

Historic Preservation & Sustainability Guidelines

for Colorado Main Streets



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Executive Summary



The purpose of this project is to provide guidelines and resources for a variety of stakeholders hoping to improve their Colorado communities through sustainable historic preservation. This guidebook is for the Colorado Main Street Program, a branch of the CO Department of Local Affairs that provides support to small rural communities throughout Colorado that want to preserve and rehabilitate their historic Main Street commercial districts. The intended users of this guidebook are municipal staff, non-profit organizations, Main Street property owners, and tenants who are interested in enhancing their community in a way that preserves history and increases the sustainability of that community, without sacrificing practicality or financial feasibility. This guide is informed by responses from experts involved with Main Street communities throughout Colorado, which help provide best practices for building, site, and district preservation. It also includes available resources for those hoping to make positive changes in their Main Street district. From each individual building element to the energy and water sources that supply Colorado communities, this guide can help to eliminate the district's impact on climate change, ecosystem health and resource depletion, while simultaneously preserving the stories that live in the history of Main Street's built environment.

Philosophy & Theoretical Background

It is becoming common knowledge that preservation and sustainability have a symbiotic relationship. This guidebook centers around the idea that “the greenest building is one that is already built” (Elefante 2007), meaning that existing (often historic) buildings are more sustainable than new construction because they contain embodied energy, are often built with durable materials, and are often designed to make the best use of natural heating, cooling, and lighting. Buildings consume energy throughout their entire life cycle. Resource extraction for building materials, transport and processing of those materials, construction, operations and maintenance, and demolition when the building is finally at the end of its life cycle all consume energy that is “embodied” within that building. Replacing an old building with a new one requires major energy consumption to demolish and rebuild, and no matter how energy-efficient the operations and maintenance of a new building, it can take several decades to recoup the initial embodied energy cost.

This guidebook draws on the philosophy of “Heritage Energy,” a recent term that combines the principles of historic preservation and sustainability as they apply to existing buildings. When we preserve historic buildings we are not only protecting their cultural legacy; we are also acknowledging the energy our ancestors used to create them, and through extending a buildings life cycle, we make this energy last longer.

Organization & Contents

The two principal sections of this project are the Sample Guidelines & Best Practices and Resources, each of which required different methods to achieve their end goals. These methods include surveys, academic and literary research, and online web demonstrations and tools analysis of Return on Investment Calculators.

A survey of communities participating in the Colorado Main Street Program, to gauge the status of Colorado Main Street buildings, utilities, system upgrades, and economies. The responses from this survey helped inform the Sample Guidelines & Best Practices as well as the Resources section of the guide. Among others, the central takeaways from this survey were:

- **Most CO Main Streets experienced a heyday from 1870-1930.**
- **Central AC and Forced Air are the most common heating and cooling systems in Main Street buildings.**
- **Several communities have recently undertaken major projects to improve the sustainability of their Main Street.**
- **Financial feasibility is the most common barrier to communities hoping to pursue these projects.**
- **Small, local businesses dominate the commercial activity of most CO Main Streets.**

The guidebook describes these survey findings in more detail, and these findings helped tailor the guidelines so that they would be most useful to Colorado communities.

The guidebook also contains a section on How to Use This Guide, which explains how each element of the guide is interconnected. Each guideline category is paired with relevant resources, to help end users match their intended action with potential loans, grants, tax credits, technical assistance, rebates, Return on Investment Calculators, or general information. Additionally, different end users will seek to accomplish different things with this guide, so each potential end user has an icon. These icons are placed next to each relevant guideline category and each relevant resource, quickly showing the user whether or not that section of the guide applies to them. The guide is not meant to be read through page by page, but should be flipped through to gauge what guidelines and resources are helpful for the end user.



The Sample Guidelines & Best Practices section has five elements:

- **District Infrastructure**
This element addresses large-scale actions that can be taken on a municipal level to improve historic preservation for the entire Main Street district, that can help significantly reduce energy and water use on a district scale, or help transition a community towards using renewable energy sources.
- **Building Exterior**
This element is oriented towards owners of historic properties, and contains more micro-level recommendations on how to maintain, restore, and repair building exteriors while improving the sustainability and energy efficiency of the building. This element emphasizes the preservation of unique historic elements, since building exteriors are the most distinct and visible element of a Main Street district.
- **Building Interior**
This element primarily provides guidelines on improving sustainability of historic buildings without compromising historic character; it dives into complex system upgrades for lighting, heating and cooling.
- **Building Maintenance**
This element provides detailed guidelines on maintaining historic properties so that historic building materials do not need to be replaced. Under ideal maintenance conditions, many historic materials can last indefinitely, preserving the embodied energy of historic buildings.
- **Site Design**
This element addresses site design of properties with historic buildings, or within Main Street districts. The recommendations emphasize capture of stormwater runoff, reducing water usage through drought-tolerant vegetation, and retaining existing site features that contribute to historic character.

Combined, these elements provide a comprehensive overview of guidelines to help preserve Main Street districts while enhancing sustainability through large-scale, district-wide initiatives, all the way down to detailed maintenance techniques.

Finally, the Resources section of this guide helps end users identify helpful resources for whatever project they choose to undertake. There are six resource categories included in the resource section:

- **Loans & Grants**
This category includes financial assistance resources for a variety of different kinds and scales of projects. This section includes many programs to help large-scale water and energy infrastructure projects, as well as some to help small businesses and property owners improve their historic buildings.
- **Tax Credits**
This category provides information on several high-profile tax-credit programs for historic preservation and energy-efficiency upgrades.
- **Rebates**
This category describes several rebate programs from local utility providers in Colorado. This selection is not meant to be comprehensive, and end users should research rebate programs of their local utility provider if it is not included in this category.
- **Technical Assistance**
This category lists some of the technical assistance programs available to municipalities hoping to upgrade town facilities, as well as those available to property owners hoping to undertake smaller-scale projects.
- **Informational Guides**
This category covers a wide variety of guidebooks, from recommendations to municipalities on how to create a Main Street district, to information on appropriate vegetation to use in Colorado.
- **ROI Calculators**
This category provides many ways for property owners to calculate their ROI for upgrades to their energy and water systems.

The combination of the Sample Guidelines & Best Practices and the Resources sections allow the user to approach each project uniquely. Each guideline should be appropriate for a Colorado Main Street context, and each one considers both preservation and sustainability simultaneously. The philosophy that historic preservation and sustainability are compatible appears throughout this guide, and it will hopefully prove to be a useful resource for anyone hoping to improve their community’s Main Street.