

JOINT AGENDA
LARIMER COUNTY PLANNING COMMISSION AND
LARIMER COUNTY BOARD OF COMMISSIONERS
Wednesday, December 13, 2017/6:00 P.M./Commissioners' Hearing Room

- A. CALL TO ORDER
- B. PLEDGE OF ALLEGIANCE
- C. AMENDMENTS TO AGENDA
- D. PUBLIC HEARING DISCUSSION ITEMS:

- 1. LARIMER COUNTY RESERVOIR PARKS MASTER PLAN

Staff Contacts: Gary Buffington & Ken Brink, Natural Resources Department

- 2. LARIMER COUNTY MOUNTAIN RESILIENCE PLAN

Staff Contact: Matt Lafferty, Planning Department

- E. ADJOURN

2.	<u>TITLE:</u>	Larimer County Mountain Resilience Plan
	<u>REQUEST:</u>	Acceptance of the Larimer County Mountain Resilience Plan, being Phase 1 of the Larimer County Comprehensive Plan.
	<u>STAFF CONTACTS:</u>	Matt Lafferty, AICP
	<u>CONSULTANT:</u>	Logan Simpson Jeremy Call, AICP
	<u>FILE #:</u>	17-CODE0224
	<u>NOTICE GIVEN:</u>	Newspaper Publication

PROJECT DESCRIPTION/BACKGROUND:

The 2013-2018 Larimer County Strategic Plan identifies an update of the 1997 Larimer County Master Plan as one of the objectives. Specifically, Objective 3 of Goal 2 (Economic Development), states:

“By January 2017 Larimer County will align the necessary resources to update the Comprehensive Master Plan. Preparations will include involving citizens to identify needs and current conditions, evaluating current land use regulations and development processes and establishing a cash reserve fund.”

Shortly following the 2012 High Park Fire and the 2013 floods, the Community Development Director identified a funding opportunity that would kick start the above objective. This funding opportunity involved seeking a Community Development Block Grant for Disaster Relief (CDBG-DR). In June of 2016, Larimer County Community Development was awarded the grant. The overarching purpose of the grant is to formulate and adopt a planning document aimed at creating resilient land use strategies, practices and policies for the mountain regions of the County.

Because the awarded grant included a specific purpose affecting a specific segment (mountains) of the County it was decided to approach the preparation of the Comprehensive Plan in two phases. Phase 1 would be completed first and will focus on the western (mountain) areas of the County, while phase 2 will focus on the eastern (plains) areas.

Since the later part of 2016, the Community Development Staff along with a team from the consulting firm Logan Simpson focused efforts on Phase 1 of the Comprehensive Plan. The results of these efforts are a plan that is being referred to as the Larimer County Mountain Resilience Plan. This plan proposes to provide a long-range framework for decision making in the unincorporated mountainous area of western Larimer County. The plan will also provide policy guidance for future development, public services and reducing the risks of natural disasters.

To achieve the proposed plan the consultants and staff, through a series of organized public events and work sessions, worked directly with citizens of the mountainous areas and communities, the Board of County Commissioners, the Planning Commission, the Stakeholders Advisory Committee, the Technical Advisory Committee, and a variety of County Boards and Commissions. The results of these efforts is articulated throughout the proposed Larimer County Mountain Resilience Plan, which is attached for your consideration.

COMMUNITY DEVELOPMENT RECOMMENDATION TO THE BOCC:

The Community Development Division requests that the Board of County Commissioners endorse the Larimer County Mountain Resilience Plan by recommending that the Planning Commission accept said plan as Phase 1 of Larimer County Comprehensive Plan anticipated for adoption in 2019.

SUGGESTED MOTION FOR THE BOARD OF COUNTY COMMISSIONERS:

I move that the Board of County Commissioners endorse the Larimer County Mountain Resilience Plan by recommending that the Planning Commission accept said plan as Phase 1 of Larimer County Comprehensive Plan anticipated for adoption in 2019.

COMMUNITY DEVELOPMENT RECOMMENDATION TO THE PC:

The Community Development Division, as recommended by the Board of County Commissioners requests that the Planning Commission accept the Mountain Resilience Plan as Phase 1 of Larimer County Comprehensive Plan anticipated for adoption in 2019.

SUGGESTED MOTION FOR THE PLANNING COMMISSION:

I move that the Planning Commission accept the Larimer County Mountain Resilience Plan as Phase 1 of Larimer County Comprehensive Plan anticipated for adoption in 2019.

Executive Summary >>> MOUNTAIN RESILIENCE PLAN

OVERVIEW

This Plan is tasked with improving land use resiliency for future hazard events and accommodating the expected population growth to better mitigate increased social, economic, and environmental risks that the County faces.

SCOPE AND INTENT

The Mountain Resilience Plan is the **first phase of a new Larimer County Comprehensive Plan**, a policy document that establishes a long-range framework for decision-making.

This Plan focuses on the opportunities, challenges, and unique character of the **unincorporated mountainous areas** of western Larimer County.

It builds on recent County plans, including the 2016 Larimer Resiliency Framework document by using the same **six resiliency frameworks**.

resilience | rəˈzilyəns |
noun

The capacity to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience.

PHASE 1
Larimer County
Comprehensive
Plan



200 W. Oak Street,
Fort Collins, CO 80521
970.498.7000
larimer.org

CHAPTER 1

SINCE THE 1997 PLAN

40% growth in population

19 official FEMA Disaster Declarations

BENEFITS OF PLANNING

planning means...

...inter-governmental partnerships

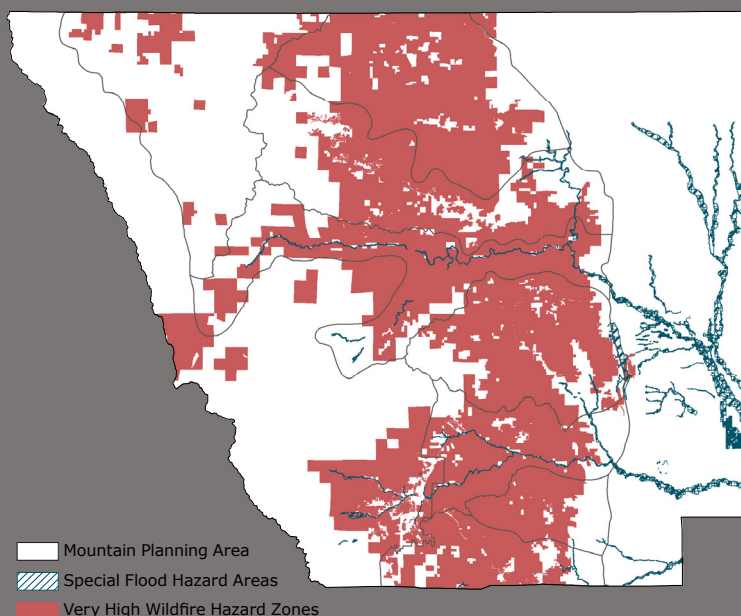
...economic development

...a safer community

...reasonably priced housing

...rebuilding better

...open lands and working lands



LOOKING TO THE FUTURE

200,000 new County residents by **2050**

Mountain population could **double** without a single new development approval

We can expect **more hazard events**

POPULATION

The mountains only account for 4% of the entire Larimer County population, yet occupy 75% of the land.

MEDIAN AGE

On average, mountain residents are nearly 20 years older than the rest of the County.

HOUSEHOLD INCOME

The average median household income of the mountains is higher than Larimer County though some areas are below the County average.

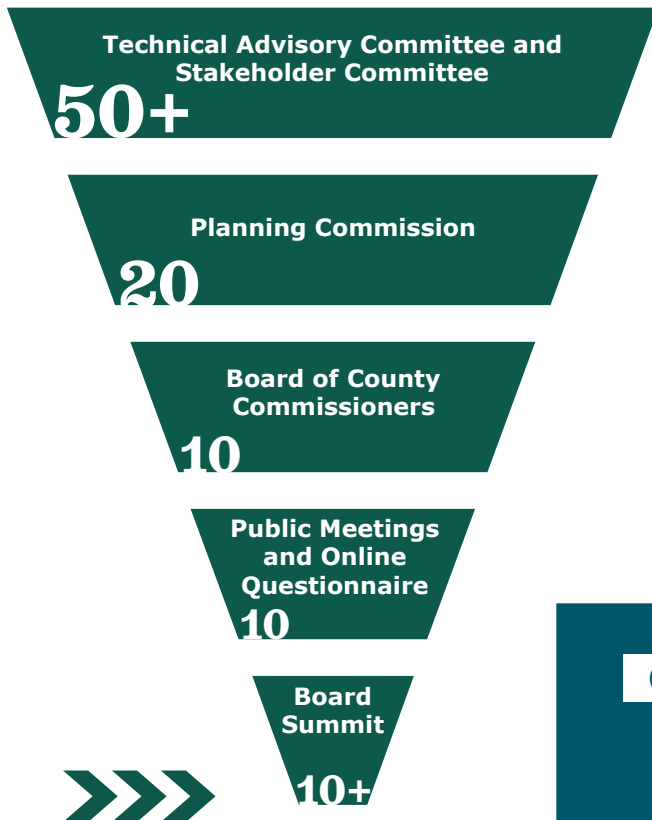
SEASONAL OCCUPANCY

As a whole, 49% of residential units in the mountains are owner occupied, 9% are renter occupied, and 42% are seasonally/occasionally occupied or vacant.

CHAPTER 2

COMMUNITY DIRECTION FOR THE PLAN

- Participants clearly value natural beauty, remote and quiet character, safety, and desire little additional development.
- Multiple mediums for outreach to engage the greatest possible range of participants and perspectives.
- Refined the Plan through events, online surveys, and committee workshops and study sessions.



COMMUNITY-BASED PROCESS

7 community events

995 online participants

12 committee meetings and workshops

GUIDING PRINCIPLES



COMMUNITY 1. Larimer County plans for long-term change based on conservation, resource sustainability, economic health, land use, community design, connectivity, and infrastructure considerations.

COMMUNITY 2. The County utilizes innovative incentives, planning tools, standards, and regulations to protect the environment, mitigate hazard risks, and strengthen the desired character of mountain communities.



ECONOMY 1. Larimer County supports and facilitates economic development efforts that contribute to high-value, low-impact employment sectors, and foster wealth creation that supports economic stability and high quality of life.

ECONOMY 2. Encourage career paths that build on different work and education experiences and the policy initiatives to support them.

ECONOMY 3. Foster development of communities with a healthy balance of jobs, housing, and recreation opportunities for all economic classes.



HEALTH & SOCIAL 1. Larimer County encourages alternative modes of transportation and alternatives to transportation to enhance regional connectivity.

HEALTH & SOCIAL 2. New development minimizes negative public and environmental health impacts such as air and water quality and water supply.

HEALTH & SOCIAL 3. Larimer County supports collaborative planning across agencies and sectors to ensure residents have access to social services, health care services, and related resources.

HEALTH & SOCIAL 4. Larimer County increases individual and community preparedness through education, identifying vulnerable populations, empowering local leaders, and promoting resiliency conversations.

CHAPTER 3

HOUSING 1. Larimer County supports the development of an appropriate mix of housing types and opportunities to meet the needs of all persons.



HOUSING 2. All new rural residential development is designed to maintain compatibility with adjacent areas, the open character of the mountains, protect and maintain agricultural uses and sensitive environmental areas, and promote a sense of community and resiliency.

HOUSING 3. Compatibility with terrain and natural hazards is considered in the design approval of all development and buildings.

INFRASTRUCTURE 1. New development will pay its own way and maintain existing facilities at adequate service levels.

INFRASTRUCTURE 2. The County ensures that transportation and infrastructure needs align with future goals and development, and encourage equity and fairness to the extent possible (see Health & Social 1).

INFRASTRUCTURE 3. Larimer County encourages sustainable design measures when making improvements and developing new infrastructure.



WATERSHEDS & NATURAL RESOURCES 1. Larimer County minimizes adverse effects of development on natural values, including wetlands, riparian areas and other important wildlife habitats.

WATERSHEDS & NATURAL RESOURCES 2. Larimer County minimizes risks and vulnerability to the impacts of natural hazards while protecting lives and reducing damages and losses to property, the economy, public health and safety, and the environment.

WATERSHEDS & NATURAL RESOURCES 3. Larimer County improves public awareness, education, and preparedness for all hazards.

WATERSHEDS & NATURAL RESOURCES 4. Larimer County works to reduce the risks of wildfire and flood hazards.



TOP STRATEGIES

1. Infrastructure Asset Management System
2. Capital Improvement Plan
3. National Flood Insurance Program Community Rating System
4. Secondary Egress Action Plan
5. Wildfire Home Mitigation Program
6. Fuel Management and Reduction Programs
7. Floodplain Acquisition Program
8. County-wide Fire Code (a.k.a. WUI Code)
9. Future Land Use Plan (Map)
10. Comprehensive Review and Update of Land Use Code
11. Subarea Planning
12. Overlay Zoning
13. Transferable Density Units
14. Business Retention/Creation Program
15. Facilitate Cooperation of Nonprofit Organizations and Coalitions
16. Community Hubs

NEXT STEPS



In 2018, the Phase 2 will mirror the Mountain Resilience Plan process with a focus on the Eastern Plains of Larimer County. This will result in a new, consolidated countywide Comprehensive Plan.

Continue to check updates on
LarimerCompPlan.



US Forest Service
and NPS Lands
(not within County jurisdiction)

Phase 1 in 2017
Mountain Resilience Plan

Phase 2 in 2018
Eastern Plains
(Comprehensive Plan)



LARIMER COUNTY COMMUNITY DEVELOPMENT

MOUNTAIN RESILIENCE PLAN

PHASE 1 OF A NEW COMPREHENSIVE PLAN

November 2017



200 W. Oak Street,
Fort Collins, CO
80521 970.498.7000
larimer.org

ACKNOWLEDGMENTS

Thank you to the hundreds of County residents and business owners that contributed to Phase 1 of this Plan.

BOARD OF COUNTY COMMISSIONERS

Tom Donnelly
Lew Gaiter III
Steve Johnson

PLANNING COMMISSION

Ray Caraway
Jean Christman
Mina Cox
Sean M. Dougherty
Gary Gerrard
Jeff Jensen
Steven Lucas
Curtis Miller
Nancy Wallace

LARIMER COUNTY STAFF

Linda Hoffmann, *County Manager*
Terry Gilbert, *Community Development Director*
Matt Lafferty, *Principal Planner, Project Manager*
Todd Blomstrom, *Public Works Director*
Gary Buffington, *Natural Resources Director*
Lori Hodges, *Emergency Management Director*

CONSULTANTS

LOGAN SIMPSON

Bruce Meighen, AICP
Jeremy Call, AICP, PLA
Miriam McGilvray, AICP
Cayla Cathron
Brooke Seaman

MICHAEL BAKER

Michael Garner
Anne Kuechenmeister

STAKEHOLDER COMMITTEE

Jacob Castillo, *Economic Development*
Sean Dougherty, *Planning Commission and RFLPAC*
Laura Emerson, *Big Thompson Watershed Coalition*
Gary Gerrard, *Planning Commission*
Jeff Jensen, *Planning Commission*
Evelyn King, *Environmental Science and Advisory Board*
John MacFarlane, *Masonville Resident*
Karin Madson, *Community Development*
Geniphyr Ponce-Pore, *Colorado State University*
Karen Urdangaray, *Pinewood Springs Resident*
George Wallace, *Agricultural Advisory Board*

TECHNICAL ADVISORY COMMITTEE

Savanah Benedick-Welch, *Larimer County*
Jennifer Cram, *Larimer County*
Drew Davis, *Larimer County*
Carol Evans, *Larimer County*
Gordon Gilstrap, *Little Thompson Watershed Restoration Coalition*
Annemarie Heinrich, *Larimer County*
Rob Helmick, *Larimer County*
Shayna Jones, *Big Thompson Watershed Coalition*
Jennifer Kovecses, *Poudre River Watershed Coalition*
Shayle Nelson, *Larimer Connects*
Suzette Mallette, *Larimer County*
Samantha Mott, *Larimer County*
Mark Peterson, *Larimer County*
Lea Schneider, *Larimer County*
Tony Simons, *Larimer County Sheriff*
Rebecca Smith, *Larimer County*
Michael Whitley, *Larimer County*
Zac Wiebe, *Larimer County*

Cover photo by Bryan Harding, Estes Park YMCA.

CONTENTS

CHAPTER ONE: FOUNDATION 1

WHAT IS THE PLAN? 3

 Why update, why now?..... 3

 Meaningful, County-wide Dialogue 7

 Benefits of Planning 8

 Development of the Plan 11

 Foundational Plans 12

 1997 Master Plan..... 12

 Larimer County Land Use Code 12

 2013-2018 Strategic Plan 13

 Hazard Mitigation Plan..... 13

 Unmet Needs & Community Fragility Study 14

 Larimer Community Resiliency Framework 14

EXISTING CONDITIONS SNAPSHOTS 15

 Community 15

 Economy 20

 Health & Social 25

 Housing 28

 Infrastructure..... 32

 Watersheds & Natural Resources 36

CHAPTER TWO: VISIONING..... 43

OUTREACH AND ENGAGEMENT PROCESS 45

COMMUNITY DIRECTION FOR THE PLAN..... 48

 The Foundation..... 48

 The Vision 48

 Community Choices 50

 Reaching for Resilience 52

CHAPTER THREE: RECOMMENDATIONS 55

POLICY FRAMEWORK & STRATEGIC IMPLEMENTATION..... 57

 Introduction..... 57



STRATEGIC IMPLEMENTATION 71

Implementation Responsibilities 71

Funding Plan Implementation 72

Infrastructure Asset Management System 73

Capital Improvement Plan 74

National Flood Insurance Program Community Rating System 75

Secondary Egress Action Plan 76

Wildfire Home Mitigation Program 77

Forest Management and fuels Reduction Programs 78

Floodplain Acquisition Program 80

County-wide Fire Code (a.k.a. WUI Code) 81

Future Land Use Plan (Map) 82

Comprehensive Review and Update of Land Use Code 83

Subarea Planning 84

Overlay Zoning 86

Transferable Density Units 88

Business Retention/Creation Program 90

Facilitate Cooperation of Nonprofit Organizations and Coalitions 91

Community Hubs 92

MONITORING 95

Why Metrics? 95

Plan Management 107

APPENDIX A. COMMUNITY PROFILES 1

APPENDIX B. FOUNDATIONAL PLANS 23

APPENDIX C. RELATED PLANS 33

APPENDIX D. GLOSSARY OF TERMS 35

APPENDIX E. OUTREACH SUMMARIES 39

ACRONYMS:

ACS: American Community Survey
BCC: Board of County Commissioners
BLM: Bureau of Land Management
CDBG-DR: Community Development Block Grant – Disaster Recovery
CERT: Community Emergency Response Team
CNHP: Colorado Natural Heritage Program
CRS: Community Rating System
CWPP: Community Wildfire Protection Plan
FCC: Federal Communications Commission
FEMA: Federal Emergency Management Agency
GIS: Geographic Information System
HMP: Hazard Mitigation Plan
HOA: Homeowner's Associations
HUD: Department of Housing and Urban Development
IGA: Intergovernmental Agreement
LFSP: Landowner Forest Stewardship Plan
NFIP: National Flood Insurance Program
NPS: National Park Service
PAC: Planning Advisory Committee
PC: Planning Commission
PLUS: Partnership Land Use System
RLUP: Rural Land Use Process
SFHA: Special Flood Hazard Area
TDU: Transferable Density Units
UNCF: Unmet Needs & Community Fragility Study
USFS: United States Forest Service
WUI: Wildland-Urban Interface



Carter Lake. Photo: John Scales

Chapter One In this Chapter

FOUNDATION

What is this Plan?

Introduction and overview of the Plan's process and scope and the benefits of planning in the County.

Foundational Plans.

Summary of the influential plans that informed this planning process.

Existing Conditions Snapshots.

Statement of the issues and trends facing mountain communities.

**Our task is to make
all of Larimer County
as beautiful in human
additions as it is in
natural wonders.**

Beautiful in the abundant life,
beautiful in opportunity and equality,
beautiful in the simplicity of its governance,
beautiful in the fellowship of humankind.

WHAT IS THE PLAN?

The Mountain Resilience Plan is the first phase of a new Larimer County Comprehensive Plan, a policy document that establishes a long-range framework for decision-making for Larimer County. This Plan focuses on the opportunities, challenges, and unique character of the unincorporated mountainous areas of western Larimer County. Through a set of Guiding Principles and Implementation Strategies unique to the mountains, the Plan provides policy guidance for future development, public services, and environmental protection. It is organized according to the Colorado Resiliency Framework, and will ultimately replace the 1997 Larimer County Master Plan.

WHY UPDATE, WHY NOW?

Significant changes have occurred in Larimer County since the 1997 Larimer County Master Plan was adopted. Over the last twenty years, the County has grown from roughly 234,000 residents to 345,035 (2017 estimate)—so nearly 40% growth in population. The Colorado Department of Local Affairs estimates that, by 2050, the northern Front Range will more than double its population, including 200,000 new residents in Larimer County.

A second reason to update the plan is because only 4% of the County population lives in the mountainous, western area of the County. This disparity led the [1997 Master Plan](#) to focus almost exclusively on the eastern plains, and residents in the mountains are quick to point out that life further west comes with its own set of challenges. As former Larimer County Commissioner John Clarke states in [The New Code of the West](#), life in the country is different from life in the city. County governments are not able to provide the same [level of service](#) that city governments provide.

In addition to a steep rise in population growth and shifts in demographics, the County has witnessed 19 official FEMA Disaster Declarations since 1997. With an average of one major disaster declaration per year over the last two decades, it is clear that both private land and public infrastructure will continue to be threatened by large natural hazard events. The risk posed by potential disaster events will continue to escalate as the population and extent of developed areas increase.

THE NEW CODE OF THE WEST

Inspired by western author Zane Grey's 1934 *The Code of the West*, former Larimer County Commissioner John Clarke penned [The New Code of the West](#) during the preparation of the [1997 Master Plan](#). Clarke set out to educate, if not to warn, prospective rural residents who wish to follow in the footsteps of those rugged settlers who first came to this part of the country during the westward expansion of the United States. Since its publication, dozens of counties and rural [service districts](#) have adopted its values of integrity, neighborly respect, and self reliance to guide their decisions.

"Life in the country is different from life in the city... The fact that you can drive to your property does not necessarily guarantee that you, your guests and emergency service vehicles can achieve that same level of access at all times...

...Water, sewer, electric, telephone and other services may be unavailable or may not operate at urban standards. Repairs can often take much longer than in towns and cities...

...Residents of the country usually experience more problems when the elements and earth turn unfriendly...

...Not all lots are buildable..."¹

Lastly, a massive recovery effort from the 2012 High Park wildfire and the 2013 floods is still underway today. Following these events, the County and its jurisdictions have conducted numerous planning efforts and studies to benefit all aspects of the community. This Plan is tasked with providing tools aimed at land use resiliency for future hazard events and accommodating the expected population growth to better mitigate the increased social, economic, and environmental risks that the County faces.

Figure 1. Scope of Phase 1 and Phase



NPS and US Forest Service Lands
(not within County jurisdiction)

Phase 1 in 2017
Mountain Resilience Plan

Phase 2 in 2018
Eastern Plains (Comprehensive Plan)

Scope and Purpose

As the first phase of the county-wide Comprehensive Plan, this Mountain Resilience Plan focuses on articulating common themes, policies, and best practices that apply to the unincorporated mountain areas and communities of western Larimer County. The Mountain Resilience Plan is aspirational and not intended to be a regulatory, prescriptive action plan. The strategies presented in Chapter 3 are best implemented through voluntary partnerships with each mountain community.

The Mountain Resilience Plan builds on the [2016 Larimer Resiliency Framework](#) document by organizing the Plan structure on the same six resiliency frameworks. This structure benefits the Mountain Resilience Plan as these sectors encompass a broad range of topics appropriate for a comprehensive plan while supporting the focus on resiliency.



IMPORTANCE OF RESILIENCE

Nobody is immune from the impacts of significant disruptions, and it is impossible to anticipate and prepare for all possible natural and economic events on a community. However, building robust community resilience provides the best possible preparation for disruptions of all types.

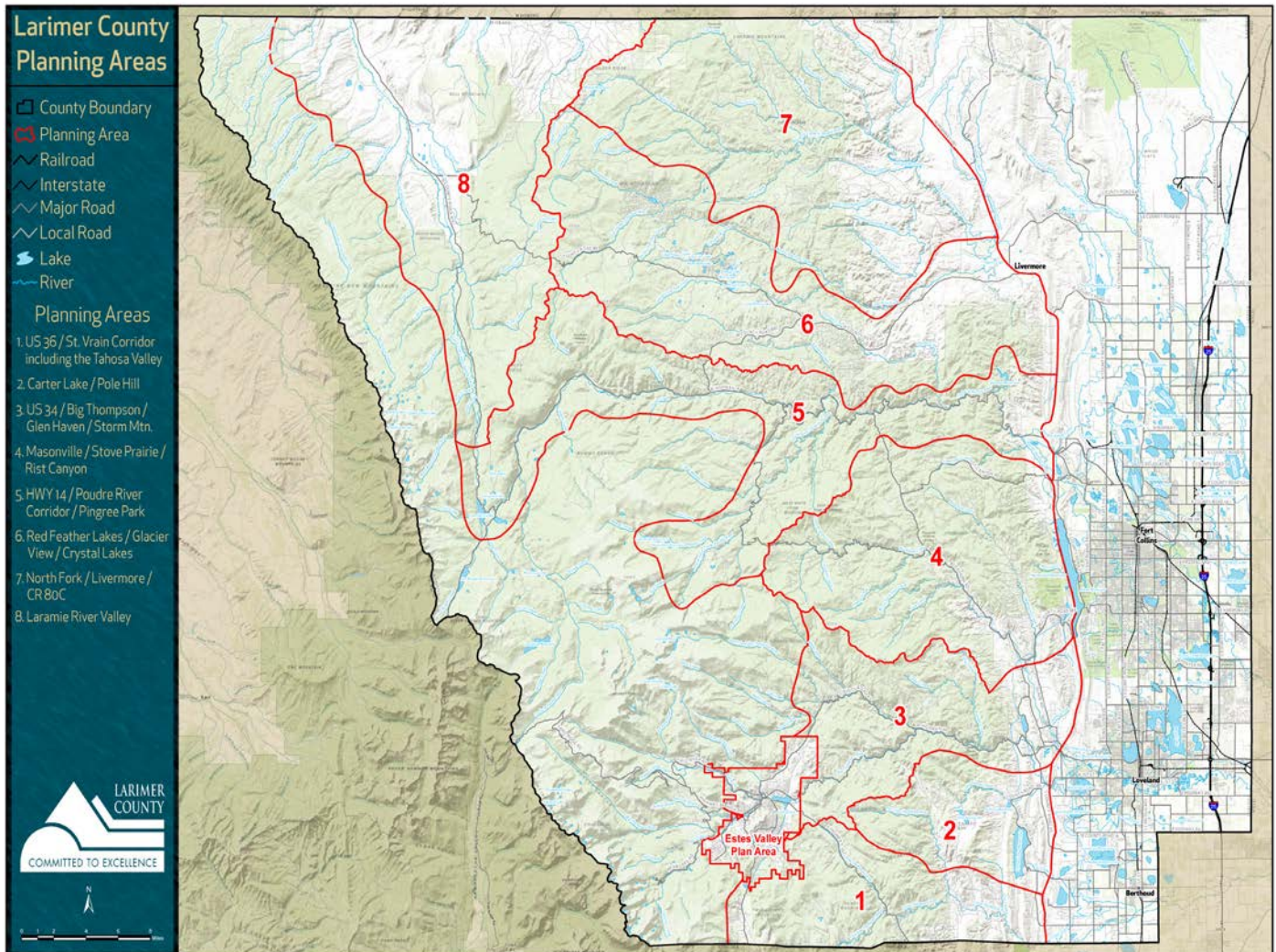
Communities that are well-prepared incorporate resiliency strategies in their planning and operations to proactively mitigate impacts and provide the capacity to continue supplying critical goods and services during emergency situations and throughout recovery.

Resilient communities have the ability to continue provision of [lifeline services](#) during a disaster event, *reduce* loss of life and injury to the community's population, and *recover* from shocks and impacts more rapidly allowing communities to resume normal activities.

Comprehensive planning by county governments is authorized in Colorado Revised Statutes to achieve several purposes.

- To develop a community vision for the planning area and communicate that vision and the supporting land use policies to citizens, landowners, developers and other governmental entities.
- To provide a policy basis for developing the Land Use Code and other land use regulations and procedures and to determine whether they are in harmony with the community's vision and implementation strategy.

Map 1. Mountain Resilience Area Map Broadband Coverage



- To provide a basis for [intergovernmental agreements](#) with the cities and towns of Larimer County, neighboring jurisdictions, and the many public and quasi-public agencies that provide services to Larimer County residents.
- To encourage County departments, other agencies, private developers, and landowners to design projects in harmony with the natural characteristics of the land and the capabilities of public services and facilities.
- To provide a basis for setting priorities and funding mechanisms for public capital improvements in Larimer County.

Mountain Resilience Planning Area

The Mountain Resilience Area Map shows the mountain planning areas in western Larimer County that this Plan addresses. This area of Larimer County includes all of the unincorporated mountain communities west of the foothills and the northern part of Highway 287, with the exception of the Estes Valley Planning Area. That area is governed by the Estes Valley Plan, Estes Valley Development Code, and the Estes Valley Planning Commission, which is tasked to advise the Town Board and Board of County Commissioners (BCC) on land use matters and applications.

[Appendix A](#) profiles each of the eight subareas, including a description of risks, demographic profile, land use mix, housing types, residential [development potential](#), issues facing the subarea, and recommendations from existing plans.

Larimer County is diverse, demographically, economically and geographically. More than half of the County’s 2,634 square miles is sparsely populated mountainous terrain, while the eastern plain areas encompass one of the fastest growing urban areas in Colorado.

The following information summarizes some of the demographic differences between the mountain areas and the rest of the County. Demographic and housing data presented within this section were sourced from ESRI’s Community Analyst, in addition to Larimer County’s Assessor Department.

Population	Median Age	Household Income	Seasonal Occupancy
The mountains only account for 4.25% of the entire Larimer County population, yet occupy 75% of the land.	On average, the mountain communities are about 17.5 years older than the rest of the County; the smallest difference being 14.3 years older (Area 4) and the largest at 23.5 older (Area 7).	Overall, the average median household income of the eight mountain subareas is higher than Larimer County as a whole, though three subareas are below the County average.	As a whole, 49% of residential units are owner occupied, 9% are renter occupied, and 42% are seasonally/occasionally occupied or vacant.

Table 1. Demographic Comparison Summary

Location	Median Age	Median Household Income	Population	Population % of County	Median household size	Median home value
Larimer County	36.5	\$60,994	318,111	100%	2.43	\$309,508
Mountain Resilience Planning Area	54.0	\$68,428	14,123	4.25%	2.26	\$373,040



Opal Land. Photo: James Frank

MEANINGFUL, COUNTY-WIDE DIALOGUE

As described further in [Chapter 2](#), the Mountain Resilience planning process was guided by public and stakeholder input and leadership from broad-based input and local boards and commissions. Every effort was made to encourage meaningful public involvement throughout the process by involving interested parties early, frequently, and effectively. A variety of interactive activities during seven public meetings as well as online outreach kept citizens informed, gathered feedback at critical points, and empowered local champions.

Engagement efforts focused on achieving consensus by being transparent with Plan objectives, clearly defining the problems the Plan can address, and methodically identifying the range of potential solutions and trade-offs so that informed decisions can be made.



Figure 2. Project Schedule

7 community events

995 online participants

12 committee meetings and workshops



“Plans are worthless, but planning is everything. There is a very great distinction because when you are planning for an emergency you must start with this one thing. The very definition of ‘emergency’ is that it is unexpected, therefore it is not going to happen the way you are planning.”²

–Dwight D. Eisenhower

BENEFITS OF PLANNING

Much like running a business, the future success of a community hinges on intentional and thoughtful planning. Before a new business opens, its owner will create a business plan that identifies opportunities for growth and how the business will become financially sustainable. The best business plans include a mission statement and list of specific and achievable goals, with supporting strategies, and measurable results.

Likewise, Larimer County is in the business of economic development; safeguarding public safety, health, and welfare; ensuring that new development provides adequate services to residents; and maintaining natural resources for future generations. In the words of Henry David Thoreau, “In the long run, we only hit what we aim at.” A unified vision and goals for the future offer internal consistency for staff and predictability for developers. Planning provides an opportunity

to establish a targeted approach to preserve and enhance the rural character, minimize effects of hazards on residents, and ensure development respects and responds to the natural environment.

Strategic long-range planning is an opportunity to influence the trajectory—to set our own course for the future. Over the lifetime of the Plan, a span of 10 to 20 years, a single policy change can make a big cumulative impact. For example, the [1997 Master Plan](#) introduced the [Rural Land Use Process](#) and Conservation Development. The [cluster development](#) patterns encouraged by the 1997 plan have resulted in thousands of acres of conserved residual land over the last 20 years. What benefits does the community want to see in the future? Better paying job growth? Better air and water quality? Reduced property and infrastructure damage during the next disaster?

Accomplishments Since the Adoption of the 1997 Plan

The [1997 Master Plan](#) continues to be a basis for Vision, Guiding Principles, and Implementation Strategies in this Plan. Summarized in the following pages are a few planning accomplishments that have affected mountain communities since 1997.



planning means... ...inter-governmental partnerships

Estes Park. Photo: Darrell Spangler

Intergovernmental Agreements (IGAs) with cities and towns provided a regional approach to planning.

New urban zoning was identified only in Growth Management Areas where urban-level services are already available.

Cooperative Planning Areas allow joint planning at a city's periphery, where land use decisions today can impact tomorrow's city growth patterns. This resulted in the Estes Park IGA in 1997 and reinforced again in 2000.

Creation of the Red Feather Lakes Plan Advisory Committee and Area Plan has led to local-level guidance on development and maintenance of the area.



planning means... ...economic development

Larimer County conducted an economic and tourism asset assessment in 2016, looking at infrastructure and amenities that enhance or detract from our ability to grow our economy.



planning means... ...a safer community

Creation of the Larimer Connects Program to increase community outreach and education regarding mitigation and preparedness for risks and hazards.

The Adequate Public Facilities regulations were updated to ensure that facilities and services are available to new development, without compromising existing service levels and burdening existing residents with the costs of growth.

Larimer County is pursuing a partnership with FortZED, to establish net-zero energy/water/waste neighborhoods and shelter-in-place locations.

Adopted new incentive-based subdivision clustering standards that create up to 80 percent open space and allow rural residential units to utilize infrastructure more efficiently.

NOCO Housing Now group has been formed to address housing affordability in the northern Colorado area.

The 2015 study "Needs and Opportunities in Housing and Care in Larimer County, Next 25 Years" helped community leaders prioritize how to address perplexing housing challenges.



planning means... ...reasonably priced housing



planning means... ...rebuilding better

Larimer County joined FEMA's High Water Mark Initiative to improve education, outreach and community engagement activities, as well as signage following the 2013 flood.

The Engineering Department identified all structurally deficient bridges in Larimer County and has a plan to upgrade them all by 2020.

The County is partnering with CDOT to make permanent infrastructure repairs from the 2013 floods, including the U.S. 34 repairs between Estes Park and Loveland.

Larimer County received grant funding in 2016 to install stream gauges along the Big Thompson River and the North Fork.

The Office of Emergency Management is participating in a NIST (National Institute of Science and Technology) pilot program called the Resiliency and Recovery Assessment Program to begin the process of identifying critical infrastructure, key redundancies and interdependencies and key businesses.


A 2017 ballot issue 1B restored the County's right to explore and foster available options for broadband services in all communities.

The Transportation Plan was updated in 2017.

Environmental review and performance standards were incorporated into the development review process, to ensure new development is more compatible with wetlands, wildlife habitat and natural systems.

Partnerships with the Big Thompson Conservation District on a Healthy Forest Initiative, including several fuels reduction projects.

Larimer County partnered with four Watershed Coalitions that are actively working on watershed health and resilience through community-led groups.



planning means... ...open lands and working lands

Red Feather Lakes. Photo: Pamela Dobrowolski

DEVELOPMENT OF THE PLAN

The Fairness Principles

Developing a land use system that is “fundamentally fair” was a premise of the [1997 Master Plan](#) and previous [Partnership Land Use System](#). Public comments over the last two decades indicate that the land use planning process can quickly be perceived as unfair or arbitrary by people on all sides of the issue. To provide a means of judging whether the Comprehensive Plan and implementing actions meet this goal, the County continues to utilize the Fairness Principles originally outlined in the [1997 Master Plan](#).

A Fair Process.

- Is timely;
- Has an open process to the public for information, input, etc.;
- Has open communication including neighborhood meetings;
- Has educational components on the process for affected parties;
- Respects individual property rights;
- Respects the values of the individuals in the community;
- Considers the cumulative impacts and future generations;
- Has application of fundamental due process in all administrative deliberations;
- Has an appeal process;
- Has consistent requirements that contain flexibility within the written criteria;
- Has incentives for exceeding the written criteria; and
- Makes it easy to do the right and responsible thing.

Difference between the Comprehensive Plan and the Land Use Code

A comprehensive plan is a non-regulatory guide for County leaders and staff on desired development patterns and infrastructure improvements. Codes, on the other hand, are regulatory documents that establish procedures and standards that mandate how property is used and developed.

Table 2. Comprehensive Plan and Zoning Differences

Comprehensive Plan	Land Use Code and Zoning
<ul style="list-style-type: none">• Advisory.• Establishes a cohesive community-wide vision for the future based on public input.• Articulates Guiding Principles that form the basis for implementation strategies that could affect specific zoning and subdivision regulations.• Recommends conceptual improvements to the Land Use Code.	<ul style="list-style-type: none">• Regulatory.• Purpose is to protect landowner rights while also looking out for the health, safety and welfare of the overall community.• Zoning is one part of the Land Use Code and refers to land use entitlements and requirements that regulate appropriate use, bulk, height, density, and other characteristics appropriate for a specific site.

FOUNDATIONAL PLANS

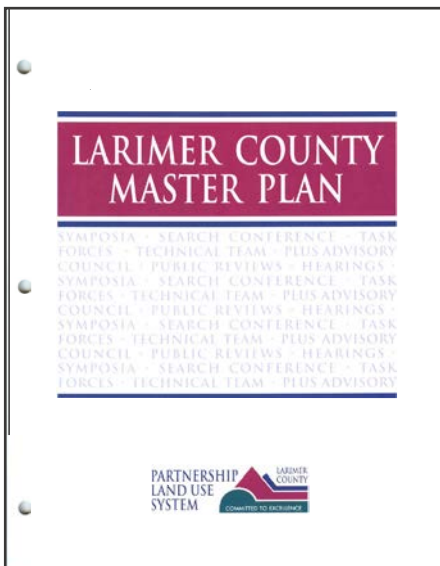
The recent floods and fires in Larimer County have led to a number of County planning efforts. These plans and studies outline important community needs and strategic initiatives to mitigate the impact of future hazard events. It is important to align the Mountain Resilience Plan with these previous community- and data-driven efforts; the plans discussed in further detail in the following pages were foundational to the development of the Mountain Resilience Plan. While the implementation of these plans will continue to shape specific projects and initiatives, the Mountain Resilience Plan incorporated and translated these plans' high-level direction into County land use policy. A complete description of these plans are found in [Appendix B](#). The five foundational plans are:

LARIMER COUNTY LAND USE CODE

The original body of land use regulations for Larimer County was adopted in 1963 as a zoning resolution and separate supporting documents. As contradictions within this body of regulations have surfaced, focused updates have been made to individual resolutions over the years –in 1963, 1972, and 1987. To implement the [1997 Master Plan](#), several improvements were made to the subdivision regulations. Then in 2000, these multiple resolutions were consolidated into a single Land Use Code, as it exists today. However, a lack of resources and time has prevented a comprehensive re-evaluation of the regulatory alignment with the community vision in the Master Plan for the past 30 years.

Stakeholders have stated that rural parts of the County lack a cohesive vision and that both the [1997 Master Plan](#) and the Land Use Code are antiquated and out of touch with current mountain conditions.

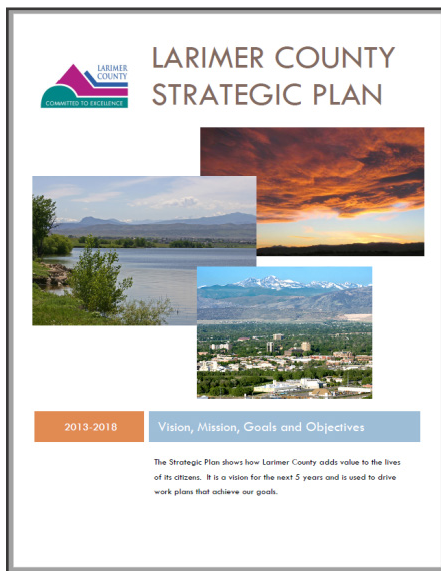
The new Comprehensive Plan paves the way for an update to the Land Use Code to reinforce the Plan's Vision and Guiding Principles with implementable actions and regulations. Aligning the Comprehensive Plan and Land Use Code would result in a stronger, more cohesive future for the County, and create more relevant and consistent community development tools that support the dynamic urban and rural communities in both the eastern plains and the mountains.



1997 MASTER PLAN

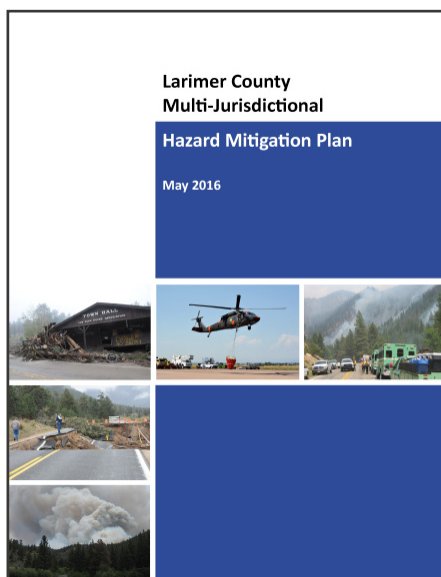
The [1997 Master Plan](#) created a growth management process designed to ensure that Larimer County operates within its resources, protects the environment, and enhances the lives of its residents. The Plan was largely successful and the level of public confidence and satisfaction with planning has steadily increased since its adoption.

As a policy document that establishes a long-range framework for decision making in the unincorporated areas of Larimer County, it influences land use patterns in development, public services, and capital facilities decisions, as well as decisions related to environmental resource protection. The Master Plan outlines a Growth Management System, which not only influences the nature of land uses but also their distribution throughout the County. This plan also introduced the concept of [Rural Conservation Development](#) and the [Rural Land Use Process](#). These processes have resulted in clustered residential development and preserve the existing open character of many rural areas of the County.



2013-2018 STRATEGIC PLAN

This plan was developed by the Board of County Commissioners, the highest authority in the County, to shape immediate short-term results for priority objectives. An objective outlined under Goal 2 Economic Development promoted updating the Comprehensive Master Plan by the beginning of 2017. The [Strategic Plan](#) places priority on specific actions and creates a solid foundation on which to begin building the Comprehensive Plan Update. This plan influences land use patterns through elements of three goals; Goal 2 Economic Development, Goal 3 All-Hazards Emergency Management, and Goal 4 Transportation. Each of these goals affects land use patterns county-wide by strategically locating commercial hubs and with the provision of necessary infrastructure and communication systems.



HAZARD MITIGATION PLAN

Larimer County has experienced 19 federally declared disasters since 1997, the same year that the Master Plan was developed, as well as a 40% increase in population causing a continuously increasing number of people to be at risk to the effects of these hazards. The [Hazard Mitigation Plan](#) (HMP) focused on two main topics; what are the County's risks to hazards, and what projects can be implemented in order to reduce or eliminate those risks and vulnerabilities? As the County works on its update to the Comprehensive Plan, the HMP can ensure that future development and growth is accomplished in a way that does not increase the County's collective risk to disasters.

There were a number of high risk hazard areas that affect current and future land uses. As part of the comprehensive planning process, questions relating to regulating development in known high hazards areas can be vetted to help reduce or minimize impacts on the built environment, and reduce the tax subsidy for individuals who chose to build in hazard-prone areas. The Comprehensive Plan also helps fulfill two land-use related mitigation actions/projects identified in the

HMP. 1) a long-range community planning effort to bring together all watershed coalition, governmental and non-governmental plans into one unified planning effort, and 2) an update to the Larimer County Land Use, Wildfire and Building Codes with recommendations to decrease future risk and disaster losses.

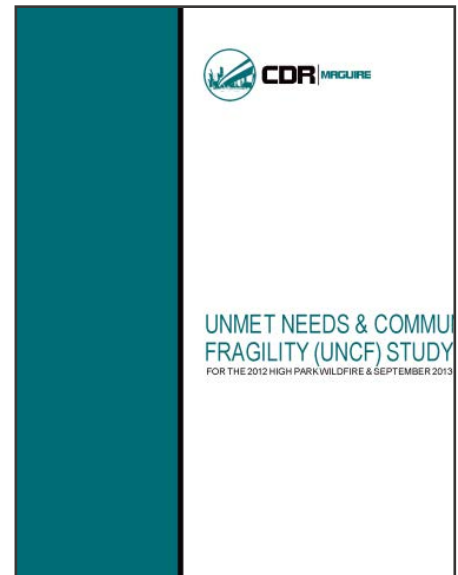
"Communities that invest in land use planning are more resilient – a critical concept in hazards research – because they are better able to anticipate and adaptively respond to extreme events, to rapidly recover, and to reduce future vulnerability."³

~National Research Council

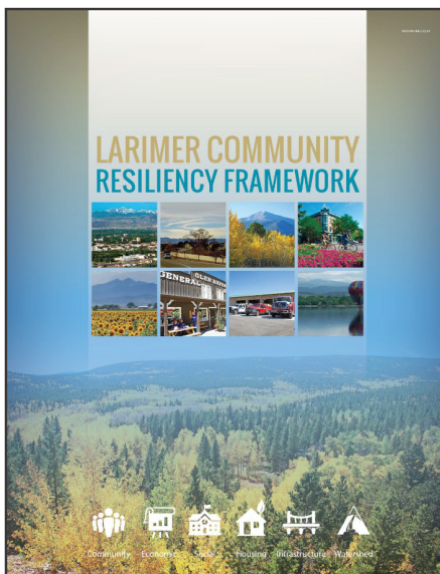
UNMET NEEDS & COMMUNITY FRAGILITY STUDY

Larimer County has learned hard lessons following the recent wildfire and flooding events. Much of that institutional knowledge was captured as part of this [Unmet Needs & Community Fragility \(UNCF\) Study](#), making it one of the major plans that will influence long-range planning strategies to ensure that the County's mountain communities can better understand their own strengths and weaknesses and take action to become more self-sustaining.

The Comprehensive Plan update provides the best opportunity to define these community visions. The UNCF Study focused on specific community needs that were not yet met by post-disaster recovery operations, as well as measuring baseline [community fragility](#). While the intent of the study was not specifically targeted toward local land use changes, many of the infrastructure and service recommendations are impacted by development patterns, mix of land uses, and location and distribution of public facilities.



"Working from a systems perspective, where all parts are necessary for the success of the whole, every person will make a difference. Each individual will play a part in bolstering the weaknesses of the system and enhancing the strengths. Disasters happen in every area of the globe. By working holistically through a systems perspective, Larimer County has the opportunity to embrace a new path forward, strengthening each community along the way."
~UNCF Study



LARIMER COMMUNITY RESILIENCY FRAMEWORK

The [Resiliency Framework](#) represents the commitment and capacity of communities across Larimer County to embrace a more resilient future. As it is intended to be a living document –its frameworks are carried into the Comprehensive Plan to continue its implementation. The Comprehensive Plan update is the most influential and useful vehicle for Larimer County and its communities to now execute the visions, goals, and strategies identified within the framework.

The framework identified three major project areas where all proposed projects were grouped: Risk Management, Resilient Natural and Built Infrastructure, and Innovative Land Use Planning. Risk management provides foundational information for communities to make informed land use, development, and capital improvement decisions to reduce exposure as communities grow and climate changes, Resilient Natural and Built Infrastructure plans for and implement projects that have a system-wide ecosystem benefit, and Innovative Land Use Planning allows for diversity in growth management and economic resiliency while supporting and protecting our natural environment.

EXISTING CONDITIONS SNAPSHOTS

INTRODUCTION

The following “snapshots” provide an overview of current issues organized by each resiliency framework. Much of the existing conditions information is already cataloged in adopted plans and studies (see [Appendix B](#) and [Appendix C](#)), and the intent is not to repeat it here. Instead, the snapshots provide a concise summary of relevant, adopted plans, and policy direction; indicates how trends and conditions can influence the development of policies; and substantiates the “big issues” facing the rural communities in the Mountain Resilience Planning Area.

As many of these issues are interconnected across resiliency frameworks, redefined policy direction and land use solutions in this Mountain Resilience Plan will have wide-reaching impacts. For example, past paradigms set aside environmental concerns in favor of what was perceived as economic necessity based on the belief that these were competing rather than complementary aspects of a truly sustainable future. Preserving [watersheds](#) protects the water supply and safeguards the health of human populations that use the water as well as the vegetation and wildlife that depend on it. Keeping floodplains intact and building-free mitigates the effects of storm events and limits damage to structures. Unmarred scenic views are a community asset for their intrinsic value, in addition to enhancing property values and fueling tourism. And ecologically valuable mountain landscapes contain features that benefit all living organisms in an area, not just people. Clustering housing and commercial development can strengthen social and service networks, while conserving valuable habitat and open space.



COMMUNITY



ECONOMY



HEALTH & SOCIAL



HOUSING



INFRASTRUCTURE



WATERSHEDS & NATURAL RESOURCES



COMMUNITY

What Should We Know?

The foundation of community resiliency is the ability of a mountain community to be self-sustaining, and to assess, determine, implement, and learn from their own experience and the experiences of similar communities. The informal channels that currently exist for local governance capacity are ad hoc and largely ineffective in a community’s ability to influence development and action that occurs there. Community associations and fire districts typically fulfill community organizing roles where present. The Red Feather Lakes Planning Advisory Committee (PAC) is the only current example of local governance in western Larimer County other than the Estes Valley Planning Commission. Rather than being proactive through long-range planning, the

County often responds reactively to development proposals, which leaves little monitoring of long-term trends, and limits a community’s ability to shape their future.

Much like the rest of northern Colorado, Larimer County is undergoing growth and other transitions that have the potential to increase the demand for goods and services to a level previously unseen. The ability for mountain communities to adapt is fundamental to resiliency, both to rapid change and to natural disasters, which have caused millions of dollars in damage in the past five years alone.

The County’s role in providing improved community development tools, especially those specific to mountainous areas, and establishing formal channels to create local governance is crucial in building resilience within these communities.

#1 The frequency and [magnitude](#) of disasters have increased. Community development tools have not.

In the western United States, largely due to changes in our climate, fire seasons now are an average of 78 days longer than they were in 1970 (USDA 2015). Fires are more frequent, larger and more severe with suppression costs often pushed into the multi-million dollar range. In 1995, the U.S. Forest Service fire budget was 16% and in 2016 it comprised over half the budget. There has also been a 39% reduction of non-fire personnel. Ironically, this shift has meant a decrease in restoration, fuel reduction, and assistance to local communities that would reduce catastrophic fire. Increased expenditures for fire are mirrored at the state and local level in spite of receiving federal cost sharing and technical assistance for fire.

Larimer County has vast swaths of forested land with heavy fuel loads, making it vulnerable to the two primary hazards in the Front Range; wildfire and floods. Just in the past decade, the County has been subject to severe instances of both of these disasters, the High Park fire in 2012 and the 2013 floods. In light of these recent disasters and the associated costs, long-range planning for resiliency in the County is critical, even more so with an increasing population—a factor that contributes to an escalation in frequency and [magnitude](#) of disasters.

According to the 2016 [Hazard Mitigation Plan](#), both frequency and [magnitude](#) are increasing over time. Figure 4 shows the number of wildfires occurring annually in Larimer County increasing over time. Although the number of annual fires is variable, with extreme lows and highs, the overall trend from 1980 to 2013 shows a positive increase.

Figure 5 illustrates the [magnitude](#) of wildfires per year occurring in Larimer County from 1980-2013. Although a majority of wildfires affected less than 10,000 acres across three decades, spikes are becoming more intense. The largest wildfires occurred around 2012 and 2013 with the High Park, Hewlett, and Crystal fires, affecting around 97,000 acres in total. Not only is the [magnitude](#) becoming more severe for these wildfire events, but the frequency is in an upward trend as well.

Although the [magnitude](#) and frequency of these wildfire instances have increased, the use of improved community development tools has not. Planning efforts have certainly increased since the adoption of the [1997 Master Plan](#); however, the effort is being made outside of the County's Community Development Department. As seen in Figure 3, a majority of the plans that have been developed in recent years were developed by

Figure 3. Timeline of Completed Plans from 1997-2016



LEGEND

Larimer County Plans Watershed Coalition Plans State Plans Natural Disasters

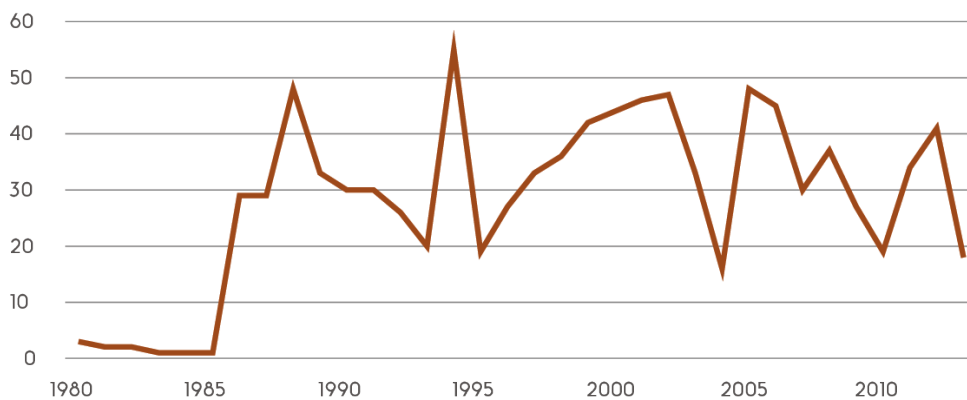


Figure 4. Frequency (Number) of Wildfires Annually in Larimer County from 1980-2013

Source. Larimer County Multi-Jurisdictional Hazard Mitigation Plan, 2016

watershed coalitions or other County departments. See for a full list of plans consulted in this Plan.

The [1997 Master Plan](#) is credited with creating the Transferable Density Units (TDU), the Rural Land Use Program (RLUP), and other community development tools that have improved land use patterns throughout the County. These existing tools, while successful in their implementation, are due for an update to bring new tools into use and to improve existing tools in light of experiences gained over the past twenty years. There is also the opportunity to update the Land Use Code in conjunction with the new Comprehensive Plan, which would allow for better integration of these important tools.

Comprehensive Emergency Management Plan - Strategic Plan Update

Larimer County Open Lands Master Plan

Big Thompson Restoration Master Plan

A Bigger Vision for the Big T

State of Colorado Resiliency Framework

Unmet Needs and Community Fragility Study (UNCF)

2010

Reservoir Road Fire

Crystal Wildfire

High Park Wildfire

Northern Colorado ULI Report

Little Thompson Watershed Restoration Master Plan

Larimer County Strategic Plan

Colorado Flood

2015

Larimer County Workforce Center Program

Larimer County Resiliency Framework

Larimer County Workforce and Overview Report

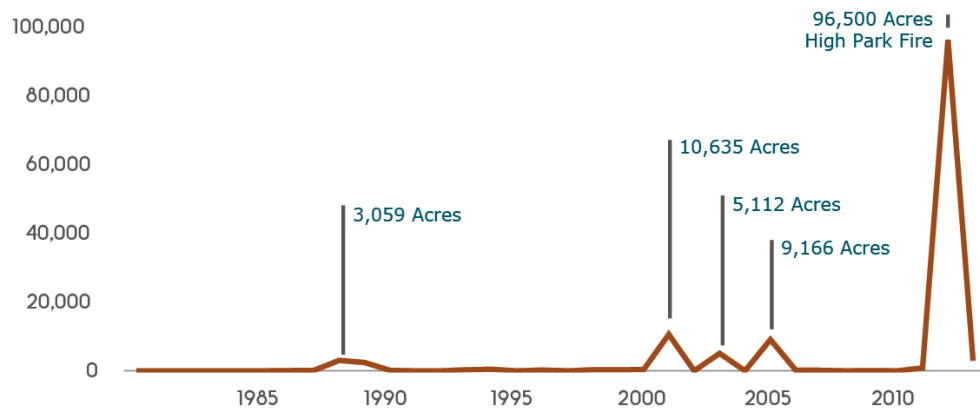
Planning for Hazards Land Use Solutions for Colorado

Larimer County Hazard Mitigation Plan

Lower Poudre River Restoration and Resiliency Plan

Upper Cache La Poudre Watershed Master Plan

Figure 5. Number of Acres Burned by Wildfire Annually in Larimer County from 1980-2013



Source: Larimer County Multi-Jurisdictional Hazard Mitigation Plan, 2016

#2 There are few formal channels for local governance, decision-making, and communication on long-range land use planning in mountainous areas.

In the eastern plains of Larimer County, there are multiple local governance entities; whereas in the unincorporated mountain communities there is only the Red Feather Lakes Planning Advisory Committee (PAC). PACs give a community legitimacy and County support. The PAC consists of a clerk to record minutes from regular meetings, committee members appointed by the Board of County Commissioners, and it receives planning staff assistance. The PAC's role is to provide an organized forum that facilitates communication within the community and with the County in order to address long-range planning needs and current issues.

The PAC form of local governance in an unincorporated community is currently unique to the Red Feather Lakes area. Before self-determination can be achieved, a community has to have self-organization. There is a lack of representation within mountain communities, which can be partially attributed to inconsistent methods of communication to address problems through organizations such as Homeowners Associations

(HOAs), road associations, or fire districts. Volunteer fire districts are a respected and unifying organization in the mountain communities; though they are faced with the common challenges of high turnover, non-career staff, and volunteers that are typically at retirement age or older.

Each mountain community should have the ability to create capacity for self-determination within a defined planning area, or community influence area, as well as influence the types of projects that move forward and their level of priority. While they do not approve the expenditure of funds, they help prioritize the needs for funds that the Commissioners can either deny or approve.

To accomplish local governance for mountain communities, it is the County's role to facilitate the creation of structures that formalize decision-making and enhance communication. These efforts enhance a community's capability of self-organization and self-determination, and thus contribute to long-term self-sustainability and community resiliency.

#3 The barriers to local governance and subarea planning in mountain communities limit their ability to resolve local issues.

A number of unincorporated towns and communities feel hamstrung at times by their lack of political authority, their constrained capacity to improve their own quality of life, and their quiet voice in promoting themselves or working toward customized economic development or land use strategies. These areas often feel a lack of control over future development, and complain of inadequate government services—including safety, recreation, and amenities found in the large incorporated towns along the Front Range. Furthermore, an ill-defined sense of place, or perhaps more appropriately, a desire to protect their own eclectic identity pushes many unincorporated community residents to seek to control their own destinies. Others fear annexation from neighboring urban areas.

Incorporation could be a solution to some of these problems, but most often the risks outnumber the rewards. The biggest issue is infrastructure, followed by financing. Upon incorporation, a new city is responsible for all raw water treatment and distribution, wastewater collection and treatment,

and road maintenance, not to mention parks, recreation, and other basic urban services. For almost every mountain community, the costs simply outweigh the benefits.

Subarea planning, on the other hand, enables a community to have a voice in whether to attract or redirect development, and decide how they want to grow. The benefits of these plans can be seen through the Red Feather Lakes Area Plan adopted in 2006. The establishment of the Red Feather Lakes PAC created a strong local governance foundation to develop the Area Plan, which creates a structure for the community to manage land uses, development, and infrastructure. This Plan, although successful in its initial implementation, was adopted before the wildfire and floods in 2012 and 2013. It could be updated to include elements that increase the resiliency of the community, emphasize the importance of services including fire, water, and sanitation, and address the costs to residents of water provision as well as fire and flood insurance.

How does this relate to resiliency?

Community resiliency rests on an ability to be self-sustaining through local governance and the application of effective community development tools. The [Larimer Community Resiliency Framework](#) identifies the need for the development of a County master plan that is tailored to community needs and incorporates hazard mitigation. The Mountain Resilience Plan is the realization of this identified need.

This Plan creates a foundation for the County to fulfill their role in creating formal channels for communities to establish local governance, and provide additional support to formal/informal leaders as stated in the [Larimer Community Resiliency Framework](#). This framework will in turn allow the County to more efficiently carry out their regulatory duties and enforcement within the mountain communities. The Plan provides strategies to increase resiliency in these areas, including tackling local land use, economic, and service challenges and identifying improved and refined community development tools.

ECONOMY



What Should We Know?

The foundation of economic resiliency is the capacity of the mountain communities to support the daily needs of residents; providing diverse, closer-to-home employment opportunities; maintaining a high quality yet unique character; and minimizing disaster losses.

Mountain residents are more vulnerable to impacts of economic stresses and shocks because they are more isolated from many necessary amenities and activities, do not have the same [level of service](#) as urban areas, and rely on tourism and natural resource extraction as primary contributors to the local economy.

The geographic and topographic constraints present in mountain communities limit the potential for development of both residential and commercial uses. This naturally leads to a limited number of commercial establishments and lack of diversity in the local mountain economies. Many residents consciously choose to commute to urban areas for work and to meet their daily needs. Both an increase in tourism dollars and a decrease in commuting could occur if more commercial uses were available in the center of mountain communities. Water availability also plays a role in the capacity of a community to accommodate additional residents or respond to tourism demands during both peak and off-peak seasons.

#1 Mountain tourism and outdoor recreation is a primary economic driver, which creates demand for services in mountain communities.

The economic benefits of outdoor recreation are greater than often realized. Tourism is the second largest industry in Colorado, and a significant economic generator for Larimer County. Natural areas and nature-based recreation areas play an important role in attracting visitors to the County who spend money at local businesses.

More than 3 million annual visitors to Larimer County make outdoor recreation a priority in their daily lives and they prove it by opening their wallets.² For destination tourists, direct spending on items such as outdoor gear, lodging, retail, eating/drinking, and entertainment/recreational establishments increases tax revenues to local governments. Colorado Travel Impacts, a study prepared for the Colorado Tourism Office, profiles tourism statistics from 1996 to 2015.⁵ According to this study, there were approximately 77.7 million visitors to Colorado in 2015 that spent an estimated \$19.1 billion, which is an all-time high for the state. Total direct travel spending in Larimer County was estimated to be \$622 million, of which \$91 million was spent on arts, entertainment, and recreation. This spending was estimated to produce \$180 million in earnings and approximately 8,290 jobs,

Table 3. Annual Overnight Travel/Tourism Benefits to Larimer County in 2015

Benefits	Monetary Benefit
Total Visitor Direct Spending	\$621,600,000
Earnings	\$179,600,000
Employment	8,288 jobs
Local Tax Revenue	\$19,300,000
State Tax Revenue	\$17,400,000

Source. Colorado Tourism Office. "Colorado Travel Impacts; 1996-2015."

of which \$47 million and approximately 3,010 jobs can be attributed to the arts, entertainment, and recreation. The Colorado travel industry generated \$19 million in local tax revenues within Larimer County in 2015.

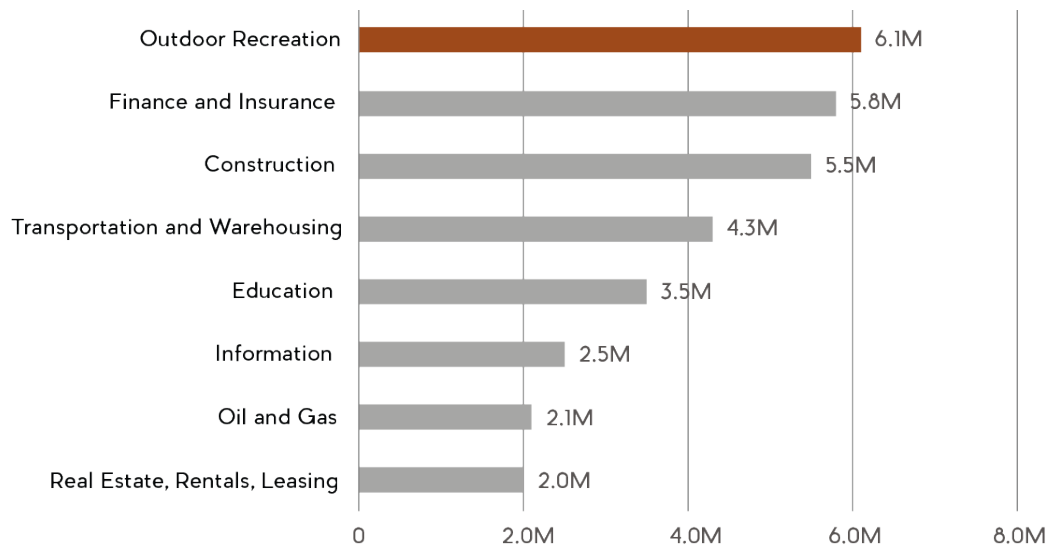
The main tourism destination in the County is Rocky Mountain National Park, which broke records in 2016 with over 4.5 million visitors and an

8.7% increase over the previous record in 2015. The growing population in the Front Range is a contributing factor to the increase in visitors, and every month of the year except December set a monthly record.⁶

The mountain communities of Larimer County have lesser known, yet still impressive, recreational opportunities. However, most do not possess the economic infrastructure to accommodate a continued increase in tourism—assets like contextual development (place-based design), water/wastewater infrastructure, transportation, and commercial amenities that support overall year-round regional tourism.

Stakeholders point to water availability, and the [1997 Master Plan](#) and Land Use Code as barriers to tourism and development opportunities. The [1997 Master Plan](#) deterred new commercial establishments in unincorporated areas and rural communities. Constraints of this nature need to be updated to allow for the balance of daily and tourism services with the community's desire to avoid fragmenting the landscape by concentrating commercial development in a limited number of town centers.

Figure 6. 2011 National Job Comparisons by Industry



Source. Outdoor Industry Association. "The Outdoor Recreation Economy." 2012.

#2 [Broadband](#) services to the mountain communities are very limited. Upgraded technology infrastructure would improve emergency and [health services](#), business opportunities, economic self-sufficiency, and education.

Historic development patterns and employment have always followed road infrastructure, from the Overland Trail wagon road to railroads. Today, technology has evolved as a "road" to communication, collaboration, and accessibility, and is increasingly becoming a necessary element of daily life.

Baby boomers are living longer and some find themselves in a position where they have not accumulated enough assets to retire at the typical age. Entering into "encore careers" (or second professional positions following their initial retirement) is becoming a popular trend.⁷ In fact, 31 million people nationally are interested

in making the leap into “encore careers.” With a higher median age than the County, barriers to provide technological and [broadband](#) services will have a detrimental effect on the ability of residents in mountain communities to access these types of second professional positions.

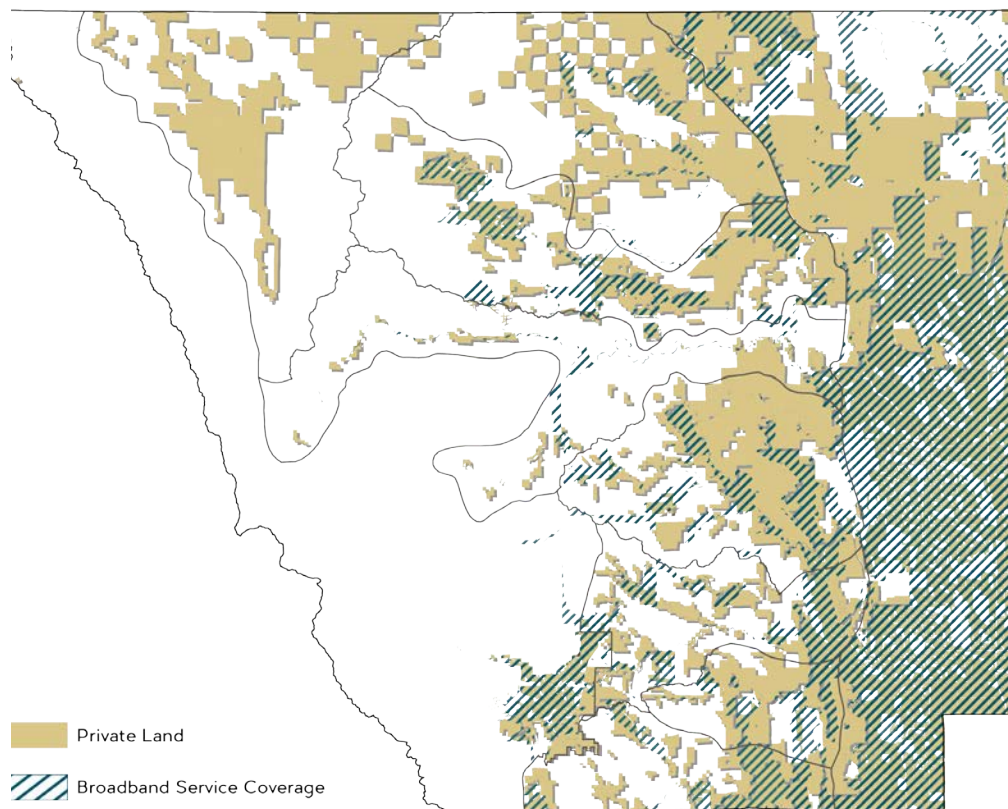
Telecommuting is also gaining traction. Regular work-at-home employees have grown 103% since 2005, not counting those that are self-employed.⁸ Of western Larimer County residents, 51% residents are in the workforce, of which 20-25% telecommutes at some frequency. With the upward trend of telecommuting and encore careers, [broadband](#) services would support this population in the mountain communities as well.

Currently, 45% of private land in Larimer County is not serviced by broadband technology. The Mountain Planning Area suffers most from this lack of or poor [broadband](#) service with low typical download and upload speeds of 200 kilobits per second (kbps) to 3 megabits per second (mbps). Some communities lack services entirely. There are 29 Community Anchor Institutions (CAIs) in the Mountain Resilience Planning Area, or institutions that offer policy makers an opportunity to understand where [broadband](#) access is located –these include 10 fire districts, 14 volunteer fire stations, four elementary schools, and one library. Emergency services and schools stand the most to benefit from improved communications. Six of these are located in US 34/Big Thompson/Glen Haven/Storm Mountain (Area 3) and eight in Red

Feather Lakes/Glacier View/Crystal Lakes (Area 6).⁹ As the population 55 and older has grown by 11% from 2000 to 2016 with an additional 3% increase projected between 2016 and 2021, improvements to this infrastructure would be necessary to support encore careers.

Lastly, western Larimer County residents are slightly more educated, on average, than eastern residents (97% high school degree or higher versus 95%), and 26% of western Larimer County have a bachelor’s degree.¹⁰ The ability to work remotely, age in place, and accommodate communications for those with learning difficulties (deaf, blind, ESL) could create a healthy social environment and network that would boost the availability for home occupation employment in the mountain communities, and lead to an increased sense of community and safety.

45% of private land in Larimer County is not currently serviced by broadband



Map 2. Broadband Coverage

#3 Local employment opportunities are scarce. The majority of residents commute on mountain roads to urban centers.

Apart from the lack of broadband services, local industry growth and work-at-home occupations are hampered by the Land Use Code that places limitations on number of employees, trips, and uses. Due to geographic and topographic constraints in the mountain communities, large-scale employment centers are not realistic. Typical physical employment centers require adequate provision of resources (i.e. water availability, sewage and wastewater, etc.), though natural resource-based employment (such as locally sourcing and processing products) does not fit the one-size-fits-all model in the Code.

The same is true for many home occupations, including those that fall into the Accessory Rural Occupations provisions that pertain to properties located outside a [Growth Management Area](#) (GMA) and within farming, forestry, open, or rural estate [zoning](#) districts. The main constraints in the Land Use Code that have been identified by stakeholders are.

Home Occupation Provisions.¹¹

- Vehicle trips associated with the home occupation will not exceed ten trips in any one day.
- Vehicle repair or similar activities are specifically excluded.
- The home occupation is conducted only by members of the family who reside on the premises plus up to one full time equivalent person who works at the site of the home occupation and does not reside on the premises.

Accessory Rural Occupations Provisions.¹²

- Criteria for agricultural uses prohibit farming on less than three acres.
- Vehicle trips are limited to 10 trips per day including employees, deliveries, and customers but can be extended to 20 trips a day under Public Site Plan Review.
- Process for Public Site Plan Review does not address types of uses.

With 53% of mountain community residents holding jobs in the services industry, allowing home occupation at certain times of the year is convenient and would supplement incomes without having to commute into more urban areas. An update to the Land Use Code would also present the opportunity to amend provisions of the Code to refine what is and is not allowed to keep pace with employment needs of the residents and modern practices. This may also fuel the trend toward year-round residency, which although beneficial economically, would require consideration of environmental and infrastructure issues.

In addition to challenges to local employment opportunities, business services that meet local, daily needs are few and far between. According to Quarterly Census of Employment and Wages data from 2012, there are 273 establishments that employ from 1-50 individuals in the Mountain Planning Area. However, a majority of these businesses are based in manufacturing/processing, with little provision for the daily needs of residents, or needs that are necessary during emergencies, such as access to grocery stores, hospitals, or hardware stores. A majority of residents in the mountain communities commute to urban areas to satisfy these needs, a commute that would not be feasible in the event of a disaster where access to these areas could be restricted due to damage.

#4 Reactive disaster recovery efforts place a financial and leadership burden on the entire County. Proactive preparedness provides dividends.

The High Park fire burned over 87,000 acres, destroyed at least 259 homes, killed one resident, cost \$38 million to suppress the fire, and resulted in \$113 million in insured losses.¹³ The flooding that followed in 2013 after 15 inches of rain kicked the County while it was down, with over 1,000 square miles affected, and 1,500 homes and 200 businesses destroyed. Extensive road damage in the St. Vrain and Big Thompson canyons cut off residents of Drake, Glen Haven, Estes Park, and Cedar Park, and both U.S. Highways 36 and 34 were severely damaged.

The costs of disasters are extremely high for communities; the 2013 flood cost Larimer County over \$107 million, of which \$24.7 million was reimbursed by FEMA. The County was also reimbursed \$13.6 million for the costs incurred from the High Park fire.¹⁴

In addition to these quantifiable direct costs, there are intangible but very real indirect costs from business/network disruption, death and injury, health/stress, community connectivity, erosion, and water quality that are often unaccounted for in reimbursable costs and span long periods of time following the disaster.¹⁵ There is also an opportunity to cost how many months and years were elected leaders, government staff, non-profits distracted by disaster recovery from other priorities.

Proactive planning for disasters not only yields leadership dividends but also mitigates the severity of effects and recovery costs, both direct and indirect, following the disaster.

How Does this Relate to Resiliency?

Economic resilience refers to the ability to prepare for, absorb and adapt to any economic change, whether caused by a disaster, a recession, or regional competition. With the expectation of continued increases in northern Colorado's population, communities that maintain healthy economic activity and employment will continue to thrive.

Currently, most counties regulate the use of land as a purely economic system, without consideration of environmental and quality of life values. Rarely do they have the tools to effectively assess existing conditions or model the effects of proposed policy changes. A resiliency approach identifies critical landscapes of economic, scenic, cultural, or hazard

mitigation values then works to leverage them towards a highest and best use.

The tools in this Plan can affect the quality of development, resilient land use patterns, hazard mitigation, and the ability for residents and mountain communities to become more economically self-sufficient. Apart from natural geographic constraints, this ability is constrained by a lack of services to meet daily needs; a lack of employment opportunities; and communication for education, emergency services, and home-based businesses. The outdoor recreation industry is expected to remain very active and can be leveraged county-wide beyond Estes Park.



HEALTH & SOCIAL

What Should We Know?

“Protection of the health, safety and welfare of the citizens” is written into Larimer County’s mission statement and is a central tenet of this Plan.¹⁶

This brings resiliency down to an individual level; making sure that basic individual and community needs are met for safety and education, mental and physical wellbeing, access to [health services](#), exposure to a healthy environment, and managing the impacts of the built environment.

The County shares the burden of providing these health and social services with a network of federal, state, special districts, non-profit and private organizations, but the real impact of the Mountain Resiliency Plan can be felt in the pursuit of maintaining a high quality of life, fostering social cohesion, and encouraging healthy lifestyles through land use planning, hazard management, and environmental justice.

#1 Many residents covet their isolation, but building community requires organizations and a good place to hang out.

There are only a handful of commercial businesses or public facilities in the mountain communities of Larimer County (see the Economic Snapshot). Locals know exactly where they are and can often name them on a single hand in their area. These gathering places play a special role to bring a community together and make it stronger and more resilient. Even in the online era, physical hang out places are still indispensable in rural areas. While the low number of gathering places limits the opportunity for social interaction among neighbors, these restaurants, stores, schools, or libraries are routinely transformed into decision-making arenas and emergency management centers by providing information, shelter, energy, or a number of basic services.

Many residents feel that unless there is a strong homeowners association (HOA), a road association, a volunteer fire district, or community group, there is very little community governance or sense of community, which is still a desirable attribute of a mountain lifestyle. Volunteer organizations or HOAs not only help coordinate maintenance and

infrastructure improvements, they can also bring a community together socially through events, volunteering, and neighborly assistance. With mail and newspaper delivery and cell service limited in some areas, the most effective organizations use online platforms such as NextDoor and Facebook to aid in communicating.

While many residents rely on this network regularly to coordinate daily needs, it is appreciated most deeply during and after crises. In communities like Pinewood Springs and Glen Haven, this has extended to sharing provisions, coming together to help clean up or rebuild community spaces, and keeping the neighborhood safe from vandalism and looting in the aftermath of the floods.

Local restaurants and meeting spaces facilitate social connections and community engagement, which is a strategy in the Larimer County Community Health Improvement Plan (CHIP) to combat mental and emotional health issues. A physical community space provides more opportunities to make connections, taking the online social network to another level.

#2 Basic services are essential to health, safety, education, and quality of life, but there is a lack of schools and health care facilities.

The dispersed population makes provision of services inefficient and costly to mountain communities. New residents are informed about the differences in levels of service between urban and rural areas through the New Code of the West.

There are 18 different fire districts and authorities that cover the entire western County. There are a total of 29 fire stations, including two in Estes Park, however many of them are staffed with volunteer firefighters. Rural communities do not have a large enough population for paid staffing at these fire stations and volunteer turnover is a challenge. With an aging population it will continue to be a challenge to backfill these positions. For some communities, these fire stations play an important role in physically grounding a sense of community. Fire protection districts that function as special taxing districts that residents can choose to pay into, like those in Glacier View and Crystal Lakes, can be an effective measure to mitigate risks of fire. The structure of these districts often leads to a pro-active commitment to fire mitigation measures.

There are four public school districts that serve the mountain communities; Poudre School District encompasses the northern half of the County; and Thompson R2, Estes Park R-3, and St. Vrain serve the southern areas of the mountain communities. Including the schools in Estes Park, there are seven public schools.

- Red Feather Lakes Elementary
- Livermore Elementary
- Stove Prairie Elementary
- Big Thompson Elementary
- Estes Park Elementary
- Estes Park Middle School
- Estes Park High School

Western Larimer County has:

27

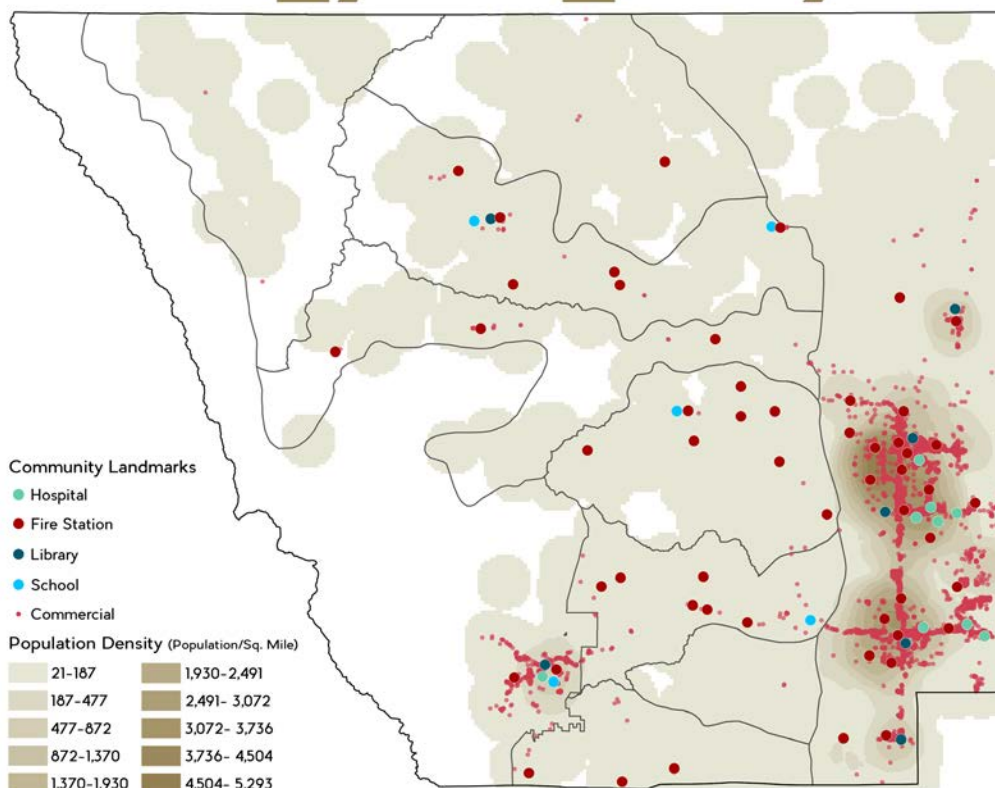
Fire Stations

2

Libraries

7

Schools



Map 3. Basic Services

School consolidation has been a local discussion for several decades, and the small public schools in mountain areas have been at most at risk of closing. The majority of mountain community school-aged children attends schools in Estes Park or drive to schools in Fort Collins, Loveland or Longmont.

Residential development has a direct impact on public school facility needs. State law and supporting Larimer County Intergovernmental Agreements with these School Districts require county subdivisions to dedicate land for schools, or fees in lieu thereof, as part of the subdivision process. These fees currently range between \$1,300 and \$1,600 per building permit, or \$8 per platted lot for Park School District.¹⁷ Capital Expansion Fees are periodically reviewed by the school districts and the County Commissioners and adjusted as necessary.

There are few options for healthcare facilities for mountain residents. The only hospital in western Larimer County is located in Estes Park, Estes Park Medical Center, which makes the only other option driving down the mountain to facilities in the urban areas of Fort Collins, Loveland, or Longmont. Some northern Larimer County residents are actually closer to emergency and medical facilities in Laramie, Wyoming. Emergency medical response is an important part of the service provided by the fire protection districts and authorities, but response times have a wide range depending on the location and accessibility of residential homes.

NEW CODE OF THE WEST

"The fact that you can drive to your property does not necessarily guarantee that you, your guests and emergency service vehicles can achieve that same level of access at all times. Emergency response times (Sheriff, fire suppression, medical care, etc.) cannot be guaranteed. Under some extreme conditions, you may find that emergency response is extremely slow and expensive."¹⁸

How Does this Relate to Resiliency?

Communities can react and adapt to shocks, stresses, and threats to stability in many different ways, but the fundamental forces that shape a community's health and social resilience rely on access to health, education, and community resources. Residents can recover faster from the stress of instability when there is a continuum of basic needs, such as schools, health care, and housing that recruit the next generation. Furthermore, having a social network and community hub that can help connect residents to those resources can be a great benefit and work toward ensuring the continued health for every mountain community.

#3 Remote mountain living can put vulnerable populations at higher risk.

The impact of hazards, economic instability, or other causes of instability, combined with the geographic, services and communication challenges inherent in the mountains, often fall disproportionately on the most disadvantaged or marginalized community members. The solitude that attracts residents to the mountains can easily turn into isolation when needs aren't met; therefore it is important to establish systems and development standards that can ensure safety and wellbeing for all residents.

The median age for mountain communities is 53, nearly 20 years older than the County as a whole. This trend toward older residents presents a unique challenge to mountain communities, as many senior services and infrastructure are not available,

such as transit, universal design standards and medical assistance. According to a 2015 study on elderly housing and care, the number of seniors needing special services is anticipated to increase in the coming years.

As residents continue to age, it will also be increasingly important for communities to attract younger generations. An approach could be to facilitate communities' engagement in local development and growth, to protect their rural characteristics while bringing in services that attract a younger generation with shared values. This would extend to water, sewer, housing affordability, broadband, telecommuting, and home-based employment.



HOUSING

What Should We Know?

Shelter is a basic need for all Larimer County residents and, as such, ensuring that safe and adequate housing options are available and attainable is key to the overall wellbeing of County residents. When it comes to resiliency and stability in rural mountain communities, housing diversity, availability, affordability, quality, and location are important aspects to address.

Understanding the County's role in guiding development and growth patterns will help address emerging housing issues and anticipate future needs. Western Larimer County is not densely populated, and in fact only has about 10,519 total housing units, or an average of 7.5 units per square mile. The vast majority of developed parcels are used for residential purposes, which indicates that housing policies and standards have a wide-reaching impact in western Larimer County.

#1 The cost of development and obtaining water rights makes new housing subdivisions of lots less than 35 acres challenging.

With high demand for water and a finite supply, the price of securing water in Colorado is at an all-time high. Generally seen as an indicator for the state water market, the water pricing for Colorado-Big Thompson (CBT) Project water have reached a historic high—more than tripling between 2010 and 2015.¹⁹ This comes at the heels of a Front Range housing boom, making it even more expensive to fund new residential developments. New residential subdivisions in urban areas around Fort Collins and Loveland are burdened with additional costs to secure water with inflated tap fees and the increased cost of obtaining raw water.²⁰

This issue is compounded in the rural mountain communities of western Larimer County, as access to treated domestic water is not available to many remote areas, and those that do have access to water utility infrastructure often see higher monthly costs of service on top of high tap fees. Non-well based system costs are high due to water treatment, distributing and operation of the system. The majority of mountain homeowners opt to drill and maintain an on-site water well. These, too, come with a sizable price tag with the associated drilling and pumping costs, pushing expenditures into the tens of thousands of dollars.

A third alternative is to truck in water to fill an on-site cistern or vault. These are often referred to as electric cabins as they only have electricity. This is not a cost-efficient year-round water source, as it

is time and labor intensive. Additional challenges arise in drought conditions, when cities close their refilling stations, leaving residents without water or having to borrow from neighbors.

The cost of securing water can vary significantly between water utility providers. In or near urban areas, the average development costs between water districts as of 2015.²¹

With rising costs of land, development and utility fees, developers are pressured to alter their targeted housing price point or risk squeezing their profit margin. These costs are ultimately passed along to homebuyers, which compound the issue of housing affordability for middle-income earners. The cost of subdividing property is challenging due to water augmentation requirements of Colorado water law.

In 1972, the Colorado Legislature determined that constructing one residential unit on a parcel of 35 acres or more is considered a "use by right" and allowed landowners to have one well for indoor domestic use.^{22,23} If a property is subdivided into parcels less than 35 acres with need for more than one well, a plan for augmentation must be approved by the Colorado water court to prevent injury to senior water right holders. The cost of a [water augmentation plan](#) is, on average, a minimum of \$200,000 when considering costs of water engineer, lawyer and court fees. This cost

is often too heavy for small developments to bear, leaving large developments with significant financial backing as the best suited to successfully obtain a [water augmentation plan](#).

Larimer County or individual communities have very little influence over the price and installation of private water utilities, however, the County's [Rural Land Use Process](#) offers an incentive to subdivide properties larger than 70 acres with additional

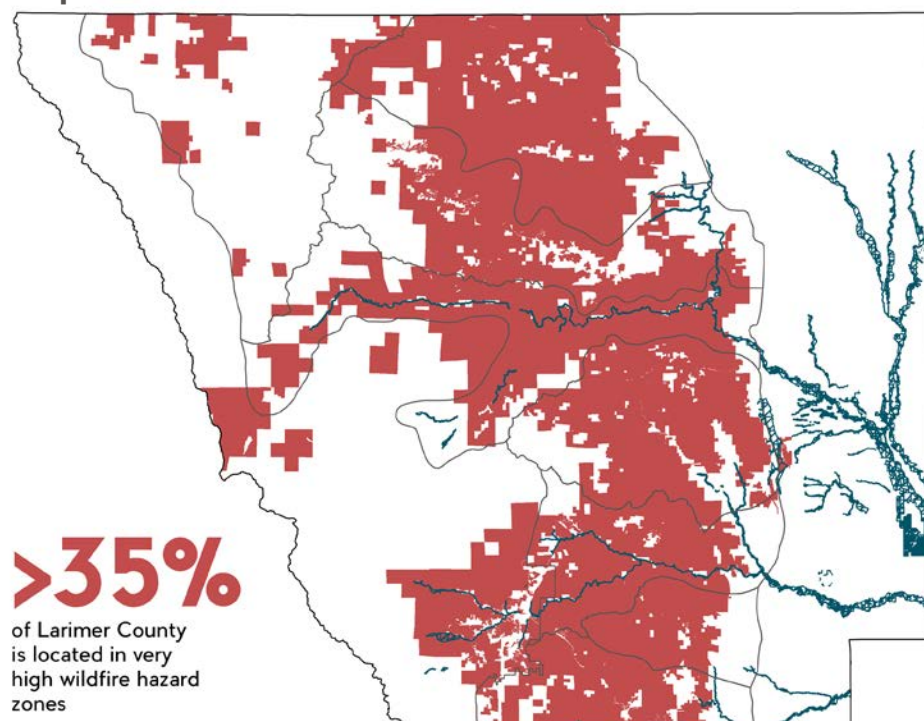
wells, in exchange for conserving 67% of the original property.²⁴ If the cost of obtaining water continues to be a defining barrier to residential development, the County may consider programs to further facilitate water well construction or supporting specific communities' centers to connect to treated domestic water. Site-specific strategies could be further identified in sub-area plans.

#2 The availability of fire and flood insurance strains residents and often results in homes being under-insured, affecting ability to recover and rebuild after disaster events.

Efficiency and reliability of housing assistance during and after disaster events relies heavily on private insurance, and federal assistance. Residents first look to insurance relief to cover the financial burden of rebuilding damaged homes after a disaster event. The UNCF Study quoted over \$11 million in claims from the National Flood Insurance Program (NFIP) for the September 2013 floods, and over \$113 million of claims were made as a result of the High Park fire.

The National Flood Insurance Program (NFIP) currently covers 654 homes in unincorporated Larimer County.²⁵ As a participant in the NFIP, Larimer County has adopted flood mitigation requirements into its Charter and County Code and Ordinance. The County's relationship with NFIP and the voluntary Community Rating System program can aid eligible residents in reduced flood insurance rates. The low

Map 4. Fire and Flood Risk Areas



number of policyholders is due to the misperception that flood insurance is unnecessary for homes that are not built in a FEMA-designated high-risk flood zone. In fact, the flood events like the one in 2013 do not reliably follow the historic [floodways](#) and often result in secondary events like dam failings or erosion. As a result, large number of uninsured or under-insured homes outside of the [floodway](#) can be affected, thereby affecting their capacity to recover and rebuild after a disaster.

One of the requirements to receive CDBG-DR recovery funding to rebuild homes in FEMA designated [floodways](#) is to have flood insurance. Recipients must confirm that

they will purchase flood insurance indefinitely, otherwise they will not be eligible for federal disaster recovery assistance in the future. For some, this is a cost burden that they may not be able afford or choose to discontinue after the 5-year grant monitoring ends.²⁶

In many rural mountain areas, residents also find it hard to secure homeowners insurance without additional costs or meeting fire mitigation requirements. Requirements and considerations vary, but most often include the distance to a

fire hydrant, fire station or other type of fire suppressant; or FireWise best practices such as creating a [defensible space](#) around the house. The *New Code of the West* considers “building at the top of a forested draw ...as dangerous as building in a flash flood area.”²⁷ With only 27 fire stations within the rural mountain study area, insurance providers can increase prices, require additional fire mitigation, or refuse a policy if considered too risky.

#3 Skyrocketing housing prices across northern Colorado are pushing into the mountain areas and influencing housing affordability.

In the years since the Great Recession, the housing market along the Front Range has bounced back in force and become even tighter for homebuyers. Five years ago, the median home price for Larimer County was between \$180k-\$220k, it has now jumped to over \$335k and growing.²⁸ Median housing values are also strong in the mountain communities; estimated at \$311,131 in 2015.²⁹ Increases in salary or new high-paying jobs have not accompanied that 65% increase, leaving many residents looking further and further outside of urban areas for housing options.

Eligible low-income residents displaced from the 2013 flood could apply for housing assistance through the CDBG-DR Program. According to the administering agency, the Loveland Housing Authority, none of the fully displaced applicants were able to find the qualifying level of affordability within their original mountain communities. Consequently, most relocated to the eastern plains, to Weld County or much further south. The housing boom was just starting in 2013, so when residents were emotionally ready to rebuild or buy, they were priced out.

County residents who are not eligible for housing assistance, but not making enough money to afford the increasingly high price of homes do not have a lot of options in the mountain community for sale market. There are no incentives to motivate builders to build entry-level housing in mountain communities, and middle-income households may not have the up-front capital to independently buy and develop a residential lot. This may explain why the median household income for western Larimer County is higher than Loveland, Fort Collins, the Estes Park area and Larimer County on the whole.³⁰ Overall, a healthy sale market is considered to be a six-month inventory, while currently there is only a 1-month inventory. The “drive till you qualify” mentality to find [affordable housing](#) is not driving residential homebuilding in the mountains.

The NOCO Housing Now group was recently formed to advise the Northern Colorado region on housing affordability initiatives and strategies. Additionally the [Larimer Resiliency Framework](#) recommended conducting a county-wide assessment of housing needs and availability. This Mountain Resilience Plan can reinforce these initiatives and partnerships through targeted Guiding Principles and strategies for some of the more vulnerable mountain areas.

How Does this Relate to Resiliency?

The long-term resiliency of residential mountain communities relies on the availability, affordability, strategic location and quality of housing in the area. Housing is in essence just bricks and mortar, but the impact of natural disasters on structures can ravage a sense of community both in the loss of inhabitable homes and in the loss of security, as history has shown. Without a framework to ensure housing resiliency, the foundation of mountain communities is at risk.

Studies show that fire suppression costs are highly correlated with the number and pattern of houses during a fire. Denser neighborhoods or

subdivisions are easier and more cost effective to serve than the same number of houses dispersed over a larger area.

Since 1997, Larimer County has guided the majority of new development to locations near urban centers, and focused on clustering new housing developments. These efforts have helped to maintain the rural character, preserve natural environments, and create more cohesive communities. The Mountain Resilience Plan advances these benefits by strengthening the County's adaptability to changing markets, environmental pressures, and disaster events.



INFRASTRUCTURE

What Should We Know?

Infrastructure is an organized system to facilitate the movement of people, goods, utilities, and information throughout the mountains and into the plains. It includes the physical connections for transportation, water, wastewater, solid waste, energy, communications, public facilities, and green infrastructure. Green infrastructure is the concept of “Designing with nature,” by bringing flood, fire and drought into land use planning and project design.

There is a need within the mountains to focus on holistic watershed health, stabilize river channel and banks, and consider how infrastructure is located in the floodplain to increase and improve aquatic and riparian habitat. These elements are essential to meeting communities’ basic needs,

and ensuring access, safety and health for all residents. As local infrastructure continues to age and be impacted by hazards, additional investment and a method to prioritize investments is needed. Upgrading infrastructure offers an opportunity to build in ways that are more resilient to hazards.

Key infrastructure issues in Larimer County’s mountain communities include the need for redundant and inter-operable systems that can meet changing customer needs and growing demand. Redundancy is defined as building in an extra layer of protection against system failure, creating a back-up system to ensure continued operation. The majority of older County infrastructure was built with only a partial understanding of the local risk and may not be designed to address emerging issues.

#1 The aging and vulnerable bridge and road system, critical for providing safe daily service and in the event of disaster, requires investments to improve community resiliency and safety.

There is a major funding need for updating critical and aging infrastructure in the rural mountain communities. Many bridges in the County were built 40 or more years ago, bringing them near the end of their design life. The Larimer County Transportation Master Plan (2017) identifies short-term needs for annual pavement maintenance, capacity, intersections and bridges at \$145.7 million county-wide. The long-term need through 2040 is estimated at \$804.9 million.

In accordance with [2013-2018 Larimer County Strategic Plan](#), the Engineering Department identified five structurally deficient publicly owned and maintained bridges for replacement. The bridge replacements will be completed by 2020, though it should be noted that not all of these bridges are in the mountainous areas in Larimer County.

The Mountain Resilience Plan looks at the future of roads and bridges in terms of vulnerability to hazards. It lays the policy foundation to ensure that all new facilities continue to be designed to withstand the impacts of hazards in the waterways and potential fire corridors where they are located.

The recently updated Transportation Master Plan should be used as a guide to develop road and bridge infrastructure requirements for development and maintenance in the mountain communities. Criteria for design of infrastructure will also meet standards to withstand potential hazards and should incorporate green infrastructure benefits when possible.

#2 Critical infrastructure is not currently designed to reduce the impacts of hazards or account for expected increases in population.

While the initial cost of designing infrastructure to withstand disasters, such as flooding and fire, is greater, the long-term benefit is substantial. New and replacement infrastructure could utilize technology and innovation in infrastructure projects to increase robustness, modularity, and diversity. In addition to the physical design and development of infrastructure, emergency action plans for infrastructure failure, including security procedures/systems for critical infrastructure should be implemented. Many critical roads and bridges in western Larimer County require modifications or upgrades to enable them to pass adequate flood flow and/or withstand the impacts of flooding and flood debris.

During the 2013 flooding events, landfill life years were decreased due to the large amount of debris accumulated. In the future, the impact of disasters could be reduced if alternative systems for debris, such as recycling, burning or compacting are in place. While the majority of public facilities are located in Fort Collins, there are some facilities in mountain areas managed by Larimer County, fire districts, and water districts. These facilities provide

meeting spaces and community information hubs, as well as emergency response and monitoring.

The Northern Colorado Community Connectivity Project will focus on improving vulnerable bridges and green infrastructure, such as river corridor design, and water diversion systems. These efforts will work to reduce the impacts of natural hazards. Currently, there is a need to identify infrastructure that is not already designed to withstand the stresses of potential disasters. To prepare for future needs, identifying growth patterns can also highlight where there is an increased infrastructure investment need.

New and existing development can evaluate risk and be designed to withstand hazards and vulnerability, which could greatly reduce mountain communities' exposure to hazards. [Design criteria](#) for new development and substantial improvements with low-impact and green infrastructure development could also improve communities' resiliency. Innovative land-use planning can also allow for identified floodplains to be retained as open space.

#3 Mountain communities without improved emergency access and secondary [egress](#) are more vulnerable.

The western two-thirds of Larimer County is mountainous terrain, and a limited number of highway and County roadways provide the only egress and ingress routes.

As the 2012 High Park Fire and 2013 floods demonstrated, these roadways are vulnerable to both fire and flood impacts. Many of the roads follow

major drainage ways, which are subject to riverine flooding; roads also cross dispersed flooding areas or have bridge crossings with varying flood conveyance capacity. Many of these County roads will remain exceptionally fragile until permanent repairs from the 2013 floods are complete. Some communities have potential points of secondary

Table 4. Public Roads in Mountain Communities

Responsibility	Name
US and State Highways	US 34, US 36, and SH 14
County Roads	43, CR 52E, CR 27, CR 38E, CR 74E, CR 73C

access that require improvements for use, or identification and coordination with the landowner. Big Elk Meadows, Buckhorn, Blue Mountain, Pinewood Springs and Glen Haven (Retreat) have all been identified as communities that have risk due to lack of secondary access.

New and existing rural residents need to be aware of potential hazards and ways that they can be prepared and ready to respond to these threats. Larimer County Office of Emergency Management is working to conduct a thorough assessment of the communities with [egress](#) concerns to determine priority areas and possible solutions.

#4 Communication channels, power and water supplies are susceptible to failure, leaving communities without access to basic services or a way to call for help.

There is sparse high-speed internet service in the mountain and foothill communities, and many areas of infrequent cell service. Many communities have services without redundancies or backups, which leads to frequent outages. Regulations to restrict public ownership of [broadband](#) were repealed in 2016, providing a new opportunity for extended [broadband](#) throughout Larimer County to increase access to high-speed internet in rural and mountain communities.

Many rural unincorporated areas are served by Poudre Valley Rural Electric Association. The County is also served by a number of publicly and privately owned utilities. Above ground electric lines and aging wells and sewer systems are vulnerable to natural hazards. Larimer County has 20 different utility sources, which does provide some redundancy, but poses the counter-issue of needing to coordinate with multiple sources in the event of disaster.

Existing plans call to incentivize the installation and implementation of redundant systems that support the viability of sheltering-in-place, or being able to stay at home during disaster events. Additionally, there is a need to proactively educate the public before a disaster regarding alternate [egress](#) and evacuation routing. These efforts can be better targeted by identifying and addressing key system vulnerabilities. Larimer County currently offers community emergency response team (CERT) trainings once a year but the number of trainings could be increased to build rural residents capacity to evacuate in the event of disaster.

The National Institute of Science and Technology pilot program in Larimer County has been established to identify critical facilities to implement redundant energy and communications systems, potentially through renewable sources. This study is ongoing and could offer valuable insight for mountain communities.

#5 Some publicly dedicated, non-county maintained, subdivision roads are in need of maintenance or reconstruction to function in a safe manner.

Publicly dedicated, non-county maintained, subdivision roads occur throughout the County. In mountain communities, they are often the single point of access. Many of these roads are not well maintained or designed to support the current level of traffic. This creates substandard roadways that are more susceptible to the impacts of hazards and are less safe for daily use. The roadway condition can cause access issues for both emergency responders as well as private companies delivering services. It is the responsibility of the subdivision to maintain these roadways and provide the necessary improvements. The cost to improve these roads can be substantial and is estimated in Table 5. According to the [Unmet Needs & Community Fragility \(UNCF\) Study](#), the annual maintenance for these roads could be an additional cost of \$5 to \$6 million per year, if included as part of County maintenance.

The County is considering the following.

- Continuing the policy that publicly dedicated non-county maintained subdivision roads must be privately maintained
- Promoting improvement districts
- Identifying roads that have a connector or community function and providing full County maintenance

Subdivision road owners may not be aware of their responsibility to maintain roads, to what level they should be maintained, or resources available to support maintenance.

Private Roads

The State of Colorado has worked with the Department of Housing and Urban Development (HUD) to include private roads and crossings in the CDBG-DR Home Access Program. These programs provide funding to improve or repair road access to primary residences in the event of disaster.

Table 5. Publicly Dedicated, Non-County Maintained Subdivision Road Improvement Costs per Mile

Publicly Dedicated, non-county maintained Subdivision Road Improvement Costs*	Per Mile (from UNCF study)	Total (in millions)
Unpaved Roads (160 miles)	\$50 - \$400 k	\$8 - \$64
Paved road to current standards (83 miles)	\$150 - \$800 k	\$12.5 - \$66.4
TOTAL		\$20.5 - \$130.4

Source. Unmet Needs & Community Fragility Study; County Highway data 2017

**Road miles do not include Public Improvement District Roads (37.2 paved and 45.3 unpaved)*

How Does this Relate to Resiliency?

Infrastructure is the backbone to maintaining a functioning system on a daily basis and in the event of disaster. These structures and systems need to have the capacity to withstand a disaster. Inadequate infrastructure impacts a community's ability to respond and recover. Mountain communities rely on strong and redundant roadways, communication, energy, and water systems that withstand the impact of hazards. There is an opportunity to put in place codes and regulations that boost awareness through education, ensure responsible development and investment and enforce continued compliance.



WATERSHEDS & NATURAL RESOURCES

What Should We Know?

The foundation of watershed and natural resource resiliency lies in understanding the interplay between land use, natural hazards, and water quality. Natural hazards are those natural events which may result in a threat to human life or property. Although termed “hazards,” such natural events are often part of predictable, even healthy, ecosystem cycles. Hazards are exaggerated by people and would not exist if people, property, or infrastructure were not placed in or near dynamic natural environments. Therefore, a fundamental philosophy is that developments and buildings should be guided away from areas prone to natural hazards.

Although there are regulations and policies in place to protect these communities from wildfire and flooding risk, they have not proven to be sufficient in the face of recent events. As the frequency and [magnitude](#) of disasters increases over time, approaches to floodplain management, managing wildfire risk, and the manner in which current services, such as water supply, are being provided to mountain communities require evaluation to improve resiliency of [watersheds](#) and natural resources for western Larimer County.

#1 Traditional approaches to floodplain management may prove to be ineffective in protecting the public from an increased risk of catastrophic events.

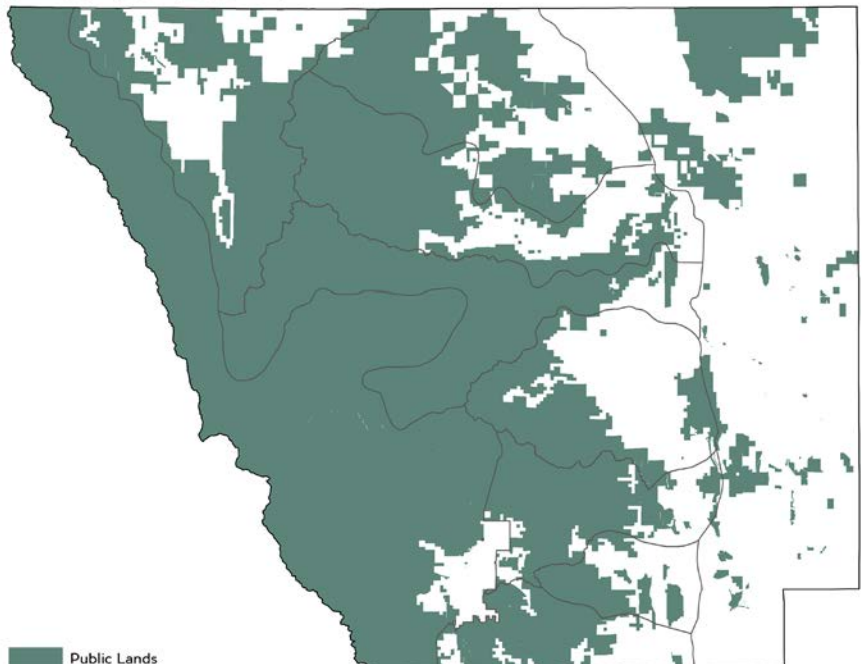
In Larimer County, climate change is expected to increase risk of wildfire and lead to higher flood flows as a result of the wildfire burn areas. The median projection is that with high emissions in mid-century, July highs in Fort Collins would average 92° –as hot as El Paso, Texas, in the recent past. By late in the century, July highs in Fort Collins would be 97°, for which no ready match is available, but beginning to approach Tucson’s recent average of 100.5°. ³¹

“High-severity fires can cause changes in watershed components that can dramatically change runoff and erosion processes in [watersheds](#). Water and sediment yields may increase as more of the forest floor is consumed.”³² Also, “peak flows in high severity burned [watersheds](#) can increase dramatically.”³³

Traditional floodplain management relies on regulating development within and around mapped and

>50%

of Larimer County is made up of public lands



Map 5. Public Lands

identified floodplains. Unfortunately, many properties have been severely damaged by recent flood events that were not located within a previously mapped 1% annual chance flood (100-year) floodplain, or even in areas previously thought to have flooding risk. The September 2013 flood destroyed many structures not located within a mapped floodplain, including areas along both the Big and Little Thompson Rivers. Although regular updating of floodplains is important as existing conditions change and historical data improves, it is not possible to accurately model floodplains that take into account future wildfire events and the resulting aftermath. This uncertainty means that communities need to re-evaluate how they identify flood risks.

Conserving additional lands along rivers provides a margin of error in floodplain management and an added level of resilience to what can be achieved by floodplain regulations alone.

Larimer County floodplain regulations are stricter than the state's minimum requirements. However, they allow rebuilding substantially damaged structures in the [floodway](#) as well as the floodplain based on a sliding scale of velocity and depth. That means landowners may continue to expose life and property to flood risks. Therefore, regulations are not sufficient as the only tool to protect public interests.

An effective floodplain management approach must be multi-layered, building on standard regulatory tools with buy-outs of willing sellers and open

space purchases on key drainage corridors.

An example of the benefits of open space protection within floodplains is provided by the work along the Meramec River in Missouri. The river presents a frequent risk of flooding, which has caused millions of dollars in damage to many small towns. Community leaders throughout St. Louis County have been working together for three decades to create the Meramec River Greenway, a program to acquire land along 108 miles of the river and conserve it as parks and wetlands. As of 2013, the organization had preserved roughly 9,000 acres of floodplain. The Federal Emergency Management Agency (FEMA) estimates that the buyouts and conservation of land prevent an average of \$7.7 million in flood damage annually, while the project also provides parks and recreational areas that benefit residents throughout the County.³⁵

"FIRST AND FOREMOST, TO BE SUCCESSFUL IN DESIGNING FOR RESILIENCE, IT IS IMPORTANT TO RECOGNIZE THAT WE CANNOT DESIGN AGAINST SUCH EVENTS, BUT MUST DESIGN WITH THEM."

-ULI Advisory Services Panel Report³⁴

#2 Larimer County is one of the most hazardous counties in Colorado for wildfire, and regulatory tools to protect the public have not kept pace with the increased risk.

Wildfires are a major concern in the mountain areas of Larimer County. The *Understanding Change: Wildfire in Larimer County, Colorado* report (2013) conducted by the U.S. Forest Service ranked Larimer County as the second most hazardous county in Colorado for wildfire hazards, and a warming climate will increase these risks.³⁶ As more forested lands are developed and recreation uses

increase, the potential for loss of life and property caused by wildfire is an ever increasing problem.

Larimer County has recently completed the first phase of a neighborhood wildfire risk assessment. This assessment took into account a number of risk indicators (subdivision design, vegetation, slope, fire project, structure hazard, and utilities)

to arrive at preliminary risk classifications. Table 6 shows the resulting assessment results of 295 neighborhoods summarized per risk classification.

Table 6. Neighborhood Wildfire Risk Assessment

Wildfire Risk	% of County Neighborhoods
Extreme	2%
Severe	10%
High	32%
Moderate	39%
Low	17%

It should be noted that some data inputs have the potential to be dated and others need in-person verification. The next step for the County is to more closely look at wildfire risk through the lens of [egress](#) and access only to prioritize which neighborhoods are further studied.

Some efforts are currently underway to reduce wildfire hazards. For example, Larimer County has partnered with the Big Thompson Conservation District on a Healthy Forest Initiative, including fuels reduction projects in Larimer County. These projects have been identified and work begins in 2017.

The Larimer County Land Use Code requires consideration of wildfire risk and references the Colorado Landowner Forest Stewardship Plan (LFSP) Guidelines (Code 30). The County takes a somewhat flexible approach in applying and enforcing the guidelines. For instance, County staff does not go out with a tape measure to check distances for [defensible space](#) and the County's enforcement is complaint-based.

On one hand, fire behavior is not fully predictable, - even when things are done right, bad things can still happen. For example, 65% of the homes destroyed in the High Park fire had [defensible space](#) established around them. Research shows that 30-35% of homes within a fire perimeter are destroyed no matter what mitigation efforts have been made. This led in part to the conclusion of a Planning Outcomes report written by Larimer Connects: "A group spent 2015 looking at Land Use, Building and Fire codes. This group sent recommendations to the Board of Commissioners and has since presented to the Planning Commission with suggested changes. Larimer did find that our codes are already mindful of mitigation and risk so few changes were recommended."

On the other hand, design and maintenance characteristics are proven to reducing structure loss. These include quality and maintenance of the defensible spaces, presence of a non combustible zone around the house, hardening of the structure itself including roof materials, water sources and sprinkling, architecture, maintenance of the structure, wildfire education of the homeowner and their willingness to embrace recommendations.

In light of fires becoming more extreme, intense, and escalating costs of firefighting and recovery as a result of climate change and the inability of any single mitigation action to fully reduce wildfire risk, Larimer County should consider policies and incentives that further discourage building within high risk wildfire areas. In addition to code content, the effectiveness of enforcement of compliance with best management practices following issuance of a building permit and construction requires review. A third tool to consider is increased public education and outreach efforts.

#3 Mountain and front range communities depend on limited water resources that are at risk.

These water resources are at risk due to a number of issues, the largest of them being population growth, contamination, aging infrastructure, and climate change. Ensuring water quality, availability, and protection of those resources are vital to everyone's daily life.

Watershed and groundwater health is important for effective conservation, hazard mitigation and as the source of water supply. Watershed health impacts both a community's vulnerability to disasters as well as the quality of a finite supply of water necessary to sustain their livelihood long-term. Mountain communities, due to the use of septic systems, the lack of wastewater treatment, and disaster events are vulnerable to degraded water quality. Damage to sewer lines also compromised water quality in the Big Thompson River. A majority of the mountain communities rely on individual or shared water wells and septic fields.

Inadequately designed and maintained septic fields and shared wells are primarily caused by historic land uses. Up until the 1960s, homes were built too close to each other for septic systems to properly function without contamination. When lots sizes are too small or soils are inadequate to accommodate septic systems, contamination increases. In the 1960s and 1970s, regulations were put in place to ensure new development does not negatively impact groundwater or downstream water quality. Still, flood events exacerbate the vulnerabilities of septic and wastewater facilities due to their placement in low areas, floodplains or areas susceptible to erosion. Furthermore, most homes were approved based on a seasonal septic system. The County-wide trend from seasonal residency to primarily full-time residency places year-round demands on undersized vault and septic systems, requiring some families to pump vaults monthly at a high cost (\$350-\$400).

The extent of degraded water quality is not fully known. Data to validate groundwater quality concerns is lacking. Sample sizes are too small (20 samples annually out of more than 600 wells) and sampling practices are inconsistent (contamination from aerators or outdoor faucets, water not being run for an appropriate amount of time before

sample collection, etc.). A statistically valid survey is needed. Still, some conclusions can be drawn.

- The highest percentage of unsafe samples taken from well water samples was 48% in 2004
- The highest percentage of E. coli present was 12% in 2008.
- E. coli test results are relatively stable each year (up to 2010) with presence in about 5% of samples.
- Nitrates fluctuate over time depending on amount of precipitation throughout the year.

Contamination of the water supply in Red Feather Lakes has the potential to impact the economic sustainability of the area, the actual or perceived health of the community, and the long-term quality of the watershed. Tourists, home buyers, and home construction can be deterred by reduced water quality, which can negatively impact home resale values, and the cost of trucking in water as a solution which is unsustainable long-term.

Potential solutions could focus on treatment, system upgrades, or land use. Small community water and wastewater treatment facilities serve rural areas at various locations in the County. Since sewage is anticipated to be the primary cause of the water quality contamination, increased investment in treatment facilities can reduce contamination currently and into the future. The implementation of centralized sewer and a wastewater treatment plant in concentrated residential areas like Red Feather Lakes would remedy the contamination of groundwater and downstream water supplies. Centralized raw water treatment may also be necessary in some areas with water contamination. Requiring that septic systems are brought up to code as part of a property title transfer is another potential solution to resolve this issue over time. The land use solution would be to extinguish undersized potential building lots, regularly pump concrete lined tanks, and require that septic systems are designed for full-time occupancy regardless of the intended use by immediate owners.³⁷

#4 Natural areas are undervalued for the resiliency and tax benefits they produce.

Recreation and conservation bring significant, synergistic economic, health, and quality of life benefits. Outdoor recreation helps people understand the importance of healthy, intact ecosystems, which builds support for their protection and stewardship. Conservation protects the natural resources and wild places upon which outdoor recreation depends.

A new report from Colorado State University found that each dollar invested by the state for [conservation easements](#) produced benefits of between \$4 and \$12 for Coloradans. Public benefits include clean water and air, scenic views, access to things produced by local farms and ranches, and wildlife habitat, all things that contribute to a high quality of life in the state.

Not only do natural areas, nature-based recreation areas, and conserved working farms and ranches contribute additional property tax revenue - they save local municipal governments money. Working farms and ranches and open lands save communities money through avoided costs on expensive infrastructure and other municipal services such as schools, police and fire protection, and other services required by residentially developed areas. Studies have consistently shown that open space

and working lands, while often removed from property tax rolls, contribute more in taxes than they require in municipal services.

Residential land, however, contributes less in taxes than it receives in municipal services, representing a net loss to local governments. The national median across 151 communities over 25 years is that for every \$1 paid in local taxes, working lands and open space require \$0.35 in services compared to \$1.16 in services for the average home. Two studies in Colorado counties confirm these findings. In Custer and Sagauche Counties working and open lands require only \$0.54 and \$0.35, respectively, in services for every \$1 generated to the community in tax revenues. Residential lands in these communities, meanwhile, require \$1.16 and \$1.17, respectively, in services for every \$1 in tax revenues received by the municipality.

The future of our public lands depends on support from all citizens of Larimer County, including the 95% of residents who live in the eastern plains and the private landowners whose lands provide connectivity and full-landscape solutions. Stewardship of Federal, state, county and city public lands and waters are the responsibility of all citizens.

How Does this Relate to Resiliency?

Resilience of [watersheds](#) and natural resources is the ability for these natural features to withstand and rebound from a natural disaster. To mitigate the effects on these resources, criteria, regulations, and policies should be in place to ensure that they can rebound as quickly as possible post-disaster. They should ensure that communities are minimally affected in their provision of water supply or destruction caused by wildfire and flood events.

With climate change causing disasters to occur more frequently and intensely over time, more stringent requirements such as no development in high wildfire risk areas, open space preservation within floodplains, and building regulations and enforcement relating to vulnerability to hazards may have to be implemented to curb the increasing risk. Current infrastructure in water retention and

provision and sewage and wastewater systems may require reevaluation. The trend toward a year-round population in mountain areas will exceed the original capacity. The transition from seasonal to full-time and short-term rentals continues, as well as the anticipated rapid population increase county-wide, can only make matters worse.

The Mountain Resilience Plan addresses health concerns, such as septic and wastewater systems, through recommendations to improved codes, regulations, and land use policy. The Plan aims to fill the gaps in existing policy and regulation relating to natural hazard mitigation, as well as evaluate alternatives to water supply provision in mountain communities that have the capacity to be negatively affected by the septic and wastewater infrastructure currently in place.

ENDNOTES

1. Clarke, John, "Code of the West" http://www.co.larimer.co.us/planning/planning/code_of_the_west/.
2. Eisenhower, Dwight D., Remarks at the National Defense Executive Reserve Conference, November 14, 1957, <http://www.presidency.ucsb.edu/ws/?pid=10951>.
3. *Disaster Resilience. A National Imperative*, (National Research Council, 2012).
4. *Our Lands - Our Future* (Larimer County, October 2013), Chapter 4. https://www.larimer.org/ourlands_ourfuture/chapter4-fr.pdf.
5. "Colorado Travel Impacts; 1996-2015" (Colorado Tourism Office, June 2016), http://www.deanrunyan.com/doc_library/COImp.pdf.
6. McGhee, Tom, "Rocky Mountain National Park sets visitor record (again) in 2016" (The Denver Post, January 24, 2017), <http://www.denverpost.com/2017/01/24/rocky-mountain-national-park-visitor-record/>.
7. Epperson, Sharon, "Retired baby boomers find second acts in encore careers." (CNBC, August 10, 2013), <http://www.cnn.com/id/100952275>.
8. "Latest Telecommuting Statistics" (GlobalWorkplaceAnalytics.com, Updated January 2016), <http://globalworkplaceanalytics.com/telecommuting-statistics>.
9. June 2014 Broadband USA data
10. 2016 ESRI Community Profile Analyst
11. *Larimer County Land Use Code*, "Home Occupation" (Larimer County), Section 4.3.10.B. 2011.
12. *Larimer County Land Use Code*, "Accessory Rural Occupations" (Larimer County), Section 4.3.10.P. 2011.
13. Gabbert, Bill, "Fort Collins brewery partners to thin and prescribed burn forest" (Wildfire Today, December 2, 2015), <http://wildfiretoday.com/tag/high-park-fire/>.
14. CDR Maguire
15. Wong, Mabel, "What is the true cost of a natural disaster?" (CSR ASIA Weekly, March 9, 2016), <http://www.csr-asia.com/csr-asia-weekly-news-detail.php?id=12563>.
16. *Larimer County Strategic Plan 2014-2018*, (Larimer County, 2014) <http://www.co.larimer.co.us/strategicplan/>.
17. "Larimer County Capital Expansion Fees" (Larimer County), https://www.larimer.org/building/impact_fee_schedule.pdf.
18. Clarke, "Code of the West."
19. Radabaugh, Cristy, "The Rising Cost of Colorado Water" (Martin and Wood Water Consultants Inc. February 22, 2016), <http://www.martinandwood.com/blog/2016/2/17/the-rising-cost-of-colorado-water>.
20. Ferreir, Pat, "Water costs drive NE Fort Collins home prices" (The Coloradoan, Aug. 28, 2015), <http://www.coloradoan.com/story/money/2015/08/28/northeast-fort-collins-water-costs/32434667/>. (March 15, 2016).
21. "Fort Collins – Loveland Water District, South Fort Collins Sanitation District Tap Fee Schedule" (April 21, 2015), <https://dta0yqvfnusi.cloudfront.net/fclwd/2014/06/Fort-Collins-Loveland-Water-District-Tap-Fees-04-21-2015-.pdf>.
22. "Pennobscot, Inc. v. Board of County Commissioners" (Justia.com), <http://law.justia.com/cases/colorado/supreme-court/1982/80sc340-0.html>.

23. *Colorado Revised Statute*, Section 30-28-101(10), <http://www.lexisnexis.com/hottopics/Colorado/>.
24. *Colorado Revised Statute*, Section 30-28, Part 4. Clustered Development and Section 37-92-602(3)(b)(II)(A). <http://www.lexisnexis.com/hottopics/Colorado/>.
25. "Policy & Claim Statistics for Flood Insurance" (FEMA), <https://www.fema.gov/policy-claim-statistics-flood-insurance> (March 2017).
26. "Flood Insurance Requirements for Recipients of Federal Disaster Assistance" (FEMA), https://www.fema.gov/media-library-data/20130726-1630-20490-6612/f695_firerequirements_11aug11.pdf (March 2017).
27. Clarke, "Code of the West."
28. "Larimer County Market Overview" (Zillow.com, March 2017) <https://www.zillow.com/larimer-county-co/home-values/>.
29. *Needs and Opportunities in Housing and Care in Larimer County. Next 25 Years*. (Highland Group, Larimer County, 2015), 13 <http://www.fcgov.com/sustainability/pdf/HousingReportHighlandGroup.pdf>.
30. *Needs and Opportunities in Housing and Care in Larimer County. Next 25 Years*. (Highland Group, Larimer County, 2015)
31. "Future Climate Extremes in Larimer County" (Rocky Mountain Climate Organization, 2016).
32. Wells et al. 1979, Robichaud and Waldrop 1994, Soto et al. 1994, Neary et al. 2005, and Moody et al.
33. *High Park Fire Identification of Post-fire Remaining Priorities* (JW Associates, Inc., 2015).
34. "Northern Colorado, Estes Park, Fort Collins, and Loveland Connected Systems, Connected Futures. Building for Resilience and Prosperity" (Urban Land Institute, 2014)
35. "County collaborates across communities to solve flooding issues" (The Economist) <http://floodeconomics.com/communities/st-louis-county-mo/>.
36. "Understanding Change. Wildfire in Larimer County, Colorado" (U.S. Forest Service, 2013).
37. Interview with Chris Manley, Water Quality Program Manager at Larimer County, March 16, 2017



Chapter Two >>>> VISIONING

In this Chapter

Outreach and Engagement Process.

Overview of the planning process and events that engaged mountain communities, local organizations and community groups, and County staff and leaders.

Community Direction for the Plan.

Summary of outreach at key milestones in the process, including The Foundation, The Vision, Community Choices, and Reaching for Resilience.

“We shall never achieve harmony with the land, anymore than we shall achieve absolute justice or liberty for people. In these higher aspirations the important thing is not to achieve but to strive.”

- Aldo Leopold, Round River. From the Journals of Aldo Leopold

OUTREACH AND ENGAGEMENT PROCESS

The Mountain Resilience Plan process relied on broad and representative community input to establish a unified vision and clearly articulate the shared values of the mountain community residents. Through this process, engagement efforts identified and refined the key community choices regarding Guiding Principles and Policies, Essential Questions, and Implementation Strategies to influence the future of mountain communities.

This process and vision builds on the established direction and values of the 1997 Master Plan, [2013-2018 Strategic Plan](#), and the [Larimer Community Resiliency Framework](#), recognizing the unique characteristics and changing trends in the mountain communities.

The outreach and engagement process:

- Offered opportunities to shape the planning for each community and the vision for the future.
- Strengthened a foundation for ongoing dialogue, collaborative learning and planning for rural mountain communities and local and regional agencies and organizations.
- Utilized multiple mediums for outreach to engage the greatest possible range of participants and perspectives.

The Mountain Resilience Plan was refined through conversations at visioning and community choices events, online surveys at each stage, and workshops with the Stakeholder Committee, Technical Advisory Committee, Planning Commission and Board of County Commissioners.

Notification and Updates

The County released Press Releases at each milestone of the process to inform the public through their formal channels and news outlets.

Regular email updates were sent out to those that signed up on the project website or at public meetings. Updates were also distributed through social media outlets like NextDoor, Facebook, and Twitter.

Committee members and community groups distributed and posted hard copy posters, fliers, and postcards at community gathering places (i.e. libraries, post offices, etc.).

Notification utilized the distribution lists of homeowner associations, clubs, community amenities (i.e. libraries, post offices, etc.), road, water, and fire districts and departments, and more.

Visioning Event Materials. Draft materials were placed on flash drives in areas where internet coverage is lacking.



Mountain Resilience Committees

Two committees provided detailed feedback at every stage of the plan development; the Technical Advisory Committee (TAC) and the Stakeholder Committee (SC). These groups participated in multiple workshops at key milestones in the process: Initiation/Visioning, Opportunities, Strategies, and Recommendations.

- The Technical Advisory Committee, brought together a team of County staff and agency representatives. They provided an important interdisciplinary perspective of how the Plan would be used, interpreted, and implemented.
- The Stakeholder Committee included representatives of mountain communities, organizations and boards. They had two primary functions. 1) to inform the planning team of the unique needs of diverse mountain communities, and 2) to inform mountain communities of the planning process and serve as liaisons to their communities and social networks.

Boards, Commissions, & Organizations

Throughout the Mountain Resilience project, the project team and staff liaisons provided regular updates to appointed boards and commissions, as well as local organizations such as the Fort Collins Area Chamber of Commerce. Members of these groups were encouraged to participate in all public outreach activities, and were invited to a special Boards and Commissions Summit in the Visioning phase of the process.



The Mountain Resilience Plan is a three stage process with events and outreach efforts, including four Technical Advisory and Stakeholder Committee meetings, at each stage.



Stakeholder Committee Meetings





Commissioner's Corner at Estes Park Senior Citizens Center

Public Events

Public events at each phase included three existing community events at the Vision stage, two open-house style interactive workshops at the Community Choices stage, and two question-and-answer style Reaching for Resiliency Public Draft events at the Recommendations stage. These activities and events provided education about the content and planning process, gained in-depth input from residents, generated interest and buy-in from local leaders and residents, actively engaged various stakeholders, and increased awareness of why this process is important to shaping the future of the County and resiliency of mountain communities. Outreach activities and events were paired with web-based surveys to engage stakeholders unable to attend the meetings.

County Commissioner & Planning Commission Involvement

Colorado Revised Statutes Section 30-28-106 (1) specifies that "it is the duty of a county planning commission to make and adopt a master plan for the physical development of the unincorporated territory of the county." To ensure consistent involvement and project understanding, the Board of County Commissioners and Planning Commission participated in joint work sessions and making sure that the project was on the right track. The BCC/PC provided input at the following milestones.

- January - Introduction & Approach
- May - BCC/PC Study Session on the Foundation
- August - BCC/PC Study Sessions on Vision and Implementation Strategies
- November - BCC/PC Study Session on Recommendations
- December - Public Hearing

COMMUNITY DIRECTION FOR THE PLAN

THE FOUNDATION

The first stage of public engagement included phone and in-person stakeholder interviews to gauge issues, needs, opportunities to address in the Mountain Resilience planning process. These interviews were conducted with relevant agencies, community leaders, elected officials, residents, businesses, the general public, and other organizations. Information about the project was also distributed and discussed at Commissioner's Corner events in January.

THE VISION

Outreach efforts are critical to building consensus around the direction and vision for the Mountain Resilience Plan. The planning team and County staff attended three separate visioning outreach events throughout June: Mountain Lions Pancake Breakfast, Big Thompson Canyon Pancake Breakfast, and Glacier View Wildfire Community Preparedness Day. These events also provided an opportunity to distribute information and resources to the public about planning process and Foundation phase.



Big Thompson Canyon Pancake Breakfast.

To integrate other County planning efforts, County representatives also presented information about the updated Transportation Master Plan, [broadband](#) programs, and Larimer Connects.

The Foundation phase document and survey as well as the draft Transportation Master Plan were also loaded onto USB flash drives and distributed at key locations throughout the mountain communities and at the three events for those residents without reliable access to internet.

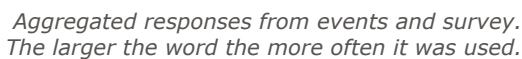
Between the three events, around 400 people attended and learned about the Plan. At the events, paper surveys were completed, and the consultant team, county staff, and members of the Stakeholder Committee interacted with the public to hear residents' vision for mountain communities.

In order to reach residents that did not attend the in-person events, an online survey was available from May through July. Survey questions were intended to mirror the conversation at the events by asking participants what they love about their mountain community, and how their area should change (or not change) over the next 20 years.



Mountain Lions Pancake Breakfast.





Residents were asked what they love about their mountain communities and what issues and opportunities still need to be addressed. Respondents clearly valued the natural beauty, and remote and quiet character above all, though the identified issues and improvements varied widely between communities. A full list of comments can be found in Appendix E, Outreach Summaries.

The visioning outreach efforts resulted in Plan Themes that outline the mountain communities' vision for their future. These are the value and vision statements for rural western Larimer County; they are statements that inform the Plan's Guiding Principles, supporting Policies, and associated strategies and tools.

MOUNTAIN RESILIENCE PLAN // VISIONING

COMMUNITY CHOICES

The planning team hosted two community choices events in August in Estes Park and Glacier View. These events also provided an opportunity to distribute information and resources to the public about plan process and the Foundation and Vision stages.

Between the two events and online survey, input was gathered from over 50 people. At the open house-style events, members of the Stakeholder Committee engaged the public to understand the effectiveness of eleven implementation strategies, programs, and tools for mountain communities across all six resiliency frameworks. The eleven tools participants evaluated were.

- Capital Improvement Plan (CIP) Specific to Rural Mountain Communities
- Overlay Zoning
- Subarea Planning
- Accurate Asset Management System (Analysis of Existing Infrastructure)
- Transferable Density Units (TDU)
- Future Land Use Plan (Map)
- Comprehensive Review and Update of Land Use Code
- Community Fuel Reduction Program
- Business Retention/ Creation Program
- Community Hubs
- Facilitate Cooperation of Nonprofit Organizations and Coalitions

To reach residents that did not attend the in-person events, an online survey was available from August through mid-September. Survey questions were intended to mirror the events' materials and exercise by asking participants to rate a strategy, program, or tool as high, medium, or low effectiveness for mountain communities, and what makes it effective or not effective.

Boards and Commission Summit

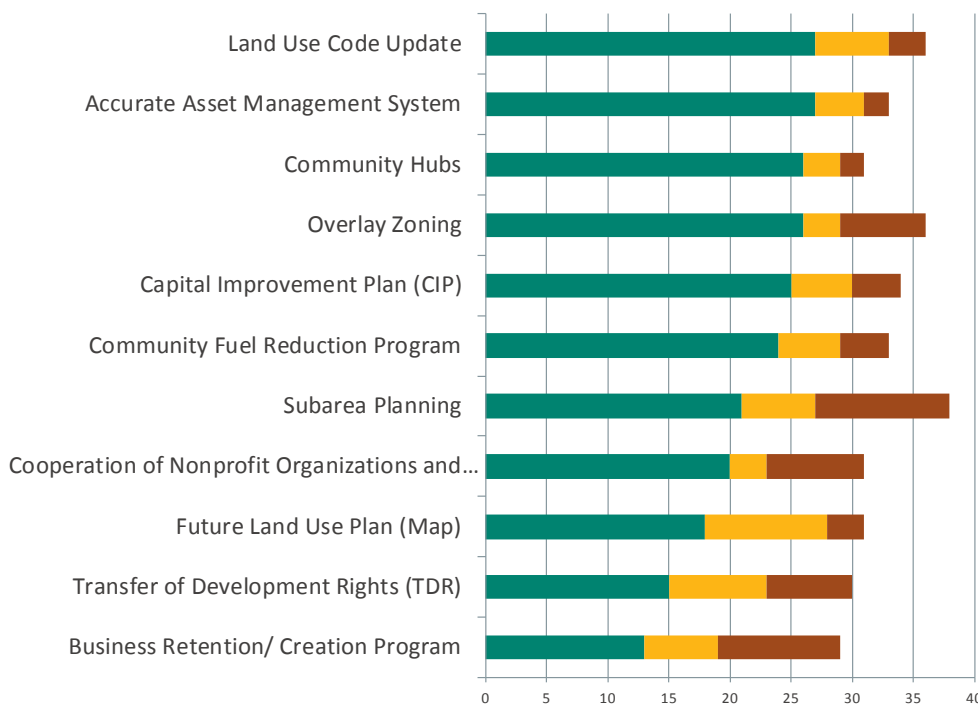
The Boards and Commissions Summit, hosted in September, gathered 30-40 members of advisory boards and commissions, and featured opening and closing remarks by a Board of County Commissioner and County Manager. The Summit provided the opportunity for participants to give feedback on top priority community choices strategies and tools following input received from the public, and commented on lower priority strategies and tools for the purpose of elevating them to be more effective for use by the County. The high level of engagement made the event a success, and feedback was incorporated into the Recommendations stage of the Plan.

Results

The Community Choices stage, including the events and outreach efforts, resulted in the prioritization, vetting, and refinement of implementation strategies to determine which are most effective for the mountain communities. A total of 17 implementation strategies were included in the Recommendations chapter of the Plan. The vetting process also contributed to the refinement and expansion of the policy direction to formulate the Guiding Principles, Policies, and Essential Questions.



Figure 2. How effective is this strategy, program, or tool?



Feedback

From an initial list of more than 50 implementation strategies, the committees' ideas were evaluated and refined based on their perceived effectiveness to work toward resiliency in mountain communities through a series of events. High level suggestions included efficient use of resources and fiscal capacity; the public's role and voice in implementation; and protection of property rights.

A full list of comments can be found in [Appendix E. Outreach Summaries](#).

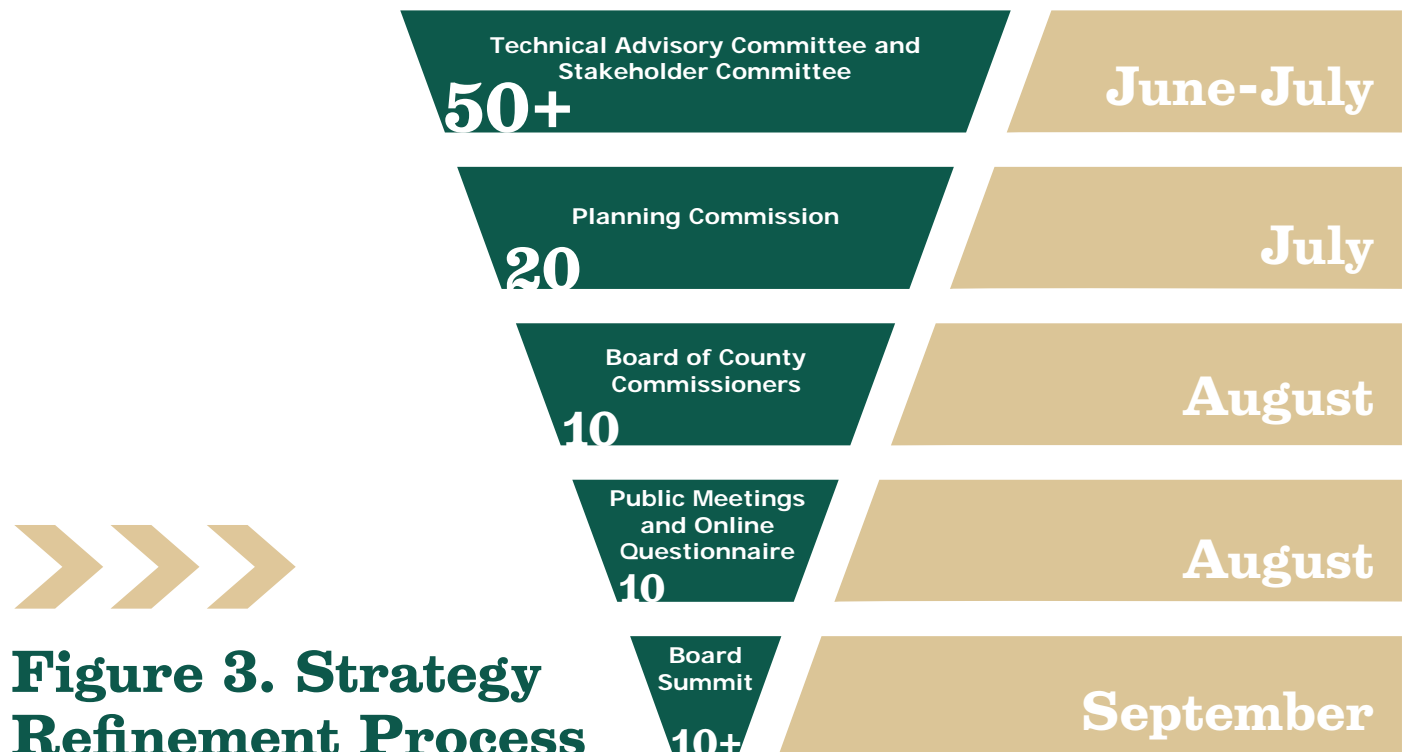


Figure 3. Strategy Refinement Process

REACHING FOR RESILIENCE

The final set of public meetings was held at the end of October in the communities of Pinewood Springs and Livermore. These events were designed to open a dialog with community members about the Mountain Resilience Plan draft policy, implementation and monitoring recommendations of Chapter 3. A presentation about the process and key recommendations was followed by a lively question-and-answer session with community members and the planning team.

These two events were accompanied by a third online survey and a comment card that could be mailed, dropped off, or e-mailed during October and November. Survey questions were intended to mirror the events' materials and exercise by asking participants whether each framework's Guiding Principles, Policies, and Essential Questions make the County's mountain communities more resilient and how these sections can be improved.



Feedback

Participants shared concerns about hazard mitigation, emergency and utility services, as well as managing growth, and protecting the rural mountain character. A full list of comments can be found in [Appendix E. Outreach Summaries](#).

Results

Based on comments from public meetings, online survey #3, committee meetings, internal staff review, Planning Commission, and the Board of County Commissioners, the planning team thoroughly refined the Guiding Principles, Policies, Essential Questions, Strategies and Metrics. Additional revisions were made to the draft Foundation and Visioning chapters. This process resulted in the final draft of this Mountain Resilience Plan, recommended by staff for approval at the joint Planning Commission and Board of County Commissioners hearing in December 2017.

WEB-BASED PUBLIC INVOLVEMENT ACTIVITIES

www.LarimerCompPlan.com provided consistent Mountain Resilience updates, resources, and activities for visitors to do online. This included responding to a call to action, participating in an online survey, or reading through project materials and plan documents.

A public schedule for all events was posted and updated on the website with summaries of past meeting and presentations.

Online surveys and idea walls were active at key engagement milestones.

The website will continue to offer planning references, an interactive hazards map, and resiliency best practices throughout Phase 2 in 2018.



What is the Larimer County Mountain Resilience Plan?

A phased comprehensive plan, built on inclusive outreach and existing plans with goals, policies, and solutions unique to each local planning area

The Plan will...

- Articulate common themes that bind

Resiliency

This planning process will be organized around the Resiliency Framework's six sectors, **Community, Economic, Watersheds & Natural Resources, Housing, Infrastructure, and Health & Social**, and will focus on addressing all ten of the resiliency criteria outlined by the U.S. Department of Housing and Urban Development's Community Development Block Grant Disaster Recovery

Timeline

Estes Valley Stakeholder Meeting & Tour of
01/11/2017 - 9:00am

Red Feather Lakes Stakeholder Meetings &
01/26/2017 - 9:00am

94 total survey responses

995 users

5,623 page views



Chapter Three >>>> RECOMMENDATIONS

In this Chapter

Policy Framework.

Policy direction through a series of Plan Themes, Guiding Principles, Policies and Essential Questions.

Strategic Implementation.

Includes a menu of strategies that communities can choose to use to implement the Plan's policy framework.

Metrics & Monitoring.

Indicators of success that the County can regularly track and use to evaluate the efficacy of the Plan and make amendments as necessary.

“One cannot be pessimistic about the West. This is the native home of hope. When it fully learns that cooperation, not rugged individualism, is the quality that most characterizes and preserves it, then it will have achieved itself and outlived its origins. Then it has a chance to create a society to match its scenery.”

- Wallace Stegner, “The Sound of Mountain Water: The Changing American West.”

POLICY FRAMEWORK & STRATEGIC IMPLEMENTATION

INTRODUCTION

The ability to “bounce back to normal” following a disaster has been a benchmark in the past to measure recovery. However, it is not a measure of resilient communities or the power of people and organizations to grow through challenges that arise and to work together to change the future. Resilient communities strive to “bounce forward” by deliberately preparing for and becoming better able to adapt to the unexpected –before, during and after.

The development of this Mountain Resilience Plan was an opportunity to re-evaluate the adopted policy direction and vision statements from the Foundational Plans (see [Chapter 1. Foundation](#)). Existing Plan Themes, Guiding Principles, and Policies were assessed for relevancy to rural mountain communities and overall functionality.

The following Guiding Principles and Policies actively are a critical step toward increasing community resilience and proactively mitigating future social, economic, and environmental impacts from natural and economic disasters. The following pages define the County’s role in resilience underlain by two beliefs: 1) that County governments are not able to provide the same [level of service](#) that city governments provide (see the [Code of the West](#)); and 2) that individuals and families are primarily responsible for their own self-reliance, preparedness and the consequences of their actions or inaction.

Essential Questions frame the conversation regarding discretionary land use decisions as well as County initiatives, actions and capital improvement priorities. These questions will not be pertinent to every decision and are not intended to overly complicate or burden processes. They should be applied contextually and in support of this Plan’s Guiding Principles and Policies.

This subsequent section focuses on aligning the policy direction with strategies to put the Plan into practice.



Top: Community Choices
Estes Park Event

Middle and Bottom: Boards and
Commissions Summit

For the purposes of this document, Plan Themes, Guiding Principles, Policies, Essential Questions, and Strategies are defined as follows:

PLAN THEMES. Important values that influence the development of the Guiding Principles, Policies, and Strategies.

GUIDING PRINCIPLES. Desired ideals and a value to be sought; an end toward which effort is directed.

POLICIES. Statements of standard or a course of action that guides governmental action and decision making.

ESSENTIAL QUESTIONS. Set of questions used to authentically work toward achieving the County’s overall vision.

STRATEGIES. Implementable actions to achieve the vision for increased resilience in mountain communities.

METRICS. A set of indicators that measure progress toward achieving resiliency goals.



COMMUNITY

Guiding Principles and Policies

Plan Themes

The planning and [development review process](#) and supporting regulations are open, consistent, predictable, and balance the needs and interests of each mountain community with the rights of individuals.

The Comprehensive Plan, supporting programs, and Code are all consistent.

Planning is a proactive process.

Rural communities are valued and supported by long-range, regional, comprehensive planning.

The County collaborates with citizens, mountain communities, local governments, businesses, non-profits, and community organizations to create the County's future while ensuring property rights.

COMMUNITY 1. *Larimer County plans for long-term change based on conservation, resource sustainability, economic health, land use, community design, connectivity, and infrastructure considerations.*

1. Establish tools for long-range planning and regional collaboration in cooperation with municipalities, residents, landowners, and other affected interests.
2. Utilize the Comprehensive Plan as policy to influence the formulation of Code and regulations in order to create cohesion in harmony with the vision and recommendations for mountain communities.
3. Facilitate informal and formal communication and decision-making channels to support community leaders and the ability to govern locally.

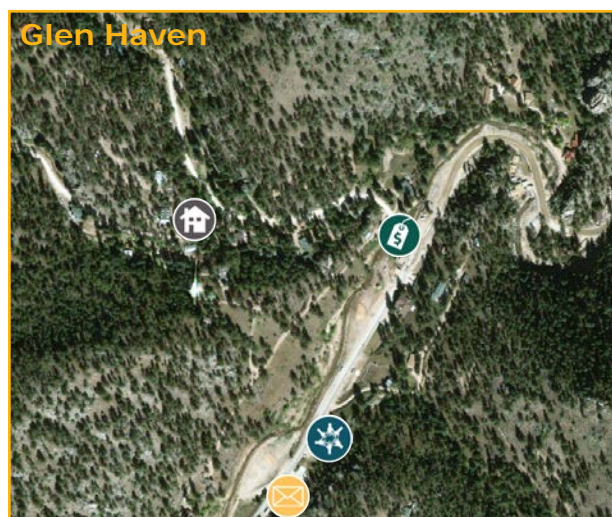
COMMUNITY 2. *The County utilizes innovative incentives, planning tools, standards, and regulations to protect the environment, mitigate hazard risks, and strengthen the desired character of mountain communities.*

1. Encourage self-sustainability and public education relating to the [Code of the West](#).
2. Encourage a variety of land use planning tools, such as the [Rural Land Use Process](#), Conservation Development Process, Transferable Density Units, and other innovative planning tools to protect and conserving important County natural and fiscal resources, where appropriate.
3. Encourage subarea planning for unincorporated mountain communities and [watersheds](#) to tailor policies, [zoning](#), and initiatives to location-specific needs.



4. Design [clustered development](#) and transfers of density units to encourage a “[village pattern](#)” through efficient placement of gathering spaces and commercial uses serving daily needs without requiring urban level facilities and services.
5. Develop emergency management and hazard mitigation programs and regulations, standards and guidelines to be relevant at the individual, household, community, municipal, county, and regional levels.
6. Encourage neighborhood and community participation in proactive planning projects and in the [development review process](#).

Figure 1. Examples of Village Patterns



Examples of existing village patterns in Larimer County that promote a sense of community, share resources, and improve communication.

Essential Questions

1. How does the project advance the countywide vision and, if applicable, the subarea or watershed plan for the affected community or communities?
2. How does the project support long-range planning and regional collaboration efforts among municipalities, citizens, and other local interests?
3. How is this project consistent with existing master and emergency management plans that are incorporated into the Comprehensive Plan?
4. How does the project encourage a “village pattern” and/or lifelines to allow a community to serve its daily needs without requiring urban levels of facilities and services?
5. Is there a consensus demand for community services? If so, what are they and how are they met by this project?
6. How does this project, and to what extent, alter the current culture of rural mountain living?
7. How does this project protect property rights?



ECONOMY

Guiding Principles and Policies

Plan Themes

Agriculture, recreation, and tourism will remain viable long-term segments of Larimer County's economic, cultural, and social fabric.

The planning process and supporting regulations support a sustainable, resilient, and diverse economy with equal access to housing opportunity, employment, and upward mobility.

A prosperous economy is powered by innovation, connectivity, high-quality education and training, a business-friendly atmosphere, well-paying jobs, attainable and diverse housing types, and technology and transportation networks that keep pace with growth where appropriate.

Resilient infrastructure that allows for viability of small businesses and the provision of basic services to residents is critical to the mountain communities' regional economic success.

Stable, long-term, and diverse funding sources are essential to protect environmental assets and support outdoor recreation.

ECONOMY 1. *Larimer County supports and facilitates economic development efforts that contribute to high-value, low-impact employment sectors, and foster wealth creation that supports economic stability and high quality of life.*

1. Foster the consolidation of redundant and disparate [service districts](#) and groups to effectively share resources and increase efficiency.
2. Build on existing efforts to identify areas suitable for development in mountain communities, potentially through the use of subarea plans and [overlay zoning](#), to cater economic development strategies to the specific needs of unincorporated mountain communities.
3. Promote local scale production of renewable energy to address the risks associated with utility provision, [lifeline services](#), and grid failure in mountain communities.
4. Ensure local employment opportunities balance economic success with local needs and community character.

ECONOMY 2. *Encourage career paths that build on different work and education experiences and the policy initiatives to support them.*

1. Support provision of basic services needed to support local employment opportunities, including home occupations and accessory rural occupations.
2. Ensure that land use practices and regulations accommodate needs of mountain communities and changing trends in regards to businesses, including home occupations and accessory rural occupations.

ECONOMY 3. *Foster development of communities with a healthy balance of jobs, housing, and recreation opportunities for all economic classes.*

1. Support partnerships with other jurisdictions and the private sector to provide a regional approach to economic growth and sustainability, including provision of [attainable housing](#).
2. Encourage designation of high hazard areas for recreation, where they meets open space goals.
3. Leverage tourism to benefit mountain communities and achieve subarea visions.

Plan Themes (Cont.)

The economic resiliency of mountain communities relies on high value, low impact job creation and retention and connectivity to proactively encourage innovation and diversification and prevent economic downturns.

Development of a diverse regional economy must meet present needs without compromising the needs of future generations.

Essential Questions

1. How does the project contribute to the provision of basic services needed to support local mountain community needs?
2. How does the project adhere to County policy and Code provisions to accommodate a balance of jobs, housing, and recreation for all economic classes?
3. How does the project support high value, low impact employment opportunities?



Glen Echo Resort in Rustic, CO. Photo. Jeffrey Beall



HEALTH & SOCIAL

Guiding Principles and Policies

Plan Themes

The County's strength lies in the collective diversity, talents, and character of our people.

The County encourages and fosters an environment of respect, supporting both physical and mental health.

The County encourages safe, affordable, and reliable infrastructure, connectivity, and services, compatible with rural activities and needs.

The County supports the diverse health and educational needs of a multigenerational population.

Through partnerships and education, the County helps mountain communities understand the risks of natural hazards so that communities and individuals can take responsibility for their own collective preparedness.

The need to maintain citizen health, safety, and welfare guides all County standards, rules, and regulations.

HEALTH & SOCIAL 1. *Larimer County encourages alternative modes of transportation and alternatives to transportation to enhance regional connectivity (see Infrastructure 2).*

1. Continue to participate in cooperative efforts with cities and counties in the region to connect regional transit and trail systems.
2. Establish public and private partnerships at all levels to develop infrastructure that expands [multi-modal transportation](#) options.
3. Consider the development and use of alternative transportation modes during the planning and design process of transportation projects.
4. Engage citizens in developing innovative ways to create regional connections that do not rely on traditional transportation, such as senior transportation and [broadband](#) service.

HEALTH & SOCIAL 2. *New development minimizes negative public and environmental health impacts such as air and water quality and water supply.*

1. Protect air and water quality through cooperative efforts, [development standards](#), and incentive programs.
2. Provide high levels of environmental protection for drinking water sources through stormwater management and water quality management plans.

HEALTH & SOCIAL 3. *Larimer County supports collaborative planning across agencies and sectors to ensure residents have access to social services, health care services, and related resources.*

1. Encourage innovative solutions to address the diverse issues associated with [vulnerable populations](#) that may have limited resources and assistance.
2. Continue to coordinate and partner with School Districts on land use planning, transportation infrastructure, connectivity, and school facility retention and expansion.
3. Encourage a countywide partnership between public and private agencies for the equitable distribution of health care and social services.

HEALTH & SOCIAL 4. *Larimer County increases individual and community preparedness through education, identifying [vulnerable populations](#), empowering local leaders, and promoting resiliency conversations.*

1. Educate new residents in rural and remote areas about the realities of rural mountain living, location-specific risks, and preparedness best practices in part through the distribution of the [Code of the West](#).
2. Support a wide distribution of information and services to vulnerable and remote areas in western Larimer County.

Essential Questions

1. How does this project increase individual and community preparedness for disaster events?
2. How does this project address specific needs of vulnerable populations?
3. How does this project enhance social connectivity and cohesion?
4. How does the project preserve or enhance water quality and supply?





HOUSING

Guiding Principles and Policies

Plan Themes

The County supports logical settlement patterns and locations that reflect the existing open, rural character as well as the natural constraints and opportunities of mountain areas.

The County supports the viability of a diverse range of housing options.

HOUSING 1. *Larimer County supports the development of an appropriate mix of housing types and opportunities to meet the needs of all persons.*

1. Create flexibility and remove barriers in the Code for a diversity of housing options including co-housing, [accessory dwelling units](#), smaller green-spaces, mixed housing, tiny homes, and other innovative housing options within village clusters, [Growth Management Areas](#), or areas where adequate infrastructure is available or feasible.
2. Coordinate with other governmental entities such as the Federal Land Management Agencies, Colorado State University, state housing agencies, local housing agencies and others.
3. Collaborate with affordable housing advocates in updating the Code to encourage development of [affordable/attainable housing](#).
4. Support other non-public, nonprofit, and private sector organizations to provide [attainable housing](#) alternatives.

HOUSING 2. *All new rural residential development is designed to maintain compatibility with adjacent areas, the open character of the mountains, protect and maintain agricultural uses and sensitive environmental areas, and promote a sense of community and resiliency.*

1. Encourage clustered residential subdivisions and support the [Rural Land Use Process](#) and incentives (i.e. Transferable Density Units) to maximize the contiguity of conserved lands.
2. Consider preservation of unique or distinctive natural features and viewsheds in the design of new development.
3. Consider the effects of siting new development and [building envelopes](#) on prominent landforms and landmarks.
4. Land uses that create high off-site impacts, such as noise, lighting, wildlife impacts, and traffic will mitigate negative effects to the extent feasible.
5. Encourage subdivisions to provide recreational amenities and trails.

HOUSING 3. *Compatibility with terrain and natural hazards is considered in the design approval of all development and buildings.*

1. Create and continually maintain [defensible space](#) around structures and otherwise mitigate potential hazards to life and property when building in wildfire hazard-prone areas.
2. Demonstrate that the creation and maintenance of hazard mitigation efforts will minimize safety and economic costs to current and future owners or the County, as an approval requirement for development and building proposals in hazard areas.
3. Only encourage [building envelopes](#) on constrained parcels, such as those that contain hazardous or environmentally sensitive areas.

Essential Questions

1. How does the project positively contribute to a diversity of [attainable housing](#) choices within mountain communities?
2. How does the project avoid impacts to the open character of rural areas, unique or highly visible viewsheds, landforms and ridgelines?
3. How does the project consider the natural terrain in its design and siting to minimize environmental impacts and avoid or reduce hazard risk to an acceptable level?



Redstone Creek



INFRASTRUCTURE

Guiding Principles and Policies

Plan Themes

Adequate public and/or private facilities and services are provided concurrent with development.

The County encourages a balanced, economically feasible multi-modal transportation system for safe and efficient travel in the County.

Critical infrastructure has built-in redundancy.

The County encourages the deployment of reliable, affordable, and redundant connectivity.

INFRASTRUCTURE 1. *New development will pay its own way and maintain existing facilities at adequate service levels.*

1. New development will provide adequate facilities and infrastructure.
2. Collaborate with adjacent municipalities and unincorporated communities to develop and implement basin-wide stormwater management plans.
3. Allow on-site alternatives for the provision of public/private facilities only where they do not conflict with planned expansions of public or community systems.
4. Encourage upgrading stormwater facilities where necessary for existing developments. Provide stormwater management services within highly developed areas.
5. Foster partnerships with appropriate agencies at a local, state and federal level to ensure that adequate infrastructure is available for development.
 - Work with water service providers in Larimer County to assure adequate domestic water service is available.
 - Coordinate fire protection standards for water supply between Larimer County water service providers and fire protection districts to provide water supplies for fire protection.
6. Encourage, wherever possible, the use of public or private sewer systems in lieu of septic systems.
7. Strongly encourage all developments to establish public improvement districts for long term maintenance of public subdivision roads and other utilities.
8. Inform and encourage residents how to effectively maintain private roads long-term.

INFRASTRUCTURE 2. *The County ensures that transportation and infrastructure needs align with future goals and development, and encourage equity and fairness to the extent possible (see Health & Social 1).*

1. Ensure consistency between the transportation planning process and development patterns, and the principles of the

Transportation Plan and Comprehensive Plan.

2. Continue to ensure new development pays its equitable share for necessary improvements to the County transportation system.
3. Utilize the Capital Improvement Program and Asset Management Program to address deficiencies in County transportation facilities as well as system vulnerabilities.
4. Review all proposed infrastructure projects to ensure they provide adequate service for current needs and future planned growth consistent with the Capital Improvement Plan, Transportation Plan, and Comprehensive Plan as applicable.

INFRASTRUCTURE 3. *Larimer County encourages sustainable design measures when making improvements and developing new infrastructure.*

1. Encourage resource-efficient building and site design, solar orientation, and water and energy conservation.
2. Utilize technology and innovation in infrastructure projects to increase robustness, modularity, cost effectiveness and diversity.
3. Encourage stormwater basin designs that meet multi-purpose goals such as providing habitat or a public amenity.

Essential Questions

1. How does the project provide adequate transportation, water, sewer, fire protection and utility services in accordance with existing master plans?
2. How will the project's infrastructure be designed, funded, maintained, and replaced to ensure it is adequate for existing and proposed development?
3. Should the project propose sustainable and low-impact infrastructure including efficient building and site designs, alternative energy options, and conservation of resources?
4. How does the project align with our future development plans for land use and transportation?
5. What is the estimated public investment required for this project? Is there sufficient population density and community benefit to justify public investment associated with this project?



Viestenz-Smith Mountain Park.



WATERSHEDS & NATURAL RESOURCES

Guiding Principles and Policies

Plan Themes

Land use is suitable for and compatible with the environmental characteristics of the site.

Natural and [cultural resources](#) are valued, identified, protected, and responsibly managed.

Open landscapes and waterways will continue to be defining features of the landscape of Larimer County.

The County protects our air, water supply, open spaces and natural resources.

The County is prepared for wildfires, floods, and other natural disasters and helps citizens prepare themselves.

Wetlands and riparian areas are important in maintaining water quality, wildlife habitat, flood protection and other critical environmental functions.

Recreation and conservation bring significant, synergistic economic, health, and quality of life benefits.

WATERSHEDS & NATURAL RESOURCES 1. Larimer

County minimizes adverse effects of development on natural values, including wetlands, riparian areas and other important wildlife habitats.

1. Provide adequate buffers between development and wetlands, streams, riparian corridors, critical trail corridors and wildlife habitat or require a finding that the proposed development is compatible with these natural values and/or effects have been adequately mitigated.
2. Provide educational materials to the public on locally important cultural and natural resources (native plants, wildlife habitat, etc.) and best practices (weed and ditch management, minimizing or avoidance of fragmenting habitats, etc.) to protect and conserve them.
3. Engage local, state, federal and other land conservation and management entities to review development proposals to ensure multiple land use goals are met when the development is either adjacent to or coincides with an area defined in existing municipal, County, CNHP, or state conservation plans.
4. Explore innovative opportunities to expand land conservation/ acquisition, including funding, that meets multiple goals for natural resource conservation, hazard mitigation, and environmental resiliency.

WATERSHEDS & NATURAL RESOURCES 2. Larimer

County minimizes risks and vulnerability to the impacts of natural hazards while protecting lives and reducing damages and losses to property, the economy, public health and safety, and the environment.

1. Discourage development in hazard areas or require a finding that the proposed development mitigates potential hazards when development is proposed.
2. Design development to mitigate safety hazards and economic costs from natural events.
3. Anticipate natural events such as flood, fire, geologic events and drought in land use planning and project design, while balancing inherent and acceptable levels of risk.
4. Encourage land management activities that diminish exotic species, promote native vegetation, and protect important habitat.

WATERSHEDS & NATURAL RESOURCES 3.

Larimer County improves public awareness, education, and preparedness for all hazards.

1. Build relationships and increase collaboration across jurisdictions for watershed and natural resource planning and management, as well as preventative planning for natural hazards.
2. Partner with community groups and educational institutions to increase public education of how human activities interact with natural resource protection and hazard mitigation.
3. Continue to collaborate with area partners (such as federal and state agencies, municipalities, recreational outfitters and nonprofit organizations) through community collaboration, mutual aid agreements and long-term planning efforts.
4. Incorporate risk reduction principles into County documents and initiatives, and encourage other agencies to do the same.

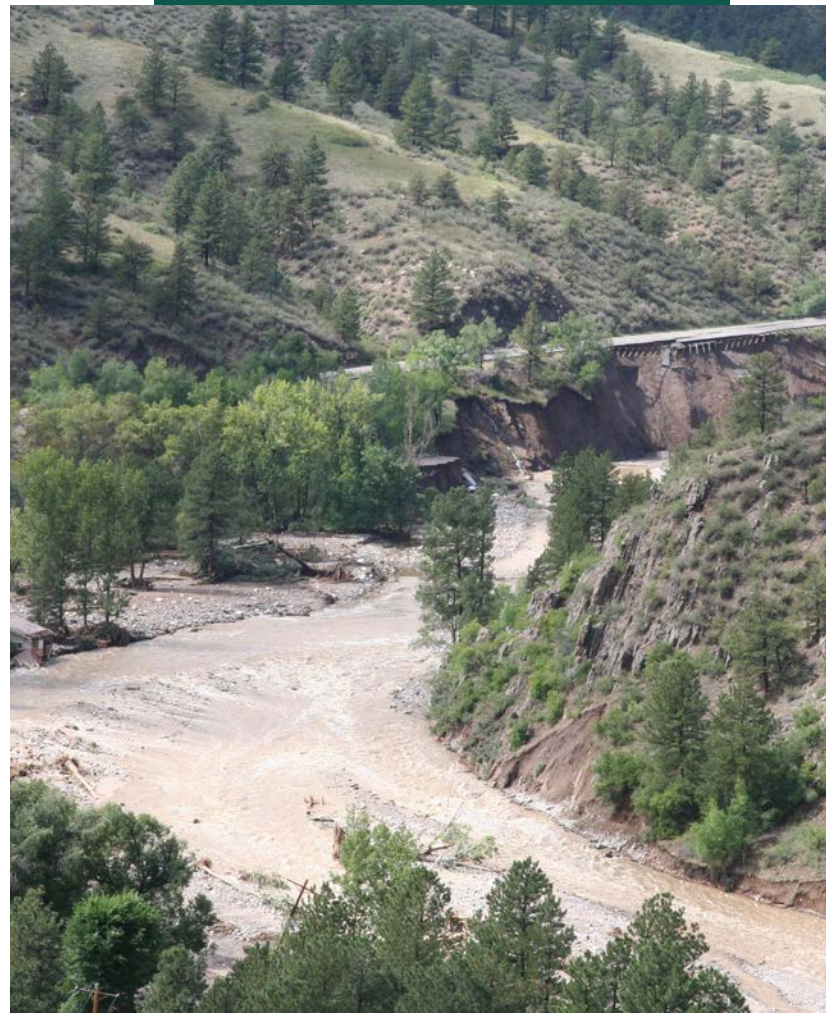
WATERSHEDS & NATURAL RESOURCES

4. *Larimer County works to reduce the risks of floods and wildfire hazards.*

1. Encourage and educate private landowners and local, state, and federal governments to develop and implement cooperative strategies to minimize critical wildfire hazards potentially affecting life and property such as the long-term maintenance of [defensible space](#).
2. Collaborate with multi-jurisdictional and private forest management in multidisciplinary approaches, including reduced fuel loads, natural fire breaks, range management, soil mitigation, and other strategies to achieve improved forest health.
3. Expand the range of tools and strategies for simultaneously protecting riverine habitat and water quality while minimizing flood damage, such as updating floodplain maps, regulating flood erosion hazard areas, identifying buffer distances/setbacks to rivers, and [designing with nature](#) to improve stream design and watershed capacity.

Essential Questions

1. How does the project adequately protect air and water quality, cultural and natural resources, and minimize fragmentation of the landscape?
2. How does the project mitigate risks and reduce economic costs of natural hazard events to increase resiliency?
3. How does the project comply with County policy, Code, Master Plans, and initiatives in relation to hazard risk reduction?



Cedar Cove, during 2013 floods.



High Park Fire Smoke Column.



STRATEGIC IMPLEMENTATION

The Implementation Strategies are possible approaches—consistent with Larimer County’s vision and values—to implement the Guiding Principles and Policies. As described in [Chapter 2](#), more than 50 actionable strategies were brainstormed and refined by the public and working committees down to the most supported, feasible, and impactful 16. Like the previous pages, Strategies are equally important and listed in no particular order. These initiatives reach across jurisdictions and departments to show tangible projects, programs, or reforms that could be accomplished in the short term to implement the Comprehensive Plan.

The Strategies are not one-size-fits-all. Some Strategies are appropriate for some mountain communities, and others are appropriate for other areas. The key is to build informal and formal decision-making channels with mountain community leaders to find the most effective solution to each community (see [Community Guiding Principles](#) and [Subarea Planning Strategy](#)).

IMPLEMENTATION RESPONSIBILITIES

Successful implementation of this Plan depends on the coordinated and collective action of County decision-makers, staff members, community members, and other partners as follows:

1. The **Board of County Commissioners** is responsible to guide implementation through Annual Work Plan priorities, developing partnerships, and ensuring accountability of County department activities in harmony with the Plan’s Themes, Guiding Principles, and Policies.
2. **Planning Commission** is responsible to use the Essential Questions in review of development proposals, promote and oversee updates to the code, and amend or revise the Plan on a 5-year cycle.
3. **Other Boards and Commissions** are encouraged to actively promote implementation by taking ownership of a Framework. For example, the Land Stewardship Advisory Board and Environmental Science Advisory Board could identify annual board priorities from the Natural Resources and Watersheds Framework.
4. **Department Directors** are responsible for pursuing the potential Strategies in their Annual Work Plans and annual budget development processes. Annual Work Plans by County Departments should identify which Strategies will be implemented each year, for review and approval by the BCC and in coordination with the Capital Improvements Plan.
5. **Community Development staff** will prepare a section highlighting implementation achievements in their Annual Report. Specifically, the Annual Report will share trends in metrics to understand the impact of the Plan’s policies on the community’s trajectory and identify where refinements are needed. Staff will continue to review development proposals, providing decision-makers with information as to whether such proposals align with the Guiding Principles and Policies within this Plan. They will also develop proposed plan amendments and present them to decision-makers for their consideration and potential approval.
6. **Citizens and County partners** are encouraged to track the Plan’s implementation through Annual Reports, and participate in County budgeting to promote adequate funding for Strategies, subarea plans, and plan maintenance.

FUNDING PLAN IMPLEMENTATION

One risk in implementation is current funding realities and limitations. The timing, prioritization, costs, and funding of these Strategies will be determined by the BCC as it considers annual capital plans and budget requests presented by County departments and divisions. Future budget requests and approvals should align future staffing and funding levels to support implementation of the Comprehensive Plan.

Many of the Policies are carried forward from the 1997 Master Plan. Similarly, several Strategies—such as Capital Improvement Planning and Community Hubs—already exist and may be better implemented through expanding or reforming current programs and services offered by the County. Some will require additional staffing and equitable funding mechanisms, and others might be accomplished through budget reallocations.

Since this Plan establishes a broad community vision and policies, additional planning efforts will be necessary to provide more detailed guidance and direction for specific topics, subareas, and codes. Regular updates to existing master plans, such as the Open Lands Master Plan and Transportation Plan, are also important windows to align decisions with supporting plans.

The Community Development Department, in concert with other departments, will seek funding sources that allow for stability and long-

range planning and that monitor the schedule and eligibility requirements for state and federal funding. A number of state and federal grants and resources, as well as partnerships with local organizations, are available and can be applied for. However, these soft funds are likely to leave a funding gap.

Even with the application of sound building practices, there are costs associated with fighting wildfires, rescuing the victims of natural disasters, as well as disaster response, recovery, and mitigation that are not covered by state and federal funds. Several options were proposed by Stakeholder Committee members to recover some of these costs. For example, a resiliency/mitigation fee for development located within designated hazard areas could be collected at the time of building permit application. Funding derived from a mitigation fee could be applied to a variety of activities that enhance resiliency, ranging from educational activities to hands-on efforts to thin forests, maintain fire breaks, watershed improvement, weed control, and other activities.

During Phase 2, the project team will investigate all reasonable options for financing the Strategies and recommend a financially sustainable approach to accelerate their implementation. Addressing the local funding gap will be critical to prepare for and accommodate the future growth anticipated in Northern Colorado.



IMPLEMENTATION STRATEGY

INFRASTRUCTURE ASSET MANAGEMENT SYSTEM

ASPIRATION

Infrastructure asset management is the combination of forecasting, management, financial, economic, engineering, and other practices applied to physical assets with the objective of providing the required [level of service](#) in the most cost-effective manner.

RESILIENCE VALUE

This type of system helps to shape the future interfaces among the human, built, and natural environments through collaborative and evidence-based decision processes. It also is a valuable tool for the county during response and recovery efforts following the next natural disaster or disruption event.

ASSOCIATED ACTIONS

Implementation will require an initial investment, which will be offset by future cost and time savings realized due to improved asset maintenance and planning. Despite the initial cost, a successful asset management program will ultimately save taxpayer dollars by optimizing maintenance activities and producing comprehensive capital improvement programs that maximize the benefits of investments throughout the service life of facilities and infrastructure.

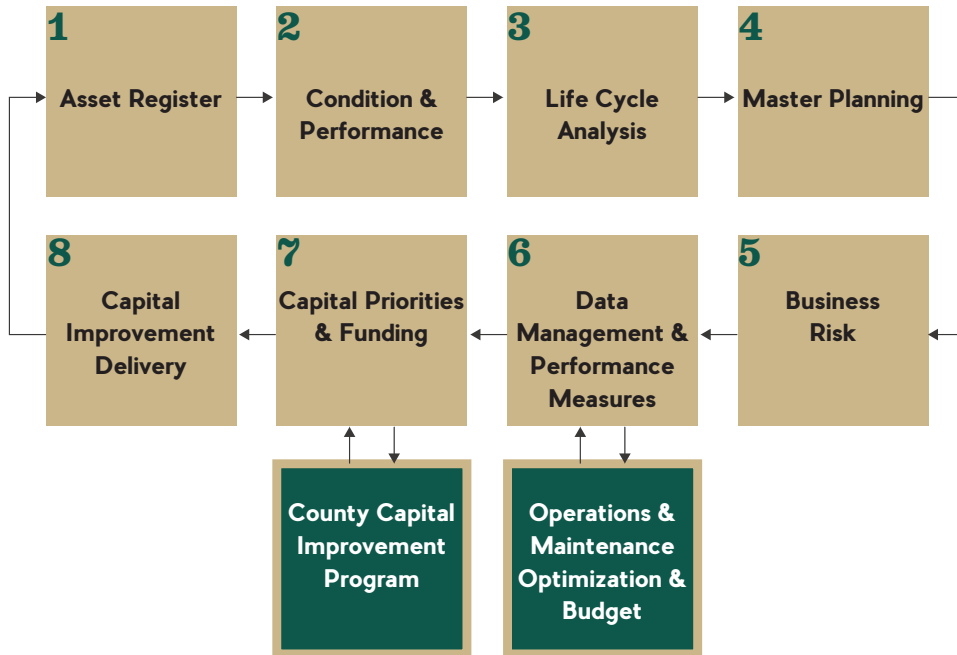
An Asset Management System is a tool that would allow for accurate monitoring and tracking of county infrastructure through a systematic process of deploying, operating, maintaining, upgrading, and disposing of assets cost-effectively. It could allow for real-time updates relating to the age, condition, and status of the county's infrastructure. This information would contribute to improved planning and capital expenditures.

STRATEGY IN ACTION

Larimer County Asset Management Program and Process

Larimer County is implementing a comprehensive asset management program to guide optimum capital and operating resource investments in County facilities and infrastructure. This process is based on current industry practices for proactively managing public assets. The accompanying diagram illustrates key components of the asset management program for the County.

Figure 2. Asset Management Program Development



RELEVANT
RESILIENCY
FRAMEWORKS >>>>>



IMPLEMENTATION STRATEGY

CAPITAL IMPROVEMENT PLAN

ASPIRATION

A CIP can enable a more transparent and fiscally responsible government, while at the same time allowing for improved planning internally and with other stakeholders/entities. It should link strategic and comprehensive plans with fiscal capacity.

RESILIENCE VALUE

A CIP provides a working blueprint for sustaining and improving the community's infrastructure. With this dynamic community planning and fiscal management tool, the County can proactively coordinate the location, timing, and necessary redundancies of critical infrastructure needs. Each project listed in the CIP should be rated based on how it advances resiliency goals.

ASSOCIATED ACTIONS

Successful implementation of CIP efforts must be supported by comprehensive asset management programs and championed by the County's elected officials and top leadership. It must be integrated into all existing capital planning and funding processes.

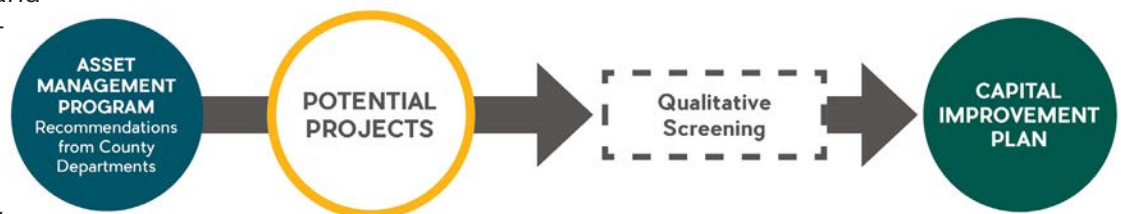
A Capital Improvement Plan (CIP) contains all the individual capital projects, equipment purchases, and major plans/studies for a local government. Details can include construction and completion schedules, which are aligned to financing plans. The CIP coordinates strategic planning, individual asset management programs, financial capacity, and physical development, and helps to evaluate competing demands for resources based on a prioritization system reflecting the government's long-term goals and objectives. Larimer County prepares a 5-year Capital Improvement Plan annually as part of the annual budget process.

STRATEGY IN ACTION

Larimer County Public Works Capital Improvement Plan

CIPs are a common and valuable planning tool used by many governments, including many of the County's jurisdictions. Recently, the Public Works Division began implementation of its first CIP.

Figure 3. Capital Improvement Plan Process



RELEVANT RESILIENCY FRAMEWORKS



IMPLEMENTATION STRATEGY

NATIONAL FLOOD INSURANCE PROGRAM COMMUNITY RATING SYSTEM

ASPIRATION

This program would encourage additional mitigation actions, help the County monitor and track current actions, while also reducing residents flood insurance premiums. In an area experiencing rapidly increasing housing costs, reducing insurance premiums is a strategy to lower monthly housing cost stress. Additionally, lowering insurance premiums may encourage additional properties that are uninsured or under-insured to participate in NFIP.

RESILIENCE VALUE

Implemented mitigation measures to reduce flood risk can further protect residents and properties from flooding, while also reducing the stress on monthly housing costs and encouraging additional NFIP participation.

ASSOCIATED ACTIONS

Larimer County is already completing many of the associated actions for CRS. To be eligible a community must:

- Participate in the National Flood Insurance Program
- Be in full compliance with NFIP (continued to the right)
- Maintain FEMA Elevation

The Community Rating System (CRS) by FEMA recognizes community efforts that go beyond the minimum standards of the National Flood Insurance Program (NFIP) and reduces flood insurance premiums for property owners. Rate discounts range from 5%-45% depending on the level of measures that a community implements. CRS provides a variety of resources to improve mitigation and reduce risk to properties and residents. Communities are scored on a scale from 1 to 10 for their level of preparedness and mitigation measures implemented.

Larimer County is already implementing strategies that the CRS program recognizes, however, as of 2017 Larimer County was a non-active community and is not receiving the benefit of insurance cost reductions. Participation would assist homeowners with reduced premiums and also provide guidance to Larimer County on where they rank in mitigation and preparedness.

STRATEGY IN ACTION

City of Fort Collins

The City of Fort Collins joined the CRS program in 1991 and is actively participating in the CRS program. In 2017 Fort Collins has achieved the highest CRS class rating in Colorado and residents received up to a 40% discount on insurance premiums.

Certificates on building in the Special Flood Hazard Area (SFHA)

- Meet repetitive loss criteria
- Maintain flood insurance policies on community-owned buildings in the SFHA
- Demonstrate enough points to obtain Class 9 rating

To re-enroll, Larimer County would submit a letter of interest and quick check form to FEMA Region VIII, prepare the needed CRS documentation and participate in an initial verification visit. Following initial enrollment the community must adhere to annual and 5-year program requirements.

RELEVANT
RESILIENCY
FRAMEWORKS



IMPLEMENTATION STRATEGY

SECONDARY EGRESS ACTION PLAN

ASPIRATION

Strategically addressing the number of communities with a single point of access will, over time, decrease these occurrences and reduce the risk of “islands” in the event of disaster.

RESILIENCE VALUE

An additional point of access gives communities a second option for evacuation, reducing the need for emergency assistance for evacuation, airlifts or communities without access to supplies or services.

Secondary [egress](#), or additional access points into neighborhoods and communities, prevent a population from being isolated from outside support in the event of a natural disaster. During and after the 2012 High Park Fire and 2013 floods, several neighborhoods in Larimer County and throughout Colorado were cut off from emergency response and recovery efforts.

STRATEGY IN ACTION

Larimer County Neighborhood Access Study

Larimer County has completed an initial Neighborhood Access Study and plans to update this study regularly. Now that communities with and without secondary [egress](#) have been mapped, the county will develop an action plan to identify feasible strategies in communities where creating a secondary [egress](#) is possible. Strategies may include emergency access easement on private property to allow residents an additional evacuation route or development of a secondary emergency access road.



Resilient Access Bridge Replaced after 2013 flood. CDR Maguire.

RELEVANT
RESILIENCY
FRAMEWORKS



IMPLEMENTATION STRATEGY

WILDFIRE HOME MITIGATION PROGRAM

ASPIRATION

More properties and homes will take effective mitigation action, and maintain these measures long term, so that future wildfires result in less loss of property while also decreasing demands on fire fighters. When properties are not mitigated, the danger and resources needed to protect those properties from loss greatly increases.

RESILIENCE VALUE

Wildfires cause large scale evacuations and disruptions for residents. By properly mitigating existing structures and property, owners increase the odds that they will have a home to return to. For example, 100% of the 23 certified structures within the 2016 Cold Springs Fire footprint survived.

On a community level, consistent mitigation also reduces the risk of large-scale catastrophic wildfires and reduces firefighting costs.

ASSOCIATED ACTIONS

Setting up this program would require identifying dedicated staff, outreach structures, and webpage for rolling out the program.

A Wildfire Home Mitigation Program supporting home and property owners through technical expertise, home wildfire vulnerability assessments and recommended actions can increase the likelihood of effective mitigation and lower insurance rates. To incentivize the responsibility of home and property owners to mitigate against wildfires, this program would issue a certificate to homeowners when mitigation actions are complete that allows a home or property owner to secure insurance or lower rate insurance and reduce the exposure of their lives and personal property to the risk of wildfire.

STRATEGY IN ACTION

Mitigation Programs in Colorado

Communities in Colorado have implemented robust incentive mitigation programs. Replicable and effective strategies from such programs include:

- Individual, on-site wildfire home assessment by an expert who will analyze risk and vulnerabilities and make recommendations on mitigation actions specific to that structure/property.
- A customized report of findings.
- Financial award to subsidize the cost of hiring a 2017 Wildfire Partner Forestry Contractor.
- Free access to Wildfire Partners Phone Advisors.
- A Wildfire Partners Certificate, letter and yard sign stating that you have mitigated your home. The certificate and letter can be submitted to insurance companies for discounts; while the yard sign lets firefighters know to prioritize your mitigated home in the event of a wildfire.



Home Owner receives Wildfire Partners Sign, wildfirepartners.org

RELEVANT RESILIENCY FRAMEWORKS



IMPLEMENTATION STRATEGY

FOREST MANAGEMENT AND FUELS REDUCTION PROGRAMS

ASPIRATION

Implementation of a Forest and Fuel Management program would provide residents with resources to more efficiently steward forests and reduce fuels on private lands. These combined mitigation efforts would help to reduce the risk of wildfire which is essential in many areas, including the wildland urban interface adjacent to many of our communities.

RESILIENCE VALUE

There are numerous programs that have been effective in nearby counties in improving forest health, reducing fuel load and maintaining [defensible space](#) around structures. Having a properly mitigated property does not prevent wildfire entirely, but gives Fire Authorities a better opportunity to save lives and structures when an event occurs. Wildfire mitigation in the wildland-urban interface has primarily been the responsibility of property owners who choose to build and live in vulnerable zones. In practice, successful wildfire mitigation strategies can be labor-intensive and beyond the ability/willingness of some landowners.

Forest Management and Fuels Reduction Programs provide resources and incentives that encourage private landowners to maintain private forests in a manner that reduces fire hazards. Actions associated with this program could include thinning out dense tree stands; reducing surface and ladder fuels; preserving mature-sized trees through prescribed burns; selected harvesting; biological methods such as incentivizing grazing on private lands; slash removal providing residents with a resource to collect and dispose of fuels; and/or mechanical treatments to remove or modify fuels in forested areas.

STRATEGY IN ACTION

Larimer County Slash Depot

Following the outbreak of mountain pine beetles and the High Park wildfire, public drop-off locations were coordinated by Larimer County to collect slash from private property and included innovative partnerships both with adjacent counties and the state to burn biomass on-site and remove wood to be chipped into mulch for re-use. The initiative was discontinued when funding was exhausted.

Summit and Jefferson County's Chipping and Slash Collection Programs

Jefferson County's slash collection program was expanded in 2015 to include weekly slash collection events, which are held at various locations across the county throughout the spring, summer, and fall. The program is funded by the county, with additional support by local fire protection districts and a use fee (\$20 per truckload).

Summit County implemented a Chipping Program, which helps residents and property owners to create [defensible space](#) by providing free pickup, chipping, and disposal for branches, logs, and small trees. A total of 1,971 local households participated in the 2016 Chipping Program, and chipping crews removed 5,979 slash piles, making significant progress toward the county's wildfire protection goals. In total, 5,480 cubic yards of chips were taken to Climax Mine for reclamation purposes.



Red Feather sort yard the county leased and work being done at that site to load logs for transport to be mulched.

Alternative Break Citizenship School

In 2016, 73 students from thirty-nine universities attended a week-long Alternative Break Citizenship School (ABCs) at Grand Canyon National Park. In addition to performing hands-on mitigation efforts, the students learned about volunteer recruitment and the park's fire management program. When they returned back to campus they shared what they learned with other students who will be leading an alternative break (volunteer service) in future years. With a large student population, the presence of Rocky Mountain National Park, and a desirable setting for students on break, Larimer County is well-positioned to benefit from programs such as ABCs.



Alternative Spring Break volunteers help fire managers chip dead and down vegetation to reduce the fuel load near the wildland urban interface.

ASSOCIATED ACTIONS

The Colorado State Office of the Bureau of Land Management seeks to engage cooperators to support hazardous fuels reduction activities on public and private lands. These efforts are focused along the WUI in an effort to reduce risks on both federal and private lands from wildfire. Funding is available through fiscal year 2017, with the option to add funding, if available, in subsequent fiscal years based on the Consolidated Appropriations Act passed each year by Congress and/or the enactment of Continuing Resolutions.

[Community Wildfire Protection Plans](#) (CWPP) are another potential resource and tool, as these allow local communities to influence where and how federal agencies implement fuel reduction projects on federal lands and non-federal lands in the WUI. While many communities across Larimer County are covered by CWPPs, a number of these plans are getting dated (the average CWPP age is almost 10 years old across the county). This type of program could also provide a funding income, through drop-off/pick-up fees and selling the refuse for other uses (biofuel, restoration, remediation, mulch).

Creating 'Here We Goat Again' type grazing programs would require partnerships between open lands departments, other land management agencies, private landowners, fire districts and others. Strengthening the link between grazing and agricultural assessment for property tax purposes would probably require modifications to state law. Informing landowners of sustainable grazing on private lands and providing tax deductions for mitigation efforts are potential actions associated with the fuels management strategy.

RELEVANT
RESILIENCY
FRAMEWORKS



IMPLEMENTATION STRATEGY

FLOODPLAIN ACQUISITION PROGRAM

ASPIRATION

Conserving additional lands along rivers provides a margin of error in floodplain management and an added level of resilience to what can be achieved by floodplain regulations alone.

RESILIENCE VALUE

An effective floodplain management approach must be multi-layered, building on standard regulatory tools with buy-outs (willing sellers) and focusing land and/or open space purchases on key drainage corridors.

ASSOCIATED ACTIONS

Targeting lands within flood hazard areas is consistent with other adopted plans, including the Open Lands Master Plan and “A Bigger Vision for the Big T. A Recreation and Conservation Assessment.” Implementation of these plans can be expected to contribute to the goal of protecting lands within flood risk areas but additional efforts may be needed, including acquisition of additional funding through other sources that may become available for flood hazard reduction activities.

This incentive would utilize available funds to acquire properties or conservation easements/covenants from willing sellers to prevent or remove building in high hazard risk areas. The September 2013 floods destroyed many structures not located within a mapped floodplain, including areas along both the Big and Little Thompson rivers. Although regular updating of floodplains is important as existing conditions change and historical data improves, it is not possible to accurately model floodplains that take into account future wildfire events and the resulting aftermath. This uncertainty means that communities need to re-evaluate how they identify flood risks, update floodplain maps and strengthen floodplain and flood erosion hazard regulations. However, even with these tools in place, the only sure way to avoid damage is to avoid building. Through voluntary acquisition, private property rights, are respected. Help Preserve Open Space sales taxes can be utilized where it matches Open Lands Master Plan goals.

STRATEGY IN ACTION

Floodplain Mitigation through City and County Action

It is a routine practice for cities to provide incentives for homeowners to relocate structures away from floodplains, and is becoming more common for counties to implement this proactive practice prior to the occurrence of flood events. Many greenways found throughout the nation are the result of government buy-out to preserve the floodplain and remove risk for property and homeowners. Property acquisition, structure relocation, and other activities to reduce risks resulting from flood and storm events by converting high risk properties back to their natural state.

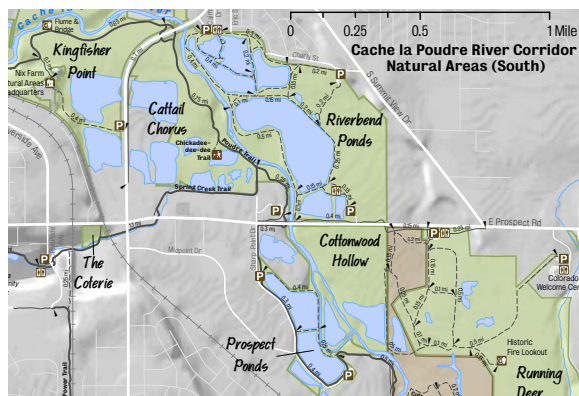


Figure 9. Fort Collins Natural Areas Map

The City of Fort Collins has purchased flood-prone lands from willing sellers to create an almost 1-mile wide greenway along the Poudre River.

RELEVANT
RESILIENCY
FRAMEWORKS



IMPLEMENTATION STRATEGY

COUNTY-WIDE FIRE CODE (A.K.A. WUI CODE)

ASPIRATION

A consolidated Fire Code lowers the risk of wildfire damage and sends a message to those who plan to develop in high risk areas that these areas pose special risks and should be treated accordingly.

RESILIENCE VALUE

Although Fire Codes, no matter how stringent, cannot eliminate the risk of wildfire to life and property, they can reduce the risk.

ASSOCIATED ACTIONS

Successful implementation of the Fire Code would require additional code compliance efforts and long-term maintenance and monitoring of buildings and sites. The Fire Code could work in tandem with Overlay Zoning.

A Fire Code advances fire and life safety for the public, as well as property protection through the provision of a comprehensive approach to wildfire regulation and hazard management. The County currently addresses wildfire in its subdivision standards and [building codes](#). With the adoption of a Fire Code, these standards could be comprehensively reviewed to reduce vulnerability of subdivisions and structures from fire.

STRATEGY IN ACTION

Fire Code Requirements Utilized by Colorado Counties

Some Colorado counties, including Douglas, Summit, and Routt Counties, have more stringent code requirements. Examples of provisions from other codes that are not specifically embedded in Larimer County standards and codes include the following.

- Development is not allowed in areas designated as severe fire hazard. For example, areas with slopes 30% or greater, or within a “fire chimney” as designated by Colorado State Forest Service.
- Prohibits access via dead-end roads with no turnaround.
- All dedicated roads in a fire hazard shall be a maximum slope of 8% with minor exceptions allowed.
- A requirement to have an emergency water supply available for fire suppression.

“As an economist, I would add that the reason people continue building on fire-prone lands, despite the known hazards, is because we have the incentives all wrong. Wildfire presents a classic case of a moral hazard, which is what occurs when someone takes a risk knowing someone else will bear a great deal of the cost if things go wrong.”

- Ray Rasker, Executive Director of Headwaters Economics

RELEVANT
RESILIENCY
FRAMEWORKS



IMPLEMENTATION STRATEGY

FUTURE LAND USE PLAN (MAP)

ASPIRATION

The Future Land Use Plan is one of the most widely-used planning tools in Colorado. Larimer's Future Land Use Plan has not been updated since 1997, requiring a comprehensive update to become a relevant and functional tool.

RESILIENCE VALUE

This is used in conjunction with [zoning](#) and [building codes](#), and supports planning for infrastructure and public services. It takes into account natural hazard risk and topographic/ geographic constraints.

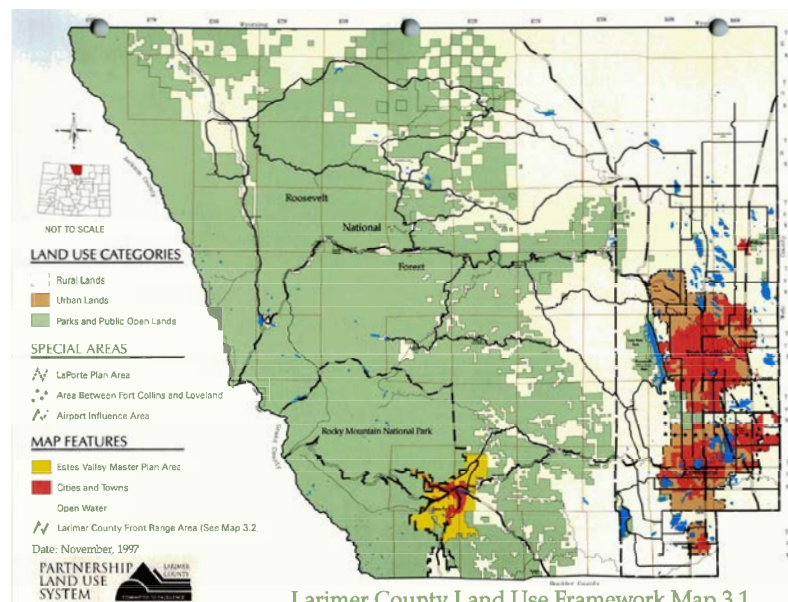
ASSOCIATED ACTIONS

The Comprehensive Plan and Land Use Code would need to be updated to include and reference the Future Land Use Plan for future development proposals.

The Future Land Use Plan guides the location, intensity, and design of development by identifying future growth opportunities and constraints, and providing future land use categories that include information such as density, size, primary and secondary uses, and design principles. It is typically integrated into the Comprehensive Plan and updated through Subarea Plans.

STRATEGY IN ACTION

Figure 6. 1997 Larimer County Land Use Framework Map



Larimer County adopted a Land Use Framework Map as part of the original [1997 Master Plan](#). This map illustrated three land use categories (Rural Lands, Urban Lands, and Parks and Public Open Lands), as well as boundaries for cities and towns. As part of this planning process, the map has been updated to reflect current [Growth Management Areas](#) and city limits, as well as area-specific Intergovernmental Agreements (IGAs), and land uses. This map can also illustrate focus areas represented in other existing plans, such as the Open Lands Master Plan. All subsequent updates to the map should reflect new subarea plans and their recommended land use changes.

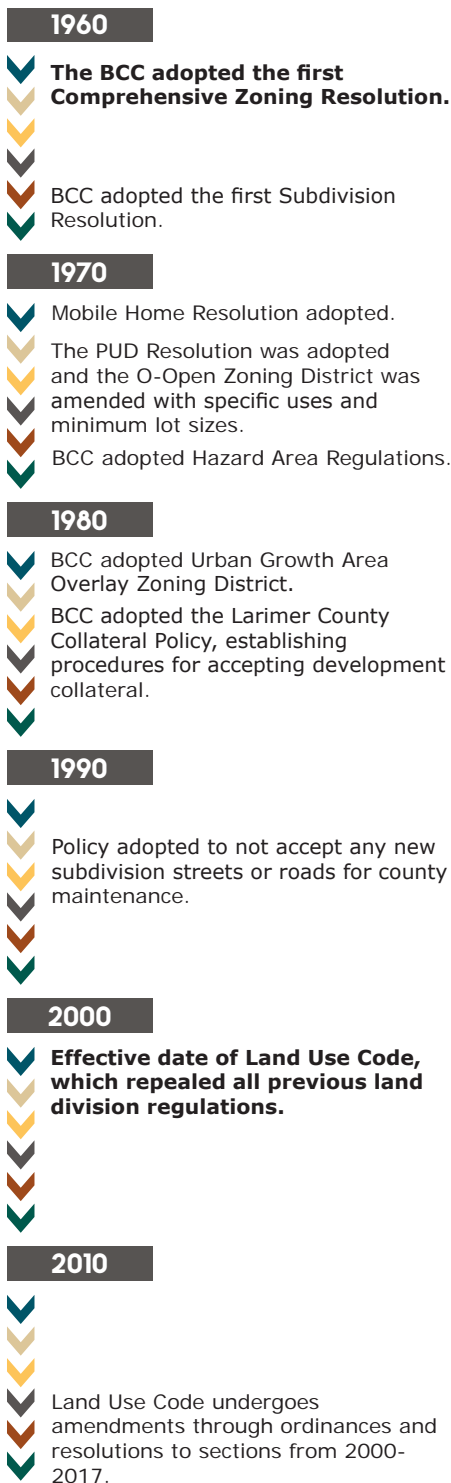
RELEVANT
RESILIENCY
FRAMEWORKS



IMPLEMENTATION STRATEGY

COMPREHENSIVE REVIEW AND UPDATE OF LAND USE CODE

Figure 7. Land Use Code Revision Timeline



A review and update to the Land Use Code would allow for differentiation in standards, requirements, and permitted uses for unique geographic areas such as the rural mountain communities. Specifically, this update could reevaluate use-specific standards, wildland-urban interface considerations and hazard mitigation, [development standards](#) including requirements for landscaping, signage, parking, and other considerations, and home occupations and accessory uses, in order to create a comprehensive Land Use Code consistent with the Comprehensive Plan.

STRATEGY IN ACTION

Larimer County Land Use Code Comprehensive Update

The Land Use Code, effective as of 2000, was previously a Zoning Resolution from its inception in 1963 until 2000. Over the course of its evolution, it has never been comprehensively re-evaluated or updated. While the Code has seen some amendments to ordinances and resolutions throughout its lifetime, these have been done in a fragmented and intermittent approach.

ASPIRATION

A comprehensive review and update would align the regulatory document to the new Comprehensive Plan's intent, reduce inconsistencies, and enhance effectiveness, legibility, and usability. The separate elements of the Land Use Code are not seamless; standards do not vary by area/region; hazard mitigation and the wildland-urban interface is not consistent or emphasized; and subdivision and [development standards](#) and [zoning](#) are a one-size-fits-all model. Updates to the current one-size-fits-all model are needed, as well as reorganization of the Code to effectively align all sections, update terms and definitions, and provide a more user-friendly format.

RESILIENCE VALUE

Allows for consistency with the Comprehensive Plan, differentiation among varied areas of Larimer County, and evaluation of outdated [zoning](#) and regulatory processes.

RELEVANT RESILIENCY FRAMEWORKS



IMPLEMENTATION STRATEGY

SUBAREA PLANNING

ASPIRATION

The County currently uses subarea planning on a limited basis. Refinement of the existing protocol for new subarea plans could benefit the County, allowing other communities to make targeted and location-specific changes and programs. Unincorporated communities that may benefit from this tool include Big Elk Meadows, Tahosa Valley, Pinewood Springs, Rustic, Glen Haven, Drake, Masonville, Crystal Lakes, and Glacier View Meadows or specific [watersheds](#).

RESILIENCE VALUE

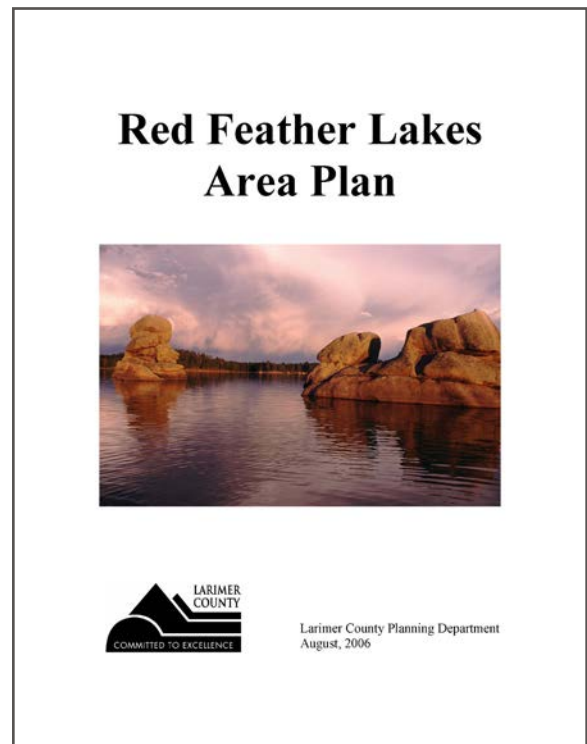
Mountain communities can use subarea plans to influence decisions at a local level on important issues. This type of plan can provide a rationale for specific [zoning](#) changes and community benefits that take into consideration the local resiliency needs for each community.

Subarea Plans are detailed plans prepared for interested, **unincorporated mountain communities that show cohesive characteristics, unique land use issues, and opportunities.** These plans can detail location-specific needs and recommend changes or improvements on a scale that is not possible for the majority of the County area. Subarea plans for unincorporated communities in the County also serve as an extension of the Comprehensive Plan.

STRATEGY IN ACTION

Red Feather Lakes Subarea Plan

In response to an increasing interest and concern from the local Red Feather community regarding future development and change, the Larimer County Commissioners appointed the Red Feather Lakes Plan Advisory Committee (PAC) to advise a County planning team in the development of an area plan. In the years since adoption of that plan, the Red Feather Lakes PAC has overseen the direction of local initiatives and regulations to implement the plan and achieve the defined vision for the area.

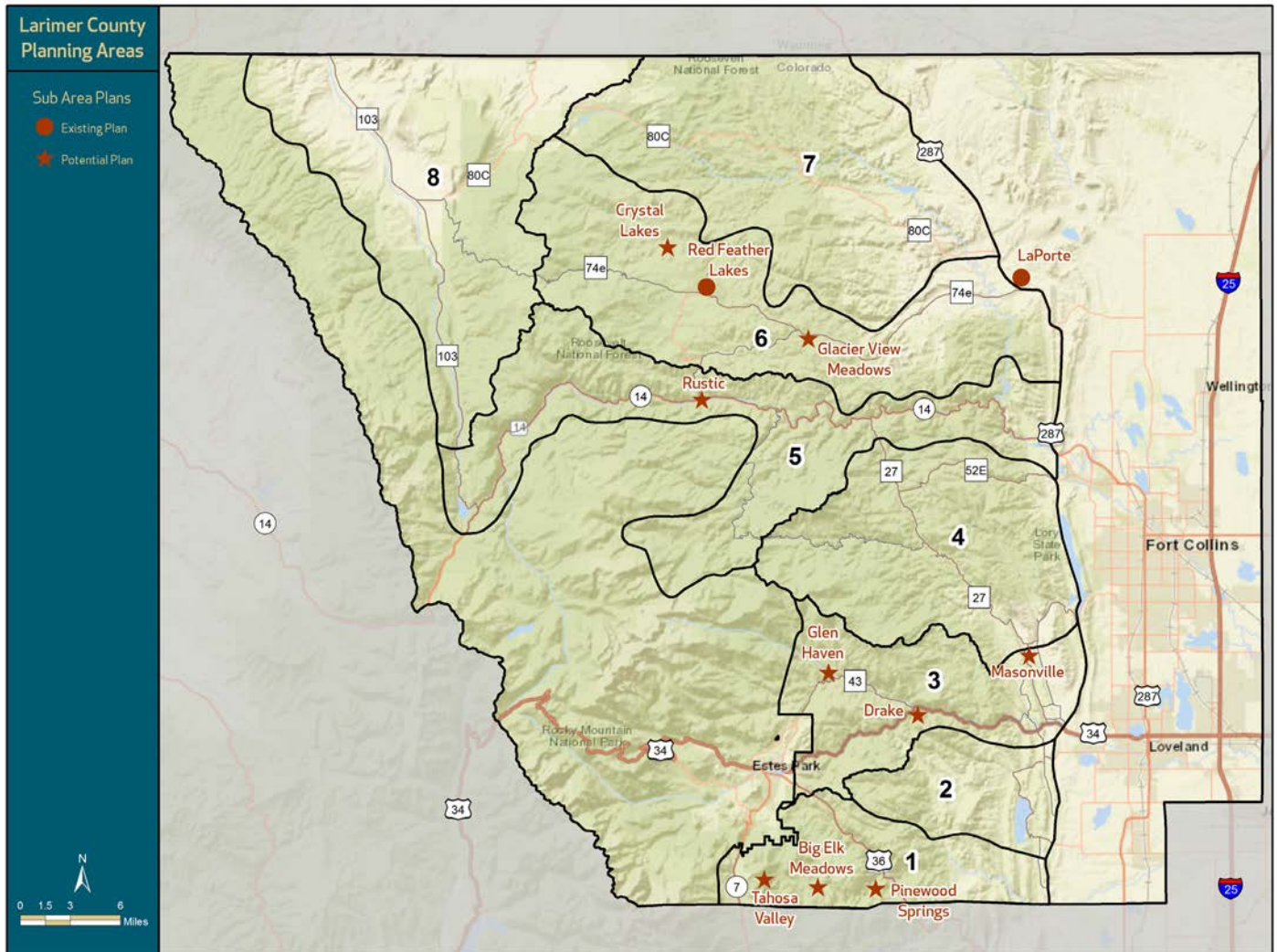


Red Feather Lakes Area Plan.

RELEVANT
RESILIENCY
FRAMEWORKS



Map 1. Existing and Potential Subarea Planning Areas



The map above illustrates the existing and potential subarea plans for the western mountainous area of Larimer County. The mountain communities that would benefit from the development of a subarea plan include Rustic, Glacier View Meadows, Glen Haven, Masonville, Drake, the Tahosa Valley, Big Elk Meadows, Pinewood Springs, and Crystal Lakes.

IMPLEMENTATION STRATEGY

OVERLAY ZONING

ASPIRATION

Although the County utilizes basic zoning designations, it has no specific designations for rural mountain or plains communities. Implementation of overlay zones that differentiate between the needs of rural areas in the mountains versus the eastern plains, such as “Rural Mountains” and “Rural Plains” designations, would accommodate the different needs in the two geographically unique rural settings.

RESILIENCE VALUE

Tailored requirements for the overlay can mitigate the impacts of natural hazards by directing development patterns and controlling growth in areas unsuitable or undesirable for development.

ASSOCIATED ACTIONS

Overlay zoning requires technical analysis and mapping of the specific areas and hazards. Such maps were produced as part of the [Larimer County Hazard Mitigation Plan](#) can be updated to fit the intent of the overlay zone. An ordinance with the overlay zone standards and procedures would be established through outreach and a public hearing. This would also work in tandem with the Fire Code Strategy.

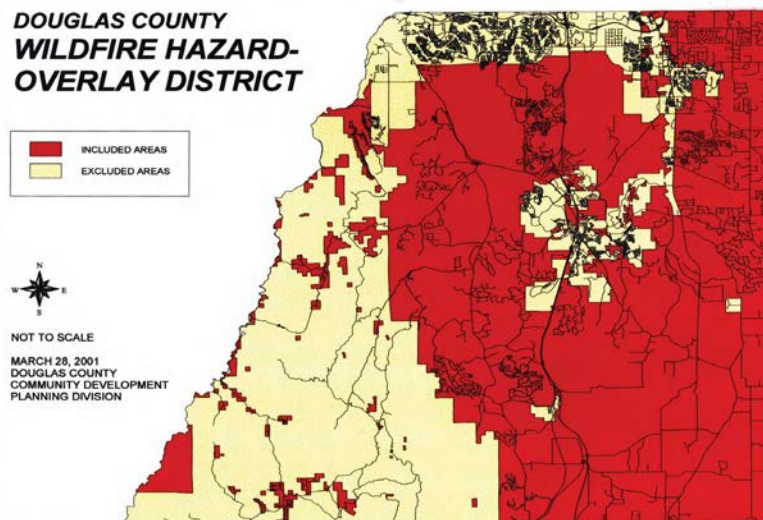
Overlay zoning is a regulatory tool that creates a special zoning district, placed over an existing base zone(s), which identifies special and additional provisions. Overlays would provide the County the ability to tailor zoning requirements to a specific area and address levels of natural disaster risk, development patterns, the implementation of “[village patterns](#)” in mountain communities, as well as areas unsuitable for intense development due to natural hazards or infrastructure constraints.

STRATEGY IN ACTION

Douglas County Overlay District

For over a decade, Douglas County has administered additional wildfire regulations through a Wildfire Hazard Overlay District. The overlay is intended to minimize the ignition and spread of wildfires in the Wildland/Urban Interface. Parcels can also be subject to the

Figure 4. Douglas County Wildfire Hazard Overlay

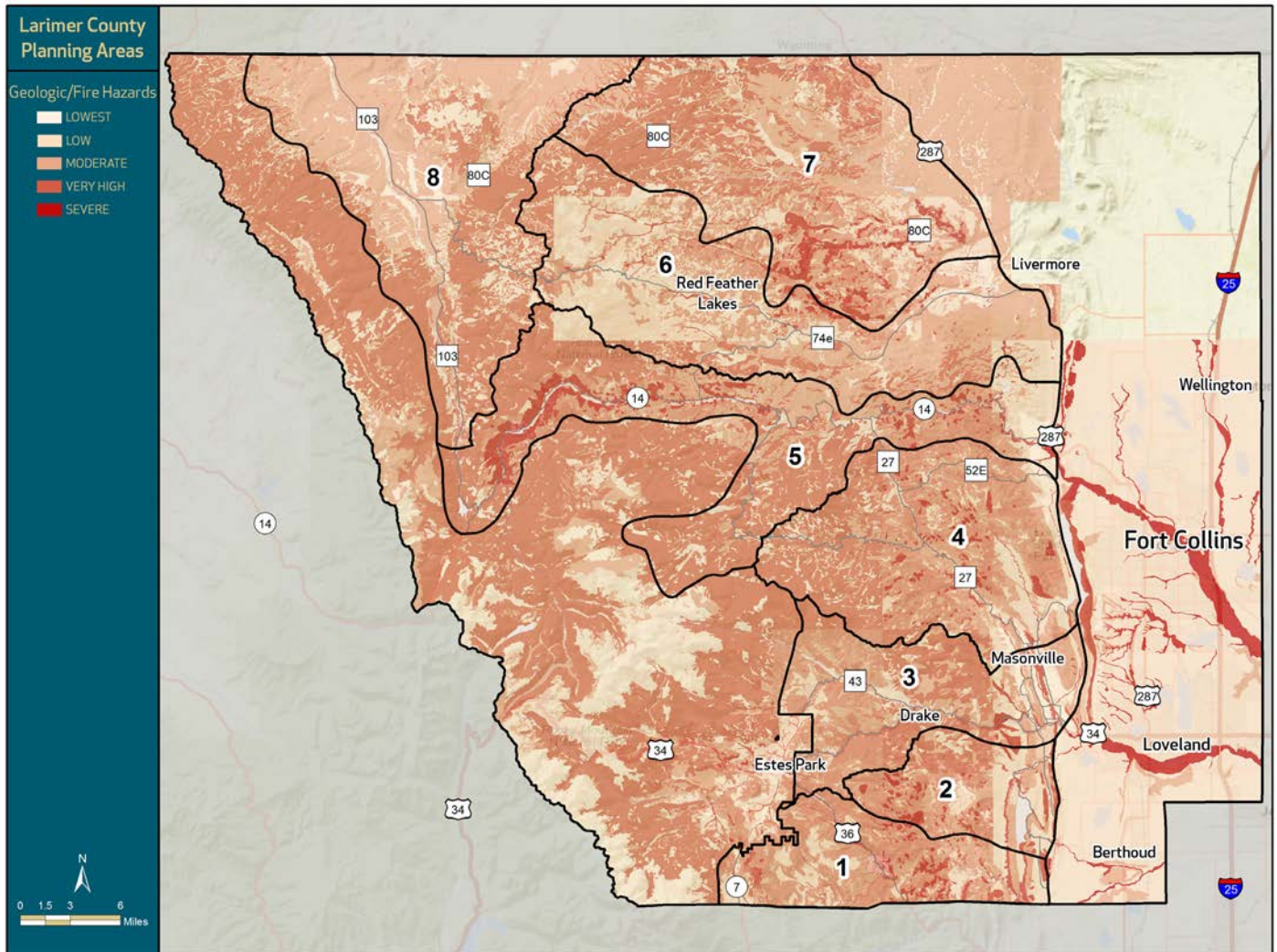


overlay regulations if staff determines a wildfire hazard exists during review of a development proposal. Within the overlay area, land use applications must comply with general mitigation and forest management provisions, road and street [design criteria](#), water supply provisions, and structural design elements.

RELEVANT RESILIENCY FRAMEWORKS



Map 2. Example of Larimer County Hazard Risk Assessment



Source: Larimer County Environmental GIS database

The map above illustrates an example of what an overlay for natural hazard risk could look like in Larimer County. The risk assessment, measured from lowest to severe, determines the vulnerability to several types of hazards—geologic, fire, and flood hazards. This kind of assessment can be used to develop an overlay [zoning](#) designation for high hazard areas.

IMPLEMENTATION STRATEGY

TRANSFERABLE DENSITY UNITS

ASPIRATION

Transfer of Density Units (TDUs) have been used successfully in Colorado for decades to protect environmental resources, historic areas, and areas susceptible to natural hazards, such as steep slopes and floodplains. To truly be used successfully, developers must realize the extra value (profit) beyond the cost of the additional [development rights](#), and landowners in sending areas must feel adequately compensated for giving up the right to develop.

RESILIENCE VALUE

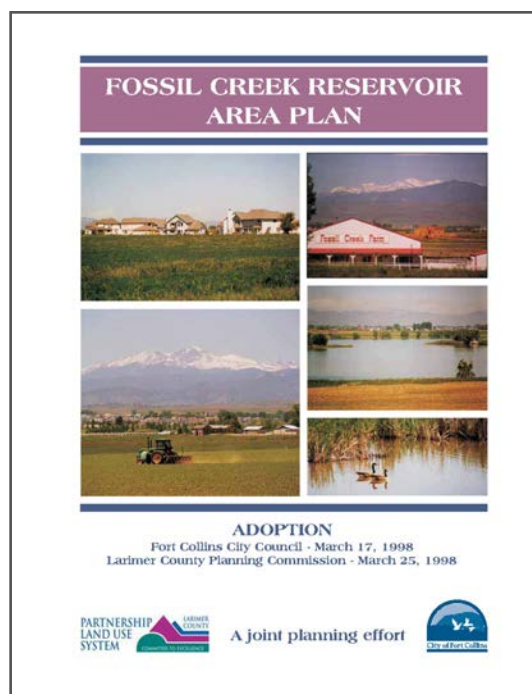
Incentives that direct new development away from hazard areas helps minimize the risk and loss of property or life associated with natural hazards. Additionally, the units transferred to receiving areas can potentially diversify housing stock, upgrade infrastructure, and make housing more affordable.

Transferable Density Units (TDU) is an incentive program that allows additional density where the community wants to grow (“receiving areas”) in exchange for conservation of sensitive or hazard areas that the community wants to protect from future development (“sending areas”). These sending and receiving areas would be targeted areas, defined through a process of community and municipal engagement. The program can be developed with flexibility to adapt to changes in growth patterns and market forces.

STRATEGY IN ACTION

Fossil Creek Reservoir TDU Program

Though the existing [1997 Master Plan](#) and Code enables the possibility of a countywide program, Larimer County has only used TDU in one area. The Fossil Creek Reservoir TDU Program was Larimer County’s pilot TDU program in 1998 and is considered one of the most successful TDU programs in the nation. The sending area was located in unincorporated Larimer County between the cities of Fort Collins and Loveland successfully created a community separator and quarter mile natural resource buffer on the north side of Fossil Creek Reservoir.



Fossil Creek Reservoir TDU Program

The program relied on significant cooperation between the City of Fort Collins and Larimer County and residents in the area, through outreach and jointly adopted land use plans. These plans include the Fossil Creek Reservoir Area Plan, the Plan for the Region Between Fort Collins & Loveland, and an intergovernmental agreement between

RELEVANT RESILIENCY FRAMEWORKS



Larimer County and the City of Fort Collins. The Fossil Creek Plan identified receiving areas adjacent to the Fort Collins city limits, where 4-8 units per acre would be appropriate but where the County [zoning](#) permitted only 1 unit per 2.29 acres. Fort Collins annexed the properties after the TDUs were transferred to the receiving area. The number of TDU awarded was based on current [zoning](#) plus a bonus for meeting selected criteria related to the County’s environmental and open space goals.

Figure 5. Density with and without TDU program

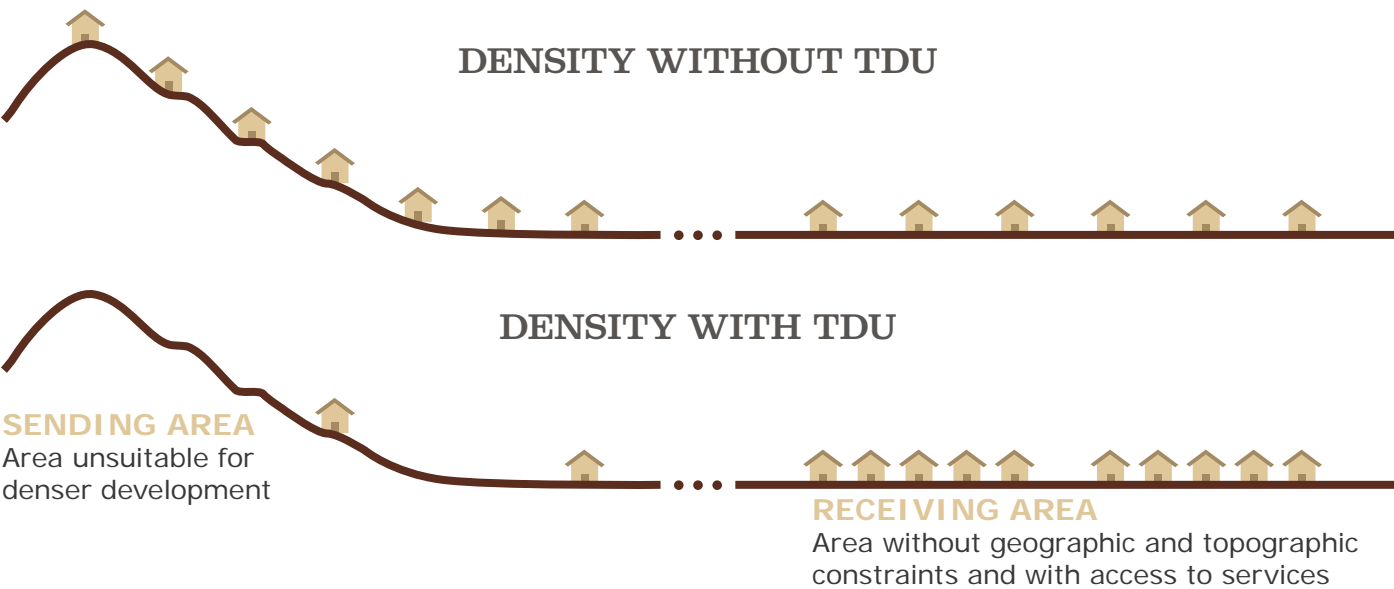


Table 1. Sending and Receiving Area Characteristics

Natural Resource or Hazard Area (Sending Area)	Village or Urban Area (Receiving Area)
<ul style="list-style-type: none"> • Steep Topography • Lacking Public Facilities • Higher Infrastructure Costs • Recreation and Scenic Values 	<ul style="list-style-type: none"> • Suitable Topography • Adequate Public Facilities • Existing Infrastructure • Community and Health Amenities

ASSOCIATED ACTIONS

The details of the program would need to be formally defined as an ordinance to clearly identify areas that the community wants to “send” and “receive” density. This program must also establish values and allocation rates for [development rights](#), as well as administration procedures. Cooperation or formal [Intergovernmental Agreements](#) (IGAs) with cities and towns is needed to effectively implement a TDU program within a growth management boundary.

IMPLEMENTATION STRATEGY

BUSINESS RETENTION/CREATION PROGRAM

ASPIRATION

A program focused on business retention/ creation, specifically in the mountain communities, does not currently exist at the County. This provides an opportunity to further support local businesses currently serving the mountains as well as tailor employment creation to the needs and constraints of these communities, positively impacting economic health and allowing for the adequate provision of housing, infrastructure, connectivity, and basic services.

RESILIENCE VALUE

By supporting both existing local businesses and the unique needs and constraints surrounding employment creation in the mountain communities, the program would contribute to the long-term economic resiliency of the mountain communities, as well as benefit housing and infrastructure needs.

ASSOCIATED ACTIONS

The program would evaluate what is feasible in the mountain communities with a focus on high value, low impact businesses. Existing properties and [zoning](#) would be reviewed. Staff would need to be allocated to manage the program. Potential partners would include the Larimer County Economic Development and Community Development divisions; tourism organizations and boards; and public land managers.

A Business Retention/ Creation Program would support existing businesses through ongoing engagement and communication between the County and local businesses, and fostering high value, low impact employment creation in mountain communities. It would recognize constraints in the mountain communities to typical, large-scale employment centers, and help retain local employment opportunities for mountain residents.

STRATEGY IN ACTION

Douglas County “SparkDC!”

Douglas County’s business retention program, SparkDC!, aims to engage businesses throughout the County. It emphasizes the importance of establishing relationships and opening dialogue regarding how the county can support and nurture existing businesses. This program involves all three county commissioners and is staffed by the county’s economic development staff. Although business retention practices are not new to Douglas County, this program formalized existing efforts and its priorities and approach are reevaluated each year. For 2017, staff was directed by commissioners to tailor efforts for companies with between 10 and 99 employees (roughly 95% of all local businesses) and major employers.

RELEVANT RESILIENCY FRAMEWORKS



IMPLEMENTATION STRATEGY

FACILITATE COOPERATION OF NONPROFIT ORGANIZATIONS AND COALITIONS

ASPIRATION

The County has not taken an active role in facilitating cooperation of nonprofit organizations and coalitions. Small organizations and groups currently experience a lack of resources including staffing and funding, inefficient organizational structure, and redundant efforts among groups with similar goals and objectives. This strategy would allow for improved organization and efficiencies to secure funding, share resources, and increase the ability to locally govern.

RESILIENCE VALUE

Umbrella entities can better implement planning tools, community building, and use funding to address issues that are regional in nature, such as hazard mitigation and vulnerability to natural disasters.

ASSOCIATED ACTIONS

This strategy would require county action for effective implementation, such as hiring a Program Coordinator/ Manager, hosting an annual summit to discuss and share resources, and/or providing a funding source to offer incentives. Potential partners include the County Community Development division and existing organizations and coalitions.

The County can act as a facilitator in improving coordination and partnerships between community organizations that represent the needs of specific mountain communities or regions with similar characteristics. Small organizations and groups may not have the ability to efficiently address systemic issues experience by mountain communities; a larger pool of resources and funding are often necessary to accomplish this task. For example, following the 2013 Floods three watershed coalitions emerged and focused resources and attention on flood recovery activities and watershed management. Similarly, there were more than a dozen fire protection districts/authorities in 2017. In the long term, these coalitions need resources and organizational support to maintain viability.

STRATEGY IN ACTION

Principles and Practices for Nonprofit Excellence in Colorado

This document, developed by the Colorado Nonprofit Association, outlines best principles and practices to guide success in the nonprofit sector throughout the state. It offers best practices on strategic partnerships and collaborations with clearly defined guidelines for engagement, limitations of partnership, and levels of authority in establishing informal or formal alliances. The document also states that nonprofits should be open to considering consolidation and/or merging their organizations when it is in the best interest of the constituents, community, or service area to avoid duplication of services and to maximize available resources and impact.

With this framework already in place through the Colorado Nonprofit Association, nonprofits working in Larimer County would benefit from County facilitation and the provision of a platform or channels to begin accomplishing these strategies.

RELEVANT RESILIENCY FRAMEWORKS



IMPLEMENTATION STRATEGY

COMMUNITY HUBS

ASPIRATION

As an existing initiative headed by Larimer Connects, this strategy would continue to build on their efforts to build community resilience by expanding the initiative to prepare local businesses to provide emergency services in the event of a disaster, provide a support system for elderly/[vulnerable populations](#) through provision of scheduled medical services or as a transportation hub, as well as leverage existing businesses and facilities to share resources and build community.

RESILIENCE VALUE

Building on the existing initiative, which focuses on collaboration and connectivity, to integrate preparedness and provision of emergency services, would form a channel for comprehensive preparedness in the face of natural disasters as well as develop cooperation and connectedness within and among communities.

ASSOCIATED ACTIONS

This strategy would require additional determination of public/quasi-public facilities to serve as Community Hubs, as well as additional staffing. Potential partners for this strategy include the County Community Development division, Larimer Connects, and mountain communities.

Community Hubs are an initiative by Larimer Connects to create community-led and operated hubs that serve informational purposes, provide community members access to resources, and provide a location for members and organizations to better connect and collaborate. Expansion of the Community Hubs initiative to provide local sources for emergency services and needs in the event of a natural disaster, as well as to serve as a support system for elderly/vulnerable residents, would help to prevent isolation as was seen in the 2012 High Park fire and 2013 floods and supplement existing efforts.

STRATEGY IN ACTION

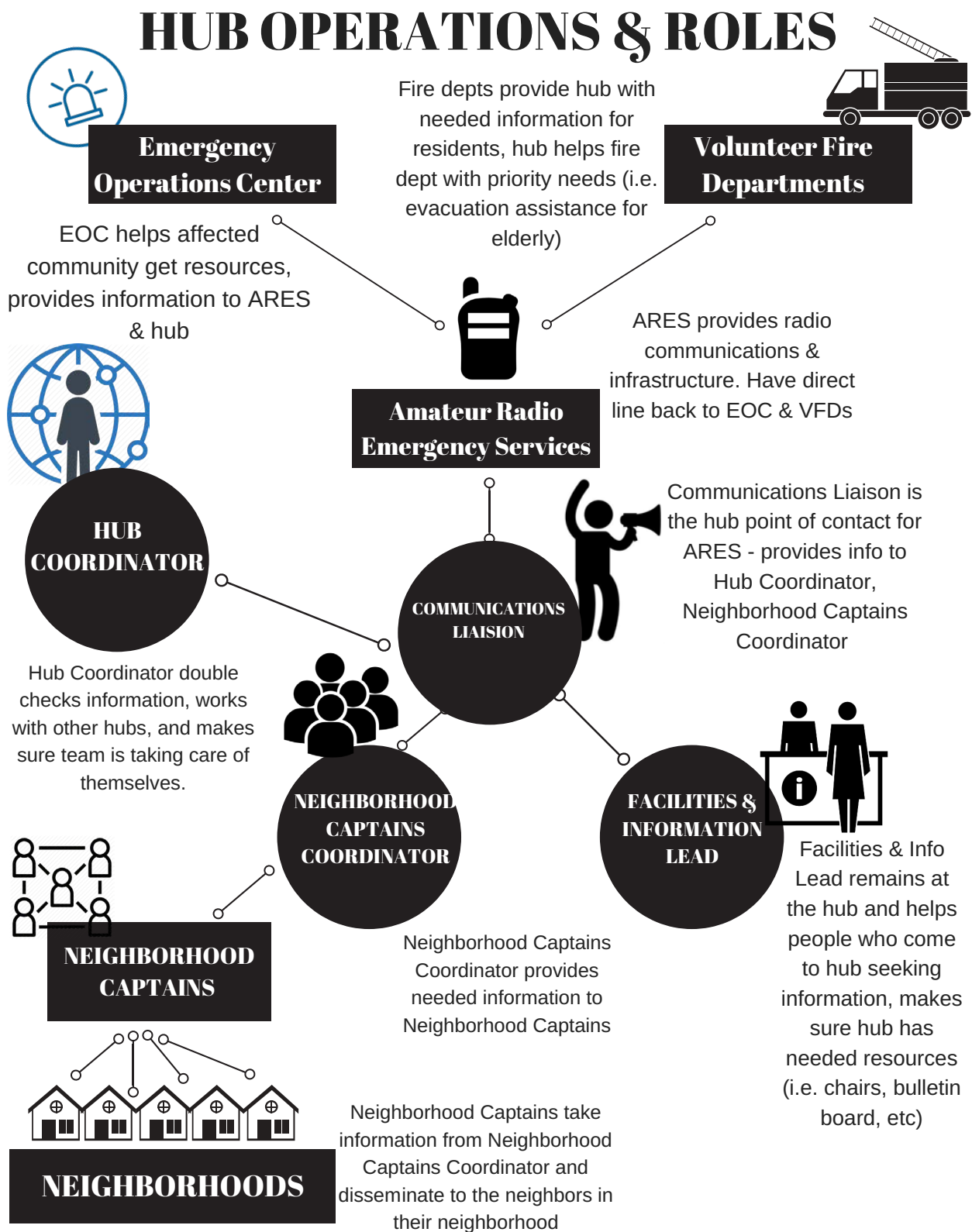
Larimer Connects Community Hubs Initiative

Residents motivated to make their community more socially-connected, safer, informed, and resilient, are working with County staff to create Community Hubs. After identifying a location that works best for the community (such as library space, community center, town hall, etc.) priority needs are assessed to identify what is needed to make the hub function, including connectivity, radio infrastructure, a generator and/or back-up power source (such as solar/wind energy generation), or storage space. Following these steps, Larimer Connects works with residents to identify sources of funding, partnerships, etc. to help solve the priority needs. Throughout this process, Larimer Connects collaborates with local emergency services to determine how the hub can best assist in disaster and recovery efforts, helps the hub team recruit additional community involvement, and reaches out to partners on behalf of the hub to gather resources. Although this initiative is still in its foundational stages, the Community Hubs success is notable and includes involving and engaging community residents in three established locations (Crystal Lakes, Red Feather Lakes, and Glacier View Meadows), with residents developing their own structure and model for their hubs with guidance from Larimer Connects.

RELEVANT RESILIENCY FRAMEWORKS



Figure 8. Hub Operations & Roles





Chimney Hollow. Photo. Richard Snell

MONITORING

WHY METRICS?

Resiliency Metrics are a set of indicators that measure progress toward achieving the County's resiliency goals. By quantifying a baseline and monitoring future changes, metrics can help decision-makers prioritize policies, strategies and funding to better achieve the community vision.

Effective community resilience metrics address three questions:

1. How can community leaders know how resilient their community is?
2. How can they know if their decisions and investments to improve resilience are making a significant difference?
3. Is the amount, location, and type of development or conservation proceeding according to the community's vision?

Metrics were developed through an in-depth review of leading academic research, the efforts of other communities to measure progress towards resiliency, and recent County planning efforts such as the [Larimer County Resiliency Framework](#) (2016) and the [Larimer County Unmet Needs and Fragility Study](#) (2016).

To help identify and develop metrics, the six Resiliency Frameworks were evaluated against the three [Community Fragility](#) components included in the UNCF Study: Connectedness, Stability, and Sustainability. This enabled the planning team to identify metrics that would be useful for quantitatively measuring across all of these Themes.

Effective community resilience metrics must be well-defined, simple to score, replicable, adaptable, and representative of significant factors which contribute to resiliency.

The Larimer Health Tracker monitors significant health indicators, including selected socioeconomic and environmental factors that measure the contribution of a community's health status to its resiliency.

Larimer County
Public Health

Larimer Health Tracker

Locally Collected Data
Browse locally collected data from the Health District of Northern Larimer County's most recent survey conducted in 2013...
[Read more >>](#)

Locally Collected Data
[Browse Local Data](#)
[State And National Data Set For Larimer County](#)

Community Health Data
See how your area compares to the state and the national target.
 [View](#)

Filter by Priority: [?](#)

[Take Me to the Data](#)

This website is for you - the researcher, the concerned parent, the health professional, the policy maker, the executive director, the health advocate, the business owner, the elected official, the student, the engaged citizen, the entire community.

[Have Questions for Us?](#)

[Change Language](#)
[Large Print](#)

Ultimately, the metrics selected for this plan were chosen for the following reasons.

- Meaningful indicators that span multiple resiliency frameworks
- Easily and continually obtainable data sets to allow for future monitoring efforts
- Local indicators that are updated annually (or within a reasonable timeframe)
- Available at a sub-county scale to allow for assessments at the community level where possible

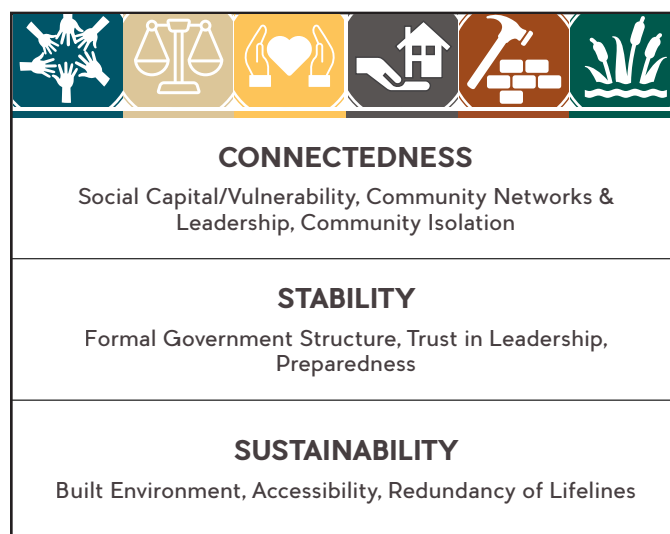
How to Monitor and Who Monitors

Annual and consistent monitoring of these Resiliency Metrics is vital to evaluate the County's progress towards realizing increased resiliency and decreased fragility of mountain communities. Regular monitoring will also provide an opportunity for the County to evaluate past successes and areas for continued refinement and improvement.

The County's Community Development Department, in partnership with Emergency Management, has taken ownership of these ongoing monitoring efforts. On an annual basis, the following Resiliency Metrics will be updated and compared to previous baselines. These results will be reported across the County government and with the public to aid in the prioritization of future actions, policies, and funding decisions.

If metrics do not indicate progress, corrective actions would be needed. Sample corrective actions could include:

- Policy, strategy, and/or Code refinements
- CIP adjustments
- Additional funding sources
- New partnerships
- New suitable subareas to accommodate growth
- Amend metric desired trends



















































When performance is measured, performance improves.

When performance is measured and reported, the rate of improvement accelerates.

GROWTH SHOULD BE MANAGED TO MOVE US TOWARD RESILIENCY.

Metrics indicate how to evaluate the amount, type, and location of growth, allowing Larimer County to adjust course as necessary.

Table 2. Metrics and Relevant Resiliency Frameworks

	COMMUNITY	ECONOMY	HEALTH & SOCIAL	HOUSING	INFRASTRUCTURE	WATERSHEDS & NATURAL RESOURCES
1. Proportion of Growth in Mountains vs. Plans						
2. Number of Community Subarea Plans						
3. Number of Community Hubs in Larimer Connects Program						
4. Community Fragility Scores						
5. Unemployment Rate						
6. Median Household Income						
7. Miles of Publicly Accessible Trails						
8. Poverty Rate						
9. Housing Cost Burden						
10. FEMA Community Rating System Class						
11. Neighborhood Access Score						
12. Number of Capital Improvement Plan Resiliency Projects Completed						
13. Percentage of Private Landowners with Broadband Coverage						
14. Number of Structures within the Regulatory Floodplain						
15. Percentage of Lands Covered by an Active (Current) Watershed Master Plan						
16. Participation in Wildfire Home Mitigation Program						



COMMUNITY

Proposed Metrics

METRIC 1. *Proportion of Growth in Mountains vs Plains, and Rural vs Urban*

DESCRIPTION

The location and amount of future growth is essential to achieving the desired community character. Critical natural resource areas are the least appropriate places for growth, while nonhazardous areas with existing infrastructure and services are preferred in accordance with the visions of mountain communities. Equally important as the size of the mountain population is the type, location, and quality of growth that occurs.

BASELINE

In 2017, the percentage of residents in the mountains compared to the eastern plains was approximately 4% to 96%. In Phase 2 of the Comprehensive Plan, the baseline rate of rural versus urban growth will be estimated and a desired trend established. This measure of the historic, rural development pattern offers a way to measure changes to the County's western character.

DESIRED TREND

As the County grows in population, maintain 4% or less population in the mountains compared to the eastern plains. This would continue a historical, concentrated development pattern in the eastern plains, which offers more existing infrastructure and services and fewer hazardous areas and critical natural resources. Benefits include minimizing ecosystem impacts, preserving the physical character of the County, and increasing resilience while respecting property rights.

DATA SOURCE AND UPDATE FREQUENCY

The Larimer County Planning Department tracks the number of residential building permits annually and would identify their location in GIS. Residential building permits would be the measure of growth.

METRIC 2. *Number of Community Subarea Plans*

DESCRIPTION

Subarea plans are community driven planning efforts for a specific area. With support from Community Development, mountain communities can use these plans to influence decisions at a local level on important issues such as growth, conservation, recreation, services, and infrastructure. Most importantly, these plans strengthen community vision and cohesion and help them proactively define their community's future.

BASELINE

As of October 2017, there are currently two Subarea Plans in the Phase 1 Planning Area (Estes Valley Joint Planning Area and Red Feather Lakes).

DESIRED TREND

Increase to one Subarea Plan for every self-identified mountain community.

DATA SOURCE AND UPDATE FREQUENCY

The Larimer County Planning Department continuously tracks this metric and can provide updates as needed.

METRIC 3. Number of Community Hubs Participating in the Larimer Connects Program

DESCRIPTION

The Larimer Connects Community Hub program is a recent effort that the County has undertaken to improve community connectedness. Successfully doing so will collectively decrease the fragility of mountain communities, thereby enhancing community resiliency. Participation in this program demonstrates motivation toward a resilient future and that residents value comprehensive preparedness and connectedness.

BASELINE

As of October 2017, there are three established locations for the Community Hubs in Crystal Lakes, Red Feather Lakes, and Glacier View Meadows, with current efforts to recruit members in the Crystal Lakes and Red Feather Lakes communities.

DESIRED TREND

Increase.

DATA SOURCE AND UPDATE FREQUENCY

The Larimer County Planning Department continuously tracks this metric and can provide updates as needed.

METRIC 4. Community Fragility Scores

DESCRIPTION

The [Larimer County UNCF Study](#) was conducted in 2016 and involved calculating 'fragility scores' for participating communities. Scores were the result of public opinion surveys that evaluated [community fragility](#) across the three frameworks presented in the UNCF: Connectedness, Stability, and Sustainability. Scores above three indicate lower levels of [community fragility](#), whereas those lower than three indicate higher levels of fragility.

BASELINE

Community	Mean CFS		
	Connectedness	Stability	Sustainability
Blue Mountain, Spring Gulch, Lyons	3.31	2.81	2.7
LaPorte, Bellvue, Livermore	3.12	2.92	2.69
Red Feather, Crystal Lakes	3.37	3.03	2.91
Glen Haven, Drake	3.64	3.43	3.33
Estes Park, Estes Valley	3.57	3.49	3.39
Pinewood Springs	3.4	3.22	3.25
Mountain Community Average	3.40	3.15	3.05
Larimer County	3.01	2.92	2.98

*Communities in the eastern plains contribute to the County's overall score

DESIRED TREND

An increase in scores above 3.0, which indicates greater levels of connectedness, stability, and sustainability in mountain communities.

DATA SOURCE AND UPDATE FREQUENCY

Larimer County Emergency Management expects to repeat this survey every five years, at a minimum.



ECONOMY

Proposed Metrics

METRIC 5. *Unemployment Rate*

DESCRIPTION

The unemployment rate indicates the percent of the labor force that is unemployed and looking for work as an indicator of local economic conditions. It is calculated as a percentage by dividing the number of unemployed individuals by all individuals currently in the labor force. It can be compared over time and also assessed against countywide, statewide, and national conditions.

BASELINE

2010 Census Tract	2015 Unemployment of Labor Force (Population 16 Years and Older)
18.08*	6.3%
18.09*	2.8%
19.03*	9.4%
20.10*	4.8%
23.00*	6.1%
24.01	2.8%
24.02*	3.4%
26.00*	5.7%
28.02*	4.0%
Planning Area Average	5.0%
Larimer County	6.7%

*Census Tract not fully contained within the Planning Area

DESIRED TREND

Larimer County would like to strive for a healthy, stable economy in which the employment rate floats 1% below the state average. An ideal rate is considered to be 4 - 4.5%.

DATA SOURCE AND UPDATE FREQUENCY

The U.S. Census Bureau provides this information through their American Community Survey (ACS) annually.

METRIC 6. *Median Household Income*

DESCRIPTION

Measured by dividing a population's income distribution into two equal groups, half having income above that amount, and half having income below that amount, as a means of evaluating local economic baseline conditions. It can be compared over time and also assessed against countywide, statewide, and national conditions.

BASELINE

2010 Census Tract	2015 Median Household Income
18.08*	\$75,000
18.09*	\$85,118
19.03*	\$67,634
20.10*	\$102,583
23.00*	\$67,031
24.01	\$48,558
24.02*	\$56,055
26.00*	\$84,766
28.02*	\$54,429
Planning Area Average	\$71,242
Larimer County Median	\$59,805

*Census Tract not fully contained within the Planning Area

DESIRED TREND

Larimer County would like to see an equitable Median Household Income across the Planning Area. The desired trend is for each census tract to remain above or trend upwards toward the Planning Area average.

DATA SOURCE AND UPDATE FREQUENCY

The U.S. Census Bureau provides this information through their ACS annually.



HEALTH + SOCIAL

Proposed Metrics

METRIC 7. *Miles of Publicly Accessible Trails*

DESCRIPTION

Community health is directly linked to trail access because it provides an opportunity for active recreation and an alternate mode of transportation. Walking, biking, or running on trails instead of using motor vehicles also benefits the environment and air quality in the region. Increasing availability of and access to trails enhances community resiliency by providing evacuation alternatives if roads are closed during hazard events.

BASELINE

As of 2017, there are around 66 miles of publicly accessible trails in the Mountain Planning Area managed by the County. This does not include miles of trails on state and federal public lands that are accessible to mountain communities.

DESIRED TREND

Larimer County would like to see an increasing number of publicly accessible trail miles.

DATA SOURCE AND UPDATE FREQUENCY

The Larimer County Planning Department can track this metric and provide updates as needed.

METRIC 8. *Poverty Rate*

DESCRIPTION

The poverty rate is the ratio of the number of people who fall below the poverty line out of the total population. It can be compared over time and also assessed against countywide, statewide, and national conditions.

BASELINE

2010 Census Tract	2015 Poverty Rate
18.08*	2.6%
18.09*	5.1%
19.03*	9.4%
20.10*	3.5%
23.00*	10.6%
24.01	15.6%
24.02*	6.3%
26.00*	6.2%
28.02*	9.0%
Planning Area Average	7.6%
Larimer County	13.7%
Colorado	12.7%

*Census Tract not fully contained within the Planning Area

DESIRED TREND

Larimer County would like to see a poverty rate that aims to be 1% below the state average.

DATA SOURCE AND UPDATE FREQUENCY

The U.S. Census Bureau provides this information through their ACS annually.



HOUSING

Proposed Metrics

METRIC 9. Housing Cost Burden

DESCRIPTION

The housing cost burden is defined as monthly housing costs as a percentage of household income over the past 12 months, either as rent or mortgage payments. When housing costs equal 30% or more of a household's income, it is considered to be housing-cost stressed.

BASELINE

2010 Census Tract	2015 Housing Costs as a % of Household Income
18.08*	10.9%
18.09*	5.7%
19.03*	6.0%
20.10*	6.6%
23.00*	6.2%
24.01	11.9%
24.02*	8.8%
26.00*	5.7%
28.02*	8.7%
Planning Area Average	7.8%
Larimer County	5.5%
Colorado	5.4%

*Census Tract not fully contained within the Planning Area

DESIRED TREND

The County would like to see a housing-cost stress rate that aims to be 1% below the state average.

DATA SOURCE AND UPDATE FREQUENCY

The U.S. Census Bureau provides this information through their ACS annually. Data was accessed through the Bureau's American Fact Finder 'Financial Characteristics for Housing Units with a Mortgage' report.

METRIC 10. FEMA Community Rating System Class

DESCRIPTION

The Federal Emergency Management Agency's (FEMA) Community Rating System (CRS) is a voluntary program for National Flood Insurance Program (NFIP) participating jurisdictions. Jurisdictions can earn CRS points for recognized floodplain management activities that exceed minimum NFIP standards. These points then allow a jurisdiction to be rated into a particular CRS Class, each of which provide differing flood insurance premium rate discounts for community policyholders.

BASELINE

As of October 2017, Larimer County is a CRS eligible community that entered the program in 1992. As of 1997, the County was rated as a Class 10 (the lowest Class on the CRS range of 10-1) community but that rating was rescinded due to lack of program participation. This baseline data applies to the entire unincorporated area of Larimer County.

DESIRED TREND

Become an active participant in the CRS program. Over time, move toward a lower CRS Class score in order to benefit from more policy discounts.

DATA SOURCE AND UPDATE FREQUENCY

FEMA publicly posts these CRS Ratings and updates them regularly. The Larimer County Floodplain Administrator would provide this information.



INFRASTRUCTURE

Proposed Metrics

METRIC 11. *Neighborhood Access Score*

DESCRIPTION

Larimer County recently conducted its first Neighborhood Access evaluation. This study evaluated neighborhood vehicular access using a number of factors, including primary and secondary ingress/egress, and wildfire risk. Neighborhoods were categorized across five wildfire vulnerability categories ranging from Extreme (1) to Low (5).

BASELINE

As of 2016, 35 (12%) of the 295 neighborhoods evaluated received a vulnerability score of Extreme (1) or Severe (2).

DESIRED TREND

A decreasing number of neighborhoods rated as having Extreme or Severe vulnerabilities.

DATA SOURCE AND UPDATE FREQUENCY

The Larimer County Office of Emergency Management plans to update these scores regularly.

METRIC 12. *Number of Capital Improvement Plan Resiliency Projects Completed*

DESCRIPTION

Capital Improvement Planning is beginning to be implemented in some County Departments and these efforts may soon expand to be a countywide process. The identification and implementation of projects that help to improve the County's resiliency are vital to realizing the goals of this plan.

BASELINE

As of October 2017, the County is finalizing its first CIP. Projects will be identified as relating to the mountains and/or resiliency in 2018.

DESIRED TREND

An increasing number of completed CIP projects with resiliency benefits in the mountains, to the extent that there are remaining projects identified.

DATA SOURCE AND UPDATE FREQUENCY

Larimer County Public Works, annually.

METRIC 13. *Percentage of Private Lands with Broadband Coverage*

DESCRIPTION

[Broadband](#) speed internet accessibility is evolving to be considered an essential service and requires redundancy and affordability. Many of the areas of the County do not have access to internet service at broadband speeds nor is the service reliable. This is primary a result of low population density spread across long distances and varied topography which presents challenges to providing service. Improved access to broadband internet would benefit many of the resiliency frameworks and provide an additional means of communication to deliver a vital, redundant, communications link.

BASELINE

As of 2014, 35% of the private lands in the Planning Area have broadband service.

DESIRED TREND

Increase the percentage of private lands with access to broadband speed internet.

DATA SOURCE AND UPDATE FREQUENCY

The Colorado Office of Information Technology Broadband Office updates this information from Information received from the Federal Communications Commission (FCC) Form 447. Updated information from the FCC is available twice yearly. This metric should be updated annually.



WATERSHEDS & NATURAL RESOURCES

Proposed Metrics

METRIC 14. *Number of Structures Permitted within the Regulatory Floodplain*

DESCRIPTION

Reducing the number of structures within the regulatory floodplain is one of the most impactful ways to reduce individual landowner's and the County's collective risk to flooding. The regulatory floodplain, also known as the Special Flood Hazard Area (SFHA), is defined by FEMA and adopted by the County.

BASELINE

The baseline will be set over the course of the next year.

DESIRED TREND

Decrease over the next 10 years.

DATA SOURCE AND UPDATE FREQUENCY

The Larimer County Planning Department can track this metric and provide updates as needed.

METRIC 15. *Percentage of Lands Covered by an Active (Current) Watershed Master Plan*

DESCRIPTION

Following the 2012 wildfires and 2013 flood, a number of watershed coalitions formed across Larimer County. Many of these coalitions championed the creation of watershed master plans to help guide future restoration efforts and identify specific projects to implemented as funding becomes available.

BASELINE

As of October 2017, there are currently five watershed master plans that have been finalized which cover 16% of the Planning Area. However, the primary focus of several of these plans is river restoration and not watershed management.

DESIRED TREND

An increasing number of acres covered by active/current watershed master plans.

DATA SOURCE AND UPDATE FREQUENCY

Watershed master planning areas were taken from individual plans. Plans can be re-inventoried every 5 years.

METRIC 16. *Participation in Wildfire Home Mitigation Program*

DESCRIPTION

Mitigating individual risks to wildfires is a valuable tool to reduce future losses of life and property. A properly mitigated property also benefits first responders' safety and their ability to provide services during wildfire events. As proposed in this Plan's Implementation Strategy, developing a Wildfire Home Mitigation Program would be a useful tool to increasing the Planning Area's resiliency.

BASELINE

Currently, no Planning Area-wide program exists.

DESIRED TREND

Upon program implementation, Larimer County would like to see an increasing participation rate. Ideally, all residents will participate in the mountain communities.

DATA SOURCE AND UPDATE FREQUENCY

Upon program implementation, involved communities could be recorded and monitored over time.

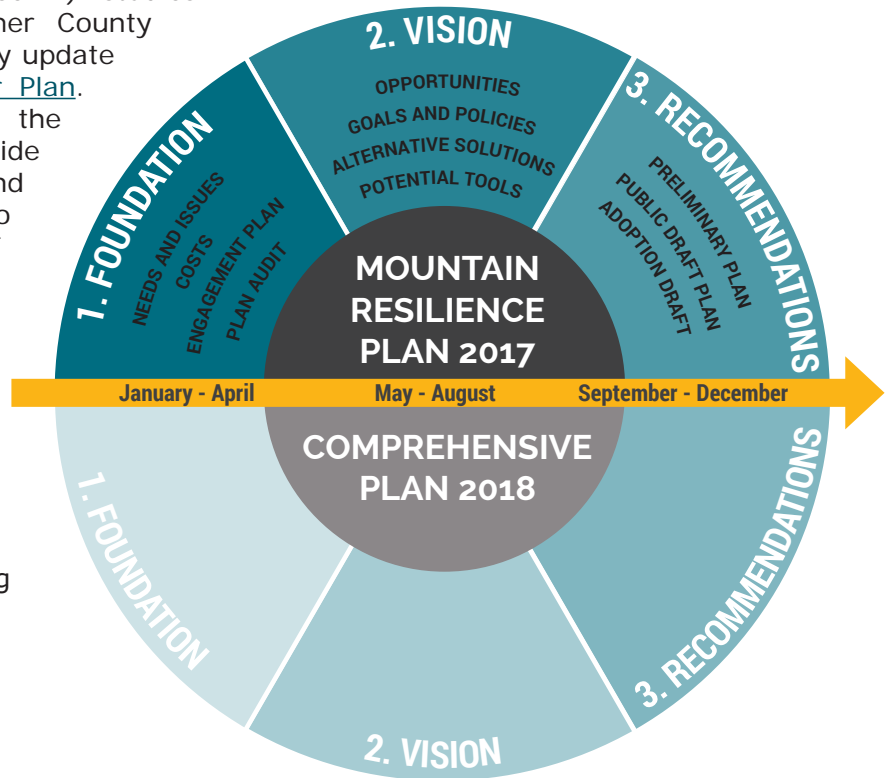
PLAN MANAGEMENT

In 2018, the Mountain Resilience Plan will be integrated with additional Eastern Plains (Phase 2) studies and plans to create a single Larimer County Comprehensive Plan that will effectively update and replace the original [1997 Master Plan](#).

With the two-phase planning process, the new Comprehensive Plan can provide tailored and targeted policy direction and strategic implementation relevant to both the mountain and plain areas of the County.

In order to remain a relevant and functional document, minor administrative amendments should be evaluated every 5 years or more frequent as needed. Comprehensive updates should occur every 10 years. Amendments to the Comprehensive Plan should reflect Board of County Commissioners' priorities, emerging trends or changing conditions.

Figure 10. Planning Process and Schedule



APPENDIX A. COMMUNITY PROFILES

INTRODUCTION

The communities in the mountainous portion of Larimer County are different from the eastern plains in many ways. These communities have developed differently, face unique challenges, and attract a different kind of resident. While some natural hazards are present county-wide, residents, structures, and infrastructure in the mountain portion of the County face an increased risk to landslides, rockslides, and, most importantly, wildland fires which together compound flood risks.

This section profiles the eight subareas in the Mountain Resilience Planning Area, further describing the unique issues and features that characterize these areas. As part of the planning process, additional issues and recommendations will be developed by community members and included in the final plan.

The following information summarizes some of the demographic differences between the mountain areas and the rest of the County. Demographic and housing data presented within this section were sourced from ESRI's Community Analyst, in addition to Larimer County's Assessor Department.

Population. The mountain communities as a whole only account for 4.25% of the entire Larimer County population, yet occupy 75% of the land.

Median Age. On average, the mountain communities are about 17.5 years older than the rest of the County; the smallest difference being 14.3 years older (Area 4) and the largest at 23.5 older (Area 7).

Household Income. Overall, the average median household income of the eight mountain subareas is higher than Larimer County as a whole, though three subareas are below the County average.

Seasonal Occupancy. As a whole, 49% of residential units are owner occupied, 9% are renter occupied, and 42% are seasonally/occasionally occupied or vacant.

MOUNTAIN RESILIENCE PLANNING AREAS

- Area 1. US 36 / St. Vrain Corridor including the Tahosa Valley
- Area 2. Carter Lake / Pole Hill
- Area 3. US 34 / Big Thompson / Glen Haven / Storm Mountain
- Area 4. Masonville / Stove Prairie / Rist Canyon
- Area 5. Highway 14 / Poudre River Corridor / Pingree Park
- Area 6. Red Feather Lakes / Glacier View / Crystal Lakes
- Area 7. North Fork / Livermore / CR 80C
- Area 8. Laramie River Valley

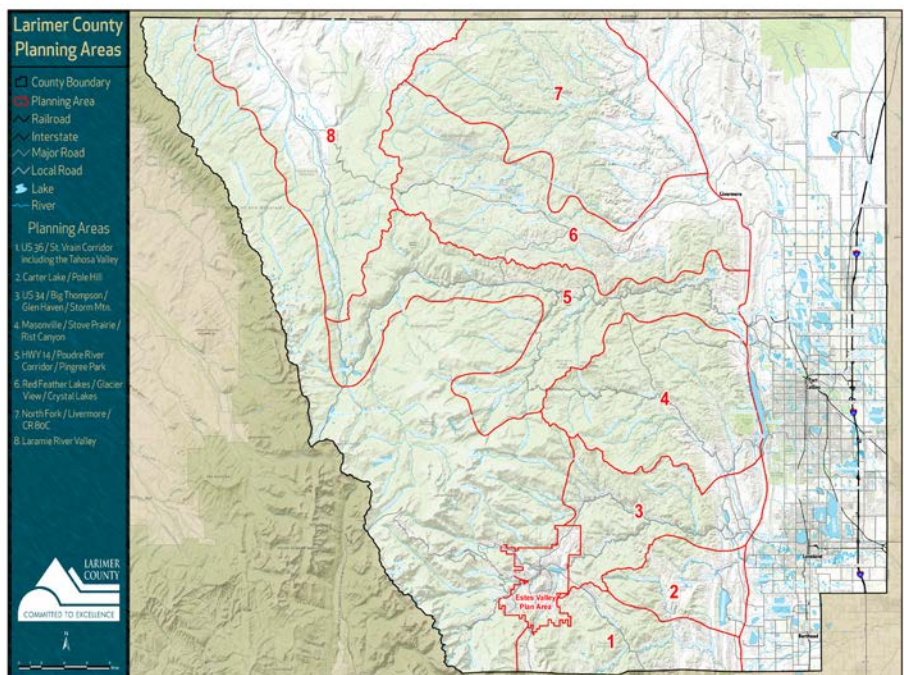


Table 3. Mountain Resilience Planning Areas Demographic Summary

Location	Median Age	Median Household Income	Population	Population % of County	Median household size	Median home value
Larimer County	36.5	\$60,994	318,111	100.00%	2.43	\$309,508
Mountain Resilience Planning Area	54.0	\$68,428	14,123	4.25%	2.26	\$373,040
Area 1	52.1	\$88,647	2,489	0.75%	2.32	\$486,294
Area 2	51.4	\$79,530	1,347	0.41%	2.30	\$429,259
Area 3	53.5	\$67,610	3,288	0.99%	2.31	\$364,417
Area 4	50.8	\$67,804	3,552	1.07%	2.26	\$357,895
Area 5	51.5	\$59,777	531	0.16%	2.15	\$295,370
Area 6	56.8	\$59,363	2,445	0.74%	2.16	\$281,045
Area 7	60.0	\$69,364	420	0.13%	2.19	\$305,172
Area 8	56.1	\$55,336	51	0.02%	1.76	\$294,444

The following table presents a summary of existing [development potential](#) across the eight planning areas. It should be noted this information comes from best available sources and that there are currently no timelines or guarantees associated with this [development potential](#). Many of these available parcels still remain from subdivisions created in the 1970-80's. For comparison's sake, 100% full development of these parcels would equate to an increase of ~13,750 residents (the current study area's population is 14,123). For reference, Table 3 presents historical new construction counts across the planning area per decade.

Table 4. Summary of Existing Development Potential

Location	Subdivided, Unbuilt Residential Parcels	Private Parcels >35 acres that could be Built or Subdivided	Subtotal by Area
Area 1	122	229	351
Area 2	17	270	287
Area 3	395	272	667
Area 4	268	714	982
Area 5	94	146	240
Area 6	1,283	487	1,770
Area 7	1	662	663
Area 8	20	520	540
Total	2,200	3,300	5,500

Table 5. Number of Residential* Parcels by Decade Built

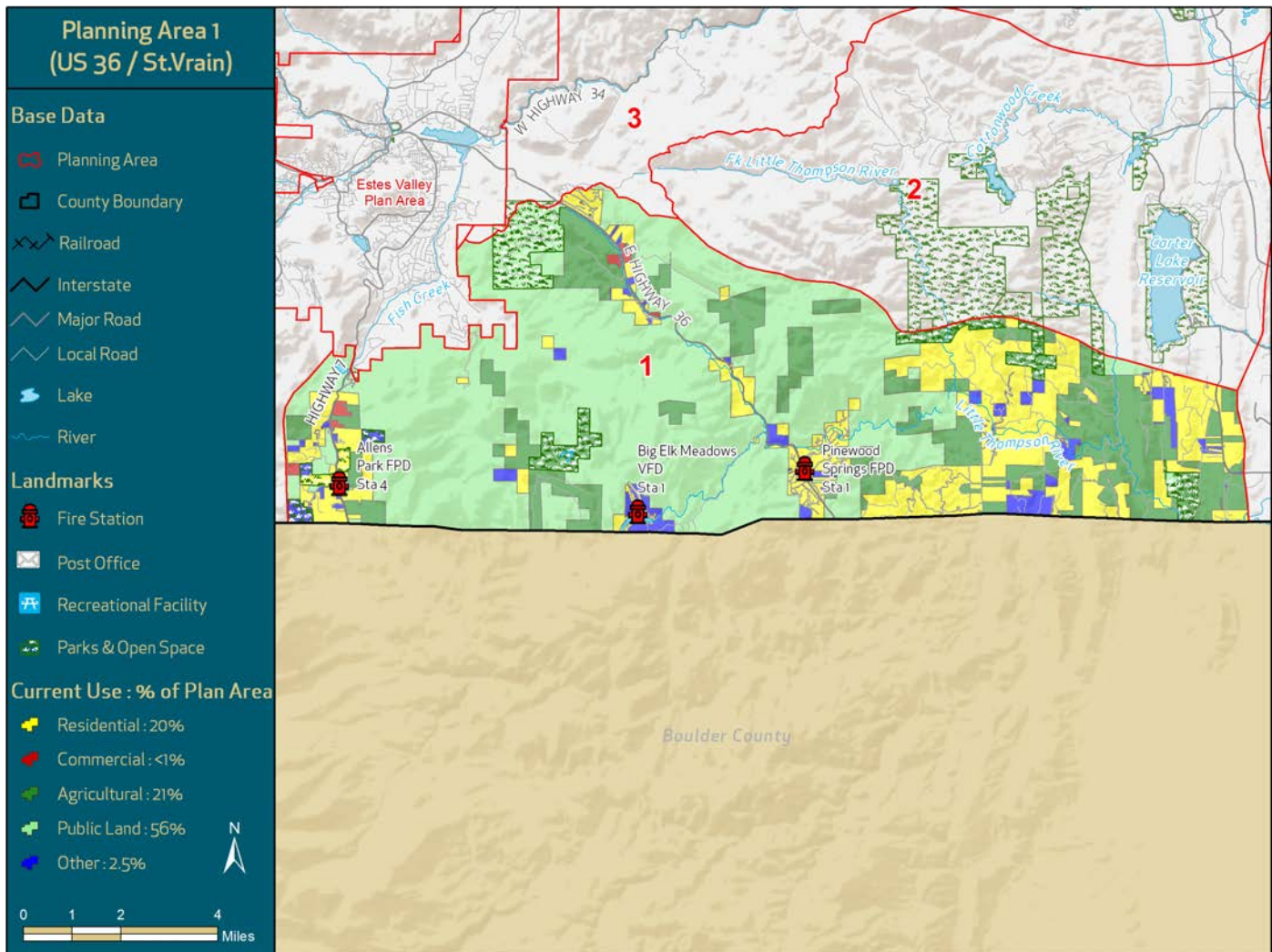
Location	1990s	2000s	2010s	Total
County	23,458	24,324	10,901	58,683
Mountain Resilience Planning Area	2,005	1,492	455	3,952
Area 1	262	141	47	450
Area 2	185	137	21	343
Area 3	355	228	69	652
Area 4	353	243	147	743
Area 5	56	53	23	132
Area 6	642	510	115	1,267
Area 7	103	104	17	224
Area 8	49	76	16	141

* Includes Condo, Duplex, Mobile Home, Multi Unit, Residential, Townhouse, and Triplex Parcel Property Types

The UNCF Study recommended actions for mountain communities based upon their unmet needs and the three key components of fragility. [Connectedness](#), [Stability](#), and [Sustainability](#). Recommendations that are applicable to most mountain areas include.

- Although seemingly well connected as a community, community planning efforts would benefit these communities and would allow them to jointly plan for their own futures and clearly define their preferred future selves. These communities should consider organizing some type of neighborhood organization or entity to increase their collective voices.
- Individuals in these communities do not feel they are obtaining services they need, did not know how to access adequate resources, and/or feel isolated from County leadership. Community members also reported that they did not feel like they knew “where to go to get things done” or how to find out about and access potential resources.
- The survey participants reported lack of trust in County leaders and public officials and lack of representation or understanding in local politics. This lack of trust and feelings of isolation in this area may contribute to inadequate planning and preparedness actions. These communities would benefit from programs aimed at building public trust, such as education and outreach efforts.

Area 1. US 36/ ST. VRAIN CORRIDOR INCLUDING THE TAHOSA VALLEY



Unincorporated Towns and Communities

- Pinewood Springs
- Blue Mountain
- Spring Gulch
- Big Elk Meadows

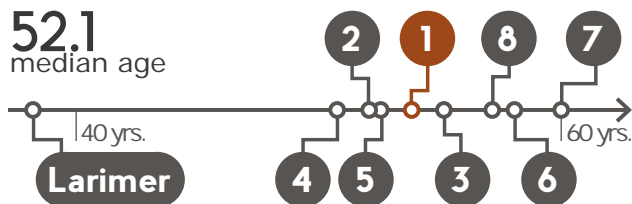
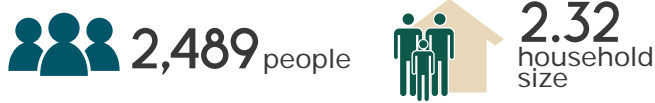
Location

The rural unincorporated communities in this subarea are located west of Berthoud and northwest of Lyons. The primary access to the area is provided by U.S. Highway 36 and Highway 7.

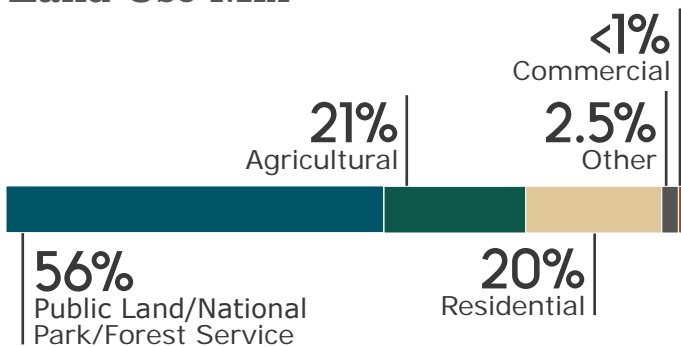
Physical Description

This subarea is located in the foothills where a majority of landownership is public that support a variety of outdoor activities including hiking, fishing, and hunting. The area includes extensive rural agricultural land with very little active agricultural activity, and residential uses concentrated in the eastern portion of the subarea. The major waterway in this subarea is the Little Thompson River.

Demographic Profile

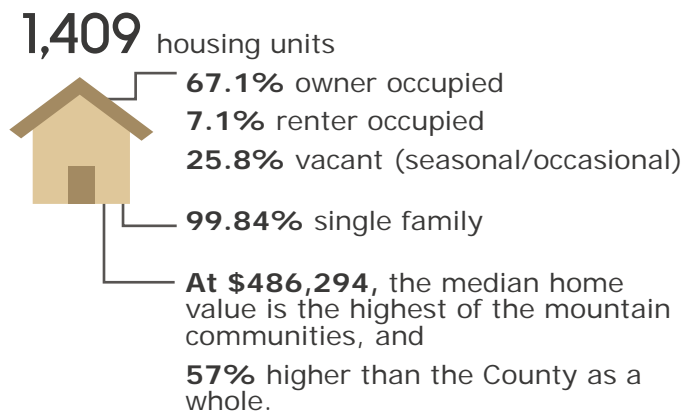


Land Use Mix



Source: Larimer County data 2017

Housing Information



Residential Development Potential

There are currently 122 vacant residential properties that are entitled or can be developed as single-family homes. Properties that are under 70-acre cannot be further subdivided by right.

There are another 229 privately-owned properties larger than 35-acres encompassing 16,648 acres that could be subdivided into residential areas in the future.

Fragility Scale

The 2015 [Unmet Needs and Community Fragility \(UNCF\) Study](#) assessed the communities in this region including Blue Mountain, Spring Gulch/Lyons Area, and X Bar 7.

In the UNCF survey, this region had high levels of [Connectedness](#), low levels of Community [Stability](#), and low [Sustainability](#). Survey respondents reported that members of the community helped each other, were committed to the well-being of the community, and worked together to improve the community.

Issues/Challenges Facing Area

During the UNCF study, specific issues and challenges were identified.

- Individuals in these communities do not feel they are getting the services they need and feel isolated from County leadership. The survey participants reported lack of trust in County leaders and public officials and lack of representation in local politics. Community members also reported that they did not feel like they knew "where to go to get things done" or how to find out about and access potential resources.
- The lack of trust in the County and feelings of isolation in this region may contribute to inadequate planning and preparedness actions.

Specific Area Plans

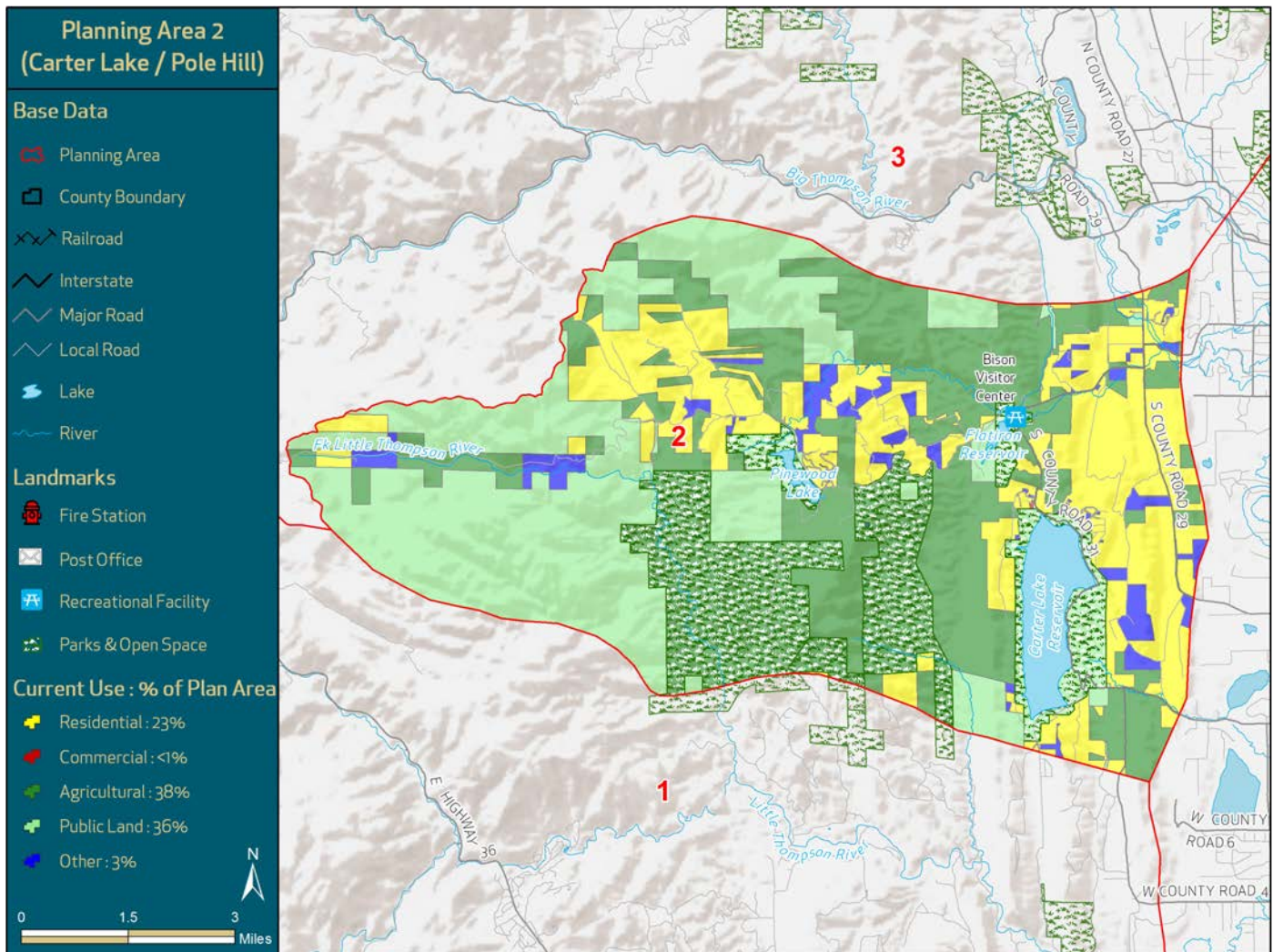
The Little Thompson Watershed Restoration Master Plan was created with the intention of breaking the disaster-rebuild cycle by developing new approaches to restoration that provide improved methods for flood response. Potential river restoration projects that would improve resiliency include relocating structures from the [floodplain](#); single-span bridge replacements of existing culverts; expanding the riparian corridor with native vegetation; revised [floodplain](#) regulations; and increased setbacks. Recommendations relating specifically to areas along the Little Thompson include refining the low-flow channel, grading and stabilization of the [floodplain](#) and headcut areas, and bank stabilization, as well as improvements to bridges and approach roads for flood/debris conveyance, reassessment of bridge design, and channel stabilization.

Recommendations from Existing Plans

The following recommended actions were identified as part of the UNCF Study.

- Consider organizing some type of neighborhood organization or entity to increase their collective voices.
- Identify community projects that residents can participate in year-round, to help foster the sense of community (i.e., river restoration, wildfire mitigation).
- Organize community planning efforts that would both engage community members and allow them to develop a better plan for the future of their community. Such planning efforts may include detailed emergency plans for future evacuations, floods, or other disasters.
- Engage Larimer County officials in community planning efforts and community outreach to ensure strong relationships and connection. Involve Town of Lyons/Boulder County in these activities as many residents identify more with those communities than Larimer County.
- Host educational programs or events in the community to teach community members about the services and programs that are available to them and help familiarize residents with emergency plans and operations in the local area.
- Invite local, County and state leaders to community events to ensure resident concerns are heard and relationships are developed.
- Improve community preparedness by creating community-focused preparedness activities, whether it is through an association or through the yearly meetings of community members. Grassroots efforts are the most effective mechanism for local community preparedness. Several agencies, including the County Office of Emergency Management, can assist in this process.
- Emergency supplies of water, food, medical supplies, gasoline, generators, and other items can be stored locally within the community and maintained so that the community may be self-supporting for the first few days following a disaster. Local fire departments or other emergency response organizations should be involved in this effort and can help train community members and assist in a leadership capacity during a disaster.

Area 2. CARTER LAKE / POLE HILL



Unincorporated Towns and Communities

- Pole Hill subdivisions
- Lands west of Berthoud

Location

The unincorporated communities in this region are located in the foothills directly southwest of Loveland. The primary access to the subarea is provided by County Road 31, Country Road 8E, County Road 29, and County Road 18.

Physical Description

This mountainous area contains National Forest and other County open lands and parks that are popular for outdoor activities including hiking, fishing, and hunting. The area is primarily used for agriculture and residential.

Major waterbodies in the area include Cottonwood Creek, the Little Thompson River, Pinewood Lake, Carter Lake Reservoir, and Dry Creek.

Residential Development Potential

There are currently 17 vacant residential properties that are entitled or can be developed as single-family homes. Properties that are under 70-acre cannot be further subdivided by right.

There are another 270 privately-owned properties larger than 35-acres encompassing 19,941 acres that could be subdivided into residential areas in the future.

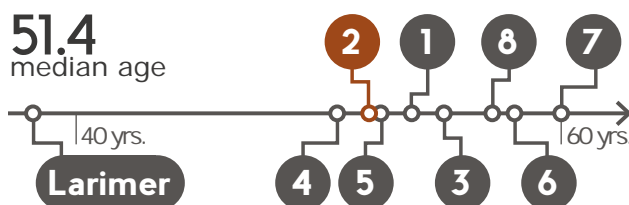
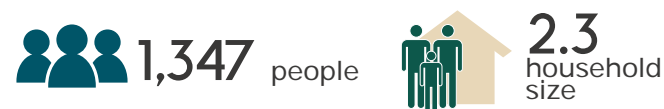
Fragility Scale

The 2015 [Unmet Needs and Community Fragility \(UNCF\) Study](#) did not assess communities in this region.

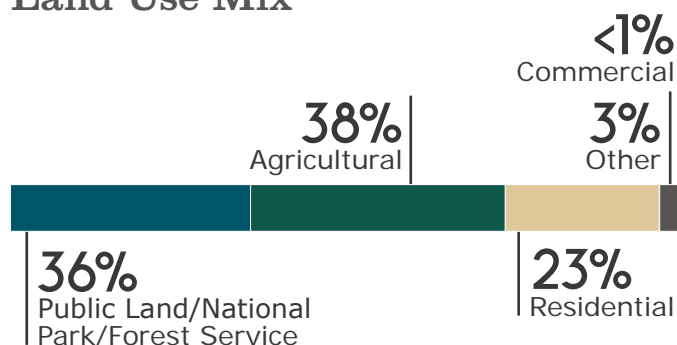
Specific Area Plans

The Parks Master Plan was finalized in 2007 and addresses the Pinewood Reservoir, Carter Lake, Flatiron Reservoir. It may be viewed at www.larimer.org/parks/masterplan/. The plan is currently being updated.

Demographic Profile

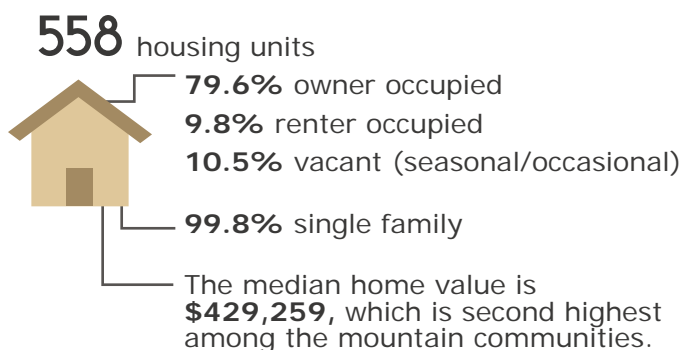


Land Use Mix

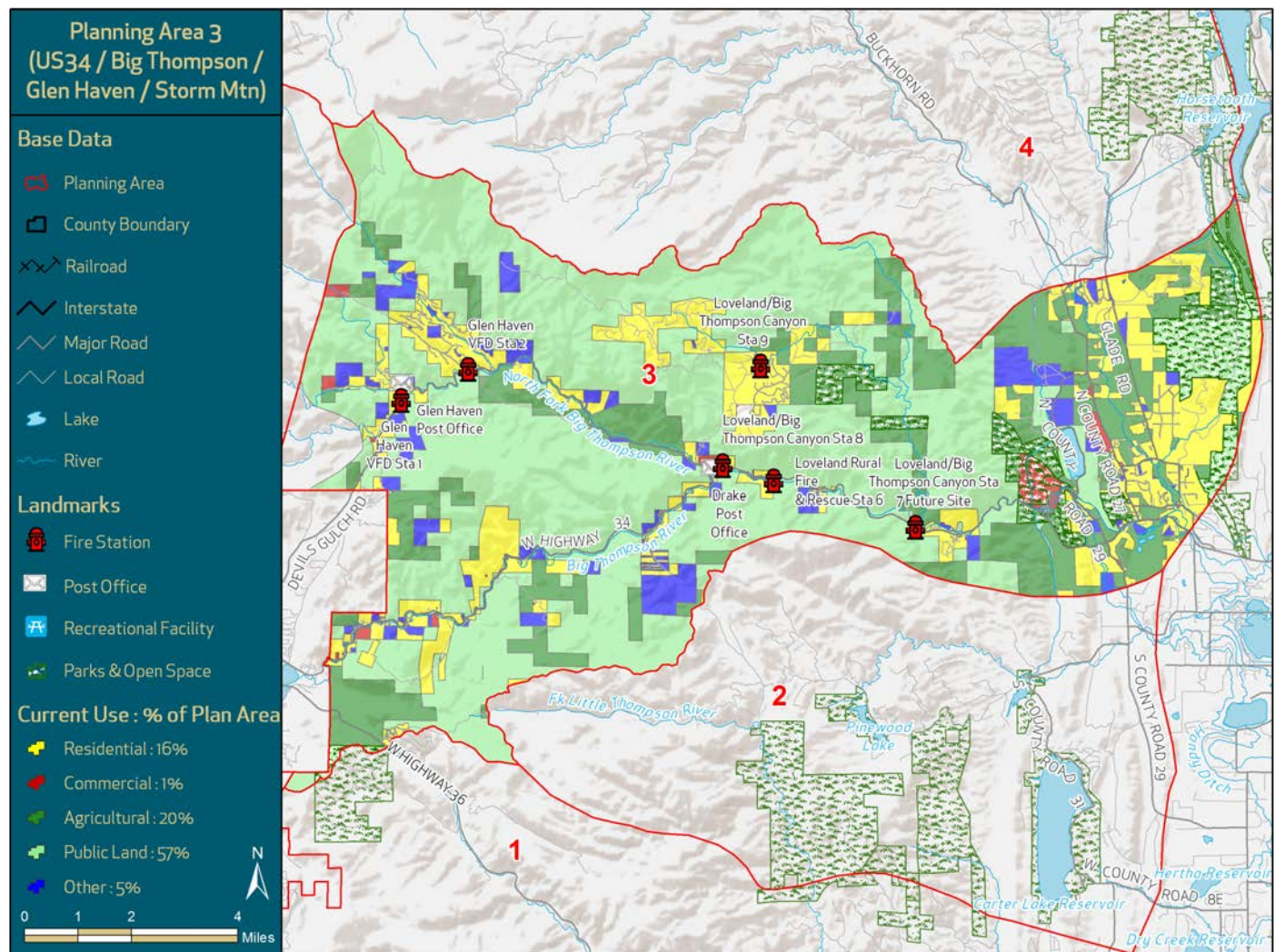


Source: Larimer County data 2017

Housing Information



Area 3. US 34 / BIG THOMPSON / GLEN HAVEN / STORM MOUNTAIN



Unincorporated Towns and Communities

- Drake
- Glen Haven
- Waltonia
- Midway
- Storm Mountain
- Loveland Heights
- Glen Comfort

Location

The rural unincorporated communities in this subarea are located directly west from Loveland, and northeast of the Town of Estes Park. Primary access is provided by U.S. 34, Devils Gulch/County Road 43, Big Thompson Ave, County Road 29, County Road 27 and Glade Road.

Physical Description

This mountainous area contains multiple public lands, including National Forest lands that are popular for outdoor activities including hiking, fishing, and hunting. The subarea is primarily rural agricultural land (with little active agricultural production outside of Sylvan Dale) and protected public lands with scattered small residential communities.

Primary waterways are the Big Thompson River and North Fork of the Big Thompson River. Smaller waterways include Cedar Creek and Redstone Creek.

Residential Development Potential

There are currently 395 vacant residential properties that are entitled or can be developed as single-family homes. Properties that are under 70-acre cannot be further subdivided by right.

There are another 272 privately-owned properties larger than 35-acres encompassing 22,713 acres that could be subdivided into residential areas in the future.

Fragility Scale

The 2015 [Unmet Needs and Community Fragility \(UNCF\) Study](#) assessed the communities in this subarea, which experienced heavy impacts from the 2013 floods.

In the UNCF survey, some of the communities in this subarea had very high levels of [Connectedness](#), high levels of Community [Stability](#), and higher than average levels of [Sustainability](#). Survey respondents reported that members of the community helped each other and were committed to the well-being of the community. Respondents also noted that the community members worked together to improve the community and felt like they belonged to the community.

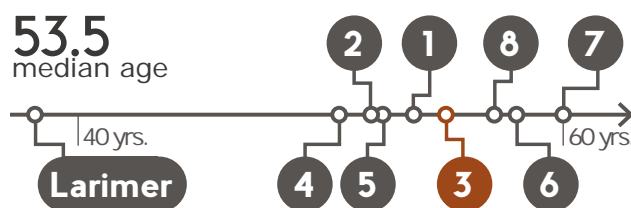
Specific Area Plans

The Larimer County Bigger Vision for the Big T plan is intended to reduce risk to lives, private property and critical infrastructure, improve water quality and ecological function, and improve river function and resiliency throughout the year, as well as during flood events, by maximizing the area available for the river and its [floodplain](#). The Plan identifies best practices for both river and ecosystem resiliency and land use and infrastructure resiliency. The following are best practices that relate to Region Area 3.

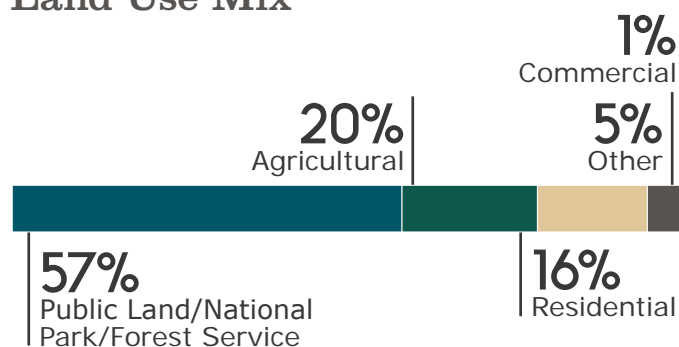
- Undertake strategic land acquisition for river enhancements.
- Actively enforce stormwater regulations.
- Retain strong [floodplain](#) regulations, including limiting buildings in the 500-year [floodplain](#), and update floodplain maps.
- Discourage the placement of earth fill or dumping of any construction material within the [floodplain](#).

The Big Thompson Watershed Coalition finalized the Big Thompson Management Plan in 2015. This

Demographic Profile

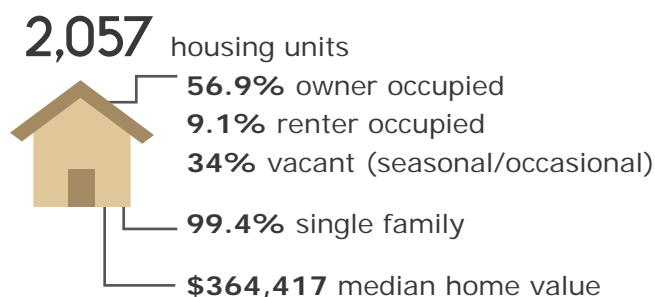


Land Use Mix



Source: Larimer County data 2017

Housing Information



plan outlines the river restoration master plan for the watershed and may be viewed at www.bigthompson.co/master-planning.

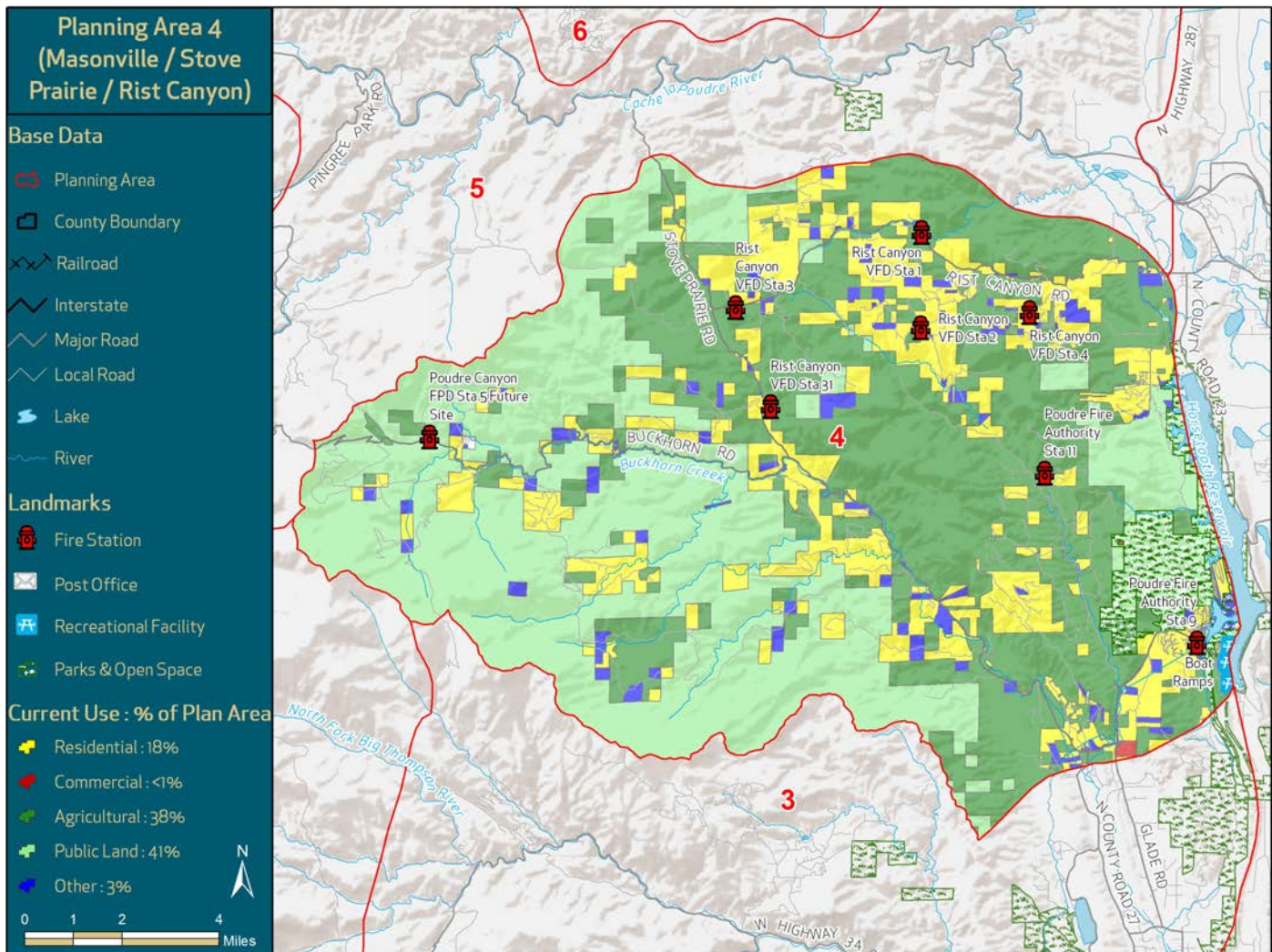
The plan focuses on creating a more resilient river system through improving river function over a broad range of discharges (including flood events); reduce risk and minimize damage to lives, infrastructure, and property; and rehabilitate ecological function, including riparian vegetation and aquatic habitat. One key recommendation is the enforcement of current floodplain management ordinances.

Recommendations from Existing Plans

The following recommended actions were identified as part of the UNCF Study.

- These communities would benefit from programs aimed at building public trust, such as education and outreach efforts.
- Continue watershed planning activities, outreach, and implementation of proposed projects.
- The Glen Haven Association and the Big Thompson Association both provide some connection points between community members as well as to outside organizations and the county. The associations should continue efforts to work with organizations and individuals to build community [connectedness](#) and improve [sustainability](#).
- Due to the fact that the Glen Haven Association is not an officially recognized entity, many of the assistance programs available to other communities were not available after the flood. By working to establish a more formal structure, such as a 501(c)(3) organization or a Title 32 Special District, the community will have better access to assistance pre- and post-disaster.
- Develop relationships with both formal and informal leaders in each community, whether through the fire departments or associations, to improve community coordination.
- Secondary modes of [egress](#) are needed for some areas throughout these communities. Continue work towards the identification and development of secondary access routes where available.
- Although somewhat well connected as a community in areas, community planning efforts would benefit these communities and would allow them to jointly plan for their own futures and clearly define their preferred future selves.
- Continued work with the Big Thompson Conservation District on forest management would greatly benefit this area.
- Coordinate with cell phone service providers to identify potential solutions for expanding and improving cellular networks and consider also utilizing other possible communication networks.
- Install stream gauges to improve flood monitoring and notifications.
- Work with the County to implement mitigation efforts included in the [Hazard Mitigation Plan](#).
- As a community building event, develop a community supply of resources for use in emergency situations when the Area is cut off from the rest of the county.

Area 4. MASONVILLE / STOVE PRAIRIE / RIST CANYON



Unincorporated Towns and Communities

- Stove Prairie
- Masonville
- Bellvue
- Buckhorn

Location

The rural unincorporated communities in this subarea are located west of Fort Collins and Horsetooth Reservoir. The primary access to the area is provided by County Road 23, County Road 38E, Stove Prairie Road, and Rist Canyon Road.

Physical Description

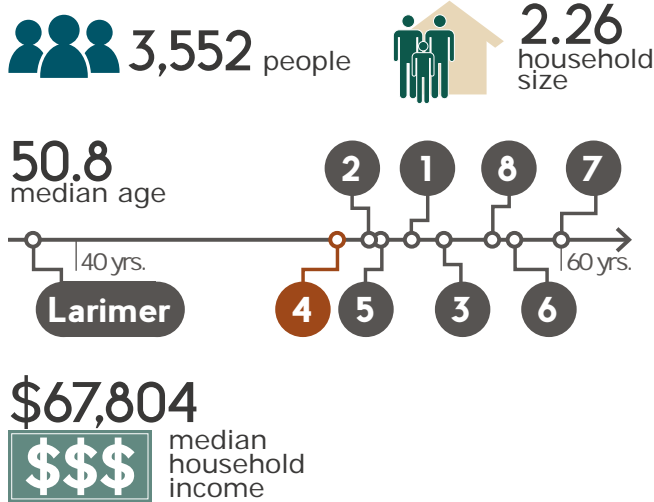
This mountainous area contains municipal and state parks and National Forest lands that are popular for outdoor activities including hiking, fishing, and hunting. The region is primarily rural agricultural land and public lands with scattered residential communities.

Residential Development Potential

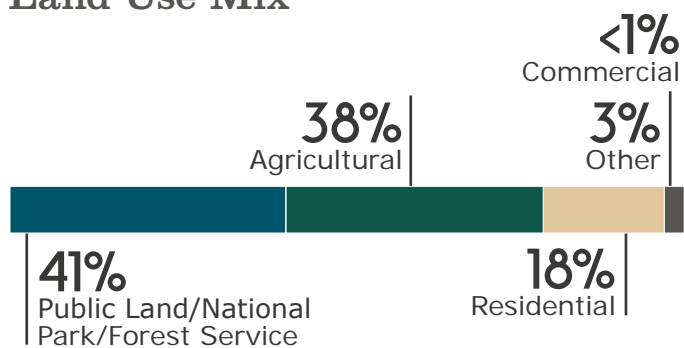
There are currently 268 vacant residential properties that are entitled or can be developed as single-family homes. Properties that are under 70-acre cannot be further subdivided by right.

There are another 714 privately-owned properties larger than 35-acres encompassing 50,399 acres that could be subdivided into residential areas in the future.

Demographic Profile

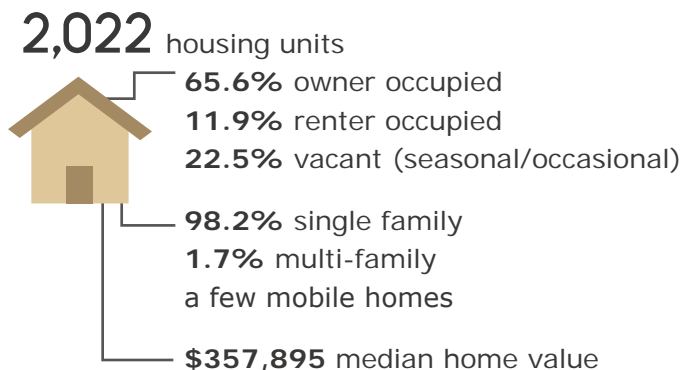


Land Use Mix



Source: Larimer County data 2017

Housing Information



Fragility Scale

The 2015 [Unmet Needs and Community Fragility \(UNCF\) Study](#) assessed the communities in this region together with LaPorte, Livermore, and the Poudre River Area due to their similar rural locations and community structure.

In the UNCF survey, this subarea had high levels of [Connectedness](#), low levels of Community [Stability](#), and low [Sustainability](#). Survey respondents reported that members of the community helped each other and were committed to the well-being of the community.

Issues/Challenges Facing Area

Issues from the rural area visioning process in 2013 and 2014.

- Education to bicyclist and notification of races
- Education on what County services are available and how they are paid for
- Better internet
- More senior services (recreation center)
- Emergency services response time
- Community organization
- Limited community ties make organizing community activities or plans difficult.

Specific Area Plans

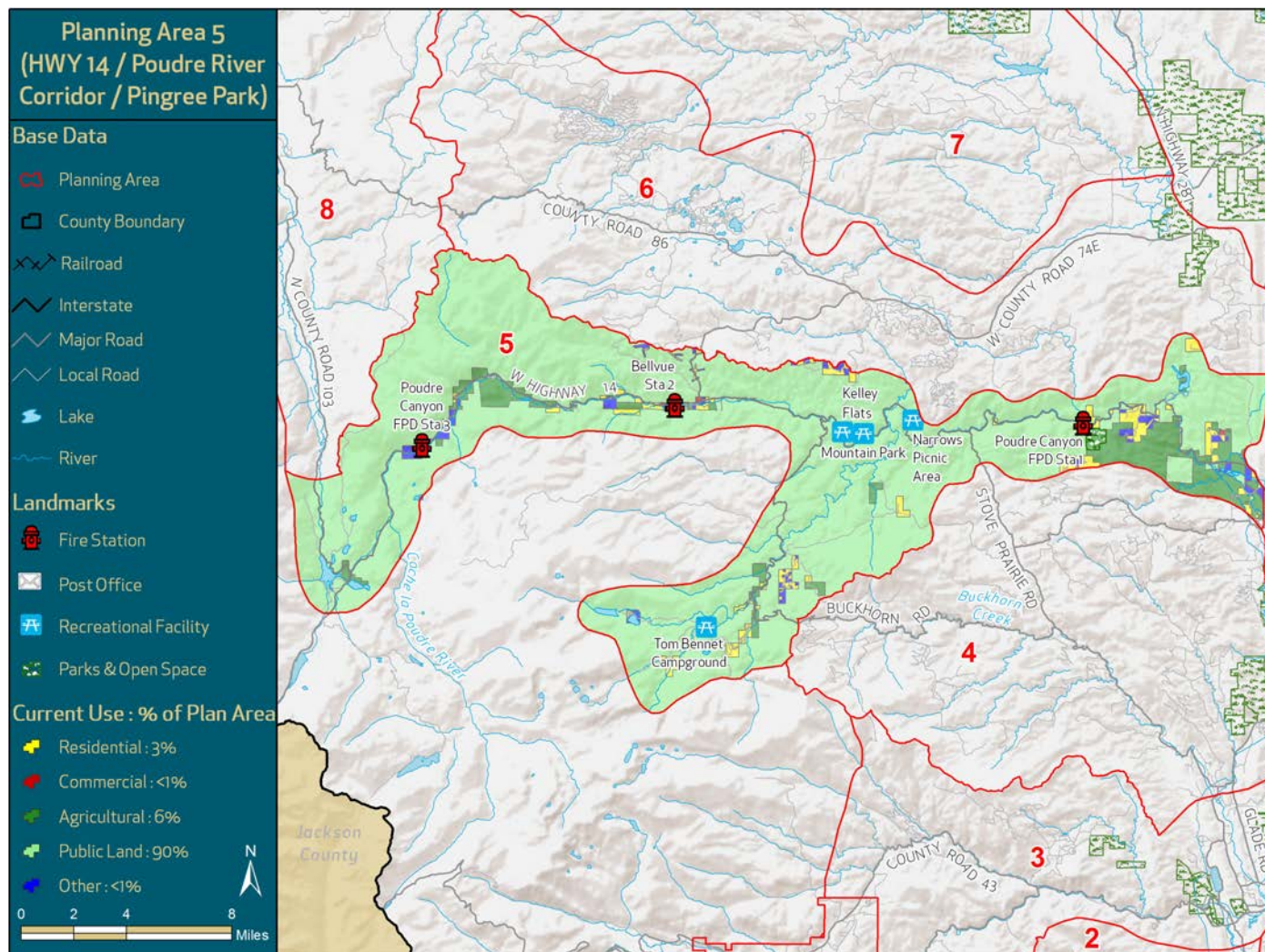
Horsetooth Mountain Park is located within this region and the current Horsetooth Mountain Park Management Plan was adopted by the Larimer County Parks and Open Lands Department in May 2006. This plan outlines resource management strategies for the park and may be viewed at www.co.larimer.co.us/parks/http_plan.

Recommendations from Existing Plans

The following recommended actions were identified as part of the UNCF Study.

- Continue coordination with the Coalition for the Poudre River Watershed and collective planning efforts. The Coalition can serve a vital role as a voice for community residents.
- Improved stream monitoring would be beneficial for a number of reasons. Install stream gauges to improve flood monitoring and notifications.

Area 5. HIGHWAY 14 / POUDBRE RIVER CORRIDOR / PINGREE PARK



Unincorporated Towns and Communities

- Poudre River Canyon, including
 - Poudre Park
 - Rustic
 - Mishawaka
 - Indian Meadows,
 - others

Location

The rural unincorporated communities in this region are located along Highway 14 in the Poudre Canyon west of Fort Collins. This region may be accessed along Highway 14 through Poudre River Canyon.

Physical Description

The Cache la Poudre River runs through this area, flowing from west to east toward Fort Collins. Highway 14 runs along the river through Poudre River Canyon with steep slopes rising up from the river along many sections of highway. There are three fire stations in the canyon and four picnic areas and campgrounds.

Residential Development Potential

There are currently 94 vacant residential properties that are entitled or can be developed as single-family homes. Properties that are under 70-acre cannot be further subdivided by right.

There are another 146 privately-owned properties larger than 35-acres encompassing 13,467 acres that could be subdivided into residential areas in the future.

Fragility Scale

The 2015 [Unmet Needs and Community Fragility \(UNCF\) Study](#) assessed the communities along the Poudre River together with LaPorte, Bellvue, and Livermore.

In the UNCF survey, this subarea had high levels of [Connectedness](#), low levels of Community [Stability](#), and low [Sustainability](#). Survey respondents reported that members of the community helped each other and were committed to the well-being of the community.

Issues/Challenges Facing Area

Issues from the rural area visioning process in 2013 and 2014.

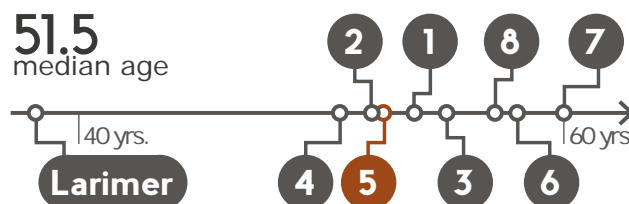
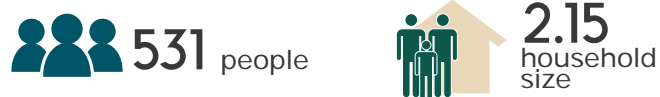
- Cell Phone Service
- Improved Road Signage
- Motorcycle racing is a problem
- Build a bike lane up the canyon road
- Pave roads around the fire station
- Re-forestation of hillside, concerned about getting too much rain
- Watershed has a lot of dirt, rocks and debris thrown into it. Would like water companies to do more
- Prefer bridges to road culverts that collect debris in floods
- More forest thinning by the forest service
- Do not want shopping areas closer

Recommendations from Existing Plans

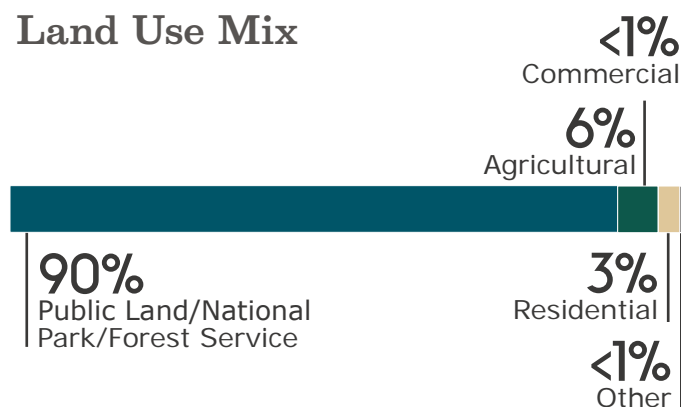
The following recommended actions were identified as part of the UNCF Study.

- Continue coordination with the Coalition for the Poudre River Watershed and collective planning efforts.
- Improved stream monitoring would be beneficial for a number of reasons. Install stream gauges to improve flood monitoring and notifications.

Demographic Profile



Land Use Mix

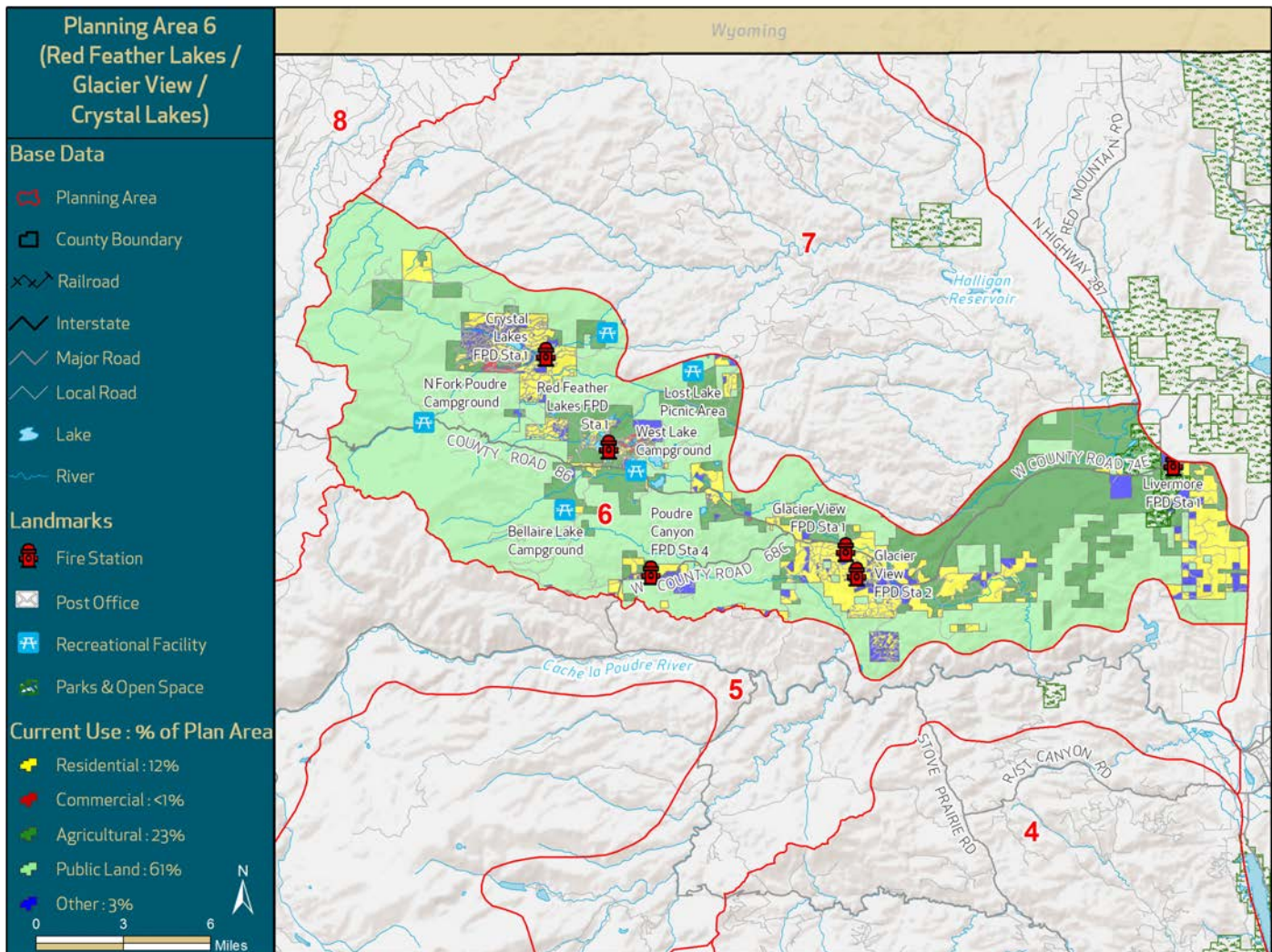


Source. Larimer County data 2017

Housing Information



Area 6. RED FEATHER LAKES / GLACIER VIEW / CRYSTAL LAKES



Unincorporated Towns and Communities

- Red Feather Lakes
- Glacier View
- Crystal Lakes

Location

The communities in this subarea are located approximately 50 miles northwest of Fort Collins. This area is accessed off of Highway 287 via County Road 74E/Red Feather Lakes Road west from Livermore. Much of this subarea is mountainous terrain that may have restricted or seasonal access.

Physical Description

This area includes multiple waterways including George Creek, Panhandle Creek, Cache la Poudre River, South Lone Pine Creek, Elkhorn Creek, North Lone Pine Creek, and Gordon Creek. The area is popular for hunting, fishing, hiking, and other outdoor activities. However, the limited accessibility and remoteness of these communities can leave them vulnerable to hazards including flooding and wildfires.

Residential Development Potential

There are currently 1,283 vacant residential properties that are entitled or can be developed as single-family homes. Properties that are under 70-acre cannot be further subdivided by right.

There are another 487 privately-owned properties larger than 35-acres encompassing 45,205 acres that could be subdivided into residential areas in the future.

Fragility Scale

The 2015 [Unmet Needs and Community Fragility \(UNCF\) Study](#) assessed the communities of Red Feather Lake, Crystal Lakes, and Glacier View Meadows.

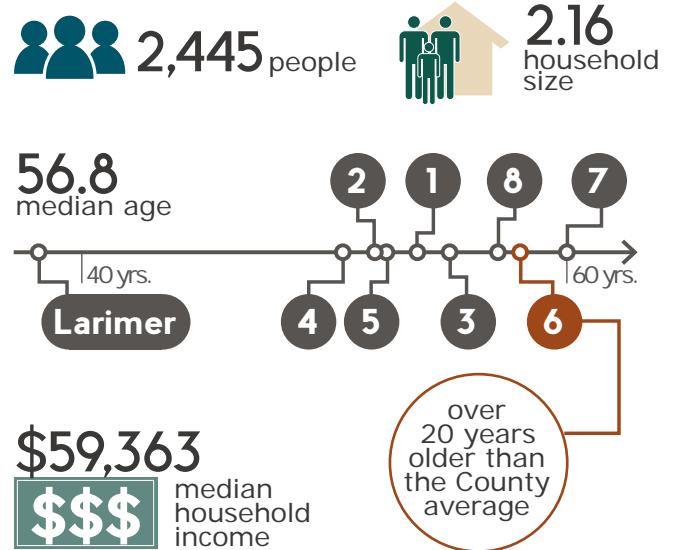
In the UNCF survey, this region had high levels of [Connectedness](#), high levels of Community [Stability](#), and low [Sustainability](#). Survey respondents reported that members of the community helped each other, were committed to the well-being of the community, and felt like they belonged to the community.

Issues/Challenges Facing Area

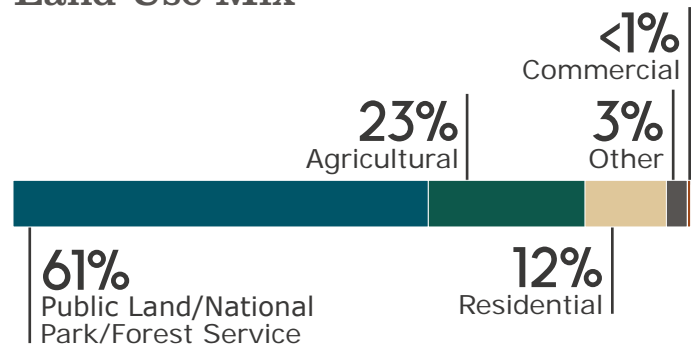
Issues from the rural area visioning process in 2013 and 2014.

- Internet/Cell phone coverage improvements
- Rural medical clinic
- Sheriff's presence
- Traffic/speed enforcement
- Fire protection
- Attract community members. medical, fire protection, school, maintaining national beauty
- Don't want to become another Estes Park
- Do not want large grocery store but interested in expanding commercial abilities to better serve communities
- Need to expand Red Feather Volunteer Fire District
- Simplify process for amending plats
- Insurance rates going up
- Concerned about marijuana facilities
- Do not want to become a urban area but want to add commercial uses
- Better Medical facilities accessibility

Demographic Profile

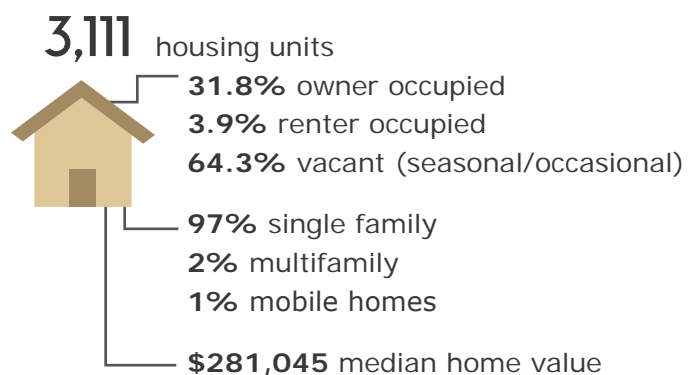


Land Use Mix



Source. Larimer County data 2017

Housing Information



- Closer recycling facility
- Ability to download maps of small areas
- Codes here are the same as Fort Collins and that is a problem – no way to meet code requirements because of rock landscaping and topography
- Build some rural requirements into land-use code
- Different road names from the County causes confusion during emergencies
- Fire mitigation
- Weed control

Specific Area Plans

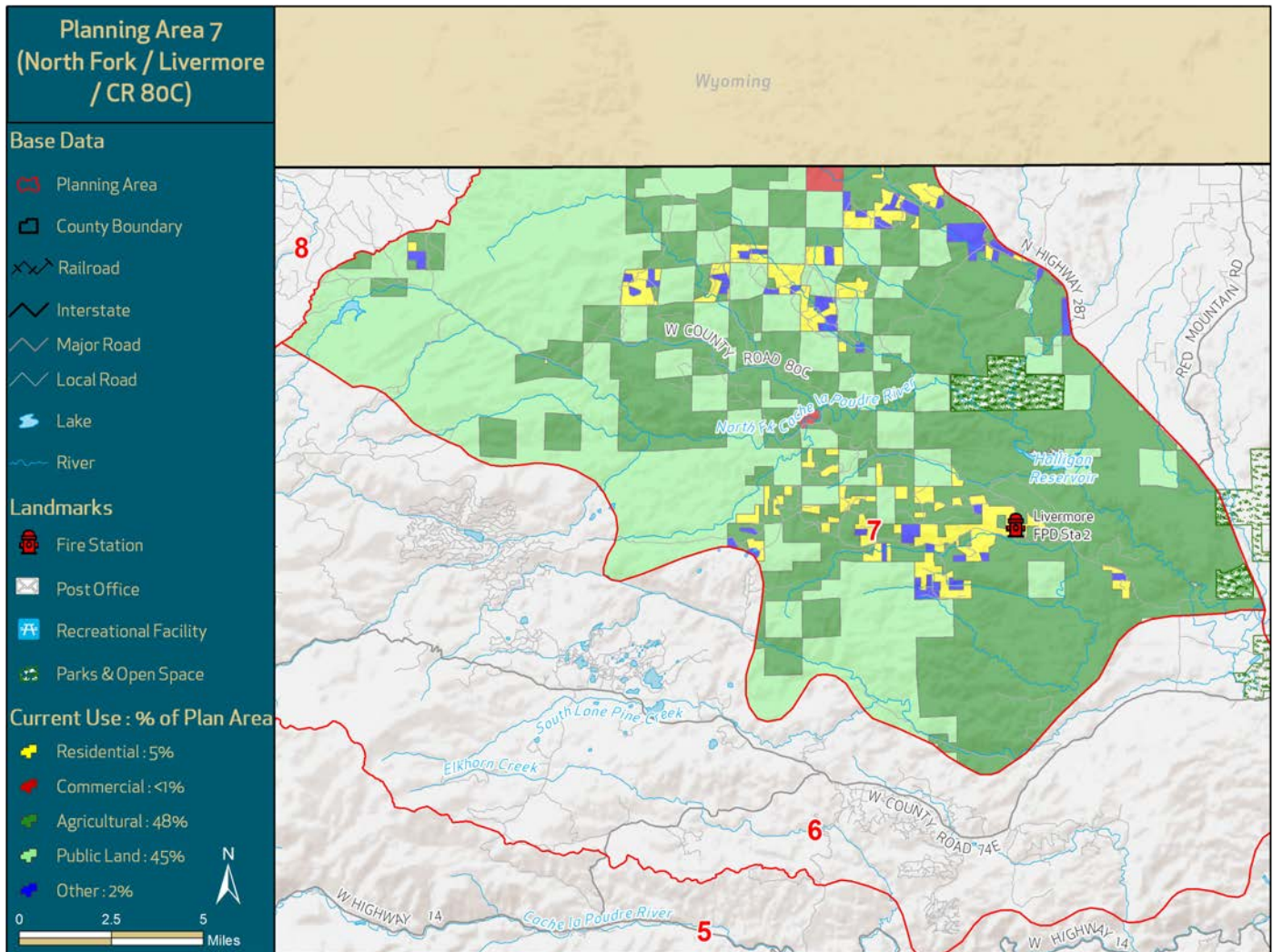
The Red Feather Lakes Area Plan was adopted as a component of the Larimer County Master Plan in August 2006. The Red Feather Lakes Area Plan may be viewed at: www.co.larimer.co.us/redfeather.

Recommendations from Existing Plans

The following recommended actions were identified as part of the UNCF Study.

- Investigate the use of mobile health clinics and re-establish another medical care facility in the area (potential site in Glacier View Area).
- Work with neighbors to form home/road associations to deal with private road maintenance issues.
- Ranking low in [sustainability](#) is an indication that adequate lifelines and resource management may not be available to these communities. Having community supplies and resources on hand will assist these communities when cut off from the rest of the county. This can be done through a community effort, with support from Larimer OEM.
- Although there were some concerns with the communications structure and the loss of VHF and 800 MHz, these concerns will actually be improving with the construction of the Killpecker Communications tower that is currently being planned. Continue to work with the county to ensure that this site meets the needs of the area. Due to the rural nature of the three communities, enhancing the capability of the Amateur Radio Emergency Services (ARES) Network will greatly improve communications.

Area 7. NORTH FORK / LIVERMORE / CR 80C



Unincorporated Towns and Communities

- Livermore
- North Fork

Location

The communities in this subarea are located northwest of Fort Collins. Access to the area is via Highway 287 and CR 80C. The community of Livermore is located at the junction of Highway 287 and Red Feather Lakes Road. Much of this region is mountainous terrain that may have restricted or seasonal access.

Physical Description

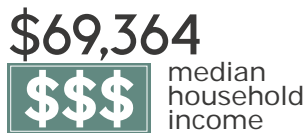
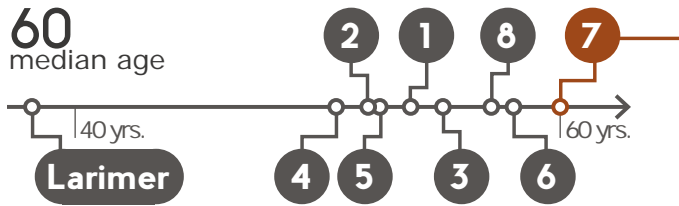
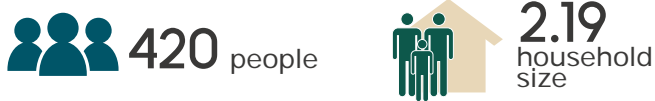
The North Fork of the Cache la Poudre River runs through this area. County Road 80C connects communities to Highway 287. This region is bounded to the north by the Wyoming state border.

Residential Development Potential

There is currently one vacant residential property that is entitled or can be developed as a single-family home. Properties that are under 70-acre cannot be further subdivided by right.

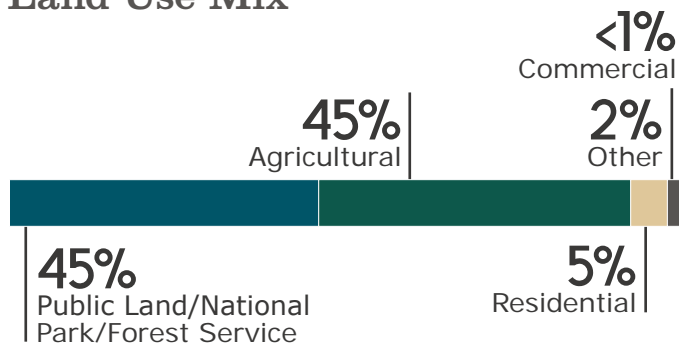
There are another 662 privately-owned properties larger than 35-acres encompassing 80,033 acres that could be subdivided into residential areas in the future.

Demographic Profile



the oldest of the mountain communities and **23.5** years older than the County average.

Land Use Mix



Source: Larimer County data 2017

Housing Information



Fragility Scale

The 2015 [Unmet Needs and Community Fragility \(UNCF\) Study](#) assessed the community of Livermore together with LaPorte and Bellvue.

In the UNCF survey, this region had high levels of [Connectedness](#), low levels of Community [Stability](#), and low Sustainability. Survey respondents reported that members of the community helped each other and were committed to the well-being of the community.

Issues/Challenges Facing Area

Issues from the rural area visioning process in 2013 and 2014.

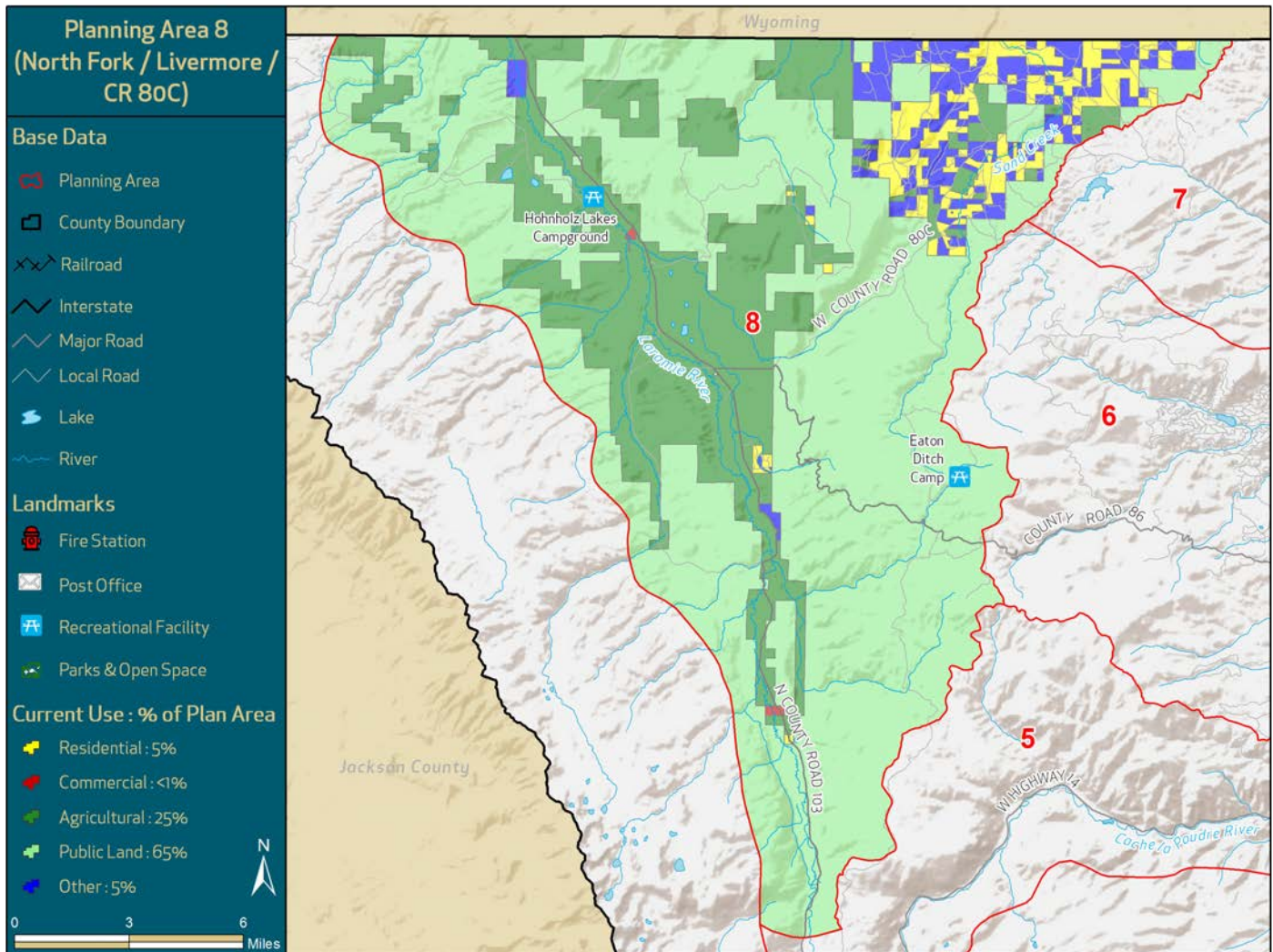
- Cell towers
- Grocery store
- Cell phone/internet service
- More senior services (65 or older)
- Roads need to be kept up (i.e. Road 80C, 82E, 179); better maintained emergency access
- Playground, soccer field
- Lower building permit prices
- Regulations are too expensive and improvements cost too much
- Concerned about reduced sheriff's patrol
- Need more information on fire mitigation
- Families leaving because funding based on number of students. No local middle school or high school options
- Feels like the community will die out

Recommendations from Existing Plans

The following recommended actions were identified as part of the UNCF Study.

- Continue coordination with the Coalition for the Poudre River Watershed and collective planning efforts. The Coalition can serve a vital role as a voice for community residents.
- Improved stream monitoring would be beneficial for a number of reasons. Install stream gauges to improve flood monitoring and notifications.

Area 8. LARAMIE RIVER VALLEY



Unincorporated Towns and Communities

- Glendevey

Location

The communities in this area are remote and difficult to access from the major population centers and primary highways of Larimer County. The rural unincorporated communities in the Laramie River Area are located along Laramie River Road in the mountains approximately 50 miles west of Fort Collins.

The community of Glendevey is located northwest of Spencer Heights and may be accessed in the summer from Route 14 via Laramie River Road (closed December to June off Highway 14) or all year from Wyoming via Highway 10.

Physical Description

The Laramie River Area is located along the Laramie River northwest of Highway 14. Shell Creek, Mill Creek, and the Laramie River Valley are prominent features in the area, an area characterized by working ranches and the soaring peaks of the Rawah Range area.

Residential Development Potential

There are currently 20 vacant residential properties that are entitled or can be developed as single-family homes. Properties that are under 70-acre cannot be further subdivided by right.

There are another 520 privately-owned properties larger than 35-acres encompassing 52,596 acres that could be subdivided into residential areas in the future.

Fragility Scale

The 2015 [Unmet Needs and Community Fragility \(UNCF\) Study](#) did not assess this region of Larimer County, however, the region faces similar fragility challenges as other rural areas of the County.

Adequate primary and secondary access and [egress](#) routes are critical to the safety and resiliency of these communities. Natural hazards, including wildfires and floods, can pose a serious risk to isolated communities with only a single access route.

Issues/Challenges Facing Area

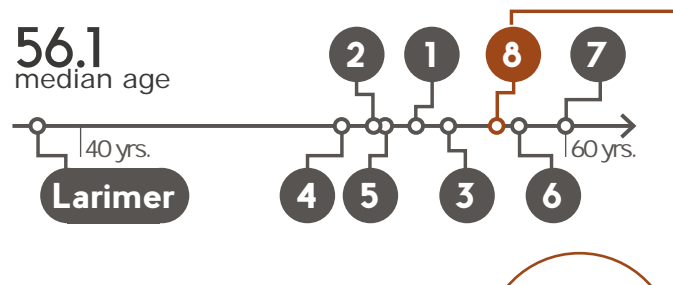
- Residents reported lack of trust in County leaders and public officials and lack of knowledge about County affairs due to the distance from the County seat and their proximity to Laramie.
- (To be identified by community during visioning outreach).

Demographic Profile

 51 people

 1.76 household size

56.1 median age

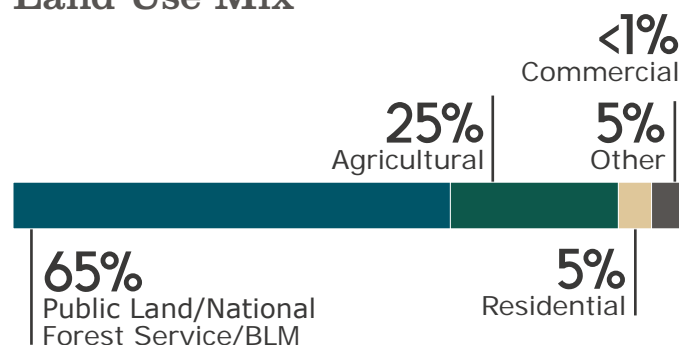


\$55,336

 median household income

almost 20 years older than the County average

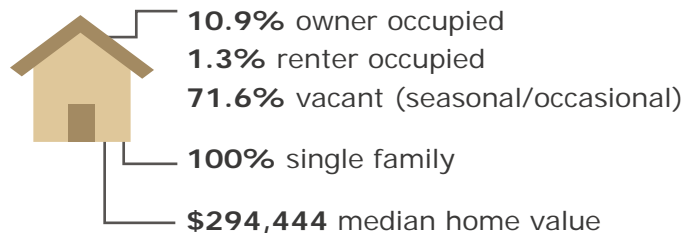
Land Use Mix



Source: Larimer County data 2017

Housing Information

245 housing units



APPENDIX B. FOUNDATIONAL PLANS

The recent floods and fires in Larimer County have led to a number of County planning efforts. These plans and studies outline important community needs and strategic initiatives to mitigate the impact of future hazard events. It is important to align the Mountain Resilience Plan with these previous community- and data-driven efforts; the plans discussed in further detail in the following pages were foundational to the development of the Mountain Resilience Plan. While the implementation of these plans will continue to shape specific projects and initiatives, the Mountain Resilience Plan incorporated and translated these plans' high-level direction into County land use policy.

1997 MASTER PLAN

Why Prepared?

The [1997 Master Plan](#) and Land Use Code are the two elements that comprise the written portion of the [Partnership Land Use System](#) (PLUS) that was developed to handle land use, growth, and environmental protection, as well as the development process in Larimer County. The public participation process for the PLUS project resulted in themes that guided the development of the [Master Plan's](#) principles and strategies.

Why Foundational?

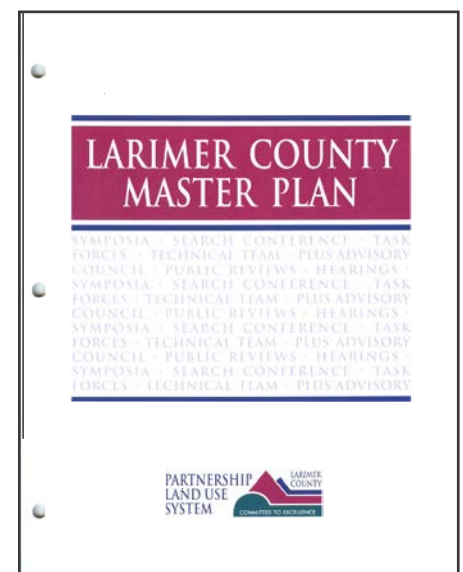
The [1997 Master Plan](#) created a growth management process designed to ensure that Larimer County operates within its resources, protects the environment, and enhances the lives of its residents. The Plan was largely successful and the level of public confidence and satisfaction with planning has steadily increased since its adoption.

What are the Key Recommendations?

Two dozen County staff, Technical Advisory and Stakeholder Committee members as well as members of advisory boards evaluated the [1997 Master Plan's](#) relevance to the mountain communities. This process unanimously determined that 46% of these Guiding Principles are still relevant, though all showed opportunities for refinement.

The top Guiding Principles to carry forward as identified by participants of the plan audit were.

1. Land use shall be suitable for and compatible with the environmental characteristics of the site.
2. Natural and [cultural resources](#) shall be identified, conserved and protected.
3. The planning and [development review process](#) shall be fair, open and predictable, and meet the needs and interests of the community without infringing on the rights of individuals.
4. Service demands of new development shall not exceed the capacities of existing roads and streets, utilities or public services.
5. Undevelopable land shall be defined in the Land Use Code and shall include the [Floodway](#) (FW) zone district and land below the high water mark of existing bodies of water.
6. New development in wildfire hazard areas shall be designed to allow [defensible space](#) around structures and otherwise mitigate potential hazards to life and property.
7. New development shall be approved only when [adequate public facilities](#) and services are available, or when necessary improvements will be made as part of the development project.
8. Larimer County will encourage private landowners and local, state and federal governments to develop and implement



cooperative strategies to minimize critical wildfire hazards potentially affecting life and property.

9. Resources and environmental conditions potentially impacted by proposed development shall be identified in the initial stages of the project, to best design a development that protects the environment.

How does the 1997 Master Plan Influence Land Use Patterns?

The [1997 Master Plan](#) influences land use patterns because it is a policy document that establishes a long-range framework for decision making in the unincorporated areas of Larimer County, including development, public services, and capital facilities decisions, as well as decisions related to environmental resource protection. The [Master Plan](#) outlines a Growth Management System, which not only influences the nature of land uses but also their distribution throughout the County. This plan also introduced the concept of [Rural Conservation Development](#) and the [Rural Land Use Process](#). These processes have resulted in clustered residential development and preserve the existing open character of many rural areas of the County.



2013-2018 STRATEGIC PLAN

Why Prepared?

The [Larimer County 2013-2018 Strategic Plan](#) originated from the Commissioner's "Planning our Future" process that resulted in a community vision for the County, high-level goals, and objectives to drive implementation over the next five years. Public participation included a citizen survey, leadership summit, and input from elected officials and the Board of County Commissioners. The resulting objectives serve as the foundation for implementable actions to achieve the vision and goals identified in the plan.

Why Foundational?

This plan was developed by the BCC, the highest authority in the County, to shape immediate short-term results for priority objectives. An objective outlined under Goal 2 Economic Development spurred allocating necessary resources to update the Comprehensive Master Plan by the beginning of 2017. The [Strategic Plan](#) places priority on specific actions and creates a solid foundation on which to begin building the Comprehensive Plan Update.

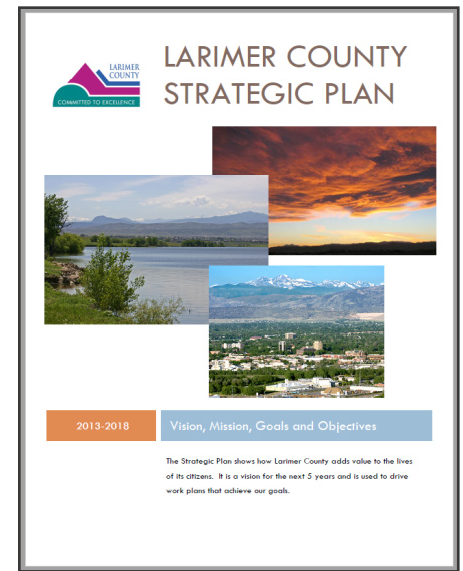
What are the Key Recommendations?

The Guiding Principles (which are to be a good steward of public resources, be customer driven, empower people to take responsibility, build partnership, and be a fulfilling and enjoyable place to work) led to the formulation of seven Goals.

- Goal 1. Safety and Wellbeing. Enhance the safety and well-being of our community by promoting a continuum of support and services to proactively address causal issues like Mental Health and Substance Abuse, integrated into the Criminal Justice system.
- Goal 2. Economic Development. Larimer County is a recognized center for supporting business by turning innovating into reality. We plan for improvement by encouraging smart business growth, more and better jobs.
- Goal 3. All-Hazards Emergency Management. We proactively deal with threats from natural and human-caused hazards within and around Larimer County.
- Goal 4. Transportation. We have an efficient transportation system and road network with safe and well-maintained roads and alternative modes of transportation.
- Goal 5. Collaborate. We have a culture of collaboration among towns, cities, businesses, non-profit organizations and citizens as the first choice strategy to accomplish the Vision and Goals.
- Goal 6. Operations. Larimer County government operates with a collaborative culture, a well-managed budget and continuously improving processes. We have evaluated our practices and services for the way we fund and operate, and have a plan for improvement.
- Goal 7. Customer Service. Government services are customer-centric, accessible and transparent. We leverage technology for better/faster customer service, allowing many services to be done online.

How does this Influence Land Use Patterns?

This plan influences land use patterns through elements of three goals; Goal 2 Economic Development, Goal 3 All-Hazards Emergency Management, and Goal 4 Transportation. Each of these goals affects land use patterns county-wide by strategically locating commercial hubs and with the provision of necessary infrastructure and communication systems.



HAZARD MITIGATION PLAN

Why Prepared?

Larimer County, along with its jurisdictions, special districts, and other organizations, conducted an update to its [Hazard Mitigation Plan](#) (HMP) in 2016. HMPs allow communities to become eligible for certain types of non-emergency disaster assistance, including funding for mitigation projects. A HMP must meet certain requirements defined in the Stafford Act, which was amended by the Disaster Mitigation Act of 2000. These plans are also required to be updated every five years.

Aside from the fact that an HMP qualifies communities for potential grant funding, the HMP planning process helps communities improve their resiliency to natural and human-caused disasters. It allows community representatives and the public to collectively define a Mitigation Strategy that aligns with a community's vision, while at the same time identifying mitigation actions and projects that can be implemented to ensure the long-term risk to hazards is reduced.

Why Foundational?

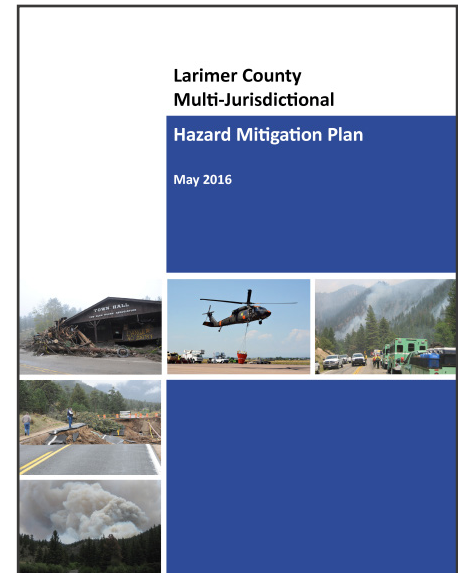
Larimer County has experienced 20 federally declared disasters since 1997, the same year that the [1997 Master Plan](#) was developed. Also during that time, the County has seen 40% population growth. An increased population will mean that there will continue to be more persons at risk to the effects from these hazards. With these facts in mind, the HMP focused on two main topics; what are the County's risks to hazards, and what projects can be implemented in order to reduce or eliminate those risks and vulnerabilities?

As the County works on its update to the Comprehensive Plan, the HMP can ensure that future development and growth is accomplished in a way that does not increase the County's collective risk to disasters.

What are the Key Recommendations?

The HMP's risk assessment was performed county-wide and analyzed a number of natural and human-caused hazards. The HMP presents the results of a vulnerability assessment and loss estimations to determine the top hazards that impact each community.

The mitigation strategy is a collection of specific mitigation actions/projects that could be implemented within each community. The planning team identified over 100 projects, 22 of which came specifically from Larimer County. Over the course of the past year since the plan was adopted, the County has made great progress in implementing many of these mitigation projects.



"COMMUNITIES THAT INVEST IN LAND USE PLANNING ARE MORE RESILIENT – A CRITICAL CONCEPT IN HAZARDS RESEARCH – BECAUSE THEY ARE BETTER ABLE TO ANTICIPATE AND ADAPTIVELY RESPOND TO EXTREME EVENTS, TO RAPIDLY RECOVER, AND TO REDUCE FUTURE VULNERABILITY."³

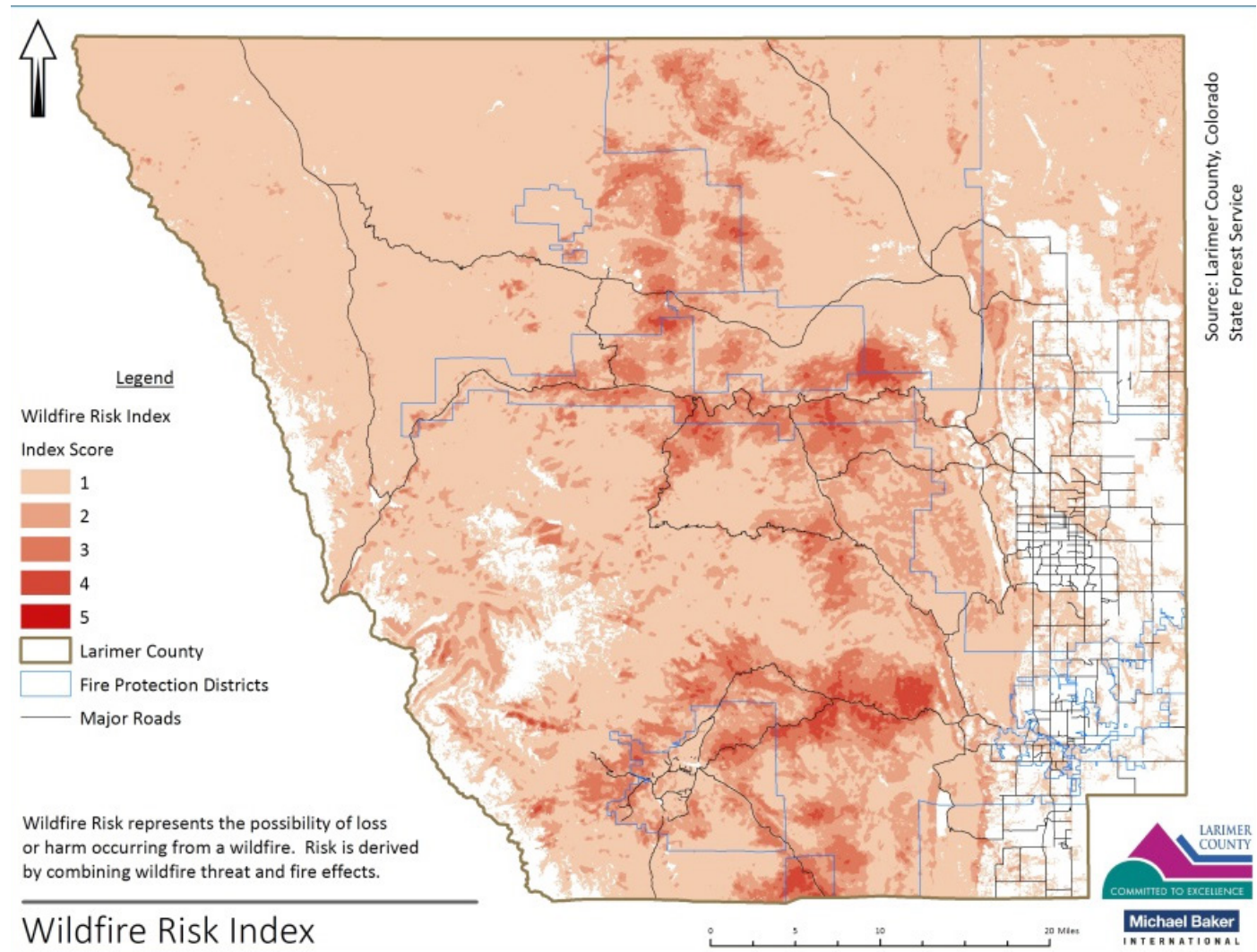
~National Research Council

How does this Influence Land Use Patterns?

There were a number of high risk hazard areas that affect current and future land uses. However, the twelve profiled hazards do not all have a specific high risk footprint (that is, they could occur anywhere, such as High Wind Events). The four with specific footprints include. Erosion/Deposition, Flood, Landslide/Rockslide, and Wildland Fire.

As part of the comprehensive planning process, questions relating to regulating development in known, high hazards areas can be vetted to help reduce or minimize impacts on the built environment, and reduce the tax subsidy for individuals who chose to build in hazard-prone areas.

In addition, the Comprehensive Plan helps fulfill two land-use related mitigation actions/projects identified in the HMP. 1) a long-range community planning effort to bring together all watershed coalition, governmental and non-governmental plans into one unified planning effort, and 2) an update to the Larimer County Land Use, Wildfire and Building Codes with recommendations to decrease future risk and disaster losses.



UNMET NEEDS & COMMUNITY FRAGILITY STUDY

Why Prepared?

In 2016, Larimer County, conducted a unique [Unmet Needs and Community Fragility \(UNCF\) Study](#) in response to recent hazard events. One year after the devastating 2012 High Park Wildfire and 2013 flood events, Larimer County conducted an all-encompassing study of remaining community needs. These 'needs' are related to outstanding actions or projects to combat damages from those disaster events so that the community can fully recover.

A second driver of this study was to attempt to measure [community fragility](#) across the County, specifically in those areas most impacted by these hazard events. Building on the prior theoretical frameworks of the Larimer County Department of Emergency Management, the Community Fragility Framework was developed. This was then assessed for various communities within the County, based upon three key components of fragility. [Connectedness](#), [Stability](#), and [Sustainability](#). These results can both serve as a baseline measure of [community fragility](#) and identify recommendations for each community to decrease their overall fragility to not only disasters, but all six resiliency frameworks.

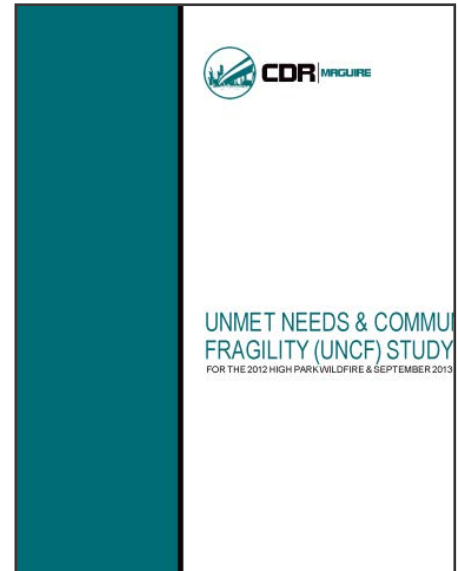
Why Foundational?

Larimer County has learned hard lessons following the recent wildfire and flooding events. Much of that institutional knowledge was captured as part of this UNCF Study. This study is therefore viewed as one of the major plans that will influence long-range planning strategies to ensure that the County's mountain communities can better understand their own strengths and weaknesses, and thereby take action to become more self-sustaining. The Comprehensive Plan update provides the best opportunity to define these community visions.

What are the Key Recommendations?

The UNCF Study presented a summary of those needs across each community, grouped in nine separate categories. Community Fragility recommendations are presented on a community basis and are not intended to be compared against each other, but rather taken as individual recommendations to help reduce fragility within each community.

Over the course of the past year since the UNCF Study was completed, the County has made great progress in meeting a number of the identified needs and also providing resources for mountain communities to work on decreasing their collective fragility. This includes the initiation of the Larimer Connects Program to establish resource hubs, improve community [connectedness](#), and identify cultural, social or economic factors that impact how individuals are able to respond in a disaster.



"Working from a systems perspective, where all parts are necessary for the success of the whole, every person will make a difference. Each individual will play a part in bolstering the weaknesses of the system and enhancing the strengths. Disasters happen in every area of the globe. By working holistically through a systems perspective, Larimer County has the opportunity to embrace a new path forward, strengthening each community along the way."

~UNCF Study

How does this Influence Land Use Patterns?

The UNCF Study focused on specific community needs that were not yet met by post-disaster recovery operations, as well as measuring baseline [community fragility](#). While the intent of the study was not specifically targeted toward local land use changes, many of the infrastructure and service recommendations are impacted by development patterns, mix of land uses, and location and distribution of public facilities.

KEY FINDINGS

Summary of Unmet Needs

	Glen Haven, Drake, Waltonia	Loveland	Berthoud	Blue Mountain & Spring Gulch	Poudre Coalition	Sylvan Dale Ranch	Crystal Lakes, Glacier View Meadows, and Red Feather
PRIVATE PROPERTY	31.8%	18.1%	36.0%	13.7%	5.4%	29.6%	13.6%
HOUSING	5.3%	5.6%	5.0%	2.2%	0.0%	0.0%	2.3%
DEBRIS	3.8%	6.9%	23.0%	3.8%	2.7%	11.1%	4.5%
COMMUNICATION	14.4%	12.5%	3.0%	41.0%	37.8%	0.0%	27.3%
UTILITIES	0.8%	0.0%	1.0%	3.8%	0.0%	3.7%	11.4%
PLANS	33.3%	38.9%	27.0%	18.0%	45.9%	55.6%	9.1%
ECONOMIC	3.8%	8.3%	3.0%	1.1%	5.4%	0.0%	0.0%
SAFETY	0.0%	0.0%	0.0%	12.0%	0.0%	0.0%	29.5%
OTHER	6.8%	9.7%	2.0%	4.4%	2.7%	0.0%	2.3%
	100%	100%	100%	100%	100%	100%	100%

Most Responses
 2nd Most Responses
 3rd Most Responses

Source. UNCF Study

LARIMER COMMUNITY RESILIENCY FRAMEWORK

Why Prepared?

As one of three pilot counties in Colorado, Larimer County was selected to create its own [Community Resiliency Framework](#). This framework was developed in 2016 and was modeled after a statewide Resiliency Framework. As best stated by the Resiliency Framework Steering Committee, “We cannot remove all hazards from our environment, and disaster recovery can only take us so far. In a county that faces natural and human-caused threats every year, we must take an extra step to develop communities that are self-sufficient and when knocked down, will rise up, wipe the dust off, and come back swinging. This is the purpose of the Resiliency Framework.”

Through inter-governmental and inter-agency collaboration, the framework outlines the steps necessary to “create a connected, collaborative, and cooperative region that proactively works together to strengthen systems and to resolve complex issues.”

Why Foundational?

The [Resiliency Framework](#) represents the commitment and capacity of communities across Larimer County to embrace a more resilient future. As it is intended to be a living document – the framework will require ongoing support to both implement and to continue its relevancy. The Comprehensive Plan update is the most influential and useful vehicle for Larimer County and its communities to now execute the visions, goals, and strategies identified within the framework.

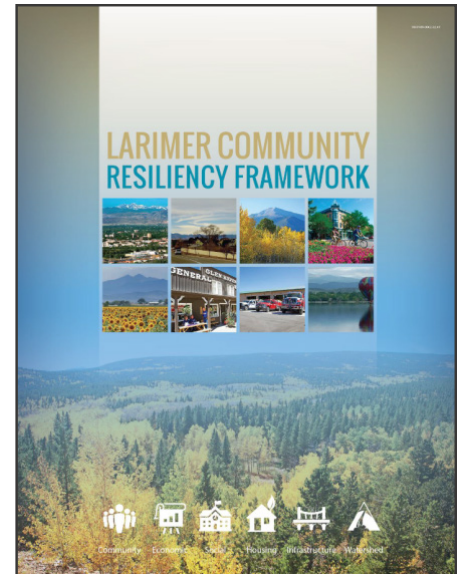
What are the Key Recommendations?

The framework was developed around six systems-wide sectors as established by the Colorado Resiliency Working Group. Community, Economic, Health and Social, Housing, Infrastructure, and Watersheds and Natural Resources.

From this perspective, a County-specific working group defined overarching visions and resulting resiliency goals. Then, as part of the planning process, which included over 300 stakeholders representing government, non-profits, the private sector, and individual community members, a number of strategies and specific projects were identified for implementation. These projects were split into immediate and long-range priority projects. In the year since the framework was developed, the County has made significant progress in initiating and completing a number of these projects.

As part of the implementation process, community members and leaders identified eight goals to address and improve disaster resiliency for the County with associated strategies that fall under each sector. These were the result of a cultural shift in decision making to think about building partnerships across jurisdictional and sectoral lines, encouraging individual responsibility while providing local services, building and maintaining infrastructure to mitigate damage from hazards, paying for the infrastructure and services desired, and analyzing the effects of long-term stresses in addition to better-known shocks, such as fire and flood. The eight resiliency goals are as follows.

- Goal 1. Develop regional, long-range, comprehensive planning that is adaptive and collaborative.
- Goal 2. Foster awareness, preparedness, self-sufficiency, and a greater sense of community by engaging and education residents of the County.
- Goal 3. Increase energy and resource efficiency and reduce risk appropriate to rural and urban contexts by developing and implementing appropriate construction standards.
- Goal 4. Increase the range of housing options and increase stock of [affordable housing](#) through traditional means as well as creative land use, [building codes](#), and measures for innovative housing.



- Goal 5. Develop and fund a regional, [multi-modal transportation](#) network using public and private partnerships at all levels.
- Goal 6. Manage natural resources through adaptive planning and management of land use, especially [watersheds](#), [floodplains](#), agricultural land, and the Wildland-Urban Interface.
- Goal 7. Build public/private/non-profit sector partnerships to support and achieve the community's vision and goals.
- Goal 8. Support the diverse production and supply needs of a sustainable supply chain for the regional food system.

How does this Influence Land Use Patterns?

The framework identified three major project areas where all proposed projects were grouped.

- Risk Management. Risk management provides foundational information for communities to make informed land use, development, and capital improvement decisions to reduce exposure as communities grow and climate changes. Implementation of resilient strategies and projects depends on the availability of current and comprehensive risk data, analysis, and mapping.
- Resilient Natural and Build Infrastructure. Plan and implement projects that have a system-wide ecosystem benefit. To do this, develop new [design criteria](#) for [low-impact development](#) and green infrastructure in [watersheds](#) across the county. Take into account the “new normal” post-disaster and anticipating climate change. This would include [conservation easements](#), [zoning](#) to remove and prevent development in high hazard areas, and other best management practices in watershed management.
- Innovative Land Use Planning. Allow for diversity in growth management and economic resiliency while supporting and protecting our natural environment. Include agricultural land protection where this doubles as [floodplain](#) and natural resource protection.

APPENDIX C. RELATED PLANS

The following is a list of planning documents reviewed and considered for this effort, accompanied by their publication date, and if applicable, the date they were adopted by Larimer County.

Table 6. Related Plans and Studies

Plan Name	Year	Formally Adopted by Larimer County
Code of the West		
Colorado Resiliency Framework	2015	
Community Wildfire Protection Plan. Berthoud Fire Protection District	2007	
Community Wildfire Protection Plan. Big Elk Meadows	2007	
Community Wildfire Protection Plan. Buckskin Heights	2014	
Community Wildfire Protection Plan. Cherokee Meadows	2012	
Community Wildfire Protection Plan. Crystal Lakes	2008	
Community Wildfire Protection Plan. East Portal FireWise Coalition	2006	
Community Wildfire Protection Plan. Estes Park	2009	
Community Wildfire Protection Plan. Uplands	2011	
Community Wildfire Protection Plan. Glen Haven Retreat	2007	
Community Wildfire Protection Plan. Hermit Park Open Space	2008	
Community Wildfire Protection Plan. Little Valley	2005	
Community Wildfire Protection Plan. Magic Sky Ranch	2008	
Community Wildfire Protection Plan. Pinewood Reservoir	2008	
Community Wildfire Protection Plan. Pinewood Springs	2010	
Community Wildfire Protection Plan. Pole Hill	2009	
Community Wildfire Protection Plan. Poudre Canyon FPD-Manhattan Creek	2007	
Community Wildfire Protection Plan. Poudre Canyon FPD-Poudre Park	2008	
Community Wildfire Protection Plan. Poudre Canyon FPD-Rustic	2007	
Community Wildfire Protection Plan. Poudre Canyon FPD-Spencer Heights	2008	
Community Wildfire Protection Plan. Poudre Fire Authority	2011	
Community Wildfire Protection Plan. Redfeather Lakes	2007	
Community Wildfire Protection Plan. Rist Canyon	2010	
Community Wildfire Protection Plan. Upper Cherokee Park	2011	
Dam Emergency Operations Plans	Multiple	
Estes Valley Comprehensive Plan	1996	
Future Climate Extremes in Larimer County	2016	
Horsetooth Mountain Park Management Plan	2006	May 9, 2006
LaPorte Area Plan	2004	January 2004

Plan Name	Year	Formally Adopted by Larimer County
Larimer County Bigger Vision for the Big T	2015	
Larimer County Comprehensive Emergency Management Plan	2015	Feb. 3, 2015
Larimer County Fire Plan	2009	MOU effective through Dec. 31, 2014
Larimer County Hazard Mitigation Plan	2016	June 21, 2016
Larimer County Health Improvement Plan	2014	
Larimer County Land Use Code	1963	1963
Larimer County Master Plan	1997	Nov. 19, 1997
Larimer County Open Lands Master Plan	2015	June 17, 2015
Larimer County Parks Master Plan *	2007	
Larimer County Strategic Plan	2013	
Larimer County Transportation Plan	2017	Aug. 16, 2017
Larimer County Unmet Needs and Community Fragility Study	2015	
Larimer County Our Land Our Future	2013	
Larimer Environmental Advisory Board Annual Report	2016	
Larimer Resiliency Framework	2016	
Larimer County Subdivision Wildfire Hazard Review	2002	
Needs and Opportunities in Housing and Care in Larimer County. Next 25 Years	2015	
Northern Colorado. Estes Park, Fort Collins, and Loveland. A ULI Advisory Services Panel Report	2014	
Northern Colorado Regional Airport Master Plan	2007	June 2007
North Front Range Regional Watershed Planning*		
Planning for Hazards. Land Use Solutions for Colorado	2016	
Red Feather Lakes Area Plan	2006	Aug. 2006
Visit Estes Park Operating and Marketing Plan	2018	Oct. 16, 2017
Watershed Master Plan - Big Thompson River Restoration Plan	2014	
Watershed Master Plan – Fall River Corridor Plan for Resiliency	2015	
Watershed Master Plan – Fish Creek Corridor Plan for Resiliency	2015	
Watershed Master Plan - Little Thompson Watershed Restoration Master Plan	2014	
Watershed Master Plan – Upper Poudre Watershed Resilience Plan	2017	

* Currently being updated

APPENDIX D. GLOSSARY OF TERMS

ACCESS/EGRESS: Points of entrance and exit from subdivisions and communities. These access and egress points prevent a population from being isolated from outside support in the event of a natural disaster.

ACCESSORY DWELLING UNIT: Finished habitable space in a single-family dwelling or in a detached building that is clearly accessory to the single-family dwelling on the lot. Accessory living area may contain a complete dwelling unit.

ADEQUATE PUBLIC FACILITIES: Facilities and services (including water and sewer systems, fire protection and roads) that are available and have the capacity to serve new development without reducing levels of service below established minimum standards.

AFFORDABLE/ATTAINABLE HOUSING: Housing which has sale price or rent within the means of a low or moderate income household as defined by local, state or federal legislation.

ASSET MANAGEMENT SYSTEM: A tool that would allow or accurate monitoring and tracking of county infrastructure through a systematic process of deploying, operating, maintaining, upgrading, and disposing of assets cost-effectively.

BROADBAND: The Federal Communications Commission defines broadband as internet connection speeds of at least 25 Mbps downstream and 3 Mbps upstream.

BUILDING CODE: A set of rules that specify standards for construction of buildings and are in effect for all permits.

BUILDING ENVELOPE: Areas within the boundaries of a lot within which all buildings on the lot must be placed.

BUSINESS RETENTION/CREATION PROGRAM: Focuses on the support of existing businesses through ongoing engagement and communication between the County and local businesses, and fostering high value, low impact employment creation in mountain communities.

CAPITAL IMPROVEMENT PROGRAM/PLAN: A schedule and budget for future capital improvements (building or acquisition projects) for roads, utilities and other capital facilities, to be carried out over a specific time period.

CENTRALIZED WASTEWATER SYSTEM: A publicly-owned, centralized sewage collection and treatment system.

CLUSTER DEVELOPMENT: A development design which concentrates buildings on portion or portions of the site to leave the remainder undeveloped and used for agriculture, open space and/or natural resource protection.

COMMUNITY FRAGILITY: An evaluation of unmet needs and a community's connectedness, stability and sustainability used to outline key actions for municipalities and strengthen systems overall to prepare for the next disaster.

COMMUNITY HUBS: An initiative by Larimer Connects that create community-led and operated hubs that serve informational purposes, provide community members access to resources, and provide a location for members and organizations to better connect and collaborate.

COMMUNITY SEWER SYSTEM: A sewage system that collects sewage from more than one parcel or lot and provides treatment at a centralized location and is not owned by a sanitation district or municipality.

COMMUNITY WILDFIRE PROTECTION PLANS: A resource and tool that allows local communities to influence where and how federal agencies implement fuel reduction projects on federal and non-federal lands in the Wildland-Urban Interface.

COMPREHENSIVE PLAN: A document adopted by the Planning Commission to provide policy direction on the physical development of the County (also referred to as Master Plan).

CONNECTEDNESS: Measurement for Community Fragility regarding closeness of a community based in interactions, planning, and communication.

CONSERVATION EASEMENT: A legal agreement between a landowners and a land trust or government agency that permanently limits uses of the land to protect its conservation values. The conditions of the land are monitored to ensure adherence to the terms of the conservation easement and to conserve the land in perpetuity.

CULTURAL RESOURCE: A site or structure which is part of the area's cultural heritage; that is, which typifies a particular stage of human activity in the

area. Cultural resources include archaeological sites, historic buildings and sites, and undisturbed natural sites that have historic or prehistoric associations including those with paleontological (fossil) specimens.

DEFENSIBLE SPACE: An area where material capable of allowing a fire to spread unchecked has been treated, cleared or modified to slow the rate and intensity of an advancing wildfire and create an area for fire suppression operations.

DENSITY BONUS: An increase in allowable density used as an incentive to a developer to benefit the community and/or maximize the protection of open space, water quality, or air quality.

DENSITY: The number of housing units per unit of land, i.e. per acre.

DESIGN STANDARDS/CRITERIA: A standard contained in a land use regulation which relates to design of a subdivision, site plan or structure.

DESIGN WITH NATURE: Development that incorporates natural factors and processes into its design to create benefits for communities and natural systems.

DEVELOPMENT POTENTIAL: A determination of how an area of land can be developed through analyzing physical attributes, carrying capacity for a specific land use, and potential market demand.

DEVELOPMENT REVIEW PROCESS: Larimer County has a variety of review processes used to evaluate development applications in the unincorporated area of the County outlined in the Land Use Code i.e. a pre-application conference, sketch plan review, neighborhood referral and meeting, general development plan, and public hearings by the Planning Commission and Board of County Commissioners.

DEVELOPMENT RIGHT: The right to develop property. This right may be purchased, or transferred under a Transferable Density Units program.

DEVELOPMENT STANDARDS: Standards or criteria that are applied to development based on its use, location, or other considerations.

DISASTER: Any natural catastrophe (including, but not limited to, any tornado, storm, high water, wind-driven water, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of cause, any fire, flood or explosion in any part of Larimer County, which in the determination of the Larimer County Board of

County Commissioners causes damage of sufficient severity and [magnitude](#) to warrant assistance through a re-build program to alleviate the damage, loss, hardship, or suffering caused thereby.

ENTITLEMENTS: Legal rights conveyed by approvals from governmental entities to develop a property for a certain use, intensity, building type, or building placement.

ESSENTIAL QUESTIONS: Set of questions used to authentically work toward achieving the County's overall vision.

FEMA COMMUNITY RATING SYSTEM

PROGRAM (CRS): A program that provides a variety of resources to improve flood mitigation and reduce risk to properties and residents. It scores communities on a scale from one to ten for their level of preparedness and mitigation measures implemented, and recognizes community efforts that go beyond the minimum standards of the National Flood Insurance Program (NFIP) through reducing flood insurance premiums for property owners.

FIRE/WILDLAND-URBAN INTERFACE (WUI)

CODE: Land Use Code provisions that advance fire and life safety for the public, as well as property protection through a comprehensive approach to wildfire regulation and hazard management.

FLOODPLAIN ACQUISITION PROGRAM:

Strategy that utilizes available funds, which could include open space funds where it matches Open Land Master Plan goals, to acquire properties or conservation easements/covenants to prevent future development on properties that are located in high hazard risk areas.

FLOODPLAIN: The channel and relatively flat area adjoining the channel of a natural stream or river that has been or may be covered by water during times of flood.

FLOODWAY: The channel of a river or other water course and the adjacent land areas that must be reserved in order to discharge the based flood without cumulatively increasing the water surface elevation by more than 0.5 foot.

FREQUENCY: The rate at which an event occurs over a period of time.

FUEL MANAGEMENT AND REDUCTION

PROGRAM: Focuses on providing resources and incentives that encourage private landowners to maintain their properties in a manner that reduces fire hazards.

FUTURE LAND USE PLAN: Guides the location, intensity, and design of development by identifying future growth opportunities and constraints, and providing future land use categories that include information such as density/size, primary and secondary uses, and design principles.

GROWTH MANAGEMENT AREA: An area adjacent to a city or town and identified for future urban development according to a community plan in an Intergovernmental Agreement with the County. Also known as Urban Growth Area.

GUIDING PRINCIPLE: A desired ideal and a value to be sought; an end toward which effort is directed.

HEALTH SERVICES: Include any number of health-related facilities, services, and organizations providing support to the medical profession and patients.

HOUSING COST BURDEN: Monthly housing costs as a percentage of household income over the past 12 months either as rent or mortgage payments. Housing costs equal to or greater than 30% of a household's income is considered to be a cost burden.

IMPLEMENTATION STRATEGIES: A plan of action intended to accomplish a specific principle.

INTERGOVERNMENTAL AGREEMENT (IGA): A contractual agreement between the County and another governmental entity. IGAs with municipalities are the County's primary means of achieving coordinated planning for the areas adjacent to city limits. The agreements define appropriate future urban areas and establish standards and procedures for development in these areas.

LAND USE CODE: A regulatory document containing all of Larimer County's land use regulations, including zoning district provisions and subdivision requirements. It brings together all regulations under a single administrative procedure, with uniform definitions and other common elements to achieve a more understandable, user-friendly regulation.

LEVEL OF SERVICE: An established minimum capacity of public facilities or services that must be provided per unit of demand, i.e. per new housing unit.

LIFELINE SERVICES: Services to communities that are necessary for their daily needs, to maintain a high quality of life, and to support community

and individual preparedness i.e. basic utilities, communication systems, transportation systems, etc.

LOW-IMPACT DEVELOPMENT: Systems and practices that use or mimic natural processes that result in the infiltration, evapotranspiration or use of stormwater in order to protect water quality and aquatic habitat.

MAGNITUDE: The intensity or size of an event.

MULTI-MODAL TRANSPORTATION: A transportation system that includes multiple types (modes) of conveyances such as an automobile, rail, bus, pedestrian and bicycle.

MUTUAL AID AGREEMENTS: Agreements between agencies, organizations, and jurisdictions that provide a mechanism to quickly obtain emergency assistance in the form of personnel, equipment, materials, and other associated services.

OVERLAY ZONING: A regulatory tool that creates a special zoning district, place over an existing base zone(s), which identifies special and additional provisions. These could include zoning requirements that address natural disaster risk, development patterns, the implementation of a "village pattern" in mountain communities, and areas unsuitable for intense development (including expansion of flood regulations to include geologic and wildfire hazards).

PARTNERSHIP LAND USE SYSTEM (PLUS): Comprised of the 1997 Master Plan and Land Use Code, a system that was developed to handle land use, growth, and environmental protection, as well as the development process in Larimer County. It utilized a public participation process that resulted in themes intended to guide the development of the Master Plan's principles and strategies.

PERFORMANCE STANDARDS: Criteria that must be met by development to limit a particular defined impact.

POLICY: A statement of standard or a course of action that guides governmental action and decision making.

RESILIENCE: The capacity to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience.

RESILIENCY METRICS: A set of indicators that measure progress toward achieving resiliency goals.

RESILIENCY/MITIGATION FEE: Strategy that imposes a fee for development located within designated hazard areas collected at the time of building permit application/review.

RURAL CONSERVATION DEVELOPMENT: The name for the required rural cluster subdivision.

RURAL LAND USE PROCESS: Larimer County's voluntary procedure for development of properties that are 70 acres or larger; designed to provide an attractive alternative to division into 35-acre tracts.

SERVICE DISTRICTS: Service area for fire protection, road, and water districts.

SPECIAL IMPROVEMENT DISTRICTS (SID): Areas organized and identified by property owners and local governments that are capitalized by a self-imposed real estate tax (i.e. a few cents per \$100 of assessed value) on properties in the SID. The tax revenue can be used for revitalization and enhancement, infrastructure maintenance and enhancement, business retention, etc.

STABILITY: Measurement for Community Fragility regarding how a community feels about its leaders, how well local politics represent their interest, and their community's ability to prepare and respond to future disasters.

STAKEHOLDER COMMITTEE: Representatives of mountain communities, organizations and boards that serve as community liaisons for the Mountain Resilience Plan.

SUBAREA PLAN: Detailed plan prepared for interested, unincorporated mountain communities that show cohesive characteristics, unique land use issues, and opportunities. These plans can detail location-specific needs, recommend changes or improvements on a scale that is not possible for the majority of the county area, and serve as an extension of the Comprehensive Plan.

SUSTAINABILITY: Measurement for Community Fragility regarding how respondents felt about accessibility to lifelines and their community's ability to provide services during an event and learn from past experience.

TECHNICAL ADVISORY COMMITTEE: A team of Larimer County staff and agency representatives that provides an important in-house perspective throughout the Mountain Resiliency planning process.

PLAN THEME: Important values that influence the development of the Guiding Principles, Policies, and Strategies.

TRANSFERABLE DENSITY UNITS: An incentive program that allows additional density where the community wants to grow ("receiving areas") in exchange for reservation of sensitive or hazard areas that the community wants to protect from future development ("sending areas"). Also known as Transfer of Development Rights.

VILLAGE PATTERN: A development pattern in which gathering spaces and commercial or civic uses serve local needs and are placed strategically without requiring urban level facilities and services. These areas create a focal point for a community within an otherwise residential, ranching, or open space area. Examples include, Masonville, Glenhaven and Livermore.

VULNERABLE POPULATION: The economically disadvantaged, racial and ethnic minorities, the uninsured, the elderly, the homeless, and those with other chronic health conditions. It also includes rural residents who encounter barriers to accessing healthcare services.

WATER AUGMENTATION PLAN: A court-approved plan which is designed to protect existing water rights by replacing water used in a new project.

WATERSHED: An area of land that drains rain water or snow into one location such as a stream, lake, or wetland and that supplies drinking water, water for agriculture and manufacturing, opportunities for recreation, and provides habitat.

WILDFIRE HOME MITIGATION PROGRAM: Supports home and property owners through technical expertise, home wildfire vulnerability assessments and recommended actions can increase the likelihood of effective mitigation and lower insurance rates.

WILDLAND-URBAN INTERFACE (WUI): A zone of transition between undeveloped wildland and human development.

ZONING: An element of the Land Use Code that refers to land use entitlements and requirements that regulate appropriate use, bulk, height, density, and other characteristics appropriate for a specific site.

APPENDIX E. OUTREACH SUMMARIES

STEERING COMMITTEE MEETINGS	42
SC Meeting #1	42
SC Meeting #2	49
SC Meeting #3	57
SC Meeting #4	68
TECHNICAL ADVISORY COMMITTEE MEETINGS	73
TAC Meeting #1	73
TAC Meeting #2	77
TAC Workshops	86
TAC Meeting #4	109
EVENTS	112
Boards and Commissions Summit	112
Visioning Events and Survey	114
Community Choices Events and Survey	114
Reaching for Resilience Events and Survey	118

SC MEETING #1 SUMMARY

Meeting:	Mountain Resilience Stakeholder Committee Meeting #4
Date:	February 23 2017
Time:	5:30 – 8:00 PM

ATTENDEES

Name	Role
Gary Buffington	Larimer County Natural Resources
Sean Dougherty	Larimer County Planning Commission and RFLPAC
Gary Gerrard	Larimer County Planning Commission
Lori Hodges	Larimer County Emergency Management
Jeff Jensen	Larimer County Planning Commission
Evelyn King	Environmental Science and Advisory Board
John MacFarlane	Masonville Resident
Geniphr Ponce-Pore	Colorado State University, Office of Community and Economic Development
Karen Urdangaray	Pinewood Springs Resident
George Wallace	Agricultural Advisory Board
LARIMER COUNTY STAFF	
Terry Gilbert	Community Development Director
Matt Lafferty	Principal Planner, Project Manager
Todd Blomstrom	Larimer County Public Works
Shayle Nelson	Larimer Connects
Drew Davis	Broadband Program Manager
CONSULTANT TEAM	
Jeremy Call	Co-Project Manager
Mike Garner	Co-Project Manager
Anne Kuechenmeister	Planner

MEETING MINUTES

1. Background

- What is this Plan? (See the PowerPoint PDF). This comprehensive plan update has been identified as a strategic effort following recent flooding and fire events. This is the first update since 1997. This effort is grant funded and is a look at mountain communities, followed by the second phase looking at transportation and parks to create a unified guiding principal.
- Roles & Responsibilities of the Stakeholder Committee (See the PowerPoint PDF): Represents mountain concerns that you are familiar with, reviews the goals and policies and vision for the plan, serves as liaisons to the communities to encourage participation, attends events in your area for each phase of project, one-on-one interview with consultant team, attends four stakeholder meetings.
- Overview of the website: www.LarimerCompPlan.com which includes information on the planning areas and resources.

2. Discussion: How do we improve upon the public involvement plan?

Venues and events to include:

- Involve youth; have a library workshop for kids or reach out to 4H clubs
- Poudre High School has a new FHA program
- Places of worship would be good to get the agricultural perspective
- Plugging into existing events such as picnics and Commissioners meetings in the mountain communities
 - The Scottish Festival, however, this may have many tourists
- Outreach to political parties within the communities, a challenge is focusing on the mountain communities as many of these events occur in the Front Range

Outreach and Communication:

- Important to have land managers involved in the process
- Laramie River Valley ranchers and land managers should be involved
- Work with community boards and the fire districts
- Get in touch with property owners associations, particularly in Red Feather Lakes, they can assist with outreach
- Risk Canyon has an e-mail service for community notices and also a Facebook page
- Commissioners e-mail list serves
- Connect with the hotel association and this could be a good network for business considerations
- Connect with Carter Lake and Northwest Carter Lake on Nextdoor.com
- Include opportunities for engagement on the webpage

Public Workshops:

- Would like to have other concurrent efforts present and/or have a booth at those events to speak to questions regarding other County services

3. Overview: county foundational plans

- These are the bedrock plans for this effort:
 - Hazard Mitigation Plan: Updated in 2016, 27 jurisdictions participated in this plan, including fire protection districts and it outlines actions taken to reduce loss to life and property on a long-term scale
 - Unmet Needs and Community Fragility Study: This includes known needs and what needs to be tackled to see the individual strengths and challenges. The data from this study was community driven and hundreds of people responded.
 - Larimer County Resiliency Framework: This plan includes the State's definition for resiliency; the short version of this definition is the ability to adapt to shocks and stressors.
- The project website includes a lot of data on the web maps page, which includes hazard data, the content button allows you to access many layers of hazard data.
- This plan needs to be in line strategically with prior efforts.

4. Exercise Summary

The following table illustrates the goals, issues, and opportunities identified by SC members. Three questions spurred the conversation about these three topics:

- What are your goals for the Mountain Resilience Plan? For example, complete this sentence: "This Plan will be a success if _____."
- What are your biggest issues for the Plan and Land Use Code?
- What are your biggest opportunities for the Plan and Land Use Code?

Goals	Issues	Opportunities
This Plan will be a success if... <ul style="list-style-type: none"> • Communication within and between communities <ul style="list-style-type: none"> ◦ We can create a comprehensive communication network for each "community" ◦ Separate community identities are respected while communication and collaboration between communities still encouraged ◦ Improves cross-boundary collaboration between jurisdictions • Planning remains straight-forward and transparent through the entire process • Thorough educational and outreach efforts • Plan for more than the obvious threats (i.e. fire vs. power outage) • Create a strategic document with a shared vision for the community • Create a new language that genuinely, accurately and respectfully describes the mountains, their nature and a trajectory • Develop new social network that protects people and the ecosystem • Integrates the other relevant county and community plans • Is flexible and adaptable over time • Takes into account the rapidly changing environment • Addresses connections and interdependencies • We can identify safer-attainable housing 	What are your biggest issues for the Plan and Land Use Code? <ul style="list-style-type: none"> • Lack of imagination in communities in regard to hazards (i.e. considering other forms of disruption) • Lack of government trust • Community in-fighting, social divisions, an overall lack of community cohesion • Temporary population (i.e. lots of vacation homes, weekend and/or seasonal recreationalists) • Community hurdles to becoming self-sustainable • "It won't happen to me" mentality regarding disasters • Outdated language that carries assumptions that doesn't reflect the nature of the mountains • Current documents paint too broad a brush • Zoning is driven by density, not land character • Community development is considered the same as growth management • Being relevant without being everything to everyone • Taking a lot of data and distilling it into manageable chunks • Community engagement without burnout • Getting community buy-in • Costs associated with permitting process and zoning and code variances • Post-fire impacts (weeds) • Land use activities that cross boundaries • Areas are fire-prone, flood-prone, erosion-prone and have limited access for emergency response • Residents are independent and 	What are your biggest opportunities for the Plan and Land Use Code? <ul style="list-style-type: none"> • Larimer Connects • The ability to see cross-sector opportunities and strengths • Take a broad look at county goals, tying together the various threads • Outreach and education • Reduction of costs and increased affordability for development • Opportunities to sell and conserve lands that serve a purpose for others • Opportunity for the County to disseminate "risk" information with every permit and to every developer • Plan that directs us to development criteria to guide mountain development • Explore TDRs (Transfer of Development Rights) for retiring difficult parcels • Criteria for incorporating building envelopes and, emergency access in site plans and development proposals • Natural resources • Planning ahead • Visioning and knowledge of stakeholders • Communication between county and public with liaison • Bringing together all of the stakeholders and giving them a voice is critical

Goals	Issues	Opportunities
<ul style="list-style-type: none"> • We can have buy-in from folks who otherwise have not been involved • Land and community health are improved • Reduces risks for residents • Reduces costs for all county residents • Incentivize mountain residents to take more responsibility for hazard mitigation • Land use decisions that keep development away from hazard areas • Motivate development of small area plans • Rigorous public engagement process • Leadership support • Adoption of plan • Public buy in and utilization • Updates land use codes to protect individual property rights and connect community in the event of disaster and for long range planning efforts • 	<ul style="list-style-type: none"> • may not want to engage with "city folks" and the government • Change may be perceived as to quick or unnecessary • Residents have limited time to engage • Population growth • Water conservation needs • Outdoor recreation and tourism • Transportation capacity on public roads • Private property rights • Encouraging people who are isolated and protective of their space in a meaningful way with various opportunities to participate in this effort 	

The following is a summary of the sc members' discussion following the exercise:

What determines success?

- Providing guidance to direct policy decisions.
- A positive and forward looking tone.
- Utilizing data in an effective way.
- Community buy-in.
- A plan that can is better suited to mountain community needs.

Goals

- Create a comprehensive communication network between and within communities
- Small area plans can make standards that fit to a specific community
- Create more flexibility in the mountain communities land use code; inflexibility results in too many exceptions to the rules; can be more responsive to the needs of a particular area
- A more nuanced language and zoning districts that fit the mountain areas and land uses
- Balance property owner rights with the increased responsibility of developing in higher risk zones
- Give developers and property owners the tools and data to make informed decisions to protect themselves and mitigate effects from hazards; quality data so developers are able to consider the impacts of vegetation, soil, slope and impacts so that they understand enough to site in a way that they is more resilient

- Adopt same mentality as floodplain management, you can do what you want on your property so long as it doesn't impact someone else negatively
- The comp plan can't solve the detailed problems, but should provide a toolbox to then create ways to address these problems; gives guidance and incentives
- The comp plan should have some teeth: require consideration of goals and objectives when crafting ordinances and changing the land use code.

Issues

- Growth should pay its own way and it is always more expensive in the mountain areas
- Large seasonal population or weekend vacationers vs. full time residents. This population also needs to be aware of hazards and involved in this planning effort.
- Impacts of public land management on private land ownership and tourism
- Continuing to enforce building and fire codes after development is completed. Currently there is not enforcement to maintain things such as thinning, after development.
- Current zoning categories don't make sense in the mountains
- People want to be left alone, until there is an issue
- There isn't a clear development process for mountain development
- One poor development choice can put other neighbors in increased danger
- There are still many developable lots that have high levels of impacts from hazards.
- There is an ISO, but most home owners don't understand what that is until after purchase.
- Code of the West used to be handed out with every building permit so that they understand the level of service that is and isn't provided to a rural mountain area. Education such as this is no longer consistently provided.
- There are physical characteristics of property that don't warrant development, such as no water availability, however, the land is still up for sale.
- People don't want to downzone or upzone.

Opportunities

- There is a lot of give and take and cooperation in the mountain communities with zoning and planning and the commission sees this and thinks that people do develop responsibly. This is more the rule than the exception.
- Need to talk to the fire districts in order to understand level people always want to be left alone.
- Clearly depict the risks of development in a given areas with a color coded map showing total risks by zones (low to high). For example, if you live in this area you may not see an ambulance for an hour, you have a high risk of flood, or erosion so a developer or property owner can make an informed decision based on a basic visual of this data.
- We are aware of some of the drivers that we need to explore in this effort, such as population growth and climate change
- One thing that the government is good at doing is providing data, statistics and information.
- Grocery stores in the mountains could improve transportation issues, however there are good and bad in decisions and unintended impacts needs to be considered.

5. Plan Audit Summary and Discussion

- See PowerPoint PDF for overview of findings from plan audit survey.

What were your biggest takeaways from the audit of the 1997 master plan?

- The overarching feeling of anti-growth throughout the plan
- The plan feels like we are trying to stop something from happening; would prefer to have something forward looking about where we would like to go in this update.
- It is unrealistic to develop a property that is one unit on 35 acres
- There is a set of criteria that should be considered when someone is putting together a development proposal
- One example is that on a cluster development they sold lots, taking it out of production, there are unintended consequence to cluster development in this way
- In 20 years I have seen maybe 3 subdivisions that have been developed, why create the expectation that they can create subdivisions when it isn't feasible?
- The tone and tenor seems to be restrictive and this time it needs to communicate that the county is a partner in active growth, because it is going to happen no matter what, rather than an adversary.
- People wanted more restrictive zoning and growth management, so this plan includes cluster growth
- The language feels so defensive, potentially because it was contentious.

6. Stakeholder Questions and Comments

- What was the reason for this grant?
 - A: DOLA and CDGB-DR grant via HUD to complete this work. It is to look at the resiliency of the communities from a land use perspective and also to incorporate the many smaller plans that have been done to date. A simultaneous effort is to look at community independence to be less reliant on government in the event of disasters and in general, building the social capital within communities.
- How many areas have an area plan?
 - A: Red Feather and Estes Valley; Estes Valley is not part of this plan since they have their own planning commission
- Did you have stakeholders involved in all of these plans? The watershed folks should be included.
 - A: They have been involved in each of the three foundation plans.
- One thing that sold the planning commissioners was being able to have small area plans come out of the process. Having smaller sub-area plans for land use will be more nuanced and refined to the needs of that area. This will be useful for the planning commission.
- The CDGB-DR grant imposes a strict date to complete the work.
- Those who are irrigating are impacted when something happens upstream, for example when there was a fire and there was black water.
- The term Community to me means Red Feather or Crystal Lakes and in my area there isn't an identifiable community, this poses a challenge to identify my area (i.e. Buckhorn or Masonville)

- We would like to work with Larimer Connects to better connect neighbors to create community, this may work in some areas and not others
- Larimer Connects understands that every area will have a different definition of community

7. Action items

- Recommend key stakeholders to interview. Stakeholder list can be found here. Please do not delete – only add.
https://docs.google.com/spreadsheets/d/15i9t8kVWVGfZdHY6RuL23vngRYPHhOoq8Mgek-i_SE/edit?usp=sharing
- Logan Simpson will add the commissioner meetings that the team attended to the website
- Logan Simpson will send the list of events to Shayla to align outreach with Larimer Connects
- Logan Simpson will write summary of the 3 foundation plans into the intro of the plan
- Logan Simpson will schedule additional one-on-one interviews with SC members

SC MEETING #2 MINUTES

Meeting:	Mountain Resilience Stakeholder Committee Meeting #2
Date:	April 20, 2017
Time:	5:30 – 8:00 PM
Attachments:	1. Foundation Draft <ul style="list-style-type: none">a. What is the Plan?b. Foundational Plansc. Community Profilesd. Existing Conditions Snapshots

ATTENDEES

Name	Role
Todd Blomstrom	Larimer County Public Works
Harold Braden	Buckhorn Resident
Jacob Castillo	Larimer County Economic Development
Jeremy Call	Logan Simpson, Co-Project Manager
Sean Dougherty	Larimer County Planning Commission and RFLPAC
Laura Emerson	Big Thompson Watershed Coalition
Mike Garner	Michael Baker, Co-Project Manager
Lori Hodges	Larimer County Emergency Management
Jeff Jensen	Larimer County Planning Commission
Evelyn King	Environmental Science and Advisory Board
Matt Lafferty	Principal Planner, Project Manager
Karin Madson	Larimer County Community Development
Geniphyr Ponce-Pore	Colorado State University – Office of Community and Economic Development
Karen Urdangaray	Pinewood Springs Resident
George Wallace	Agricultural Advisory Board

MEETING MINUTES

1. Background

1. We have completed the Foundation task: summarizing existing plans, data, and issues. The purpose of this meeting is to obtain your comments on the Foundation results.

2. Community Profiles Exercise

Community Profiles Breakout Groups: What land use and resiliency themes do you see coming from that data? What, if any, information do you feel is missing from the community profiles?

1. General Comments

- o Question if SC thought the age demographics would be similar in 20 years?
 - Info from 20 years ago may answer this question for us.

- Demographic trends are highly driven by child-related services and amenities. Families with school-aged children simply do not have the option to live in most of these mountain communities.
- SC members could see community opinions on expanding broadband both positive (will let residents be even more self-sufficient) and negative (will expedite growth).

2. Community Profiles: North

- Area 6: Red Feather Lakes / Glacier View / Crystal Lakes
 - Area is divided; half the people want more services and road improvements, and the other half want things to remain the same or just a little better.
 - Parcel lines are not accurate.
 - There is a fear that if roads are improved, they will not be able to ride ATVs.
 - No way to pay for their wants, and little public support for increasing taxes.
 - Biggest impediment is the unwillingness to pay for water and septic. The belief is that septic systems are failing, but there is no clear proof.
 - There are natural resource constraints, and the “complaints” that are voiced are based on physical realities.
 - Median home price seems too high.
 - Most residents do not want to see an increase in population.
 - Major subdivisions were completed before the County strengthened their PLUS planning tools, so it’s likely that pattern would not be seen in new developments.
 - Moved to the mountains for a reason. Make sure to capture the following reasons:
 - Perception of safety (low crime).
 - Solitude.
 - Affordable manufactured homes (in Glacier View).
 - Only area that has formal governance in the mountain areas.
- Area 7: North Fork / Livermore / CR 80C
 - Lots of large ranches, some are conserved.
 - The Roberts Ranch is 16,000 acres and is under conservation easement.
 - Could use voluntary means to conserve. Requires proactive outreach. Agricultural Board can help.
 - Checkerboard land ownership pattern is unique. There is no public access to public lands that are landlocked by private property.
 - Federal agencies should use more land swaps.
 - No paved roads. County Roads are well-maintained.
- Area 8: Laramie River Valley
 - Did not discuss

3. Community Profiles: Central

- Area 4: Masonville / Stove Prairie / Rist Canyon
 - SC did not agree that a major issue/challenge was the need for some form of bus service. It was felt that the top 2 were: #1 emergency services response times and #2 better internet.
- Area 5: Highway 14 / Poudre River Corridor / Pingree Park: Not discussed.

4. Community Profiles: South

- General Comments
 - Noted that many, if not all, of the issues presented are universal to the planning area as a whole, not isolated to the area being discussed.
- Area 1: US 36 / St. Vrain
 - Isolation applies more to Boulder County than Larimer County.
 - Road plowing is not good. In order for the County to maintain Pinewood Springs, they had to sell equipment, and now the roads are not plowed as well as before the County took over.
 - Services and access issues with one way in and one way out.
 - Broadband issues. Need a lace of good communication systems.
 - Commercial uses supporting the locals are limited.
 - Hikers, campers, and the like are unfamiliar with the area and local rules. This results in trespass issues and creates dangerous situations with campfires, fires, and the like.
 - Connectedness between communities has improved but still needs to be strengthened.
- Area 2: Carter Lake / Pole Hill
 - Less than 1% commercial in the area. Difficult for locals to get services and daily needs met without having to drive long distances.
 - Economic development is not happening.
 - Cell service is poor.
 - Lack of broadband creates issues for communication and emergency services.
 - Preservation of big agriculture is an issue. Agricultural properties and operation are resilient to most situations, but we should make an effort to preserve these uses for what they offer.
 - No community connection or sense of community.
 - Limited services and access with one way in and one way out.
- Area 3: US 34 / Big Thompson / Glen Haven / Storm Mountain
 - County should negotiate access for emergencies before emergencies happen.
 - Service and access issues. Highly dependent on State-managed roads.
 - Water, wastewater, and sewer are significant issues.
 - Outdoor recreation impacts the quality of life for residents and wildlife.

3. Existing Conditions Snapshots Exercise

Existing Conditions Snapshots Breakout Groups: How should the “big issues” be refined? What’s missing? What aspects of the Land Use Code exacerbate this issue?

1. General Comments

- All Big Issues are interconnected. How can we best address this fact in the Plan?

2. Economy and Housing

- Economy: Not discussed.
- Housing
 - General Comments
 - Let the landowners sell their densities down to the mountain plains.
 - Request home sales turnover rates.
 - Are we able to show the ‘consumption rate’ of land being developed?
 - Are ‘building rates’ over time able to be shown?
 - Concern was shared regarding working ranches in Areas 6, 7, & 8 and identifying steps the County can take to help minimize the loss of these.
 - SC felt the County needs to more closely look at incentivizing transfers of development rights (TDRs) and land banking.
 - Interest in graphing home prices to see pricing patterns to see if mean/median is skewed?
 - Big Issue #1
 - Wordsmithing to change big issue language: “The cost of obtaining water rights makes new housing subdivisions **of lots less than 35 acres** ~~and individual home construction~~ largely infeasible.”
 - a. Possibly add “all development costs” instead of “obtaining water rights” or in addition to.
 - Code of the West.
 - Big Issue #2
 - Wordsmithing to change big issue language: “The ~~high-cost~~ **availability** of fire and flood insurance strains residents and often results in homes being under-insured, affecting ability to recover and rebuild after disaster events.”
 - Mitigation: More companies may provide if systems were mandated.
 - a. Fire sprinkler and the like.
 - Big Issue #3
 - Quality of housing dictates price.
 - Issue may be heavily skewed in one direction.
 - Substandard living conditions leads to lower value of houses.

3. Community and Health & Social

- Community
 - General Comments
 - Fairness principle: True cost of our lifestyle choices should be carried by residents. Should pay your own way.
 - Learn from how we get to where we are.
 - Value the historic character and mountain lifestyle.
 - Government needs to get out of the way and let broadband and medical services come in.
 - Big Issue #2
 - Many residents fight against formal structure/governance.
 - Big Issue #3
 - Wordsmithing to change big issue language: "The ~~lack of~~ **barriers to** local governance and subarea planning in mountain communities **limit their ability to resolve** ~~are barriers to their ability to mitigate~~ local issues."
- Health & Social
 - General Comments
 - Reference percent of residents that are retired.
 - Reference percent of residents in encore careers.
 - Big Issue #1
 - Fire Districts should not be communication hubs except for emergency channels of communication.
 - Big Issue #2
 - Wordsmithing to change big issue language: "Basic services are essential to health, safety, education, and quality of life, but **there is a lack of** schools and health care facilities ~~are few and far between~~."

4. Watersheds & Natural Resources and Infrastructure

- Watersheds and Natural Resources
 - General Comments
 - Learn to listen to the land: Make better decisions by learning from the land.
 - Don't want to spend so much on recovering from disasters.
 - Big Issue #1
 - It is true that floodplain maps need regular updating as conditions change and data improves. It should be noted, however, that many of the damages caused by the 2013 floods were not due to poor mapping or regulations, but rather the uncertainty that the past wildfire events caused. It isn't possible to update flood maps based on potential wildfire events – too many variables/uncertainty. In the end, these are

'what if' events, that are not guaranteed to occur, although current studies/science points to an increase in the size and number of wildfire events. Need to view natural resources as a multi-generational constraint.

- Big Issue #3
 - Wordsmithing of big issue language to incorporate water availability and protection. This is not a universal issue.
 - Note ranches can impact water quality (nutrient runoff).
 - Important to be able to store water and have redundant infrastructure.
- Infrastructure
 - General Comments
 - Put tax money into infrastructure instead of broadband.
 - Will encouraging broadband result/require more cell towers?
 - Broadband will allow encore career retirees to live year round in mountains.
 - SC believed expectations for services in all of these mountain planning areas were similar. It was pointed out that Pinedale residents may have somewhat higher expectations for additional services.
 - SC felt that the County was mainly expected/responsible for providing emergency services to residents, such as adequate communication and access.
 - Big Issue #1
 - County has identified a needed annual budget of \$25 million for basic road improvements and maintenance. Currently the annual budget is only \$10 million.
 - a. SC questioned why this is the case from a County budgeting standpoint. Why are we talking about broadband when road funding is not meeting current needs?

5. Visioning Exercise

3 Breakout Groups (organized according to North, Central, and South mountains): What are the shared values in the mountain communities? Is there a shared direction that residents in these communities can rally behind?

1. General Comments

- Felt that all high-level visioning included all mountain areas and was not geographically unique.
- Big picture question to ask – Should we stop, or what should we do to stop, growth trends?

2. North

- Reducing the cycle of escalating disasters, then subsidizing uses that exacerbate disasters. Most people can agree on that as a fairness principle.
- Voluntary down zoning.

- Use of Transfer of Development Rights (TDR). Use TDR for increasing the ability for some commercial retail/medical uses. Take density from less developable areas.
- Recognition of historic resources and history of the area.
- Begin to really listen to the land and see what it can and cannot do. IN other words, be honest about natural resource constraints so that we spend less on recovery from disasters.
- Increased community communication/self-sufficiency/partnerships.
- Preservation of the rural/ranch character of the area.
- Landscapes that support wildlife.
- Assuring the lakes remain healthy and clean.
- Ability of rural residents to support themselves.
- Mitigation of hazards (especially wildfire).
- Broadband, better cell coverage, and jobs in the community.
- Water system (community).
- Zoning allowing businesses/restaurants.
- Road maintenance.
- Medical facilities.

3. Central

- Keep government out of personal property rights issues.
- Lower rural densities.
- Basic sustainable access.
- Base level of transportation and communication.
- Residents overall do understand their risk is higher and have agreed to live with that.
- Independence.
- Independent and rural property rights.
- Increase availability to keeping residential/commercial mix of uses.
- Encourage small businesses.
- Conservationism, not environmentalism.
- Implementation of continual floodplain mapping and enforcement.

4. South

- Remaining independent. Space equals independence, which equals privacy.
- Allowing room for wildlife to remain and remain wild.
- Not being Fort Collins, Loveland, or the urban areas.
- Open space.
- Safety from fire/flood.
- No barking dogs, loud motorcycles, or loud neighbors.

- Control growth (limit permits, raise prices), address global climate change issues, wildfire mitigation and floodplain issues.
- Want reliable services.
- Want transportation access that is maintained year-round.
- Would like relief from tourist “invasion.”
- Want communication and information from the County.
- Being able to stay in their homes into the older years and feeling safe.
- Along but together.
- Limited contact but community when needed.
- Educate newbies that it isn't the same as they're used to.
- Privacy and maintaining places of peace and quiet.
- Improved access and safety for vehicle travel.
- Water availability.
- Being able to see the stars at night.

6. Homework

1. Finish review and send comments by Friday, April 21st.
2. Next Steps
 - a. Visioning: Public Engagement – May-June
 - i. Will include 1 or 2 “big tent” events and 2-3 booth & board piggyback events.
 - b. BCC Meeting – May 10th
 - c. SC Meeting #3 – July 20th
 - d. Community Choices: Public Engagement – August

SC MEETING #3 MINUTES

Meeting:	Mountain Resilience Stakeholder Committee Meeting #3
Date:	July 20, 2017
Time:	5:30 – 8:00 PM

ATTENDEES

Name	Role
Gary Buffington	Larimer County Natural Resources
Jacob Castillo	Larimer County Economic Development
Sean Dougherty	Larimer County Planning Commission and RFLPAC
Laura Emerson	Big Thompson Watershed Coalition
Jeff Jensen	Larimer County Planning Commission
Evelyn King	Environmental Science and Advisory Board
John MacFarlane	Masonville Resident
Karin Madson	Larimer County Community Development
Geniphyr Ponce-Pore	Colorado State University – Office of Community and Economic Development
George Wallace	Agricultural Advisory Board
LARIMER COUNTY STAFF	
Terry Gilbert	Community Development Director
Matt Lafferty	Principal Planner, Project Manager
Michael Whitley	Planner II
CONSULTANT TEAM	
Mike Garner	Co-Project Manager
Miriam McGilvray	Assistant Project Manager

MEETING MINUTES

1. Background

As part of the Visioning phase, we have attended three community events, one Chamber of Commerce Legislative Affairs Committee, received online feedback from 66 mountain community residents, and conducted five TAC workshops. The purpose of this SC meeting was to review the refined policy and tool choices for each of the six frameworks.

1. Community or agency updates
 - a. The Ag Board is presenting initiatives to protect ag. Lands. Draft should be out by September.
 - b. Red Feather Lake PAC: dealing with signage and wayfinding challenges to get tourists to Main Street. Related to creating community and making the community more visible.
 - c. CSU has an Eco Tourism program that deals with sustainable economic development

2. Choices Exercise

Stakeholder Committee members split into three small groups to discuss the draft guiding principles, programs and tools. They were asked: How should the guiding principles and policies be further refined? What tools are missing?

After the small group discussion, each group presented back to the full group and discussion common ideas and issues that crossed sectors.

1. Community Framework

a. Themes

- Revised theme: “The planning and development review process and implementing rules should be fair, open, consistent and predictable, and meet the needs and interests of the community without infringing on the rights of individuals.”
 - In the first sentence, replace “implementing rules” with “and supporting regulations.”
 - Strike the word “fair.”
 - Second strike – “will be critical.” Just say “is.”
- Refined theme: “Urban land use shall ultimately be in cities and towns.”
 - Replace that theme with, “Land uses shall be consistent with infrastructure, where resources are adequate and where it fits with the character of the area.”
- Refined theme for GM-1 Larimer County shall plan for long-term growth and physical expansion based on environmental, land use, community design and infrastructure considerations.
 - The County can’t physically expand. Strike “physical expansion.”
 - Use the word “conservation” instead of the word “environmental.”
 - The word “environmental” has become pejorative.
 - Add the economy somehow.
 - Don’t plan for long-term growth. Plan for changes but not necessarily growth.
 - Plan to be adaptable for long term changes.
 - Plan for resiliency.

b. Guiding Principles

- LU4 In rural areas, allowed uses and residential densities shall be based on the current zoning of the property.
 - This principle is part of the “no upzoning” agreement when the previous Master Plan was adopted.
- LU6 Clustered development shall be designed to encourage a “village pattern” without urban level facilities and services.
 - Question: Is “urban level facilities and services” defined?
 - Answer: It’s in Section 8 of the Land Use Code.
 - In mountains the only alternatives for subdividing should be 35 acre development or the Rural Land Use process.

- GM-7 The County shall utilize zoning, new standards, and performance requirements for Adequate Public Facilities, Rural Conservation (cluster) Development, neighborhood compatibility, protection of environment, and mitigation of hazard risk to protect rural character in mountain communities.
 - Encourage more innovative processes other than zoning.
 - Change “new standards” to “Innovative standards.”
- LU-7 The Rural Land Use Process shall be encouraged and supported as an alternative to creation of 35-acre tracts.
 - Strike the word “encourage.”
 - Add, “Transferable Density Units (TDUs) and other innovative programs shall be encouraged.”
 - Transferable Density Units (TDUs) should be the mechanism we use to preserve the mountains.
 - Move the potential density down to the plains.
 - Protect resources and give people a value to their land.
 - TDUs can be a tool that allows the land to be an economic benefit without development.
 - If mountains are the attraction, why do we want to develop them?
 - Maybe allow greater density on the urban fringe.

2. Economy Framework

a. Themes

- Revised theme: “A prosperous economy is powered by innovation, connectivity, high-quality education, a business-friendly atmosphere, well-paying jobs, affordable housing, and convenient transportation networks that keep pace with growth.”
 - Single-family housing is not the gold standard. We should support innovation in housing.
 - The federal government definition of affordable housing is tied to area median income.
 - We should address equal access to housing opportunities.
 - The term affordable suggests the government has to be involved.
 - We need to make it so housing can be developed to keep pace with growth.
 - How about diverse housing options? (Multiple people agreed)
 - Allow flexibility and creativity
 - Use “attainable and diverse housing” instead of “affordable housing.”
 - We should be more inclusive than “high-quality education.” How about diverse education?
 - We don’t have the workforce to build houses.
 - General agreement – Change “high-quality education” to “high-quality education and training.”

- “The economy is diverse, vibrant, and sustainable with a trained, diverse workforce that fosters equitable access to the services, education needed to maintain capacity, flexibility and high quality of life.”
 - Change “sustainable” to “resilient.”
 - Add regulations that support diversity, innovation and quality jobs (diverse employment)
 - Don’t want to focus on one type of employment.
 - It seems like zoning doesn’t allow for the economic activity we need.
 - We need manufacturing activity but there is limited industrial land available.
 - Look at how does the Land Use Code discourage a diverse economy.
 - Do we really want to upzone property outside of Growth Management Areas?
 - We should explore impact based zoning that would allow wineries, etc.
 - We need to be specific where we think there are barriers in the Land Use Code.
 - We shouldn’t add regulations, we should remove regulations.
 - Add regulations that support diverse economic activity.
 - The nature of manufacturing has changed.
 - Manufacturing can be low impact.
 - Work with the current Master Plan and Land Use Code to make them more inclusive.
 - How about adding, “regulations that foster....” to the theme?
 - Where can you actually do manufacturing?
 - Add, “...and regulations to make it easier to make opportunities for economic diversity and diverse jobs” to the theme.
 - There’s currently a lot of focus on agriculture.
 - Modify the Land Use Code to create a framework to allow workforce goals and economic goals.
- “Sustainable infrastructure that allows for viability of small businesses and the provision of basic services to residents is critical to the mountain communities’ regional economic success.”
 - Change “sustainable” to “resilient.”
 - Resiliency involves redundancy and preparation.
- “The economic resiliency of mountain communities relies on high value, low impact job creation and retention to proactively prevent the decline of the area’s economic health.”
 - What does “high value” mean?
 - Instead of “high value” how about “sustaining wage?”
 - Low impact – Does that mean from home or that doesn’t impact neighbors?
 - Broadband service would allow people to work from their homes.
 - Do we want to drive people and jobs to the mountains?
 - We want to allow people to work from home.

- Add innovation. "Proactively encourage innovation and prevent the decline of the area's economic health."
- Delete "prevent decline." It should read, "...job creation and retention to proactively encourage innovation."
- After discussion there was a consensus to keep the language about preventing decline.

b. Guiding Principles

- GM-14 The role of Larimer County government in economic development is to support and facilitate other public and private economic development efforts in mountain communities that provide high value, low impact employment opportunities which are consistent with the adopted Economic Development Policy for the County.
 - Not everything we do is about creating jobs.
 - Wealth creation that enriches an area doesn't necessarily involve jobs.
 - People (residents or visitors) spending money in an area creates wealth.
 - Being able to work from home is a quality of life issue.
 - Lots of people live here because of the quality of life and not primarily because of jobs.
- E1. Continue to enhance the diversity of the economy while maintaining the larger employment bases such as the university and government.
 - E1 should read, "Encourage a diverse economy."
 - Remove the rest. We don't need to define it further than that.
- E2. Develop alternative career paths that build on different work and education experiences and the policy initiatives to support them. Change cultural perceptions around the idea that "good" jobs require a college education.
 - E2 is a loaded statement.
 - It's not our job to develop alternative career paths or change cultural perceptions.
 - Change the word "develop" to "support."
 - We should focus on a diversity of jobs rather than on a college education.
 - We should drop, "cultural perceptions."
 - A college education isn't all about jobs.
 - We need to include trades.
 - The focus for a long time as been about higher education and tech jobs.
- E3. Foster development of communities with a healthy jobs/housing balance and geographic work, life, and play opportunities for a variety of economic classes.
 - Change the word "variety" to "all."
- E4. Foster the consolidation of redundant and disparate service districts and groups to effectively address economic issues in the county.

- Question: Where did this come from? Answer: Fire districts. Many small fire districts don't have a lot of resources. It may be more efficient to consolidate some districts and share resources.
 - Add, "...share resources and take advantage of economies of scale."
 - Add, "increased effectiveness."
- E5. Promote local production and storage of energy to foster employment opportunity and address the risks associated with utility provision and grid failure in mountain communities.
 - Stop at, "...storage of energy" and delete the rest.
 - There's a concern about local impact.
 - What about the neighbors to energy production and storage facilities?
 - Remove E5 or put it in a different section, i.e., natural resources or infrastructure.
 - We should also look at local food production.
- E6 is fine as it is.

c. Policies, Programs and Tools

- Add area plans to tools.
- Under Programs add workforce development and training plans.
- If you aren't measuring anything how do you know how you are performing? Develop metrics.
- We need to be able to measure the resiliency of the economy and infrastructure.

3. Health and Social Framework

a. Themes

- Masonville and Glen Haven are similar communities: not necessarily a community with a lot of amenities, but it's still a place that wants to attract people/businesses. We don't consider them neighborhoods. They are communities.
- Roads are an issue, but don't need to have urban infrastructure in rural areas. Serviceable/functionable but do not need urban-level improvements (make drivers speed)
- Adequate infrastructure, compatible with rural activities: have to have good drainage to not wash out.
 - Change 2nd theme to: We encourage adequate infrastructure and connectivity, compatible with rural activities.
- Livermore community center, Forks, good association of people, events, etc.
- Last theme: focus on awareness of hazards, but people will always need help.
 - Merge and change last two themes to: The County will provide the mechanisms and channels through collaboration and education to ensure that County residents understand their risks, and communities and individuals can take responsibility for their own and collective preparedness.

- Tool: Mountain resilience fee: help from road authorities, rural fire departments. Prioritization that rated the ability to protect structures (weakness/strengths). This fee could be used for education and incentives to pay for some of the infrastructure/educational initiatives needed in the mountains.
 - RFPAC wouldn't support this; doesn't want the roads to be maintained at all by the County.
- Have the Code of the West available or have developers sign something that shows an understanding with what the issues/realities are in the mountains. Realtors need to be forthright. Plus right to farm (and ranch).
 - Terry has a standard letter to people that complain about farm smells etc.
- Move schools (theme 2) to theme 3 re: youth. Communities support and fight for their schools.
 - Change 3rd theme to: We place a priority on our youth and educational facilities where communities are supportive of schools in the mountain area.

b. Policy Direction

- Collaboration with school district to maintain viable rural schools where supported by the local community. (tool: streamlining, etc).
- The County will eventually need public transportation to move people into/out of the mountains.

4. Housing Framework

a. Themes

- Change 1st theme to: "The County shall support logical settlement patterns and location that reflect the existing open, rural character as well as the natural constraints and opportunities of mountain areas."
- Remove the second theme, or change to set up support of mixed/flexible housing options. Leave for subarea plans to flesh out.

b. Policy Direction

- Need to define what a "village pattern" is.
- Housing affordability could be addressed with campgrounds or labor housing
- Cost of living is prohibitive. If people can't afford a mountain lifestyle/home it's not up to the County to subsidize
- Tiny homes is a fad. Won't last. Allowed but have to fit building code.
- Allow a diversity of housing within clusters
- Design with Nature (flexibility)

5. Infrastructure Framework

a. General

- Don't fully understand clustered – do not think it is a useful tool for mountains, anti-village at first – but not after being educated on the subject
- 'adequate' is different for mountains – and also differs across the mountain communities

- By-passes/exemptions needed for most all policies – common sense, i.e. – if a medical provider wants to come to red feather, don't require them to pave x miles of road to do so
- Need better wording than 'new development', some instances were previously 'site plan' – county staff didn't like that – SC doesn't like the suggested reference to 'new development'
- To address wildfire risk, consider covenants disclaiming the county's responsibility and owner's knowledge of risk
- Mill levees (voted by a community) instead of forced mitigation/risk fees/taxes
- Will there be separate principles for the mountain resilience plan vs phase 2/flatlands?
- Consider exemption overlays for mountain areas that simply cannot abide by some of these regulations that are good ideas and implementable for 95% of the mountain areas, i.e. – some properties are barely able to get a single, barely accessible driveway in - secondary egress is not possible
- Incentives/de-centives supported by some – not by others, we'll need to identify specific ideas before presenting to the public, better than policy
- In favor of a slash-removal program, similar to Summit County or Jefferson County
- Many of these infrastructure comments cut across all sectors!
- Catch 22 – county isn't in utility market, how pushing for energy resilience – doesn't make sense as things currently stand
- Education is favored over regulation – 'some will always be stupid, but some simply need educated/information'
 - Use existing governmental 'touch points' to distribute
- Conservation easements simply don't work in the mountains – other options preferred, the only way it could potentially work is to offer other incentives to doing so (allowing more parcels to be split out, etc)
- Need to break themes and the rest out of sector-specific framework – instead include everything together and tag by sectors that are relevant – then it can be filtered as such
- i.e. - Watershed theme 1 relevant to infrastructure
- general theme of comments on everything for infrastructure relevant to watersheds & all others

b. Themes

- 'adequate public facilities and services' has a different meaning in the mountains...need to address/reword
- Multi-modal isn't a vision of mountain residents, but is for the rest of the county

c. Guiding Principles

- PF1: adequate doesn't work in mountains – not feasible
- Pf4: no water suppliers in some mountainous areas, standards are already dictated by state – why is county wasting efforts double-regulating?, do not even think about regulations relating to individual water storage and any increases over past rules/best practices

- Pf10 (*new principle that was peeled from the back half): shall be allowed, sometimes a resident pays for service extension – then other tie in to those services ‘beneath’ them and should be able to pay their ‘portion’
- Gm2: how measure the ‘straw that breaks the camel’s back’
- TR2: ‘adequate’, what is ‘new development’, in some locations new push for sufficient egress/access will never be possible – suggest a way for new development to add a covenant for those situations so that future owners are informed of risk and county is legally ‘covered’
- LU6: TA in favor of eliminating, SC doesn’t understand – but generally supportive of village idea is that’s what people want to do
- LU14: all for energy efficiency, but it isn’t the county’s role – no county policy needed – nor do they even have any stake in local energy markets, public education is all the county should provide – but there is support for this type of information
 - 2016 resiliency framework: developed by the ~94% that live in the plains, many not supported/applicable to mountain resident

d. Programs/Tools

- Re-continue issuing Code of west and other ‘facts for living in the mountains’ suggestion document when issuing building permits/other processes/realtors

6. Watersheds and Natural Resources Framework

a. General

- Downzoning ability needed – owners will self-regulate
- Need to utilize Stick and carrot for preserving open spaces
- Ridgeline development supported as a whole – exceptions need though
 - if structure can be integrated into the environment (i.e. – if 1’ over ridge, but not noticeable, ok)
 - If only place to build
 - Carrot/stick to allow exemption – maybe this is where fire mitigation, other policies can be leveraged?
- CSU has a resiliency program that may be leveraged for this project – Gennifer can connect
- Make sure risk reduction isn’t policy
 - No ‘no’ from the county, instead here are alternatives/education
- Incentives and funding partially supported, but need specifics
 - Full support for some type of slash collection program
- Consolidation of watershed groups & fire protection districts could work – but county can push for – only educate and help inform/support
- County should only foster/facilitate – don’t regulate!
- ‘green infrastructure’ is a confusing term – maybe ‘design with nature’ instead
 - SC felt this is another thing that is a good idea, but shouldn’t be regulated – inform/educate instead

b. Themes

- Not fully supportive of 'shall be conserved and protected'

c. Guiding principles

- Lu13: against county denying development, defensible space requires stick and carrot – and continual enforcement
 - Insurance industry already forcing mitigation (except for a single company) – govt. doesn't need to regulate
- Pf4: state already has rules, why county double dipping?
- Er5 – future owners – consider utilizing covenants for education (and county indemnification), i.e. wildfire risk
- Lots of redundancies across er5, 6, 7
- ER7/W1: Design with nature – not a policy, though a great topic to promote/educate
- W3/4 : w4 perfect example of w3 coordination that is needed

d. Programs

- Road improvement districts – not fully supported/understood
- Grazing/mgmt. on private lands – no county involvement but a good idea/best practice to share
- Mill levee a better option rather than a resiliency/fire mitigation fee
- What is county wide fire code going to add that isn't already in use
- Additional standards/criteria
 - Education instead of standards/criteria
 - No subdivision design
 - Need to filter down to what's currently not being utilized
 - Emergency water supply – don't mandate – don't change
 - Code compliance is the biggest issue – codes on books not currently regulated unless reported

7. General Comments/ Big Group Discussion

- Adaptability was a common theme. Don't want to lock ourselves out of options, but don't want to guide people down a less desirable path. Enough clarity, but not restrictive.
- Adequate public facilities regulations weren't implemented the way they should've. Resulted in artificial growth boundary (development without services just outside of urban areas).
- The pendulum is swinging back.
- Full range of trade, skills (include training). Homebased businesses, utilize the resources that they have (not need for more infrastructure).

3. Community Choices Events

The Stakeholder Committee members were asked to provide direction on where, when and how the next set of public events should be conducted. The consensus was to have two open house events in August.

- **Locations:** Glacier View and Estes Park
- **Day of the week:** Tuesday or Thursday
- **Time:** 4:00-7:00 PM
- **Format:** Open house with stations/information on each of the frameworks. Two or three presentations to provide background and orient the participants (4:30, 5:30, and 6:30)
- **Notification:** provide business cards to SC members to hand out (with website, and general project info) – “give to 5 of your friends”

4. Homework

1. SC members will be able to provide additional feedback on themes, guiding principles and tools online.
2. Next Steps
 - a. Community Choices Events – August
 - b. BCC/PC Joint Meeting – August 9th
 - c. TAC Meeting #4 – TBD (October)
 - d. SC Meeting #4 – October 19th

SC MEETING #4 SUMMARY

Meeting:	Mountain Resilience Stakeholder Committee Meeting #4
Date:	October 19 2017
Time:	5:30 – 8:00 PM

ATTENDEES

Name	Role
Sean Dougherty	Larimer County Planning Commission and RFLPAC
Carole Garvey	Red Feather Lakes Resident
Gary Gerrard	Larimer County Planning Commission
Lori Hodges	Larimer County Emergency Management
Jeff Jensen	Larimer County Planning Commission
Evelyn King	Environmental Science and Advisory Board
John MacFarlane	Masonville Resident
Karen Urdangaray	Pinewood Springs Resident
Nancy Wallace	Larimer County Planning Commission
LARIMER COUNTY STAFF	
Matt Lafferty	Principal Planner, Project Manager
Todd Blomstrom	Larimer County Public Works
Shayle Nelson	Larimer Connects
Drew Davis	Broadband Program Manager
CONSULTANT TEAM	
Jeremy Call	Co-Project Manager
Mike Garner	Co-Project Manager
Miriam McGilvray	Assistant Project Manager

MEETING MINUTES

1. Background

1. Project Accomplishments To-Date

- Community Choices Events and Feedback: There was a good discussion about TDRs.
 - Perception that TDRs are not always a good tool, but the County needs to build a better toolbox and not every tool works for every area.
 - What made Fossil Creek such a success? Didn't manipulate the market. There were higher costs for areas with environmental value (wetlands, eagle's nest etc)
 - Should call it Transfer of Density Units (not Transfer of Development Rights). Some many interpret it as a "taking of rights."
- Boards and Commissions Summit.
 - Consider 2-night session to allow more time to educate participants. More context and pre-education is needed to be successful, if repeated.
 - Good idea for next year. Could also consider doing a summit during the Visioning phase to book-end the process.

- Include Glossary with key terms and concepts. Define the difference between development, building and project.

2. Community or Agency Updates

- Lori will attend a state legislature meeting to get resiliency recognized in state statute. Jonathan Singer will sponsor a bill.
- Boulder County (BoCo Strong) is doing metrics, too, and looking to share at November workshop
- Larimer County Public Works department is coming together to start the Asset Management Program, based on recent data and collaboration from many different departments.
- County has adopted many new master plans this year
- The Foundation doc (chapter 1 of the Mountain Resilience Plan) was key to moving the broadband program forward. The grant will connect back to the Mountain Resilience Plan and use the eight mountain study areas.

2. Chapter 3: Recommendations + Discussion

1. Guiding Principles, Policies, and Essential Questions

Stakeholder Committee members split into two groups to discuss the draft guiding principles, policies and essential questions. They were asked: Do these make the mountain communities more resilient? How could they be further refined?

Community

- Essential Question #3: Reference HMP or emergency management plans (not assumed under “existing master plans”).
- Essential Question #4: Include lifelines or redundancies (i.e. “How does the project encourage a “village pattern” and/or lifelines to allow a community to serve its daily needs without requiring urban levels of facilities and services?”)
- Define: Lifeline Services (basic utilities, communication systems, transportation systems)

Economy

- Economy 1: Remove “alternative”
- Economy 2, policy 3: Broaden utilities to include redundancies in other lifelines (i.e. roads and more than one access)
- Rural-level Business Retention is important countywide. Should identify good areas for commercial/businesses. Infrastructure is biggest barrier to support those areas (water, sewer). Having places for small business is crucial.
 - Ensure language is clear that this means low-key, from home, remote work that does not require large development, but still contributes to the local economy
- Define: Basic Services

Housing

- Change “affordable” to “attainable” throughout.

- Re-word Housing 3, policies 1 and 2. Should be descriptive actions (i.e. "Create and continually maintain defensible space around structures and otherwise mitigate potential hazards to life and property when building in wildfire hazard-prone areas.")
- Essential Question #3: add "hazard" (read: "reduce hazard risk")
- Define: Attainable/Affordable

Health & Social

- (Not enough time to discuss at meeting)

Infrastructure

- Infrastructure 1, policy 1: "New development will provide adequate public facilities and infrastructure."
- Infrastructure 1, policy 3: remove "potentially"
- Infrastructure 1, policy 4: upgrade stormwater facilities where necessary. Problematic because there is no money for retrofits. Split into two policies:
 - Upgrade stormwater facilities where necessary for existing developments and provide stormwater management services within highly developed areas.
 - Encourage stormwater basin designs that meet multi-purpose goals such as providing habitat or a public amenity.
- Infrastructure 1, policy 5, 6, 7: Are these redundant? Pull under policy #8, as sub-actions.
- Infrastructure 2: replace "maintains" with "encourage" (i.e. encourage equity and fairness to the extent possible.)
- Infrastructure 2, policy 4: Every development establishes public improvement district is a big idea. Should the County require this or just strongly encourage?
- Essential Question #1 and 2: Add "How" to beginning of sentence. Replace "current" with "existing."
- Essential Question #3: Replace "How does" with "should" (i.e. "Should the project propose sustainable and low-impact infrastructure... if so, how?")

Watersheds & Natural Resources

- Watersheds 1, policy 1: Does "discourage development" mean putting on sanctions?
- Watersheds 1, policy 4: "is either adjacent to or coincides with an area..." Issue with undefined "non-profits" as they are special interest groups. Need to define or remove.
- Watersheds 4, policy 2: Replace "Design" with "Encourage" (i.e. Encourage new development and structures in wildfire hazard areas..."
- Watersheds 4, policy 3: Change to "Collaborate with multi-jurisdictional and private forest management..."
- Essential Questions #2: Change to "How does the project mitigate risks and reduce economic costs of natural hazard events to increase resiliency?"
- Essential Questions #3: Replace "adhere to" with "comply with." Include Master Plans in list (i.e. How does the project comply with County policy, Code, Master Plans, and initiatives in relation to hazard risk reductions?")

2. Metrics and Monitoring

As a large group discussion, the Stakeholder Committee discussed the metrics and monitoring section of the draft chapter. They were asked: Are these metrics the best measure of resiliency in the mountains? Could the County easily and consistently track different metrics?

- Community Metric 2 (Number of Community Subarea Plans): the goal should be at least one subarea plan for every community. There's a limit to how many subarea plans there can be.
- Economy Metric 1 (Unemployment Rate): 4% unemployment rate isn't a growing economy. Need to follow-up with Jacob Castillo and the Chamber to identify a healthy unemployment rate goal. Could it be a stable OR decreasing rate? Unemployment rate can't decrease forever. "State as 1% lower than Colorado's variable rate" or "1% lower than the national average." Then add Colorado (or national) 2015 rate at the bottom of the table.
- Economy Metric 2 (Median Household Income): Household income should be spread across planning area, no necessarily increase.
- Health Metric 1 (Number of Available Health Services): Desired trend should be based on population served by health services. Private sector will handle the provision of health services when feasible, but if not, the County needs to help. Infrastructure is a barrier.
- Health Metric 2 (Poverty Rate): Poverty Rate cuts across different frameworks, so consider restructuring how the metrics are presented (i.e. like strategies). There should be a goal for this metric, not just a trend. Is there a poverty rate that we are striving for? State as "1% lower than Colorado's variable rate."
- Housing Metric 2 (FEMA Community Rating System Class): Becoming an active member with the FEMA Community Rating System may not be sustainable for the County because of size. Housing is a heavy lift, but affordable insurance is key. Follow up with Eric Tracy.
- Infrastructure Metric 2 (Number of Capital Improvement Plan Resiliency Projects Completed): Increase number of completed CIP projects to the extent that we have projects. Four measurement components for infrastructure: 1) condition, 2) risk, 3) functionality, and 4) capacity.
- Infrastructure Metric 3 (Percentage of Private Lands with Broadband Coverage): Desired trend is not measurable. Tie to FCC definition of broadband. Drew to advise Baseline data.
- Watersheds Metric 2 (Number of Structures Removed from the Regulatory Floodplain): Change to Number of Structures in the Regulatory Floodplain (or Floodway). Point out that there are funding sources available to help owners who wish to relocate out of harm's way. Apparently as stated currently, some people read it as if that the government is going to come tomorrow and start removing houses.
- Need metric for wildfire or other hazard areas. Change to hazard-centric, not flood-centric.
 - Target homes or future buildings in WUI?
 - Measure homes off ridgelines
 - Cost fire mitigation

3. Next Steps and Events

1. Release of the Public Draft: mid-October
2. Reaching for Resilience: Public Draft Events
 - October 25: Pinewood Springs Community Church @ 6:00pm
 - October 26: Livermore Community Hall @ 6:00pm
3. BCC/PC Joint Study Session – November 8
4. BCC/PC Joint Public Hearing for Recommendation and Acceptance of the Plan – December 13

4. Homework

1. Send any additional comments or revisions to Miriam (mmcgilvray@logansimpson.com)

TAC MEETING #1 SUMMARY

Meeting:	Mountain Resilience Technical Advisory Committee Meeting #4
Date:	February 14, 2017

ATTENDEES

Name	Role
Terry Gilbert	Community Development Director
Matt Lafferty	Principal Planner, Project Manager
Gordon Gilstrap	Little Thompson Watershed Restoration Coalition
Annemarie Heinrich	Larimer County Department of Health and Environment
Savanah Benedict-Welch	Larimer County Community Development
Shayna Jones	Big Thompson Watershed Coalition
Jennifer Kovecses	Coalition for the Poudre River Watershed
Suzette Mallette	Larimer County Engineering
Shayle Nelson	Larimer Connects
Mark Peterson	Larimer County Engineering
Lea Schneider	Larimer County Department of Health and Environment
Tony Simons	Larimer County Sherriff
Zac Wiebe	Larimer County Natural Resources
CONSULTANT TEAM	
Jeremy Call	Co-Project Manager
Bruce Meighen	Principal
Terra Mascarenas	Environmental Planner
Andre Duarte	CDR Maguire
Joe Gross	CDR Maguire

MEETING MINUTES

1. Expectations

During introductions, each TAC members shared their expectations for the project:

- Address framework of adequate public facilities.
- Incorporate recent planning efforts including the Open Lands Master Plan.
- Integrate with the Master Transportation Plan, due to be completed by June.
- Use a holistic view of the County.
- Utilize Land Uses that promote activity and health.
- Address health including air and water quality.
- Address social issues with the high mountain communities.
- New development plans consider the financial, environmental, health and safety effects on the developed property, adjacent properties, downstream properties, and the associated infrastructure.
- Integrate relevant information associated with the Poudre River.
- Cohesion between all groups.

- Incorporate best planning for water quality, rivers, and wildfire resistance.
- Create one plan that is seamless.
- Ensure the relevance of the Plan.
- A process that incorporates priorities of the watershed coalitions and other partners.
- Leverage the chance to create the framework for the second stage through the Mountain Resilience Plan.
- Preserving the identities of rural communities and encouraging their participation in the Plan process.

2. Background

- See Powerpoint PDF: What is this Plan? What isn't this Plan?, Overall Process & Schedule
- Roles & Responsibilities of the TAC: to review/approve existing conditions data, findings, and goals and policies prior to distribution to the public. Improve public outreach approach. Represent your organization/department and represent the plan to your organization/department.

3. Exercise Summary

The following table illustrates the goals, issues, and opportunities identified by TAC members. Three questions spurred the conversation about these three topics:

- What are your goals for the Mountain Resilience Plan? For example, complete this sentence: "This Plan will be a success if _____."
- What are your biggest issues for the Plan and Land Use Code?
- What are your biggest opportunities for the Plan and Land Use Code?

Goals	Issues	Opportunities
This Plan will be a success if... <ul style="list-style-type: none"> • The process remains transparent and community concerns are truly acknowledged throughout the planning process. • Communities understand and support it. • A diverse set of stakeholders have their ideas captured. • The communities feel empowered and optimistic in their progression as a result of this Plan. • It promotes resilience from wildfire and floods • Community input is incorporated, indicators/metrics are identified to measure success, public health and equity are considered in 	What are your biggest issues for the Plan and Land Use Code? <ul style="list-style-type: none"> • Lack of understanding. • Cause and effect in mountain settings. • Lack of imagination as to what can go wrong. • Wildfire mitigation and watershed protection. • Including climate change into planning principles • Population growth in the Wildland Urban Interface. • Size of document to be able to find what you need. • Alternative evacuation routes for one-way-in one-way-out communities. • Funding after disaster grants. • Political connotation with green infrastructure. • Funding for basic 	What are your biggest opportunities for the Plan and Land Use Code? <ul style="list-style-type: none"> • Incorporating other disciplines. • Open Lands. • Transportation. • Air Quality • Water Quality • Integrating all plans. • A chance to integrate policies and plans already in existence. • It becomes a living plan that is both referenced and updated. • Creating partnerships that can create a more sustainable vision for the County. • Positive citizen opinion • Give people both a voice and a choice in creating community and charting the

- | | | |
|--|---|---|
| <p>policy, and the Plan holds weight on future policies/development decisions.</p> <ul style="list-style-type: none"> • We can create a clear vision for the mountain and urban areas that can be supported by all County stakeholders. • The Plan promotes strong communication and collaboration among different County departments. • It addresses some of the unified needs/wants of various “communities” and guides development/implementation. • It can incorporate other plans and be able to be easily and routinely updated over time, so it stays relevant. • The Plan can provide a more defined path for Land Use and can support updates to the Land Use Code • It is useful, living, understandable, and allows for ease of implementation. | <p>infrastructure.</p> <ul style="list-style-type: none"> • Such a diverse area with differing values – if not framed properly they may seem at odds with each other. • Disparate goals. • Community lack of understanding of how the Plan will impact them, or do not agree with the approach of guiding ideas that come out of it. • Getting citizens to engage in the process. • Challenges with bringing all interests to the table. | <p>future.</p> <ul style="list-style-type: none"> • Widespread and effective outreach to community leaders. • If some communities are lacking leadership, a way to potentially build this may be through the stakeholder process. • Funding sources for wildfire mitigation. • Communities and properties have attributes in place to handle disaster and inconvenient situations. • Promote social, environmental, and economic sustainability. • More innovation in thinking about ways to address key mountain challenges. • Incorporating more watershed and ecosystem principles and thinking. • Larimer Connects as a program to bridge the gap for lack of community resilience knowledge. |
|--|---|---|

The following is a summary of feedback received from TAC members in discussing of the exercise:

What determines success?

- All plans working together.
- Taking the stigma out of comprehensive and proactive planning.
- Getting involvement from the mountain communities.
- Cohesion between mountain and urban area planning.
- The ability for the Plan to serve as a communication tool.

Goals

- Ability for communities to support this plan by respecting people’s values and creating measures of resiliency.
- Creating a plan structure that is relevant and can be used over time, has the ability to be updated more frequently, and identifies a more defined path for the Land Use Code.
- A Plan that is easily implemented, understandable, and useful.
- A Plan that is indicator-based and can identify whether the County is going in the right/wrong direction over time.
- Promoting resiliency for wildfires, floods, and social factors.
- Helping people to understand why this Plan is necessary and how they are affected.

Issues

- Mountain communities and mountain property owners are more nuanced than simply wanting to be isolated. Communities don't shy away from good ideas and want to better their community, without necessarily zoning their areas.
- Lack of imagination in the communities exists in regards to what can go wrong.
- Need funding for basic infrastructure.
- Size of the document cannot be too large, and must be easily navigable to find what you need.
- Resources are limited; the question of how do you support growing communities?
- Do not keep the plan too high level, too mother earth and apple pie. Be specific and tangible where possible.
- Not allowing upzoning (i.e. a property is zoned agriculture and you want to develop a commercial use. An example is the Noosa Yogurt Manufacturing).

Opportunities

- Utilizing effective community leaders and champions.
- Larimer Connects.
- Giving people a voice and a choice.
- Involve positive citizens instead of just negative.
- Plan is working well it is just getting stale.
- Need to be innovative.
- Allow people to become more resilient in their communities.
- Integrate plans and policies that are already in existence.

4. Plan Audit Summary and Discussion

- See Powerpoint PDF. The audit questionnaire will be available online until Wednesday, Feb 22. A full report of the results is available upon request.

5. Action items

- Recommend key stakeholders to interview. Stakeholder list can be found here. Please do not delete – only add.
https://docs.google.com/spreadsheets/d/15i9t8kWWVGFzdHY6RuL23vnqRYPHhOoq8Mgek-i_SE/edit?usp=sharing
- Matt / Logan Simpson will schedule the next TAC meeting in April via Doodle Poll
- If you have not completed the 1997 Master Plan Audit please take it here by Wednesday, Feb 22: <http://www.surveymoz.com/s3/3240389/Larimer-County-Resiliency-Plan-Plan-Audit>
- A second Audit of other Relevant Plans will be distributed by end of February. Complete it within 2 weeks.

TAC MEETING #2 MINUTES

Meeting:	Mountain Resilience Technical Advisory Committee Meeting #2
Date:	April 12, 2017
Time:	11:00 AM – 12:30 PM
Attachments:	<ol style="list-style-type: none"> 1. Foundation Draft <ol style="list-style-type: none"> a. What is the Plan? b. Foundational Plans c. Community Profiles d. Existing Conditions Snapshots

ATTENDEES

Name	Role
TECHNICAL ADVISORY COMMITTEE	
Terry Gilbert	Community Development Director
Matt Lafferty	Principal Planner, Project Manager
Gordon Gilstrap	Little Thompson Watershed Restoration Coalition
Annemarie Heinrich	Larimer County Department of Health and Environment
Shayna Jones	Big Thompson Watershed Coalition
Jennifer Kovecses	Coalition for the Poudre River Watershed
Suzette Mallette	Larimer County Engineering
Shayle Nelson	Larimer Connects
Mark Peterson	Larimer County Engineering
Lea Schneider	Larimer County Department of Health and Environment
Tony Simons	Larimer County Sherriff
Zac Wiebe	Larimer County Natural Resources
Drew Davis	Larimer County Community Development Department
Savanah Benedick-Welch	Larimer County Community Development Department
Michelle Bird	Larimer County Public Affairs
CONSULTANT TEAM	
Jeremy Call	Co-Project Manager
Cayla Cothron	Planner
Joe Gross	Facilitation

MEETING MINUTES

1. Introduction

1. Department Updates

- Master Transportation Plan is in the draft plan phase.
 - 5/10 – BOCC will hear draft plan and review
 - 7/19 – Goal for plan approval
 - Challenge: Trying to figure out a simple way to integrate detailed minutiae into other plans such as the comp plan.
 - Identified private road maintenance as a funding necessity
- Larimer Connects
 - Implementing community hubs
 - Working on secondary egress and community plans for emergency evacuation situations
- Broadband Feasibility and Economic Viability Study
 - About 6 months out for substantial progress
- Health Department
 - Can assist in providing technical assistance on policy language, data needs, etc.
- Parks Master Plan
 - Impact on Carter Lake communities

2. Community Profiles

Community Profiles Breakout Groups: What land use and resiliency themes do you see coming from that data? What, if any, information do you feel is missing from the community profiles?

1. Community Profiles: North

- Area 6: Red Feather Lakes / Glacier View / Crystal Lakes
 - Secondary egress routes
 - Surrounded by U.S. Forest Service which limits road building
 - County and private roads are not maintained in winter
 - Some secondary egress could lend to more hazardous situations
 - Congested during emergencies
 - Update development potential before SC Meeting #2
 - Proportion of part time versus year round residency
 - Impacts of year round living.
 - Well drawdowns
 - Septic and vault systems

- Solid waste creation
- Older population means turnover in volunteer fire departments
 - Most of fire department volunteers are retired
 - High leadership turnover, though still the same age
- Emergency services are extremely limited
 - Common to all mountain communities except Estes Park, but exasperated because of tourism and population in RFL area
 - Limited in capacity and equipment
 - Boards are not integrated (no cooperation between RFL and CL). There needs to be an agreement to work together.
- Emergency services could be further strained by additional residential and commercial growth
- Adequate public facilities standards do not apply to RLUPs. May need to reevaluate APFs For RLUPs
- Area 7: North Fork / Livermore / CR 80C
 - Map legend: Define 'other'
 - Topography limits access opportunities
 - Referral process used by Community Development does not need to change
 - Consider TDUs rather than restrict development
 - More supportive systems for mitigation for fire in tandem with development approval
- Area 8: Laramie River Valley
 - Unique population
 - White supremacy, anti-government
 - Very different demographics than CR 74 corridor: Generational owners, people more self-sufficient
 - Broken ownership is very difficult to manage
 - Mill Creek and Sand Creek are ranching and 35-acre oriented
 - Laramie River Valley is recreation oriented

2. Community Profiles: Central

- Area 4: Masonville / Stove Prairie / Rist Canyon
 - Along the south shore of Horsetooth Reservoir, there is a concentration of commercial (Spring Canyon area – Sanitation district with some developments linked and others still on antiquated septic systems).
 - Lots of storage and industrial uses
 - There is a parcel with residential zoning that is surrounded by commercial in this area – Presents an opportunity to improve zoning for what is realistic/feasible.
 - Old homes along reservoir with private roads

- Runoff is terrible along these private roads, there is no PID to manage them and the County has no jurisdiction
- Bicycle recreation is popular in this area
 - Love/hate relationships
 - Popular along dams and in Rist Canyon
 - Roads inhibited by recreational bike/running races
 - Striking a balance
 - Important to understand demographics in the area for methods of communication i.e. internet, flyers, etc.
- Bellvue and Masonville present opportunities with existing commercial uses to expand rather than starting new commercial nodes elsewhere
 - Bellvue: Might have done a plan?
 - Moose manufacturing and distribution plant located in this area.
 - Masonville: Existing commercial uses could be expanded upon here.
- Area 5: Highway 14 / Poudre River Corridor / Pingree Park
 - Mishawaka Shuttle: Successful because of safety concerns due to lack of ped/bike infrastructure
 - Issues in the area include motorcycle racing, lack of bike infrastructure (because bikes are inhibiting cars on the roads)
 - General store in Kinikinik (or Glen Echo near Rustic)
 - Opportunity to expand upon areas of existing commercial uses/needs
 - Zoning can make access to services feasible, versus stunting it
 - Home occupations are also hindered by considerations of water provision, stormwater limitations, etc.
 - Construction water quality is a big deal for this area, and the mountain communities as a whole
 - Ted's Place: Opportunity to expand services and commercial amenities
 - Add place names to Community Profile maps to help orient reader

3. Community Profiles: South

- General Comments
 - Utilize neighborhood Pods GIS layer that exists on Larimer's website
 - Annamarie Heinrich mentioned a GIS layer that will possibly be able to lay on top of the Zoned Use layer to provide a more "Actual Use" layer. Followed up with her for that datum and it has been provided.
 - A common theme is that all the communities lack public trust in their local government
 - The term "Neighborhoods" needs to be included with towns and communities in these profiles to be inclusive
 - Noticed the trend of an aging population

- The communities like their recreation activities, but want to keep them for themselves. Have the mindset of “I live out here for a reason, now everyone else get out and leave me alone.”
- Area 1: US 36 / St. Vrain
 - The percentage of Ag land is misrepresented as much of that land is zoned Ag but isn't actually used for Ag.
 - The statement about the communities in this area feeling no attachment to Larimer County rang true to the group. Many of these residents feel more connected to Boulder County and often wind up going to Lyons, Boulder or Longmont to get resources and not in Larimer County.
- Area 2: Carter Lake / Pole Hill
 - Distinctly different than others, not truly a mountain community and more a rural suburb of Loveland
 - The only region without “village” type of a community feel, like Red Feather Lakes or Glen Haven. It is more spaced out ranch homes on large parcels in Ag setting rather than a residential or neighborhood type.
 - Not as remote as other regions
 - No services in the area other than the marina. Utilizes nearby Loveland for all resources such as gas stations, grocery, post office, etc.
 - Infrastructure concern for increase of traffic with all the reservoir activities, especially with the newer facilities being built.
 - Though it has a large recreational aspect with all the reservoirs, the residents are apprehensive about the extra visitors.
- Area 3: US 34 / Big Thompson / Glen Haven / Storm Mountain
 - The entire regional profile is an extension of Glen Haven and all the other communities and neighborhoods in the region are nothing like Glen Haven.
 - Other than Glen Haven, there is not a lot of connection between neighborhoods.
 - There is a conflict between the recreation aspect of the communities and the amount of people it brings to the area.
 - It does have the lowest household income. What can be done to help these people that in many cases cannot help themselves?
 - Consider changing the boundary. The area to the east (East of CR 29) does not reflect the same characteristics as the rest of the region, possibly grouping in data that may be skewed. That area is more reflective of Loveland than a mountainous community.

3. Existing Conditions Snapshots

Existing Conditions Snapshots Breakout Groups: How should the “big issues” be refined? What’s missing? What aspects of the Land Use Code exacerbate this issue?

1. Economy and Housing

- Economy

- Big Issue #1
 - Creating more demand than we have infrastructure to support i.e. water, solid waste disposal, transportation infrastructure, etc.
 - No recreation-based taxes, such as a tourism tax, or free structures creating revenue streams.
 - Have to take action to almost deter rapid increases in tourism.
 - Visitation must be managed.
 - a. Three competing groups: Lodging/commercial establishments vs. residents vs. realtors.
- Big Issue #2
 - Land Use Code and regulations need to be planning for broadband infrastructure.
 - a. Should be a development requirement.
 - i. Dig once policy: Use as a requirement for conduit, and a tool to upgrade existing developments.
 - Need to be friendlier in the Code to micro and pico sites with broadband infrastructure.
 - a. Typically provided in the ROW
 - b. Pretty much prohibited currently
 - c. Adapt the Code to support state law changes toward this issue
- Big Issue #3
 - Use accessory rural home occupation criteria from the Land Use Code rather than those criteria for the GMAs.
 - a. Criteria are specific on allowances
 - b. Challenges presented by these criteria:
 - i. Ag-based use allowances are strict
 - 1. No farming on less than 3 acres
 - 2. Opportunity to amend the Code to allow urban agriculture on less than 3 acres.
 - ii. Process to allow doesn't address types of uses
 - iii. Opportunity to refine what is/is not allowed
- Housing
 - Commuting is becoming typical from RFL to Fort Collins for work.
 - Big Issue #1
 - Non-well based system costs are high of treatment, distributing, operation of the system, etc.
 - Many mountain communities can only access surface water with no PID to pay for it.

- RFL has “electric cabins” which are using cisterns/vaults and trucking in water and only have electricity.
- In some areas, density doesn’t permit the drilling of a well.
- Big Issue #2
 - Has been an issue for 30 years
 - People refuse to do mitigation
 - a. Could make it a regulatory requirement that would decrease risk for insurance companies and increase coverage.
 - b. Metal roofs could be required to decrease fire risk.
 - c. Fire districts contribute heavily to control risk where they are present.
 - i. Western slope uses special districts with fees to manage mitigation activities.
 - 1. Glacier View and Crystal Lakes may already be doing this.

2. Community and Health & Social

- Community
 - Big Issue #3
 - Great plan → No way to service plan → Tend to react to failures.
 - How should “big issues” be refined?
 - Mountain area is a regional resource that local entities are not attending to.
 - Allowing mountains to grow at a similar rate as the Front Range will cause us to lose this resource.
 - What’s missing?
 - So difficult to create “place” i.e. RFL wanting more resources but not wanting to become Estes Park.
 - a. Distinctive places are priceless. Compare Breckenridge, Crested Butte, Telluride, Evergreen, and Blackhawk who have lost their place and become “burbs” to Denver.
 - Issue of aging population interweaving into all sectors
 - a. Aging needs and housing – **Annemarie can send the link.**
 - b. Aging in place – Vulnerable population at higher risk, presenting unique challenges.
 - c. Broadband enables aging in place and reduces the “friction of distance” that previously constrained population distribution.
 - Issue of community social nuances/dynamics that cause hurdles to progress.
- Health & Social
 - Big Issue #1

- Larimer Connects hubs should be separate from Fire Districts because during emergencies the visiting public can prevent the volunteers from their emergency responsibilities.
- How should the “big issues” be refined?
 - Do we want to encourage “aging in place” in these rural/vulnerable locations?
 - Fire departments are a poor location for social “hangouts.”
- What’s missing?
 - Can we encourage “traveling” services or services through technology?

3. Watersheds & Natural Resources and Infrastructure

- Watersheds and Natural Resources
 - Big Issue #1
 - Define what a “traditional approach” actually is.
 - Collateral damage outside the floodplain.
 - Utilize current Code (adjust floodplain).
 - State 100’ study.
 - Big Issue #2
 - Concerns over the age of the source saying it is the ‘second most hazardous county.’
 - a. To read “Larimer County is one of the most hazardous counties in Colorado for wildfire, and regulatory tools to protect the public have not kept pace with the increased risk.”
 - Certain materials, defensible space, etc.
 - Some recent regulations adopted.
 - What is in other codes that are not in our code?
 - Assumption that threats grow exponentially.
 - Big Issue #3
 - Rephrase to say “Water quality that mountain and Front Range communities depend on is impacted by aging infrastructure.
 - Tie water quality stringent (runoff) into infrastructure snapshot.
- Infrastructure
 - Did not fully get to evaluating this Snapshot, therefore no changes were provided at the meeting.

4. Visioning and Next Steps

1. Events Feedback

- Don’t utilize the Fire Board meeting to glean information from the public, but can reach out to them for help advertising public workshops/events.
- Glacier View Firewise event – June 10th.

- Use Next Door app to reach out to the communities and disseminate information.
 - Rist Canyon Fire Festival – Labor Day weekend.
2. Next Steps
- TAC feedback/review by next Friday – April 21st.

WATERSHEDS & NATURAL RESOURCES

WORKSHOP

Meeting:	Watersheds & Natural Resources Workshop
Date:	June 19, 2017
Time:	12:00 PM – 2:00 PM

ATTENDEES

Name	Organization	Email
Clint Jones	Larimer County	cdjones@larimer.org
Carol Evans	Larimer County Planning	cevans@larimer.org
Karin Madson	Larimer County Code Compliance	kmadson@larimer.org
Zac Wiebe	Larimer County Natural Resources	zwiebe@larimer.org
Laura Emerson	Big Thompson Community	Btrrcweb2098@gmail.com
George Wallace	Ag Advisory Board	George.wallace@colostate.edu
Gretchen Reuning	NRCS/F.C. and Big T Conservation Districts	Gretchen.reuning@co.nacdnet.net
Jane Lopez	USFS (AD)	Janelopez9193@gmail.com
Michael Whitley	Larimer County Planning	mwhitley@larimer.org
Drew Davis	Larimer County	ddavis@larimer.org
Rebecca Smith	Larimer County Planning	rlsmith@larimer.org
Rob Helmick	Larimer County Planning	rhelmick@larimer.org
Savanah Benedick	Larimer County Planning	sbenedick@larimer.org
Samantha Mott	Larimer County Planning	smott@larimer.org
Warren Jones	Glacier View FPD	Cvfdchief1@gmail.com
Eric Fried	Larimer County Building	efried@larimer.org

CONSULTANT TEAM

Jeremy Call	Logan Simpson, Co-Project Manager	jcall@logansimpson.com
-------------	-----------------------------------	------------------------

EXISTING GUIDING PRINCIPLES/POLICIES RESULTS

Potential Policies	Yes/No?
1997 MASTER PLAN	
Clearer statement about the County's "Duty to adequately mitigate or deny."	5 Yes
Standard on what constitutes adequate mitigation as a condition of approval could be clearer.	5 Yes
2016 RESILIENCY FRAMEWORK	
Incentives: Density Bonus, Development Agreement, Transfer of Development Rights	4 Yes (2 Yes for TDR)
Development Standards: 1041 Regulations, Cluster Subdivision, Conservation Easements, Land Acquisition, Overlay Zoning, Buffers & Setbacks	3 Yes (2 Yes for Conservation Easement, Overlay Zoning) (1 Yes for Cluster Subdivision)
Improving Buildings & Infrastructure: Building Codes, Critical Infrastructure Protection, WUI Code	7 Yes
Redefinition of Adequate Public Facilities	6 Yes

2016 HMP

Update Larimer County Land Use, Wildfire and Building Codes to decrease future risk and disaster losses.	7 Yes
--	--------------

STRATEGIES RESULTS

Potential Policies	Yes/No?
PROGRAMS	
Providing more information about the full range of natural resource constraints, hazards, and development potential of private lands. Improve new homeowner outreach.	5 Yes
Coordination between County, Road Improvement Associations, Fire Districts, and Watershed Coalitions to improve service to existing development: turn-around locations, signing/markings roads/addresses, turnaround locations, secondary egress, evacuation routes, etc.	6 Yes
Encourage unifying professional and volunteer fire departments following LFRA's model.	3 Yes
Structure defense planning	6 Yes
Formation of Road Improvement Associations	9 Yes
Slash pile removal or burning grants or infrastructure.	8 Yes
Defensible space for long-term maintenance (code compliance).	1 No
Support for private timber mills to support private land fuels reduction	7 Yes
Support grazing / fuels management on private land.	4 No
	1 Yes
	6 Yes
TOOLS	

Consider additional standards or performance criteria in Land Use Code Water:

- | | |
|---|-------|
| <ul style="list-style-type: none"> Water: Stronger emergency water supply requirements. See emergency water supply requirements in Douglas and Boulder counties. | 6 Yes |
| <ul style="list-style-type: none"> Road and Street Standards for evacuation, emergency vehicles, secondary access, turnaround areas, maintenance condition, maximum slope/width/turning radius, etc. | 8 Yes |
| <ul style="list-style-type: none"> Subdivision design that clusters homes around a pumped well or cistern with grazing around the perimeter. | 6 Yes |
| <ul style="list-style-type: none"> Mitigation Plan must meet specific criteria. | 6 Yes |
| <ul style="list-style-type: none"> Building envelope siting based on fire risk | 6 Yes |
| <ul style="list-style-type: none"> Fire-resistant building materials | 1 No |
| <ul style="list-style-type: none"> Internal Sprinkler Requirements | 8 Yes |
| | 1 No |
| | 3 Yes |
| | 2 No |

Consider adopting a universal fire code county-wide, which is common for cities. Boulder County adopted standards for all new development in fire zones following the 2010 Four Mile Canyon Fire. Development not allowed in areas designated as severe fire hazard and slopes 30% or greater, or within a "fire chimney" as designated by Colorado State Forest Service.	3 Yes
	5 Yes
	1 No

Incentives: to keep ranches in operation, TDR/PDR	6 Yes
---	-------

Detailed Site Analysis 3 Yes
1 No

Resiliency Fee or Fire Mitigation Fee. (see State of CA's Fire Prevention Fee; ULI's Floodplain Occupancy Fee). The Angel Fire Village Council requires all village landowners to pay a monthly wildfire protection fee determined by the size of their lots.	<p>6 Yes</p> <p>1 No</p>
---	--

- Define development. Does this include building any new building(s) on existing lots?
 - This is only for new development proposals; how to address pre-existing lots?
- “Defensible space for long-term maintenance (code compliance).”
 - Give this an education focus.
- Need for coordination efforts among fire districts. Cooperation in education, resources, cross-jurisdictional efforts coordinated by the County.
- Other Planning Tools:
 - Basin/Sub-basin Master Plans, Neighborhood Master Plans, etc.
- Use Summit County’s TDR program as an example, as well as Headwater Economics 2015 Recommendations for Summit County.

COMMUNITY & ECONOMY WORKSHOP

Meeting:	Community & Economy Workshop
Date:	June 30, 2017
Time:	1:30 PM – 3:30 PM

ATTENDEES

Name
Rebecca Smith
Robert Helmick
Drew Davis
Matt Lafferty
Shayle Nelson
Suzette Mallette
Savanah Benedick-Welch
Jacob Castillo
Mark Peterson
Eric Fried
CONSULTANT TEAM
Jeremy Call
Cayla Cothron

COMMUNITY EXISTING GUIDING PRINCIPLES/POLICIES RESULTS

Potential Policies	Yes/No?
1997 MASTER PLAN	
How do the policies support long range/advanced planning? How support regional collaboration?	
The Master Plan should provide for a more detailed and better defined future land use map that gives the county more leverage on future development in the unincorporated areas, particularly with regard to conservation and open space preservation.	-
Zoning is too large scale to adequately respond to the issues that arise in how land is used.	
Broad support for TDR's to help protect more lands and still respect the rights of landowners without putting development in potentially inappropriate places. Why not developed?	-
Evaluate whether the CPAs and CIAs have been effective to determine whether modifications or dropping these areas are warranted.	-

Current CPAs, CIAs, and GMAs not relevant to mountains.

Include desired attributes of neighborhood character/function and community needs, depending on the particular area and wishes of the people directly affected in each area

-

A one size fits all policy is not always the correct approach.

Be careful as to no interfere with individual property rights.

-

Hinders the ability to create community spaces that offer important and needed services to these areas? Do this without development growing out of control?

-

Encourage a "village pattern."

Re-evaluate RLUP. Process needs refined for mountainous areas with clearer definitions for incentives.

-

STRATEGIES RESULTS

Potential Policies	Yes/No?
TOOLS	
Additional Subarea Planning Areas	3 Yes 1 No
Expand in conjunction with Subarea Plan?	2 Yes 1 No
Overlay Zoning	4 Yes
Use-Specific Standards	4 Yes

COMMUNITY FRAMEWORK FEEDBACK

- Virginia Dale church is the most likely location serving as a community hub for the area.
 - The historical society is also a good contact to make in regards to the community choices input effort.
- Red Feather Lakes has done small, long-range planning efforts. But branded them as "community pathways" to avoid contention.

What is the desired future for the mountains?

- Sub-boards and subarea planning.
 - Committees survive versus programs/initiatives that fizzle out.
 - Change in Red Feather Lakes Property Owners' Association (POA) to a community association with regional boundaries and focus.
 - Boards could have one representative that also gathers with other board representatives on regional and county-wide issues.
 - Get away from elected boards and appointments and instead to community representation and gathering.

- Design standards to create “smart design” are a good tool for the mountain communities.
 - Could be utilized in both a local and flexible manner.
 - Would identify and preserve character.
- Do away with development types, and focus on RLUP.
 - Design with sensitivity to the site.
 - Mandating clusters doesn’t make sense in the mountain communities, but is beneficial to broadband.
 - Could differentiate the differences in clustering on 60 acres vs. 650 acres through cluster diagrams.
 - RLUP allows property owners to avoid the provision of adequate public facilities.
 - TDU (Transferable Density Units) program to encourage a “village core.”

Any missing tools?

- Comprehensive rezoning efforts throughout Larimer County.
- Encouragement of commercial development.

ECONOMY EXISTING GUIDING PRINCIPLES/POLICIES RESULTS

Potential Policies	Yes/No?
1997 MASTER PLAN	
Change “self-reliant,” provide more objective guidance, and tailor to incorporate mountain communities.	6 Yes
Evaluate the Economic Development Policy for rural relevancy and define types of mountain economic development.	7 Yes
Potential to incentivize or make mandatory, or change language to indicate it is preferred.	6 Yes
2016 Resiliency Framework	
Marketing, Business Incubator, Land Assembly, Development Incentives and Financing, Capital Improvement Program.	4 Yes
Workforce Training Program, Business Skills and Management Training for Small Businesses Program.	3 No
Support Economic/Nonprofit Organizations and Coalitions.	5 Yes
Energy Incentive Programs: Property- and Sales-Tax Exemptions, Reduce Regulatory Limitations	1 No
Geotourism	6 Yes
	5 Yes
	4 Yes

ECONOMY STRATEGIES RESULTS

Potential Policies	Yes/No?
GUIDING PRINCIPLES/POLICIES	
Future Land Use Plan to guide location, intensity, and design of development.	7 Yes
PROGRAMS	
Emergency Savings Account Program for Individuals or Associations.	2 Yes

Business skills and management training for small businesses in mountain communities.	1 No 4 Yes 3 No
Marketing to attract businesses to western Larimer County.	5 Yes 2 No
Streamline development review through comprehensive reviews of key regulatory programs every five (5) years.	7 Yes
Support Economic/Nonprofit Organizations and Coalitions.	8 Yes
Prepare Local Businesses to Provide Emergency Services.	7 Yes
TOOLS	
Accurate land inventory and market system.	7 Yes
Energy Incentive Program: Property- and Sales-Tax Exemptions, Reduce Regulatory Limitations in the Land Use Code.	7 Yes

ECONOMY FRAMEWORK FEEDBACK

- Mountain Employment: Jacob can pull geographic employment data, Cayla to follow up.
- Biggest impediment to commercial isn't the land use code's restriction on home occupations; it is water. Once a use changes to commercial, the property must go through water augmentation.
- Public facilities requirements for commercial are cost-prohibitive.
 - Changing to commercial adds sprinkler requirements and other building code requirements that may be cost-prohibitive.

Themes Feedback

- #3: "innovation, connectivity..."
- Theme from 2016 Resiliency Framework: What is included in "social services?"
- Missing recreation and tourism.
 - The Chamber of Commerce sells Rocky Mountain National Park (RMNP) and the rivers, and recruiting announcements for talent highlight the environment and recreational amenities.
- Add high quality educational system.
- Add small businesses that support residents.
 - Small businesses in addition to water and basic infrastructure.
 - i.e. Bed-and-breakfast application being dropped because the cost of converting to a commercial well cost \$200,000.
- Do we have sustainable infrastructure that makes commercial uses viable?
- High value low impact job creation/retention is critical for economic resiliency in the mountain communities.

- Retention of employees is critical so that they don't have to leave the community for housing or basic services.
- What are our target employment markets? Are we encouraging primary or secondary jobs? Tourism is high value low impact primary employment. Technology is necessary for permanent jobs. Broadband helps to enable these high value low impact primary employment (home-based) positions.
- Status quo will lead to decline in economic health.
- We want all these amenities, but not the secondary effects that come with them (congestion, tourists, etc.). However, amenities cannot be supported without tourist supplements (population in Red Feather Lakes is too small to support a grocery store).
- Coworking space could be a desired use in the mountain communities to support remote workers and smaller businesses to locate in those areas.
- Public/private partnerships and leverage of anchor institutions (or the creation of an anchor institution).
 - Current anchor institutions include the Shambhala Center, library, etc. Instead of driving 45 minutes, could they drive 7 minutes to an anchor.
 - Is it the government's responsibility to provide anchor institutions or install broadband? It is the government's responsibility to remove barriers/impediments/road blocks to these services. What are the government-driven road blocks?
 - Water augmentation is an example. County has not lobbied the state to relax restrictions.
 - Rather than removing road blocks, could find ways to get around the barriers.
 - Housing is an existing barrier. Restaurants flip ownership because they cannot retain employees or owners.
 - Glacier View is primarily composed of commuters. Perceived cost avoidance because they are paying lower rent.
- Who is most important in the conversation – the 4% mountain residents that want peace and quiet and amenities; or the 96% that benefit from the mountains? Can it be reduced to such a binary level? A third choice is increasing the number of occupancy nights so that people stay longer, spend more nights, spend more money. Who are we planning for? Are they irreconcilably in conflict with one another?

Guiding Principles Feedback

- Agree with changing or deleting "which is increasingly self-reliant." In reality, they are becoming more interdependent.
 - Consensus to strike "self-reliant" altogether.
- Define impediments and remedies.
- Make energy incentive programs a higher level potential policy.
 - Change language from 'shall be considered' to 'shall be encouraged.'

- Change “local” to “regional economy.”

2016 Resiliency Framework Feedback

- E1. Larimer County is highly diverse.
 - Not reliant on a few large employers. Even largest sector (government) is highly segmented.
- E2. Needs language change.
 - Student debt not relevant. Rephrase as “change the perception that “good” jobs require a college education.” Needs a rework.
- E3. Needs to foster jobs/housing balance to achieve.
 - Geographic live/work is important.
- E4. Consolidation of disparate and redundant service districts.
- E5 and E6. Refocus on desired outcomes rather than the methodology and steps to get there.
 - Very specific, not relevant to the mountains.
 - For E6, change ‘of vulnerable populations’ to ‘of communities.’

Programs

- Emergency Savings Account Programs for Associations, not individuals.
 - Consensus that this should be changed to the “Economic Development Fund,” described below.
- For preparing local businesses, some Larimer Connects hubs are already thinking about this.
- Some programs will be a function of the overall vision i.e. marketing who for what?
- When utilizing marketing as a planning tool, focus on “targeted” businesses or utilize the word “employment.”
- PTAC (Privacy Technical Assistance Center) communications could be a process for engagement.

Tools

- Economic Development Fund
 - Create an annual competitive grant fund for rural areas. Smaller scale than DOLA’s rural economic development grants.
 - Incentive to encourage associations to work together.
 - Most Economic Development dollars are currently funneled to the urban areas. County may be interested in partnering with associations.

- How could the Return on Investment (ROI) be determined?
 - The state does it all the time for counties.
- Instead of accurate land inventory and market system, create an accurate analysis of existing infrastructure/assets systems and gaps between future state.
- BIDs are limited by water/sewer.
 - Metro Districts would be more appropriate for the mountain communities to improve water and infrastructure.
 - Commissioners are very interested in business retention and growth rather than recruiting new companies.

HEALTH + SOCIAL AND HOUSING WORKSHOP

Meeting:	Health/Social and Housing Workshop
Date:	July 12, 2017
Time:	1:00 PM – 3:00 PM

ATTENDEES

Name
Rebecca Smith
Jacob Castillo
Drew Davis
Eric Fried
Laura Emerson
Savanah Benedick-Welch
Matt Lafferty
Kelly Haworth
Annemarie Heinrich
Lea Schneider
Gordon Gilstrap
CONSULTANT TEAM
Miriam McGilvray
Cayla Cothron

HEALTH/SOCIAL EXISTING GUIDING PRINCIPLES/POLICIES RESULTS

Potential Policies	Yes/No?
1997 MASTER PLAN	
Developers should be required to make needed improvements, but where infeasible implement a developer “fee-in-lieu” system.	7 Yes
Need higher standards, or rural standards.	
As long as timing of planned expansions are imminent.	7 Yes
Needs clarification.	
Use of funds to properly maintain what is already in possession should take priority over new acquisitions.	6 Yes 1 No
Consider open areas in the mountains to be used as parks and for wildfire mitigation. Require open space/parks within new developments.	
Improve communication and collaboration with school districts.	
Accommodate more education opportunities.	7 Yes

Schools should support multi-modal infrastructure to connect with residents.
In mountain areas, creative alternatives may be necessary.

9 Yes

Include some urban services in needed locations to provide people access to necessary services while acknowledging this can't be done everywhere.

Service providers determine their expansion.

4 Yes

Need options when new development provides added services to existing and adjacent properties.

2 No

Alternative transportation options should be required in the GMAs and areas where the infrastructure is available -not relevant to mountain communities.

7 Yes

Communities with one access need to determine alternate methods of transportation/ develop alternate routes in event of hazard.

1 No (Alternative transportation options required in GMAs)

Regulate mountain area like Front Range plains.

6 Yes

No incentive program currently.

1 No

Maximum extent would result in no development. Reasonable parameters.

5 Yes

Add dark sky protection

1 No

Developments next to farms, dairies and feedlots may require additional negotiation.

5 Yes

All standards, rules, and regulations, should be guided by the need for citizen health, safety and welfare priorities.

4 Yes

Address community health facilities and access to healthy foods and/or health services.

3 Yes

2 No

2016 RESILIENCY FRAMEWORK

Building community strengths, knowledge, and abilities to respond to natural disasters.

3 Yes

HS2. Achieve equitable distribution of social service facilities and resources around the county to maximize redundancy and decentralization and to develop sustainable social "safety nets."

1 Yes

All standards, rules, and regulations, should be guided by the need for citizen health, safety and welfare priorities.

3 Yes

Addresses community health facilities and access to healthy foods and/or health services.

3 Yes

Empower local organizations, groups or HOAs to create community

3 Yes

STRATEGIES RESULTS

Potential Policies	Yes/No?
PROGRAMS	
Food study to look at food deserts and gaps in accessibility	5 Yes
Resiliency Fee / Fire Prevention Fee / Fire Mitigation Fee	4 Yes
Safe Routes to School	3 Yes
Update Red Feather Lakes Area Plan:	3 Yes
Complete Streets	2 Yes

Energy Conservation Tax Credits	2 Yes
Marketing to attract local services and retail businesses to western Larimer County.	3 Yes
TOOLS	
International WUI Code + Building Code	5 Yes
Energy efficiency standards in building	4 Yes
	1 No
Refine street standards for mountain context	5 Yes

HEALTH + SOCIAL FRAMEWORK FEEDBACK

Themes Feedback

- Look at the split of gender in the mountain communities.
- Second theme:
 - Add “robust connectivity” before “roads, structures and...”
- Last theme:
 - Potentially create another theme about interconnectedness and the County creating formal channels.
 - “The County will provide the mechanisms and channels through collaboration and education to become self-sufficient and self-reliant.”
 - Split individual theme into two thoughts.
 - Could take out “are self-sufficient.”

Guiding Principles Feedback

- PF-1: Take out the word ‘public’ as it doesn’t directly relate to the needs of the mountain communities.
 - Could potentially be found in a building code.
 - “Developers should be required to provide adequate infrastructure commensurate with the kind and types of uses.”
 - Altered standards, rather than higher. Applicable for the mountain communities.
- PF-2:
 - “...expansions of public or community systems.”
 - Incurs higher cost for development. Will get more into that with housing policies.
 - Could require metro districts instead of a fee-in-lieu system.
 - Creating a taxing authority to collect assessment for an area.
 - Could only require open space/parks in new development if it was possible/made sense.
- PF-5: Be more specific about maintaining what exists. Should define the ‘what’ in the “what is already in possession” statement.
 - Possible to make connections between where people are living, different parks, etc.

- Multi-use bike path, trails, etc.
 - Building envelopes could also contribute to this guiding principle.
 - “Consider the use of parks, open space, and TDR in the mountains for wildfire mitigation.”
 - Plan for the Region between Loveland and Fort Collins is outdated.
- PF-7:
 - These statements have no teeth.
 - Schools should support multi-modal infrastructure to connect with residents: Potentially changed to support connections to regional parks.
 - Schools do not have long-range plans. Accommodate more education opportunities could be changed to support a policy to set aside land from development for a school as long as there was a population to support it (with a particular number of residents).
 - Try to focus on bringing more middle and high schools.
 - Schools could also support the community on weekends, emergency venues for the Red Cross, senior centers/rec centers for the mountains, and school buses could be used for transport.
- PF-10: Stick to the principle that existing residents aren’t forced to pay. But can offer other options (metro districts, etc.) to allow existing residents to weigh in and invest if they want.
 - Urban services need to be defined, as do necessary services.
- TR-4: Think about alternative transportation in terms of connection, rather than putting a bike lane on every single road.
 - Needs to only refer to non-motorized.
 - Needs a focus on infrastructure changes.
 - Focus on regional connection, versus providing local and isolation infrastructure.
 - With interconnection to regional bike networks and trails.
 - Consider as we develop roads through adequate shoulders to support alternative forms of transportation.
 - Rather than having white edge stripe right at the edge of the pavement, give room for pedestrians and bicycling.
 - Focus on encouraging and enabling, not mandating.
 - Example, restriping to allow two-way traffic with a shared bike lane that the car only needs to accommodate this when a car is coming the opposite direction.
 - Fit language in about reduced travel and connectivity rather than how people can continue to increase their transportation. Reduce the need to travel rather than controlling it as it gets worse
- ER-12: Add language regarding water quality into that guiding principle (if not already in watersheds/natural resources guiding principles, double check).
- ER-13: Could also include water quality language.
- ER-17: Interested in looking into dark sky protection.

- Red Mountain might get dark sky certification.
 - Add policies for environmental protection.
 - Could be used in conjunction with TDUs.
- All standards, rules, and regulations should be guided by the need for citizen health, safety and welfare priorities.
 - “by the need to **maintain** citizen health...”
- Address community health facilities and access to healthy foods and/or health services...
 - Potential Land Use Code barriers, and would need to provide them the opportunity to access it if they want it.
 - Market-driven.
 - Is there something in the economy piece that wouldn't allow someone to have a farm stand?
 - Regulations that permit or prohibit the ability for residents to grow and sell at a smaller-scale than a full-size grocery.
 - Potential for a community market (like at the community hall in Stove Prairie).
 - Be careful that we don't make it cart blanche. What you don't want is the guy selling beef jerky in the middle of the road that causes traffic issue and illegal for health department standards, etc.
 - For health services that comes into play too when seeing in-home patients or a mobile clinic.
 - Broadband, etc.
 - Would fit into home occupation allowances.
- HS1: Use policy to help communities to be prepared such as building code, defensible space, etc.

Programs

- For the resiliency fee, encourage consolidation of small district into larger district to be able to share administration and overhead.
- Like the concept of the safe routes to school in a rural area, but don't like tying it to a specific program.
 - School buses would be a good focus for school improvement.
 - Could be an objective, but not a program.
 - In urban areas, schools don't even build sidewalks due to not infrastructure funding.
 - A policy in the infrastructure capacity would be more effective in controlling this issue than a program.
 - Can beef up policy piece about infrastructure needs in response to this.
- Brenda Jameson might be useful on the food study program. 970-498-7719.
 - Existing initiative.
- No air attainment in the mountains. Stops at the NPOs (foothills).

Tools

- Resistance with builders in making more energy efficiency standards than already exist. Each year they go up incrementally.
 - Kept pace, but is happening organically anyway.
 - Already exists and is increasing incrementally.
- WUI Code
 - Could adopt a fire code countywide.
 - Already in process of integrating the WUI code into the building code.
- Any missing tools?
 - TDR and TDU program would fit well into health + social as well.
 - From the standpoint of natural resource facilities and connectivity that could promote health and the building of communities.
 - Another way to support TDUs.
 - Dark skies could promote TDU program.
 - Rural Street Toolkit
 - Accessibility Standards
 - Building Envelope

HOUSING EXISTING GUIDING PRINCIPLES/POLICIES RESULTS

Potential Policies	Yes/No?
1997 MASTER PLAN	
County should collaborate with cities/towns, non-profits, etc to encourage affordable housing in and around cities; it's not ideal in rural development.	6 Yes
County should not own/operate affordable housing. Be careful not to interfere with individual property rights.	6 Yes
Neighborhood character as well as Zoning need to determine the allowed uses and residential densities.	6 Yes
Refine how residential development shall be designed to protect these areas. Sometime clustering is not the best way. Specific siting should be allowed through all processes like it is through Rural Land Use Process.	6 Yes
Encourage a "village" pattern for infrastructure and community spaces within clusters.	9 Yes
Re-evaluate RLUP. Process needs refined for mountainous areas with clearer definitions for incentives.	6 Yes
Homeowners should have to sign complaint waivers upon purchase of homes residing next to or near existing agricultural operations/uses that meet all Land Use Code criteria/buffers and government regulations.	4 Yes
Stricter defensible space requirement are needed	3 No
	7 Yes
	1 No
How to incentivize this or make mandatory?	7 Yes
	2 No

- GM-15/16: Should be focused on where the jobs are and on the people who need the affordability.
 - Reframing in terms of transportation adds to affordability, and use of “cost of living.”
 - Cost of transportation makes it unaffordable.
 - Could utilize incentives to accomplish this.
 - Policies could help make housing accessible.
 - Make it really clear whether we’re using a federal definition of affordable housing (HUD, section 8, etc.), and change language to “housing affordability” if it isn’t the federal definition.
 - Formal is a different conversation than if people can afford to live here and keep up with the cost of living.
 - Tiny homes aren’t supported in the land use/building code. Have to be made non-mobile, only allowed if its built from the ground up.
 - Current limitations exist. There is a standard for manufactured homes and RVs.
 - About 120 square feet is about the smallest you could build to meet building code.
 - Find someway to accommodate that for housing affordability.
 - Potential to create alternative like a mobile home park structure for tiny home communities.
 - How much infrastructure to support them?
- Could incorporate language or make a new policy about “aging in place.”
 - If we encourage more rural aging in place, we’re going to create a much greater demand on emergency and hospital services that don’t have a lot of capacity. Both hospitals, air evacuation in the event of a disaster, etc.
 - Find a way to temper this and tailor it to rural/mountain areas.
 - Emergency organizations are already strained with existing workloads without many resources to support that.
- LU-5: As long as the Ag area can be maintained.
 - Sensitive environments only see this issue depending on what the nature of it is.
 - Should be a plan for long-term maintenance that’s enforceable.
 - Might be worth looking into how water rights are affecting this (but being handled by the Colorado Water Plan).
 - Specific siting should be required.
- LU-6: Could work in something about affordability.
 - Village core could require community water/sewer. More urban level infrastructure, but not “urban” per say. Could require development standards such as streets/surface materials, drainage, connectivity, etc.
 - Could come up with appropriate development standard for this principle.

- Some mountain communities are gravitating toward the village experience i.e. Pinewood Springs, Big Elk Meadows.
 - To not have to provide their own water, sewer, etc.
- LU-7: RLUP is fine in the mountains, its conservation development that is not good. Conservation development requires augmentation.
- LU-11: Potential policy not enforceable.
- LU-13: Maybe not stricter defensible space requirements, but figure out strategies to better enforce them.
 - Issue seems to be in the space around and between homes, not necessarily the adjacent areas right around the homes.
 - Defensible space sometimes isn't allowed through the existing lots sizes in the mountain communities i.e. in RFL. Can't walk up to your neighbors and say "I'm cutting down trees on 50 ft of your property."
 - Building envelopes/hazard mitigation.
- LU-14: Expand past just solar.
 - Include water efficiency in addition to energy.
 - Don't make mandatory.
 - Could be the potential to utilize a fee waiver.
 - Subdivision design for orientation and fee reductions.
- PF-4: County has created their own standards, they're either met or less, but never stricter.
 - Have to create a system that gives safe havens for people to get out of their houses and to go to for rescue or rebuild, etc.
 - For evacuation purposes.
- Resiliency Framework Principles
 - H3: Keep programming out.
 - H5: Investigate tiny homes and other housing options.
 - H4 and H5: A lot of potential for translation into land use policy.
 - Through the Land Use Code.
 - Codes do not prevent mixed housing, co-housing, or other innovative housing options.

Programs

- Countywide housing assessment plan is not relevant to the mountains.
- National programs that would require an application for grant funding, but could relate to the ability to age in place.
- Larimer County health is focused on urban areas, and it's easy to get stuck on what works in the urban areas versus rural.
 - Think out of the box about mountain communities.
 - Health being infused throughout the entire document is critical to the success of the Plan.

- Not a lot of teeth today; make sure there are regulatory teeth and the creation of incentives is happening because its critical.
 - Be innovative with existing policies and neutrality.

Tools

- Overlay zoning is possible.
- Density bonuses and permanent conservation easements are possible.
- Potential missing tool is a development fee waiver.

INFRASTRUCTURE WORKSHOP

Meeting:	Infrastructure Workshop
Date:	July 18, 2017
Time:	11:00 PM – 12:00 PM

ATTENDEES

Name
Matt Lafferty
Shayle Nelson
Lea Schneider
Annemarie Heinrich
Samantha Mott
Rebecca Smitch
Drew Davis
Rob Helmick
Clint Jones
Suzette Mallette
Mark Peterson
Savanah Benedick-Welch
CONSULTANT TEAM
Mike Garner
Anne Kuechenmeister

INFRASTRUCTURE EXISTING GUIDING PRINCIPLES/POLICIES RESULTS

Potential Policies	Yes/No?
1997 MASTER PLAN	
New development must demonstrate adequate public facilities.	
Consider support for a “village” pattern in some areas to promote development clusters and innovative infrastructure options.	11 Yes
New development approval must include a check for availability of existing public systems plans	11 Yes
Level of service standards in the Land Use Code shall be coordinated with service providers.	10 Yes
Larimer County shall consider establishing Intergovernmental Agreements with service providers.	4 Yes
Developers should make needed APF improvements but in some rare cases where this is not feasible, is there a way to implement a manageable developer related “fee in lieu” system	5 Yes 3 No
Adequate provision of infrastructure (including broadband) must be provided with each development.	7 Yes
Revisit and revise current zoning.	6 Yes

Link land use and transportation to ensure that in the future these are done in coordination with each other.	11 Yes
Limit access of new development to high volume roads.	8 Yes
Ensure that developments have adequate access for evacuation and emergency response and at least two points of egress.	
Communities with one access need to determine alternate methods of transportation/ develop alternate routes in event of hazard.	9 Yes
Larimer County shall encourage the development and use of alternative modes of transportation through infrastructure and land use.	1 No (on second point)
Encourage "village" patterns in some areas to allow for feasible development of adequate infrastructure.	7 Yes
Evaluate if more current infrastructure options may be available that can adequately support development clusters of higher densities.	
Infrastructure shall be constructed in a way that can be efficiently maintained and is sustainable - possibly look at other options such as green infrastructure practices or hazard mitigation infrastructure that is feasible.	7 Yes
New roadways, including Larimer County roads, shall be designed and constructed in a manner that minimizes the impact on water quality and is economically feasible for sensitive environmental areas.	9 Yes
2016 RESILIENCY FRAMEWORK	
Infrastructure Performance Zoning Scoring	4 Yes 1 No
Critical Infrastructure Protection Plan: System Management and Enhancement Strategy	7 Yes
Zoning Hazard Overlay with associated development requirements and review	8 Yes
Critical Infrastructure Protection Plan: System Assessment	7 Yes
Incentives to build backup systems	7 Yes
Infrastructure Response Training Program Delivered via Larimer Connects	8 Yes

STRATEGIES RESULTS

Potential Policies	Yes/No?
PROGRAMS	
Cluster Subdivision Model to preserve open space, promote shared and efficient infrastructure development and building outside of hazard areas	6 Yes 1 No
Larimer Connects- Community Conversations (Education and preparedness training)	3 Yes
North Colorado Community Connectivity Project (transportation network)	3 Yes
Resilient Natural and Built Infrastructure (develop new design criteria for low-impact development and green infrastructure in watersheds)	4 Yes
Larimer County Engineering Bridge Assessment and Upgrade Program (2020 horizon)	4 Yes
Rural and small town multi-modal toolkit (write in)	1 Yes
Tools	
Future Land Use Plan at the Subarea Scale	5 Yes
Rural Land Use Process / Conservation Development (Clustered Subdivisions)	3 Yes
Subdivision Standards	3 Yes
Green Infrastructure Design Standards	4 Yes

INFRASTRUCTURE FRAMEWORK FEEDBACK

Foundation Findings Feedback

- There is a need to define 'green infrastructure' and provide local and relevant examples. Consider using "designing with nature" instead of green infrastructure.
- The terminology of "private" unmaintained road improvement costs needs to be changed and the numbers provided are incorrect. The correct term is "Publicly dedicated, non-county maintained roads"
- Broadband connection is vulnerable to outages consistently, not just in the event of disaster.
- Infra 5: Many non-county maintained roads and crossings are not built or maintained as

Themes Feedback

- No feedback was provided, nor were revisions requested.

Issue Feedback

- Infra 1: vague/confusing how worded. Suggest: The aging and vulnerable bridge and road system requires investments to sustain and improve community resiliency and safety.
- Infra 5: Many non-county maintained roads and crossings are not built or maintained as a safe and functioning roadway.
- Need to incorporate multi-modal mention as issue statement – or work into an existing issue
 - Perhaps add mention of this to the end of Infra 5
- Infra 4: Communication & telecommunication channels, power and water supplies are susceptible to failure, leaving communities without access to basic services or a way to call for help.
- Health & social (not sure which #): Remote mountain living can put vulnerable populations at higher risk to – comment to continue this statement. Also noted that auto-centric and isolation are key issues for this.
- Economy (not sure which #): Whenever we mention 'broadband services', should disclaim that we are using the FCC's definition (25MB download, 3MB upload)

Guiding Principles Feedback

- Existing 1997 Master Plan
 - PF-10 New development shall not reduce existing service below adequate levels. , nor shall **(Separate into two guiding principles)** Capital improvements to support new development **shall not be** subsidized by existing residents.
 - TR-2 New development shall occur only where existing transportation facilities are adequate or where necessary improvements will be made part of the development

Tools Feedback

- Develop a rural and small-town multi-modal toolkit.
- Need to more clearly define what green infrastructure design standards are.
- Infrastructure performance zoning scoring needs to be defined and provide examples.

TAC MEETING #4 SUMMARY

Meeting:	Mountain Resilience Technical Advisory Committee Meeting #4
Date:	November 8 2017
Time:	2:00 – 4:00 PM

ATTENDEES

Name	Role
Savanah Benedick-Welch	Larimer County Community Development Department
Jennifer Cram	Larimer County Community Development Department
Gordon Gilstrap	Little Thompson Watershed Restoration Coalition
Shayna Jones	Big Thompson Watershed Coalition
Jennifer Kovecses	Coalition for the Poudre River Watershed
Shayle Nelson	Larimer Connects
Samantha Mott	Larimer County Community Development Department
Mark Peterson	Larimer County Engineering
Lea Schneider	Larimer County Department of Health and Environment
Rebecca Smith	Larimer County Community Development Department
Zac Wiebe	Larimer County Natural Resources
LARIMER COUNTY STAFF	
Matt Lafferty	Principal Planner, Project Manager
CONSULTANT TEAM	
Mike Garner	Co-Project Manager
Miriam McGilvray	Assistant Project Manager

MEETING MINUTES

1. Background

1. Project Accomplishments To-Date include three sets of public outreach, Boards and Commissions Summit, meetings with other groups like the Chamber of Commerce.
2. The Recommendations chapter is the final chapter deliverable before the entire Mountain Resilience Plan is consolidated and refined for adoption.

2. Chapter 3: Recommendations + Discussion

1. Improving the Final Plan: Committee members were asked to review the responses from the first TAC meeting that asked “This Plan will be a success if...”
 - o This plan doesn’t directly outline the improvements or necessary land use code updates to easily roll into that implementation item.
 - o What the public engagement successful throughout the process? It was a learning process, but we engaged residents on many different platforms/venues (digital, hard copy and in-person)
 - o Education was a big piece of the process intent.

- There may be a perception of being “locked-in” with this plan, but we tried to make it clear that it can still be updated next year and we recommend more frequent updates to the plan every several years to keep it a ‘living document.’

2. Review the Guiding Principles, Policies, and Essential Questions

Two Breakout Groups (3 frameworks per group): Do these recommendations address each of the Goals, Issues, and Opportunities for the Plan? Do they make the mountain communities more resilient? How could they be further refined?

- Community
 - Define “village pattern”: efficiency of resources, communications are easier, naturally developing already.
 - Should there be an Essential Question about social cohesion? Check with Health/Social
- Economy
 - reword 3:2 – Encourage designation of high natural hazard areas for recreation, where it meets open space goals
 - 3:3 ‘...and achieve relevant sub-area visions’
 - Main 2: high value/low impact – can we better clarify what this means?
- Health & Social
 - #2 – stress ALL areas of health (i.e. - water supply, etc), instead of just air and water quality
 - i.e.: New development minimizes negative public and environmental health impacts such as: air quality, water quality, water supply, etc
 - Essential #2: remove ‘such as disabled or elderly’
 - #3: change to ‘..access to social services, health care services, and related resources’
 - Add a new 4 – add sub-element language for health care specifically
 - 3 ‘develop’ language needs changed – ‘encourage’
 - 1 - Similar to the ‘essential #2’ comment above, don’t specifically call out aging
 - Define vulnerability in glossary
- Housing
 - Housing 1.2: can we substitute “coordinate” with a stronger word? Lobby?
 - Can we add a policy about establishing a funding source to build infrastructure or help remove barriers/cost to affordable housing?
 - Look at best practices – tie into this section?
 - Rural Land Use Process may change in the future
 - 2-4: ‘...lighting, wildlife impacts, and traffic,....
- Infrastructure
 - 1 – 1: change to ‘adequate facilities’
 - 1 – 3: reword: public/private facilities
 - 1-4: encourage upgrading stormwater
 - 2-7 (new): when appropriate, encourage alternate modes of transportation
 - 2-6: remove ‘near’

- 2-4: ‘...and other utilities’
- Add a new policy to 1: relating to Code of the West/self-sustainability
 - Encourage self-sustainability and public education relating to the Code of the West
- Watersheds & Natural Resources
 - Policy 1.5: Tie to fire/flood buffers or mitigation (acquisition should try to achieve other goals for resiliency). Environmental/hazard resiliency. Leverage open space and hazard mitigation dollars by conserving open space in strategic locations that also help mitigate hazards.
 - Fundamental premise of the plan is that there will be new development, but that compounds the problem with hazards and resiliency. Fire suppression is because of the people there.
 - Consider new metric: remove structures from the WUI?
 - Plan/agency/fire authority to enforce mitigation?
- 3. Metrics and Monitoring

Large Group Discussion: How will this plan improve the County’s resiliency and quality of life in measurable ways? Are these metrics the best measure of resiliency and quality of life in the mountains?

- #7: Not the best metric. Medical facilities tend to cluster and this doesn’t account for other methods to get health coverage (tele-doc).
- #13: change to private landowners receiving the need for broadband coverage (cows don’t need internet). Eventually will need to look at who it’s serving.
- #14: Total number, not percentage of new rivers and streams within new floodplain. Desired trend = maintained or increased. May not be relevant in the end.
- #14 and 15 are at odds; if there are more floodplains being mapped, there will be more structures technically within floodplains.
- #15: consider changing to # of new structures permitted.
- #17: “Healthy” is hard to define. No standard metric across watersheds, sub-watersheds, etc. Will be tough to measure. Perhaps focus on progress toward watershed master plans, even though very focused on river corridors.

3. Next Steps

1. BCC/PC Joint Study Session – Nov. 8
2. BCC/PC Joint Public Hearing for Recommendation and Acceptance of the Plan – Dec. 13

4. Homework

1. Send final comments and revisions to Miriam (mmcgilvray@logansimpson.com) by November 15.

BOARDS AND COMMISSIONS SUMMIT

Meeting:	Boards and Commissions Summit
Date:	September 6, 2017
Time:	5:30 PM – 8:00 PM

OVERVIEW

The Boards and Commission Summit hosted 30-40 members of advisory boards, commissions, and featured opening and closing remarks by a Board of County Commissioner and County Manager. The participants had the opportunity to provide feedback on top priority community choices strategies and tools following input received from the public, and commented on lower priority strategies and tools for the purpose of elevating them to be more effective for use by the County. The engagement by participants made the Summit a success, and will be incorporated into drafting of the guiding principles and policies and strategies and tools featured in the Mountain Resilience Plan.



PURPOSE

The purpose of this event was to bring all County boards and commissions together and provide an opportunity to gather diverse, informed, and vested feedback from participants that are already involved in Larimer County initiatives and planning. This event helped build credibility for the updated Comprehensive Plan in front of the Board of County Commissioners, and internal support for the implementation initiatives that will be outlined in the Plan. This was also a knowledge sharing opportunity between departments and across topics.

MEETING FORMAT

The meeting was structured as a workshop with small groups at round tables (6) to discuss one resiliency topic at a time. Following general introduction about the plan and process, participants were asked to engage in an exercise and open dialogue with staff and consultants to provide feedback on key choices that have been identified throughout the planning process. These include implementation strategies and tools across all six frameworks (Community, Economy, Health/Social, Housing, Infrastructure, and Watersheds/Natural Resources). The exercise mirrored the discussion at the public choices workshop and online survey.

CHOICES INPUT

Community Choices	Effectiveness Rating	Comments
Capital Improvement Plan (CIP) Specific to Rural Mountain Communities	11 High 1 Medium 1 Low	<ul style="list-style-type: none"> Change 'attention' to 'resources ' in the sentence, "Current processes may not direct enough attention to mountain areas..." But at the same time, it's a small percentage of the population that lives in the mountains.
Overlay Zoning	14 High 1 Medium	<ul style="list-style-type: none"> Makes a lot of sense.
Subarea Planning	10 High 2 Medium	<ul style="list-style-type: none"> If we are not changing basic zoning, then subarea planning is extremely important.
Accurate Asset Management System (Analysis of Existing Infrastructure)	15 High 1 Medium	<ul style="list-style-type: none"> This should already be in existence! It is not a master plan issue but should just be part of the County process. (responded to previous 'how do we pay for it?' public comment) How about a resilience fee? Should be valuable - focus system design on functionality, NOT cool interfaces and keep your development cost down. Can communities use tourism taxes collected within the community to improve/repair tourism-used amenities (add public toilets, water fountains, trash receptacles, etc.) How is it tracked now? Admirable goal, difficult to assess how much money and staff would be needed to maintain it.
Transfer of Development Rights (TDR) or Transferable Density Units (TDU)	8 High 3 Medium 1 Low	<ul style="list-style-type: none"> Great idea, but difficult to implement in a fair way.
Future Land Use Plan (Map)	7 High 4 Medium	
Comprehensive Review and Update of Land Use Code	14 High 2 Medium	<ul style="list-style-type: none"> Often restrictions don't match needs, more community input.
Community Fuel Reduction Program	11 High 1 Medium	<ul style="list-style-type: none"> Seconded the "Once or twice a year. Be able to put slash on the side of the highway with someone to pick it up" as a great idea. Selling debris for biofuel, mulch, etc. is a great idea. Recycling!
Business Retention/ Creation Program	3 High 4 Medium 2 Low 1 Low	<ul style="list-style-type: none"> Communication and support are good - overreach is NOT! Be careful. This risks putting County government in the role of picking winners and losers.
Community Hubs	12 High 1 Medium	
Facilitate Cooperation of Nonprofit Organizations and Coalitions	7 High 2 Medium 1 Low	<ul style="list-style-type: none"> Build on multi-sourcing of resource. Reduce redundancies. Where will funding/staffing come from? Helpful to pool resources but is this realistic?

VISIONING EVENTS

Meeting:	Mountain Lions Pancake Breakfast	Big Thompson Canyon Pancake Breakfast	Glacier View Wildfire Community Preparedness Day
Date:	Sunday, May 28 th	Sunday, June 4 th	Saturday, June 10 th
Time:	7:30am—10:30am	8am—2pm	11am—2pm
Location:	Property Owners Association [POA] Building, 58 Firehouse Lane, Red Feather Lakes	Big Thompson Canyon Association Building [one mile east of Drake on US Hwy 34]	Glacier View Fire Station, 1414 Green Mountain Drive, Livermore

OVERVIEW

Outreach efforts are critical to building consensus around the direction and vision for the Mountain Resilience Plan. In order to effectively communicate goals and objectives for the Mountain Resilience Plan process, clearly define the problems the Plan is trying to solve, and receive feedback about what residents envision for their mountain community, the planning team and County staff attended three separate visioning outreach events throughout June: Mountain Lions Pancake Breakfast, Big Thompson Canyon Pancake Breakfast, and Glacier View Wildfire Community Preparedness Day. These events also provided an opportunity to distribute information and resources to the public about Plan process and Foundation phase.

To integrate other County planning efforts, County representatives also presented information about the updated Transportation Master Plan, broadband programs, and Larimer Connects. Residents were notified about the events through posters, factsheets, and postcards throughout western Larimer County, and residents were also encouraged to take an online survey through the Plan's website to gather input from those that did not attend events. The Foundation phase document and survey as well as the draft Transportation Master Plan were also loaded onto USB flash drives and distributed at key locations throughout the mountain communities and at the three events for those residents without reliable access to internet.

The three community events targeted the community areas of Red Feather Lakes, Crystal Lakes, US 34, Pinewood Springs, Big Thompson, Glen Haven, Storm Mountain, Glacier View, Livermore, and Poudre Canyon areas. Among the three events, around 400 attended with over 200 members of the public reached. At the events, paper surveys were completed, and the consultant team, county staff, and members of the Stakeholder Committee interacted with the public to hear residents' vision for mountain communities.



VISIONING INPUT SUMMARY

What do you love about your mountain Community?



Community

- Government which governs least, governs best.
- Planning is not a hindrance but a guideline for growth. Keep an open mind and flexibility.
- Rural Larimer County will be valued and supported by long-range strategic planning and respect the residents' rights and opinions.
- Building should feel more cooperative while working with the building department.
- Controlled growth and community engagement is especially important in rural areas.

Economy

- Tourism is great until it affects the character of the land with traffic, littering and uneducated campers.
- Establish a good working relationship between the County and mountain businesses.
- A prosperous economy is powered by freedom and free market principles.
- Small businesses, motels, and campgrounds are every bit as threatened as agriculture where housing developments are taking over.

- The main inhibitor to employment in Red Feather is high speed internet - inability for professionals to work at home.
- Don't structure mountain communities around heavy economic growth.
- Emphasize education in tolerance and environmental sustainability.

Health & Social

- Collaboration and advocacy is important.
- Provide education in CERT program, self-sufficiency education, personal empowerment.
- Provide professional and competent health care by more actively monitoring those responsible.
- Sometimes communities need to be helped out even if they attempt to be self-sufficient.
- The 2013 floods proved we can take care of ourselves.
- Our county, state, and national taxes should guarantee a certain amount of protection and "preparedness."
- Federal and state government should be included in promoting collaboration.

Housing

- Mountain communities do not have neighborhoods.
- Protect the rural nature of mountain communities.
- Economic factors determine the housing and transportation realities in our area and that is as it should be.

Infrastructure

- Yes to transportation alternatives. Consider shuttles between Estes and Lyons.
- Maintain roads as foundation.
- Support high-speed internet access to rural communities.
- No public transportation.
- A bike lane on Rt 36 MM20 to MM1 would be helpful.
- Mountain communities have little to no trash removal options.
- Water and sewer availability will inhibit future growth

ISSUES AND OPPORTUNITIES

"Mountain communities have unique issues that are different than aspects of life in flat land communities."

"We can get community members to show up immediately after a disaster when they need help, but don't have a compelling long-term vision that will keep them engaged long-term for preparedness."

"The new reservoir in Pinewood Springs is puny, more reservoirs are needed above Big Elk Meadows and in Pinewood Springs to protect the wildlife in river during drought years."

"We are concerned about losing our rural character as more businesses push for more tourists and more homes are converted to short term vacation rentals. There IS a carrying capacity in the mountains, including Estes and the park, and it seems that capacity has been reached. Planning needs to reflect that, despite the arguments you will get from those that want to bring more and more people here to buy t-shirts."

"State-of-the-art communications has no impact on the natural beauty, but has a big impact on the viability of the community - Ideally a broadband (1Gbit+) infrastructure would be available to all residences in the hills."

and will impact health and safety in the fairly near future.

- We have a lot of power surges and outages. There is no redundancy.

Watersheds & Natural Resources

- Financially support volunteer fire departments.
- Revise open space rules to allow horseback riding and hunting dog training.
- Identify and respect natural and cultural resources.
- Focus on the ecology of the rivers, especially the Little Thompson.
- Protect our natural resources and open space with adequate resources for fire protection.
- Loss of clean water would kill Red Feather. Both the lakes and domestic water are at risk.
- Expand cell phone coverage and design to run in adverse conditions.
- Emphasize disaster preparedness and infrastructure needs.

IMPROVEMENT NEEDS

- Traffic on Highway 36; need more passing lanes
- Minimize new development, or negative impacts of commercial uses
- No changes
- Slower speeds and traffic controls
- Improved broadband internet and cell service
- Road maintenance
- Bike lane from Lyons to Estes
- More local control and subarea planning
- Continue local control over snow removal and road maintenance
- Welcome small businesses like grocery store or gas station
- Water quality
- Wildfire mitigation and Firewise programs

COMMUNITY CHOICES EVENTS

Meeting:	Community Choices Events #1	Community Choices Events #2
Date:	August 28, 2017	August 29, 2017
Time:	4:00 PM – 7:00 PM	4:00 PM – 7:00 PM
Location:	Estes Conference Center Estes Park	Glacier View Fire Station Livermore

OVERVIEW

Two public events were held to identify and refine the key community choices regarding goals, objectives, and implementation strategies for the Mountain Resilience Plan. Educational information about each choice was presented, allowing participants to learn about the tradeoffs and potential benefits that could result from each choice.



MEETING FORMAT & EXERCISE

Following general introduction about the plan and process, participants were asked to engage in a board exercise and open dialogue with staff to provide feedback on key choices that have been identified throughout the planning process. These include implementation strategies and tools across all six frameworks (Community, Economy, Health/Social, Housing, Infrastructure, and Watersheds/Natural Resources). To evaluate effectiveness, participants were asked to place stickers on strategies/tools from each framework, ranking them on a scale from not effective at all to very effective. There was also a space for written comments on the boards to voice explanations or concerns. The eleven tools participants were asked to evaluate were:

- Capital Improvement Plan (CIP) Specific to Rural Mountain Communities
- Overlay Zoning
- Subarea Planning
- Accurate Asset Management System (Analysis of Existing Infrastructure)
- Transfer of Development Rights (TDR) or Transferable Density Units (TDU)

- Future Land Use Plan (Map)
- Comprehensive Review and Update of Land Use Code
- Community Fuel Reduction Program
- Business Retention/ Creation Program
- Community Hubs
- Facilitate Cooperation of Nonprofit Organizations and Coalitions

An online survey mirrored the events' materials and exercise, and was open to receive additional public feedback through mid-September.



CHOICES INPUT

Community Choices	Effectiveness Rating	Comments
Capital Improvement Plan (CIP) Specific to Rural Mountain Communities	13 High 3 Medium 3 Low	<ul style="list-style-type: none"> • I don't grasp this, what are examples of capital improvements (i.e. roads, power, etc.)? • Increased use by nonresidents is a problem. Don't encourage the need for infrastructure deterioration, thereby saving money and inconvenience of constant repair. • Not sure of any results yet. • More non-local government intrusion/less local control • A CIP should include increased revenue streams from the areas receiving the services. New development in mountain communities needs to do more to pay its own way. The per capita financial burden of mountain residents on the County is disproportionately high. Capital infrastructure projects are important, but those who benefit the most should shoulder more of the cost. • I'm very new to the area but the plan seems to address some of the areas that have needed attention. I plan to become more informed over the next year as I'm not fully aware or informed of the issues and how they might be prioritized.
Overlay Zoning	12 High 2 Medium 3 Low	<ul style="list-style-type: none"> • For new development proposals, some additional conditions of approval • Agree - for new development. Potential conflict with HOA covenants and water rights/shares. • Not interested in more zoning regulations • no guarantees that non-residents will propose/enforce zoning designations • The different risks and costs associated with development in these various zones can be addressed via overlay zoning. This is a good idea, but it must have some teeth. Even if those teeth are unpopular with some segments of the community. • Addresses the issue of unique and specific needs of the various mountain areas which are diverse.
Subarea Planning	11 High 4 Medium	<ul style="list-style-type: none"> • They help Planning Commission and BCC make better decisions.

	4 Low	<ul style="list-style-type: none"> Concern about a few with megaphones driving the process. Economic development corporations are not entirely concerned with keeping a community's quality of life, but often cater to the interest of developers' greed who come from outside the community or those interested in mostly profit. I like limiting zoning changes Subarea plans can be effective for small communities that wish to preserve or create a unique character. At the same time, costs associated by these plans must be shouldered by the communities they serve. This is a very complicated issue. I would need to know more to rate it higher than a little effective. At least it is being discussed.
Accurate Asset Management System (Analysis of Existing Infrastructure)	12 High 3 Medium 3 Low	<ul style="list-style-type: none"> How do you pay for it? This seems to be a business basic for each department/agency. Does it belong here or a performance review for each department manager? Like targeting effective use of resources requires more analysis ... too many "could"s If this will increase efficiency, then I believe it is a good idea. I do not know enough to comment on specifics. Asset management is an expensive endeavor but management can and should increase services and reduce costs based on efficiency.
Transfer of Development Rights (TDR) or Transferable Density Units (TDU)	7 High 5 Medium 6 Low	<ul style="list-style-type: none"> Need good recovery areas. Slippery slope for the County to meddle with individual owners' rights. People buy property based on current zoning. It is a good idea to protect areas for wildlife and environment, but otherwise not change zoning to accommodate developers. Need local control/input restrictive to existing property owners ... who determines "adequate compensation" ... if development on existing property restricted property value decreases significantly I believe these are very good planning tools or managing the landscape. TDUs and TDRs can help to manage development patterns that honor County resource limitations and natural resource concerns. Uncertain. Can't answer this question.
Future Land Use Plan (Map)	11 High 6 Medium 3 Low	<ul style="list-style-type: none"> Basic to community functioning. Critical success factor is for this to be bottom-up (community generated) rather than top-down (County generated). Agreed. Must be done with respect to public input before decisions are made. Public must be able to give input before application for funding for any project is made. Leave things alone. Less regulation best. Don't impose on landowner rights 1997 map url not available A plan is a good road map. A good plan will help to outline the direction of development for better long term outcomes. This serves people and our natural

		resources.
Comprehensive Review and Update of Land Use Code	13 High 4 Medium 3 Low	<ul style="list-style-type: none"> • Business basic to keep the Land Use Code updated. • Must have public input before final product. • The original intent of the Comprehensive Plan was not followed. The wetlands and wildlife corridors have been deleted. To protect the environment so people can enjoy mountain communities is imperative. People often do not know what a real mountain experience should be. • best left alone • obvious • Updating the Land Use Code can be contentious and controversial. But it is essential and is needed. This process will require true leadership from within County government. We will need Commissioners who are committed to public service and who have vision and leadership skills. Public service will need to transcend politics. • Update information is needed for several of the other programs to be effective, thoughtful, and timely.
Community Fuel Reduction Program	13 High 4 Medium 4 Low	<ul style="list-style-type: none"> • Once or twice a year. Be able to put slash on the side of the highway with someone to pick it up. • The noxious and invasive weed drop off for the Estes Valley is financially effective by saving labor of collecting cheat grass, etc. (i.e. fire hazards). Woody debris collection is also good. Selling debris for biofuel, mulch, etc. is a great idea. Recycling! • should be all voluntary • legislates property management • This is needed, but the cost must be carried primarily by the mountain communities. A Resiliency Fee must go along with the program. If people choose to live in the mountains and want their homes protected from wildfire, then those residents must absorb the cost. All of us on the plains are currently paying the cost of increased homeowners insurance due to the High Park Fire and poor planning by mountain residents. Moving forward, we must improve risk management and the costs must be paid by those who are getting the protection. • Needed.
Business Retention/ Creation Program	10 High 2 Medium 7 Low	<ul style="list-style-type: none"> • Broadband access is critical. There are many opportunities for entrepreneurs in mountain communities but must have reliable broadband. Coordinate with Innosphere. • Economic driven communities changes them to be what is not always desired. If it would allow businesses to support the needs of residents and pay workers what is needed for decent housing that would be good. If this were done, there would be good education. • let demand initiate any business services • more government interference • If mountain communities can support sustainable businesses, then let the economics drive that. The government should not be in the business of supporting for-profit businesses that are not sustainable on their own. If the government does

		<p>become involved, the endeavors should be non-profit and should be subject to high degrees of community oversight (beyond just the mountain communities). I am opposed to business welfare programs for non-sustainable businesses in communities that are being built by choice (for people who also tend to be above median income, etc.). Sounds too much like welfare for the rich.</p> <ul style="list-style-type: none"> • Complicated issue, I need to understand the core purpose in more detail.
Community Hubs	14 High 2 Medium 2 Low	<ul style="list-style-type: none"> • It is important for community members to stay connected - not just when there is an emergency. Need more ways to keep people engaged with preparedness mindset between disasters and reactionary vs. proactive action. • High value! My top choice for low-hanging fruit and immediately actionable. • facilitate local control • overdue • A good idea, but costs must be absorbed by the communities that are served. If you choose to live in the mountains, then pay the costs associated with the risks. Don't complain about taxes and then expect others to pay your way. • Safety and support = community cohesion. • Re emergency preparedness in mtn. communities, suggest compilation of list of active and retired volunteers, from industry and universities, based on their engineering training and experience: Civil Engineers (roads and bridges); Mechanical Engineers (ability to invent, design, build, and/or fix many different kinds of mechanical systems); Electrical Engineers and REA professionals (electric power generation and transmission).
Facilitate Cooperation of Nonprofit Organizations and Coalitions	13 High 1 Medium 7 Low	<ul style="list-style-type: none"> • Would be helpful as nonprofits don't always have time/resources to continually research efforts of other organizations or look for partnerships. • Could be important to have a way to reach different people with different interests, bring together folks who don't usually get along, get to people who are hard to reach. • Could be very helpful with fundraising for nonprofits. • Have more robust information system to provide information on resources/recovery status post-disaster. • Cost for non-government responsibility. • This method is biased in favor of developers and coalitions pushing their own interests and leaves small groups, individuals, and organizations with no power. • not sure county involvement needed • Larger government ... why? • Could be useful, but the costs must be absorbed by the communities being served.

REACHING FOR RESILIENCE EVENTS

Meeting:	Reaching for Resilience Event #1	Reaching for Resilience Event #2
Date:	October 25, 2017	October 26, 2017
Time:	6:00 pm	6:00 pm
Location:	Pinewood Springs Community Church	Livermore Community Hall

OVERVIEW

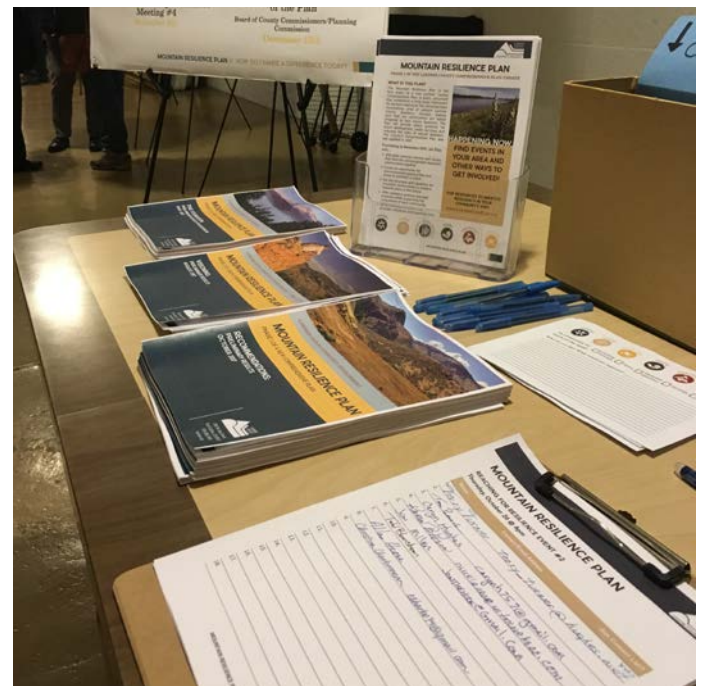
Two public events were held to refine the policy framework, implementation strategies, and how the County can measure the success of the Mountain Resilience Plan. The events and online survey provided mountain community residents with a forum to provide their input on the Recommendations Chapter of the Plan, as well as any concerns regarding the Foundation and Visioning Chapters.



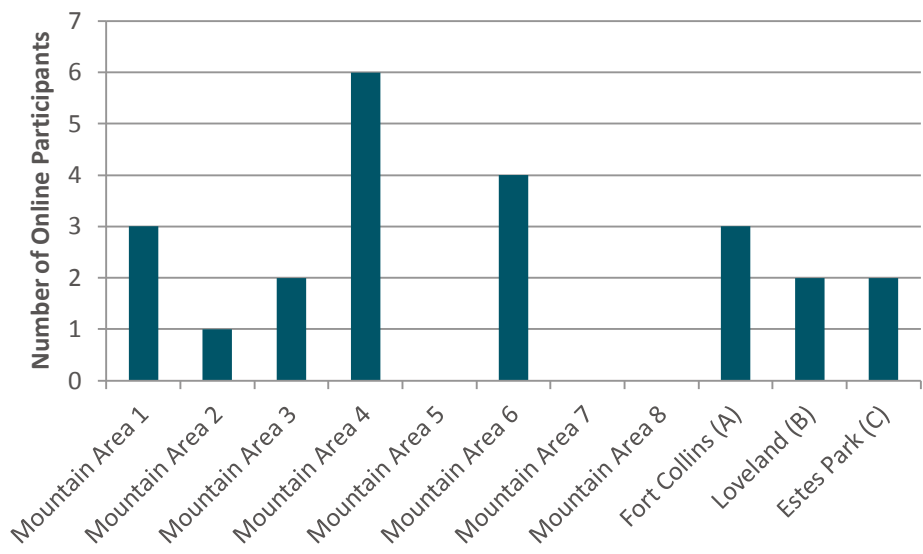
MEETING FORMAT & EXERCISE

The meetings were structured as a presentation with opportunities to ask and answer questions. After an overview of the planning process, presenters provided highlights of the draft chapter content. Participants asked questions and there was a public dialogue with the planning team and other community residents. Informational boards and copies of the draft were available around the room, for those that want to review before, during and after the presentation.

Residents could voice their concerns through one-on-one conversations, public statements, written comment cards, and the online survey. The online survey mirrored the events' materials and exercise, and was open to receive additional public feedback through mid-November.



RECOMMENDATIONS INPUT



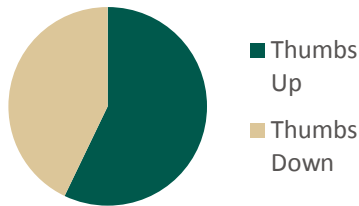
40 event participants

26 survey submissions

2 email comments

Policy Framework	Does this direction make the mountains more resilient? (online question)	Comments
Community	<p>Thumbs Up</p> <p>Thumbs Down</p>	<ul style="list-style-type: none"> Too many rules again being placed on landowners who tend to be responsible managers of their properties NO - glacier view has an established land use - you can't change it. GV has emergency management - don't change it - GV is a wonderful location to "live". This all sounds like another way for progressives to get control of the people who specifically live a rural and independent life. You all make things worse not better--EVER. Leave us alone. Less regulation STAY OUT OF MY AREA WE DON'T NEED ANY MORE CROOKED POLITICIANS UP HERE TRYING TO FIGURE OUT HOW TO TAKE OUR HARD EARNED MONEY. IF WE WANTED YOUR COMMUNITY BS I WOULD HAVE MOVED INTO ONE ALREADY.
Economy	<p>Thumbs Up</p> <p>Thumbs Down</p>	<ul style="list-style-type: none"> How do you successfully implement balanced employment opportunities and supply attainable housing? Economy - what are you talking about - not applicable for GV....!!! Less regulation GO HOME. NOT WELCOME UP HERE "What about technological infrastructure improvements (wifi, fiber, etc.) to improve the economy? I think this should also address the give and take between tourism and locals who live in an area.

Health & Social

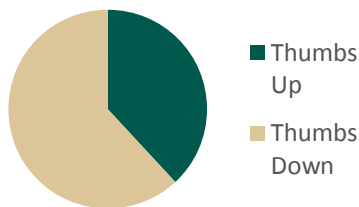


Larimer County tends to give preference to money making tourism over local residents values/desires.

- Shouldn't unincorporated Fort Collins area also have a subarea plan, not just Masonville."
- The reasoning behind economic development in mountain communities seems to be flawed in particular with regard to Red Feather Lakes. It would be better to discourage such development rather than encourage it. Please look at ways to do that rather than the sections "Economy 2." and "Economy 3."

- It seems to me to be creating more government jobs that will result in higher costs and end up with subpar services
- Allow swimming in horsetooth reservoir with the use of a marker or dive flag bouie.
- IF YOU HAVE HEALTH ISSUES AND LIVING UP HERE IS A PROBLEM FOR YOU MOVE OR DON'T MOVE UP HERE IN THE FIRST PLACE
- With regard to Red Feather Lakes, Section "Health and Social 2" is going to be rather problematic. What is needed there is Wastewater protection, not stormwater protection. Because there has not been proper county oversight on development in Red Feather Lakes, improper systems have been installed and continue to plague the area. There is no sufficient stream flow in Red Feather to dilute future wastewater effluent. This is a major problem for future development.

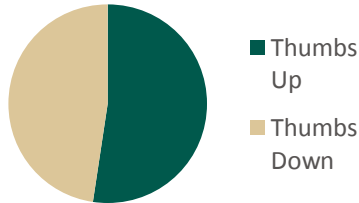
Housing



- Let's get specific to gain trust. If this plan is to help avoid infill then I can support it rather than agenda 21.
- Sounds like building regulations will become more restrictive. While maintaining open and natural looks, rights of individual landowners must be protected.
- AGAIN - glacier view has an established land use - you can't change it. GV has emergency management - don't change it - GV is a wonderful location to "live". This is the "mountains" NOT CITY LIFE - take your plans go away!
- Less regulation, dont want to promote new developments
- New development and re-development needs to meet strict requirements to minimize footprint, carbon load and water use.
- GO AWAY
- "Need to address infill housing in existing neighborhoods. Building beyond the original footprint may be ok if stormwater, etc. are addressed but it starts to change the character of neighborhoods and should have some process associated with it where neighbors can weigh in.
- Also, what about AirBNB and VRBO housing that is now creeping in and changing character of neighborhoods? This should be addressed."
- If the county is not currently enforcing the rules

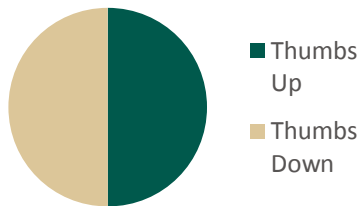
and regulations regarding housing, and it seems to be quite lax in the Red Feather Lakes area, how does the county plan on enacting and going forward with this plan?

Infrastructure



- How about some oversight for companies like Boxelder that can raise rates more than double in a single year.
- Less regulation
- MOVED UP HERE TO GET AWAY FROM BS LIKE THIS. STAY AWAY
- New development has NEVER paid its own way, that's why taxes always have to go up. All of the essential questions above need to be addressed before anything is done.

Watersheds & Natural Resources



- Changing flood plain regulations will impact current landowners' properties and multi agency regulations generally confuse and delay future building projects.
- the answer to the above question - NO
- Less regulation
- STAY AWAY

What other ways could these recommendations be improved?

- Bottom line for many of us is to not put economic development over maintaining the rustic environment - The reason we live here is this area is one of the few natural areas left.
- These principles and policies are great, but they don't mean much without a direct means of implementation. What my community (Horsetooth Lake Estates) needs to be more resilient:
 - Technical/logistical and financial support for fuel management/reduction
 - Technical/logistical and financial support for wildfire home mitigation
 - Technical/logistical and financial support for installation of a community fire cistern
 - Incentives or code requirements for power company to bury electric lines
 - Technical and legal/financial support for identification/acquisition/installation of secondary egress route
- A plan on integrate up and down canyon pods.
- Define terms within Glossary to avoid planner jargon
- Need to connect with surrounding counties regionally
- Fire Authority needs radio communication within Larimer County. Phones aren't dependable.
- No cell or wire connection in Big Thompson (Emergency Communication)
- Continue agreement with Boulder County for Fire and Emergency services
- Collaboration between hubs, agencies up and down the canyon
- Need a "welcome wagon" to inform new residents what to do in the event of an emergency

- Need better access to communication (notifications, alerts). If you're not in cell service or by your home phone, you won't get the alert.
- We feel more connected to Larimer County than we ever have after moving here 10 years ago. Good people doing good things. Thank you! Would like to see better communications in the event of a disaster. How to cultivate that!
- Need cell service – more than just Verizon in Livermore. Red Feather doesn't have any service! And internet and other utilities. It's in certain areas and it's capped.
- Emergency exist. Secondary egress is really important. When there's a detour, not enough gas available to go all the way around the mountain.
- Roads are a problem for emergency evacuation
- Will a road into a private community be owned by the community, can you help that community get in and out? Help all is the goal; we may want to look at private land for emergency access. Need to build relationships in order to keep private land access open, when it is abused is when this closes.
- Need to ensure that future development doesn't have one way roads or not enough access points.
- Is there anything that talks about power lines? In wooded areas? They can cause fires. Burying power lines is expensive, but so is replacing houses.
- There are threats to our way of life. More population is a threat to wildlife, the water supply
- This plan is to help us grow smarter, so that growth infringes upon me or impact me less.
- I think that you guys have done a really good job. Thank you.
- In an ideal world, I would be more comfortable if we had a fire station every 5 miles, but maybe if there has been more growth there is a better system. Red Feather Lakes sounds like a great system. I would like to see more increase in fire coverage.
- It seems like development occurs, but doesn't require the infrastructure to support it (i.e. you put in 300 homes, but you don't improve the roads)
- Scanned the document, looks pretty thorough.

As a resident of Spring Gulch, in Larimer County by my fence line, I just want to emphasize that we generally feel left out of Larimer County decisions and culture. For example, we get property-taxed for the Thompson Valley Health facility, but I would guess 0% of the Blue Mountain and Spring Gulch residents have ever been there, let alone used it. Our only access out of our community is south into Boulder County, where most of us work, shop, and play.

I noticed that one of your areas of interest was single-access communities. This is a big concern for us; perhaps Larimer County can open up a roadway to the north (used to be a tortured path, but not for 40 years).

One other concern is debris and limb/tree chipping. From here, there has never to my knowledge been a reasonable site to haul a trailer full of slash/etc. Nederland and Allenspark are Boulder County sites (available for a few of us) but they are an unreasonable time/mileage distant. If you were serious about encouraging fire mitigation efforts, perhaps you could have a drop-off site within range. (Our community has a similar problem with hazardous materials, etc, which always seem to be in Fort Collins.)

Thank you for listening; I just wanted to put a bug in your ear about us orphans on the Boulder County border.

