PATH TO RESILIENT MOBILE & MANUFACTURED HOMES:

PONDEROSA RESILIENCE WORKSHOP
**Boulder, Colorado
December 4, 2017**

REBUILD BY DESIGN

Prepared in partnership with

THE CITY OF BOULDER, TRESTLE STRATEGY GROUP & 100 RESILIENT CITIES

TABLE OF CONTENTS

INTRODUCTION

Boulder, Colorado, located in the foothills of the Rocky Mountains a half hour north of Denver, is known for its high quality of life, progressive land use planning, open space preservation, and a strong environmental ethic. The community is highly educated with a diverse and rapidly growing economic base projected to increase by another 10% in the next 25 years. There has been a 15% increase in jobs over the past 15 years with that trend projected to continue over the next 15 years as well.[1] The rate of high-tech startups per capita in Boulder County is double the rate in Silicon Valley, and six times the national rate.[2] Home prices in Boulder are also high and climbing, at $855,000 for the median single-family home in 2017, with a 31.3% increase between 2015 and 2017.[3] Nearly two-thirds of Boulder's renter households are cost burdened.[4] Escalating economic trends and plummeting housing affordability leads to growing income inequality and difficulty retaining workers in some sectors. In addition to these resilience challenges are the physical threats of wildfires and the highest flash flood risk in Colorado. The city recognizes many of these challenges through its Resilience Strategy, developed in coordination with 100 Resilient Cities which seeks to take a holistic approach to address these complex and intersecting shocks and stresses.

In this context, the Ponderosa Mobile Home Park (Ponderosa or PMHP) site, a Boulder County enclave to the city, faces a confluence of resilience challenges, including those noted above and others unique to the people and place. Many of Ponderosa's diverse households, nearly half of which are Latino, and many of which are families with children, elderly, and mobility challenged members have lived in the Boulder area for decades. They have watched the area around Ponderosa redevelop and transform, and are worried for their futures in Boulder. Most of the older mobile homes in this community are located in the 100-year floodplain, with a small share in the 500-year floodplain. Though facing high flood risk, the residents are in housing that is substantially more affordable than the majority of Boulder. As the city faces a significant housing affordability challenge, the city seeks to maintain diversity in ethnic backgrounds, incomes, and household compositions, which makes the Ponderosa site particularly important.

In August 2017, the city purchased Ponderosa MHP and is now planning infrastructure improvements, annexation of the site into the city and is working with residents to identify affordable, energy-efficient home replacement options. The goal is to avoid displacement while transforming the community into a model for developing a resilient, affordable and carbon neutral community.

As part of this exploration, Rebuild by Design worked with the City of Boulder and Trestle Strategy Group to create a resident-centered, community design process that included a day long workshop on December 4, 2017. The purpose of this report is to capture the outcomes and next steps from the workshop. This can be utilized as the process of developing and transforming the Ponderosa mobile home park continues into the next phase of design.

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1 City of Boulder, "2017 Boulder Community Profile".
   https://www-static.bouldercolorado.gov/docs/2017_Community_Profile-1-201708171012.pdf?_ga=2.213674580.1746541986.1515617311-823600116.1515617311

2 US Department of Housing and Urban Development, "Boulder, Colorado," January 1, 2017. https://www.huduser.gov/portal/publications/pdf/BoulderCO-comp-17.pdf

3 Boulder Area Realtors Association

4 Cost burdened means 30% or more of a household's monthly income is dedicated to housing costs. Source:
   U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

BACKGROUND OF PONDEROSA HOUSEHOLDS

Understanding who lives in the Ponderosa community is critical for holistically envisioning a more resilient and sustainable mobile home park and tackling issues of housing and affordability. The median household income in the City of Boulder is $60,569.[5] Based on a survey of household incomes in Ponderosa, no more than one or two households earn above a moderate income, while two-thirds fall into the "Extremely Low Income" category as defined by US Department of Housing and Urban Development (HUD). (see chart on pg. 4 for breakdown).

Understanding housing and household compositions and monthly costs (see table and infographic on pg. 4 & 5) are important for determining needs and accommodating a diversity of ages and household capacity. The average total housing cost plus bottled water costs (due to concerns about drinking water safety at Ponderosa) ranges from $618 to $916, with lot rent as the vast majority of the cost ($475 - $580). Other monthly cost is split between heating (natural gas, electric, wood), electricity, bottled water and home repairs.

5 Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

ESTIMATED INCOME OF PONDEROSA RESIDENTS

OVER
1.7%

MODERATE
6.7%

LOW
25.0%

EXTREMELY LOW
66.7%
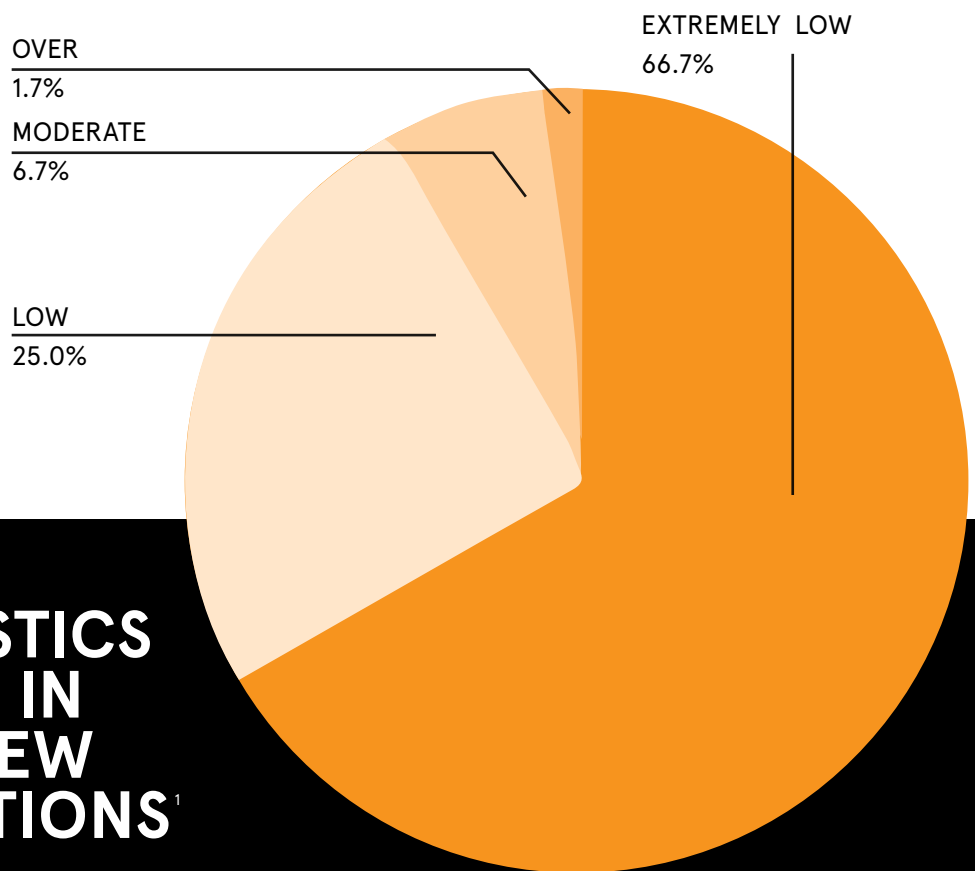
HOUSEHOLD CHARACTERISTICS TO CONSIDER IN DEPLOYING NEW HOUSING OPTIONS[1]

TENURE:

Nearly all households own their home

INCOME:

A number of households work in seasonal industries

Some households have fixed incomes

HOUSEHOLD COMPOSITIONS:

54% 1–2 resident households

Homeowners with one roommate

Older households

Families with children (some as many as 5–6 family members)

Extended families

Some blended households (e.g. family with unrelated adult)

PUBLIC ASSISTANCE:

Some households receive routine benefits (e.g. SNAP[2])

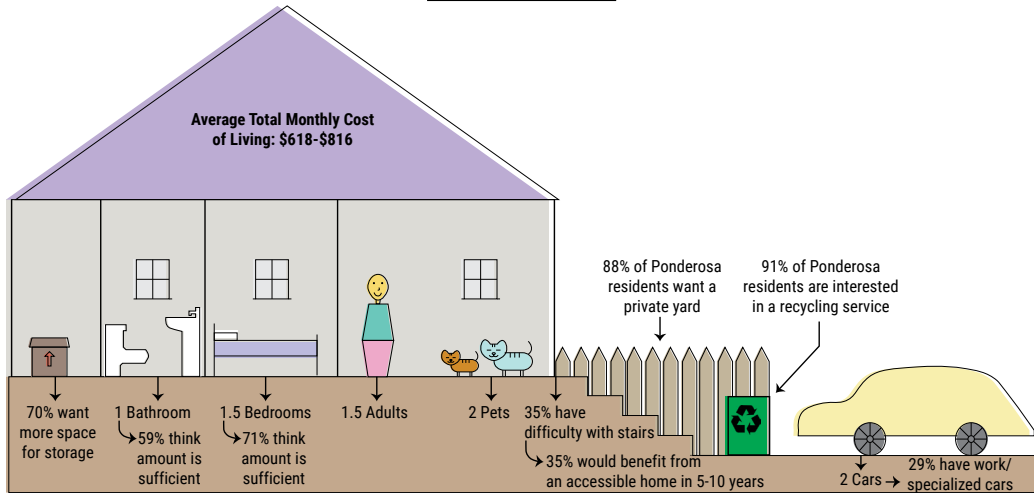Periodically, some households rely on emergency assistance to pay lot rent

1 2015 Community Profile completed under a CDBG-DR Resilience Planning Grant
2 Supplemental Nutrition Assistance Program

INCOME RANGE: 1 TO 8 PERSON HOUSEHOLDS
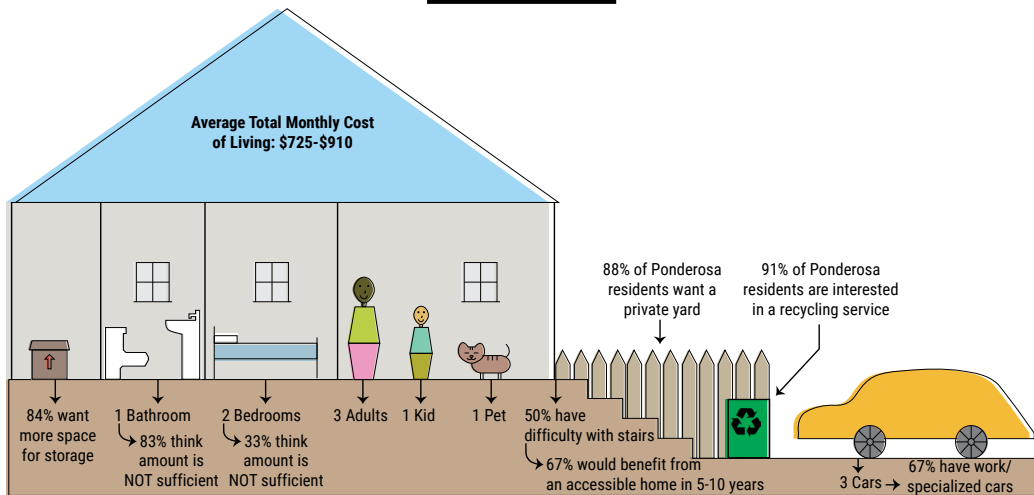
EXTREMELY LOW INCOME

$0 to $38,910

LOW INCOME

$20,641 to $64,850

MODERATE INCOME

$34,401 to $89,800

TRESTLE
strategy group

Household Averages

Data gathered from clicker question activity.

1-2 Residents

Average Total Monthly Cost of Living: $618-$816

70% want more space for storage

1 Bathroom
↳ 59% think amount is sufficient

1.5 Bedrooms
↳ 71% think amount is sufficient

1.5 Adults

2 Pets

35% have difficulty with stairs
↳ 35% would benefit from an accessible home in 5-10 years

88% of Ponderosa residents want a private yard

91% of Ponderosa residents are interested in a recycling service

2 Cars → 29% have work/ specialized cars

3-4 Residents

Average Total Monthly Cost of Living: $725-$910

84% want more space for storage

1 Bathroom
↳ 83% think amount is NOT sufficient

2 Bedrooms
↳ 33% think amount is NOT sufficient

3 Adults

1 Kid

1 Pet

50% have difficulty with stairs
↳ 67% would benefit from an accessible home in 5-10 years

88% of Ponderosa residents want a private yard

91% of Ponderosa residents are interested in a recycling service

3 Cars → 67% have work/ specialized cars

5+ Residents

Average Total Monthly Cost of Living: $759-$916

90% want more space for storage

1 Bathroom
↳ 70% think amount is NOT sufficient

2.5 Bedrooms
↳ 50% think amount is sufficient

3 Adults

3 Kids

1 Pet

0% have difficulty with stairs
↳ 50% would benefit from an accessible home in 5-10 years

88% of Ponderosa residents want a private yard

91% of Ponderosa residents are interested in a recycling service

2.5 Cars → 50% have work/ specialized cars

1-2 RESIDENTS

AVERAGE RENT:
$475-560

*OTHER
MONTHLY
COSTS

RENT

*OTHER MONTHLY COSTS

NATURAL GAS
53% pay $0-50
29% pay $51-75

HEATING
53% pay $0-50
24% pay $51-75
6% pay $76+

ELECTRICITY
47% pay $0-50
24% pay $51-75
24% pay $76+

BOTTLED WATER
24% pay $0-10
53% pay $11-20
18% pay $21+

MONTHLY REPAIRS
29% pay $0-30
35% pay $31-50
18% pay $51-75

DATA GATHERED FROM CLICKER QUESTION ACTIVITY.

PHOTO COURTESY OF TRESTLE

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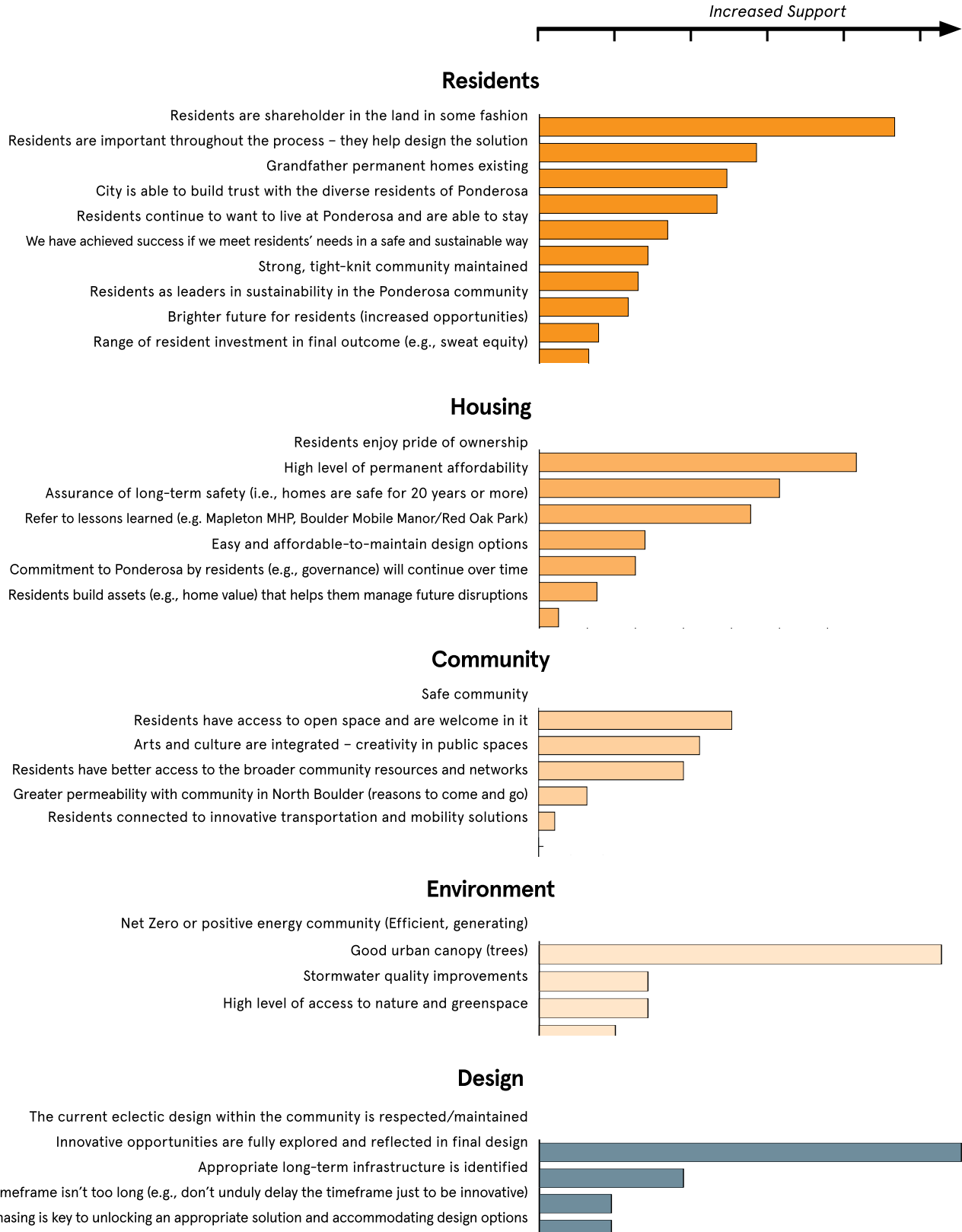
MEANING OF URBAN RESILIENCE

100 Resilient Cities defines urban resilience as "the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience." Stresses could include high unemployment, endemic violence, or an insufficient public transit system and shocks could include flooding, wildfires or a disease outbreak.

In order to ensure the city and residents' resilience goals were aligned, prior to the December 4th Resilience Workshop, both the residents of Ponderosa and relevant city staff held separate convenings to discuss what resilience means for the Ponderosa community. The city staff developed 33 resilience drivers that were shared and discussed with Ponderosa residents. Residents voted on their top priorities within that list (see pg. 8 graphic). Resilience was defined as part of both the process and the outcome – safety, affordability, residents playing a key role in the design and infrastructure update process, ownership of land and housing, access to open space and being a net zero or positive energy producer rose to the top of the list (see pg. 8 graphic). These components were important inputs into the December Resilience Workshop as residents and experts came together to imagine possibilities for enhancing the neighborhood and creating a resilient community.

Resilience in Ponderosa is...

Within one community there may be different definitions of resilience. To make sure everyone had a shared understanding of resilience, city staff brainstormed what resilience in Ponderosa looks like and residents at Workshop #1 dot voted to rank their alignment with the City's relience values. Here are the results.

Increased Support →

Residents

Residents are shareholder in the land in some fashion
Residents are important throughout the process – they help design the solution
Grandfather permanent homes existing
City is able to build trust with the diverse residents of Ponderosa
Residents continue to want to live at Ponderosa and are able to stay
We have achieved success if we meet residents' needs in a safe and sustainable way
Strong, tight-knit community maintained
Residents as leaders in sustainability in the Ponderosa community
Brighter future for residents (increased opportunities)
Range of resident investment in final outcome (e.g., sweat equity)

Housing

Residents enjoy pride of ownership
High level of permanent affordability
Assurance of long-term safety (i.e., homes are safe for 20 years or more)
Refer to lessons learned (e.g. Mapleton MHP, Boulder Mobile Manor/Red Oak Park)
Easy and affordable-to-maintain design options
Commitment to Ponderosa by residents (e.g., governance) will continue over time
Residents build assets (e.g., home value) that helps them manage future disruptions

Community

Safe community
Residents have access to open space and are welcome in it
Arts and culture are integrated – creativity in public spaces
Residents have better access to the broader community resources and networks
Greater permeability with community in North Boulder (reasons to come and go)
Residents connected to innovative transportation and mobility solutions

Environment

Net Zero or positive energy community (Efficient, generating)
Good urban canopy (trees)
Stormwater quality improvements
High level of access to nature and greenspace

Design

The current eclectic design within the community is respected/maintained
Innovative opportunities are fully explored and reflected in final design
Appropriate long-term infrastructure is identified
Timeframe isn't too long (e.g., don't unduly delay the timeframe just to be innovative)
Phasing is key to unlocking an appropriate solution and accommodating design options

GRAPHIC PROVIDED BY TRESTLE STRATEGY GROUP

GOALS & DRIVERS OF THE RESIDENTS AND CITY

The city's purchase of the Ponderosa Mobile Home Park on August 1, 2017 was informed by eleven goals and drivers identified in 2015 through engagement with Ponderosa residents and the then-owner of the community as well as city staff and council. This engagement was performed under a Community Development Block Grant - Disaster Recovery (CDBG-DR) Resilience Planning Grant, available in the aftermath of the 2013 federally declared flood disaster. This flood resulted from unprecedented rainfall that damaged or destroyed 10,000 homes in Boulder. The flooding resulted in sheet-flow flooding, rendering Ponderosa's unpaved roads muddy and damaging homes with the infiltration of rain. These 11 goals and drivers were foundational elements guiding the decision by the city to intervene and purchase Ponderosa. They were captured in an official city resolution on the approach and goals of the community, and informed the December Resilience Workshop. They were presented at the Resilience Workshop to provided background and context as options were explored for Ponderosa.

1   Minimize disruption to the owners and residents

2   Keep the residents of the community together; minimize displacement

3   Improve the resilience of the community

4   Improve health and safety

5   Retain affordability

6   Create certainty for the future

7   Achieve annexation goals

8   Encourage long term investment in property

9   Improve utilities stability/reliability/service

10   Leverage disaster recovery funding

11   Minimize costs and maximize dollars invested

THESE 11 GOALS AND DRIVERS WERE FOUNDATIONAL ELEMENTS GUIDING THE DECISION BY THE CITY TO INTERVENE AND PURCHASE PONDEROSA.

PHOTO COURTESY OF CITY PHOTOGRAPHY

TOP 5 COMMUNITY HOPES, VALUES, AND CONCERNS

1   **Affordable**

2   **Aging in Place**

3   **Improved Infrastructure**

4   **Safe, Comfortable, Clean Community**

5   **Many Home Options**

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PONDEROSA RESIDENTS AND THE CITY OF BOULDER HAVE TOP ALIGNMANT ON THESE ISSUES

Residents
Residents are shareholdrs in the land in some fashion

Housing
Residents enjoy pride of ownership

Community
A safe communmity

RESILIENCE WORKSHOP OVERVIEW

The purpose of the December 4th Resilience Workshop was to investigate how the city could redevelop the Ponderosa site to be a resilient and sustainable community that maintains its unique affordability. The composition of approximately 60 participants ranged from expertise in city planning, design and sustainability to housing affordability and social services. Approximately 20 residents also attended throughout the course of the day.[8]

These three areas were the primary focus of the day and harnessing the insights from experts and residents. Additionally, there was a broader set of seven objectives for the entirety of the daylong engagement that the City of Boulder, Trestle and Rebuild by Design wanted to achieve.

THE THREE KEY AREAS THAT WERE EXPLORED

1. Land ownership options and their potential impact on housing affordability

2. Infrastructure and housing innovations to explore during the design stage

3. Social challenges and assets of the existing mobile home park community and broader Boulder community for generating additional capacity and useful resources.

OBJECTIVES OF THE DAY

1. Explore ways to maintain the affordability of Ponderosa and avoid displacement of residents

2. Generate a full understanding of the community's challenges and opportunities as well as the community's aspirations and needs

3. Explore key areas of interest to understand site possibilities and constraints

4. Create possible scenarios for infrastructure and ownership approaches that promote resilience, affordability and carbon neutrality

5. Expand the city's network of experts who can help address challenges with the site

6. Inform the design team's approach to the site

7. Map social assets of the community and develop key elements of an asset strategy

WORKSHOP OVERVIEW

The morning started with a tour led by the residents to showcase the neighborhood and provide visiting experts with a concrete understanding of the layout, usage of space and housing typology. It was an important opportunity for the residents to engage with the experts and for the experts to fully grasp the look and feel of the community as well as understand the experience of living in the community, as many of the residents have resided in Ponderosa for 20+ years. The residents spoke about the desire for more communal space, maintaining their community garden, the unique housing typology and the individual nature of each of the homes. These were aspects that made the residents particularly proud of the Ponderosa community.

The afternoon began with presentations by the city and consultants about the work that had been done to date, which included the outcomes from multiple resident meetings, the creation of a Resident Leadership Committee, outcomes of an internal city workshop and the formal city purchase of the Ponderosa property. This was followed by the primary focus of the day – a series of breakout sessions reflective of the three key areas. The goal of each group was to identify innovative options and implementable strategies for the Ponderosa site. In order to focus the discussion, a series of key questions was developed for each key area to provide structure. The outcomes, knowledge gaps and next steps were discussed in each of the breakouts.

8 The local Channel 8 News covered the workshop and that video can be found in Spanish (https://vimeo.com/246879926/291ac78e78) and in English https://vimeo.com/246525698

BREAKOUT SESSIONS

PHOTO COURTESY OF CITY PHOTOGRAPHY

A
LAND OWNERSHIP OPTIONS & HOUSING AFFORDABILITY

PHOTO COURTESY OF CITY PHOTOGRAPHY

B
TECHNICAL & INNOVATIVE INFRASTRUCTURE AND HOUSING FEASIBILITY

C
SOCIAL ASSETS & CHALLENGES OF THE PONDEROSA COMMUNITY

LAND OWNERSHIP OPTIONS & HOUSING AFFORDABILITY

BREAKOUT GROUP GOALS:

One of the primary session topics was the pros/cons of different land ownership structures, evaluating options and possible layered combinations, and identifying the most promising options for land ownership and housing affordability.

The second half of this session was spent exploring affordability for different housing types in depth, both in the short and long-term, to determine the factors that could undermine the proposed approach to affordability.

Facilitators

Crystal Launder
Housing Planner, City of Boulder
Willa Williford
Principal, Williford Housing

Notetaker

Kate Masingale
Funding Administrator, City of Boulder

Collaborators

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Beth Truby
Preservation Program Manager, CHFA
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Jeff Yegian
Senior Project Manager, City of Boulder
Kathy
Resident, Ponderosa Mobile Home Park

OVERVIEW OF WORKSHOP BREAKOUT GROUP

Minimal displacement is a key goal for Ponderosa, yet by-in-large it is a community of very low-income homeowners who value the pride, privacy and independence they experience as homeowners. The standard approach to affordable housing in Boulder – attached rental housing with rents up to 60% AMI funded by Low Income Housing Tax Credits – is both unfordable and undesirable to Ponderosa's residents and would not only violate trust, but in all likelihood produce displacement.

Prior to the December Resilience Workshop, partner and resident meetings occurred to discuss housing needs and desires. From these conversations, Habitat for Humanity emerged as a partner capable of delivering the fixed-foundation homeownership options that maintain affordability for residents and advance the city's carbon reduction goals. The primary tools at the disposal of Habitat include:

Homeownership training programs targeted at lower income homebuyers

Specialized home loan options

Reduced cost to construction (volunteer builders and sweat equity program)

A development team skilled at design and construction of energy-efficient homes

After residents shared their needs and desires around housing at an earlier workshop, preliminary housing prototypes were developed in collaboration with Habitat for Humanity. These were then presented at a second workshop one month prior to the Resilience Workshop. The majority of residents were enthusiastic about these housing options.

At a high-level, it appears that Habitat is a strong partner to deliver the affordability and home purchase option residents desire, yet in the spirit of non-displacement, many details remain, such as:

Each households' ability to qualify for a mortgage

Clear options, such as home rehab, to ensure each household can successfully remain in existing mobile homes or opt into new housing if desired

Non-traditional housing composition

Of high importance as well, the city does not intend to own Ponderosa forever. Once infrastructure upgrades are completed the city plans to transfer the land. Residents are interested in control of the land, and the city seeks to ensure that the future land ownership enables housing choice, and promotes the long-term sustainability of Ponderosa.

As the city determines the best path forward for Ponderosa, investigating options for affordability and home and land ownership was critical to the Resilience Workshop and the key aspect of this particular session.

KEY EXPECTATIONS FOR LAND OWNERSHIP & HOUSING AFFORDABILITY

1 — HOUSING OPTIONS

Future community should accommodate residents' desires for a mix of housing options (e.g. ownership of new housing, rental of new housing, remaining in existing mobile homes and continuing to pay lot rent).

Lot rents paid by those who wish to remain in mobile homes should continue to provide a similar level of affordability. New fixed foundation ownership options will range from small footprint, single family to small-scale attached (e.g. duplex).

New fixed foundation housing options should be available for residents who may not qualify for or wish to own their homes.

2 — FUTURE LOT RENTS

Residents who chose to live in fixed foundation homes will no longer pay lot rent.

Existing mobile homes will continue to pay similar lot rent with potential for small (1-2%) annual increase.

3 — ANTI-DISPLACEMENT

Future housing options (e.g. option to remain in existing mobile home and option to own or rent new home) are offered with the intent to avoid displacement.

4 — AFFORDABILITY

Future housing costs should be similar to existing housing costs.

5 — LAND VALUE

The future land ownership option will need to eliminate land value from the housing costs or land must be "decommodified" to keep housing affordable.

6 — NO PRIVATE LOTS

Subdivision of land into private lots is technically infeasible for a variety of reasons including the requirement of 30 feet of frontage on a public street, homes would be in the setbacks, private utility easements, etc.

Affordability models assume that Boulder Housing Partners, the city's housing authority, would need to extend its property tax exemption so that taxes don't make housing unfordable.

Question 1 – LAND OWNERSHIP:

What are all the different legal ownership structures for collective resident control of the site? What are the pros and cons of each model (e.g. level of effort to establish, resident empowerment/leadership capacity building, financial costs, financial benefits, availability of subsidies)?

Based on the conversation, the following is a record of assessment of advantages and disadvantages of different ownership models.

Option for Collective Resident Control	Advantages	Disadvantages
Private lot[1]	• Simple to understand • Easy access to lending product	• Costs associated with subdivision • Challenging to manage common space • Reduced flexibility to add common spaces in community • Less sense of community • Additional cost of property taxes
Cooperative/Resident Owned Community (ROC) Homeowners in a community become member shareholders in a nonprofit cooperative. This nonprofit cooperative owns the land. The cooperative board (primarily cooperative members) would oversee management of the community. Cooperative housing is characterized by shared management and consensus (e.g. arriving at a common decision rather than voting) or other egalitarian governance.	Requires highly engaged community	• Requires highly engaged community • High share of residents must support and actively participate, particularly in the beginning • Not well known in Boulder
Resident Nonprofit Residents could establish a nonprofit organization to own the land. A nonprofit is an organization formed by a group of people "to pursue a common not-for-profit goal", that is, to pursue a stated goal without the intention of distributing excess income to members or leaders.	Achieves resident control	• Setting dues correctly at the start • Resident-only board (no outside expertise) • Not well known in Boulder
Community Land Trust A Community Land Trust (CLT) creates permanent affordability by severing the value of the land and the improvements (e.g. house improvements). The land is held in trust by a nonprofit or other entity and then leased to the homeowner. The homeowner enjoys most of the rights of homeownership, but restrictions are placed on use (e.g. owner occupancy requirement) and price restrictions on resale ensure that the home remains affordable.	• Tripartite board (balanced representation of residents, broader community, experts) • Strong network for technical assistance locally and nationally • Model well known in Boulder	Requires additional work to maintain a vision long-term
Common Interest Community (CIC) Common-interest communities, also known as common-interest developments, are housing developments comprised of individually owned units, in addition to shared facilities and common areas. (Note: Cooperatives are a form of common interest community excluded from this definition and addressed elsewhere.)	Financing (e.g. mortgage requirements) understood	• Due to CIC rules, future homebuyers may not have access to mortgage product if too many leased pads (e.g. "renters" in existing mobile homes) • Long-term financial sustainability is entirely up to the residents • Resident-only board; no outside expertise
Land Lease w/ 3rd Party Ownership A separate entity such as an affordable housing nonprofit or a housing authority owns the land. The resident owns the home. A land lease is the legal contract giving the homeowner the right to live on the land.	• Known/familiar • Less governance demands on residents • Provides creditworthiness	Residents would have no ownership interest

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1 Though it is not a mechanism for collective resident control, residents requested that private lot ownership be added as an option for the discussion.

Findings

Careful analysis will be needed to identify the best land ownership opportunity to accommodate residents who wish to continue to live in their existing mobile homes and those who choose new fixed foundations homes with mortgages. Common interest communities, including Homeowners Associations (HOAs) and shared equity cooperatives, disallow mortgages (if there are too many rented units), impacting affordability and long-term options. The city also needs an understanding of the actual costs paid for housing by each household to accurately assess affordability.

KNOWLEDGE GAPS AND NEXT STEPS

To advance knowledge and adequately inform decision-making related to land ownership, the group suggested the following:

1   Further flesh out the benefits and drawbacks of land ownership models.

2   Test ownership options against identified principles.

3   Test ownership options against the full "bundle of legal rights" (e.g. right to own, control of property use, right to exclude, right to inherit, etc.).

4   Evaluate future community governance models in connection with land ownership options.

5   Determine what subsidies are available for each land ownership option. In particular, more analysis is needed as it relates to project financing and individual affordability. Tax Increment Financing surfaced as a possible opportunity, yet the value of it was in question given the permanent affordability deed restrictions anticipated. Also, working with the Assessor's Office for tax reductions on improvements surfaced as a possibility that needs further exploration.

6   Determine whether there are any impacts on housing options as it relates to land ownership options.

Question 2
HOUSING AFFORDABILITY:
For all housing options, how can affordability be created in the short-term and maintained over time?

Findings
Careful analysis will be needed to identify the best land ownership opportunity to accommodate residents who wish to continue to live in their existing mobile homes and those who choose new fixed foundations homes with mortgages. Common interest communities, including Homeowners Associations (HOAs) and shared equity cooperatives, disallow mortgages (if there are too many rented units), impacting affordability and long-term options.[2] The city also needs an understanding of the actual costs paid for housing by each household to accurately assess affordability.

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KNOWLEDGE GAPS AND NEXT STEPS

1   Collect utility bills to understand residents' costs.

2   Determining what mortgage options are available (e.g. 30-year fix, 20-year fixed).

3   Understand and establish affordability objectives (e.g. are we trying to match existing households' current housing costs or create affordability based on income?).

4   Utilize targeted electrical upgrades to keep property safe and secure before development.

5   Prior to annexation, appraise all homes which the city is on track to complete by the beginning of 2018.

6   Engage Habitat for Humanity to create and deploy tailored financial fitness and homeownership classes of Ponderosa.

7   Determine which and how many households want to stay in their existing homes, own new homes, or rent new homes.

8   Hold workshops that focus on 1-, 2-, 3-BR groups to define new energy-efficient, small home design and a better understanding of the level of commitment to the current home layout. Doing this before annexation will allow the city and residents to better understand what will be needed to promote successful homeownership and fully utilize the annexation process.

9   Based on the characteristics of the Ponderosa residents, determine which affordability considerations the city should plan for. Are there readymade solutions?

10   Determine the long-term affordability needs. This needs further investigation since much of the conversation diververged into cataloging next-steps for uncovering short-term affordability.

2   See land ownership definitions on page 15

TECHNICAL & INNOVATIVE INFRASTRUCTURE AND HOUSING FEASIBILITY

Collaborators

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OVERVIEW OF WORKSHOP BREAKOUT GROUP

Site and housing design are critical elements to innovation and transforming a mobile home park into a resilient and sustainable community. This session tackled the largest set of questions ranging from flooding and stormwater issues to transportation, landscaping, community space and home footprint. The participants in this session came from a wide range of expertise – energy, architecture, landscaping, urban design, engineering, housing and academia – and included several residents.

BREAKOUT GROUP GOAL:

The goal of the discussion was to explore different possibilities in infrastructure and housing innovations, utilizing creative thinking from both outside experts and local community knowledge. A critical aspect of this discussion was keeping the conversation true to the core values of sustainability, resilience, and above all affordability. Through creative thinking around technical assets, participants identified and analyzed solutions and tradeoffs focused around the project's baseline resilience measures: energy-efficient construction, long-term flood protection, solar orientation, energy code, and upgraded infrastructure.

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Outcomes of Key Questions

Question 1
INFRASTRUCTURE – GREEN/SUSTAINABLE

In addition to a microgrid, what other resilience-based energy systems could make sense for the site or surrounding area? What are the benefits of each as well as the relative feasibility, orientation and costs? Are there resources available to support implementation or reduce costs? Are there additional greening and sustainability options for the site?

Options	Pros/Cons Trade-offs	Knowledge Gaps/Challenges	Dependence On Other Key Areas
Electrification of heating/cooling systems Net-Zero EcoDistrict potential	**Pros:** Creation of all-electric site, single meter with sub-meters that is fed with community solar garden, microgrid, and utilizes emergency backup in resilience center Cons: consider construction-related inconvenience and disruptions to residents, how to handle other fuel sources during the transition.	• Utility company regulations and electrical code compliance. • Desire for more trees	Site Program Elements
Plant more trees on the site Use rain gardens, pervious areas to increase absorption of surface water, distribute detention/water quality, and mitigate flood risks	**Pros:** assists need for stormwater mitigation and adds greenery and shade for hot weather **Trade-offs:** reallocating density to increase available site area, less rooftop solar panels with more trees, required distance from trees to water/sewer lines may not be achievable.	• Not a lot of current unused space on site • Understand water movement through site during rain events • Previous owner took out trees because of sanitation and sewage problems • Currently no stormwater collection	• Stormwater and Water Quality • Floodplain • Housing • Landscaping and Open Space

Findings

There are many opportunities for solar energy production, especially since there is not a significant tree canopy. There is a need to balance solar with tree planting and unit location. Providing a master meter for the site would provide many opportunities for emergency backup, simpler systems with less redundancy, community solar gardens, offsite production and other plug and play solutions. The city will want individual sub-metering to accurately charge the residents according to their usage. Options for this needs evaluating.

There is also an opportunity to meet many city sustainability goals, especially for creating an all-electric community. This may conflict with residents' desires to continue to have gas and will be difficult to adapt to existing homes and systems.

KNOWLEDGE GAPS AND NEXT STEPS

1. Evaluate opportunities for solar integration through carports, solar gardens, microgrid, rooftop solar on a community building, and other community based solutions.

2. Understand limitations due to utility company and constraints of electrical code.

Outcomes of Key Questions

Question 2
INFRASTRUCTURE – SEWER, WATER, ELECTRICAL CODES, REGULATIONS, REQUIREMENTS

As this project transitions from the County to City, how do we make changes to infrastructure (sewer, water, electrical) to increase life safety, promote resilience and ensure long-term investment

Options	Pros/Cons Trade-offs	Knowledge Gaps/Challenges	Dependence On Other Key Areas
Identify both short-term and long-term solutions to upgrade the infrastructure, meet minimum life safety standards, and minimize impacts to residents during installation.	**Pros:** improvement to life safety systems (fire ratings, electrical wiring, wood burning appliances)	• Ponderosa previously sat in the county so there was not a lot of flexibility; as annexation occurs, city will need to ensure each unit is brought up to code. • Phasing of upgrading sewage lines and utilities	• Floodplain • Housing • Health and Safety
Educate and empower residents to invest in life safety upgrades that will minimize risk for the community.	**Pros:** Individual improvements can increase the overall safety within the community and inspire others to take the initiative. **Cons:** Community members are hesitant to make personal improvements when the overall larger plan is uncertain.	Each unit has significantly different circumstances and often minor changes can create additional problems or challenges that become difficult to implement.	
Lighting	**Pros:** Night safety, visibility, create sense of place, homey, sensors/timers to preserve energy	• Dark Skies Ordinance • Light posts in Mapleton are good precedent • Opportunity to use lamp post as sub-meter, utility hub	Health and Safety

Findings

There was a strong concern for residents' safety, but an understanding that improvements should be prioritized and balanced with trade-offs. The final site design may require different approaches than city engineering standards in order to accommodate other realities on the site, such as the the desire to not displace residents.

Residents feel they are able to take responsibility, as they have in the past, for some of the safety issues such as distinguishing small fires. However the city may have an alternate perspective due to their responsibility to protect life safety, provide service and ensure the units are in accordance with the fire code. There is desire from all participants to be flexible in the approach, especially with respect to phasing, location of utilities and connecting to existing homes. Improving sewer and water is vital for the long-term resilience of the community.

Currently there are many dark corners and hidden spaces on the property that pose potential safety issues. There is a desire for more of a community feel through front porch lighting or lamp posts.

KNOWLEDGE GAPS AND NEXT STEPS

1 | Develop phasing and layout plan to discuss with residents and the city.

2 | Identify other sources of support to improve resilience with smoke alarms, etc. Partnering with Boulder Fire-Rescue is suggested and underway.

3 | Fix immediate electrical needs and evaluate long-term solutions to reduce risk and minimize ongoing costs.

4 | Evaluate options for flexibility in standards to accomplish goals of minimizing displacement and working around existing conditions for utility hookups.

5 | Look for options for solar/battery powered safety lighting.

Outcomes of Key Questions

Question 3
TECH INFRASTRUCTURE – WI-FI INFRASTRUCTURE
What are high-quality broadband options to advance long-term household resilience? What is the infrastructure needed for residents to access?

Option	Pros/Cons Trade-offs	Knowledge Gaps/Challenges	Dependence On Other Key Areas
Community-shared high-speed connection	**Pros:** Operational cost savings, access to Wi-Fi for all residents, increase affordability and capacity for home business/education/involvement/etc, acknowledges Wi-Fi as essential part of infrastructure	How can this system be set up? Look at local providers for example systems	

Findings

There was overall consensus by both residents and experts on the idea of providing community-wide Wi-Fi, both in the short-term and long-term. This would reduce the cost that each household currently pays for this service. This appears to be a project that could be implemented right away and continue through future changes. Community Wi-Fi is also aligned with citywide goal of access to cheaper, faster Wi-Fi.

KNOWLEDGE GAPS AND NEXT STEPS

1. Identify costs and potential options for providing community-wide Wi-Fi.

2. Work with the city (IT, communications, etc) to identify options and consult with service providers.

3. Explore grant opportunities as well as a potential immediate Wi-Fi project with Freedom By Design.[1]

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1 CU-Boulder AIAS (american institute of architecture students) chapter has a student-led service arm called "Freedom By Design" http://www.aias.org/freedom-by-design/). The students are responsible for 1) finding a project, 2) funding the project, and 3) building/implementing the project. It is a true community-service initiative with a long track record of success.

Outcomes of Key Questions

Question 4
TRANSPORTATION/CIRCULATION – PARKING
What are cost effective, affordable, and accessible ways to reduce total site area designated for parking while maintaining the high need for parking that is accessible and in close proximity to homes?

Options	Pros/Cons Trade-offs	Knowledge Gaps/Challenges	Dependence On Other Key Areas
Identify locations and building types that incorporate parking and reduce on-street parking. Examples include: • Carports adjacent to homes • Carriage home with 1-2 units above garage	**Pros:** Accessibility, more space for sidewalks/roads, ability to utilize available site area that doesn't displace existing homes. **Cons:** carriage home not ADA accessible, some residents may not want carriage home **Trade-offs:** possible reduction of home footprint or yard	• Need to look more closely at lot sizes, site measurements, precedents • Survey residents on ADA needs, parking needs, space needs	• Infrastructure • Landscaping and Open Space • Site Program Elements
Car Elevator	**Pros:** cost relatively cheap (~$2000) **Cons:** requires coordination amongst users and may have installation and maintenance costs. **Trade-offs:** would utilize space on site that is in high demand for other community serving uses	• Is this feasible? • Infrastructure impacts • Space requirements	• Infrastructure • Landscaping and Open Space • Site Program Elements
Reduce cars on site (eco-car share, units with multiple cars park primary car on site and secondary cars off site)	**Pros:** encourage carpooling, less cars on site so more space for playing, community amenities, etc. **Cons:** offsite parking may not be ideal for some residents	Measure interest from community on car share	• Infrastructure • Landscaping and Open Space • Site Program Elements

Findings
The existing residents are very reliant upon their automobiles (both personal and work vehicles). However, there might be opportunity to develop car share programs within the community that allow for some vehicle reductions and reduce overall costs for the residents. Site constraints will require creative solutions for parking and opportunities to convert space in the future when it may not be needed for parking.

KNOWLEDGE GAPS AND NEXT STEPS

1 Discuss a car or work truck car share program with residents at Ponderosa.

2 Talk to eGo CarShare about options.

3 Develop education around the costs of car ownership.

4 Evaluate off site locations for vehicle and other (boats, RVs, food trucks) storage. Boulder Meadows provides a locked vehicle storage option for residents who pay to store cars, RVs, etc.

5 Explore tradeoffs with residents of vehicle storage with other desired community elements (open space, gardens).

6 Develop options for creative parking solutions (tandem spaces, parallel, long term parking, work vehicles).

7 Identify how many cars/vehicles each household currently has/uses through survey mechanism.

8 Connect vehicle storage with solar electricity generation (carports).

9 Provide electric charging stations in infrastructure design for future options.

10 Explore unique car storage options like a car elevator or structured parking options.

Question 5
TRANSPORTATION/CIRCULATION – ALTERNATIVE STREET DESIGNS AND CONNECTIONS

Can we look at alternative street connections that encourage slower vehicular speeds and greater pedestrian priority?

Options	Pros/Cons Trade-offs	Knowledge Gaps/Challenges	Dependence On Other Key Areas
Explore street connections including: alternative vehicular design standards, one-way streets, sidewalks on one side, alternative parking layouts, fire access	**Pros:** sidewalks, pedestrian friendly, spaces for kids to play **Trade-offs:** parking space	• Study precedents • Space requirements • How to integrate with tree planting, utility layout, accessibility.	• Infrastructure • Housing • Landscaping • Site Program Elements
Explore the Woonerf street design that has successfully been used to give equal priority to all modes of transportation including walking and biking	**Pros:** pedestrian friendly, people oriented with cars taking equal priority, slow down car speeds, ADA accessibility, cars park on side **Trade-offs:** less parking space, cars secondary to people	• Study precedents • Space requirements	• Infrastructure • Housing • Landscaping • Site Program Elements
Paving and Materials: plaza-like, grass-crete, pervious pavers, hardscaping around community area	**Pros:** permeability, ADA accessible, kid friendly **Cons:** creates challenges for snow plowing **Trade-offs:** some residents like rural aspect of dirt roads	How is this possible	• Infrastructure • Housing • Landscaping • Stormwater and Water Quality
Implement City's Safe Schools Regulation	**Pro:** kids feel safer traveling to and from school **Con:** The property isn't in the city yet, so it's not eligible for improvements or investment. School bus pickup is important for safety.	• Transient population • Activity at creek • Kids don't feel safe at underpass	

Findings

There is consensus about existing challenges with traffic speeds, cars cutting through the site, road safety (pedestrian and children) and dust from dirt roads. Road maintenance is an ongoing issue with many potholes and rutted out portions. The roads are difficult to plow and maintain.

The preference was to make the streets private to allow for maximum flexibility on width, parking orientation and surface material. However the costs to residents will be more with private roads, so it will be important to evaluate all of the short and long-term costs and benefits.

KNOWLEDGE GAPS AND NEXT STEPS

1 Discuss alternative street standards and pavement treatment with the city.

2 Explore short-term solutions to reduce traffic speeds and cut through traffic to increase pedestrian and child safety and reduce dust.

3 Street design should take into account ADA accessible and parking proximity for elderly and less mobile residents.

4 Research Mapleton streets and other cross sections in Boulder mobile home parks.

5 Discuss options with Fire Department to ensure their vehicles have adequate access.

Question 6
TRANSPORTATION/CIRCULATION – SITE ACCESS

Can we look at alternative street connections for site access that will improve safety and mitigate traffic through and around the site?

Options	Pros/Cons Trade-offs	Knowledge Gaps/Challenges	Dependence On Other Key Areas
Main access from 10th and Cherry St.	**Pros:** resolves safety issue of turning left out from Broadway, traffic calming along Cherry/10th **Cons:** speeding at corner is currently an issue (3-way stop?) **Trade-offs:** this option is preferred by City, would require relocation of community garden	• Explore 3-way stop • Analyze traffic impact	• Health and Safety • Site Program Elements
Permeability	**Pros:** open environment, eyes on the street safety, more natural buffers **Trade-offs:** fewer fences, semi-private spaces	Survey residents on interest in permeable elements and weight of tradeoffs	• Landscaping and Open Space • Health and Safety

Findings

Circulation and connections will need to change with annexation and redevelopment. Future design should take into account access, neighborhood traffic patterns, emergency access and pedestrian/bike connections.

PHOTO COURTESY OF CITY PHOTOGRAPHY

KNOWLEDGE GAPS AND NEXT STEPS

1 Evaluate options to connect at 10th Street and use adjacent Right Of Way in 1000 Rosewood to improve traffic safety and provide connections.

2 Identify road sections that could be removed/reduced. There are many single loaded roads that could be used more efficiently.

3 Identify options to improve pedestrian connectivity to adjacent properties.

Question 7
STORMWATER & WATER QUALITY – GRADING AND PERVIOUS MATERIALS

What are some site elements that can be implemented in order to achieve stormwater runoff volume reduction, increased infiltration?

Option	Pros/Cons Trade-offs	Knowledge Gaps/Challenges	Dependence On Other Key Areas
Pavers, grass-crete, plaza stones, etc.	**Pros:** permeability, ADA accessible, kid friendly, ideal for private streets, trucks can drive on it **Cons:** challenges with snow plowing. Expensive to install and ongoing maintenance requirements. City standards.	• The more pavement added, the more need to offset with stormwater mitigation • Snow plowing options • Look at Mapleton post flood work as precedent (multi-use path successful in flood protection)	• Transportation and Circulation • Infrastructure

Findings

There was strong support for alternative street standards, particularly with porous surfaces. The existing dirt roads create runoff, maintenance and water quality issues. Reducing the amount of impervious surface through narrower roads and permeable solutions, reduces the stormwater detention requirements. Porous surface materials can also cause challenges with snow removal and maintenance, and may not be acceptable from city design/construction standards. If the community decided to go with private streets for greater flexibility in design, costs could also be greater with the maintenance.

PHOTO COURTESY OF CITY PHOTOGRAPHY

KNOWLEDGE GAPS AND NEXT STEPS

1. Research green crete and other porous surface options.

2. Conduct a cost/benefit analysis of maintenance and stormwater requirements as well as the cost for privatization.

3. Develop road cross sections for discussion with the city and residents.

4. Reach out to resources in green infrastructure consulting (e.g. Greening the City).

Outcomes of Key Questions

Question 8
STORMWATER & WATER QUALITY – STORMWATER DETENTION

What stormwater detention options would work on this site?

Options	Pros/Cons Trade-offs	Knowledge Gaps/Challenges	Dependence On Other Key Areas
Bioswales, rain gardens, rain barrels Communal water barrels in centralized community space Storing rainwater for irrigation – state pilot project?	**Pros:** reuse of stormwater for use throughout community, ability to deploy a micro-strategy that can easily adapt to each homeowner and site.	• 110 gallon rain barrel limit for individual homes, is 110 enough? • Collecting water and draining to creek – need to further explore detention and water quality treatment/ constraints and opportunities • Need to observe site & area hydrology. Is there a desire-line across the site that might help control sheet flow drainage and could also be an organizing element for site circulation, edible landscapes, trees, etc? • Piping to off-site locations using macro approach rather than site by site?	• Floodplain • Landscaping and Open Space • Site Program Elements • Infrastructure

Findings

There is currently no detention or stormwater treatment on site. Existing sheet flow across the site is full of sediment and contaminants and flows onto adjacent properties. There was strong consensus to explore localized solutions with rain gardens, permeable surfaces, landscape strips, and other scattered detention/water quality solutions. This is a huge opportunity for resilience that should also be considered together with flood protection and flooding events.

Water is a significant resource and constraint on this site, and it should be managed comprehensively. Currently there is a limit to storing rainwater due to Colorado water right laws. However this could be an opportunity for a pilot project for community storage and release.

KNOWLEDGE GAPS AND NEXT STEPS

1   Explore off-site connection to City storm system and potential for discharge into Four Mile Creek.

2   Investigate if Ponderosa can be a pilot project for water collection and grey water system implementation. New (and phased) infrastructure could provide unique opportunities.

3   Develop rain barrel collection system for residents and explore low cost solutions for water reuse. Research and potentially incorporate a similar program to Mapleton MHP program with Resilient Together.[2]

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2 Through Resilient Together, the Mapleton MHP trained residents in rain barrel installation. Twenty-five trained volunteers installed 50 rain barrels in MHP communities throughout Boulder.
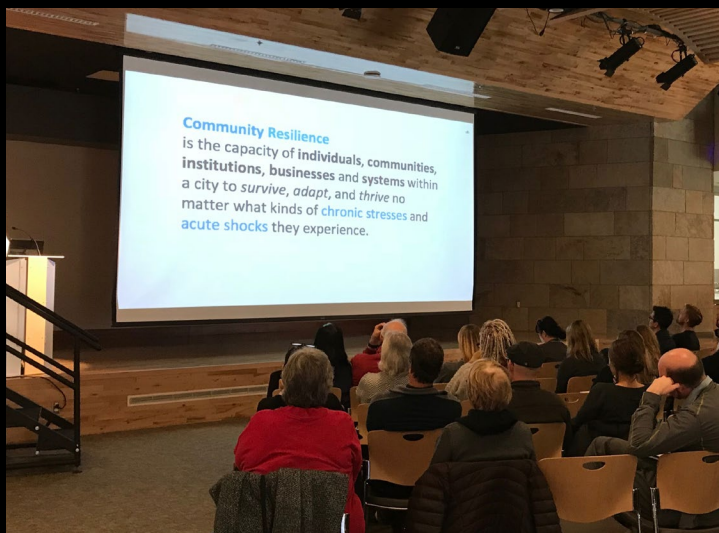
Question 9
STORMWATER & WATER QUALITY – DRINKING WATER QUALITY

How can we identify and quantify water quality threats and impacts to human health? How can this information inform improved infrastructure and water quality needs?

Option	Pros/Cons Trade-offs	Knowledge Gaps/Challenges	Dependence On Other Key Areas
Test water quality and quantify resident concerns	**Pros:** improved infrastructure, save money on bottled water, environmentally conscious	• Cultural/social connotations • When will testing get done? Who will do this? • Public water line serving hydrants and smaller line serving individual units	• Infrastructure • Health and Safety

Findings

Many residents have indicated that they do not drink the tap water due to perceived potential contamination. The water has not been tested and there is uncertainty as to whether there is a drinking water issue. Residents surveyed indicated they purchase bottled water at significant expense (both economically and environmentally).

Community Resilience is the capacity of **individuals, communities, institutions, businesses** and **systems** within a city to *survive, adapt,* and *thrive* no matter what kinds of chronic stresses and acute shocks they experience.

KNOWLEDGE GAPS AND NEXT STEPS

1 Identify resources or programs at the City or County to test drinking water and work with residents to collect data.

2 Develop an educational program around the drinking water and consider low-cost water filtration solutions.

3 If public health issue exists, notify residents and develop protocol for safety.

Question 10
FLOODPLAIN:
DESIGN AND PROTECTION – MACRO-FLOOD CONTEXT

Are there potential off-site flood mitigation options that are available? (e.g. upstream water retention/detention to reduce floodplain downstream) FEMA green infrastructure/HMA funds may be available for offsite work to remove homes from floodplain. Are there elevation options for site or housing to remove from floodplain? How can this impact insurance?

Options	Pros/Cons Trade-offs	Knowledge Gaps/Challenges	Dependence On Other Key Areas
Leverage existing off site water detention Meet or exceed FEMA regulations	**Pros:** Building for the future, being prepared for climate change, creating resilience	• Understand where water has been/where it wants to go to drive solutions • Look at existing topology and hydrology • Look into adjacent Shining Mountain to partner with on flood mitigation • Study greenways for Boulder Creek to handle 50 year flood and consider adopting 100 year flood	• Infrastructure • Landscaping and Open Spaces

Floodplain Map

☑ City High Hazard Zone
☑ City Conveyance Zone
☑ FEMA 100 Year Zone
☑ FEMA 500 Year Zone

Extent of 2013 Flood
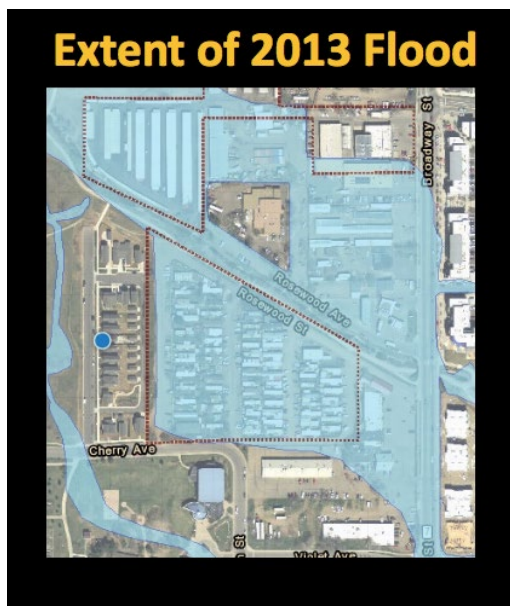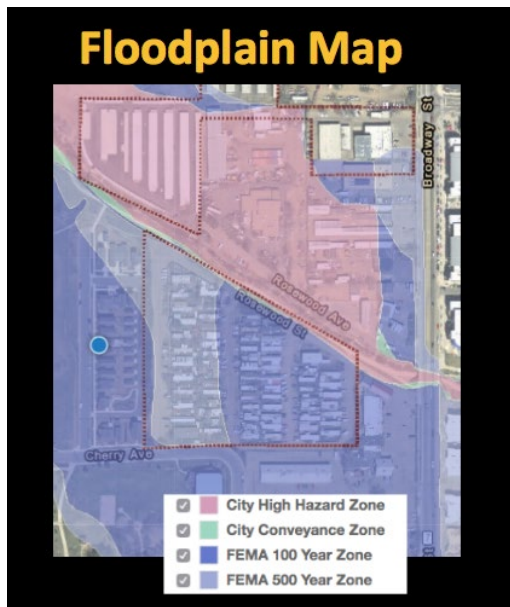
Findings

This site is within a 100- and 500-year flood zone and is considered a flood risk. Many of the mobile homes may be elevated above the requirement, but do not have the additional flood protection required (tie downs, etc). The split on 4 Mile Creek creates a sheet flow pattern across the site that is unique. While the 2013 flood didn't significantly impact the site, future flood events can and will threaten the site.

There was consensus on the importance of the risk, although residents didn't perceive this risk as acutely as the other participants in the workshop. Long-term resilience will be highly influenced by the flood protection solutions phased into this project, as well as developing resilience within the community in the event of a flood.

KNOWLEDGE GAPS AND NEXT STEPS

1. Survey the property to understand flood elevations and existing structures.

2. Evaluate options to utilize multi-use path and green spaces for flood absorption, water conveyance and home protection.

Question 11
FLOODPLAIN:
DESIGN AND PROTECTION – MICRO-FLOOD CONTEXT

What (and where) are potential flood mitigation innovations to consider? How can community spaces interface with these flood mitigation innovations?

Options	Pros/Cons Trade-offs	Knowledge Gaps/Challenges	Dependence On Other Key Areas
Amphibious Design (responsive floating infrastructure)	**Pros:** flood proofing, raised circulation system that allows water to sheet flow across	Determine cost and feasibility	• Infrastructure • Housing
Raising homes out of floodplain	**Pros:** flood proofing **Cons:** costly, may not be possible for some existing trailers that want to remain **Trade-offs:** ADA accessibility (1 ft of elevation = 12 ft of ramp)	• Are existing trailers required to be lifted? • Lower roads to increase flood conveyance?	• Infrastructure • Housing
Water feature on site	**Pros:** create own source of water by using pond and wastewater, provide community focal point/greenspace/playspace, double as control source for overflow and help people downstream **Trade-offs:** Less space for homes and other community amenities/site program elements	• Is there enough water on site to fill a pond? • Ask city if creek water could keep pond full?	• Infrastructure • Housing • Landscaping and Open Spaces • Site Program E lements

Findings

Individual home modifications or new home building could provide additional flood protection. However, the cost and design may not prove viable but should still be explored as new housing designs are considered.

1 Identify short-term flood protection opportunities.

2 Discuss flood impacts with the residents and provide education on risk and response.

3 Develop strategies for community response during a flood event (e.g. backup power, food storage, medical support, etc). Survey residents for existing resources (generator, equipment, sandbags, etc) and develop response plan.

KNOWLEDGE GAPS AND NEXT STEPS

4 Research BoCo Strong[3] resilience strategies and programs.

5 Evaluate flood insurance options.

6 Bring existing resources and programs to the community.

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3 After the 2013 flood, BoCo Strong was created. It is a collaborative network of community leaders, organizations, and government departments interested in building new skills, and integrating knowledge and resilience building projects around Boulder County. Resilient Boulder and BoCo Strong work together to build resilience in the City of Boulder and Boulder County.

Question 12
HOUSING – HOME FOOTPRINT AND DENSITY
Can we look at alternative floor area ratio options that maintain or increase existing household area while increasing site density? What are the tradeoffs?

Options	Pros/Cons Trade-offs	Knowledge Gaps/Challenges	Dependence On Other Key Areas
Raising levels of homes Joined walls/duplexes	**Pros:** homes have equal or more square footage, pushes homes together to create more space for community amenities/circulation **Cons:** homes pushed together may create less space between neighbors or smaller yards **Trade-offs:** sharing a wall with your neighbor		• Housing • Landscaping • Transportation/Circulation • Site Program Elements

Findings

Since individual plots are considered small for today's standards, it would be challenging to fit all the residents in expanded lots. It is preferable that current home density of the site should remain intact, which is in agreement with the city's goal of no displacement.

Minimal distance between homes and/or duplexes with a shared wall is an ideal design option for maintaining all residents in the park, as well as freeing up space for other site amenities. Residents are generally hesitant to share a wall or be closer in distance to their neighbors, but most are interested in having more land area in the park for community spaces.

KNOWLEDGE GAPS AND NEXT STEPS

1 Subdivision of the property to maintain 68 lots would not be possible. Utility easements, road easements, minimum lot sizes, setbacks and unit spacing will all preclude a subdivision of the existing community. It is not possible to meet the requirements or provide necessary Right of Way to each lot if the land were subdivided without displacing residents. Therefore, further options should be explored for land ownership where subdivisions are not necessary.

2 Further surveying of the residents will be required to understand space requirements for homes and family sizes.

3 Explore with the residents options for homes that are close together while maintaining or increasing household area.

Outcomes of Key Questions

Question 13
HOUSING – HOME REPAIRS AND HEALTH & SAFETY

What safety considerations need to be addressed in existing homes and what options and resources are available in assisting to improve health and safety (i.e.- weatherization, air quality)? How do we ensure that Ponderosa residents are safe in the short-term both before and after annexation? What are potential life safety issues that could be addressed now without impacting future investment?

Options	Pros/Cons Trade-offs	Knowledge Gaps/Challenges	Dependence On Other Key Areas
Weatherization Home repair programs	**Pro:** help existing homes, resolve energy and heating issues, stop gap measure for homes that will be replaced, alleviation of active health impacts	• Opportunities for energy efficiency/net zero in new homes but is it adaptable for existing homes? • Seek funding sources for weatherization and repairs, especially with heating	• Health and Safety • Infrastructure • Floodplain
Test indoor air quality	**Pro:** alleviation of current health impacts, inform and train residents on these health impacts as well as safety measures like gas line shut offs	• Connect with Colorado University academics on this issue • Energy efficiency improvements (especially individual improvements) can have adverse effects on indoor air quality. Tightening up the building envelope can potentially restrict air flow and have negative impacts if there are pre-existing air quality issues (radon, carbon monoxide, lead, gas leaks).	• Health and Safety

Findings

It is imperative that any immediate health and safety issues in homes and the community be resolved. Residents should work with the city and property manager in addressing these issues. Working with local organizations and institutions on short-term and immediate community enhancement projects that can help improve community health and safety (e.g. EcoCycle trash and recycling services, Boulder Fire and Rescue for alarm installation, Freedom by Design).

KNOWLEDGE GAPS AND NEXT STEPS

1 Develop database of community needs and match up with partners.

2 Explore LEAP programs and other low-income services to help with weatherization and repairs.

3 ADA accessibility resources and services.

4 Partner with Colorado University and Freedom for Design or other community partners to provide low cost home repairs.

5 Partner with Boulder Fire-Rescue for installation of smoke/carbon monoxide alarms.

Question 14
HOUSING – SWEAT EQUITY

What options exist that will leverage skills and work from the community in order to maintain affordability and increase opportunities for ownership and involvement?

Option	Pros/Cons Trade-offs	Knowledge Gaps/Challenges	Dependence On Other Key Areas
Habitat for Humanity Model that utilizes community skill sets when building homes	**Pro:** self-help housing model, residents involved, affordability, leverage skills within community. Opportunities for energy efficiency/net zero, eclectic community design, homes are built for the long-term to serve the existing population and generations to come, increase sense of ownership and attachment to community **Trade-offs:** dedication and commitment of time	Explore options: prefab ($66-68/sq ft), panelization, modular, tiny, shipping container	Intersects with all other key areas

Findings

Homes built from the Habitat for Humanity model are extremely affordable and provide home ownership for people with very low incomes. One of the ways that the residents maintain affordability is to respond to water pipe breaks, small fires, roof leaks, etc themselves. Other responses that provide longer-term benefit included complete weatherization solutions and building envelope changes. The city should consider leveraging this grit and determination and the skillset currently available within Ponderosa which includes construction, electrical, landscaping, metal working, and artists to keep maintenance low. Sweat equity is a model that currently is important for living in Ponderosa MHP, and residents hope to be able to make changes and adapt their homes to their needs in the future.

The homes exhibit a wide range of building conditions, with some in very poor condition (without heat or windows) to very high performing buildings. Future changes should bring the standard of living up for all residents and utilize sweat equity solutions to encourage personal investment and pride for those residents that have the capacity.

KNOWLEDGE GAPS AND NEXT STEPS

1. Utilize Boulder Area Housing Research Initiative survey (BAHRI) to identify social assets and existing abilities/strengths (see Social Assets chapter, question #1 for more details).

2. Partner with sweat equity based solutions like Habitat for Humanity.

3. Identify modular and replicable solutions for increased energy efficiency, storage solutions and housing prototypes (e.g. prefab, offsite construction, modular, bulk purchasing, adaptable design).

4. Recognize and document the unique elements of the community and identify opportunities to preserve art, sculpture, eclectic design and individualism on the current mobile homes.

Question 15
SITE DESIGN – LANDSCAPING, OPEN SPACE AND NATURAL ELEMENTS

Where are the most important places to landscape? What are the best ways for the community gardens to be incorporated and allow for beautification and resilience?

Options	Pros/Cons Trade-offs	Knowledge Gaps/Challenges	Dependence On Other Key Areas
Plant landscape buffers and hedges along property boundaries Retain existing plants, new plants	**Pros:** Creates an open environment, eyes on the street safety, greenery, sense of security without harsh line, maintain current pollinating plants, windbreak on western edge **Trade-offs:** possibly fewer fences, semi-private spaces	• Survey residents on interest • Lack of trees on current site is a big vulnerability	• Transportation and Circulation • Site Program Elements • Health and Safety
Edible Landscapes Community Gardens	**Pros:** Adds value (e.g. tool shed, compost bins, raised beds, irrigation hydrant, diverse plant varieties), and provides food **Trade-offs:** move community garden from Cherry St. entrance to centralized community space	• Who will take care of plots? • How will food be distributed?	• Short-term Community Projects • Floodplain • Site Program Elements

Findings

Historically this community has had very limited communal and green spaces because of the outlook that people don't take personal responsibility for common space. Creating open spaces and community areas will have to be carefully phased in to dispel this. However, the current wishing well/garden is a cherished space and ground for many of the residents and is a good starting point.

Site design and landscape elements can support community pride, beautification, tranquility as well as build community identity and allow for food production and native and pollinator vegetation.

KNOWLEDGE GAPS AND NEXT STEPS

1. Explore community garden concepts with the residents and other community partners.

2. Explore onsite food production opportunities.

3. Build relationship between residents and neighborhood community garden.

4. Share info on Double Up Food Bucks Program to get double credit at the Boulder Farmer's Market.

Question 16
SITE DESIGN – COMMUNAL AND PROGRAMMED SPACES
How can community space be utilized to increase social resilience?

Options	Pros/Cons Trade-offs	Knowledge Gaps/Challenges	Dependence On Other Key Areas
Create a community that will double as a Resilience Center in times of crisis.	**Pros:** shared resources, safety zone for flooding, space for communal activities, meeting rooms, office, mailboxes, area for kids, community garden, etc. **Trade-offs:** less space for other site program elements or possibly housing lot sizes	• Map existing community assets, skills, needs and wants for creative/communal spaces • Who will take care of community center? Who will respond to immediate problems/maintenance?	• Short-term Community Projects • Floodplain • Infrastructure • Housing • Health and Safety
Playspace for children	**Pros:** safety, keeping kids off the street, visibility within site for parents **Trade-offs:** hard surfaces, less space for other site program elements	• Could this be incorporated with the community center? • What kind of play spaces do the kids/parents want to see?	• Short-term Community Projects • Floodplain • Infrastructure • Health and Safety

Findings

The residents have a strong desire to have a community center that can serve many purposes. If built with resilience in mind, a community center can serve as a safe gathering space and communication center in times of flooding or outside hazards. Any flood protection should be ADA compatible. It can also be shared space where residents can access information, tools, resources, supplies, and meeting spaces. This has proven to be successful and beneficial to other co-house communities nearby (e.g. Wild Sage).

KNOWLEDGE GAPS AND NEXT STEPS

1   Utilize BAHRI survey to identify social assets and existing abilities/strengths (see social assets chapter, question #1 for more details).

2   Work with Growing up Boulder (GUB) to develop youth engagement planning activity at upcoming workshops.

3   Tour other community centers (Wild Sage, BHP).[4]

4   Talk to potential partners (BHP, IHAD, EFAA, Food Rescue, other).[4]

5   Continue to build partnerships with Colorado University.

6   Finalize program for community center (size and program).

4 Boulder Housing Partners, I Have A Dream Foundation, Emergency Family Assistance Association)

Ponderosa should pull inspiration from other mobile home parks, both locally and nationally, for examples of innovative infrastructure, design, site amenities, housing, affordability, programming and maintaining unique community character.

Case Study:

Mapleton Mobile Home Park, Boulder, CO

The Mapleton Community can be looked at for precedent in many aspects of design, site amenities, infrastructure improvements, and housing. In the context of Ponderosa, Mapleton can be studied for its design and programmatic elements. Their neighborhood lighting design is an example for what could be implemented in Ponderosa to increase night safety, visibility, and sense of place within the community. Mapleton's multi-use path from post flood work is another example to investigate with regard to increasing flood safety in Ponderosa. In June 2017, Mapleton MHP did a workshop with Resilient Boulder to install 50 rain barrels in partnership with Colorado University Environmental Center & FLOWS and the Colorado State University Extension Office.

Case Study:

Tony Hsieh "Llamapolis" Mobile Home Park, Las Vegas

This mobile home park has a unique character due to its integration of art, music, and culture in this tight-knit community. Llamapolis can serve as a precedent for maintaining and enhancing the unique qualities of Ponderosa as it undergoes construction. In order to respect the diversity of talent, lifestyles, and cultures that make up the Ponderosa community, keeping its eclectic character should remain rooted in the design of the park.

Case Study:

Poplar Place, Boulder, CO

Poplar Place is an affordable housing development that has many valuable lessons learned that can be studied for the Ponderosa project, including affordable home ownership, sweat equity, site design and programmatic elements. It was specifically brought up in the conversation around parking and neighborhood density. We will look to Poplar Community for lessons learned and possible best practices in the concept development phase.

SOCIAL ASSETS & CHALLENGES OF THE PONDEROSA COMMUNITY

OVERVIEW OF WORKSHOP BREAKOUT GROUP

The Ponderosa community has a wealth of assets, including strong networks, a spirit of resourcefulness and a broad range of skills. The city wants to build upon these assets and foster community cohesion through the redevelopment of the site. A Resident Leadership Committee (RLC) was established as an initial step, that harnesses community assets to maximize the exchange of information and input between the city and residents and also foster this capacity towards long-term resident leadership. In order to continue to harness and elevate the social assets of the Ponderosa community, this breakout group focused on identifying and building upon existing capacity within the neighborhood and broader Boulder community.

BREAKOUT GROUP GOALS:

The primary goal of this session was to identify assets within the Ponderosa community and resources available from community organizations that could help residents achieve their high-level aspirational goals. Those goals are related to desired social outcomes and identified barriers (see pg. 37).

The second goal of the session was determining how indoor and outdoor communal spaces could be created and used to leverage existing assets and to build social capital. The group identified ways to reduce the risk of displacement of residents and to reduce barriers to accessing social services. Facilitators and participants used cultural competence[1] as a guiding principle during the discussion.

Collaborators

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Victor
Resident, Ponderosa Mobile Home Park

Jose Luis
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Maria
Resident, Ponderosa Mobile Home Park

Pat Arter
Boulder County Area Agency on Aging

Juanita
Resident, Ponderosa Mobile Home Park

Facilitators
Marina La Grave
Eitan Kantor

Notetaker
Kate Busse

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1 Without understanding the cultures of the residents, it is difficult to predict how residents will react to various innovations and it is difficult to create effective service systems. Cultural competence is defined as "a set of congruent behaviors, attitudes, and policies that come together in a system or agency or among professionals that enables effective interactions in a cross-cultural framework." Reference: Cross et al. 1998. Towards a Culturally Competent System of Care: A Monograph on Effective Services for Minority Children Who Are Severely Emotionally Disturbed. Washington DC: CASSP Technical Assistance Center, Georgetown University Child Development Center.

CHALLENGES AND GOALS: BUILDING A COMMUNITY THAT IS NOT JUST SURVIVING BUT THRIVING

Challenge	Goal	Barriers
Safety	Community members feel safe at all times of day and supported by law enforcement.	• Transient and homeless population by the creek (behavior and drug use) • Dark at night • Insufficient patrol by police • Absence of neighborhood watch
Communication	Residents should be well-informed of happenings in the neighborhood and connected with the city and community at large.	• Language and cultural barriers • Cellular service is poor within Ponderosa • Excess paperwork for residents now that it's owned by the city
Accessibility to Resources	Ponderosa creates a community learning and resource center. Community is healthy and has access to healthcare.	• Public transportation (connectivity) • Laundry facility access • Healthcare access
External Stigma	The community supports and celebrates itself on a regular basis.	• Lack of respect from outside • Lack of personal esteem
Economic Mobility	All families have opportunities and access to education, economic mobility, and social advancement.	• Lack access to educational opportunities like financial, language, and other critical classes (e.g. GED) • Lack of professional support • Low income

Outcomes of Key Questions

Question 1 What assets exist within the Ponderosa community? And what resources are available from the larger Boulder community that could help residents achieve identified goals?

Below is a list of current assets that exist within the Ponderosa community. Page 38 consists of a list of external resources in the larger Boulder community. Much of this list was generated prior to the workshop, but also reflects the discussion and may not be not comprehensive.

EXISTING ASSETS WITHIN PONDEROSA

1 Gardening:
• Some grandparents in the community know how to garden
• Identified landscaping and gardening expertise in the community

2 Equipment/Tools:
• The Ponderosa office and some homes have tools and equipment
• Some homes in Ponderosa have washing machines
• Homes with landscaping equipment were identified

3 Services:
• Many residents work in food service/food preparation
• Some residents have handyman and woodworking services
• Guitar teaching, rock climbing and journalism were other resident skills identified

4 Caregivers:
• A professional nurse was identified as well as residents with child care skills.
• At least one resident knows how to provide emotional and cultural support for children

Job-training for young people/ employment programs

- Workforce Boulder County
- Center for People with Disabilities – Employment Program
- Boulder Bridge House
- Connecting Colorado
- CORE/Labor Source
- Project: Return to Work
- State of Colorado Division of Vocational Rehab

Aging in Place

- City of Boulder Senior Services – resource specialists, enrichement, health and wellness, senior centers
- Boulder County – Aging and Disability Resources of Colorado/Area Agency on Aging
- Boulder County Care Connect
- Meals on Wheels
- Community Food Share
- Adult Care Management, Inc.
- Center for People with Disabilities
- Circle of Care
- Jewish Family Service
- Audio Information Network of Colorado
- Starkey Foundation
- Colorado Talking Book Library
- Senior Reach

Wellness and Mental Health

- Mental Health Partners
- Clinica Campesina Family Health Services
- Boulder Valley Women's Health Center

- Planned Parenthood
- Dental Aid
- iThrive
- Genesis/Genesister
- El Centro Amistad
- Boulder County AIDS Project
- Glowmundo
- Mental Health Partners counselor at EFAA

Education

- Early Childhood Education
- City of Boulder Child Care Subsidy
- Colorado Child Care Assistance Program
- Boulder County Head Start
- Boulder County Child Care Resource and Referral Program
- Foothills United Way
- Boulder Day Nursery – Early Learning Programs
- Children's house Preschool – First Chance Scholarship
- The Family Learning Center
- New Horizons Cooperative Preschool
- YWCA – Children's Alley Child Care
- BVSD Teen Parent and Early Childhood Learning Program
- Literacy
- Boulder Public Library Literacy Tutoring
- English Language Acquisition
- Intercambio de Comunidades
- Academic support
- Colorado Women's Education Foundation
- Engaged Latino Parents Advancing School Outcomes
- Glowmundo
- Transition to college
- CU's New Student & Family Programs
- Boulder High Adelante! Program

- "I Have a Dream" Foundation of Boulder County
- BVSD Counseling

Financial Coaching and Small Business Support

- Boulder County Circles
- Personal Investment Enterprise Program
- Bridge House
- Small Business Development Center
- Colorado Minority-owned Business Council
- Latino Chamber
- Bank On – for financial stability
- Financial Advisor via Boulder County – for financial stability

Safety, Community Policing, Community Watch

- Safehouse Progressive Alliance for Nonviolence
- Mother House
- Mental Health Partners Project EDGE
- BoCo Strong
- National Hazards Center
- Boulder Police Department
- Boulder County Sheriff's Office
- Boulder Office of Emergency Management (preparedness)
- United Way Community Resilience Grants (cycle 3 due Summer 2018) – Contact

  Stephanie Walton

2 Resources in italics were added by participants at the Dec. 4th workshop (this list was started before the workshop). Underlined resources are additional resources that participants would like to exist for the community.

Homebuyer Readiness

- City of Boulder Division of Housing
- Habitat for Humanity
- Boulder County Homeownership Counseling

Home Repair

- Boulder County Care Connect
- Flatirons Habitat for Humanity
- ReSource ToolShare program at 6400 Arapahoe Avenue
- Heater installation

Food and other basic needs

- Emergency Family Assistance Association (EFAA)
- Community Food Share
- Boulder Food Rescue

- City of Boulder Family Resource Schools
- Farmers Market Food Assistance
- Harvest of Hope Pantry
- Foothills United Way 211 Colorado
- Salvation Army
- Ensure water treatment services are accessible in terms of language
(are they able to provide service in Spanish?)

Legal Aid/Human Rights

- Immigrant Legal Center of Boulder County
- CU Criminal/Immigration Defense Clinic
- City of Boulder Office of Human Rights
- District Attorney's Office
- Towards Justice
- Bridge to Justice
- Colorado Legal Services

- Colorado Civil Rights Division
- Office of Fair Housing and Equal Opportunity
- US Equal Employment Opportunities Commission
- Anti-Defamation League
- Human Rights Campaign
- ACLU

School Bus Routes and Other Transportation Topics

- Community Cycles
- GO Boulder
- Via Mobility
- ADRC: Transportation Information and Assistance
- RTD
- Neighborhood Eco-Pass Program (contact GO Boulder) 303-441-1832
- Boulder County Care Connect Medical Mobility

Findings

Residents expressed an interest in capacity-building and empowerment. They feel that they have many important assets in their community already, but that trainings could help residents capitalize on these assets. There is also a desire for the city to expand the scope of the social connections that they examine. For example, residents have connections to people living outside of Ponderosa, and considering these connections would help city staff better promote positive social outcomes. Additionally, many of the listed resources tend to focus on basic needs and survival. The conversation should be expanded to include resources that help people out of the cycle of poverty instead of helping people survive within the cycle of poverty.

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KNOWLEDGE GAPS AND NEXT STEPS

1. Identify cultural brokers to help residents with asset utilization. These brokers should be paid for their services/skills.

2. Build a comprehensive asset-mapping survey or workshop that includes an internal social assets inventory for Ponderosa residents. Explore using Boulder Area Housing Research Initiative survey (BAHRI) to uncover and document existing skill sets within the community.

   The process should capture resources within Ponderosa and connections and relationships between Ponderosa residents and other Colorado residents (family, friends, teachers, etc.). It should also seek answers to the questions, "What assets do residents need to survive?" and "What assets do residents need to thrive?" and capture the associated reasoning.

3. Continue to nurture strong community volunteerism and the emerging self-governance model of RLC.

4. Identify short-term projects (e.g. physical improvements or programs) to build capacity and empower the residents to take ownership.

5. Identify needed insurance and credentials for community members with skill sets that require these and seek assistance from the larger Boulder Community to help with this certification process.

6. Hold intercultural trainings for residents to address demographic, cultural and language divides and misunderstandings.

Outcomes of Key Questions

Question 2

How can the physical environment address social issues (e.g. build social capital, foster resilience, support service delivery and promote community cohesion)?

The residents and community experts discussed how indoor and outdoor communal space on the Ponderosa site could be used to address the identified challenges facing the community. Concepts such as a community center, playground, community garden, trails to access nature, a blacktop to bounce balls and parking were voiced as the desired spaces. See below table for desired aspects of those spaces. In order to ensure safety and effectiveness, participants identified key needs for some of these spaces—keycode access, staff, volunteers and cleaners.

Desired Aspects of New Resilient Community Hub & Outdoor Space

Challenges/Barriers	Outdoor	Indoor (Resilient Community Hub)
Safety • Transient and homeless population by the creek (interaction and drug use) • Dark at night • Lack of patrol by police • Absence of neighborhood watch	• Safe place to play • Paths along perimeter and to existing playground and creek path	• Child care space
Communication Barriers • Language and cultural barriers • Cellular service is poor within Ponderosa • Excess paperwork now that it's owned by the city	• Community ambassador programs such as resident-led running groups to connect residents with nature	
Accessibility to Resources • Public transportation (connectivity) • Laundry facility access • Healthcare access	• Connectivity to existing spaces and paths. How to include Ponderosa in larger natural area? • Crosswalks (e.g. at Cherry & 9th) • Garden, soccer field, dog park, hiking trail • Residents value trees	• Laundry • Big open, dividable space • Library • Kitchen • Builder space: tools available/art studio/theater • Dynamic space (e.g. moldable & able to transition easily)
External stigma • Lack of respect from outside • Lack of personal esteem	• Space near playground that adults can congregate too (e.g. multi-generational uses)	
Economic mobility • Lack access to additional educational opportunities like financial, language, and other critical classes (e.g. GED) • Lack of professional support Low Income		• Classrooms • Computer lab • Child care/after school programming
Thriving not just surviving	• Blacktop expansion by current asphalt strip-area near the bulletin boards in front of manager's office (short-term win for community) • Add basketball hoop to blacktop to create sport court • Area for pets	• Educational and economic opportunities (programing, access to technology & training)

PHOTO COURTESY OF CITY PHOTOGRAPHER

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PHOTO COURTESY OF TRESTLE

Findings

Indoor and outdoor communal spaces are key to capitalizing on existing social assets. Since existing common areas are used and valued differently by different residents, it can be difficult to decide where to start when trying to prioritize and capitalize on these assets. Residents identified the blacktop area, the garden area and the property manager's office as areas of opportunity.

KNOWLEDGE GAPS AND NEXT STEPS

1 Work with residents to prioritize space/infrastructure improvements related to building social capital and promoting health.

2 Create a short-term win for the community by extending the blacktop near the manager's office and adding a basketball hoop to allow for sports activity that has health and community cohesion benefits.

3 Determine who has the right to use the outdoor space on the western edge of the park. This could provide an opportunity for additional space for community use.

Question 3

How can the city and community foster access to resources and effective service delivery to support Ponderosa?

The following is a list of ideas for service delivery methods and developing effective approaches to connect Ponderosa residents with resources.

1 Resource Fair

- Representatives from local nonprofits and government agencies could hold events at Ponderosa once a year or a few times a year to inform residents about available resources.

- Some residents do not feel comfortable accessing social services because they are unfamiliar with the process of accessing those services or because they are afraid of interacting with government agencies. One way to overcome this challenge is to have residents publicly share their success stories about accessing social services. The resource fair should include resources for all ages, including information that will help residents age in place.

- A resource fair could be an opportunity to implement a "swarming" model[3] in which service providers huddle to address resident issues together. Issues to be addressed through swarming could be determined by the Resident Leadership Committee.

2 "Village Movement" Model

- "Instead of seniors leaving their homes for senior housing or assisted living, a group of residents in a given community, typically age 50 and older, could form a non-profit membership organization to provide access to services that support their goal of remaining at home as long as possible."[4]

- While this model focuses on enabling older adults to age in place, the model could also be applied to the provision of programs and services for all Ponderosa residents.

3 Resident Leadership Committee Utilization

- Resident Leadership Committee could be utilized to engage external resources or partners. Local nonprofits or government agencies could attend the regular committee meetings to present information about available resources. The story-sharing idea mentioned within the resource fair idea could also be an aspect of the committee.

4 Benefit & Enrollment Workshops

- Based on their incomes, family sizes and other factors, many residents likely qualify for local, federal, state and nonprofit-based benefits (e.g. Women Infants and Children Food Assistance Program or the City of Boulder's child care subsidy). Residents may not know the full range of benefits for which they qualify, or they might not know how to apply

for these benefits. A resident or resident service coordinator could be trained to identify and address situations where people are eligible but not enrolled in benefits.

5 Intercultural training

- The residents expressed a need to better understand the cultural differences between various community groups. Training residents and staff could help enhance the cultural liaisons/cultural brokers effectiveness. It will also help the community better understand enculturation, acculturation and assimilation.

6 City Staff Engagement

- Staff working on the Ponderosa project could strengthen bonds with residents by hosting or participating in community events that are unrelated to the process of making big changes at Ponderosa.

7 Neighborhood Phone Book

- The Holiday Neighborhood has created a neighborhood phone book that has not only names and phone number but pictures of residents. This could be done at Ponderosa. The document could also contain a list of skills possessed by residents (e.g. sewing, gardening, caregiving, recreational activities like rock climbing, etc.)

8 Resilience Ambassadors

- The city's Resilience program, a local organization called BoCo Strong and the Boulder Office of Emergency Management have developed a course called Better Together. This class helps community members get to know their neighbors and become disaster preparedness and recovery leaders. The course helps residents become ambassadors to/for their neighborhood. This course could be delivered at Ponderosa.

9 Mental Health Service Communication

- Communication with some residents is complicated by mental health struggles. Staff working on the Ponderosa project should consult with mental health service providers about encouraging effective communication with those residents. assimilation.

3 Ramesh, Praveen. Tiered Support Vs Swarming – Which Will Suit You? https://blog.freshservice.com/three-tier-support-vs-swarming/
4 Snelling, Sherri. "The Village Movement: Redefining Aging in Place." 4 June 2012. Next Avenue. http://www.nextavenue.org/village-movement-redefining-aging-place/

Findings

In order to foster access to resources and effective service delivery, several characteristics and aspects of service models are desired. Adding two roles to the community will improve access to social services – a service coordinator and cultural ambassadors. The service coordinator[5] role could be staffed by a nonprofit or government agency. Cultural ambassadors are envisioned to be residents of Ponderosa who would work with the Resident Leadership Committee and city. These roles will help residents feel less intimidated by government agencies and nonprofits, and will help residents understand available services. These positions could mitigate the feeling of "outsider status" that exists among the residents in relation to the larger Boulder community. Residents or other community members who act as cultural liaisons should be paid for their effort and skills.

Jurisdictional boundaries are a barrier to service provision. This is especially relevant since the site will be moving from the county to the city. Creative and flexible arrangements should be made between the city, county and other agencies to provide services during the transition. This is particularly important in the areas of public safety and social services. Residents tend to agree with ideas presented by city staff and Trestle relating to more aspirational, long-term goals but often raise the immediate basic needs issues first. Utilizing the transition to showcase responsiveness and access to social services will help the community focus on the larger picture of long-term needs.

It is recommended that service providers focus on investments that address the root causes of social issues and address these issues before they become crises. Early investments are cost-effective and impactful. Investments in social services should be data-driven, and metrics should be established to support decision-making in the future.

KNOWLEDGE GAPS AND NEXT STEPS

1 Determine metrics with residents and city staff for social outcomes of residents so that effective measurements can be taken before and after the transition to determine success.

2 Address community safety stemming from interactions with people experiencing nearby homelessness.

3 Collaborate more with city agencies on the issue of safety, especially between Boulder Police Department and Boulder County Sheriff's Office regarding service at Ponderosa.

4 Explore the concepts from the service delivery idea list (pg. 43) to determine feasibility and effectiveness of utilizing those approaches.

Outcomes of Key Questions

Question 4

Construction Impacts – What models and approaches exist to support communities facing disruption (e.g. large-scale construction) in order to maximize the wellbeing of households and avoid displacement?

Findings

A key concern among residents is mitigating hardship from construction impacts from parking, noise that disrupts sleep (some residents may work nights and weekends), safety for children, privacy, and neighborhood mobility constraints. The number one concern among residents is being displaced during construction. The group felt that open and constant communication with residents through multiple channels was key for successfully managing the stress and hardships during this time.

KNOWLEDGE GAPS AND NEXT STEPS

1 Clarify the points in the planning and implementation process when residents will get to make decisions. Clarify which decisions will be made by residents and which decisions will be made by city staff with input from residents?

2 Utilize the International Association for Public Participation principles.

3 Clarify the financial or staff resources that can be leveraged during the transition from construction to new home development, ensuring positive outcomes for residents.

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5 At Casa de la Esperanza, in Longmont, Colorado, the Program Coordinator acts as a resource and referral coordinator for residents. This system is effective because the residents trust the Program Coordinator and have ongoing interactions with her. This could be effective at Ponderosa.

Ponderosa should pull inspiration, both locally and nationally, for examples of creating and harnessing social assets for the community. There are many effective models and programs that can be drawn from. The below case studies highlight some of these.

Case Study:
Casa de la Esperanza, CO

This is an example of a flourishing housing community for seasonal workers with in-house academic programs and effective connection of residents with available services. The academic center has a computer lab, small classrooms, additional storage and office space. Casa de la Esperanza has served hundreds of families since it opened over 15 years ago.

Case Study:
Promotoras

The promotora model, where a Hispanic/Latino community member can receive specialized training to provide basic health education without being a healthcare professional, could be applied to Ponderosa. A community member trained as a promotora would be a liaison between between their community and health care professionals

Case Study:
"I Have A Dream" Foundation, CO

This is a model of comprehensive programming to support positive outcomes for youth. This is an incentivized program that offers each Dreamer a four-year tuition assistance scholarship for college or vocational school upon successful completion of high school. The program's goal is to follow Dreamers as they progress through school to create a strong academic, social, and emotional support system.

Case Study:
Harlem Children's Zone, NY

This is a model of comprehensive programming to support positive outcomes for youth, and the principles of this model could be adopted by Ponderosa:

- Serve an entire neighborhood comprehensively and at scale, to reach numbers significant enough to affect the culture of the community, and to meet local need.
- Create a pipeline of support with accessible programs that provide support for children's healthy growth.
- Build community among residents, institutions, and stakeholders, who create the environment necessary for children's healthy development.
- Evaluate program outcomes and create a feedback group that cycles data back to management.
- Cultivate a culture of success rooted in passion, accountability, leadership, and teamwork.

Case Study:
Holiday Neighborhood, CO

This community offers workplace options for small businesses, artisans, and entrepreneurs as well as a variety of housing options. They have a community phone book, parks and gardens available within walking distance, as well as a theater. Many aspects of this community could be emulated in Ponderosa.

Case Study:
St. Paul's Intergenerational Program, CA

This model addresses both aging and child care as an intergenerational program that brings seniors and children together for activities like reading, arts and crafts, sing-alongs, dancing, and learning opportunities. This model attempts to enhance the quality of life for both seniors and children while improving intergenerational understanding and sharing new skills.

KEY INTERVENTIONS FOR BUILDING A RESILIENT MOBILE HOME PARK

As the City of Boulder and the Ponderosa community continue to explore the various opportunities for creating a resilient and sustainable mobile home park, there have already been learnings that can be applied to mobile home park redevelopment that increase resilience and sustainability.

The following interventions are highlighted for their innovation and resilience value. They are options that the city is evaluating for the Ponderosa site and are key ideas to consider when envisioning and creating a resilient and sustainable mobile home park in Boulder or in any community within Colorado or the United States.

LOWER MONTHLY COST BURDENS

1

Affordability is a key pillar to any mobile home community. It's often the reason people and families choose to reside in these communities. However, low rent is not the only opportunity for lower costs. By harnessing the principles of the sharing economy, mobile home communities can lower costs and create greater access to resources through community-wide Wi-Fi, car and tool sharing and potentially community solar.

Many older mobile homes also have significant room for improving efficiencies of energy and water usage. Often these improvements will decrease costs to the residents over the long-term, but education of the upfront cost versus the long-term cost is needed as well as access to programs that can provide rebates or discounts for more efficient appliances. For low-income households, the Department of Energy funds many local weatherization programs that will work on mobile homes.

Another alternative is to support residents to replace their older mobile homes with new energy-efficient manufactured housing, significantly lowering utility costs. Newer homes are more energy efficient than older homes and a number of home manufacturers now produce Energy Star-rated homes. Zero-energy modular housing that fits the footprint of older mobile homes is being produced as well. However, lack of subsidy, access to finances and the often small size of older mobile home lots relative to modern manufactured housing can make this option less viable.

BUILDING PHYSICAL AND SOCIAL RESILIENCE INTO A COMMUNITY CENTER

2

If built with resilience in mind, a community center can serve as a safe gathering space and communication center in times of flooding or outside hazards. The center can serve as a battery backup location for solar if the grid goes down as well as a facility that can produce solar power during good weather and provide energy after a shock event or during power outages. The center can also serve a more traditional role and add shared space where residents can access information, tools, resources, supplies, homework help and meeting spaces.

ON-SITE SOLAR GENERATION

3

Solar generation is often not considered a viable option for mobile and manufactured homes because traditional mobile homes typically cannot support the weight of a solar array. If existing mobile homes are replaced with new, fixed-foundation housing; then roofs may be able to accommodate rooftop solar. Ground mounted solar systems or portable solar panels are additional options, especially if the community as a whole is committed to utilizing solar to power multiple homes. A mobile home community can create a solar microgrid powered by a community solar garden or other solar panel options to allow for the community to continue to receive power in times of outages. Solar generation can also be paired with a resilience center for battery power storage and energy generation.

STORMWATER DETENTION & FLOOD MITIGATION

4

One of the vulnerabilities of mobile home parks is the potential for residing in a floodplain. In order to address this susceptibility, communities should consider various mitigation options such as rain gardens, bioswales, water retention ponds and rain barrels (individual and community style). These water collection solutions can also offer opportunities for implementing a grey water system or low-cost water reuse solutions. Permeable solutions such as porous streets and surfaces should also be incorporated and phased in as infrastructure updates occur.

COMMUNITY CONTROL OF THE LAND

5

Exploring models that allow the residents to have control of the land creates more community involvement and support among residents for potential long-term and short-term site improvements. In Boulder, models that promote community ownership and control, include: community land trusts, resident HOAs with land leases, and resident nonprofit management of the community with nonprofit ownership of the land (see pg. 15). Primarily in the Pacific Northwest and New England, cooperative ownership by homeowners in mobile home parks is common. Resident control can help foster a sense of individual investment in homes and communal spaces, allowing for support of the other interventions listed here. Factors to consider include: the number of homes in the mobile home park, the level of resident interest in governance, community cohesion or tension, the cost of common amenity maintenance, and long-term stewardship and affordability.

RESILIENCE & CULTURAL LIAISONS/AMBASSADORS

6

Mobile home communities are often made up of a diverse demographic from different cultural and economic backgrounds. There is also a stigma of "outsider status" attached to mobile home residents. Creating ambassadors or coordinators whose responsibility is to connect the residents better to health and social services via a nonprofit will help provide resources to the community and better connect them with the city. A cultural ambassador could also help bridge the gap between various community groups, creating community cohesion and allowing for neighbors to connect with one another. Also key people in the community can become disaster preparedness and recovery leaders by knowing the most vulnerable households and helping to initiate a system of neighbors helping neighbors. All these positions would require some amount of training and likely require a partnership between a local community organization and the mobile home park.

IMPLEMENTATION OF PROGRAMS THAT LEVERAGE RESIDENT SKILLS TO BENEFIT THE ENTIRE COMMUNITY

7

An area that is often overlooked within a mobile home community is the various talents and assets that reside in the community already. Members of the community might be caregivers (for children or elderly), healthcare practitioners, gardeners or have home repair expertise. Having a full understanding of the existing assets of the community can create social cohesion and provide additional resources to the community. One way to do this is through social asset mapping. Utilizing local skillsets can also foster a sense of trust among community members as neighbors get to know each other through the usage of each others talents.

INCLUDE RESIDENTS IN DECISION MAKING

8

Whether it's developing or improving infrastructure, creating shared community spaces, promoting neighborhood cohesion, or improving community safety, engaging the community in the process is critical. Robust engagement throughout the process creates an educated population that understands the importance of developing a resilient and sustainable community and it creates buy-in for institutionalizing ideas and developing resilient infrastructure.