

Climate Smart Future Ready Cost-Benefit Analysis

*A return-on-investment review of County-
supported climate, resilience, and economic
initiatives (2023–2025)*

Presenting Today

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Overview

Objectives of this CSFR Cost-Benefit Analysis



Capture the costs and the hidden longer-term social, health, and environmental benefits provided by CSFR projects along with the economic value



Identify limitations and areas of uncertainty



Aggregate the costs and benefits up to the portfolio level



Communicate the overall value clearly to leadership and the community

CSFR as a community-led portfolio

- A coordinated set of community, partner, and County-supported initiatives
- County role often includes funding, staff support, coordination, and technical leadership
- Designed to reduce risk, leverage resources, and deliver long-term community value

Unifying Solutions

Built Environment

Circular Economy

Businesses and Jobs

Mobility of People, Goods,
and Services

Natural Environment
and Water

Agriculture and Local Food

Greenhouse Gas Emissions

What was included in this study?

In scope:

- Wildfire and flood mitigation
- Efficiency from building codes
- Solar energy support
- EV charging stations and support
- Mattress recycling
- Open lands

Out of scope:

- Projects resulting in plans or analysis for later action: Water, Transportation, Community Food Assessment, etc.
- Workforce upskilling
- Soil Health Days, Food Van
- Business outreach
- Methane capture

The CBA Process

High-Level Approach

Reviewed County-supported CSFR investments across the full portfolio

Collected data on costs and outcomes from action teams, and identified longer-term benefits

Converted measurable benefits to monetary value where possible

Reported conservative estimates and ranges where uncertainty exists

What could be included as a benefit?

- Cost avoidance
- Economic value
- Health and environmental benefits

Not benefits:

- Activity data
- Outcomes that can't be linked to CSFR activities

Calculation Methods



Existing ROI factors

FEMA has studies on the average impact of their wildfire mitigation grants



Impacts calculated in other studies

A large California study of recycled mattresses quantified benefits



Best (conservative) estimates of impact

The 726 unique DC fast charger customers likely spent at least \$x locally.



EPA standards

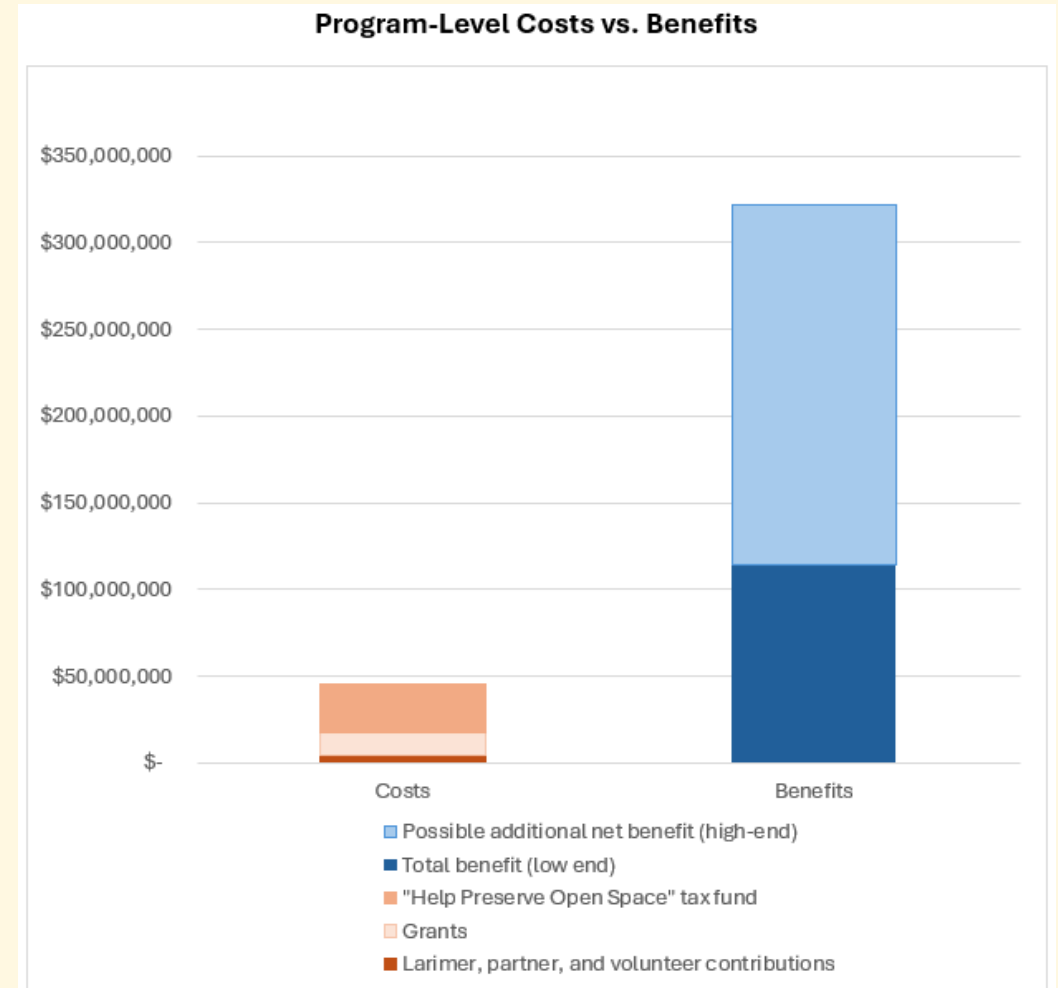
Value of avoided particulate matter, carbon dioxide, and methane

Results

Portfolio-Level Results

- **\$4.0M:** Larimer County, volunteers, and partner contributions
- **\$13M:** Grants
- **\$28M:** Open Space funds
- **\$114 to 321M:** Benefits

Program costs produced benefits to the community of 2.5x to 7x the total investment.



Why are benefits reported as a range?

Some benefits occur over long time horizons and are realized as avoided future costs.

Not all community and environmental benefits can be precisely measured today.

Conservative assumptions were used to avoid overstating results.

Top 3 Projects

1

Building codes that support efficiency:
up to 16:1

2

Preservation of open lands and natural resources:
up to 8.6:1

3

Wildfire mitigation and forest restoration:
up to 7:1

Challenges and Solutions

Metrics

A benefits analysis is looking for outcomes, which requires before-and-after data on what actually changed as the result of activities.

Action teams had varying levels of usable data for calculations.

Usable:

- # Mattresses recycled
- kWh of solar panels installed
- Salary increases after training

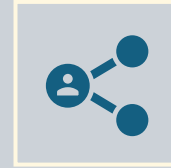
Not convertible to impact:

- # businesses contacted
- # website visitors
- Any current average, without a baseline

Recommendations for Action Teams



Focus on tracking direct *outcomes* instead of *activities*.



Follow up with impacted community members.



Keep an eye out for new tools and research for calculating benefits.



Establish baseline metrics at the start of each project.

Conclusion

What this means for Larimer County

CSFR investments are generating community value that clearly exceeds their costs, even under conservative assumptions.

Many of the most important benefits take the form of avoided future risks and costs.

Evaluating CSFR as a coordinated portfolio reflects how local governments deliver long-term, forward-thinking solutions, prioritizing resilience and public value over maximizing ROI for individual projects.

Where to Go Next

- **Focus on overall value, not financial:**

These results are not a call to favor some projects over others!

- **Expect improvements in future cost-benefit analyses:**

As the tracking process matures for many action teams and plans become implementation projects, additional benefits will be seen even for analyzed projects.

- **Continue to build partnerships:**

Organizations with targeted expertise can both help inform project design as well as assess the actual impacts afterward.

The background is a solid dark grey color. It features several abstract, organic shapes in a lighter grey tone. Some of these shapes are filled with a pattern of small, light grey dots. The shapes are scattered across the frame, with some appearing in the top left, top center, and bottom left, while others are more solid and located on the right side and bottom center.

Questions?



Thank You!