios · median PV difference -\$12,978	of scenarios · median PV difference \$10,806

Two numbers, one per mortality basis (the bracket). They differ only by the assumed death table; everything else, including the market paths, is held identical.

Population

CRUT wins 36%

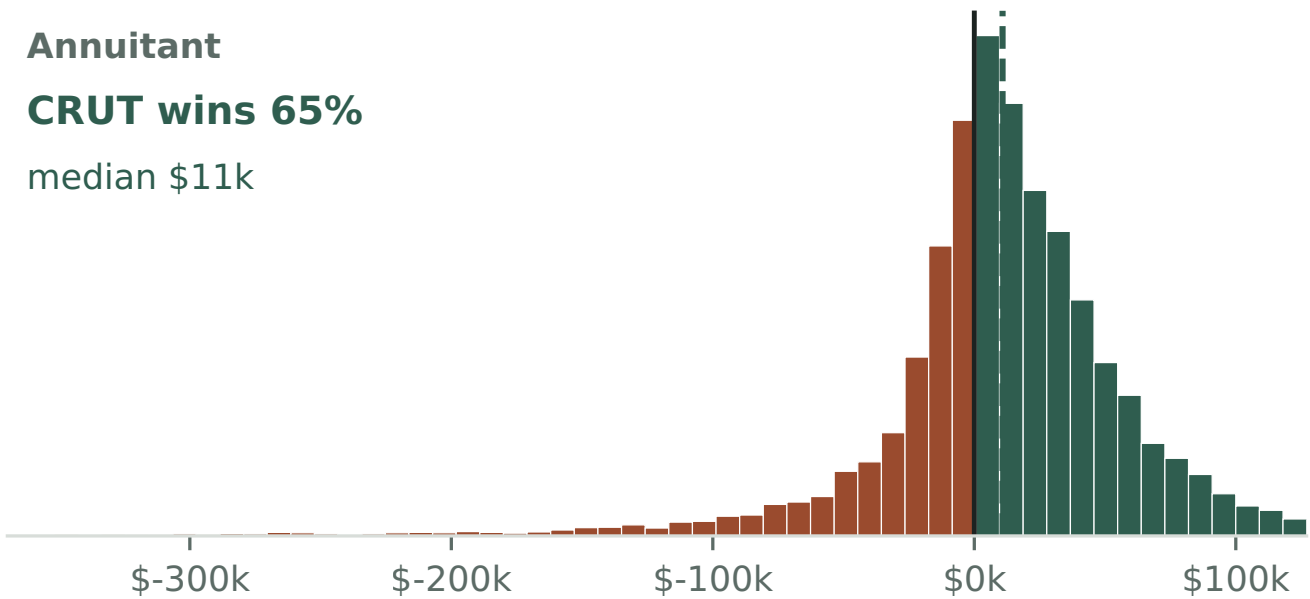
median -\$13k



Annuitant

CRUT wins 65%

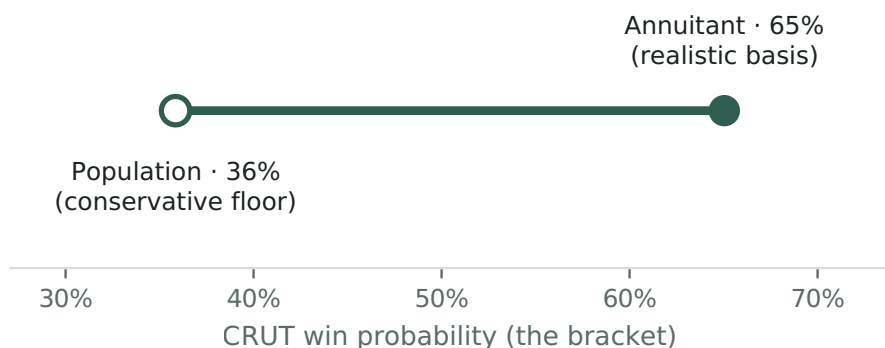
median \$11k



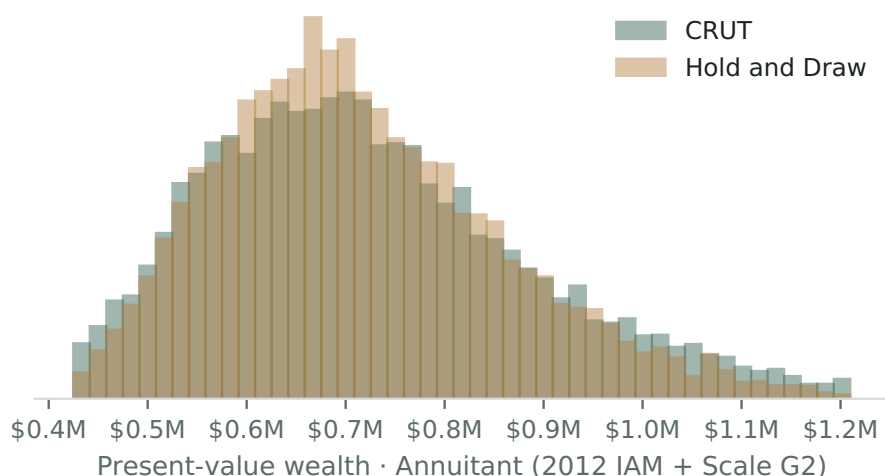
CRUT – benchmark PV wealth (right of break-even: CRUT ahead)

The Monte Carlo picture behind the headline: per-path CRUT – benchmark present-value wealth, each mortality basis shown as its own distribution with its own win probability and median. Teal bars are the paths where the CRUT finishes ahead of the alternative; rust bars are the paths where it finishes behind. The teal mass to the right of break-even is the win probability. The annuitant basis (2012 IAM + Scale G2) is the realistic basis for a typical, self-selected CRUT donor; the population basis (IRS 2010CM) is a conservative floor.

self-selected CRUT donors skew toward the annuitant (realistic) basis



The mortality bracket: win probability at each table. The annuitant basis (2012 IAM + Scale G2) is the realistic basis for a typical, self-selected CRUT donor; the population basis (IRS 2010CM) is a conservative floor — not a midpoint to average.



Where each strategy lands: the distributions of CRUT (teal) and Hold and Draw (tan) present-value wealth, showing level and dispersion, not just their difference.

The headline win probability answers one question — how often the CRUT comes out ahead of the alternative on a given path. This chart answers a different one — by how much, and where the two strategies actually land. They are complementary: a strategy can come out ahead on most paths while its overall distribution sits close to, or even below, the alternative's, because it tends to win frequently by modest margins and lose infrequently by larger ones. Winning here means finishing ahead of the alternative, not reaching any particular dollar figure, and an informative comparison shows both the odds and the magnitudes rather than the odds alone.

IMMEDIATE CHARITABLE DEDUCTION (STATUTORY)

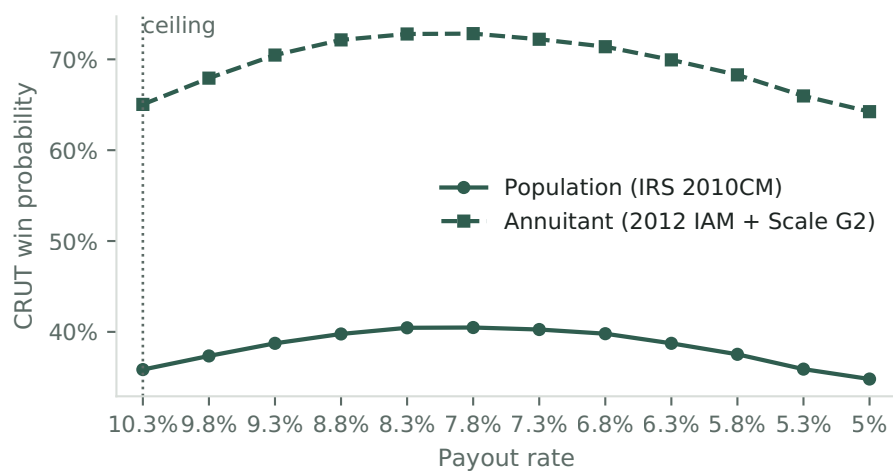
Gross statutory deduction (FMV × remainder factor)	\$101,968
Charitable remainder (% of contribution)	10.20%
10% minimum-remainder test	Passes (≥ 10% required)
IRS actuarial duration	23.7 years

The deduction is deterministic and statutory: gross FMV times the §664 remainder factor at the illustrated 10.3% ceiling payout. It is the gross deduction, not the client's tax saving (which depends on the full return and is the CPA's work). The ceiling payout by construction places the remainder just above the 10% threshold; qualification under §664(d)(2)(D) requires independent confirmation before the trust is funded.

PAYOUT-RATE LADDER VS HOLD AND DRAW

Win probability and median present-value difference at each payout rate, from the ceiling down to the 5.0% statutory minimum, on the same flat tax basis as the headline.

PAYOUT RATE	POPULATION (IRS 2010CM)		ANNUITANT (2012 IAM + SCALE G2)	
	CRUT WIN PROB	MEDIAN PV DIFF	CRUT WIN PROB	MEDIAN PV DIFF
10.3% (ceiling)	35.9%	-\$12,978	65.0%	\$10,806
9.8%	37.4%	-\$12,235	67.9%	\$13,768
9.3%	38.7%	-\$11,755	70.5%	\$16,938
8.8%	39.8%	-\$11,762	72.1%	\$20,077
8.3%	40.5%	-\$12,299	72.8%	\$23,261
7.8%	40.5%	-\$13,646	72.8%	\$25,847
7.3%	40.3%	-\$15,517	72.2%	\$28,338
6.8%	39.8%	-\$18,518	71.4%	\$30,196
6.3%	38.7%	-\$22,676	69.9%	\$31,079
5.8%	37.5%	-\$27,550	68.3%	\$31,597
5.3%	35.9%	-\$33,349	66.0%	\$30,682
5.0%	34.8%	-\$37,660	64.2%	\$28,677



The same ladder, drawn: CRUT win probability at each payout rate from the ceiling down to the 5.0% floor. Rungs are spaced evenly as an ordered list of candidate rates, not proportionally to the rate itself. The dotted line marks the ceiling rung; the two mortality bases share the CRUT teal and are separated by line style.

For this fact pattern, the ceiling rung is not the best rung on the ladder. On the Population (IRS 2010CM) basis, win probability is highest at the 7.8% rung and the median present-value difference is least unfavorable at the 9.3% rung. On the Annuitant (2012 IAM + Scale G2) basis, win probability is highest at the 7.8% rung and the median present-value difference is largest at the 5.8% rung. A lower payout rate is not strictly worse: it produces larger later-year distributions and a larger charitable remainder. Read the ladder as a tradeoff continuum, not a directive to take the top rung.

FOR CONTEXT: IF YOUR ALTERNATIVE WERE DIFFERENT

These are not the headline. They show how the comparison would change if the no-CRUT alternative were one of the other two strategies (each shown at every basis).

If your alternative were **Hold to Death** instead — Population (IRS 2010CM): CRUT wins **55.2%**, median **\$33,382**; Annuitant (2012 IAM + Scale G2): CRUT wins **67.0%**, median **\$106,216**.

If your alternative were **Liquidate and Reinvest** instead — Population (IRS 2010CM): CRUT wins **59.1%**, median **\$10,413**; Annuitant (2012 IAM + Scale G2): CRUT wins **83.6%**, median **\$38,777**.

TRUST STRUCTURE (AS ENTERED)

Trust structure	Two Life	Measuring lives	Two lives, ages 66 and 64
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The structure above is the fact pattern entered for this illustration; the numbers throughout rest on it. A longer- of (life or term) trust continues payments to the named term taker if the measuring life dies before the fixed term ends.

ASSUMPTIONS USED (PRACTITIONER-SET)

Expected return (μ)	7.0%	Volatility (σ)	12.0%
Portfolio turnover	20.0%	PV discount rate	5.0%
Trust management fee	1.0%	Benchmark fee	1.0%
\$7520 rate	5.0%	Monte Carlo paths	10,000
Payments per year	4	Valuation → first payment	0 mo
Longevity adjustment	0 yr	Market seed	42
Mortality basis	Bracket		

LIMITATIONS AND BASIS OF THIS ILLUSTRATION

- **Mortality basis — a bracket, not a point.** Results are shown at two death tables: a population table (IRS 2010CM) and an annuitant table (2012 IAM + Scale G2). Because the donor pool for a CRUT is self-selected for longevity, the annuitant table is the realistic basis for a typical donor and the population table is a conservative floor — not a midpoint to average. The pair brackets the longevity assumption (realistic versus conservative) rather than asserting a single life expectancy.
- **Win probability, defined.** "Win probability" is the share of modeled scenarios in which the CRUT produces more present-value personal wealth, integrated over both the market paths and longevity at the stated basis. It is not a deterministic point estimate, and it is distinct from the academic CRUT-vs-CRUT wealth measure, which lives on a different axis.
- **One scored objective.** Present-value wealth to the non-charitable beneficiary is the only objective scored here. Other donor objectives — income stability, maximizing the charitable remainder, and legacy goals — are not scored and may favor a different choice.
- **Scope of tax figures.** The immediate charitable deduction is deterministic and is computed exactly. This tool does **not** compute the client's actual tax savings, which depend on the client's full

return and are the CPA's work. The tax handling inside the comparison, and the deduction valued at a representative marginal rate, are modeling devices used to estimate the CRUT's benefit — not tax-preparation figures.

- **Flat, symmetric tax basis.** The comparison taxes both the CRUT and the benchmark at a single flat rate, applied symmetrically. The rate used is 33.1% = federal long-term capital gains 20.0% + net investment income tax 3.8% + state 9.3%. It does not model graduated brackets, year-by-year bracket movement, or the alternative minimum tax. The tax basis is orthogonal to the mortality basis above.
- **Modeled, not guaranteed.** Results come from a 10,000-path Monte Carlo simulation under the stated return and volatility assumptions. They describe the modeled distribution of outcomes, not a prediction or guarantee.

Methodology and published research: quanticrut.com/research