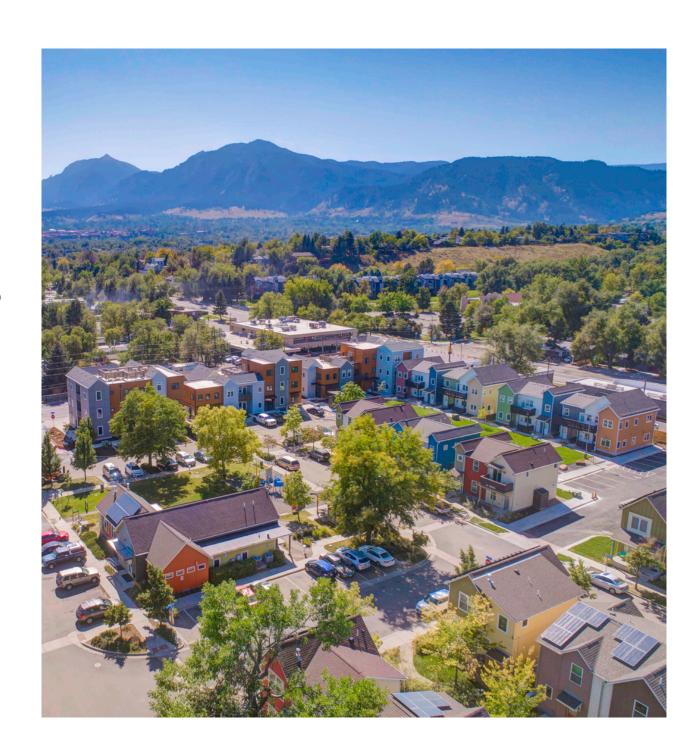
Affordable Housing Program



Housing & Human Services

- Creating Affordable Housing in Boulder
 - Inclusionary Housing, Funding, and Annexation
- Manufactured Housing Preservation Policies
- Ponderosa Community Stabilization Project
- Modular Factory



Local Context Boulder

- Population: 105,000
- Jobs: 103,000 (60% are nonresidents)
- Home to CU Boulder, a thriving science and tech industry
- City 28 square miles
- Open Space 73 square miles

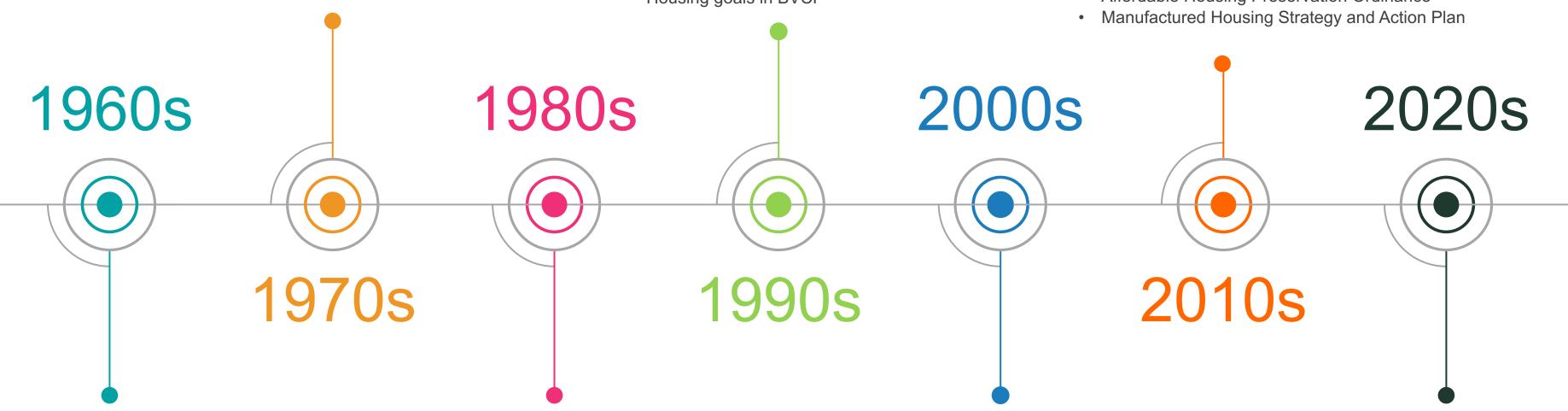


Timeline of Affordable Housing Efforts

- Moderate-income housing annexation strategy
- City starts receiving CDBG funds
- Growth management plan

- Housing excise tax
- Community Housing Assistance Program
- HOME funds
- First Home Program
- Co-op Ordinance
- Comprehensive Housing Strategy
- · Housing goals in BVCP

- Inclusionary Housing (IH) Ordinance
- Comprehensive Housing Strategy
- Affordable housing linkage fees
- Short-term home rental regs
- Housing Boulder Toolkit
- Middle Income Housing Strategy
- Affordable Housing Preservation Ordinance



- Housing Authority of the City of Boulder (dba Boulder Housing Partners) established
- Attempt at rent control (leads to statewide ban)
- ADU Ordinance
- Residential Growth Management System
- Moderate Income Housing Program
- Mobile Home zoning adopted

- Asset Management Program
- Inclusionary Zoning adopted
- Regional HOME Consortium and Boulder County Homeownership Consortium
- Affordable Housing Program Review

- Eviction prevention services
- Middle income Down Payment
- IH Update
- Modular Factory

Regulations + Policies + Investment

- Inclusionary Housing
- Funding
- Annexation
- Middle Income Strategy
- Manufactured Housing Strategy
- Preservation
- Local and Federal Funds
- Leverage
- Partners



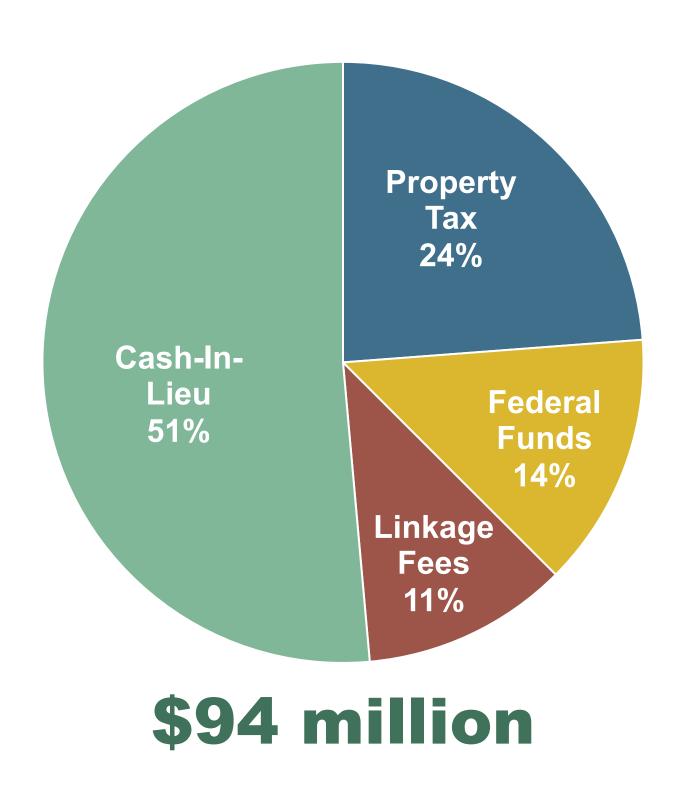




Affordable Housing Tools

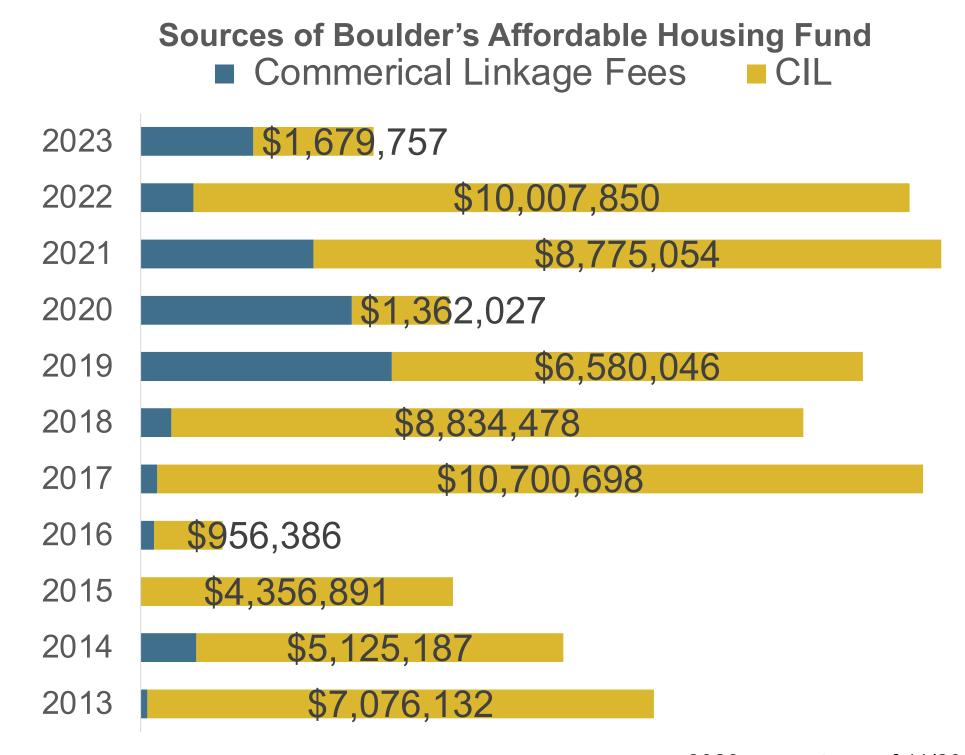
- Tool #1: Annexation
- Tool #2: Local Funding
- Tool #3: Inclusionary Housing

Funding Sources, 2015-2022



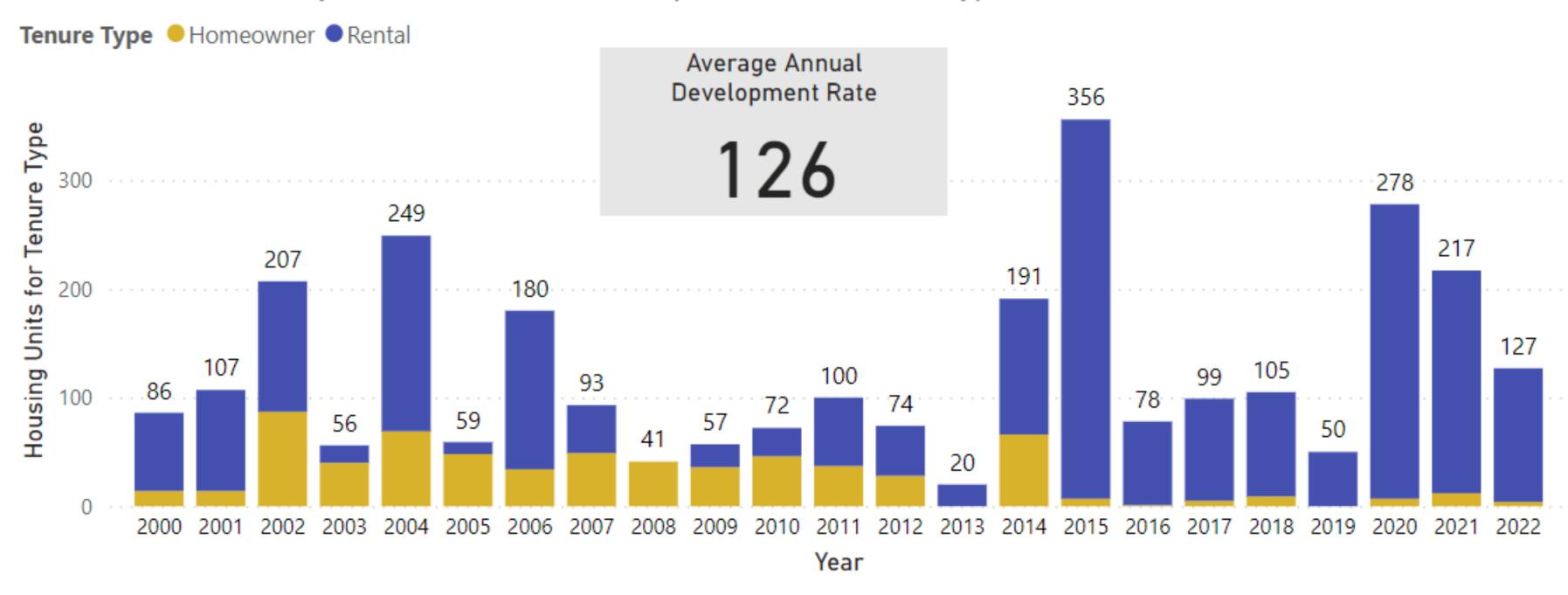
Cash-in-lieu – the "workhorse"

 A cash-in-lieu (CIL) contribution is the most common way IH requirements are satisfied



Outcome of Three Tools

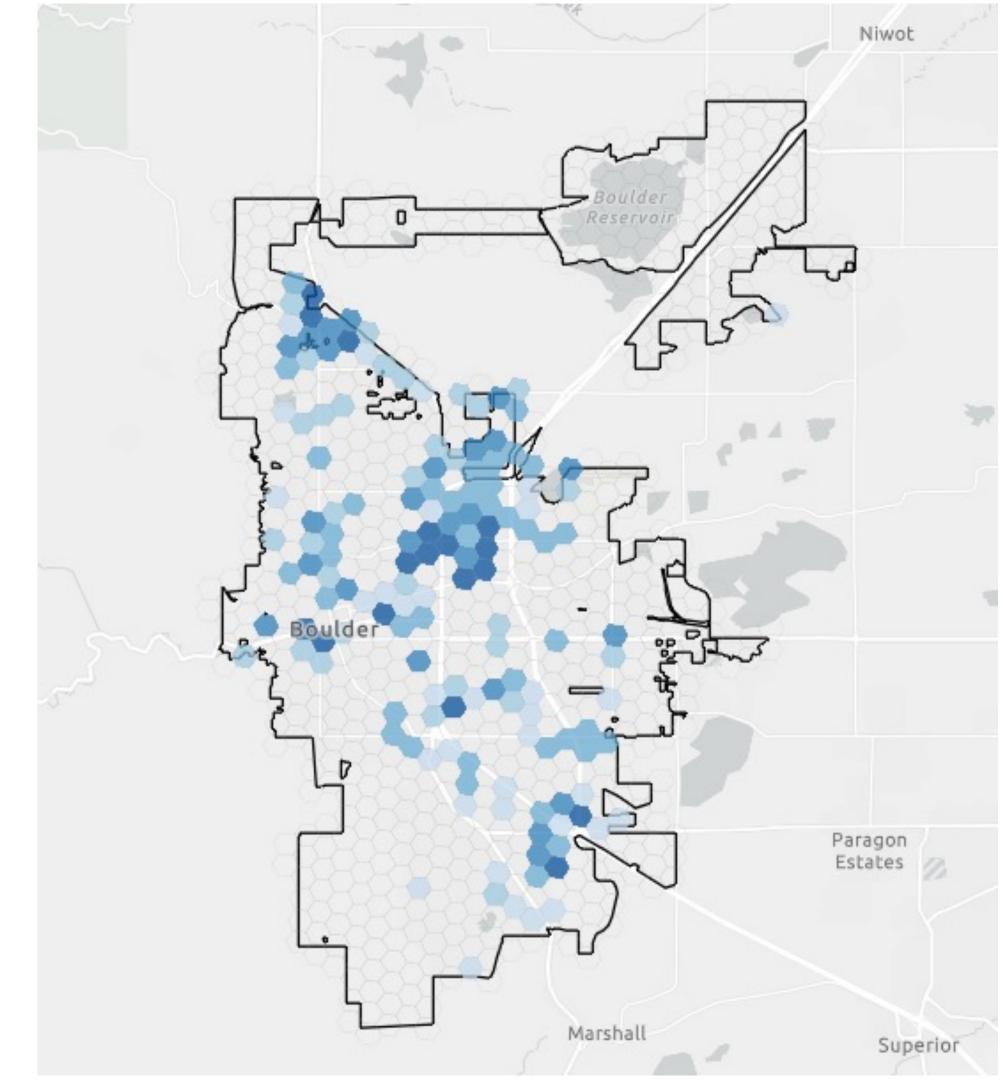
Number of Permanently Affordable Homes Added per Year and Tenure Type (since 2000)



https://bouldercolorado.gov/boulder-measures/affordable-housing-boulder

Local Funding Outcomes

- Local dollars leveraged with outside sources
- Funding supports a wide variety of housing types geographically dispersed
- Primary source for acquisition
 & middle-income



Leading by Example

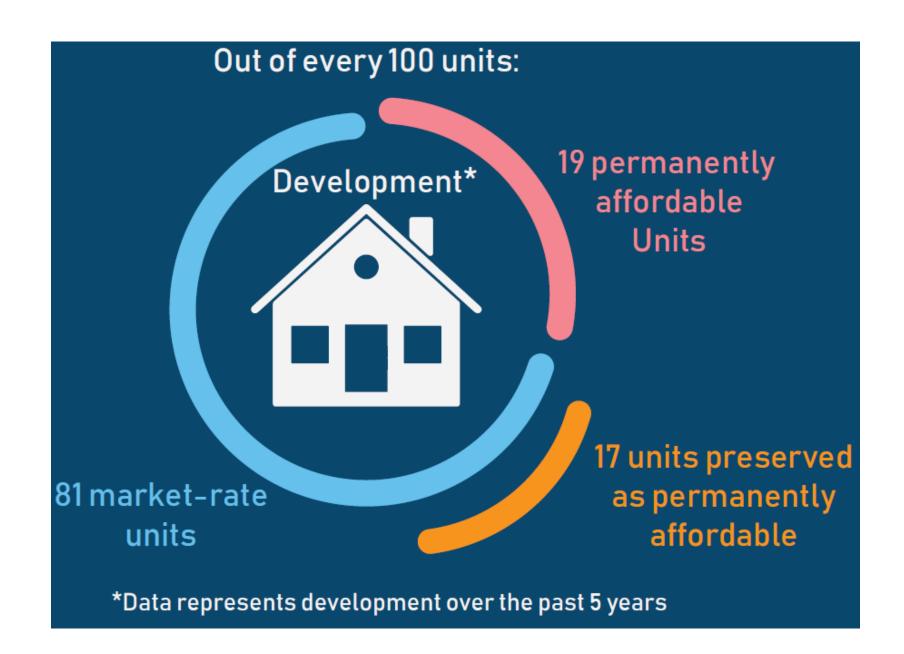
- Boulder's affordable housing program is one of the largest and most successful in the country
- Communities throughout Colorado are now adopting Inclusionary Housing programs

3,947

Total # of
Permanently
Affordable Homes

8.3%

% Permanently Affordable



Housing & Human Services

MANUFACTURED HOME COMMUNITIES IN BOULDER

Pockets of Diversity

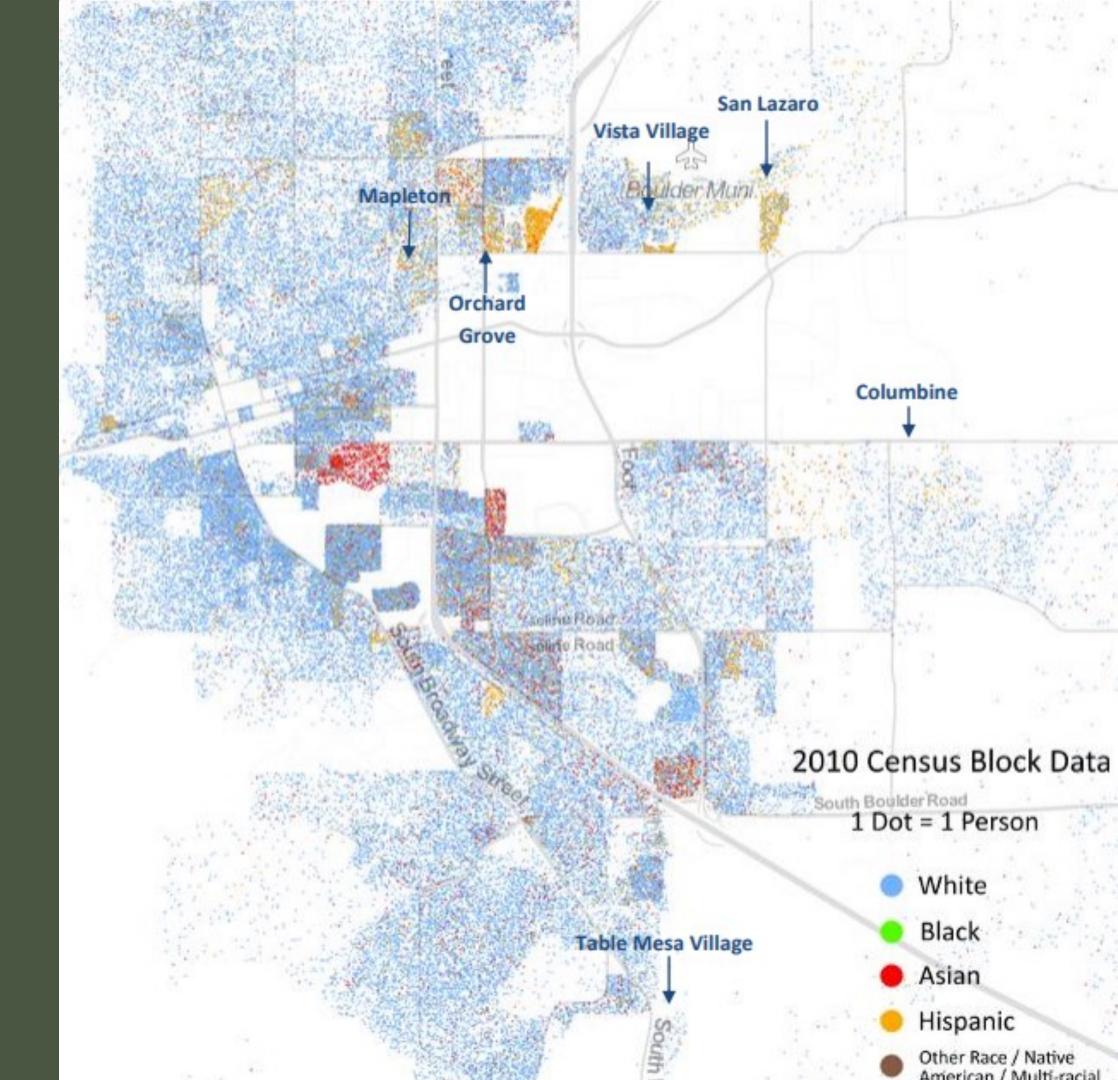
Low-to-moderate Income Homeownership

Entry to Homeownership

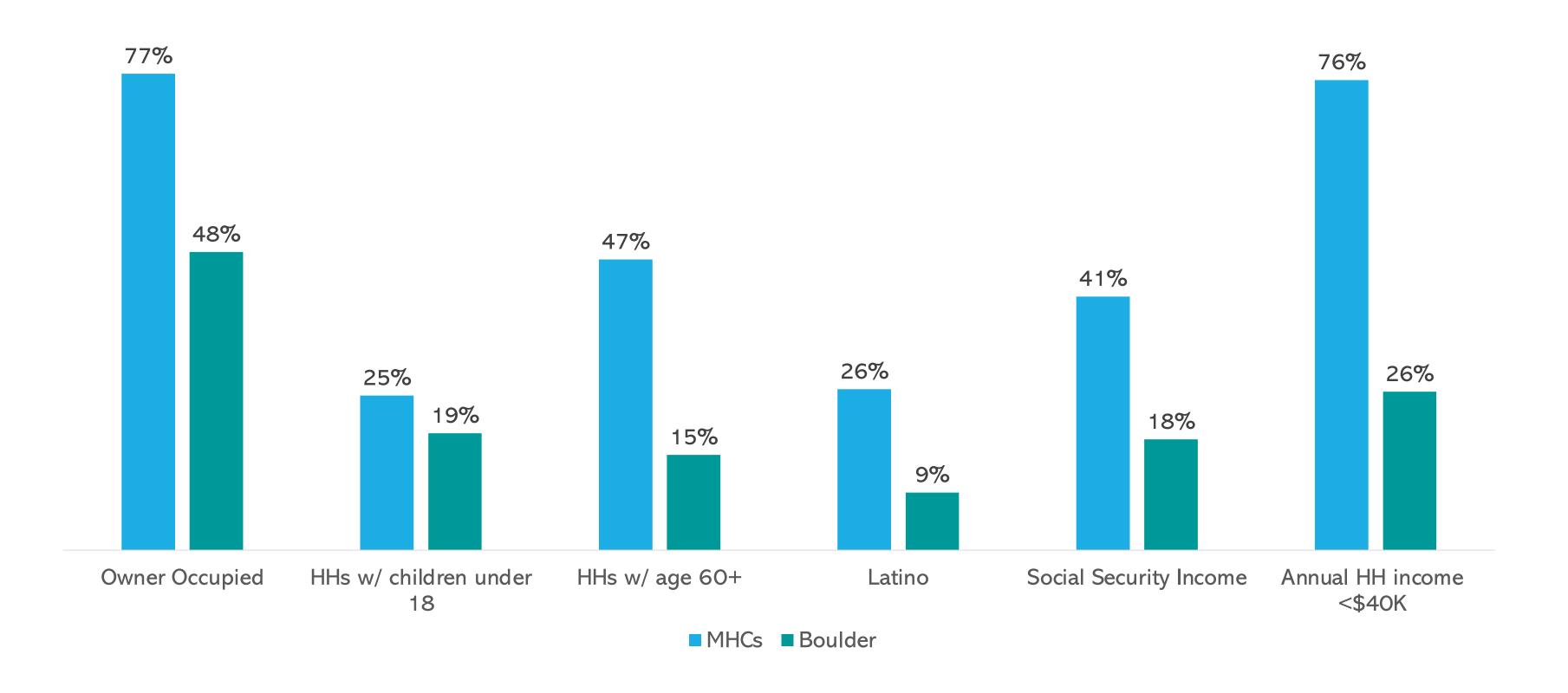
Workforce Housing

Aging in Place

Downsizing



MANUFACTURED HOME COMMUNITY SURVEY (BOULDER AFFORDABLE HOUSING RESEARCH INITIATIVE – BAHRI)



MANUFACTURED HOUSING PRESERVATION POLICY

7.08 Preservation and Development of Manufactured Housing

"...the city and county will encourage the preservation of existing mobile home parks ... Whenever an existing mobile home park is found to have health and safety issues, every reasonable effort will be made to reduce or eliminate the hazard."

Preservation Zoning

Mobile Home (MH) Zone

CASE STUDY: PONDEROSA MOBILE HOME PARK







PONDEROSA RESIDENTS

Roughly 180 residents

92% owner-occupied homes

67% below 30% AMI

DIVERSITY in language, ethnicity, age,

household composition, ability

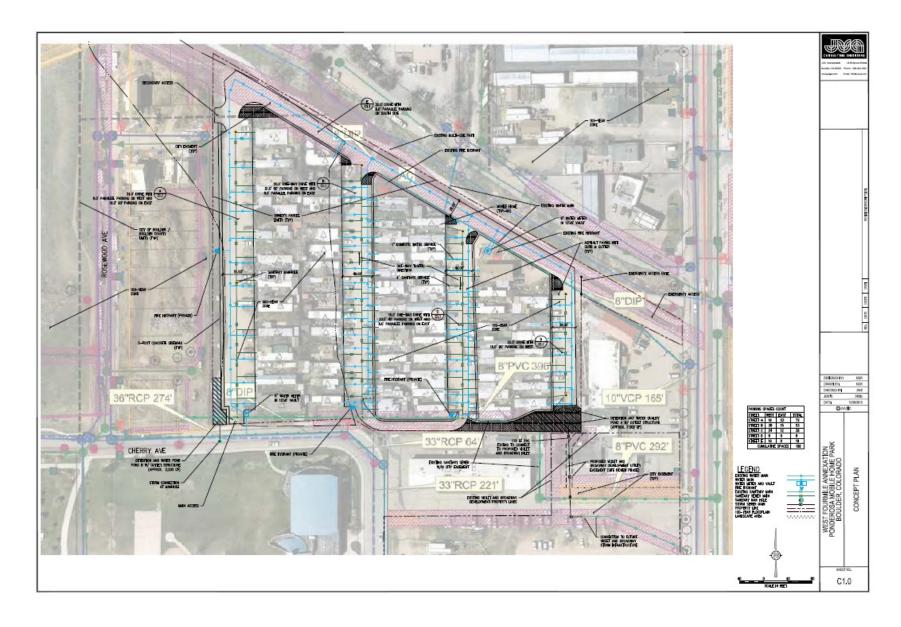


2014: CDBG-DR RESILIENCE PLANNING GRANT

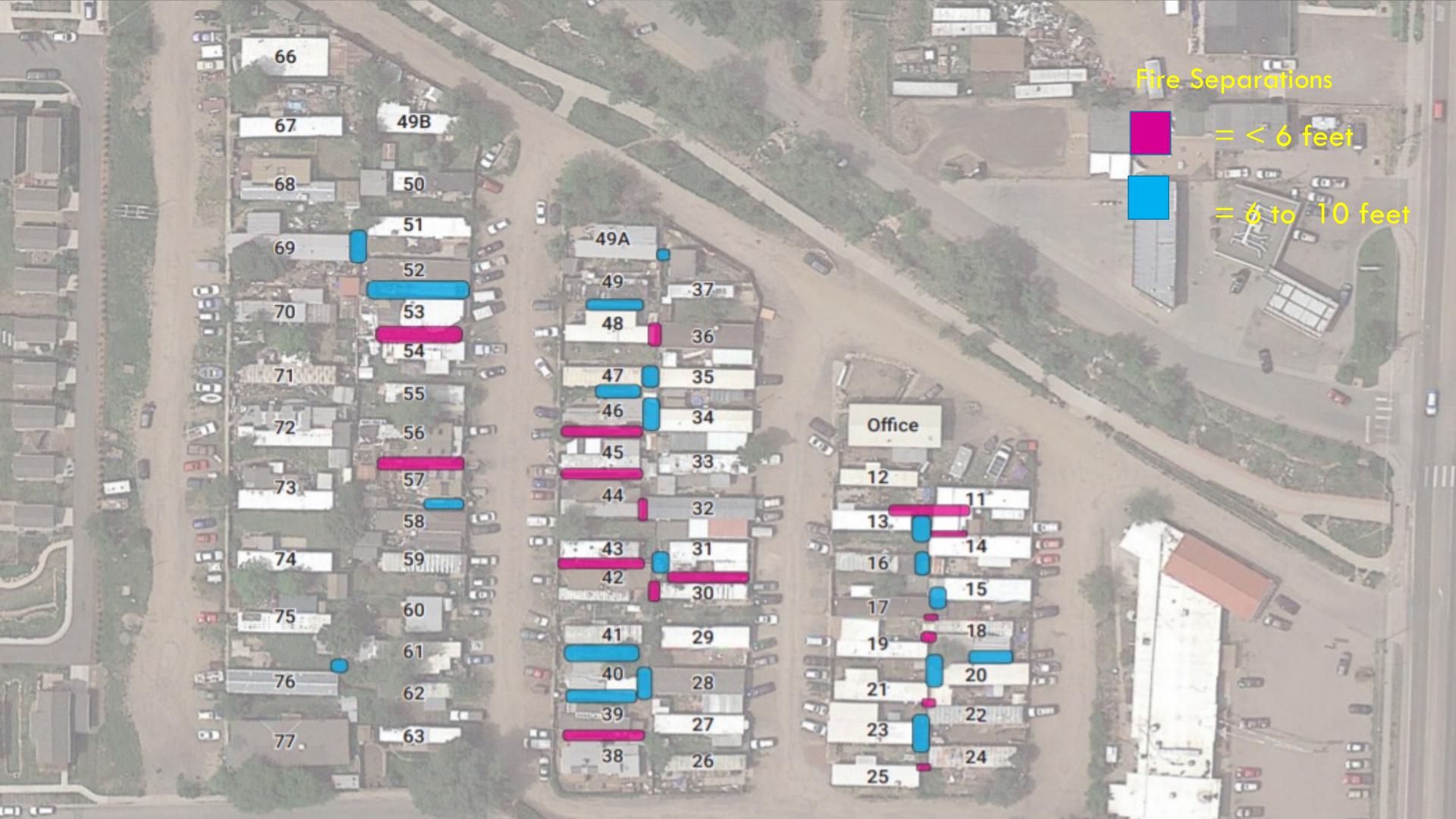
Community Engagement



Infrastructure Cost Estimate







EXISTING CONDITIONS



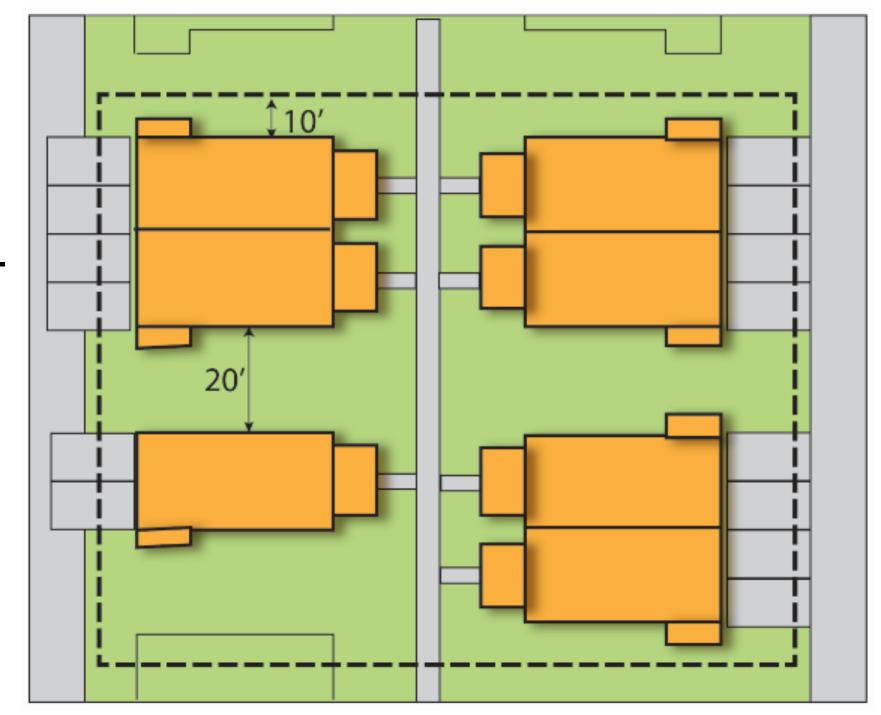
6 Houses
59% Open Space
Average Home Size = 900 SF

PATH FORWARD

- 7 Houses
- 68% Open Space
- Average Home Size = 1,200 SF (twostory)
- Maximum 73 homes

Duplexes, single-family homes, common parcel

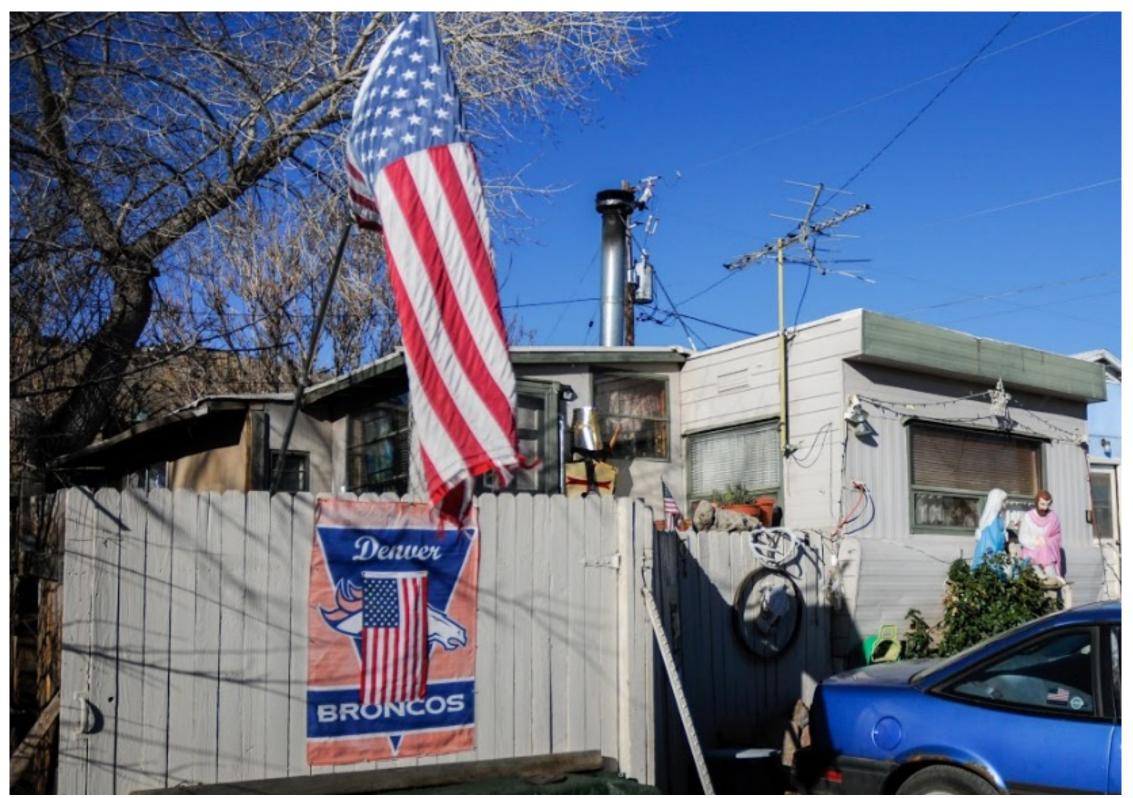
Path to Compliance



Medium-density Residential Zoning

EXISTING MOBILE HOMES

- May remain
- Nonconforming use



HOME REPLACEMENT OPTIONS

- Medium-density zoning
- Modular (less disruption)
- Similar footprint
- Fixed foundation



PHASE I HOUSING

- Phase I: Unimproved western edge
- As home sites open up, there will be more room to build



PHASE I HOMES

Triplex
Carriage home
Single-story home









Eventual Site Plan



INFRASTRUCTURE

Water and sewer in streets

Undergrounded electric

Water quality and detention

Paved streets

Landscaping, tree canopy

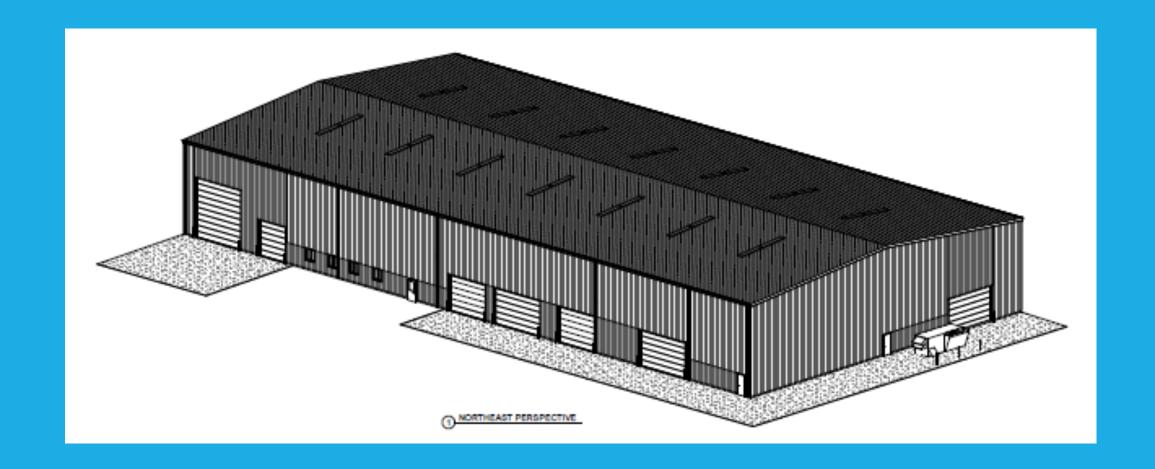
NO natural gas



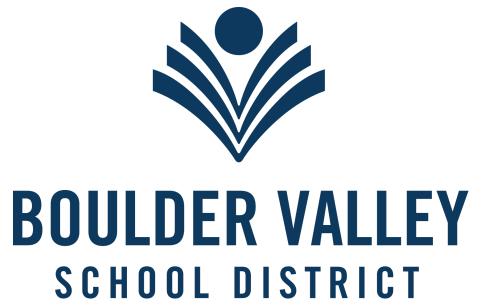
Affordable Housing Modular Factory













WHAT IS ZEM?

- All-Electric
 - Heating and Cooling
 - Ultra Efficient Appliances, Lighting and Mechanical
- Thermal Envelope and Air Sealing
- Fair Air Ventilation
- Quality Materials and Construction Practices
- Permanent Foundation
- Modular Construction



FLOOR R-40
WALLS R-43
ROOF R-60

14" roof truss

Airtight ducts inside house

1 foot overhang

5/8" sheetrock & low-VOC paints

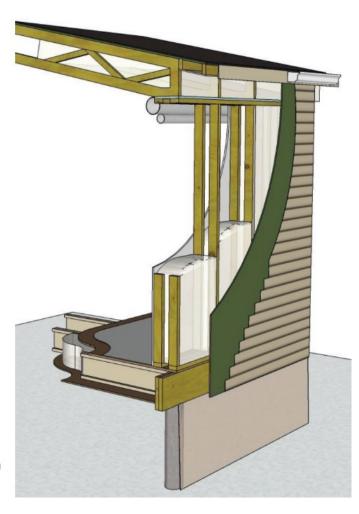
Double stud walls, 10" cavity

Formaldehyde-free plywood decking and sheathing

9.5" floor system

Moisture-tight underbelly

Frost protected foundation





ZERO ENERGY MODULAR (ZEM) MARKET ANALYSIS

Lead Agencies:

Colorado Housing Finance Authority

Energy Outreach Colorado

City of Boulder

Colorado Habitat for Humanity

Purpose:

Assess demand for ZEM Homes in multiple scenarios

- Mobile Home Replacement
- Single Family, Multi Family and Infill
- Production Facility

MARKET ANALYSIS FOR ZERO ENERGY MODULAR IN COLORADO

March 26, 2019



https://www.veic.org/resource-library/marketanalysis-for-zero-energy-modular-in-colorado

WHAT CAN MODULAR BE?







Images Courtesy
Jason Carter,
The Mod Coach
www.themodcoach.com



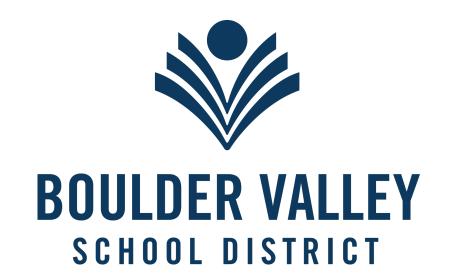








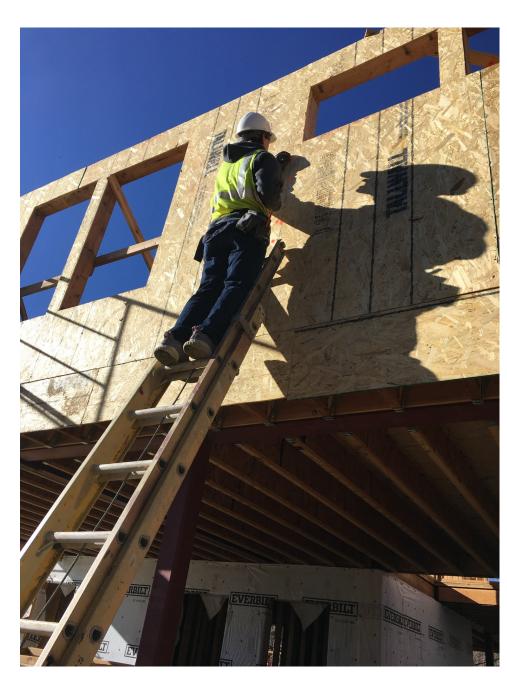
PURPOSE OF THE PARTNERSHIP







- Produce much needed affordable housing
 - Serve both Boulder Valley residents and workers (including BVSD staff)
- Provide workforce training for BVSD students
 - Emphasis on Process of Construction
 - Hands on experience with evolving construction industry



TEC STUDENTS



ROLES OF PARTNERSHIP

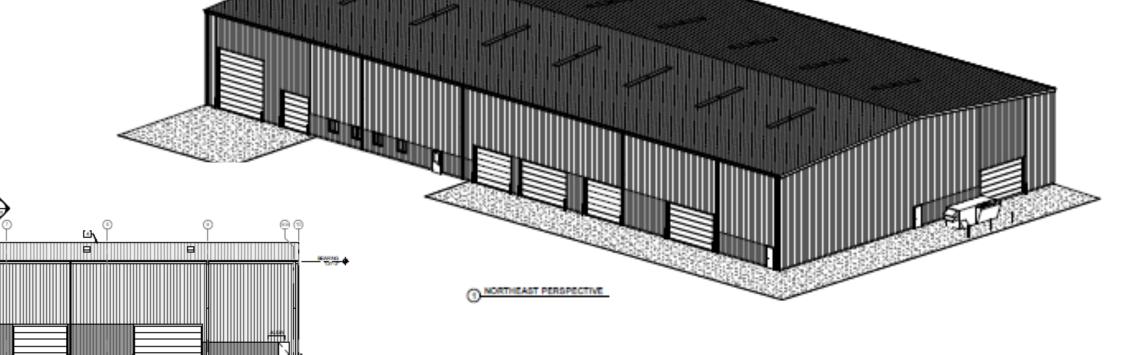
- **City** provide funding to construct the factory and the tools to equip
- Flatirons Habitat for Humanity manage the facility, procure materials, and provide logistical support of organizing volunteers, homeowners, professional staff and integration of TEC students
- School District provide land on the Educational Resource campus for the construction of the factory at no cost for a period of at least 10 years and use the operation as a teaching facility

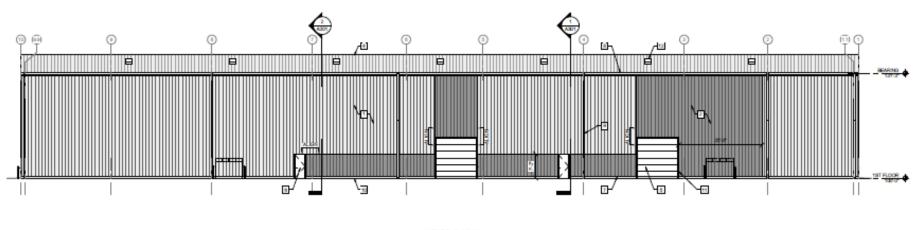


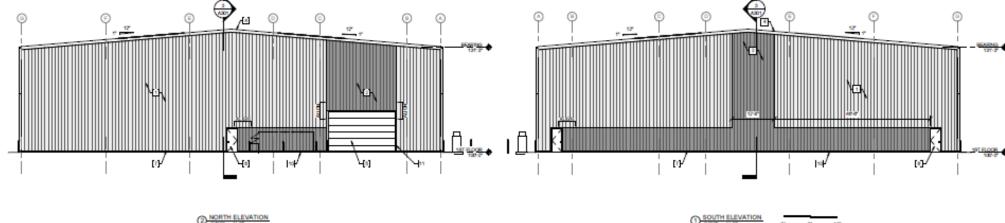
WHY MODULAR?

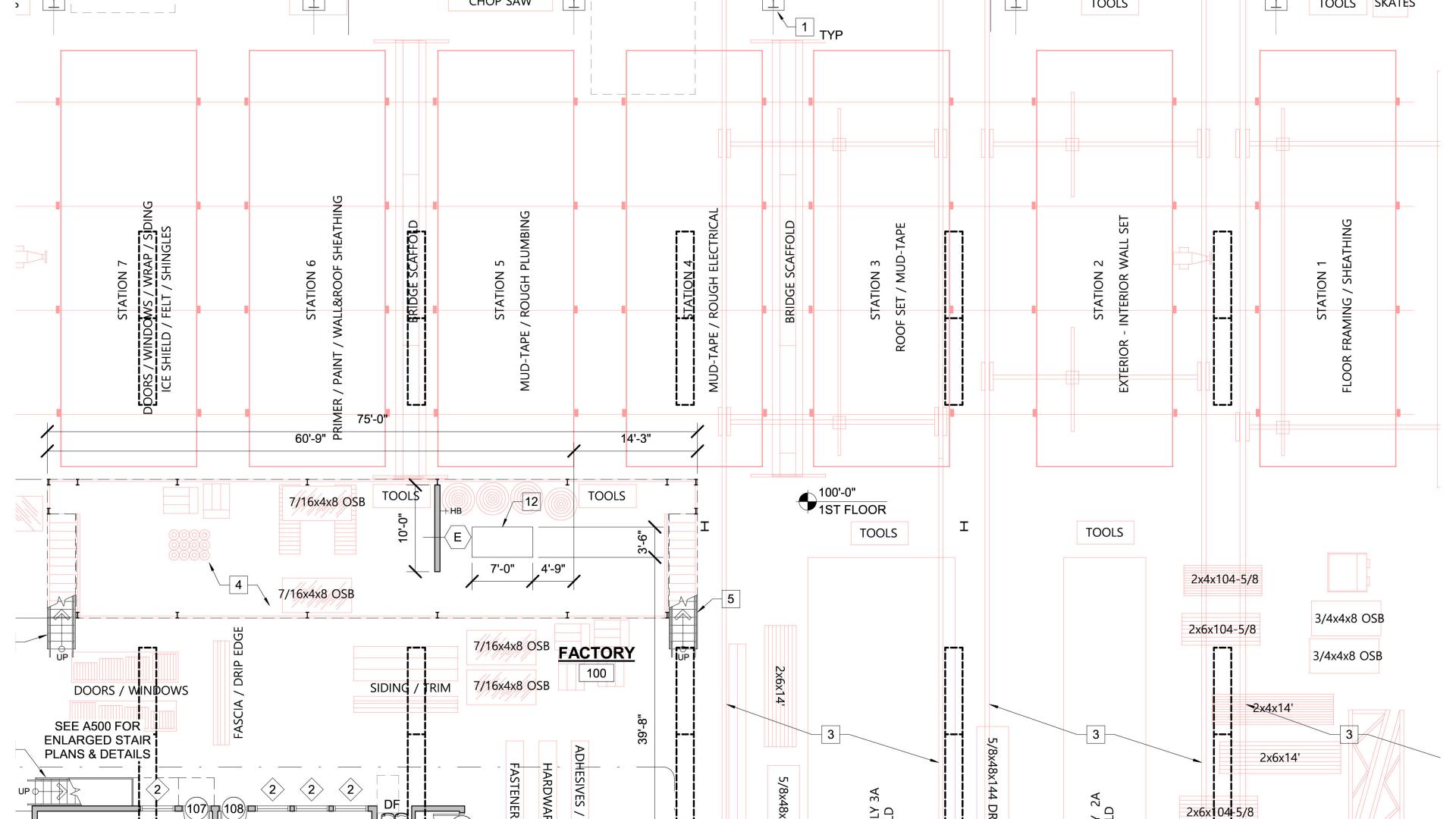
- Higher production capacity to build 50+ homes / year
- Lower cost / higher quality
- Less exposure to weather
- Worker safety
- Less material waste
- Minimizes disruption to the community

FACTORY LAYOUT



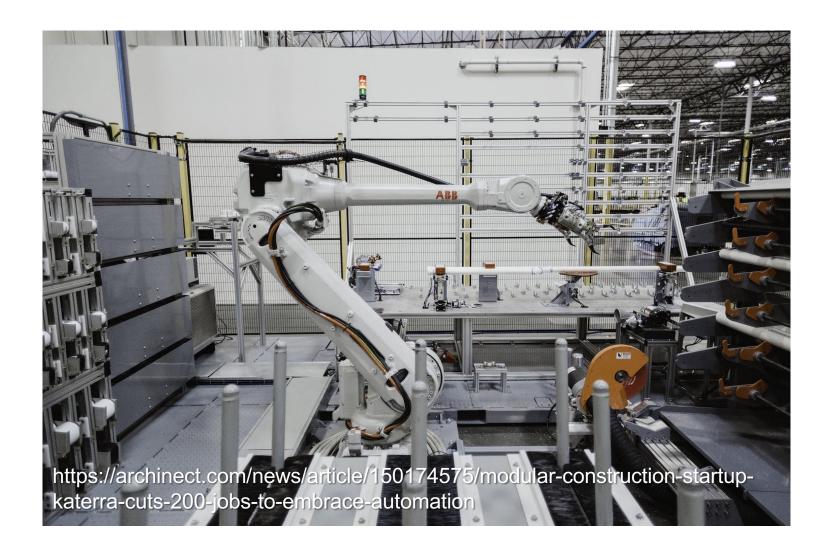






THE FUTURE

- Modular construction gaining momentum
- Wood or steel
- Multifamily / student housing / modular classrooms
- Prepare students for a changing industry



32 story modular apartment building currently under construction; Atlantic Yards B2 Tower, Brooklyn, NY: SHoP Architects



Image Courtesy Jason Carter,
The Mod Coach www.themodcoach.com

