

**CITY OF BOULDER
PLANNING BOARD AGENDA ITEM**

MEETING DATE: December 18, 2014

AGENDA TITLE:

Boulder Valley Comprehensive Plan 2015 Major Update – Assessment and Options for Scope of Work and Update on Resilience Strategy

REQUESTING STAFF:

David Driskell, Executive Director, Community Planning & Sustainability (CP&S)
Susan Richstone, Deputy Director, CP&S
Lesli Ellis, Comprehensive Planning Manager, CP&S
Greg Guibert, Chief Resilience Officer, CP&S

OBJECTIVE:

Provide an update on the Assessment for the 2015 Major Boulder Valley Comprehensive Plan (BVCP) and discuss ideas for input on the work plan for BVCP and Resilience Strategy.

EXECUTIVE SUMMARY

The Boulder Valley Comprehensive Plan (BVCP) is adopted jointly by the City of Boulder (“city”) (Planning Board and City Council) and Boulder County “county” (County Commissioners and Planning Commission) in their legislative capacities. A link to the 2010 plan and maps is located at www.bouldervalleycomplan.net. The BVCP is updated periodically to respond to changed circumstances or evolving community needs and priorities. In 2015, the plan is due for its major five year update.

The purpose of this information packet is to describe the 2015 Boulder Valley Comprehensive Plan (BVCP) update assessment and scoping process; provide background and feedback regarding the update process; and summarize the consultant assessment of the 2010 Boulder Valley Comprehensive Plan. (See Boulder Valley Comprehensive Plan Assessment report, [Attachment A](#).) The draft report identifies strengths and weaknesses of the Plan and offers suggestions for improvement. This packet builds upon the Oct. 14, 2014 joint study session with City Council and Planning Board and the Nov. 3, 2014 joint study session with the Board of County Commissioners and Planning Commission, incorporating feedback from all four bodies as well as others. It also provides a draft a process and timeline for the 2015 update in preparation for the work plan discussion in January and ideas for community engagement. (See [Attachments B and C](#).)

In addition, the memo provides an update on the city’s Resilience Strategy next steps and work plan and materials from 100 Resilient Cities (100RC) (Rockefeller Foundation). (See [Attachment D](#).)

BACKGROUND

Boulder Valley Comprehensive Plan 2015 Update

Plan Assessment and Scoping Process

In June 2014, the city issued a Request for Proposals, received five proposals, and hired a consultant team (Clarion Associates/Godschalk) to conduct research and analysis in support of an assessment of the 2010 Plan, understand community goals for the update, and to provide fresh ideas about how communities make plans highly strategic and effective. The consultants have completed most of their assessment and the draft report is attached. (See [Attachment A](#).)

2010 BVCP Background

Since 1970, the city and county have jointly adopted and regularly updated a comprehensive plan that guides land use decisions in the Boulder Valley. Each five years, the city and county undertake a review to determine how to ensure the plan remains responsive to evolving conditions, needs and priorities.

The last update in 2010 addressed demographic challenges, recommended ramping up climate action, and addressed economic challenges. Two broad areas were strengthened during the update: (1) Sustainability polices encompassing social equity, environmental health and economic vitality, and (2) urban form and community design policies. The city and county also discussed clarifying the process for considering service area expansion into the Area III-Planning Reserve but did not ultimately change the plan requirement for four-body review of service area expansions (i.e., City Council, County Commissioners, Planning Board and County Planning Commission).

The plan is framed as the overarching policy guide for the community that is implemented by departmental strategic/master plans (over 20), subcommunity and area plans, Priority Based Budgeting, the Capital Improvements Program, and Development Standards and Zoning. The Land Use Code and zoning is largely instrumental in guiding development to achieve plan goals consistent with the land use map.

FEEDBACK

Board of County Commissioners and Planning Commission – Nov. 3 Study Session

The County Commissioners and Planning Commission held a joint meeting on Nov. 3, 2014 to review preliminary observations from the consultant and provide input regarding the scope and extent of the plan update. The summary is located in [Attachment B1](#). Joint county input regarding the upcoming BVCP update is summarized as follows:

1. Select a limited range of topics that are important to the community and do them well. A mid-range BVCP update effort is appropriate.
2. Make the document accessible, visual, and readable to encourage the next generation to engage.
3. Maintain the long standing partnership between the city and county (while expanding systems thinking and regionalism).
4. Add resilience as a core concept in addition to sustainability.
5. Create clear linkages to metrics and/or regulations. It is important to set baselines and be able to measure progress toward goals.
6. Give the plan a clearer link with the land use code and implementation – make it easier to use when reviewing development proposals.
7. Examples of urban form would be helpful. It will be important for the city to determine what level of density is acceptable for the county's rural policies to work.

City Council and Planning Board – Oct. 14 Study Session

The City Council and Planning Board met on Oct. 14, 2014 to review preliminary observations from the consultant and provide input regarding the scope of issues and extent of the plan effort. The approved summary is located in [Attachment B2](#). Points of input regarding the Plan included but were not limited to:

1. Support a mid-range BVCP work effort with focus on implementation tools (with some opting for a minor work effort, and others supporting a more major effort in 2015).
2. Integrate resilience with sustainability.
3. Do not redefine the vision or rehash values, but make the plan more graphic and less wordy and clarify policies in some cases.
4. Integrate metrics and outcomes.
5. Add new or emerging topics, such as built environment clarification, climate commitment, arts and culture, and local foods.
6. Engage the community widely, including neighborhoods (coordination with the city's new neighborhood liaison) and include vulnerable or under represented populations.

City Boards and Commissions

All board and commission meeting summaries are located in [Attachment B3](#).

- Transportation Advisory Board discussed the update on Oct. 13, 2014.
- The Environmental Advisory Board discussed the update on Oct. 1, 2014.
- The Planning Board met on Sept. 18, 2014 in preparation for the Study Session with City Council on Oct. 14, 2014.

Other Input

The consultants and staff conducted interviews and scoping sessions with city board members and with staff from city and county organizations, including the following (summarized in [Attachment B4](#)):

- Two members from the Arts Commission
- Two members from the Open Space Board
- Two members from Downtown Management Commission
- Growing up Boulder staff
- City staff from all departments that provide community services, including master plan coordinating committee and ecological planning team
- County staff from multiple departments

CONSULTANT ASSESSMENT SUMMARY

To assist with discussions in October and November, the consultant prepared initial assessment observations. The draft report summarizes these observations as well as input received from the city and county over the past few months. It is presented in five parts:

1. **Introduction** – describes the BVCP Plan analysis and provides general background on the history, successes and strengths of the Plan.
2. **Analysis of Plan and Themes for Improvement** – includes seven key themes identified during the Plan analysis that guide the recommendations for the 2015 Plan update process.
3. **Best Practices** – provides general background on features of effective community plans, and includes a set of “best practices” around some of the key themes to help inform the Plan update process.
4. **Work Plan and Community Engagement Recommendations** – includes sequence of steps for the Plan update, including initial ideas about phasing of tasks in 2015 and 2016 and ideas to engage the community.

5. **Possible Structure(s) for Plan Update** – includes options for a revised structure for the Plan to incorporate consultant recommendations, with two outlines presented in the appendix

Recommendations for Plan Improvement—Key Themes

While the consultant report recognizes many long time strengths of the Plan, it also identifies potential areas of improvement, including:

- Include 21st century challenges and opportunities, such as resilience and unpredictable change, climate mitigation and adaptation, planning for energy needs, and others;
- Present the vision in a more compelling way;
- Include outcomes and metrics to help track progress towards reaching the community’s goals;
- Illustrate desired urban form of the city;
- Strengthen linkages between the plan and implementation tools;
- Clarify policies in key areas; and
- Integrate resilience during the update process and throughout the Plan.

Each of these themes is discussed in more detail below and in the report (See [Attachment A.](#))

1—Include 21st Century Challenges and Opportunities and Expand Systems and Regional Thinking

The Plan has its origins in the primary challenges facing the community in the 20th century; growth management, containment of sprawl, and preservation of open lands. The city and county are nationally renowned for achieving “best-in-class” results in tackling these challenges. However, the Plan’s scope now needs to broaden if it is to serve the community’s current needs and challenges, and vision for the future. While the Plan’s core values and vision from the 1970s are still solid, a new and evolving set of challenges is now before the community, such as:

- resilience and the dynamic and unpredictable pace of change and disruptive events;
- climate adaptation and mitigation and planning for fundamental energy system transformation;
- equity, income disparity, and aging population;
- housing affordability;
- expanding on local and regional partnerships to leverage scarce resources and plan to achieve mutual goals; and
- community arts and culture.

Some of these topics can best be addressed through work that is underway while others may need to be addressed through alliances or other initiatives.

2—Recast the Document Format to Present the Vision in a More Compelling Way

The Plan contains many powerful and innovative ideas, each of which can lead the city towards a better future. Opportunities include making the format more user-friendly and less wordy, doing a better job of telling the Boulder story, and conveying the vision in a more graphic way.

3—Address Outcomes and Metrics in the Plan

For the most part, the current plan and its policies do not have direct and well defined measures of outcomes, results, and actions. While this encourages flexibility of implementation, it discourages public understanding, accountability, collaboration, and organizational learning. For more specifics, one must look to the various Master Plans created for transportation, public safety, and other functional areas. The Plan could serve a stronger role in integrating the various plans as well as by including a set of high level outcomes and metrics.

4—Illustrate the City's Desired Urban Form

The Plan does not clearly illustrate the desired sustainable urban form and how it will be affected by individual projects or public policies. The Plan needs to use new tools to show what the desired outcome is (e.g., graphic images, pictures, perhaps 3D modeling). This will help inform ongoing efforts to update the city's development regulations and procedures and provide a clear picture of the types of change that are expected. The report presents opportunities to illustrate or modify the land use plan to focus on desired physical characteristics for places and to illustrate how all areas of the city fit together.

5—Strengthen Linkages between the Plan and Implementation Tools

The Plan should serve as the guiding document for the tools that are used to implement planning in the community, including master plans; area and sub-community plans; priority-based budgeting that drives programs and services; and development regulations contained in the Land Use Code. More could be done to strengthen and more clearly articulate the Plan's role and linkages especially to the code.

6—Clarify Policies in a Few Key Areas

The Plan contains a large number and range of policies. While for the most part they are clear and well-written, users of the Plan will say that at times they can be all things to all people. The 2015 update could focus on clarifying a narrow range of policies.

7—Integrate Resilience

Community resilience is generally defined as the ability of a city to bounce back after a shock or stress or the sustained ability of a community to use available resources to respond to, withstand, and recover from adverse situations. Resilience and sustainability are closely related; a sustainable city is resilient and a resilient city is sustainable. The city and county leaders were supportive of including resilience in the Plan, and opportunities for the update include integrating resilience throughout the Plan update by leveraging the 100 Resilient Cities effort, network, and analysis (described later in this memo) to develop a new model for addressing resilience in a comprehensive plan.

Proposed Approach and Schedule to Update the BVCP

In October and November, the consultant presented different approaches and levels of effort to address the Plan update, ranging from minimal (e.g., retaining the current plan and focusing on related implementation tools) to much higher levels of effort (e.g., potentially significant changes to the plan and repackaging, with extensive engagement of the community and key partners).

Given the multitude of other initiatives and high priority work items and also ideas to improve the BVCP and address current conditions, in October and November the city and county leadership generally supported a moderate scope for the update to focus on aspects of the plan that could be successfully completed (as noted in key themes above) as well as focusing on parallel or subsequent implementation tools, including Design Excellence code changes and growth management implementation.

The 2015 BVCP update is anticipated to take 18-24 months with major phases that roughly coincide with the Resilience Strategy phases and that will be solidified after work plan discussions with City Council and the county in January 2015:

Phase 1—Foundation Work and Community Engagement Plan (tasks described below)

Phase 2—Issues Focus and Community Kick off

Phase 3—Policy and Map Updates

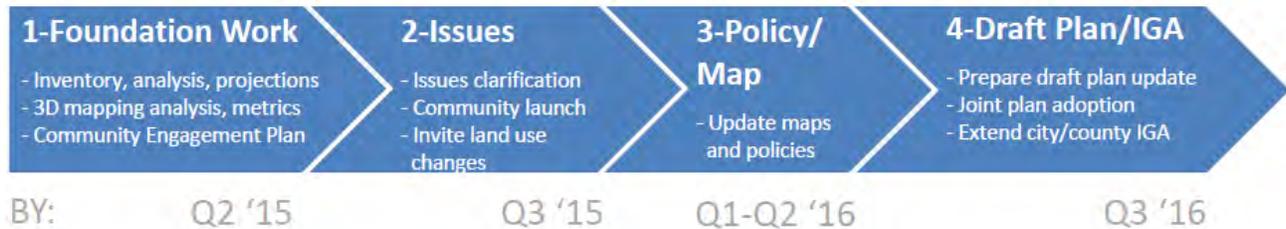
Phase 4—Draft Plan and IGA Renewal

The draft Timeline for the Plan and Resilience Strategy is also located in [Attachment C](#).

Because the topic of four-body review of service expansions or changes to Area III/Planning Reserve was not discussed or supported during city and county Study Sessions, staff does not anticipate revisiting the topic that was previously unresolved.

Additionally, because the City of Boulder/Boulder County Comprehensive Development Plan Intergovernmental Agreement (IGA) expires on Dec. 31, 2017, staff suggests the city and county extend/renew the IGA after the plan update is complete in 2016.

BVCP – 2015 Update



Draft 2015/2016 Timeline for BVCP Update

Foundation Work (Phase 1 – Early 2015)

Staff anticipates certain steps that are part of a five year update regardless of its overall scope plus some additional proposed foundation work in response to the key themes and recommendations identified as part of the initial plan assessment and discussions. The following tasks are planned for early 2015:

1. Finalize the work plan with the city and county (Jan. 2015) with consideration of other work plan priorities.
2. Update community profile and demographic information.
3. Prepare map-based (Geographic Information System) analysis of growth capacity considering current land use plan and zoning and other regional forecast information.
4. Evaluate 3D mapping options and prepare 3D mapping analysis.
5. Develop a Community Engagement Plan that will be creative, transparent, and involve all segments of the community around key issues. (See [Attachment A](#), p. 35, and [Attachment B](#) for additional community engagement ideas.)
6. Prepare approach to including metrics in the Plan, including those currently in use in Boulder and exploration of how other communities have included metrics in plans.
7. Coordinate with new neighborhood liaison to identify best ways to involve neighborhoods.
8. Invite requests for land use map changes as part of phase 2.

Tasks for the subsequent three phases of the update effort will be defined as part of Task 1 above (finalizing the work plan).

RESILIENCE STRATEGY

As part of the Rockefeller Foundation's 100 Resilient Cities (100RC) campaign, Boulder will be devoting considerable attention and work effort over the coming two years toward becoming more resilient to the physical, social, and economic challenges of the 21st century. (More information is available in [Attachment D](#).) 100RC supports the adoption and incorporation of a view of resilience that includes not just the shocks the community faces – fire, flood, disease – but also the chronic stresses that persistently weaken the city and sap our full potential. The 100RC program supports resilience building activities at the city level along four pathways:

- **Chief Resilience Officer:** Financial support for the creation of a new position in the government who will lead the effort. This position was filled in the Fall of 2014 with the hiring of Greg Guibert as Boulder's first Chief Resilience Officer.
- **Tools and Methods:** Technical and logistical support for the development of a resilience strategy that will serve as the city's roadmap to resilience activities and priorities
- **Platform Partners:** Access to tools and specialized partnerships to help developed a sophisticated understanding the city's risks, assets, weaknesses, and opportunities and how they interlink in unanticipated ways
- **Network:** Inclusion into a network of 99 other cities from which best practices, innovation, and peer-to-peer learning can advance the practice of resilience globally

100RC has developed a general approach and methodology for developing resilience strategies that Boulder with three stages that Boulder will need to customize according to its individualized needs, community goals, and capacity and develop in tandem with the BVCP scope of work.

- **Phase I** can be generally characterized as foundational and included a workshop with 100RC staff in April 2014 and the hiring of the CRO in September 2014. The first major process phase, however, began in late October 2014 and it will include a series of diagnostic and analytical activities designed to more comprehensively assess the city's risk profile, catalogue the existing portfolio of resilience-related projects, policies, and programs, and map a robust and inclusive stakeholder engagement plan for subsequent phases.
- **Phase II** will deliver the resilience strategy by identifying specific priorities and initiatives for implementation.
- **Phase III** will be dedicated to early implementation activities and ensuring the financial sustainability of the effort beyond the initial 100RC investments.

The success of the resilience strategy process for the city will rest in the ability to integrate the tools and methodologies pioneered by 100RC with the needs, processes, and priorities of the Boulder community. While the diagnostic, assessment, and engagement tools will undoubtedly surface important contributions to the overall strategy, it must build on a foundation of existing city efforts and successes. Some early opportunities for integration include incorporation of resilience principles and metrics into the BVCP Update and the development of the Local Food policy. Similarly, some of the mapping and assessment tools proposed by 100RC, such as the creation of a stakeholder map, have the potential to add real value to other efforts across city departments, including the 2015 Plan update.

As part of the 100RC program, Boulder will have access to a series of specialized technical partners known as Platform Partners. The type and level of service will vary among Platform Partners, with some making specific 'off the shelf' tools available for city use, such as SwissRE's catastrophe modeling software. Other opportunities will be co-developed in consultation with the city and a partner. In Norfolk, for example, the city has partnered with Palantir, a data innovation and management company, to develop information architecture that will allow the city to digest vast quantities of data to improve situational awareness during disasters. Similarly, Norfolk has also partnered with Sandia National Labs to develop a cutting-edge full cost accounting method of Cost-Benefit Analysis for various development pathway options to maximize their resilience to climate change and sea level rise. Finally, Boulder's resilience strategy development process may indicate specific technical analysis not yet supported by the 100RC Platform in which case the city will have the opportunity to work with 100RC to locate suitable partners whose services can be replicated across the Network. Engagement with Platform Partners is largely envisioned for Phase 2 and 3, once priority areas have been identified through community input and interaction. However, Boulder is partnering with Ushahidi (<http://www.ushahidi.com/>), an open-source location-based community engagement technology platform, in early phases as intentional expansion of the engagement effort to local technologists, tech start-ups and entrepreneurs, among others.

On December 3, 2014, 100RC announced the second round of cities into the Network. As part of the inaugural class announced in 2013, Boulder is relatively well advanced in the planning process. A smaller subset of cities were designated as pilot cities and provided useful input and modification to the draft tools and methodologies now being replicated across the Network. Because Boulder is already engaged in a number of resilience building activities independent of the 100RC effort (in many cases due to the 2013 Flood recovery efforts), we have made important early contributions to 100RC tools and guidance documents, suggesting significant modifications to the stakeholder engagement and “shocks and stresses” assessment tools, for example. The expectation remains that Boulder will continue to be a peer leader having made early connections with Melbourne, AUS; San Francisco, CA; Berkeley, CA; and Rotterdam, NL around areas of mutual interest, including climate impact assessments, cyber-security and infrastructure, and equity and housing affordability, among others.



Draft 2015/2016 Timeline for Resilience Strategy

IMMEDIATE NEXT STEPS

- Jan. 2015 Finalize work plan for 2015 BVCP Update and Resilience Strategy
- Jan. 23, 2015 Council retreat discussion of work plan
- Early 2015 Phase 1 Plan Update and Resilience Strategy technical work; Develop Community Engagement Strategy

ATTACHMENTS

- A. Boulder Valley Comprehensive Plan Assessment - Report from Consultant
- B. Summary of Feedback and Input
 - B1. Boulder County, Nov. 3, 2014 Joint Meeting of the County Commissioners and Planning Commission
 - B2. City of Boulder, Oct. 13, 2014 Joint Meeting of the City Council and Planning Board
 - B3. Board and Commissions Summary
 - B4. Summary of Interviews and Staff Input
- C. Draft Timeline for BVCP 2015 Major Update and Resilience Strategy
- D. Updated Resilience Strategy Materials

C L A R I O N



BOULDER VALLEY COMPREHENSIVE PLAN ASSESSMENT

DRAFT

December 8, 2014

Introduction	1
Project Description.....	1
Project Process.....	1
Organization of this Analysis.....	2
Boulder Valley Comprehensive Plan Overview.....	2
Summary of Preliminary Findings	6
Analysis of Current Plan and Recommendations for Improvement	7
Introduction	7
Elements of “Cutting-Edge” Plans.....	7
Key Themes and Areas for Improvement	9
Best Practices	21
Introduction	21
Urban Form Best Practices.....	21
Outcomes and Metrics Best Practices	28
Resilience Best Practices.....	30
Action Plans Best Practices	32
Work Plan and Community Engagement Recommendations	34
Introduction	34
Work Plan Recommendations	35
Recommendations for Public Outreach.....	35
Recommended Structure for Plan Update.....	37
Appendix	38
Boulder Valley Comprehensive Plan Outline, Based on Current Structure	38
Boulder Valley Comprehensive Plan Outline, Based on Sustainability Framework	41

INTRODUCTION

Project Description

The City of Boulder retained Clarion Associates and David Godschalk, national planning consultants, to complete an assessment of the 2010 Boulder Valley Comprehensive (plan) in anticipation of its five-year plan update. The intent was to provide a third party review of the plan identifying strengths and weaknesses of the document, and offering suggestions for improvement based on national best practices and community-identified concerns. It will set the foundation for the plan update commencing in 2015, which planning staff will largely conduct in-house.

Project Process

The Plan Assessment project consisted of three primary tasks as follows.

Task 1: Preliminary Assessment

To begin the project, the consultants met with city and county staff from multiple departments over the course of several days, and reviewed background materials. Consultants and city staff also met with boards and commissions to get their input. Consultants then reviewed the plan document and prepared a set of preliminary observations. These served as the basis for study sessions with city and county leadership during Task 2.

Task 2: Review Preliminary Findings

The consultants met with city and county leadership to review and discuss their preliminary findings. Meetings included a study session with the Boulder Planning Board; a joint study session of the Planning Board and City Council; and a joint study session with the County Planning Commission and Board of County Commissioners. Participants at the meetings discussed a wide variety of issues and concerns for Boulder and their relationship to the 2015 plan update.

Task 3: Preliminary Report

During the final phase of this project, the consultants refined their findings and recommendations for proceeding with the 2015 plan update. The result is this analysis, which includes the following:

- Key Themes – Analysis of Current Plan and Recommendations for Improvement
- Summary of Best Practices Related to BVCP Update Issues
- Work Plan Recommendations
- Recommended Structure for Updated Plan

Organization of this Analysis

This Analysis is organized in five parts plus an appendix:

Introduction – describes the plan analysis effort and provides general background on the history and successes and strengths of the plan.

Key Themes – provides general background on elements of “cutting-edge” plans, and describes seven key themes identified during the Plan analysis that guide the recommendations for the 2015 plan update process.

Best Practices – includes a set of “best practices” examples to help inform the plan update process.

Work Plan Recommendations– includes a recommended sequence of step for the plan update, including phasing of tasks in 2015 and 2016, as well as ideas for community engagement.

Recommended Structure for Plan Update – includes recommendations for a revised structure for the plan, to incorporate our recommendations.

Included in the appendix are outline examples of a revised BVCP based on the recommendations contained in this report. Also available under separate cover are summaries of issues identified during consultant/staff interviews, and a summary of study sessions with city and county elected and appointed officials.

Boulder Valley Comprehensive Plan Overview¹

Early Planning Efforts

Boulder has long valued its surroundings at the base of the Front Range foothills. After examining the city for the Boulder Civic Improvement Association, Frederick Law Olmsted, Jr. recommended in 1910 that the foothills of the city be preserved in their natural state. Boulder's first urban service boundary, the "Blue Line," was established in 1959 as a citizen-initiated City Charter amendment. The purpose of the Blue Line is to protect the foothills from development which was considered imminent and extremely detrimental to the natural beauty of Boulder. It insured that city water service could not be used to further urban development up into the foothills by prohibiting the supply of county water to areas lying above a certain elevation. Effectively, this line prevented the city from annexing or serving the land west of its municipal limits.

¹ Note: this section is based on “Growth Management in Boulder, Colorado: a Case Study”, prepared by J.Raismes, H. Hoyt, P.Pollock, J. Gordon, And D. Gehr, 1999

Once the city had adopted the Blue Line as an urban growth boundary along its western side, it began planning for its utility capacity to serve new growth. The city's primary planning document was called the "Guide for Growth," adopted in January, 1958. It consisted of a land use and circulation map, a summary of basic studies, plans for circulation, land use, schools, recreation, central district and utilities, and action programs.

Other early planning documents included "Boulder's Fringe Area Objectives" (1964) and "The Service Area Concept: A Program for Boulder's Planned Development" (1965), often referred to as "The Spokes of the Wheel." The assumption of both of these plans was to guide growth in the fringe areas, to prevent disorderly sprawl, through contracts for water and sewer service outside of the city's boundaries.

Boulder Valley Comprehensive Plan – a New Beginning City/County Cooperative Planning

The adoption of the 1970 Boulder Valley Comprehensive Plan was important in that it set the stage for city and county cooperation and introduced the concept of staged urban growth in the Boulder Valley. The plan was primarily a land use and service area map which also defined future open spaces around the city. It largely placed the burden on the city to implement the plan through annexation and utility service policies, since the current plan was first adopted in 1977. Since then, six major updates have been completed: 1982, 1990, 1995, 2000, 2005 and 2010.

With the adoption of the 1977 Boulder Valley Comprehensive Plan, the city changed its service area concept to one that is based on staged development. It divided Boulder Valley into three service areas:

- Area I, land within existing city limits, which were receiving all municipal services;
- Area II, land eligible for annexation within the next fifteen years; and
- Area III, land not planned for urban development within the fifteen year planning period.

Also adopted was a land use map that specifically defined the type and intensity of land use. The county agreed to zone the unincorporated areas in a manner that was consistent with the Comprehensive Plan. Ultimately, in 1984, county staff brought forward a proposal to implement the comprehensive plan's recommendations through downzoning most of the unincorporated area of the county. Much of the county had over the years been zoned to various residential and commercial districts, and most of this rezoning had been done on a speculative basis, resulting in large areas zoned for urban uses and densities, but only scattered, and minimal actual development. The county's rezoning of 25,340 acres in 1985 and 1986 was a bold step in implementing the Boulder Valley Comprehensive Plan, and is one of the major factors for its success. Both the city and the county have lived with a stable Comprehensive Plan framework since 1977, with periodic updates approximately every five years. The most recent update was in 2010.

Successes and Strengths of the Plan

By most measures, Boulder's growth management strategy clearly has been successful. It has helped preserve important elements of the natural environment. It has focused community attention on the

relationship between development and the infrastructure necessary to support that development. The sense that both the valley's natural beauty and its urban form may be protected over time has contributed to the desirability of the city as a place in which to live and work.

Unlike many cities that sprawled into the countryside, Boulder has created a sharp edge between urban and rural development. The definition of areas where services are provided allows a direct link between land use planning and infrastructure planning. The urban service areas also help to focus investment on redevelopment within the city. Through redevelopment of underutilized areas and infill development, the city has been able to capitalize on its existing public investments in infrastructure, and has transformed many of its corridors and centers into vibrant, urban places.

The city's coordination of planning efforts with the county is the bedrock foundation upon which all of these planning efforts have been implemented. The city and county have maintained relations that led to cooperative planning efforts from the days of the Boulder Regional Planning Commission in the early 1950's to today. City and county cooperation has prevented leapfrog development patterns in the Boulder Valley and other problems that occur when governments compete with each other rather than cooperate. City and county cooperation also set the stage for the highly successful Open Space Program that to date has preserved more than 70 square miles of city open space land, with an additional 150 square miles administered by the county. The result has been the preservation of two-thirds of the Boulder Valley.

While Boulder has been successful in preserving a ring of open space around its borders and limiting outward sprawl, many working people now find it challenging to live within the city due to the high cost of housing. Infill and redevelopment opportunities within which to retain some demographic balance are limited, therefore the city faces the challenge of making sure that the city's planning does not lead to social elitism and other unintended changes in the quality of life and character in Boulder, due to high costs of housing and other factors such as high levels of workforce in-commuting. The city has continuously revisited the question of balance between housing and jobs over the years, and has made adjustments to the BVCP land use plan in response. However, the dynamic between places to live and work is now a regional issue, as are transportation challenges, and Boulder will need to continue to engage with other communities as well as regional partners on this topic.

Current Status and Policy Directions

The Boulder Valley Comprehensive Plan provides a general statement of the community's desires for future development and preservation of the Boulder Valley, and is largely a policy document. The principle of sustainability drives the overall framework of the plan. The sustainability framework contained in the current plan is primarily based on the Triple Bottom Line: environmental sustainability (energy, climate, agriculture and food, and natural environment); economic sustainability (economy and transportation); and social sustainability (housing and community well-being). More recently, City Council has adopted a comprehensive sustainability framework that is based on seven broad categories:

1. Safe Community
2. Healthy and Socially Thriving Community
3. Livable Community
4. Accessible and Connected Community
5. Environmentally Sustainable Community
6. Economically Vital Community
7. Good Governance

The core components of the plan are:

Policies: The bulk of the plan contains policies that guide decisions about growth, development, preservation, environmental protection, economic development, affordable housing, culture and the arts, urban design, neighborhood character and transportation. The policies also inform decisions about the manner in which services are provided such as police, fire, emergency medical services, water utilities, flood control and human services.

Amendment Procedures: This section of the plan describes the procedures for various types of amendments to the Plan, including five-year updates.

Land Use Map Description: The Boulder Valley Comprehensive Plan Land Use and Area I, II, III maps define the desired land use pattern for the Boulder Valley regarding location, type and intensity of development.

Implementation: This section describes the various master plans, subarea and community plans that provide a more detailed framework for implementation of the plan.

Referral Process: Establishes the referral process for land use and public improvement activities.

Urban Services Criteria and Standards: Describes the urban service criteria and standards that are used to determine adequacy of services for land use and public improvement activities in Area II as well as for annexation.

The most recent update to the plan, completed in 2010, focused on three areas:

1. Sustainability policy changes throughout the document, with a particular focus on urban form/community design;
2. Land Use and Area I, II, and III map changes, particularly the consolidation of Area IIA and IIB designations; and
3. Process changes for amendments to the Area III Planning Reserve; these were ultimately not approved by the County Planning Commission, thus these changes were not included in the 2010 update.

Summary of Preliminary Findings

Overall, the plan contains a number of strengths that serve as a positive foundation for the update. These include:

- A solid foundation in growth management and land conservation, with a track record of success that is widely supported by the community;
- A long-term, successful track record of cooperation between the city and county in planning and implementation;
- A compact development pattern with policy support for diverse housing types;
- A comprehensive set of master plans, subarea plans, and other detailed documents that help implement the BVCP;
- Regular updates to the plan (five years) to keep it current and relevant;
- A multi-modal transportation network that is well on its way towards implementation; and
- A wide range of topics related to sustainability and other contemporary issues to build on for the update.

In addition to these strengths, we have identified a number of key themes for improvement to be considered during the upcoming update process. These include the following:

- Include 21st century challenges and opportunities in the update, such as resilience, climate mitigation and adaptation, planning for energy needs in the future, and others;
- Present the vision in a more compelling way;
- Consider including outcomes and metrics to help track progress towards reaching the community's goals;
- Make the desired urban form of the city more clear, and illustrate it so that all can understand it;
- Strengthen linkages to implementation tools and actions;
- Clarify policies in key areas; and
- Integrate resilience throughout the plan during the update process.

Each of these themes is discussed in more detail in the next section of this report.

ANALYSIS OF CURRENT PLAN AND RECOMMENDATIONS FOR IMPROVEMENT

Introduction

The following observations from the consultant team are based on our assessment of the plan, interviews with board members and city staff, and observing other community discussions regarding planning policy. They are based on the personal experience and national research of the authors about best practices related to effective and cutting-edge comprehensive plans. Our preliminary observations were reviewed in study sessions with city and county planning commission members and appointed officials, and our recommendations below reflect the input and discussions from these study sessions.

Elements of “Cutting-Edge” Plans

Based on our experience with plans that have been prepared in recent years, we believe that cutting-edge, successful plans should include the following:

Compelling Vision: The plan contains a clear and compelling vision for the future of the community that is easy to identify and describe.

Strong Rationale for Plan Direction and Policies: Effective plans include strong, clear rationale for recommended policies and actions. Elected officials and citizens must understand why a particular course of action is needed or desired if they are going to support its implementation.

Visually-Oriented and User-Friendly: The plan should use state-of-the-art graphics and images as much as possible to depict planning concepts. Maps should be legible and useful, conveying desired outcomes, not just land use categories.

Contemporary Planning Issues and Opportunities: The plan should also advance best practices in the planning and development fields for contemporary issues such as resilience and sustainability, neighborhood design and mixed-use development, partnerships and coordination, and social equity. It is also important that plans incorporate such topics in compelling and meaningful ways.

Integrated Approach: The plan should serve to tie together other plans in the community.

Clear-Cut Implementation Strategies: An effective plan should include a clear set of actions and strategies to carry it out. In many instances, elements of plan implementation can be carried out concurrent with the planning process, setting the stage for action and demonstrating early progress towards plan goals.

Outcome-Focused and Include Measures for Progress: Successful plans set clear, desired outcomes and include mechanisms for tracking progress.



Cutting-edge plans for communities integrate multiple aspects of a community's sustainability goals

Key Themes and Areas for Improvement

While recognizing many long time strengths of the plan, this assessment identifies a number of potential areas of improvement. Each is described below.

Include 21st Century Challenges and Opportunities in the Update

The plan has its origins in the primary challenges facing the community in the 20th century; growth management, containment of sprawl, and preservation of open lands. In its current form, the plan is largely a land use and preservation plan, and has been so dating back to its origins in the 1970's. The city and county are nationally renowned for achieving "best-in-class" results in tackling these challenges. However, the plan's scope now needs to broaden if it is to serve the community's current needs and challenges, and vision for the future. While many of these challenges and opportunities are being addressed in some way through separate initiatives, the 2015 update could serve to bring together many of these topics in a cohesive, unified manner. Opportunities include:

1. Address new century challenges. While the plan's core values and vision are still solid, a new and evolving set of challenges is now before the community, such as:

- resilience and the dynamic and unpredictable pace of change
- climate adaptation and mitigation and planning for energy needs of the future
- equity, income disparity, and aging population
- housing affordability
- expand on local and regional partnerships to leverage scarce resources and plan to achieve mutual goals
- the role of arts and culture

Some of these topics can best be addressed through work that is now underway, such as the ongoing housing strategy and through efforts to integrate the City's ongoing resilience strategy with the plan update process. Other topics will need to be addressed through other initiatives or alliances to address topics such as social equity, or arts and culture, which could be integrated with the city's cultural plan.

2. Expand systems and regional scope. In our discussions with city and county leadership, they noted that many of the systems that serve the community and demographic and growth influences that affect it (e.g., water, transportation, air quality and climate, natural systems, energy infrastructure and supply, population growth) have a geographic scope that reaches beyond the boundaries of the plan. With an increased emphasis on resilience, it may be appropriate during the update to consider these systems in their larger context, beyond the boundaries of the plan area. This will be particularly important to consider as part of the resilience strategy. Note that this recommendation does not imply that the plan needs to be recast as a regional plan; rather, what we are suggesting is that many of the built and natural systems that support the city are part of a larger regional framework that needs to be considered. However, it may be appropriate for some of the maps in the plan to be more regional in scale.

Recast the Document Format to Present the Vision in a More Compelling Way

The plan contains many powerful and innovative ideas, each of which can lead the city towards a better future. However, they are imbedded in the Plan document in a rather disconnected manner, not stated as a unifying vision with a clear, strategic structure. Simply stated, Boulder has a great story to tell about its vision for the future, and we believe that the Plan is the right place for this to come together. We have found in our experience with other progressive communities that a cohesive vision can serve as a unifying element of the plan. The Vision and supporting Core Values can be part of a strong section that can also stand-alone outside of the plan document, and serve as a guide for high-level policy and decision-making. These relatively simple changes could go a long way towards unifying the plan update and enabling it to serve as a unifying document for the community's development. Opportunities include:

1. Make the format more user-friendly. The plan in its current form it is not presented in a manner that is a compelling read for much of the community, particularly non-planners, because it is heavy on text, contains few graphics and maps, and is organized in standalone chapters or elements that do not relate to a broader vision for the city. A fresher format that is more visually oriented, in addition to other recommendations outlined below, could help make the document more appealing to readers.

2. Do a better job of telling the Boulder story. Boulder has an incredible story to tell – its past, present, and future – and the plan can present so much more in a way that is more inspirational and accessible to the broader community. This can help build a greater understanding of the purpose of the plan. This could include a retrospective section that explains what the plan has done to shape the community over time, and how its values have been maintained over the 40+ year history of planning in the Valley. For example, a graphically illustrated timeline of areas of land conserved over time would help give the reader a better sense of accomplishments related to the vision contained in the Plan.

3. Convey a compelling vision. The plan and other documents (Sustainability Framework, for example) contain much that speak to the community's values and vision, but this is not presented in a clear, cohesive, form that gives meaning to most people in the community. In the current form of the plan, there really is no identifiable vision per se. City and county leadership have told us that they would like to see the vision be more obvious and clear in the document. The community's vision for the future could be more evident, setting the tone for the plan and carrying forward in some manner throughout the document. Note that our recommendation does not imply that the underlying elements of the vision needs to change, but rather that it could be made more obvious and clear. Simply stated, the vision should set the aspirations of the community, and the rest of the plan should describe what it will take to get there.

For Boulder, a new, creative approach to its vision might include elements of the past, present, and desired future in a series of "big idea" statements, including graphics and illustrations to fully convey the desired future vision.

For example, Portland’s draft Vision for 2035² (see figure below) is a simple narrative statement. It is supported by seven key directions to achieve the vision, that help to frame up the rest of the plan’s content:

1. Create complete neighborhoods
2. Encourage job growth
3. Create a low-carbon community
4. Improve natural areas and open spaces
5. Provide reliable infrastructure
6. Improve resiliency
7. One size does not fit all

VISION FOR 2035

Portland is a prosperous, healthy, equitable and resilient city where everyone has access to opportunity and is engaged in shaping decisions that affect their lives.

Our diverse population, innovative businesses and forward-thinking leaders create a vibrant and unique community.

- A thriving low-carbon economy provides jobs and supports the prosperity of a diverse population.
- Portlanders feel more connected to each other, the city, and their communities and they are involved in community decisions.
- Nature is woven into the city, and a healthy environment sustains people, neighborhoods and wildlife.
- Distinctive neighborhoods and the vibrant downtown are safe, energizing civic and cultural spaces.
- Environmental risks are managed and resiliency increases, helping Portlanders prepare for change and recover from disasters.

Source: [Portland 2035 Comprehensive Plan Proposed Draft](#)

² <http://www.portlandoregon.gov/bps/57352>

Another example is found in The Auckland Plan – a recently completed plan for Auckland, New Zealand³. Its vision is found in a section of the plan called “Auckland Now and Into the Future”. The vision statement is a simple one:

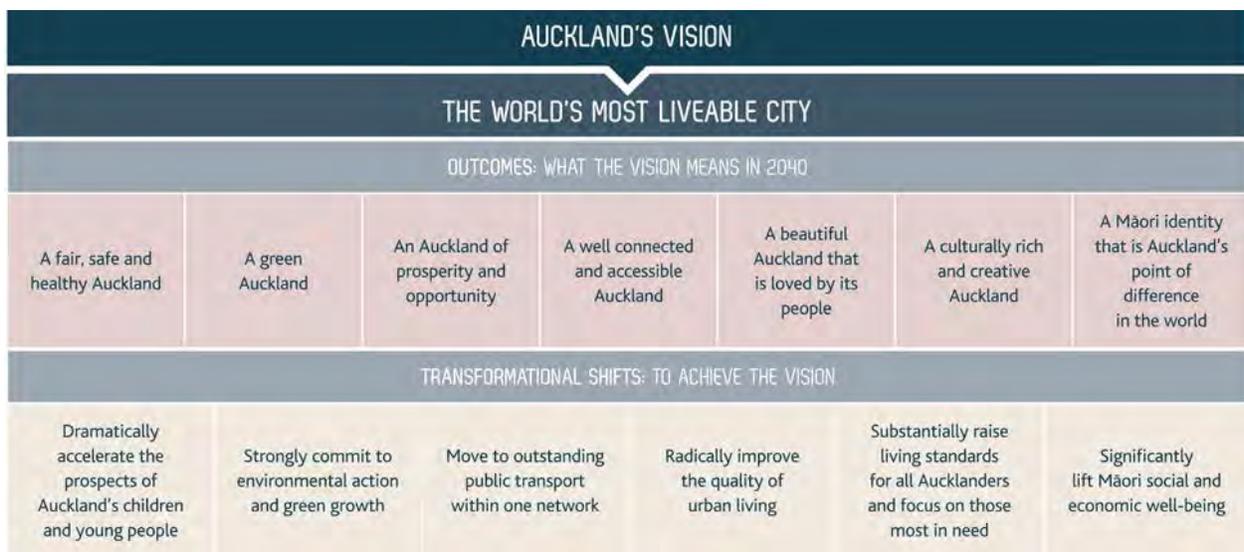
Auckland’s vision is to become the world’s most liveable city. As the world’s most liveable city Auckland will be a place that:

Aucklanders are proud of,

they want to stay or return to, and

others want to visit, move to, or invest in

The vision; the outcomes (what the vision means in 2040); and transformational shifts needed to achieve the vision for Auckland are all contained in the simple diagram below. What distinguishes both of these examples from the BVCP is that there is a clearer link between the vision stated in the plans and the actions and outcomes that are needed to achieve the vision over the longer-term.



³ <http://theplan.theaucklandplan.govt.nz/auckland-now-and-into-the-future/#b-1-the-vision-for-auckland>

Use the Plan to Address Outcomes and Metrics

The current BVCP is primarily a general policies plan. For the most part, the policies do not have direct and well defined measures of outcomes, results, and actions. While this encourages flexibility of implementation, it discourages public understanding, accountability, collaboration, and organizational learning. A written policy that can be interpreted as either supporting or opposing a proposed action is not a useful decision guide. For more specifics, one must look to the various Master Plans created for transportation, public safety, and other functional areas. While these other supporting plans represent a strong approach to implementing programs and policies, we believe that the BVCP could play a stronger role in integrating the various plans (see below, *Strengthen Linkages Between the Plan and Implementation Tools*) as well as by including a set of high level outcomes and metrics. In our discussions with city and county leadership, we were told that the current plan does not answer the question of “how are we doing” because it does not incorporate a process or have metrics to help answer that question in an ongoing manner. Opportunities include:



1. Include outcomes and metrics. Planning has been defined as the transformation of knowledge into action. Contemporary best practices-based plans make this transformation possible by defining the community's desired outcomes and linking them to measurable metrics that assess the results of actions. Without outcomes and metrics, planning goals are abstract concepts without ties to practical actions. Experience shows that what gets measured gets done.

Plans that bring together goals, outcomes, metrics, and actions have several benefits:

- they make clear to the public how the community's planning vision will be defined, measured, and acted upon
- they lay out an agenda for government decision-makers and staff in order to activate the plan's goals
- they provide a basis for collaboration between the public and private sectors, including developers, neighborhoods, and non-profit organizations
- they support learning and understanding about the effectiveness of community development strategies in order to adapt and revise them as necessary to meet adopted goals.

2. Indicators for baseline measures and desired targets. Metrics are prepared on the basis of the community's goals and needs. They are stated in terms of baseline measures of starting conditions as indicators-- qualitative or quantitative measurement tools that allow comparisons of outcomes and changes over time among government units, projects, and objectives, and benchmarks that lay out desired targets (e.g., future objectives). Metrics may be derived from scientific or technical measurements such as air quality, as well as more general composite indices such as the ecological footprint. Increasingly, communities are not only publishing metrics report cards on a regular basis but also displaying them on website dashboards where the public can track the effectiveness of planning Initiatives.

The Imagine Austin Plan includes a number of urban form indicators that are related to proximity from residences. These include percent of households within a half mile of:

- a full-service supermarket/grocery store (Livable)
- a park or accessible open space (Natural and Sustainable)
- an art/cultural venue (Creative)
- a school (Educated)
- transit (Mobile and Interconnected)
- retail and mixed-use centers (Prosperous), and
- medical services (A Community that Values and Respects People).

3. Opportunities for linkages to desired outcomes in master plans. Cutting-edge plans contain projections, outcomes and metrics used to set objectives and track progress. Linking these to maps and other visual tools would help convey and track outcomes in a more graphic style. Opportunities include:

- include information about growth projections and land use information, to set a foundation for understanding the city's capacity for growth. This could also include information on growth rates, cost of growth, etc., as desired to support and inform the plan's policy directions.
- include high-level outcomes or objectives in the plan to provide stronger linkages between the BVCP and the many city master plans that are used to implement the BVCP (for example, the Transportation Master Plan and Fire-Rescue Master Plan)
- create linkages to the city's budgeting process
- set the stage for tracking progress over time (possibly through an expansion of the dashboard being coordinated through the City Manager's Office) to reflect community trends as well as city performance.

4. Integrate outcomes and metrics for each chapter of the plan. The updated plan could integrate outcomes and metrics into each major plan chapter, or in a combined section of the plan as part of the Action Plan. The 2010 BVCP states that the city and county will establish sustainability indicators specific to the Boulder Valley to measure progress in the health and well-being of the community, environment, and economy, including changes related to elements of sustainable urban form. These could be formulated for the plan update, along with outcomes and measures for other plan elements, and be

added to over time as appropriate indicators are developed and vetted (see Best Practices information on metrics and indicators in section III of this report). Fort Collins has implemented a Performance Measurement and Community Dashboard that integrates and displays a periodic snapshot of the community’s progress in attaining key outcomes (see figure below). The outcome categories are the same as the city’s performance-based budgeting system, as well as the organizing structure of Plan Fort Collins, the city’s comprehensive plan. The dashboard is a work in progress; as metrics are refined, they are added to the dashboard. Performance results are updated quarterly; the most recent results shown below are from the 3rd quarter of 2014.

Jump to: [About Performance Measurement & Dashboard](#) | [Reports and Resources](#) | [Budget Information](#) | [Performance Excellence](#) | [Provide Feedback](#)

Outcomes and Measures (last updated: Nov-21-2014)

Outcome	Q3 2014 Results ?
 Community and Neighborhood Livability Fort Collins provides a high quality built environment and supports quality, diverse neighborhoods.	
 Culture and Recreation Fort Collins provides diverse cultural and recreational amenities.	
 Economic Health Fort Collins has a healthy, sustainable economy, reflecting community values.	
 Environmental Health Fort Collins promotes, protects and enhances a healthy and sustainable environment.	
 High Performing Government Fort Collins exemplifies an efficient, innovative, transparent, effective and collaborative city government.	
 Safe Community Fort Collins provides a safe place to live, work, learn and play.	
 Transportation Fort Collins provides safe and reliable multi-modal travel to, from, and throughout the City.	

Source: City of Fort Collins Community Dashboard, 2014

Illustrate the City's Desired Urban Form

When asked about issues that the plan update should address, one of the most oft-heard comments from staff and city leadership was about urban form and the lack of clarity about the desired future form and shape of the city. While the plan includes broad policies and a narrative definition of “sustainable urban form”, it does not clearly articulate and illustrate what the desired sustainable urban form might look like, and how it might be affected and implemented by individual projects or public policies. Words alone cannot convey this vision – the plan needs to use new tools to show what the desired outcome is (graphic images, pictures, perhaps 3d modeling, either city-wide or for targeted sectors). This could help inform ongoing efforts to update the city’s development regulations and procedures, as well as provide a more clear picture of the types of change that are expected in the city’s physical realm. Opportunities include:

1. Illustrate desired urban form outcomes. A clear statement and image of the desired future urban form could help to inform public expectations and assist staff, decision-makers, and developers in judging the appropriateness of potential changes to Boulder’s regulations and ultimately built urban form. This could be done at several levels – visual models to illustrate build out of centers, prototype buildings and blocks, or perhaps visuals that conceptualize build out of sectors of the city, if desired. Auckland’s plan includes excellent examples of how visuals can be used to convey differing levels of intensity. This could be particularly useful in illustrating that the various areas of the community may have different outcomes for their built form – that there is no “one size fits all” approach. Urban form policies, with accompanying illustrations, could be prepared for prototypical districts, neighborhoods, and major corridors. As part of this approach, it would be useful to clearly identify and distinguish areas where change is expected (and desired), from areas that are expected to remain largely stable, with little change in their current physical form. The urban form policies should clearly illustrate the differences between transforming and stable areas.

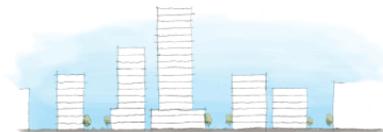
NEIGHBOURHOOD –
LOW RISE (UP TO 4
STOREYS)



TOWN & LOCAL CENTRES –
LOW/MEDIUM RISE
(UP TO 8 STOREYS)



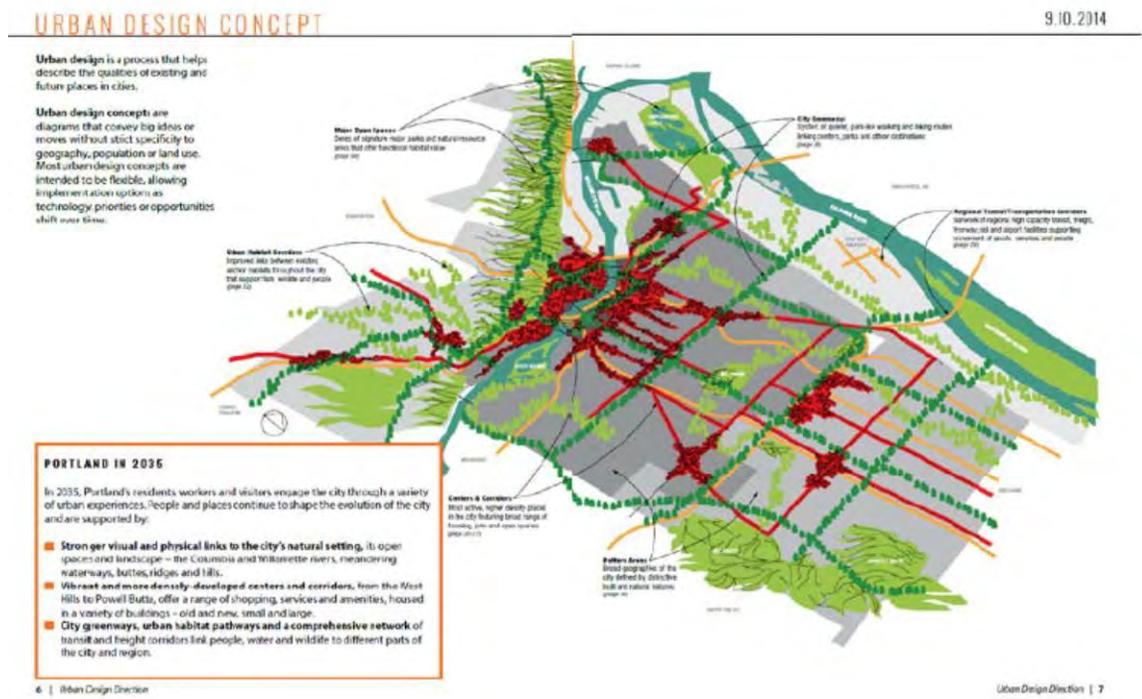
CITY & METROPOLITAN
CENTRES –
MEDIUM RISE
(5-8 STOREYS)
HIGH RISE
(9+ STOREYS)



The Auckland Plan (Auckland, NZ) uses 3D graphics and drawings to illustrate the desired urban form for different sectors of the city.

2. Consider reinventing the Future Land Use map to focus on desired physical characteristics for “places” rather than by land use type. One emerging trend in comprehensive plans is the concept of form-based or place-based land use plans. Place-based planning is a way to shape the future of the city by concentrating on the look, feel, form, and character of places instead of focusing on conventional categories of land use. In general, they are organized around “place-types,” the characteristic patterns of development that citizens live with every day. Typically, they are built around three place-types: neighborhoods, districts, and corridors. This approach to a future land use plan is less concerned with the specific use of each parcel, but rather is more focused on the collective uses within an area to establish a “place”. This approach, if applied to the BVCP, could help create a stronger linkage between the desired physical form of areas of the city and the land use maps. As a relatively new approach, there are few examples of communities that have used this approach over time, since the completed examples are all recent. For more information on this approach, see section IV of this report – Best Practices for Urban Form.

3. Consider including a structure or framework plan that illustrates how all areas of the city fit together. Many contemporary plans include an illustrative plan that conveys how various centers, corridors, open lands, and other community elements fit together. Depending on the desired usage, this could replace or supplement the Future Land Use Plan map. Portland 2035, the city’s draft comprehensive plan, includes an excellent example of a framework plan that illustrates the city’s overall physical framework (see figure below). For Boulder, a framework plan approach could be expanded to illustrate the many systems that support community life, such as layers for natural systems and open lands; multi-modal transportation corridors, trails and pathways; community facilities (schools, parks, etc.); and neighborhoods and districts. This approach would reinforce the interconnectedness of these elements.



Portland’s newly adopted plan update includes an Urban Design Framework diagram that locates centers and corridors (areas that are expected to grow and change) within the City’s physical context. 17

Strengthen Linkages between the Plan and Implementation Tools

The plan should serve as the guiding document for the tools that are used to implement planning in the community. These include: departmental master plans and strategic plans; area and sub-community plans; priority-based budgeting that drives programs and services; and development regulations contained in the Land Use Code. In its present form, the plan does not clearly describe how it relates to the implementing tools. More could be done to strengthen and more clearly articulate this role for the Plan. Although there is a separate Action Plan document that was prepared as part of the 2010 plan update, it is not clearly linked to the BVCP. Opportunities include:

1. Strengthen linkages to other plans and implementation tools within the Plan. Although the Introduction section and the Implementation section of the plan describe the various other plans and regulatory tools that are part of the implementing mechanism for the BVCP, it does not describe how they related to the policies contained within the plan. The BVCP is the place for the conversation about how all of the pieces fit together. The update could provide stronger linkages to the various master plans and other operational plans and tools, to illustrate more clearly how all of the component parts of the community's vision and planning framework are integrated. This could be done in a number of ways, such as a matrix that illustrates linkages and connections between the policies in the plan and the implementing plans and regulations and programs; an expanded section in the plan Introduction that more fully explains the relationships between the plan and implementation tools; or perhaps "bridge" language at the beginning of each chapter that describes the plans and other tools that implement the topics in the chapter.

2. Increase the Plan's focus on implementation by retooling the Action Plan. In its current form, the Action Plan for the BVCP is prepared as a separate document. It is structured on the seven themes of the Sustainability Framework and does not clearly describe linkages between the BVCP's policies and the implementation items contained in the Action Plan. While implementing actions generally are contained in master plans and other documents as well as the Boulder Revised Code, it may be appropriate to include high-level strategies within the plan itself so that it serves as a unifying element, to show how the master plans and other implementing documents are linked to it, and how they serve to carry out the overall vision contained in the plan. Even if the Action Plan remains as a separate document, it could be more clearly connected to the vision, policies, and directions in the BVCP as well as to the overall directions contained in the master plans and other implementing plans and regulatory tools. The Action Plan could provide the direct linkage between desired policies and outcomes in the BVCP and the actions that are needed to be taken to implement them. The Action Plan could also identify near-term as well as mid and long-term strategies, and continue to be subject to a mid-term review to ensure that it is aligned with work plans and available resources.

Clarify Policies in Key Areas

The plan contains a large number and range of policies. While for the most part they are clear and well-written, users of the plan have told us that it can at times be all things to all people; that policies can be used to both advocate and repel proposed actions. Opportunities include:

1. Make the intent of policies in key areas clearer. Sharpening the focus of key policies can help make them less subject to interpretation. For example, the Growth Requirements policy states:

“The overall effect of urban growth must add significant value to the community, improving quality of life. The city will require development and redevelopment as a whole to provide significant community benefits, achieve sustainability goals for urban form, and to maintain or improve environmental quality as a precondition for further housing and community growth”.

While well intentioned, this policy leaves a number of unanswered questions. What does it mean to add value, improve quality of life, provide significant community benefits, achieve sustainability goals, and maintain or improve environmental quality? The policy would be clearer if it specified outcomes and metrics for the desired qualities of proposed growth. Example outcomes could be a measureable increase in affordable housing and transit usage in new development. Target metrics could be an increase in affordable units and transit ridership in growth areas, both of which are contained in master plans and could be incorporated into the BVCP.

A second example is the policy on Preservation of Floodplains, which states that:

“Undeveloped floodplains will be preserved or restored where possible through public land acquisition of high hazard properties, private land dedication and multiple program coordination. Comprehensive planning and management of floodplain lands will promote the preservation of natural and beneficial functions of floodplains whenever possible”.

While the written policy specifies the intent of floodplain preservation, it would be clearer if accompanied by a map of floodplains and their land use, including those areas already in public ownership. It would be more effective if it were integrated with the subsequent floodplain policies on Flood Management, Non-Structural Approach, Protection of High Hazard Areas, and Larger Flooding Events into one unified floodplain policy, rather than a series of separate policies.

2. Address development issues at the urban edge. One specific policy area identified during initial discussions with county staff is related to development at the urban edge (i.e., in Area II) and update policies and regulations for these areas. As part of the update, the plan could include updated policies and regulations to govern annexation and the management of parts of Area II at the urban edge where development connected to urban services may be desirable, in order to clarify what form of development is appropriate, and how it is to be processed under joint city/county procedures. This could also include describing how the boundaries are determined, to clarify why properties are included (or not) in these areas.

Integrate Resilience

Community resilience is generally defined as the ability of a city to bounce back after being struck by a severe shock. Another definition is the sustained ability of a community to utilize available resources to respond to, withstand, and recover from adverse situations. “Evolutionary resilience” recognizes that community systems constantly shift between states of equilibrium. Under changing conditions, continual adaptation is required.

Resilient cities aim for development that can withstand major disruptions without failure of critical systems; they are concerned with survivability, reducing impacts from future crises on their populations, infrastructure, and institutions. Sustainable cities aim for development that balances the demands of environmental protection, economic growth, and human equity. They are concerned with intergenerational equity, meeting the needs of present residents without disadvantaging future populations. Resilience and sustainability are closely related; a sustainable city is resilient and a resilient city is sustainable. This interdependence shows up in overlapping goals, policies, and metrics of comprehensive plans. Opportunities include:

1. Integrate resilience throughout the BVCP by leveraging the Resilient Cities effort. As the recipient of a Resilient Cities grant from the Rockefeller Foundation, Boulder is committed to develop its resilience. The updated plan could be an important tool in achieving this goal by addressing resilience throughout its policies and topics. Boulder has previously committed to becoming more sustainable. Both resilience and sustainability require foresighted planning, aware and prepared populations, and relevant outcome measures, though their main goals are somewhat different.

2. Develop a new model for addressing resilience in a comprehensive plan. Boulder has the opportunity to develop a new model for incorporating resilience in the comprehensive plan, based on its own hazards and vulnerability. The model should recognize that a resilient city is a complex network of physical systems and human communities requiring combinations of apparent opposites: redundancy and efficiency, diversity and interdependence, strength and flexibility, autonomy and collaboration, planning and adaptability. Because the most vulnerable populations are the weakest links in resilience, there is an opportunity to integrate hazard mitigation, economic development and social justice. In addition to traditional physical system hazard mitigation, Boulder could seek social and institutional resiliency by monitoring vulnerability reduction, building distributed hazard mitigation capability, developing broad hazard mitigation commitment, operating networked communications, adopting recognized equity standards, assisting vulnerable neighborhoods and populations, and mitigating business interruption impacts.

BEST PRACTICES

Introduction

As part of the assessment process, the consultants prepared a set of best practices to help inform the update process by providing examples of what other communities are incorporating into “cutting-edge” plans for progressive communities. The topics below – urban form, outcomes and metrics, resilience, and action plans – were chosen to align with the recommendations contained in this report. Each best practices topic includes a general description; a discussion of applicability to the BVCP update; and several summary examples, with links for additional information.

Urban Form Best Practices

Urban form best practices focus on the integration of urban form and character into the realm of comprehensive plans, as a means of implementing a community’s vision for its desired built environment. One of the key issues for Boulder is how to achieve high-quality design that fits the context and scale of the different types of places in the city. Best practices plans are focused on including standards and principles that make areas more livable, more vibrant, and more people-oriented. These principles include walkability, connectivity, mixed uses, housing diversity, character protection, neighborhood form, and transportation alternatives, to name a few. A sophisticated and nuanced approach is required, as there is no “one size fits all” solution. The Boulder community already has numerous excellent built examples of districts and neighborhoods that embrace these principles, including both historic areas (e.g., downtown districts and neighborhoods) as well as more recently built examples (such as North Broadway). The challenge is to integrate information about the desired built environment into the BVCP as a form-based “toolkit,” to provide both policy and visual guidance for new projects as well as redevelopment.

Applicability to BVCP

Boulder could adapt many of the approaches in the examples below as a means of better integrating urban form into the plan update. Including a framework plan with a series of overlay illustrations, similar to the concept contained in the Portland Design Framework, could help illustrate the linkages and relationships between the various elements of the built and natural environment. This would build on many of the concepts already contained in the Plan, such as centers and corridors, but would present them in a more interconnected manner. This framework could also be used to develop a series of character districts for each of the various place-types that would address and illustrate basic urban form characteristics. Similarly, the use of drawings, urban framework diagrams, visual models, etc. would reinforce the narrative objectives that are already contained in the Plan, and could serve as a guide or “roadmap” for the preparation of more tailored policies and regulations for the city. While some of these areas would continue to be supported by design standards and other implementing tools, the

urban form framework would help develop a greater understanding of the desired built form for areas of the city.

Examples of Urban Form in Comprehensive Plans

St. Albans, Vermont

As part of an innovative approach to establish a renewed direction for this small community in Vermont, the city sponsored a charrette-based effort to develop a fresh vision and “toolkit” for the community. They developed a character and form-based toolkit that establishes a vision for the community; a set of character area directions and illustrations; and a toolkit for implementing the plan in a strategic manner.

The toolkit includes a set of character area diagrams that are a good example of illustrating urban form policies in a visual manner, containing information on building character, configuration, setbacks, building/street relationships, and parking. For more information, see [St. Albans Character and Form-Based Planning Toolkit](#).

T5 DOWNTOWN CENTER CHARACTER AREA

The Downtown Center Character Area refers to places within St. Albans where attached buildings are pulled to the back of the sidewalk, and typically have a height of two to four stories. Often the first floor is occupied by retail, with office or residential above. The Downtown Center includes Main Street as well as the side streets that share similar characteristics.

T5 - DOWNTOWN CENTER CHARACTER AREA

The T5 Downtown Center Zone consists of higher density mixed use buildings that accommodate retail, office, townhouses and apartments. It is a tight network of streets, with buildings set close to the sidewalk.

General Character: T5 Downtown is the historic heart of St. Albans.

Building Placement: shallow to no setbacks, buildings oriented to street defining a street wall.

Frontage Types: Storey, Basement, doorway, shopfront, gallery.

Building Height: 2 to 5 stories.

Type of Civic Space: Parks, Plazas and Squares, modern landscaping.

BUILDING CONFIGURATION

1. Building height shall be measured in number of stories, including attics and roof basements.
2. Stories may not exceed 14 feet in height from finished floor to finished ceiling, except for a first floor Commercial function which must be a minimum of 11 feet and may exceed 14 feet.
3. Height shall be measured to the eave or roof deck.

SETBACKS - PRINCIPAL BLDG

1. The location and elevations of Principal Buildings shall be dictated from the Lot lines as shown.
2. Windows shall be built along the front facade at the minimum specified width in the table.

SETBACKS - OUTBUILDING

1. The elevations of the Outbuilding shall be dictated from the Lot lines as shown.

PARKING PLACEMENT

1. Uncovered parking spaces may be provided within the Third Lot Layer as shown in the diagram.
2. Covered parking shall be provided within the Third Lot Layer as shown in the diagram.

T5 - DOWNTOWN CENTER CHARACTER AREA

a. BUILDING FUNCTION

Residential	open use
Lodging	open use
Office	open use
Retail	open use

b. BUILDING CONFIGURATION

Principal Building	4 stories max., 2 min.
Outbuilding	2 stories max.

c. LOT OCCUPATION

Lot Width	18 ft. min., 96 ft. max., #
Lot Coverage	95% max.

d. BUILDING DISPOSITION

Edgeyard	not permitted
Skyward	not permitted
Rearward	permitted
Courtyard	not permitted

e. SETBACKS - PRINCIPAL BUILDING

(g-1) Front Setback	18 ft. min., 12 ft. max.
(g-2) Side Setback	10 ft. min. *
(g-3) Rear Setback	3 ft. min. *

f. SETBACKS - OUTBUILDING

(b-1) Front Setback	40 ft. max. from rear
(b-2) Side Setback	10 ft. min. or 3 ft. at corner
(b-3) Rear Setback	3 ft. min. **

g. PRIVATE FRONTAGES

Common Lawn	not permitted
Porch & Fence	not permitted
Terrace or L.C.	permitted
Foamcut	permitted
Sloped	permitted
Shopfront & Awning	permitted
Gallery	not permitted
Arcade	not permitted
Burglars Case	not permitted

* Or 15 ft. from center line of alley, whichever is greater.
 ** Corner lot side setbacks shall match corresponding front setback.
 # Corner lot minimum must be 5 ft. wide.

1. Create Complete Neighborhoods
2. Plan and Design to Fit Local Conditions
3. Connect People and Neighborhoods
4. Improve Natural Areas and Open Spaces
5. Encourage Job Growth

The urban design framework outlined in the document (see figures below) is based on a network of place-types; centers, corridors, transit station areas, city greenways, urban habitat corridors, and employment areas. It also identifies a set of “pattern areas” – broad geographies that are defined by existing patterns of natural and built features, such as the central city, neighborhoods, and inner ring districts, and provides basic urban design characteristics and comparisons for different types of centers, corridors, and other features.

Finally, the document includes a series of urban design framework maps that illustrate how these corridors, greenways, and other features are connected together to provide a basis for the city. While it is not clear from the document how these maps will relate to zoning, it does state the urban design framework materials will be used to help tailor more specific policies and regulations to better respond to each area’s unique natural and built assets and characteristics.

URBAN DESIGN FRAMEWORK



CENTERS: A COMPARISON

NEIGHBORHOOD CENTER



HOUSING	3,500 units
JOB	Primarily retail/ service
BUILDING SCALE	Up to 4 stories

Local hubs. Neighborhood centers are hubs of commercial services, activity, and transportation for surrounding neighborhoods. They typically include small parks or plazas that support local activity and gathering. These smaller centers provide housing capacity within a half-mile radius for about half the population needed to support a full-service neighborhood business district (surrounding neighborhoods provide the rest of this population base).

TOWN CENTER



HOUSING	7,000 units
JOB	Diverse employment/ institutions
BUILDING SCALE	Up to 5-7 stories

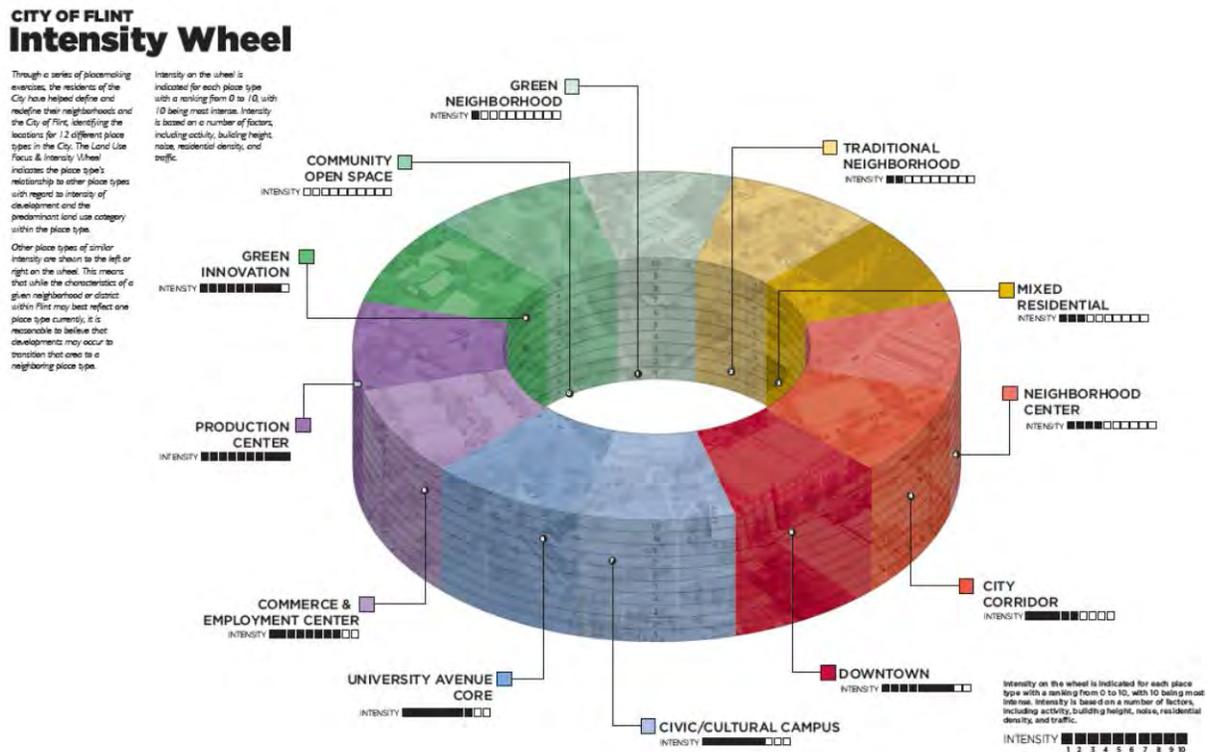
District hubs. Each Town Center is a hub of commercial and public services, activity, and transportation for the broad area of the city it serves. Town Centers include parks or public squares to support their roles as places of focused activity and population. They provide housing capacity within a half-mile radius for enough population to support a full-service neighborhood business district.



Flint, Michigan

As a part of its new master plan adopted in 2013 (see <http://www.imagineflint.com/>), the city of Flint, Michigan developed a creative approach to its future land use plan that focuses on a place-based land use map, based on the concept of place-making. The plan identifies 12 different place-types within the city. This approach was particularly relevant for Flint since like many communities in the Midwest, its population is shrinking and their planning effort is focused on revitalization and redevelopment of existing, traditional development patterns. One of the more interesting aspects of their approach was the development of an Intensity Wheel (see below) that illustrates each place type's relationship to other place types with regard to development intensity and predominant land use.

Each place type is described in the plan by a series of diagrams and illustrations to capture the intent of its land use character and attributes, along with recommendations for implementation. While the characteristics of the community are quite different from Boulder, it may be a useful model for a different approach to the community's future land use map.



Flint's recently adopted Comprehensive Plan includes a series of place-based districts that reflect character, use-type, and relative intensity.

San Francisco, California

The City of San Francisco's City Design Group was established in 2005 as a distinct unit within the city's planning department. They focus on multiple projects within the city with an emphasis on placemaking;

urban design policy development; and design review. There are numerous examples of projects and supporting visual materials that can be viewed on the City Design Group’s website located [here](#).

Examples of visual materials prepared by the City Design Group that may be helpful to inform Boulder’s efforts to convey high quality and context-appropriate design include the following:

Central SoMa Plan. The city recently completed a draft plan for the South of Market (SoMa) neighborhood, which is the bridge between the traditional central business district near Market Street and the burgeoning activity center of Mission Bay. While the seeds of the Central Corridor Plan began under the basic tenet of supporting transit-oriented development, planners recognized that managed growth could bring with it a number of tools to transform and improve the neighborhood. Infill fabric, if designed with high quality architecture and active ground floors, could increase visual quality as well as safety of the areas streets. The plan includes an urban form element that addresses design policies and implementation strategies, as well as extensive use of visualization to convey overall desired urban form.



San Francisco’s SoMa plan uses visual models to convey changes in the area’s built form.

Upper Market Community Vision. In 2007, city residents and planners created a community vision for the upper portion of Market Street. While primarily focused on the roadway corridor, it includes examples of the use of visual models to convey street character and building/street relationships. A set of accompanying Design Guidelines provides further examples of desired attributes of new development and redevelopment (see examples below).

FIGURE 2A POTENTIAL FOR 55' BUILDING ADJACENT TO RESIDENTIAL PARCEL

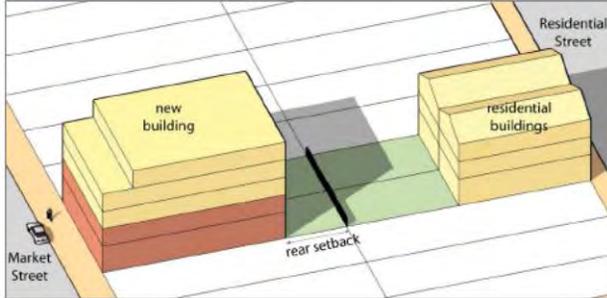


FIGURE 2B POTENTIAL 85' BUILDING ADJACENT TO RESIDENTIAL PARCEL

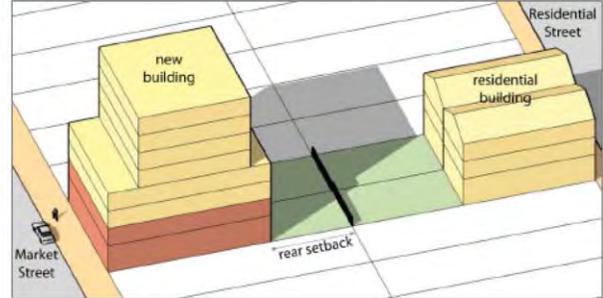


FIGURE 2A POTENTIAL FOR 55' BUILDING ADJACENT TO RESIDENTIAL PARCEL

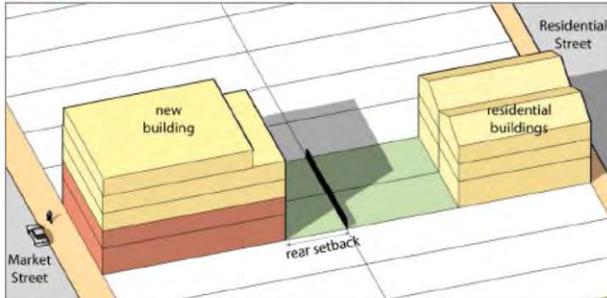
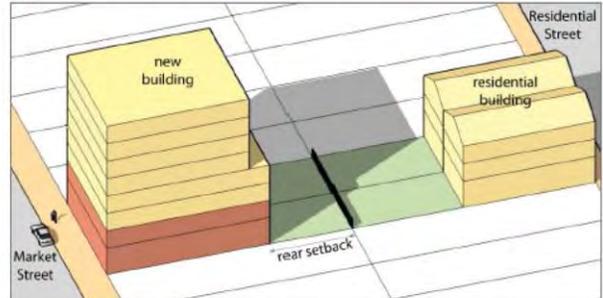


FIGURE 2D POTENTIAL 85' BUILDING ADJACENT TO RESIDENTIAL PARCEL



B. INVITING GROUND FLOOR DESIGN FEATURES

The following guidelines were the most important for the community. Many participants noted a desire for stronger language for the following recommendations due their relative importance relative to other development guidelines.

B1: Promote active uses of the sidewalk building zone through ground floor building design elements such as transparent, operable windows, open partitions, awnings, goods and wares visible in front, and informational displays.

B2: Create inviting building entrances for large and institutional buildings through the following techniques:

- Integrate the sidewalk area into building entrances.
- Use light features to highlight buildings.
- Set back entrance from the rest of the building.
- Install plazas, fountains, and sculpture in front of buildings.

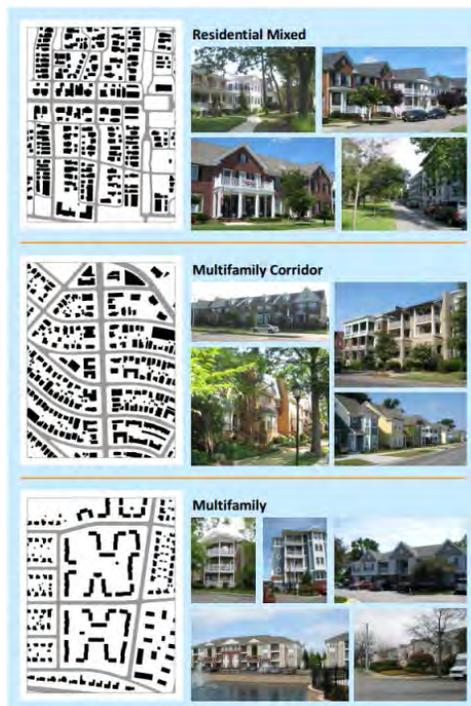


Attractive outdoor dining options

rate the suitability of metrics for use in a plan, to avoid using metrics that are inappropriate for this purpose (see indicator criteria for Imagine Austin, below).

Examples of Outcomes and Metrics in Comprehensive Plans

Norfolk, Virginia



Norfolk's new comprehensive plan expresses its design objectives in a graphic format

The Norfolk, Virginia, comprehensive plan, *plaNorfolk2030* (www.norfolk.gov) contains a vision chapter, eleven chapters each based on an element of the vision, and an implementation chapter. The element chapters start with descriptions of current conditions and expected trends, and then highlight key issues. They set one or more key goals, define desired outcomes, and list related metrics and actions for each identified key issue. For example, Chapter 2, *Identifying Land Use Strategies*, notes that Norfolk is essentially a built-out city and includes a single goal: Ensure that the type and quality of land uses will complement or enhance the community's physical characteristics. An outcome for this goal is for future land use to respect neighborhood characteristics and meet the demand for each type of use.

Actions include implementing residential land use categories that reflect existing successful neighborhood patterns with regard to lot width, structure type, setback, and vehicular use areas. Desired characteristics are shown described in text and shown graphically, illustrating footprints and visual types (see

figure with Residential Mixed, Multi-Family, and Multi-Family Corridor). Metrics include change in linear feet of un-buffered lower intensity residential land and more intense land uses, percent of development within areas with design guideline mandates that comply with design regulations, and others.

Austin, Texas

The Austin Texas 2012 Imagine Austin Comprehensive Plan (www.austintexas.gov) links policies, goals, metrics, and actions in its chapter on Implementation and Measuring Success. For example, under the number 1 priority program, *Invest in a Compact and Connected Austin*, there are two goals; increase non-vehicular trips, and improve access to transit. The metrics for the goal to increase non-vehicular trips are: transit-ridership numbers, number of transit stops, percentage of trips by biking and walking, and annual trips per capita. The metrics for the goal to improve access to transit are: population density within ½ mile of transit stops and employment density within ½ mile of transit stops and high capacity transit stops. The Imagine Austin comprehensive plan calls for an analysis and assessment of indicators or metrics that can be used to measure progress after the plan's fifth year. Many of the indicators that were contained in the original plan were suggested and not completely scoped, and some were

aspirational or not measurable at the time. More than 100 draft indicators were originally identified; 34 core measures were selected as the initial set that could reasonably be used by city staff to track plan progress. While there is no “right number” of metrics for a community, experience has shown that generally, fewer, high-quality indicators are better than a large number of indicators that is hard to administer.

In selecting indicators to use for Imagine Austin, planners developed the following set of criteria:

- relevance to the priority programs
- staff resources available to support data collection
- information that can be used by planners and others when faced with decisions
- measurable information, with achievable results, as opposed to anecdotal information
- a tendency to show change over a relatively short period of time
- reliable, consistent, and relatively free sources of data

Resilience Best Practices

Resilience best practices in comprehensive plans are relatively rare because the concept of resilience has only begun to be applied to community development in the last decade or so. Attention has grown since Hurricane Katrina in New Orleans, the Tohoku earthquake and tsunami, and Hurricane Sandy in the Northeastern U.S. Current best planning practices focus on disaster resilience: reducing risk, building community awareness, and instituting recovery planning, often integrated with sustainability goals and policies, as described below:

- Reducing risk takes the form of integrating hazard mitigation into overall community development policies and actions through directing development away from known hazard areas and strengthening vulnerable structures and facilities to resist disaster impacts.
- Building community awareness takes the form of engaging citizens and organizations in hazard scenarios and creating neighborhood support networks to function in disaster preparation and rebuilding.
- Instituting recovery planning takes the form of preparing a plan to guide decisions on recovery and redevelopment following a disaster in order to increase resiliency and to contribute to a more effective and efficient recovery.

FEMA has published a report, *Integrating Hazard Mitigation into Local Planning: Case Studies and Tools for Community Officials* (2013) with fact sheets on Building Community Resilience by Integrating Hazard Mitigation into Local Planning. Topics include: Integrating Hazard Mitigation into the Local Comprehensive Plan, The Role of Local Leadership, Social and Economic Benefits, Planning for Post-Disaster Redevelopment, and Protecting Community Infrastructure. The report has case studies on planning in: Cedar Rapids, Miami-Dade, New Orleans, Tulsa, and other locations.

Applicability to the BVCP

Boulder could follow the traditional examples of other communities in applying disaster resilience practices in its comprehensive plan, but it could also extend the resilience lens to cover other plan goals and policies. On the traditional front, the BVCP should add resilience to the natural hazards identified in the very thorough 2012 *City of Boulder Multi-Hazard Mitigation Plan*. It lists: as “highly likely” (happens every year) extreme temperatures, thunderstorms, lightning, windstorms, and winter storms; and as “likely” (recurrence interval of ten years or less) drought, West Nile Virus, hailstorms, and wildfire. It rates dam failure and floods as “catastrophic” (over 50 percent property damage, facilities shut down for more than 30 days, and/or multiple deaths), and includes a map of 100 year and 500 year flood hazards. A map of buildings in the 500 year floodplain shows that most of the development in the city’s central area is located there. All of these factors have significant potential impacts on future development, public expenditures, infrastructure, environmental preservation actions, and other planning decisions.

At the same time, the BVCP update could develop a lens with which to view the city’s social, institutional, and economic resilience. This means asking “the resilience question” of plan policies and actions that affect disadvantaged populations, deployment of city staff and resources, and vulnerability to shocks stemming from potential economic breakdowns. This is a broad question with both tangible and intangible elements. For example: Does this policy increase our vulnerable neighborhood communication linkages? Does this program build our crisis response capability? Does this metric assess our ability to come back from the loss of a major element of our economic base? Together with its new Resilience Officer, Boulder can create a pioneering model for formulating and answering the resilience question, based on its unique conditions and needs.

Examples of Community Resilience in Comprehensive Plans

Norfolk, Virginia

Norfolk Virginia is susceptible to flooding from coastal storms and sea level rise. A Category 4 hurricane would flood the entire city and a Category 3 storm would flood about 70 percent of the city. Its 2030 Plan (2014) includes resilience under its goals, outcomes, metrics, and actions for Environmental Sustainability in Chapter 6:

Goal: Prepare for the consequences of natural hazards.

Outcome: Reduced risk and increased resilience to gradual and catastrophic natural events.

Metrics: Percent of properties in flood zone that do not receive a variance to waive requirements related to flood protection; area of wetland restoration projects; change in FEMA Community Rating System evaluation.

Actions: The Plan includes many actions related to this goal. Examples include: evaluate impact of potential sea level rise when reviewing development proposals and in preparation of budgets; revise development regulations to respond to the impact of potential sea level rise; continue to monitor changes in tide data and its effect on flooding throughout the City; ensure that all new development in

designated flood-prone areas complies with the City's flood protection regulations; ensure that residents and property owners in flood prone areas are notified of the threat to their properties; identify areas of the City that are particularly susceptible to inundation and develop a communication strategy to notify residents in advance of and during flood events; among others.

Lee County, Florida

Lee County includes hazard mitigation in the Conservation and Coastal Management policies in Chapter VII of The Lee Plan (www.leegov.com). While it does not include a specific resilience goal, the plan designates a goal to protect the public from the effects of natural and technological hazards through the county emergency plan. It defines the hazards by reference to the County's Hazard Vulnerability Analysis and includes policies to inform the public, coordinate governmental emergency programs, protect natural systems and water resources, limit public expenditures in high hazard areas, and maintain a post-disaster strategic plan. The 2014 Lee Plan is a policies plan; it does not include outcomes and metrics.

Action Plans Best Practices

Action Plan best practices focus comprehensive plans on the strategies and actions that will lead to implementation of the plan policies. Leading comprehensive plans provide explicit guidance to staff, decision-makers, and the public about what specific steps need to be taken to move.

Applicability to BVCP

Including the action plan in the BVCP would help achieve several purposes; reinforce the role of the plan as the unifying document among all of the city's master plans and implementation tools, and provide a stronger linkage between the vision and policies in the plan and the steps to be taken to accomplish the desired outcomes.

Examples of Action Plans in Comprehensive Plans

Austin, Texas

The Austin, Texas comprehensive plan, Imagine Austin (<https://austintexas.gov/imagineaustin>) has an action program that is organized into eight priority programs that provide the structure and direction to implement the plan. The eight programs are:

- Invest in a compact and connected Austin
- Sustainably manage our water resources
- Continue to grow Austin's economy by investing in our workforce, education systems, entrepreneurs, and local businesses
- Use green infrastructure to protect environmentally sensitive areas and integrate nature into the city
- Grow and invest in Austin's creative economy
- Develop and maintain household affordability throughout Austin
- Create a Healthy Austin program

- Revise Austin's development regulations and processes to promote a compact and connected community

Each priority program has a lead department, cross-disciplinary team, community partners and a work plan that is reviewed and revised on an annual basis. Each of the programs is moving forward on the plan through a series of actions organized into five categories: education and engagement, internal alignment, regulation, capital investment, and partnerships. The city administration is also organizing its operations, core services, decisions, and investments around the priority programs in Imagine Austin. The eight priority programs are grouped into four topic groups as a way of further consolidating efforts in the city towards implementing the plan.

The city charter requires that the Planning Commission and staff provide an annual report to City Council about the implementation of the comprehensive plan. The Planning Commission has just published its second annual report since the adoption of the plan in 2012 ([see Imagine Austin 2014 Draft Annual Report](#)). This is somewhat similar to Boulder's mid-term review process, but is a more rigorous approach, with a detailed review of the Action Plan; metrics and outcomes; and a recasting of strategies, in a formal report that is prepared for the Planning Commission.

Fort Collins, Colorado

Plan Fort Collins⁴, the city's comprehensive plan adopted in 2011, contains an Action Plan that identifies high-priority actions and strategies for implementing the plan. The Priority Actions and Strategies outlined in this section are organized into three key time frames:

- Immediate actions - Concurrent and ongoing with plan adoption
- Near-term actions - Following plan adoption, all actions already funded within current budgeting cycle
- Longer-term actions - Several years following plan adoption within the next budgeting cycle
- The Plan Fort Collins approach is unique in that while it is simple, it is strategic, focused and prioritized, and all immediate and near-term actions must be funded to be included in the Action Plan.

⁴ <http://www.fcgov.com/planfortcollins>

WORK PLAN AND COMMUNITY ENGAGEMENT RECOMMENDATIONS

Introduction

The purpose of this section is to provide recommendations for the update to the BVCP, including public outreach strategies, and a targeted and phased approach to accomplishing the recommendations of this analysis. It suggests a strategy for how to accomplish the recommendations in the preceding sections of this report.

During our meetings with city and county officials, we discussed that the 2015 plan update may be narrow or broad in scope, ranging from minimal changes to the plan to a major overhaul of its content and structure, with a continuum of options in between. The direction to be taken in the 2015 update would depend on direction from city and county leadership, based on their perception of need, community priorities, and availability of resources.

In general, most of the city and county leaders believe that the 2015 update should not constitute a major overhaul, but should comprise a moderate level update that incorporates many of the recommendations contained in this report as resources allow and as the work plan for the update is developed in more detail early in 2015. Particular areas of focus that city and county leadership would like to see the update address include:

- Clarifying and incorporating the vision
- Make policies more clear and succinct
- Incorporate more direction and visual clarification of desired urban form, particularly as it might provide more clear direction for needed development code changes
- Integrate resilience throughout the plan; and
- Include outcomes and possibly metrics to begin to move towards tracking progress towards the plan's goals.

Given staff resources and the multitude of other efforts already underway, it is likely that the update will be completed in phases over an 18-month to two-year cycle. Early in the process, staff should work with



the Planning Board and City Council and County Commissioners and Planning Commission to establish priorities for the phasing of tasks during the update process.

Work Plan Recommendations

Based on discussions with staff to date, we recommend that the 2015 work program focus on foundational work for the update process. Foundational work will include:

- Forecasting (land supply, population and employment projections)
- Updating map layers needed for analysis purposes and begin work on 3-D mapping
- Coordinating with resilience strategy foundational work
- Develop initial concepts for plan formatting
- Work plan for development of visualization tools for urban form element
- Work plan/approach for integrating resilience into update process
- Identification of potential outcomes and metrics to be integrated into the plan (from existing master plans and other sources)
- Public engagement launch with community ideas forum (see outreach section below)
- Invite applications for land use changes

We also recommend that the foundational work for the updated vision and “Boulder Planning Story” be commenced as part of 2015 activities. As an initial step in the process, staff could develop a working version of these two elements to be reviewed at initial community forums.

Subsequent tasks to be completed during 2016 would include:

- Policy revisions and additions, including development of new elements as needed (see outline in section IV, above)
- Mapping updates (including development of new approaches to the future land use plan and supporting materials)
- Incorporation of metrics and outcomes into plan draft update
- Preparation of draft BVCP document (in new format)
- Preparation of revised City/County IGA

Recommendations for Public Outreach

Based on our initial discussions and meetings with city and county officials, it is evident that many citizens and other organizations will have strong interests in the planning process. We recommend the city consider creative, focused ways to engage the community in the planning process, either in focus groups or forums on specific topics. A targeted approach will allow for input on specific topics of interest to all at appropriate points in the process.

Our recent experience in dynamic communities like Boulder is that there is no single "best" way to accomplish a high level of participation by the community in planning efforts. Based on our discussions during the preparation of this analysis, suggestions to consider include:

- 1. Public Ideas Forum:** Numerous members of the community as well as city and county officials have suggested that an Ideas Forum be conducted as part of the kick-off activities for the update process. This could involve speakers as well as table discussions and exercises among attendees to begin a dialogue about the range of topics to be addressed in the update. Given the diverse range of views, we recommend that the forum be convened by an organization that is seen as a neutral party by most in the community or co-hosted by several organizations together.
- 2. Educational Forums:** Given the range of new topics and challenges to be addressed during the update, it may be useful to conduct a series of educational forums about a variety of topics. These can be recorded and made available via streaming from the website.
- 3. School-Based Activities:** Workshops involving youth can achieve two objectives. First, they bring a fresh perspective to the planning process, and second, activities involving kids often will attract parents who are curious about what their children are involved in related to planning. Recent planning events in the community, such as the Civic Center planning process, have already used this approach with a successful outcome by partnering with Growing up Boulder.
- 4. Displays in Public Places:** Ongoing displays can be placed in multiple locations around the community where people gather, such as the library, cultural institutions, senior centers, recreation centers, etc. If resources allow, kiosk technology can be utilized to capture feedback on a range of topics.
- 5. Robust Dedicated Website:** Today's technology-savvy community requires a well-constructed website for use throughout the process, as a means of gathering input and feedback on various ideas and proposals during the plan process. Techniques such as "topic of the week," online surveys, blogs, and virtual meetings can all be used to raise awareness and generate interest. Web sites for plans often attract a different audience than the typical meeting-only based process-offering both can increase the range of participants and viewpoints heard.
- 6. Neighborhood Groups:** Both the city and county have established neighborhood groups that can be tapped for the update process. In particular, the groups that have formed to focus on flood recovery activities may represent a new pool of community members to engage during the process and coordination with new neighborhood liaison position.
- 7. Creative Engagement of Business Community:** In addition to the traditional focus on business owners, consider focusing on employees and in-commuters, using focus groups and employee surveys.
- 8. Take the Plan to the Community:** The most effective strategy for engaging hard to reach members of the community is to take the planning process to them. This may include senior living centers, schools, and places of worship (particularly important for minority community members).

RECOMMENDED STRUCTURE FOR PLAN UPDATE

Based on the recommendations contained in the report, we have developed two possible options for a possible structure for the updated plan document. Our primary recommended structure assumes that the current 2010 plan structure will be maintained, with revisions and additions to incorporate new and updated material. As an alternative, we have suggested an approach that is based on the city's Sustainability Framework. While resources and priorities may not allow the 2015 update to follow this alternative approach, we have included it for consideration as a possible direction for the plan's transformation over time. The approach based on the sustainability framework may be particularly beneficial as the city's priority-based budgeting process is fully integrated with the Sustainability Framework, and as the city's metrics dashboard is implemented. This change would ensure that the BVCP, budgeting process, Sustainability Framework, and metrics dashboard were all in alignment by sharing a common organizational structure. The two outlines are included in the appendix to this report.

APPENDIX

Boulder Valley Comprehensive Plan Outline, Based on Current Structure

Introduction

- History of BVCP
- Boulder Valley Today and Tomorrow – Challenges and Opportunities of the 21st Century
- Summary of 2015 Major Update – and what’s new (including resilience)
- How this Plan is Structured
- Incorporating Outcomes and Metrics (note: these could either be in each section or consolidated in Action Plan)

Boulder Valley Comprehensive Plan Policies

Section 1: Vision and Core Values (note: this would be the new consolidated Vision section)

- Community Vision and Core Values

Section 2: Built Environment

- Growth Management (relocated from General Policies in BVCP chapter 1)
 - City’s role
 - Limits on physical expansion
 - Growth projections
 - Growth requirements
 - Jobs/housing balance
 - Framework for annexation and urban service provision
- Intergovernmental cooperation
- Partnerships with community organizations
- Sustainable urban form (note: integrate current work on urban design, include visual materials that support and illustrate desired urban form)
- Community Identity and Land use patterns Neighborhoods
- Mixed-Use Development
- Activity centers and corridors
- Community Conservation
- Rural lands preservation

Section 3: Natural Environment

- Biodiversity and native ecosystems
- Urban environmental quality
- Natural hazards and geological resources
- Water and air quality

Section 4: Energy and Climate

- Climate commitment
- Energy Conservation and renewable energy production
- Green building
- Waste stream management
- Sustainable purchasing

Section 5: Economy

- Strategic redevelopment and sustainable employment
- Diverse economic base
- Sustainable business practices
- Job opportunities, education, and training
- Fiscal sustainability (new topic to address city revenues and linkage to budget)

Section 6: Transportation

- Complete transportation system
- Land use integration
- Air quality

Section 7: Housing

- Community housing needs
- Housing choices
- Affordable and workforce housing
- Housing diversity
- Growth and community housing goals

Section 8: Safety and Community Well-Being

- Human services
- Social equity
- Diversity and inclusion
- Community health
- Community infrastructure and facilities
 - Schools
 - Community facilities and services

- Parks and trails
- Arts and Culture
- Community safety and police services
- Fire protection
- Emergency preparedness
- Public safety through design

Section 9: Agriculture and Food

- Support for agriculture
- Local food production & access to healthy foods
- Sustainable agricultural practices
-

Amendment Procedures

- Procedures
- Changes at any Time
- Mid-Term Review Changes
- Five-Year Review

Land Use Maps and Descriptions (note: could include Framework Plans here)

- Land Use
- Open Space

Implementation

- Sub community and Area Planning
- Master Plans
- Trails Map
- Action Plan
 - Matrix with all actions organized by element
 - Identification of priority actions

Referral Process

Urban Services Criteria and Standards

Boulder Valley Comprehensive Plan Outline, Based on Sustainability Framework

Introduction

- History of BVCP
- Boulder Valley Today and Tomorrow – Challenges and Opportunities of the 21st Century
- Summary of 2015 Major Update – and what’s new (including resilience)
- Incorporating Outcomes and Metrics (note: these could either be in each section or consolidated in Action Plan)

Section 1: Vision and Core Values

- Community Vision and Core Values (note: this would be the new consolidated Vision section)

Section 2: Safe Community

- Community safety and police services
- Fire protection
- Emergency preparedness
- Public safety through design

Section 3: Healthy and Socially Thriving Community

- Human services
- Social equity
- Diversity and inclusion
- Community health
- Local food production & access to healthy foods
- Community infrastructure and facilities
 - Schools
 - Community facilities and services
 - Parks and trails
 - Arts and Culture

Section 4: Livable Community

- Sustainable urban form
- Land use patterns (note: land use categories and land use maps could be consolidated into this element or remain in a separate chapter as per the current plan)

- Creating and maintaining healthy and vibrant neighborhoods
- Activity centers and corridors
- Housing (integrate findings/policy directions from housing strategy)
 - Community housing needs
 - Housing choices
 - Affordable and workforce housing
 - Housing diversity
- Growth Management (from General Policies in BVCP chapter 1)
 - City's role
 - Limits on physical expansion
 - Growth projections
 - Growth requirements
 - Jobs/housing balance
 - Framework for annexation and urban service provision
 - Areas I, II, and III
 - Annexation
 - Provision of urban services
 - Phased extension of urban services
 - Utilities
- Rural lands preservation and community conservation

Section 5: Accessible and Connected Community

- Complete transportation system
 - Transit
 - Roadways
 - Bicycle network
 - Pedestrian network
- Land use integration
- Air quality

Section 6: Environmentally Sustainable Community

- Biodiversity and native ecosystems
- Urban environmental quality
- Natural hazards and geological resources
- Water and air quality
- Climate commitment
- Energy Conservation and production
- Green building
- Waste stream management

Section 7: Economically Vital Community

- Strategic redevelopment and sustainable employment
- Diverse economic base
- Sustainable business practices
- Job opportunities, education, and training
- Fiscal sustainability (new topic to address city revenues and linkage to budget)

Section 8: Good Governance

- Engaged community
 - Collaborative approach to decision-making
 - Inclusive and accessible
 - Information accessibility
- Effective local government
- Intergovernmental cooperation (from General Policies)
 - Regional and statewide cooperation
 - Policy assessment
 - Collaboration for service delivery
 - Compliance with land use regulations
- Partnerships with community organization
- Sustainable purchasing

Plan Amendment Procedures

- Procedures

Implementation

- Sub community and Area Planning
- Master Plans
- Trails Map
- Action Plan
 - Matrix with all actions organized by element
 - Identification of priority actions

Referral Process

Urban Services Criteria and Standards

Joint Study Session of Boulder County Commissioners and Boulder Planning Commission for Boulder Valley Comprehensive Plan (BVCP) Assessment and Scope – Nov. 3, 2014

Board of County Commissioners Present:

- Cindy Domenico
- Deb Gardner
- Elise Jones

Planning Commission Members Present:

- Michael Baker
- Dan Cohen
- Lieschen Gargano
- Scott Holwick
- W.C. Pat Shanks
- Doug Young

Staff and Consultants Present:

- Pete Fogg, Abigail Shannon, and Dale Case (Boulder County)
- Lesli Ellis and Jean Gatzka (City of Boulder)
- Ben Herman (Clarion Associates)

P. Fogg: Provided slides with background of the Plan beginning with the 1970s county zoning in the Valley. He described the urban/rural set up - Area I, II, III maps, etc. and why the city/county partnership was created. He also provided an overview of the amendment procedures as articulated in the Plan.

D. Gardner: How was the gray (BVCP planning area) boundary determined in the 1970s?

P. Fogg: Depends on the location of the boundary, but it is generally based on topographic features, the City's "blue line" on the west, provision of urban services, other existing service providers' boundaries like Left Hand Water District, etc.

B. Herman: Provided an overview presentation with consultant observations about the current BVCP. It has more moving parts and applications than does the county's Plan. Key observations prior to the City Council and Planning Board discussion included:

- 1 – tell story better about the vision in the Plan
- 2 – make Plan more informative, graphic
- 3 – opportunity to integrate efforts in Plan
- 4 – articulate/define what a clear sustainable urban form is (city only?)
- 5 – develop better linkages between Plan and implementation tools
- 6 – clarify policies in key areas
- 7 – consider measuring outcomes via monitoring, indicator and metrics tools

He also explained the possible Range of Approaches shown on a slide to update the Plan, from minor to more major, and stated that the city discussed an update effort possibly in the range of

about 2.5 on a scale from 1 to 5. The city would like to modernize the Plan and develop stronger linkages to implementation and metrics.

Questions and Comments:

P. Shanks: Provide PowerPoints. **P. Fogg** will send.

The relationships between master plans and sections in the Plan is interesting. Often it's an advisory board that works hard on a master plan – has been done substantially in some areas and not at all in others. What are consultant observations about how these work?

B. Herman: There seems to be a bit of an unevenness between topics and an opportunity to tie them in better with the Plan; some are very plugged into the BVCP while others are not. Master Plans are a good tool to be able to address topics at a level of detail while keeping the BVCP approachable and accessible, less daunting.

P. Fogg: The county does not do area or topical plans in the same way that the city does except for in a few areas (e.g., open space or health). Also, the county does not have the same number of advisory boards as the city.

C. Domenico: Metrics idea is intriguing. What do they look like in plans that the consultant is familiar with?

B. Herman: Example of Transportation Master Plan that has dozen of metrics and a lot of data. Health care has metrics. At BVCP level, it's more about the big things that tell us how we're doing overall – big picture. From there, you can drill into the details.

P. Fogg: County staff did a lot of research on this topic while preparing the Sustainability Element for the BVCP—mostly considering municipalities where this work has been done. You can “over-metric” a plan. Santa Monica example had over 100, and it became difficult to administer; some didn't fit together well or clashed or were hard to quantify/measure. Reducing to fundamental goal driven metrics can be daunting, but it would be helpful. Takes diligence and a cold eye to do so.

D. Gardner: 21st Century Challenges and Opportunities slide identifies “Resiliency.” Because of the federal money and interest in this topic, communities will be developing projects to fit the resiliency component. Are the words sustainability and resiliency (or resilience) interchangeable?

B. Herman/L. Ellis: No, resilience is not a replacement for sustainability. There isn't a common definition of “resiliency” which is a problem in itself. Needs to be a new overarching concept to include in our thinking. Ties to long term vision.

C. Dominico: Long term urban services aren't sustainable in rural areas. Resilience is a useful new lens.

B. Herman: Question for the Planning Commission and Commissioners about what level of effort should occur for the BVCP update: do you agree with the city boards or have different thoughts?

D. Cohen: To do the full list of issues and challenges presented might be more than 2.75 on the scale. We often don't go the distance that it takes to make the full list happen. Glad to see that will happen. The definition of sustainability/resilience is the fundamental question – manage change in appropriate way – dealing with density and transit, etc. Include the boundaries question – city boundaries don't necessarily work with climate issues, etc. Think a little bigger. Sometimes there is a disjunction between how we count and or versus what our goals are. Example is we kept that car out of Boulder so we don't count it, but the car and its impacts are still out there.

B. Herman: Boundary – may want to address some of these ideas as a system. Resilience is not quite as value laden as the notion of self-sustaining. Communities struggle with how we define boundaries and limits. Resilience is something people seem to understand a bit more intuitively.

S. Holwick: Resilience is less value laden. Everyone wants to be resilient.

D. Young: Like what Dan said: do one thing or a few and do them well. Liked the idea of focusing on the vision graphically so people can identify with the plan more. That might carry the plan forward through updates to go forward as opposed to yet another thing that fell off the plate. Examples of urban form – if you could provide those graphics – options, that would be helpful. When people are afraid or don't have a clear vision, they want or are more comfortable sticking with the status quo. Need to provide a graphic that provides example of status quo, too. Defining city's urban form will influence the county a lot in things like housing stock, and (as a Planning Commission member), I'm not sure what county housing stock should be like—not sure county's vision is solidly articulated either. City could be a great proving ground. Agree with colleagues about sustainability and resilience; they are not the same thing. Systems approach might be a great way to look at resilience (i.e., need to be able to poke the system and have it bounce back.) Really being sustainable also means being adaptive in the long term. Sustainability means getting a comfort level with the long term vs. “now”. Sustainability is a longer wave length than resiliency.

E. Jones: Commenting through the lens as a county commissioner, a Boulder resident, and former Planning Commissioner. I appreciate the conversation about sustainability. There's overlap with resiliency, but they are two different things. Sustainability is a desired state (more proactive), whereas resiliency is the ability to bounce back (more reactive). Both are really important, and it is important to include both in the Plan. Appreciate the conversation around topics such as chronic issues like poverty. Urban form might be a bit disconnected from the county, but the partnership between city and county on land use and urban/rural is important on this topic. The partnership only works if we can figure out how to make density acceptable in the city – rural can only work if density is OK'd. It has always been a source of frustration that the Plan does not answer “how are we doing” because we don't have process or metrics to address that question. Could use the Plan as a barometer to help answer that question. Give a shout out for regionalism – that is the single most effective aspect of the Plan, and I like that no one is calling that into question. The BVCP is an example in the state, and many pressing issues are regional. For instance, with transportation we have to think big (e.g., BRT, regional air quality, oil and gas emissions). Local food is another topic the city and county have been addressing together. Making the document more accessible and readable is a good idea; we especially need to do so to encourage the next generation to read and access the Plan. We need to move to new technology – to get people to engage. Finally, let's acknowledge that every update always takes longer and more effort than we want.

C. Domenico: Visual piece and telling the story. Visuals of photos of past and present, and 3D graphic visuals could really excited people. Agree on resilience and sustainability components as well as metrics. Would be helpful to look at clarifying policies around Area II. Transit routes – some interesting structures and facilities. Question is how to bring them into the city, and is there a tie to affordable housing? Economic viability. Partnership is amazing and really important.

B. Herman: Don't sell short what needs to be done or the effort it will take.

P. Shanks: Liked the comments about metrics – really important for setting baselines/indicators/accomplishment of goals vs. using lots of words. Agree with the experience

with the Plan policies – it can be all things to all people. It gets quoted at City Council or Board of Commissioners for or against an issue. Maybe the definitions are not tight enough or enabling regulations don't link tightly enough at the city level. There may be a closer link between the County Comp Plan and county regulations, whereas in the BVCP, there seems to be less linkage with the code and regulations (e.g., grow paying its own way is murky in the city). There seems to be a more clear vision for Boulder County (e.g., a series of urban centers with rural areas in between), which is pretty much what we have today. Regional thinking is important. Boulder gets accused of exporting sprawl – how do we reduce/minimize undesirable consequences spinning off from the Plan? Think about urban form, urban centers. How self-sufficient can we be? Do centers enable transit so people don't have to drive? A lot of things like that need to be addressed. Neighborhoods are important. Right now the Plan doesn't have much about them. There's a lot of annexation activity. That would be a welcome addition to the comp plan. Agree with everything that's been said. Pick some of the things that are important and create clear linkages to metrics and/or regulations. At the county, we have been working through the Boulder County Comprehensive Plan (BCCP), and shortly thereafter there are regulation updates to reflect that Plan. It might be a little simpler, but it does seem that the BCCP and regulations are more tightly linked. For the BVCP, there may be some items in the Plan that don't lend themselves to regulations. Maybe they should be identified.

D. Young: The BCCP does seem simpler, whereas the city and its interaction with DRCOG, etc., is more complicated. With the county plan, it has been more like a rolling update, and we can see policy changes and regulation changes immediately afterward vs. going through a BVCP Five year trauma. This means some sections are less up to date than others, but that's OK. Not sure if that approach is applicable for BVCP. It's a pretty hefty document – daunting for anyone except the hardiest of planners. The BVCP suffers from having people being a bit attached to policies – new language and policies get added, not taken out.

D. Cohen: Agree with Doug and reiterate what Pat says – update the Plan in a conscientious way to develop a cleaner link with land use code. It is hard to use from a development standpoint. The most useful thing about the Plan is the partnership between the city and county, otherwise it is not user friendly. It has weak language in some places, and often gets ignored or pushed aside during an argument. Staff will present a report to Planning Board – the process can be unpredictable. The Plan should be a good basis for the code to implement the vision. On the metrics side, metrics should be informative not prescriptive. Be careful about drawing a hard line, but instead create standards that can evolve. I concur, the document could be more user friendly. County and city both have great GIS systems. The BVCP could interface with GIS to provide access and information from large to small scale.

M. Baker: Picking up from there. Regulations, standards, guidelines – adding that stronger link would help the Plan be more user friendly and would provide clarity and certainty.

D. Cohen: Everyone benefits from clarity in the Plan.

P. Fogg: Boulder County Healthy Communities annual reports – includes basic metrics and indicators. As example of how a document can use some basic info. As a primer – look at that example.

D. Gardner: The slide you presented with 21st Century Challenges and Opportunities – these topics are also very important to the county. It would be a missed opportunity if we didn't work on these

issues when we're doing an update. It is interesting observation that none of these are called out in the Key Observations list – are they implied?

B. Herman: Yes, at least two are implied, and a few of them such as resilience, climate and energy, and workforce housing are parallel efforts at the city.

L. Ellis: Yes, the city has talked about all these issues quite a bit. We will send you a more detailed summary from the city joint study session.

D. Gardner: Good because if we just focus on the “size of the breadbox” without the key 21st Century topics we aren't doing our job.

D. Cohen: Be more proactive about these topics not passive about leaving it the same. Use the policies to drive outcome accomplishments, not just add more policies.

L. Gargano: If modernization is a goal, making the BVCP more accessible would help even if a lot of it doesn't change policies much.

B. Herman: Next steps include preparing a consultant report and scope of work. Plan launch will not start until early 2015. If you have additional thoughts or comments about the plan, community engagement, or other topics please send them to Pete Fogg.

BOULDER VALLEY COMPREHENSIVE PLAN – Input from Oct. 14, 2014 City Study Session of the Planning Board and City Council

Staff Presentation:

L. Ellis introduced the project and consultants with PowerPoint slides.

Planning Board Overview:

A. Brockett provided an overview of Planning Board discussion on BVCP from previous board meeting discussions.

Consultant Presentation:

B. Herman and **D. Godschalk** provided consultant observations as included in the packet and the Range of Approaches, as follows:

- Retain Current Plan/Focus on Implementation Tools
- Minor Plan Update with focus on Vision and Policy Refinement
- Plan Repackaging/Sustainability Integration and Outcomes
- Major Update with Community/Partnership Process

Discussion Topics:

The following questions guided the council discussion:

1. New Topics and Issues: What new issues and opportunities should the 2015 plan update address?
2. Update Approach: What is the appropriate level of effort and community engagement for the plan update?
3. Resilience Strategy: Should the resilience strategy process and/or outcomes be bundled with the BVCP update?

City Council and Planning Board provided the following comments and questions:

M. Cowles: Like the upper end of range of approaches for the comp plan update, because the community has had floods, fires, and seen increased focus on climate change. The plan should address areas of the city that are less resilient and have more vulnerable people. We should do the plan in line with the resilience strategy. It is surprising that the plan is not expressing the vision. It is expressed with heavy text, and many desires without priorities. It may be time for analysis related to outcomes.

J. Gerstle: We have been well served by the plan's vision and goals of existing plans, and it is not obvious that the vision needs attention. It makes sense to incorporate resilience, but it is not clear we need to redefine the vision. It is appropriate to talk about it and ensure agreement. Focus on implementation is absolutely appropriate and most useful to issues raised by Planning Board.

M. Young: Seems the plan does not have a correlating Master Plan to the built environment. The text is good, but it needs visualization of the definitions. Make it clear to the whole community what is appropriate. Do a minor update and focus on the implementation of the built environment section and then do code changes. Weave in resilience.

Consultant response: The plan could include a more defined version of urban form definition (e.g. San Francisco or other examples). It could be part of the plan or a separate element.

L. May: The value statements are clear if you use it a lot. I would not call for a minor update, but we need to an update with focus on vision and policy requirements. Roll in resilience. As part of that, a significant community partnership process needs to be incorporated. Do a modest update and incorporate topics that have not previously been in there, and flesh out the built environment topic.

S. Weaver: Take a holistic look. The values are there. The vision is there but is not clear to all. The update should be somewhere between minor and major. It needs an urban form component that gives more guidance – for both by-right and site review projects. The climate goal that was adopted needs to be included and flow down to implementation. If not we will miss our goals. The BVCP is the place to include big aspirational goals. Add resilience and net energy goals. Key is to show what goals look like to the community.

A. Brockett: Focus on implementation tools. Add prioritization particularly in built environment and outcomes. A separate built environment plan is intriguing, if it guides the shape of development, areas of city, different streetscapes. Maybe not in this plan if it is to be done. Achievability of completing the built environment plan is a concern.

J. Putnam: With plan repackaging, be careful not to lose what is in the comp plan. Policies are there, but there are holes in translation. The plan needs a good definition of compact urban form. We have good understanding and policies to prevent sprawl. With visual and graphic tools we can address urban form. Take a hard look at urban form goals with the public, as people may not agree with text. Then, look at implementation tools and outcomes. Agree that resilience needs to be integrated with the plan to take it seriously. This may mean that we have something rougher and less perfect that can be refined later, rather than wait. Get to implementation.

S. Jones: Agree that the plan has served Boulder well. The values are solid – don't rehash them. But, repackage to tell the story better. Resilience is important. Rough out the visualization piece where details will happen with other processes. Other issues have been ripening in the community, such as arts. The plan doesn't really address, but people seem ready to embrace it more holistically.

L. Morzel: Agree with plan repackaging, sustainability, and outcomes. The comp plan is great. When I was a neighborhood advocate, it got me into planning and action. It will be important to integrate sustainability and resilience – they have to be done in parallel. Don't do much visioning. Sharpening and refining policies could help. It will be critically important to add implementation tools. There is too much wiggle room from Planning Board approval through site review, and we need more certainty. Address the map changes. Want to look at Area III – Planning Reserve and where we are going with that. The last thing we want to do is to loosen our belt and go sprawling into Area III. We should not consider developing into Area III. Not something city should go talk to county about. Discuss area II as well. Want to have time to discuss map.

A. Shoemaker: Ditto to what Aaron said, including built environment. Allow the update to evolve culturally and reflect demographics. There is a lot of change in the city – implementation tools are critical. If we do not have those tools, we lose opportunity to shape things as they are happening. Perhaps the vision statement needs more clarity. Improve the graphics of what is a wonky document.

B. Bowen: Agree with what others said. Address plan update at the appropriate level of light touch. Address urban form more deeply and sustainability and resilience. We have won past battles. Need to be doing a deep enough revision to address current issues and get ahead of them.

C. Gray: The report was interesting and I appreciate the consultant observations. A process with resilience integrated into the comp plan update makes sense. Use the new neighborhood liaison to have a real involved process in the community. Community partnerships are important in Boulder (e.g., with major employers, university, labs, art and culture). Not so much about growing the community but understanding the needs of those partners.

T. Plass: The bones of the plan are strong. We may be too close to see that the vision is not clear. It's worth looking at how to make it clearer. Tie in resilience – it's the next really important thing. Would like to also see local food as part of implementation, as it is currently aspirational, but we need to get more specific. Another more detailed topic is to incorporate better cellular coverage in our community, as it is a safety issue and desired by the community.

M. Appelbaum: Agrees with Tim and John, and would like to address built environment, possibly as a master plan or separate element. Concerned we might focus on built form too much, and it will slow down the process. The comp plan is not just a land use plan – that is what people see, but it is much more than that, and we should remind people it is more. Other sections probably need some revision and updating to get them more in sync with other plans. Sometimes, the land use drives other things and sometimes it's the other way around. Resilience is like that as well. Map is a working component but not the only thing. Not sure about prioritizing goals. Despite the ability to use policies to justify anything, that may not be a bad thing, as we can't always have it all. Projects (on project-by-project basis) cannot be expected to solve all the problems. A giant battle about ranking the goals will not get us far. Sort out the detailed needs in area plans. Regional is important, but not just for partnerships. Boulder is part of a bigger metro area. The way we look at implications and the way we measure things is important. We cannot just look at how things affect Boulder. Regional impacts need to be considered, in how we measure (e.g., housing). We need to consider "if it weren't here what would that mean?" We need a full and accurate picture of not just Boulder's sustainability but the sustainability of the region.

G. Karakehian: Minor update rather than major. Agree with other comments. Update and modernize, but not interested in seeking a major work effort. The plan works and needs fine tuning.

L. Payton: Part of the reason we have so little community engagement is because we average across the community. We should have a section on neighborhoods (e.g., a couple of pages per neighborhood). Get people involved to describe and set vision for the future, identify ways they are vulnerable, resilient, sustainable, or could be more sustainable. It would get people involved and thinking about it. Policies are too generic and that creates distance between people and the plan.

M. Young: Would like to reiterate support for the arts. Resilience it has the potential to weave into other areas also. Also, like Liz's idea of defining neighborhoods and having them define themselves.

S. Jones: Agree with Tim on local food; it fits with resilience.

G. Karakehian: Agree with review of maps – confirm they still reflect what we want them to. Value of neighborhood planning in general should be stressed – neighborhood plans indicate what may be expected of individual developments.

S. Weaver: Like idea of a very light touch of neighborhood plans – preparation for that could be useful. Not going to get so many area plans in the next five years.

L. May: Reinforce maps and neighborhoods. As we look at developing neighborhood plans, we need to look at growth and development pressures and the question of growth paying its own way.

M. Appelbaum: Neighborhood plans are not where the action is. They have almost no changes unless we started some real rezoning or increase in density. Not saying I am in agreement with no changes, but we need to focus on where change is happening and where it is likely to change. For most neighborhoods, very little is happening. For areas where things are changing, that might be helpful, but that is different than the conversation we're having. Neighborhood planning could spread us too thin.

T. Plass: Agrees that the neighborhood planning idea by Liz has merit. It gives the residents more buy-in, engagement. There is value to calling out neighborhood and having pride in where they live.

M. Appelbaum: Need to address scope of what is possible.

L. Morzel: Agrees with Tim that neighborhoods could help create better social fabric (e.g., flood resulted in people getting to know each other). Buy-in to the comp plan is important. It isn't just land use.

Consultant summary: Common themes tonight are middle range of level of effort; integrate sustainability and resilience; not a redefining of vision, but clarify policies in some cases and make the plan more graphic. Explore integrating metrics and outcomes, and add new or emerging topics, such as built environment clarification.

NEXT STEPS

David Driskell closed the meeting by highlighting the following next steps:

- Consultant will provide recommendations related to Boulder Valley Comprehensive Plan Assessment and thoughts on process and scope.
- Our goal is to get suggestions to you on work plan prioritization and options in advance of your January retreat.
- Didn't hear concerns around new thinking about engagement strategy for Comprehensive Housing Strategy. We will move to implement.
- Victor Dover is now planned for Dec. 9 with City Council as part of Design Excellence Initiative.

Approved Transportation Advisory Board Summary from Oct. 13, 2014 Discussion of BVCP 2015 Update

Name of Board/ Commission: Transportation Advisory Board
Date of Meeting: 13 October 2014
Board Members Present: Daniel Stellar, Zane Selvans, Jessica Yates, Dom Nozzi, Andria Bilich
Agenda Item 6: Staff briefing and TAB input regarding scoping for Boulder Valley Comprehensive Plan Update Lesli Ellis presented the item. A PowerPoint was presented for this item. Executive Summary from Packet Materials: Attached for review and input from the Transportation Advisory Board (TAB) is a draft memo to City Council and Planning Board prepared for the joint Study Session regarding the Boulder Valley Comprehensive Plan (BVCP) Update. Also included as attachments are comments received to date from Planning Board, stakeholder interviews, and consultant observations. The purpose of this study session is to review the 2015 Boulder Valley Comprehensive Plan (BVCP) update assessment and scoping process; provide information for feedback from interviews and boards regarding ways to make the plan more effective, strategic, and aligned with other outcomes; note the parallel resilience strategy; and seek feedback regarding issues and options for the 2015 Major Update of the BVCP. Staff will available to discuss the BVCP memo and comments received to date as well as seek input from TAB during the October 13 board meeting. Input from TAB will be incorporated into the presentation materials shared with City Council and Planning Board on October 14. Board discussion and comments included: 1. What new issues and opportunities should the 2015 plan update address? <ul style="list-style-type: none">• Comments regarding striving to be a graphics based plan to inspire audience• Comments for using plan to move toward more form-based zoning, away from conventional use-based zoning• Suggestions for urban to rural transect visions to provide for all travel choices for 5 and 15 minute neighborhoods.• Comments on creating housing for families to reduce in-commuter trips 2. What is the appropriate level of effort and community engagement for the plan update? <ul style="list-style-type: none">• Comments regarding a complete overhaul of the comp plan with the community involved should be tackled now.• Comments regarding plan update can be helpful in looking at conflicts between goals.• Comments regarding all individual plans, housing, trans etc.. The community doesn't have opportunity to provide feedback, not tethered to other plans. Community engagement will bridge the plans and information together. No board action beyond input is requested at this time.

Environmental Advisory Board Discussion about Boulder Valley Comprehensive Plan Update

October 1, 2014

Environmental Advisory Board Members Present: Mara Abbott, Tim Hillman, Morgan Lommele and Brad Queen.

SUMMARY:

- The board indicated that the Boulder Valley Comprehensive Plan is a high-level vision document that includes the community's sometimes-conflicting values, but lacks strategic structure and fails to address where Boulder is headed as a city in terms of growth and sustainability.
- Instead of requesting community feedback on the Comprehensive Plan, the board suggested holding facilitated community meetings to discuss specific topics such as the vision of Boulder, energy, resilience, housing and more. It was believed that people may be more inclined to discuss specific issues instead of the entire framework of the plan.
- While gathering community feedback the board suggested using questions that will result in measurable, concrete answers that are not ideological in nature.
- The main questions that should be addressed are questions around sustainability of resources and growth and how to balance the two as well as resilience and how our community should respond to anticipated and unanticipated stressors.
- The board noted the importance of integrating resilience into our sustainability efforts and developing terminology that is more widely understood. The board suggested using the flood to illustrate the importance of resilience and as a way to build awareness of the impacts of less concrete issues like climate change.
- The board recommended actively utilizing organizations like Better Boulder, Open Boulder, Plan Boulder, etc. to convene community engagement events through which the city could gather valuable feedback on issues, values and priorities. BVSD could be a valuable resource to encourage the next generation to discuss these issues.
- Consider using scenario planning as a way to help make the future options more tangible and provide more concrete alternatives for the community to consider and use to create recommendations.

Boulder Valley Comprehensive Plan – 2015 Update Boulder Planning Board – Summary of Key Points (September 18, 2014)

The Boulder Planning Board showed support for the following ideas regarding the Boulder Valley Comprehensive Plan (BVCP) Update in 2015.

Format of the Plan

Recognition of its Strengths:

- It includes great aspirational statements and provides an overview of the community (e.g., built environment, energy, community well-being). Many use it to learn about the community.
- Our partnership with the county and 4-body review provides our only link to regionalism.

Areas for Improvement:

1. **Improve the format:** Ideas include using graphics and illustrations to convey ideas. Make it more concise, less wordy, lots of visuals.
2. **Tell the Boulder planning story better:** For instance, include a retrospective (e.g., what the plan has done to shape this community, and what if we hadn't had the plan)
3. **Broaden its topics to reflect inclusive community ideas:** Important to be inclusive in the plan, beyond land use. *(some topics noted below)*
4. **Sharpen its policy focus:** Provide community guidance on priorities.
5. **Include metrics:** Roll in existing and new metrics related to land use, climate/energy, etc.
6. **Partnerships:** continue to build partnerships with CU, federal labs, and other important institutional and regional partners.
7. **Bridge to Implementation:** Provide a bridge between the plan's vision statements, policy, and implementation tools (e.g., between land use and zoning) should be strengthened. Make land use map definitions more specific and clear, and link site review criteria with the plan. Address form
8. **Clarify density and design:** Define how urban, compact, etc., and what level of quality as defined through a community conversation. Address form-based design.

Current Issues to be addressed

1. Workforce housing
2. Public art, art, and culture
3. Sustainability goals (integration)
4. Impacts on government services - community facilities and services (e.g., library, etc). More specificity about offsetting/mitigating impacts.
5. Regional system and partnerships
6. Local food
7. Energy and municipalization
8. Carrying capacity
9. Settling planning reserve questions such as Hogan Pancost
10. Regenerative design vs. greenfield design
11. Resilience

How Resilience Strategy Might Relate to the BVCP Update

1. Coordinate resilience strategy and BVCP, at least at high level and for public process, but do not sideline resilience.
2. Let resilience implementation actions move forward without being tied to the plan.
3. Determine where vulnerable populations can best be accommodated (e.g. reserve land for community identified needs).
4. Address communication strategies (e.g., between city and population, or within neighborhoods), as an important part resilience that could also be addressed through the plan. This is especially relevant during floods, fires, etc.

Community Engagement Process Ideas

1. Educate the community about the plan. Start out with some common information (e.g., “Comp Plan 101” sessions). Public forums to set the foundation, via speakers.
2. Consider producing a series of short, snappy videos – educate the community in different ways.
3. Reach out to people not ordinarily engaged (e.g., Mobile home parks, Neighborhood associations)
4. Talk about how the plan actually affects people’s lives – those not interested in zoning, etc. Illustrate what it means to people.
5. Visualization is really important as part of the outreach process.

Boulder Valley Comprehensive Plan (BVCP) Assessment and Update Process Summary of Comments from Interviews – Fall 2014

Following is a summary of comments received from a series of interviews and meetings conducted by the consultants and staff in fall 2014. During the course of these interviews, the consultant/staff team members met with city staff from a broad range of service areas, including staff from Public Works, Finance, Fire, Police, City Manager’s office, Community Planning and Sustainability, Energy Future, Human Resources, Communications, Housing, Transportation, Environment and Ecology, Open Space, Parks and Recreation, and Utilities, as well as Boulder County staff. They also met with the City’s Master Plan Coordination Committee; Ecological Planning team staff; and Growing up Boulder staff; members of the Arts Commission; Downtown Management Commission; and Open Space Board.

During the interviews, staff and consultants posed a consistent set of questions to obtain a wide range of input in a consistent manner. Topics discussed included the following:

1. **Plan Usage and Awareness** - *How do you currently use the Comprehensive Plan? How would you like to use it in the future, once updated? How widely do you think that the plan is understood and used by the community?*
2. **Content** - *What are the strengths of the current plan? What are things in it that are rock solid, must remain – format, content, process? What could be improved (format, content, process)?*
3. **Issues to be Addressed** - *What are some of the issues facing the community that you think the plan update needs to address?*
4. **Update Process** - *Do you have any ideas for creative ways to engage the community in the update process itself? Any organizations or sectors of the community that you think are particularly important to reach out to?*

The following is a summary of feedback received from the meetings and interviews, organized in the same manner as the questions above.

1. Plan Usage and Awareness

- **Usage of the Plan varies widely.** Usage of the Plan varies, depending on the role that staff or board members play in the city organization. Those involved in development review use it regularly as an implementation tool – to provide direction regarding development projects, or to justify actions or support actions they are about to take as a city. Some use it as more of a “vision” document, to see if what they are proposing is consistent with the city’s overall direction. Some departments acknowledged that they have little knowledge of the plan, and do not see it as integral to their work. Many would like to see the Plan have more relevance to what they do – to see it serve as more of a “unifying” document, particularly for those service areas that rely on a Master Plan to guide their efforts.
- **Awareness of the Plan among the general community is perceived as low.** With the exception of Planning Board and City Council members, the development community, and a small number of planning-oriented citizens (many of whom date back to the initial growth management/land preservation efforts in the 1970s), most feel that the Plan is not widely understood or perceived as relevant to most residents or businesses. However, many think the community has a good understanding of and support for the Plan’s core values (e.g.,

growth boundary, land preservation, focus on transportation choices, etc.) even if they do not know that those concepts are contained in the Plan.

- **The Plan gets used by the community to support (or repel) proposed development activities.** Many noted that the Plan’s policies tend to be used by the public as either a sword or shield, depending on whether they support or oppose a proposed action.

2. Plan Content

a. Plan Strengths

- **Growth Management/Service Area concept is seen as “rock-solid”.** There is widespread understanding and support for the Plan’s focus on containing urban growth where it can be served and preserving rural areas and open lands.
- **Core Values (sustainability, city/county cooperation, environmental stewardship, multi-modal transportation, etc.) are widely supported.** Most believe that these values are widely supported and must remain as part of the Plan’s foundation.
- **Policies are generally clear and well-founded.** However, as noted below, many believe that there are opportunities to clarify the Plan’s policies.

b. Areas for Improvement

- **More focus on implementation.** Many think the Plan is weak on implementation and actions.
- **Clarify Policies.** The Plan’s policies in key areas (e.g., urban form, density) could be sharpened to make the intent of the policies clearer. (One comment - “dial up enough detail so that 90% of people will agree on what it says”.)
- **Strengthen connections to the university and other partners.** Partnerships are seen as critically important to the community, yet they are not broadly addressed in the Plan.
- **Update the format and content to make the Plan more community-friendly.** Many think the Plan is too much of a “planner’s plan”, and would like to see it repackaged in a way that would make it more accessible to the broader community. This could include a stronger vision, as well as a retrospective on how the city has gotten to where it is through planning. Do more physical, geographic planning (more about form and character), less narrative.
- **Stronger linkage to City Master Plans.** Many city departments rely on a Master Plan for their guidance and direction, and see an opportunity to strengthen ties between the Plan and their Master Plans, with the BVCP containing high-level actions and strategies to help integrate the Plan and Master Plans. Have a less piecemeal approach to planning in general.
- **Add Metrics and Outcomes.** While opinions vary on this topic, many think the Plan should set the foundation for the city’s increasing efforts to set outcomes and track progress and build on the c measures that are currently in the Plan (e.g., urban service criteria) or in master plans (e.g., Transportation Master Plan, Fire Master Plan, and Parks and Recreation Master Plan). Some think metrics should be

contained in the Master Plans, and that the Plan should set high-level goals and outcomes.

- **Integrate the Sustainability Framework into the Plan.** The Sustainability Framework is seen as an increasingly important tool for the city. While it is mentioned, it is not yet fully integrated into the Plan. However, city departments are beginning to use the Framework as a basis for Master Plan updates and the City Manager's office is using it for performance metrics.
- **Regional Mapping and Thinking.** The plan's maps stop at the borders and many of the policies do not stretch beyond the current limits, but the urban area influences areas around it and regional factors have bearing on the city.

3. Issues to be Addressed

As may be expected, the interviews identified a wide range of issues that the update might address. These are listed below (*in alphabetical order*):

- **Arts and culture** – little mention in current plan.
- **Climate** – action, adaptation, mitigation
- **Density/urban form** – identified as a top issue by many; define what we mean by sustainable urban form.
- **Disruptive change** – shift focus of plan from growth management to new challenges (e.g. climate). How to be more adaptive, dynamic, and fluid?
- **Economic development** – does it need a reset?
- **Energy Future** – needs to be considered in the Plan.
- **Fiscal health** – linkage with budget, capital projects, tracking fiscal health and outcomes.
- **Inclusivity/income disparity** – equity issues around income, public health, access, diversity, and wealth that can be passed to future generations.
- **Resilience** –with two fires, a flood, and a recent recession, resilience is an important topic.
- **Workforce and affordable housing** – in conflict with high economic levels and in short supply.
- **Youth issues** – interaction with nature, places for teens to “hang,” independent mobility
- **“15-Minute” Neighborhoods** – transition of neighborhoods over time; Where? How? How much?

4. Community Outreach Ideas

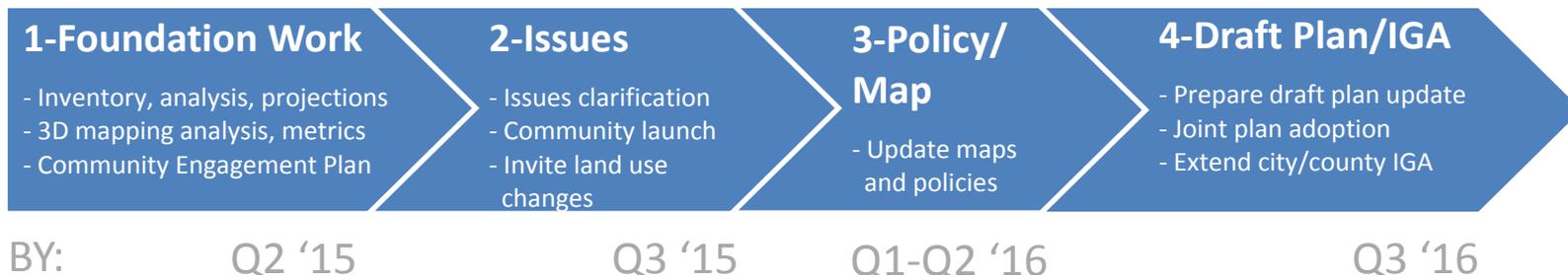
There is widespread support for transparent, inclusive, meaningful input from the community, and a variety of ideas were expressed about how to accomplish authentic participation. These are listed below:

- **Develop a Process Committee to sort through and prioritize best ideas for community engagement, including ideas below.**
- **Tap into neighborhood groups organized as part of flood recovery efforts.** This was mentioned as a way to involve many who would not typically be involved in planning-related topics. Also the Long Term Flood Recovery group might be a good resource.
- **Look to recent successful planning efforts (i.e., Transportation Master Plan, Civic Area Plan) for ideas that worked.** Both of these recent efforts were mentioned by many as having using creative new approaches to citizen engagement – both web-based as well as activity-based, storefront workshops and going to where the people are. TMP storefront workshops were seen as particularly effective, as were youth workshops organized by school district, university, and the city.
- **Look to some older successful planning efforts.** North Boulder Subcommunity Plan was a citizen-driven project that is also seen as having been successful for its day.
- **Use creative ways to engage the business community.** Look to engage business owners, but also employees and in-commuters or day population. Consider focus groups, employee surveys that focus on economic policies.
- **Traditional meetings/open houses not seen as very effective.** These events tend to attract relatively small attendance (unless focused on controversial topics) and provide low return on investment.
- **Make the Plan “real” to people.** Focus on real, concrete examples with visual tools for people to understand how changes to the Plan might affect them.
- **Consider a community-wide kick-off event or forum.** Bring people together from different backgrounds and interests at the start of the process, to generate discussion and interest in update topics.
- **Go to where people are and work with trusted groups.** Rather than organizing events and expecting the community to come out for them, go to where they are – senior living centers, schools, places of worship (particularly important for minority communities). Touch base with organizations, including but not limited to: Better Boulder, Boulder Chamber, New Era, Open Boulder, and Plan Boulder County.
- **Involve neighborhoods.** Need to do a better job of informing and engaging with neighborhoods.
- **Do “mobile” planning.** Consider a planning truck (like a food truck) to get out into the community.

- **Use newer communication tools, such as video and info graphics.** People get their information in different ways – not just written word. Be creative to hook people with ideas that matter to them.
- **Do some Planning “101” sessions** for people who are less familiar with the plan.
- **Tap into other local networks.** For instance, police have contacts and networks that planning may not have.
- **Consider outreach to county residents specifically.** Go to where the people are, in Gunbarrel for instance.
- **Engage with Boards and Commissions.** Facilitate meaningful discussions about planning topics.
- **Go to existing organizations’ events and meetings.**
- **Attend non-traditional planning events to do brief presentations.** Go to events such as New Tech Meet Up (5 minute presentation), Boulder Open Coffee, and Ignite (3 minute pitch).

Boulder Valley Comprehensive Plan (BVCP) Update & Resilience Strategy 2015/2016 Draft Timeline

BVCP – 2015 Update



Resilience Strategy



Resilience Strategy Update

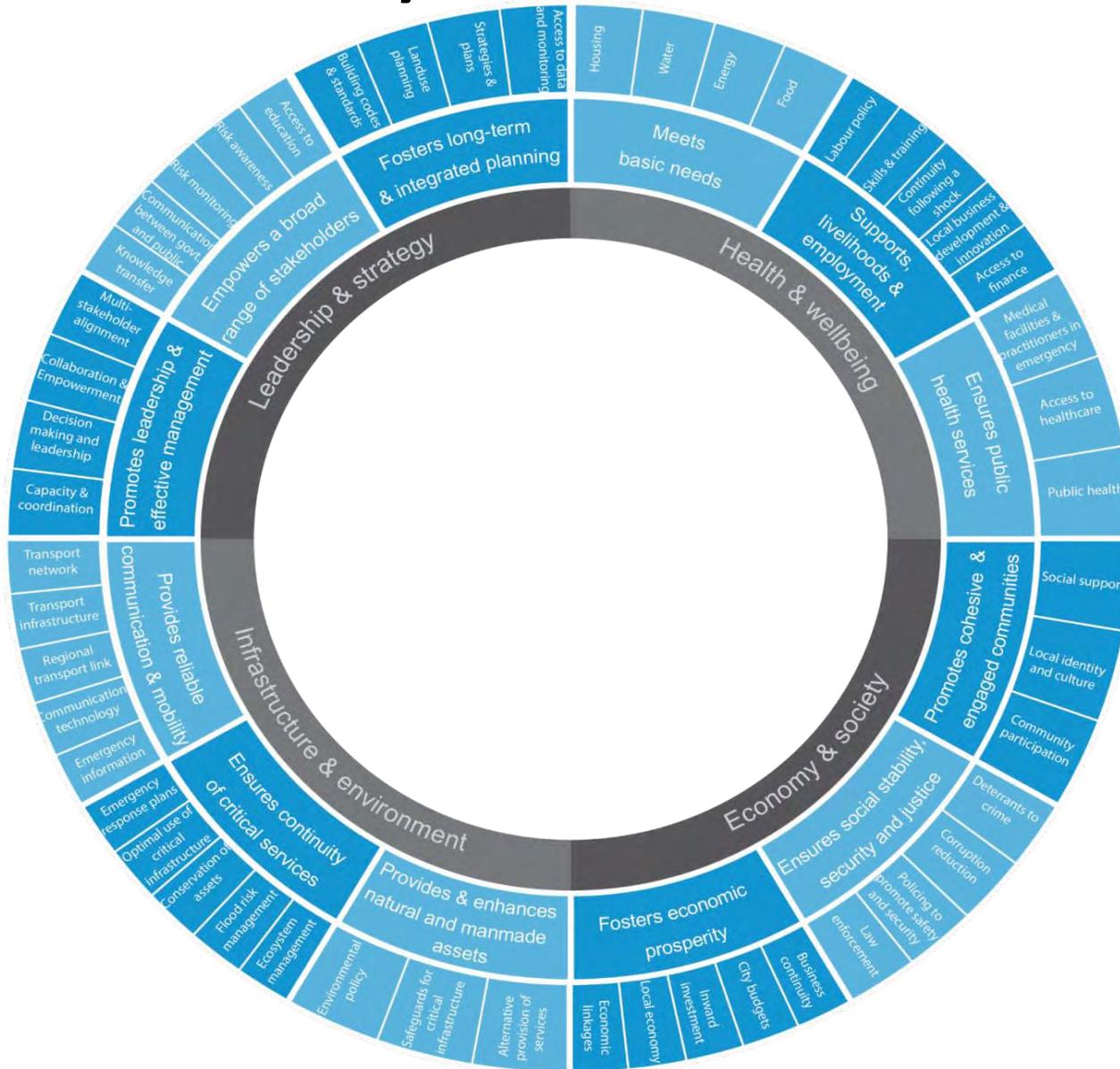
from 100 Resilient Cities

December 2014

100RC Overview

- **Objective:** Dedicated to helping cities around the world become more resilient to the physical, social and economic challenges that are a growing part of the 21st century. 100RC supports the adoption and incorporation of a view of resilience that includes not just the shocks – earthquakes, fires, floods, etc. – but also the stresses that weaken the fabric of a city on a day to day or cyclical basis.
- **Partners**
 - HR&A: <http://www.hraadvisors.com>
 - Platform
- **Network:** www.100resilientcities.org

City Resilience Framework



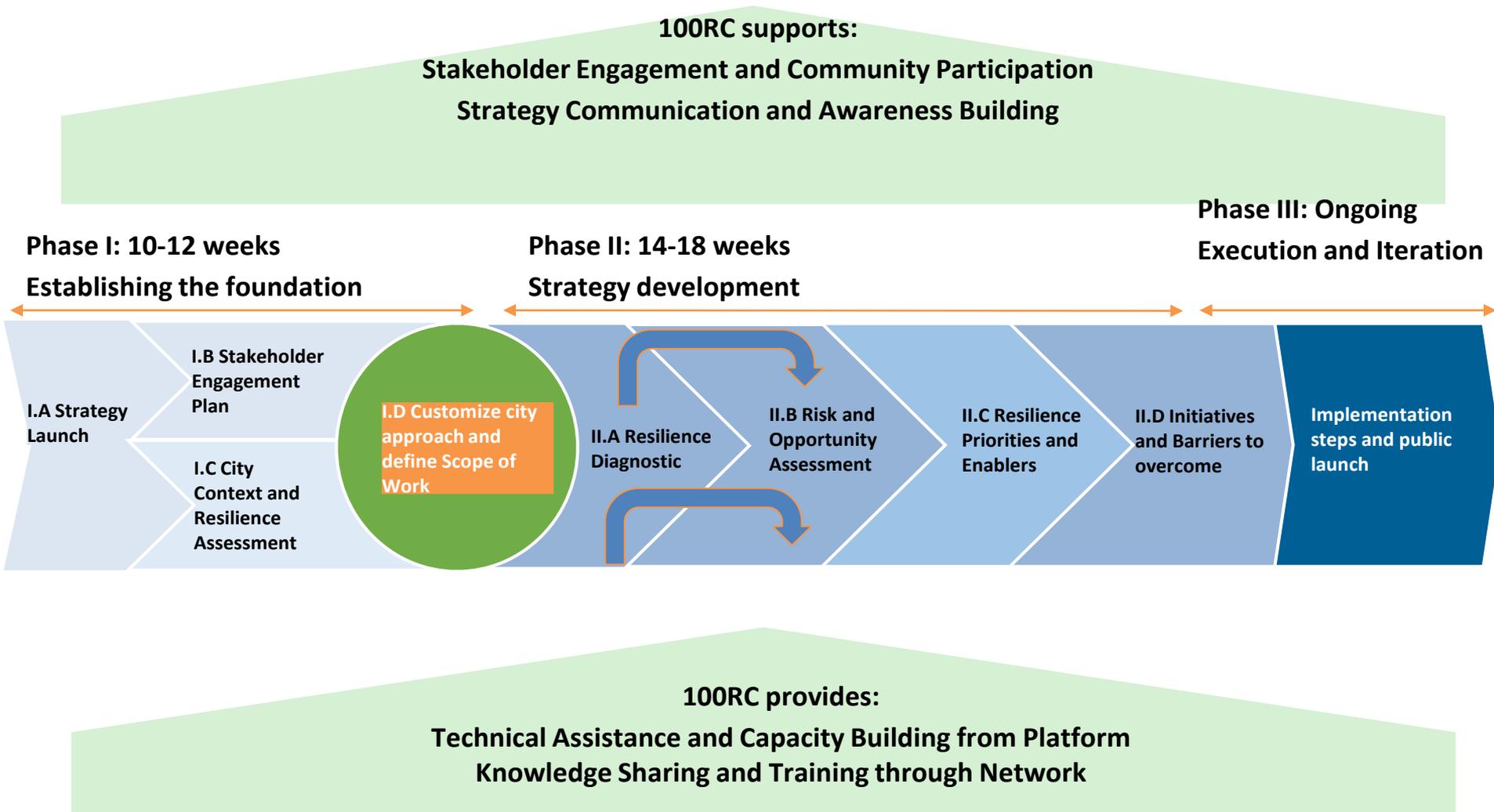
The CRF looks at cities through the lens of

7 Qualities
4 Dimensions
12 Drivers
50 Sub-Drivers

Resilience Qualities

Reflective	Resourceful	Robust	Redundant	Flexible	Inclusive	Integrated
Ability to learn and act	...conceiving systems & assets that can withstand shocks & stresses as well as using alternative strategies to facilitate rapid recovery			...planned to take account of city-wide needs and promote coordinated actions	

The Strategy building process and 100RC resources



100RC Program Elements

- **Chief Resilience Officer:** a new position in the government who will lead the effort
- **Tools and Methods:** Technical and logistical support for the development of a resilience strategy that will serve as the city's roadmap to resilience activities and priorities
- **Platform Partners:** Specialized partnerships to help developed a sophisticated understanding the city's risks, assets, weaknesses, and opportunities and how they interlink in unanticipated ways
- **Network:** Inclusion into a network of 99 other cities from which best practices, innovation, and peer-to-peer learning can advance the practice of resilience globally.



What is the Platform and Why Do We Need it?

The Challenge:

- Market has limited information around city needs
- Existing resilience building tools and services are not reaching cities

The Solution: The Platform

- The Platform links resilience tools and services with city demands
- Team identifies, negotiates and aggregates resilience-building tools and services in a web-based Catalog
- Engages with RMs and cities to pair Catalog services with city needs
- Facilitates and monitors implementation of solutions

Partner identification

Tools/Services/ Research/
Funding
↓ ↑ ↓
(the Catalog)

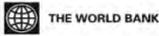
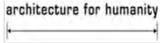
Uptake off the Catalog



Implementation of Tools
and Services

Monitoring & Evaluation

The Platform Catalog is composed of 22 Platform Partners, with 29 services for a total current value of \$81 million

 <p>Regional Resilient Design Studios</p>	 <p>Procurement</p>	 <p>CRO Recruiting</p>	 <p>City-wide Modeling and Simulation</p>	 <p>Water, Energy, and Waste Mgmt. Services</p>
 <p>Cultural Preservation through Coating</p>	 <p>Part of the Medellín Collaboration Group</p>	 <p>Online Outsourcing Platform</p>	 <p>Natural Hazard Visualization Tool</p>	 <p>City Creditworthiness Academy</p>
 <p>Regional Resilient Design Studios</p>	 <p>Situational Awareness for Public Health</p>	 <p>Water Resource Mgmt.</p>	 <p>Land Zoning</p>	
 <p>City Resilience Framework</p>	 <p>Inter-American Development Bank Resilience Financing</p>	 <p>Data Integration</p>	 <p>DRM Tools</p>	
 <p>Community Outreach for Water Resources</p>	 <p>Feasibility Study Technical Assistance</p>	 <p>Earthquake Modeling</p>	 <p>Crowdsourcing Tool</p>	

Examples of Platform Engagements

We have deployed certain platform offerings where appropriate to facilitate cities' strategy processes

Status of City Engagements			
 Palantir	Situational Awareness Model	Norfolk, VA	Palantir is integrating datasets across many departments, enabling the city to quickly understand situational awareness during an event and provide planning information.
 Sandia National Laboratories	Flood Mitigation Cost Analysis		Sandia is looking to conduct an economic analysis to assess the costs of sea level rise/flooding in Norfolk allowing it to better understand costs/benefits associated with different mitigation approaches.
 Ushahidi	Resilience Network Initiative Crowd Sourcing	Porto Alegre	Ushahidi is providing technical advice on technology for citizen engagement to engage marginalized groups and civic data more readily available for use by local software developers
 Sandia National Laboratories	Energy and Transportation analysis Infrastructure	San Francisco, CA	Sandia developed a project scope for creating a list of actions and investments San Francisco should undertake in energy and transportation systems to make the city and region more earthquake resilient.
 RMS	Catastrophic models	San Francisco, CA	RMS is implementing technology to help the city use software models more dynamically to better understand risks and potential ways to mitigate them.

100RC Outputs and Deliverables – Phases 1-2

Phase I

1. Phase I Work Plan
2. Stakeholder Engagement Plan
3. Resilience Steering Committee
4. List of major shocks and stresses
5. Resilience Assessment Tools outputs
6. Preliminary Resilience Assessment & Focus Areas
7. Phase II Work Plan

Phase II

1. Focus Area diagnostic and analysis outputs
2. Cross-Focus Area analysis
3. Documentation of Field of Opportunity
4. Documentation of Resilience Priorities, enablers and initiatives
5. Resilience Strategy



Phase 1 Tool Example: Stakeholder Map Template

Health and well-being			Economy and society			Urban systems and services			Leadership and strategy		
1 Minimal human vulnerability	2 Diverse livelihoods and employment	3 Adequate safeguards to human life and health	4 Collective identity and mutual support	5 Social stability and security	6 Availability of financial resources and contingency funds	7 Reduced physical exposure and vulnerability	8 Continuity of critical services	9 Reliable communications and mobility	10 Effective leadership and management	11 Empowered Stakeholders	12 Integrated development planning
Food	Livelihood opportunities	Public health management	Community and civic participation	Deterrents to crime	Economic structure	Environmental Policy	Ecosystem management	Integrated transport networks	Multi-stakeholder alignment	Research, knowledge transfer & best practice sharing	City monitoring and data
Water and sanitation	Skills and training	Access to affordable health services	Social relationships and networks	Corruption reduction	Inward investment	Safeguards for critical infrastructure	Flood risk management	Information and communications technology	Intra-governmental alignment	Risk monitoring and alerts	Strategies and plans
Energy	Development and innovation	Emergency facilities and practitioners	Local identity and culture	Policing and justice	Integration with regional and global economy	Building codes and standards	Maintenance practice	Emergency communications services	Government decision-making and leadership	Public awareness of risk	Land use and development
Housing	Access to financial assistance		Integrated communities	Approach to law enforcement	Business continuity planning		Demand on critical infrastructure		Emergency capacity and coordination	Education	
					Sound fiscal management		Continuity planning			Communication between government and citizens	
City Dept A											
City Dept B											
Civic org C											
Civic org D											
Private sector org E											
Private sector org F											

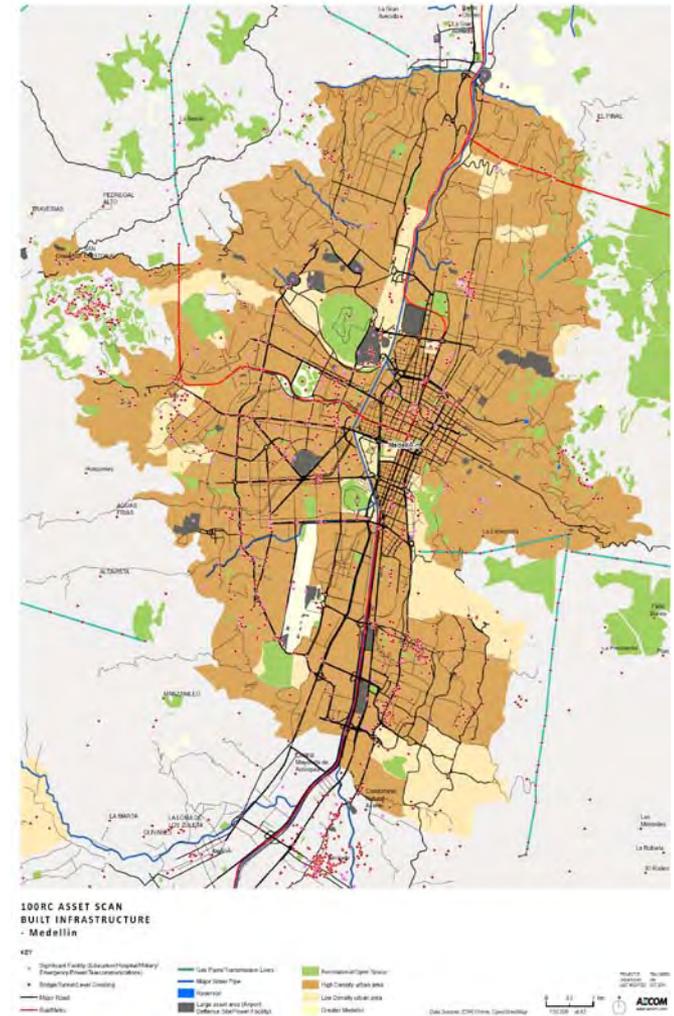
Phase 1 Tool Example: Risk Screening

Table 6 Risk screening matrix

		Likelihood		
		Low	Medium	High
Consequence	Low	L	M	M
	Medium	L	M	H
	High	M	H	H

Table 11 Task RA5 shock and stress linkage guidance

Linkage	Descriptor
Direct	<p>There is a direct link between the stress and shock (e.g. the stress is likely to directly exacerbate one or more consequences of the shock event, or vice versa).</p> <p>Example: A blizzard is likely to result in a higher number of deaths in a city with a large homeless population.</p>
Indirect	<p>There may be an indirect link between the stress and shock (e.g. the stress may exacerbate one or more consequences of the shock event, or vice versa).</p> <p>Example: Low levels of education may constrain the ability of residents to respond appropriately to a disease outbreak.</p>
None	<p>There is no foreseeable link between the stress and shock.</p> <p>Example: High energy prices within a city are unlikely to exacerbate the consequences of a landslide.</p>



Initial Areas of Opportunity/Priority

- Boulder Valley Comp Plan integration
- Energy systems blueprint
- Local Foods policy
- Civic Area design and community discussion
- Neighborhood level / non-traditional engagement
- A few others:
 - Flood recovery, disaster preparedness, performance and asset gap assessment
 - Climate science planning knowledge infrastructure
 - Data management and cyber infrastructure

Potential Platform Partner Linkages

- Ushahidi – Resilience Network Initiative*
- Palantir – big data design and assimilation
- Sandia National Labs – energy system design, CBA of resilience interventions
- Digital Globe – remote sensing, situational awareness
- SwissRE – climate risk screening, risk transfer strategies, disaster modeling

Network Examples



BERKELEY

Berkeley hopes to use the **strategy process** to find ways to jointly tackle **climate adaptation** and **seismic retrofits**, and link planning to the **budget cycle**.



NORFOLK

Norfolk is working with **Palantir** and **Sandia** to integrate their departments' **data** sets to better plan for the future and **model** the devastating social and economic **consequences** of not better managing their **chronic flooding**.

VEJLE

Vejle is collaborating with private businesses and **100RC Network** partners to advance new thinking on **energy resilience** and **micro-grid technology**, being at the forefront of transitioning from a “**smart city**” to a “**resilient city**”.

