

A STORY OF PLACE

FORT COLLINS, COLORADO

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with contributions from Diane Jones, Callahan Seltzer, and Colin Day



INSTITUTE FOR THE
BUILT ENVIRONMENT
COLORADO STATE UNIVERSITY



REGENERATION

ABOUT IBE

The Institute for the Built Environment is based at Colorado State University. We form interdisciplinary teams of faculty, students, and off-campus professionals to take research to practice. At our heart, we develop and educate sustainability leaders at CSU. **Our mission is to advance the development of healthy, thriving built environments.** We work with building owners, organizations, and communities to develop strategic programs that increase alignment, build team capacity, and meet sustainability goals.

Why Story of Place?

Fort Collins anticipates 100,000 new community members in the next 15 years. For better or worse, people have discovered that living in Fort Collins and on the Colorado Front Range has a lot to offer. The city has enjoyed a slew of top ten rankings over the years – most recently as the fourth happiest city in America by National Geographic. However, there are growing concerns about losing what makes this place special.

While there is much to enjoy about a robust economy and real estate market, there are plenty of concerns, as well: high-end national stores pushing out opportunities for startups and innovative small businesses, rising housing prices and cost of living, headache-inducing traffic, an increasingly affluent and homogenized demographic, loss of farm land and open space, depletion of natural resources and the list goes on. These concerns ring true for many Front Range towns and cities, and raise important questions: Who do we become in the face of change? How do we protect that which is special? How do we respond to the forces of population growth and economic prosperity that are upon us? Understanding what makes this place unique through its patterns might provide some direction for answering these questions.

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PREFACE

The Story of Place Process

A regenerative approach to community development does not rely on generic solutions or even best practices. Instead, it begins by engaging community members in a deep exploration of the ecological and social dynamics underlying the place where they live. This eco-social understanding is known as a Story of Place and it draws on natural and human history to illuminate the recurring patterns, processes, and essential qualities of a place.

From pre-human history through human inhabitation, Story of Place considers how environments and their inhabitants have co-evolved through time. It uncovers four essential patterns—Core Process, Core Purpose, Core Value, and Place Vocation—that together express the uniqueness of the workings of a place. With an understanding of what is unique, distinctive, and fundamentally “programmed” into any given place, community members are able to work more effectively and within the context of place.

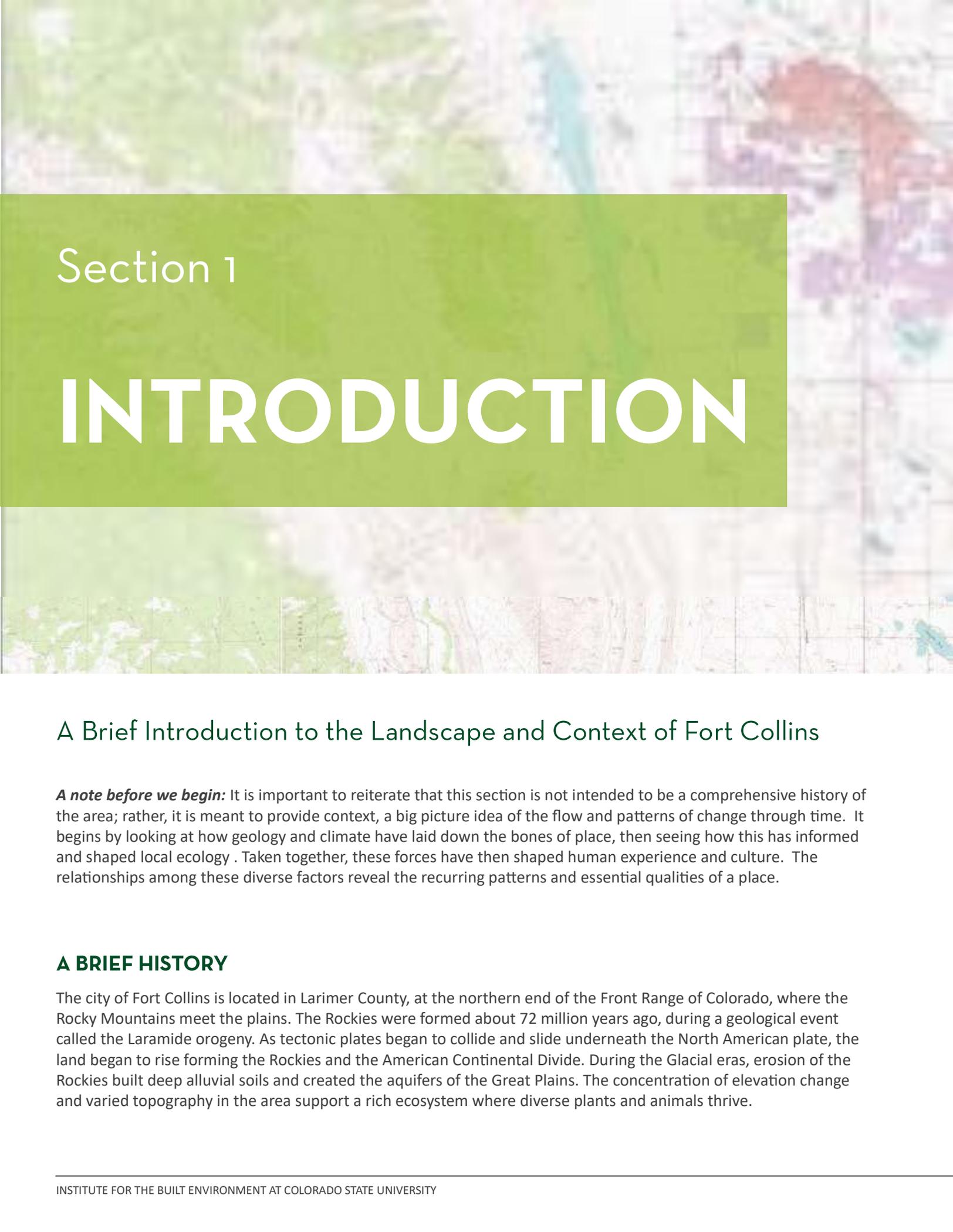
The aim of the Story of Place process is to help people deepen their sense of connection to the landscapes they inhabit. Through their understanding of the inherent potential of a place, community members and influencers are able to work in ways that contribute to its health, vitality, and authenticity. As defined by Regenesi, developers of the Story of Place methodology, this approach helps “access the deep love and caring that people have for their place, and then reconcile the inevitable contrasting stakeholder viewpoints into a higher-order understanding that all can experience, share, and work from together.”

Story of Place Course

During the summer of 2017, the Institute for the Built Environment, Urban Lab, and Regenesi teamed up to hold a Story of Place course in Fort Collins. Over a span of nine online sessions and a five-day intensive, the series immersed participants in a guided research process for understanding and working with place as a living system.

Participants gathered from as near as our own backyard to as far as New Zealand, Canada, and Portugal to explore every aspect of Fort Collins. They learned about the formation of the mountains and the deep sediment of the plains; Paleo-Indians and the mastodons they hunted; keystone species like cottonwoods, beavers, bison and ground hogs; and more recent inhabitants like sheep farmers and beer brewers. Their goal was to learn how to see Fort Collins as a living system, with its own ways of working and its own unique essence. The idea was that if we could see Fort Collins’ as a living being, then just maybe we would have a better chance of making good choices about who we might become and the future we want to pursue.





Section 1

INTRODUCTION

A Brief Introduction to the Landscape and Context of Fort Collins

A note before we begin: It is important to reiterate that this section is not intended to be a comprehensive history of the area; rather, it is meant to provide context, a big picture idea of the flow and patterns of change through time. It begins by looking at how geology and climate have laid down the bones of place, then seeing how this has informed and shaped local ecology. Taken together, these forces have then shaped human experience and culture. The relationships among these diverse factors reveal the recurring patterns and essential qualities of a place.

A BRIEF HISTORY

The city of Fort Collins is located in Larimer County, at the northern end of the Front Range of Colorado, where the Rocky Mountains meet the plains. The Rockies were formed about 72 million years ago, during a geological event called the Laramide orogeny. As tectonic plates began to collide and slide underneath the North American plate, the land began to rise forming the Rockies and the American Continental Divide. During the Glacial eras, erosion of the Rockies built deep alluvial soils and created the aquifers of the Great Plains. The concentration of elevation change and varied topography in the area support a rich ecosystem where diverse plants and animals thrive.

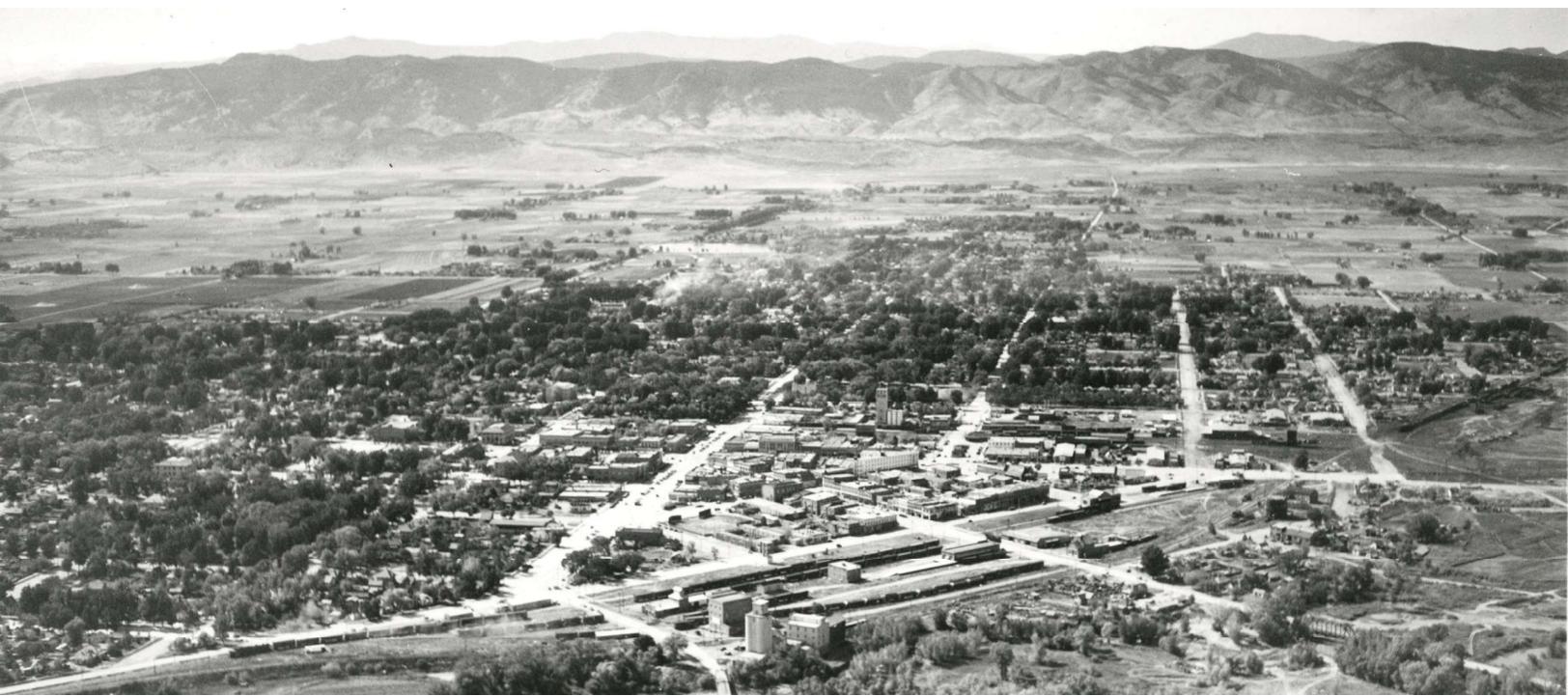
The Cache la Poudre River originates in the Front Range and emerges from the foothills north of Fort Collins. It flows eastward across the plains, passing north of the city of Greeley and into the South Platte River. Subject to devastating floods, the Cache la Poudre River has often impacted local communities. (The flood of 1864 destroyed the military post at Camp Collins, causing the inhabitants to relocate the future city up out of the flood plain.) The Platte River runs from the Rocky Mountains to the Mississippi River and has always been an important artery facilitating the movement of plant and animal species as well as cultural cross-pollinations.

Humans arrived in the area roughly 15,000 years ago during the Mesozoic Era to find an ecosystem rich with mammalian mega-fauna including Woolly Mammoths, Giant Ground Sloths, American Camels and Saber-tooth Tigers, among others. Early human inhabitants lived as small bands of hunter-gatherers, migrating with the seasons and movement of the animals. As recently as two hundred years ago, animal species such as bison, black-footed ferrets, pronghorn antelope and grassland birds flourished on the landscape alongside a variety of Native American tribes. The arrival of Spanish and European explorers, and later settlers, forever changed the way that humans inhabited the area. The Native American population, alongside that of the bison and many others species, plummeted dramatically during the American westward expansion of the 1880s.

While the Gold Rush attracted adventurers to other parts of Colorado, settlement of Larimer County was primarily agricultural. Despite the challenging climate, agriculture was made possible in the 1860s by the relative ease of access to the water from the Poudre River and the introduction of irrigation systems. Water was diverted from streams and rivers, transforming the area into a hub for ranching, farming and commercial exchanges. Colorado State University was established in 1870, but classes only began in 1879. Later established as a Land Grant University, CSU has been home to multiple innovations and technologies that support agriculture.

Prior to the Dust Bowl, agriculture relied upon water from local rivers. However, these water supplies were insufficient to support the entire agricultural season. The solution was the Colorado-Big Thompson Diversion, a federal water project initiated during the FDR administration in 1938. Requiring 20 years to complete, the diversion collects West Slope mountain water from the headwaters of the Colorado River and diverts it to the east, to Colorado's Front Range and plains. In recent years, this diversion is mostly serving municipal and industrial purposes, rather than irrigation for agriculture.

In the past 40 years, Fort Collins and Colorado State University have grown significantly. The changing demographics have shifted the political climate, making the region less conservative and more liberal overall. The focus on agriculture and ranching while still present, has decreased. Increasingly, the university and the local economy are based on technology, innovation, and the proliferation of beer companies and beer culture.





Section 2

CORE PATTERNS & PROCESSES

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Emerging from hundreds of hours of research, observation, interviews and lived experience, the following patterns and processes appear to be part of the essence of life in Fort Collins. Core process relates to the question, “how does this place work?”

PATTERN 1: SHELTERING EDDIES

The Front Range is exposed to a host of dramatic natural events—everything from floods, fires, and tornadoes, to boomtown economics. A key element for channeling these events and into renewing and positive directions is the existence of sheltering eddies. Such eddies function to create continuously evolving and nurturing places—physically, emotionally, and intellectually—to address in pragmatic and constructive manner the challenges and the unexpected.

Geographically, Fort Collins is nestled along the Front Range of the Rocky Mountains, at a rich intersection of ecosystems, topography, and culture. The Front Range is the long North-South stretch where the Rocky Mountains (the most formidable mountain range in North America) meet the prairie and semi-arid western edge of the Great Plains. Like a shoreline where the ocean of grass of the Eastern prairie meets a mountain wall, today the Front Range is considered the 3rd coast of America. Many of the early settlers, facing such a monumental barrier, may have decided to settle here instead of pressing further west.



Fort Collins sits at a point along the Front Range that opens westward and allows for relatively easy movement across the Rockies. In other words, it lies at a crossroads between north-south travel along the Front Range and east-west travel to the Denver Basin and range and beyond. At this crossroads, human and animal traffic can spill over, released from the pressure imposed by the mountain barrier. This allows the traffic to slow down and pause, or eddy, creating an opportunity for settling and exchange to occur.

This pattern is also reflected in the flow of water through the landscape. Water rushing off of steep mountain slopes slows down and infiltrates when it encounters the gentle gradients of the plains. As the water slows, it also releases sediment and nutrients, contributing to the steady deposition of prairie soils. Ecosystems respond to and amplify this process, through beaver dams (now all but absent in the urban landscape) and cottonwood bosques. Cottonwoods slow and mitigate the impact of floods, while the disturbance they bring creates pools of water and nutrients, bounded by debris, that allow for the cottonwoods to regenerate.

Fort Collins nestles into a pocket of sheltered air at the foot of the mountains. This air cushion, an eddy in the air flow, protects the community from the tornadoes that approach from the east to as close as the interstate.

The area has long served as an intersection on the travel and trading routes of Native American tribes including the Cheyenne, Arapahoe, Kiowa, and the Mountain Ute.

Today, Fort Collins remains an active crossroads where diverse groups can settle and find a sheltering environment that fosters learning, enterprise, and innovation. Modern social and cultural examples of agencies and programs that provide a haven for start-ups and people experimenting with a variety of ideas and approaches include:

- **Rocky Mountain Innosphere:** a science and technology startup incubator
- **Music District:** a dynamic gathering hub, workspace, and creative playground for the music community
- **Museum of Discovery:** a unique public/private partnership that is a hands-on history and science museum and learning center
- **Catalyst for Innovative Partnerships (Colorado State University):** supports interdisciplinary research teams tackling grand societal and scientific challenges, to achieve significant global impact, in accordance with CSU's land grant mission
- **Red Tail Ponds:** a Permanent Supportive Housing community for homeless and low income citizens that features 60 apartments along with a community kitchen, fitness area, computer room, community garden and several common areas for residents to congregate
- **Engines and Energy Conversion Laboratory (Colorado State University)** – a globally recognized energy research and educational facility. Innovations include small 2-stroke cycle engine for use in developing countries to reduce emissions and a clean burning cook-stove to help minimize indoor air pollution in developing countries

Our extensive system of parks, trails and natural areas provide protected habitat for wildlife, and serve as an antidote for people living in an urban environment. Another way that this pattern manifests is in Fort Collins beer drinking culture, which creates space for interesting conversations, a place to slow down and for people to connect.

Sheltering eddies, the active, welcoming, open, dynamic places and opportunities that foster exploration, experimentation and innovation are key to what makes Fort Collins unique and attractive as an ecosystem and a human gathering place.



PATTERN 2: TRANSFORMATIVE REINVESTING

Fort Collins looks toward the future and reinvests precious resources in hopes of a brighter one...

The Great Plains were formed by millennia of erosion from the Rocky Mountains. The Rockies were once twice as tall as they are today. Through countless freeze and thaw cycles, through floods and wind, the soils and aquifers of the Northern Great Plains were deposited and developed, forming the basis for the grasslands ecosystems they support. These ecosystems in turn experience periodic disruption by floods, fires, and vast migrations of herds. The effect of these disruptions is to cycle the nutrients held in the grass back into soil. This investment ensures that each subsequent generation of grassland system draws from a deeper reserve of ecological wealth and resilience. Indigenous peoples were generally skillful users of fire as a grasslands and wildlife management tool. (Modern agriculture, which has tended to be extractive with regard to this ecological wealth, is now faced with the challenge of how to evolve its practices in order to reinvest carbon and other nutrients into the soil).

While mining interests, and subsequent connection to the mountains, fueled much of the pioneering interests in Denver and Boulder, Fort Collins offered few meaningful mining opportunities. Instead, Fort Collins had a relatively short-lived and modest start as a military outpost located strategically at a key crossroads. Soon after, it found its identity in agriculture. Even though the soils were comparatively inferior to those of nearby communities—heavier in sand, gravel, and clay—the community made use of available surface water through strategic investments in a sophisticated irrigation system. These investments are the foundation for what ultimately enabled a thriving agricultural economy .

Transformative reinvesting is one of the adaptive patterns that Fort Collins has exhibited repeatedly over time. This pattern refers to the many ways that the Fort Collins community and its organizations have boot-strapped resources today, with an eye on future prosperity. This particular form of investment (vs. speculation or lack of investment) is attentive to the long view and shows evidence of people who believe in their future.

One example comes from the late 19th century, the newly settled community of Fort Collins faced economic hardship and lack of feasible exports and employment. Recognizing, like many other towns on the Colorado Front Range, that Fort Collins' climate and soil are ideal for the production of sugar beets, local businessmen leveraged local investment into the establishment of a sugar beet production facility, enabling increasing economic vitality and viability for the community.

In 1992 residents approved a quarter-cent sales tax to increase open space and land conservation. This tax allowed the city to purchase the Cathy Fromme Prairie and Coyote Ridge Natural areas. Over time, this self-imposed tax has enabled the preservation of 39 natural areas – clearly an investment into the long-term health and vitality of the area. Another modern example includes the City's adoption of the Climate Action Plan – a clear commitment to investing in future generations.





PATTERN 3: PRAGMATIC INNOVATION

In the 130 years since the advent of pioneer settlement, the community has exhibited a strong tendency to experiment, invent, and create. In the earlier days, it was about new ways of trapping, farming and ranching. In contemporary times the area is a hotbed of innovation related to technology, transportation, clean energy, aerospace, bioscience, agriculture and veterinary practice.

If we go back to the example of sugar beets, Fort Collins distinguished its sugar beet production from other Colorado communities through the creative reuse of the otherwise discarded beet tops. During a particularly heavy winter snow, sheep that typically wintered on grain and hay were fed the “waste-product” beet greens. The animals thrived and the area became known as the “lamb feeding capital of the world.”

Other examples of pragmatic innovation in Fort Collins include:

- **Street Car System:** In 1907 Fort Collins was an early adopter of a street car system, which ran every 20 minutes from 5am to midnight. This is especially notable because of the size of the town.
- **Parshall Irrigation Flume:** a flow measuring device in irrigation engineering, originally developed in the 1920's, which is widely used today.
- **Peace Corps:** Professor and humanitarian Maury Albertson from CSU played an instrumental role in founding and administering the Peace Corps.
- **Humane Slaughter:** CSU professor Temple Grandin has revolutionized the commercial cattle industry to reduce fear and suffering in animals when they go through slaughter.
- **Envirofit Cookstoves:** low cost, high performing biomass cookstoves that reduce fuel consumption by up to 60% while reducing harmful emissions up to 82% compared to open fires, with over one million stoves produced and in use in developing countries.
- **Patents Per Capita:** Fort Collins has one of the highest national rates of patents per capita – four times that of the national average.

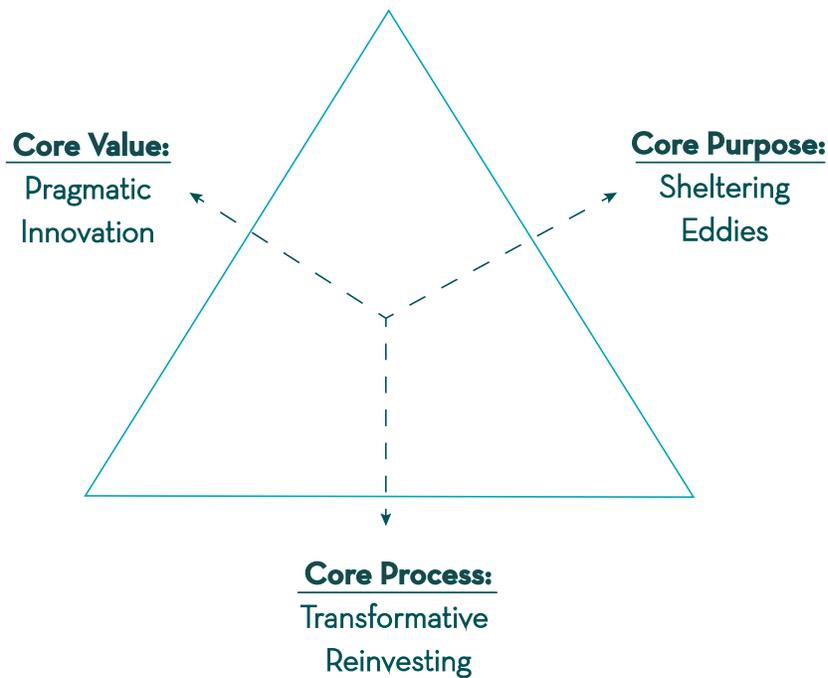
Fort Collins has been recognized by the Smithsonian Lemelson Center for the Study of Invention and Innovation. Only five communities from across the country and over time have been selected for this recognition. Joyce Bedi, a Smithsonian historian working on the project said, “[Fort Collins demonstrates an] overarching character of collaboration” that sealed its place in the exhibit. Strong ties between leaders from CSU, city government and local businesses drive innovation, Bedi said. That level of collaboration wasn’t found in Boulder, Denver and other areas.

Vocation: Learning Broadcaster

Fort Collins isn't content to sit on its innovations that result from its sheltering eddies and transformative reinvesting.

We create ideas, products and other innovations that are shared with the world. Most obviously, we see this in the mission of the Land Grant University, whose mission is to create and disseminate useful, applicable research and innovation. In addition to the examples outlined above, the role that CSU professor Maury Albertson played as co-founder of the Peace Corps offers a remarkable example of broadcasting the learnings from our community (and eventually communities around the globe) in hopes of making a positive difference.

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