



Bringing People Into Resilience Efforts: Integrating Community, Justice and Infrastructure for Change

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With contributions on Denver case from:

Rapid Assessments: Jorge Figueroa, Denver CASR

Equity Priority Buildings: Berenice Garcia Telez, Denver CASR

My research

- “Usable Science” – intersection between the production of science and the use of science for societal decision making
- Climate Adaptation and Resilience
- Water
- Carbon management

<https://bit.ly/Dilling2023>



Focus in on this session's challenge:

What is needed to “help resilience officials put a big dose of equity and justice in US cities’ resilience plans and actions”?

Clark 2002

- “Too often when natural resource problems arise, people jump immediately to recommend solutions...we tend to make assumptions about people’s goals, pay too little attention to what has happened in the past, and what might happen in the future, and focus uncritically on possible solutions”
- “these difficulties could could be avoided if participants focused on analyzing and understanding problems fully before they proposed solutions”

Clark 2002

- “Too often when Climate Resilience problems arise, people jump immediately to recommend solutions...we tend to make assumptions about people’s goals, pay too little attention to what has happened in the past, and what might happen in the future, and focus uncritically on possible solutions”
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First, a bit about resilience

- Generally has to do with the ability to cope with and recover after disturbance, shocks, and stresses, maintaining function
- Critiqued as a concept because often the starting state is not particularly safe, just, livable, or desirable
 - Adding concept of reorganization and transformation

But resilience in practice is a completely amorphous concept!

- Resilience is not one thing, and is not measured in one way
- Resilience is not a “static state” to be optimized
- Specified resilience and general resilience interact
- Resilience is grounded in acknowledging uncertainty and building systems-based capacity to cope with unexpected future change
- Efficiency can be in conflict with goals of resilience
- Resilience is often in the eye of the beholder, whether the scientist, engineer or the person experiencing the shock or stress
- Resilience has technical and social aspects

Meerow and Newell 2016

Jones 2018

Rodina 2018

Well-meaning greenspace projects are critiqued for their negative impact on poor communities

“Green Gentrification” in 17 of 28 cities:

- Increased property values
- Increased Housing prices
- Physical displacement of working-class residents and racialized groups and cultures

Anguelovski et al. 2022



Atlanta Beltline



Chicago 606



NYC High line



Puerto Nova park in Milan

Residents saying “no” to free trees

CITYLAB

DESIGN / TRANSPORTATION / ENVIRONMENT / EQUITY / LIFE



John Kost, left, and Barry Johnson, citizen foresters for the nonprofit group The Greening of Detroit, plant a tree in the Osborn neighborhood in Detroit in 2016. // Carlos Osorio/AP

Why Detroit Residents Pushed Back Against Tree-Planting

BRENTIN MOCK, JAN 11, 2019

<https://www.citylab.com>

- Non profit received funding for 1000-1500 new trees a year
- Met “stiff resistance” from residents. 25% declined offers for new trees.
- Why?

*“I think a lot of the times it stems from the approach of *oh we just go out and offer tree plantings or engaging in an outdoor activity, and if we just reach out to them they will come,*” Payne told Taylor.*

- “How tree-planters presented themselves and residents’ distrust of city government” --not about trees per se
- Didn’t trust the city” because of past experience with government neglect of public spaces, lack of maintenance of existing trees, feeling of neglect from city government.
- Chance to “air their grievances about the burnt up houses on the street...how long it takes police to get to the neighborhood...and there’s all these greater issues and why are we wasting money planting trees?”
- **“So a lot of the issues I find with the trees were not the trees, it was life in general and here I was bringing something extra into your life. So it’s about control. It’s about being able to control your environment.”**

In some cases, existing parks are unusable and unsafe for families.



Our tools are essential and informative but do not resolve value conflicts- and our tools are not apolitical!

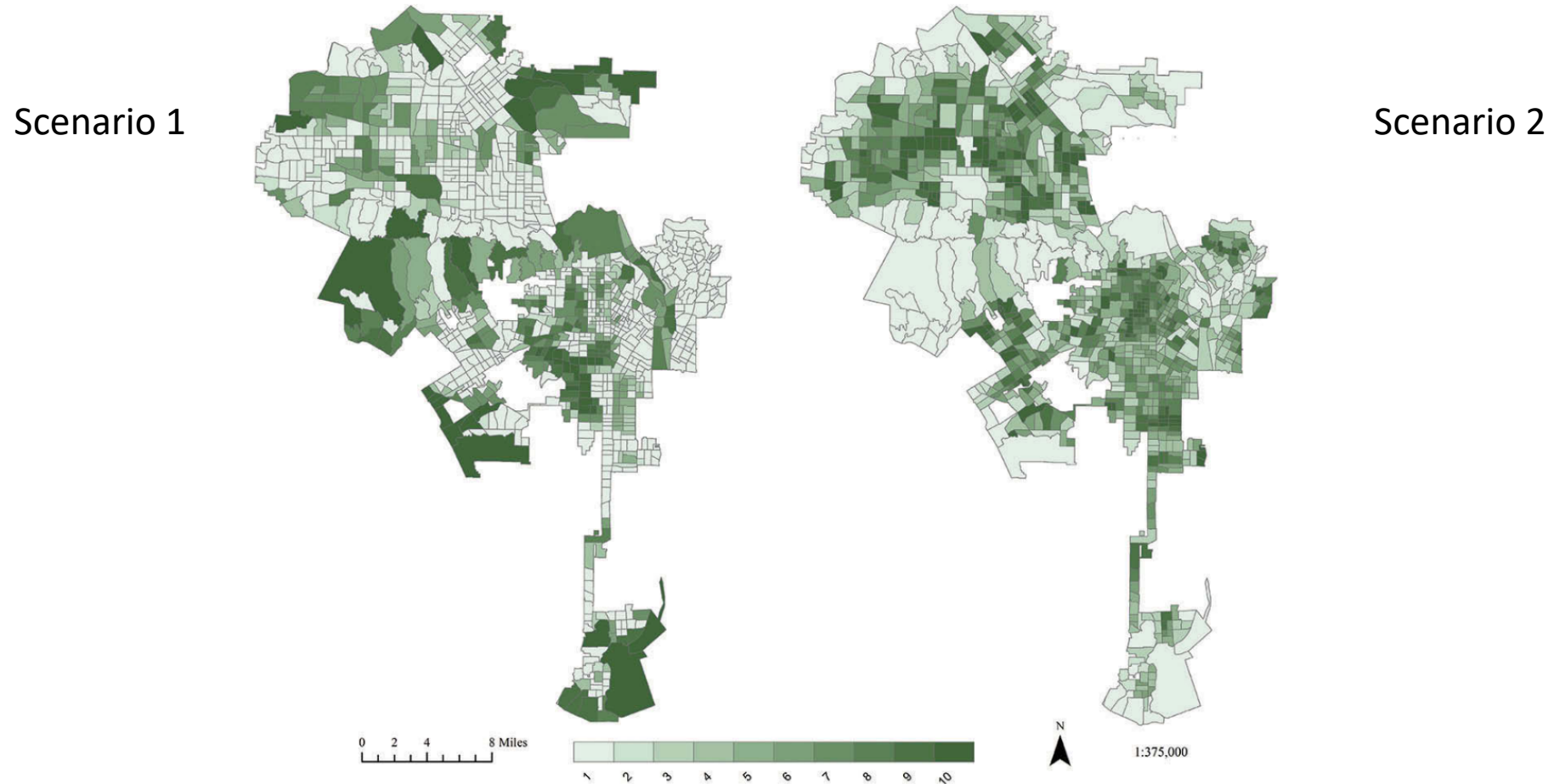


Figure 4. Priority census tracts for green infrastructure development in the City of Los Angeles based stormwater management (left) and access to green space (right)
Note: Maps show standardized census tract scores divided into 10 quantiles. Darker colors indicate higher priority.

Vulnerability (and resilience) is a combination of physical and social factors

2011 7.2 earthquake in Turkey



2010 7.2 earthquake in Mexico



Attempts to reduce vulnerability can cause harm



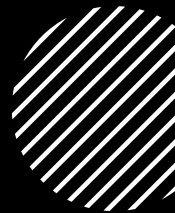
Evans, Colorado 2013 floods

- Damaged or destroyed 300 housing units including 208 mobile homes and market-rate affordable rentals
- Outside the regulatory floodplain
- Did not have flood insurance
- Jan 2014 Evans updated floodplain maps to put those areas inside the floodplain
- Seen as chance to “remove mobile home parks” –“othering of those who live there” but it is affordable..
- Concentrated vulnerability (lower income, disability, less connected to gov’t structures, language)
- Made reconstruction of mobile home parks cost-prohibitive
- No public resources committed to rebuilding affordable housing
- City doesn’t see it as its job to supply affordable housing (see job as public safety)
- Close-knit communities forced to move elsewhere, away from jobs, friends, others in community

We must work with
intentionality, humility
and true partnership



3 Core Tenets of Justice



Distributional – distribution of benefits and burdens

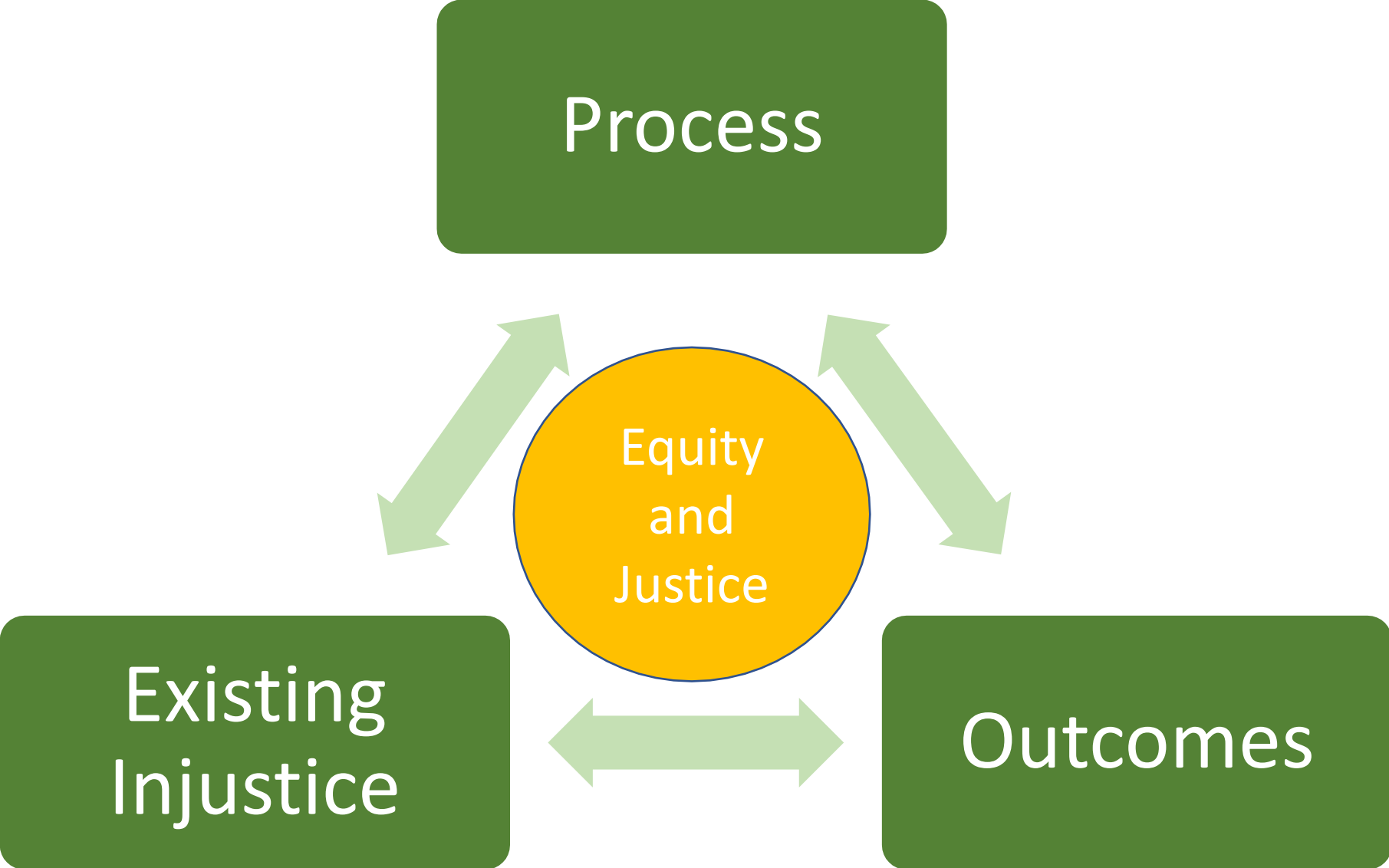


Procedural– who is included in the decision



Recognition– understanding and reconciling of historic and ongoing inequalities

Three elements essential to putting equity and justice into resilience plans and actions:



To be intentional in prioritizing equity and justice in resilience, the first questions we should be asking:

Table 1. The five Ws of urban resilience

		Questions to consider
Who?		Who determines what is desirable for an urban system? Whose resilience is prioritized? Who is included (and excluded) from the urban system?
What?	T R A	What perturbations should the urban system be resilient to? What networks and sectors are included in the urban system? Is the focus on generic or specific resilience?
When?	D E O	Is the focus on rapid-onset disturbances or slow-onset changes? Is the focus on short-term resilience or long-term resilience? Is the focus on the resilience of present or future generations?
Where?	F F S	Where are the spatial boundaries of the urban system? Is the resilience of some areas prioritized over others? Does building resilience in some areas affect resilience elsewhere?
Why?		What is the goal of building urban resilience? What are the underlying motivations for building urban resilience? Is the focus on process or outcome?

Note: Adapted from Meerow et al. (2016).

Denver, Colorado

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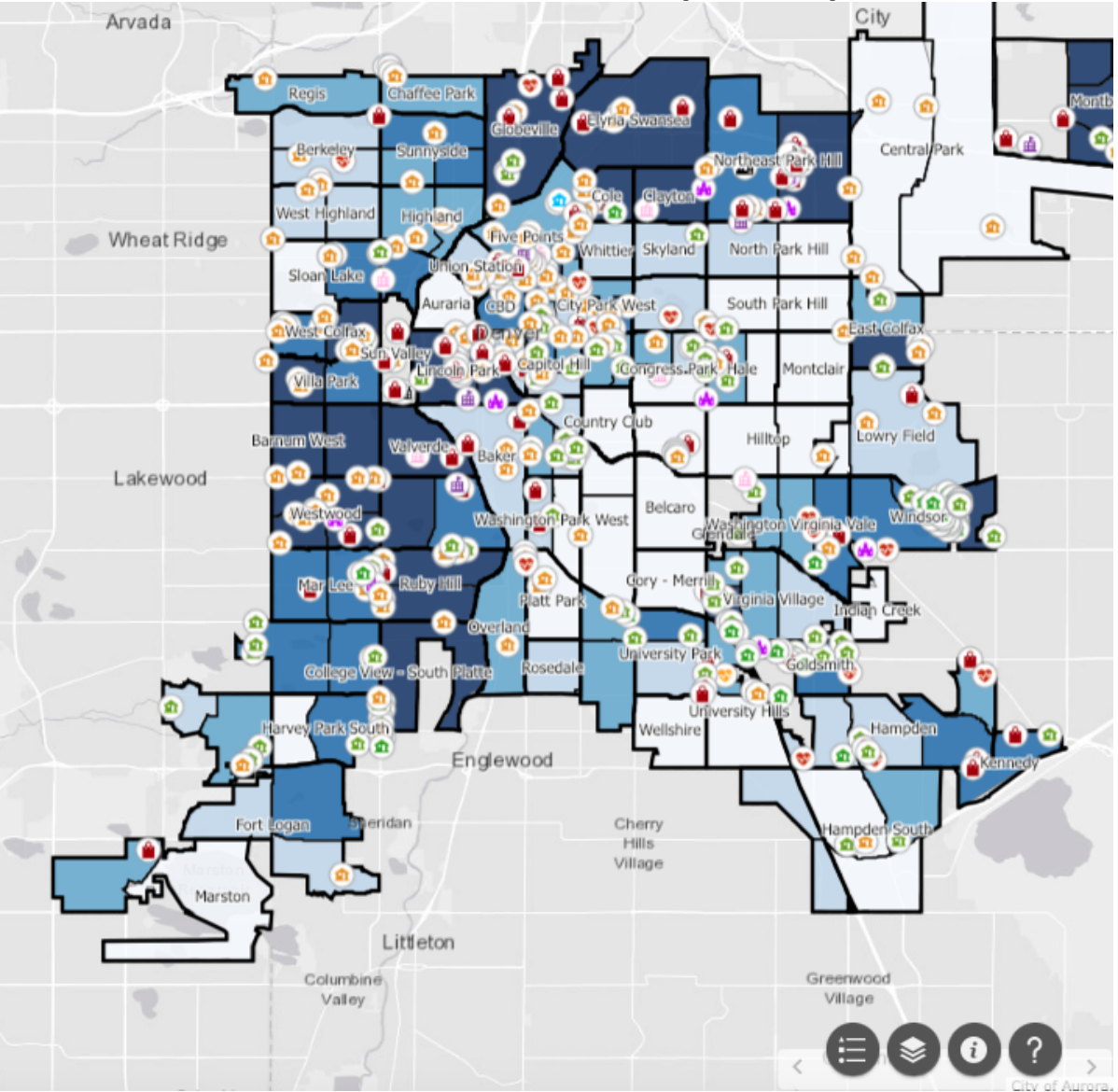


Climate Protection Fund

- Resident-led and City Council-supported ballot initiative approved in November of 2020 with 64% of the vote.
- New 0.25% sales tax.
- Estimated to generate aprox. \$40M annually.
- Six allowable uses.
- Requires 50% of the spending to directly benefit climate-vulnerable communities with focus on social & racial justice.
- City and County of Denver's Office of Climate Action, Sustainability and Resiliency (CASR) develops rules for and administers the Fund.

Denver's Equity Priority Building Initiative

<https://geospatialdenver.maps.arcgis.com/apps/webappviewer/index.html?id=784fff300fcb4b73b0088d622d76271a>



 **Identify** Identify Equity Priority Buildings

 **Engage** Engage the community

 **Avoid** Avoid unintentional harm through analysis and evaluation

 **Direct** Direct Investments and programming

Equity Priority Buildings: Berenice Garcia Telez, Denver CASR

Summary of Climate Rapid Assessments

Goals

- (i) Start a Dialogue with Denver's most vulnerable and under-resourced neighborhoods about the Climate Protection Fund.
- (ii) Receive input from community adults, youth and local leaders on the most urgent needs and major barriers for the Climate Protection Fund.
- (iii) Meet the people of Denver where they are, and develop durable partnerships with local neighborhoods.

The project conducted 10 neighborhood Climate Rapid Assessments (East Colfax, Elyria-Swansea, Globeville, Montbello, Northeast Park Hill, Sun Valley, Valverde, Villa Park, West Colfax, Westwood) with more than 550 participants, 30 focus groups and 50 neighborhood meetings.

Climate change and resilience is really “intersectional” – attending to justice and equity means recognizing what is needed to support communities that may not seem like “climate”.

E.g. Safe neighborhoods. Access to healthy food. Maintaining city infrastructure. Timely and appropriate police presence when called.

Success in Washington, DC?

11th Street Bridge project- Intentional green space with housing and jobs for poorest neighborhood



- Address deficit of green space in Ward 8 in DC
- Simultaneously put in place affordable housing protections and conversion to ownership with downpayment assistance, Homebuyers Club for low-income residents
- Build local businesses and job opportunities into the park
- INTENTIONALITY

A rendering of the 11th Street Bridge Park design, which got final approval in October (Courtesy of OMA+OLIN and Building Bridges Across the River)

Injecting equity into our resilience planning

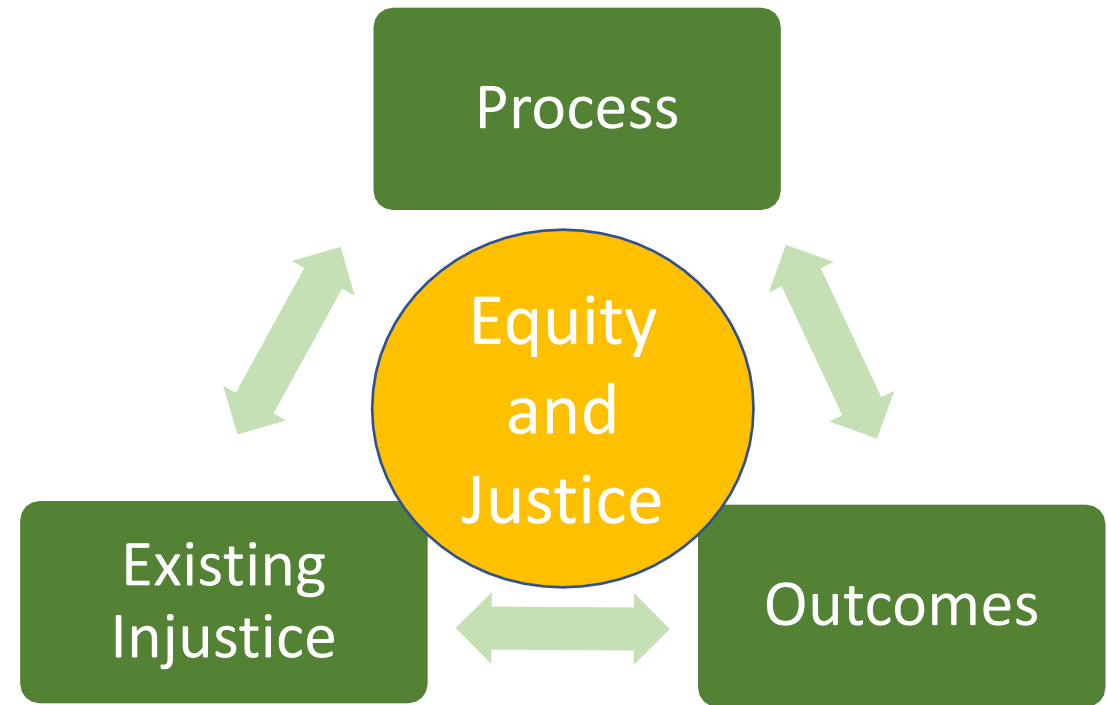
- Start with communities in planning – and not just NGOs who may be focused on parks or energy efficiency. Community members and organizations who are grass roots and embedded in the community
- Recognize that there are some trust deficits and action deficits. Are there some obvious and needed city services not currently being delivered to some communities?
- Recognize this is a long term, multi-step process
- Be intentional about equity and preserving the neighborhood character and housing available for low-income residents. **WITHOUT AFFORDABLE HOUSING NO ONE IS RESILIENT.**

Three reminders as researchers in climate resilience:

1. Climate resilience and climate justice are not only about climate
2. Creating tools or planning or even action ≠ Creating just outcomes
3. More holistic, INTENTIONAL, community-led planning **AND** appropriate action is needed to avoid exacerbating inequality

Bringing people into just and equitable resilience efforts-- The 3 Commitments:

- Commitment to process: Engage with true humility and partnership. Understand the problem(s) from point of view of those living them. “Nothing about us, without us”
- Commitment to reconciling: Identify actors with power to change and address existing resilience deficits in safety, maintenance. “Moving at the speed of trust”
- Commitment to outcomes: Transparency in tradeoffs, choices, and prioritizing community input. “First, do no harm”



Thank you!

Questions? Comments? ldilling@Colorado.edu

Thank you to Jorge Figueroa for sharing his work in Denver, Colorado