

# Keeping the “CO” in Community Co-design

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# What is participatory co-design and why community participatory co-design?

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Stronger, enduring community engagement is linked to community resilience



Participatory design methods allows community members to think further into the past and future, not be overly influenced by a recent event (i.e., what happened on the way to the building)

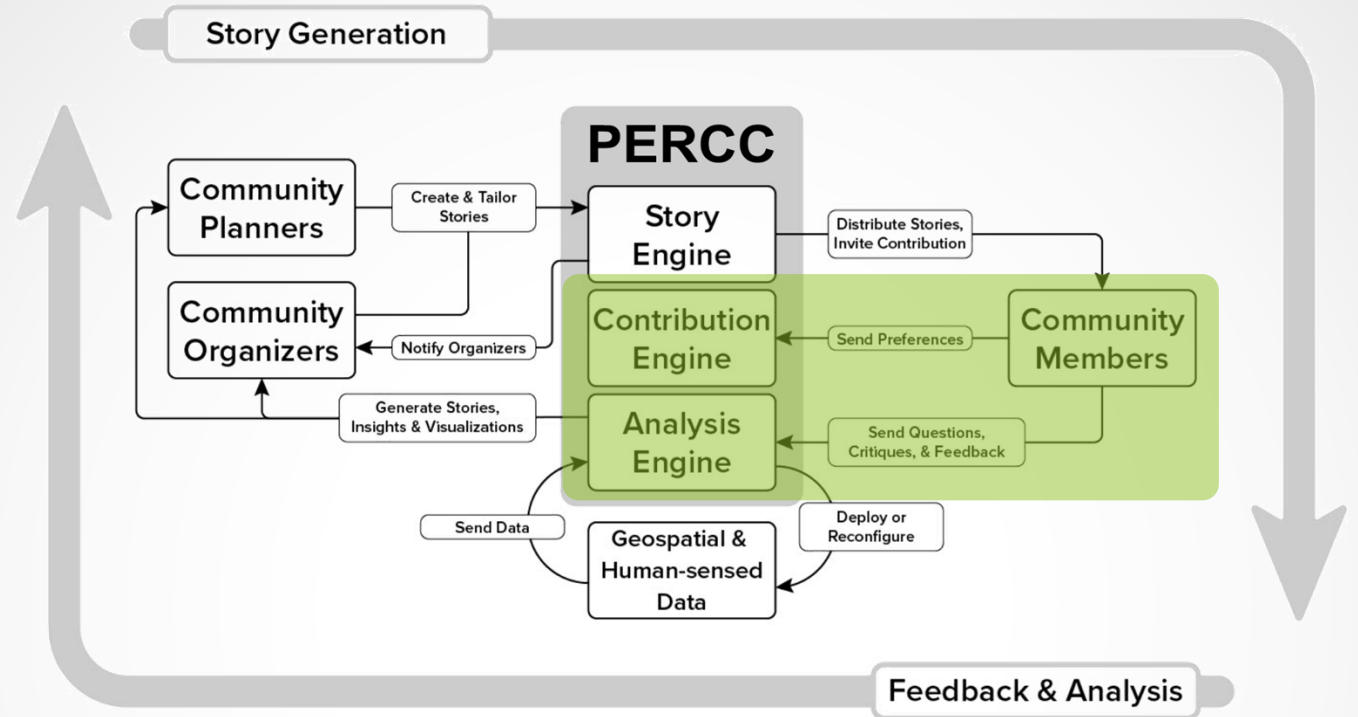


Participatory is fun!



Participatory co-design removes boundaries through play

# What is PERCC?



- Public Engagement for Reimagining Community Co-planning (PERCC; pronounced “perk”)
- 2-way interactive communication
  - Better Listening: Community → Planners & Organizers
  - Better Sharing: Organizer & Planners → Community
  - And vice-versa?
- We're focusing on the Community sharing, Planner & Organizers listening portion!

# Why PERCC?

## Problem

- **Fostering more inclusive and meaningful community engagement** in planning is a long standing and still unresolved challenge (Healey 2020).

## Hypothesis

- Our fundamental hypothesis is that **improving dialogue between planners and community will translate into more community participation in governance** (e.g., attendance at public meetings and events, increased participation in voluntary and paid local organizing and governance positions).



# What is PERCC trying to accomplish?



- The goal of PERCC goal is **widespread, inclusive community co-planning**
- The PERCC platform will accomplish this by:
  - **Integrating technologies to produce Machine Readable Co-design (MaRC) tools** by using AI and machine learning to gather evidence and personal stories from the community
  - **Translating and communicating evidence** into stories that are accessible and relatable to the community
  - **Including workflows and tools** for translating between digital and analog modalities in both directions, helping to overcome time, space, and technology barriers that restrict participation from current engagement events, such as in-person and virtual public meeting

# What is MaRC?

**Machine-Readable Co-design (MaRC)** is a set of technologies to facilitate the scale of community-generated data collection and analysis that PERCC will require to support meaningful co-planning

**MaRC Bullseye toolkit** will need to be able to successfully:

Determine geographic placement of materials used on Bullseye

Identify stock materials

Identify and interpret participant-created materials

Interpret all written and spoken words

**Human-Machine Teaming** will be utilized to ensure community stories are being captured and analyzed correctly

Human

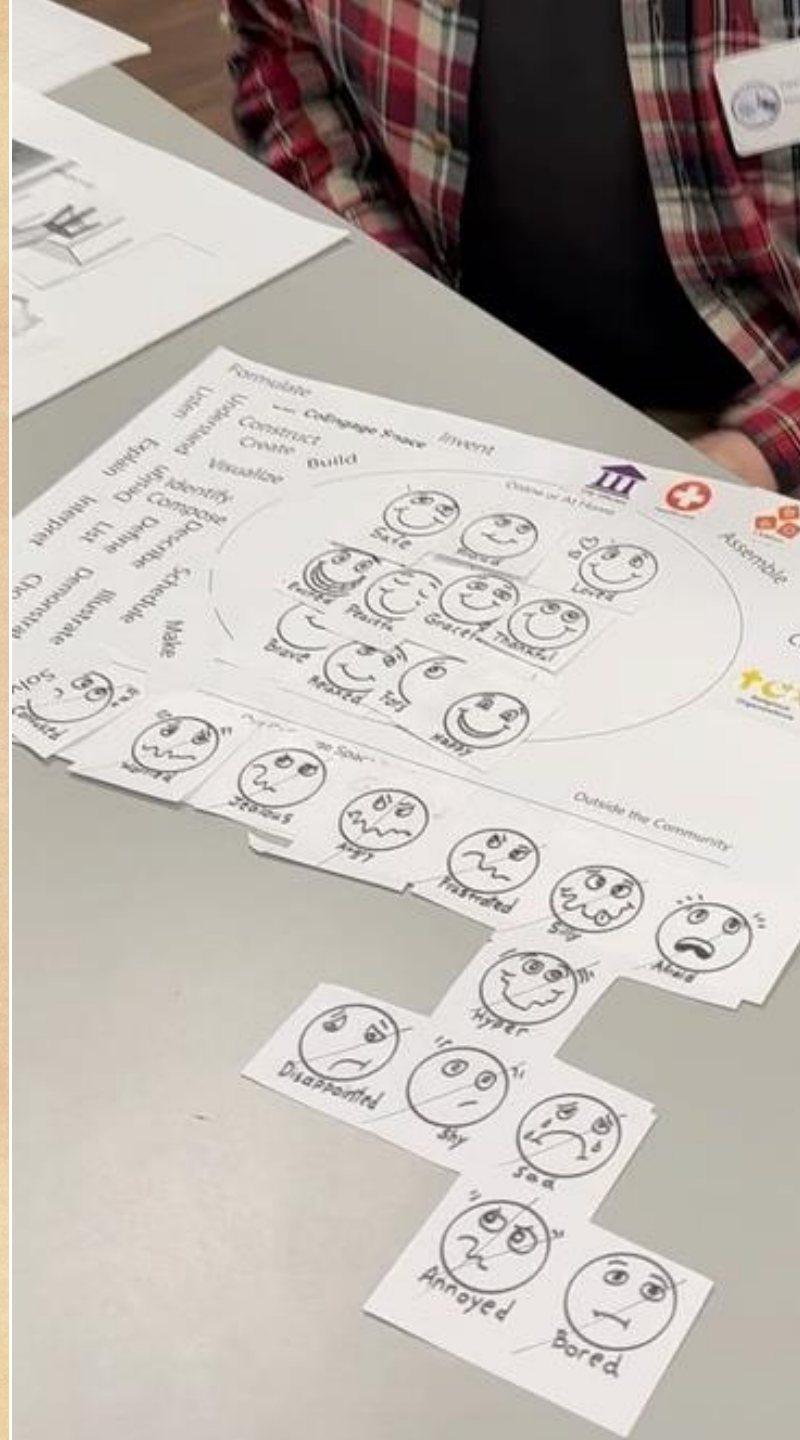
Machine

Interactions and interdependencies between humans and machines



But wait ...  
what is  
this?

Wait, it's  
messy!

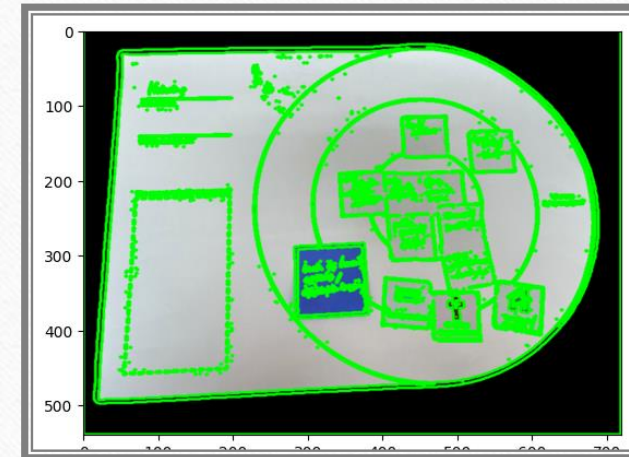
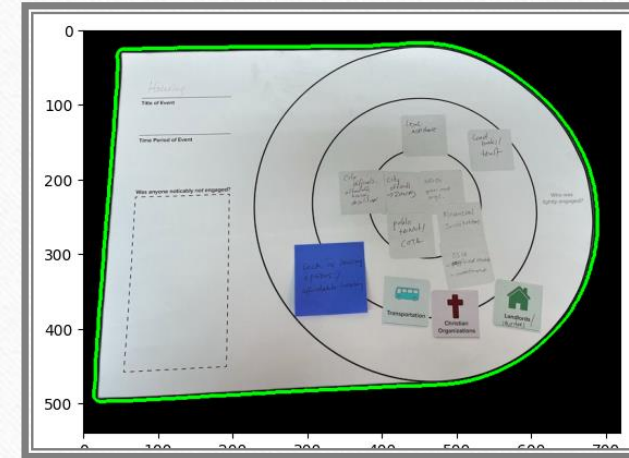




# Bullseye Contour Detection

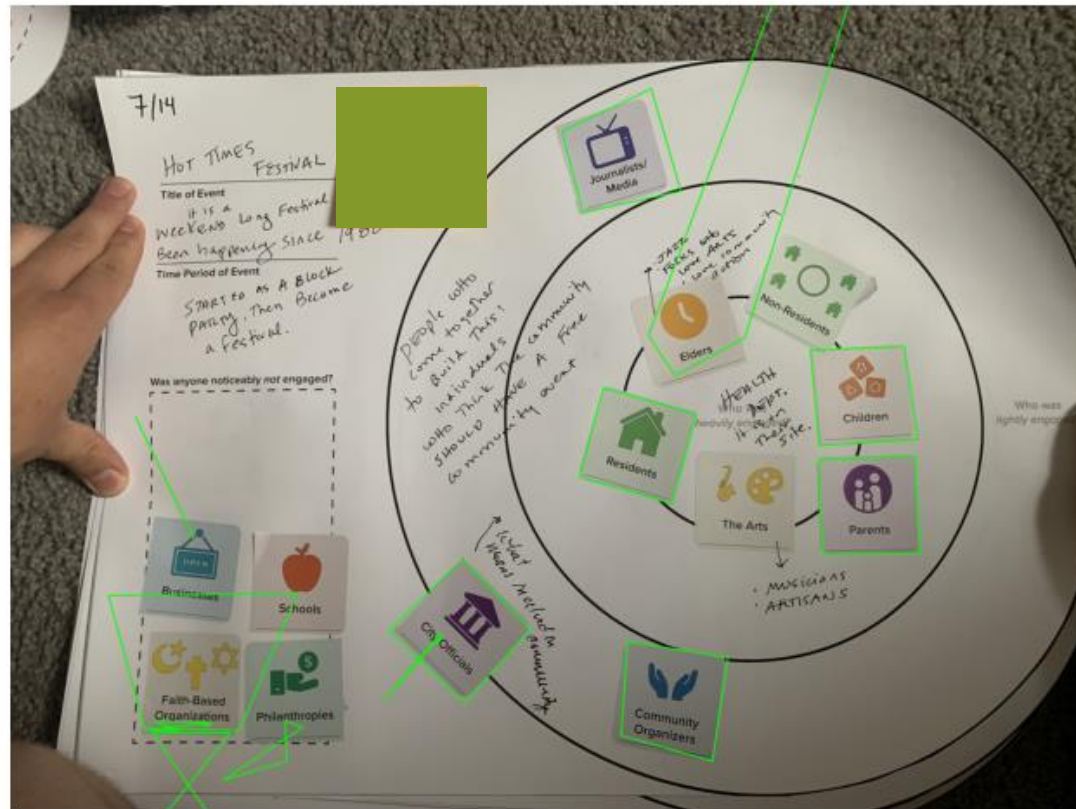
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1. Background removal
2. Find contours of bounding box, bullseye activity, and materials on bullseye
3. Using the contoured objects, determine the center of the bullseye and extract coordinates of contoured objects
4. Rank coordinates of stimuli and materials to determine importance



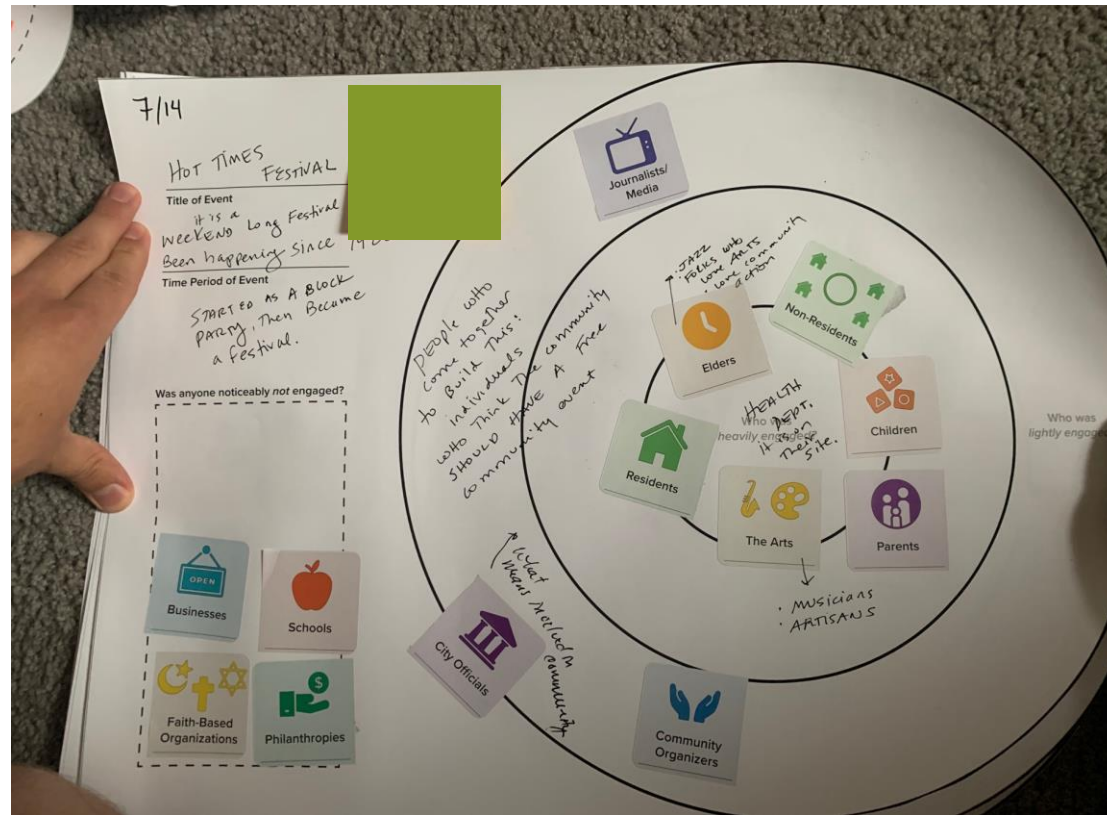


# Stimuli Contour Detection



- Template matching
  - Identify and match stimuli image to the correct category
- Text classification
  - Identify keywords (stimuli categories) from the clustered sentences

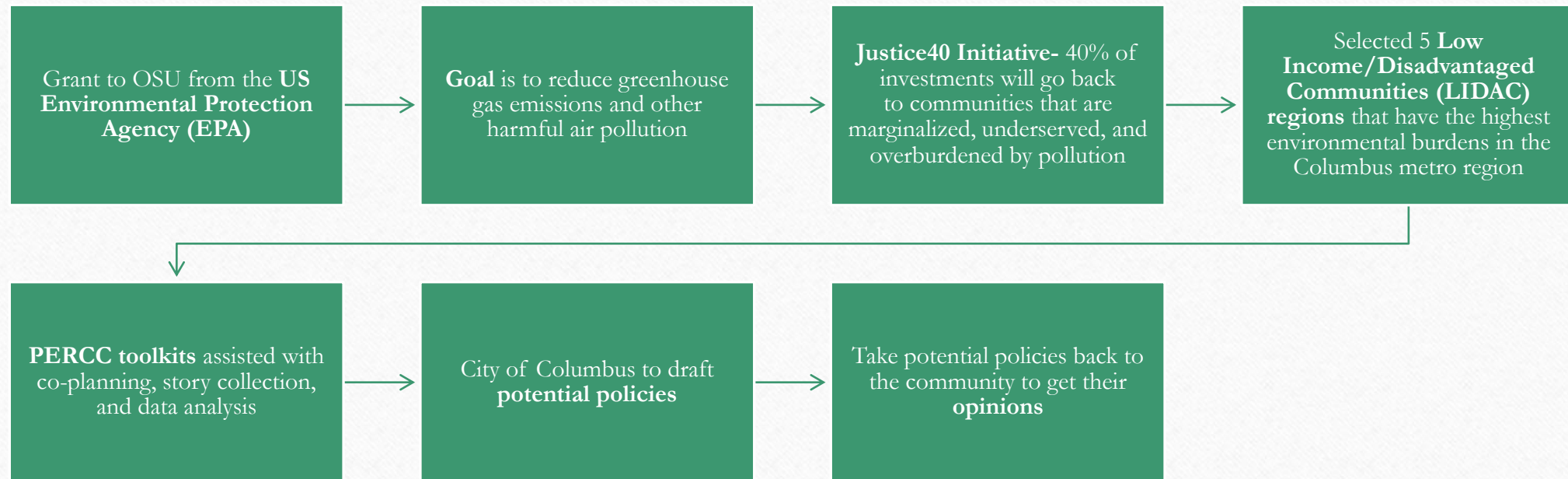
# Bullseye Text Detection



7/14 | 1 | HOT TIMES | 1 | Title of Event | it is  
 a | Weekend Long | FESTIVAL | Been happening | Time  
 Period of Event | Was anyone noticeably not  
 engaged? | OPEN | Festival | Since 1980 | STARTED AS A  
 BLOCK | PARTY, Then  
 Became | festival. | a | Businesses | Schools | Lynn | Stan | (614  
 )218-5613 | G+ ✨ | Faith-Based | Organizations  
 Philanthropies | LA | people cotto | Come together | to Build  
 This: | individuals | SHOULD HAVE | III | What | Weans  
 Moelved M | community event | City  
 Officials | Journalists/ | Media | community | A Free | Who  
 Think The community | IIIHO | JAZZ | FOLKS  
 WHO | Love ARTS | love  
 com | action | G | Residents | Elders | imunity | Community |  
 Organizers | heavily engn | It | Non-  
 Residents | Their | site. | The  
 Arts | 9 | ☆ | Musicians | ARTISANS | Children | O | 1 | Parent  
 s | Who was | lightly engaged?



# Past Project: Climate Pollution Reduction Grant (CPRG)



# Present Project: Near East Side Community


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- Why Near East Side Community?
  - For decades, this community has been negatively affected by numerous local and city policy decisions, including the construction of Interstate 71 directly through its center.
    - This has led to:
      - **Community distrust** in local and city authorities
      - A general **disconnect in priorities** and general understanding between the community and those authorities
      - **A steady decline in overall community participation** in civic activities (but intense participation by a subset)
    - Despite this, there has been a recent groundswell of community organizing to elevate and unify community interests.
  - PERCC has been working with the Near East Side Committee (NEAC) and community to co-design a MaRC toolkit that will capture community stories about wants and concerns




# Case Study Background

This envisioned scenario was co-created with 64 community residents and organizers of the Near East Side community of Columbus, OH.

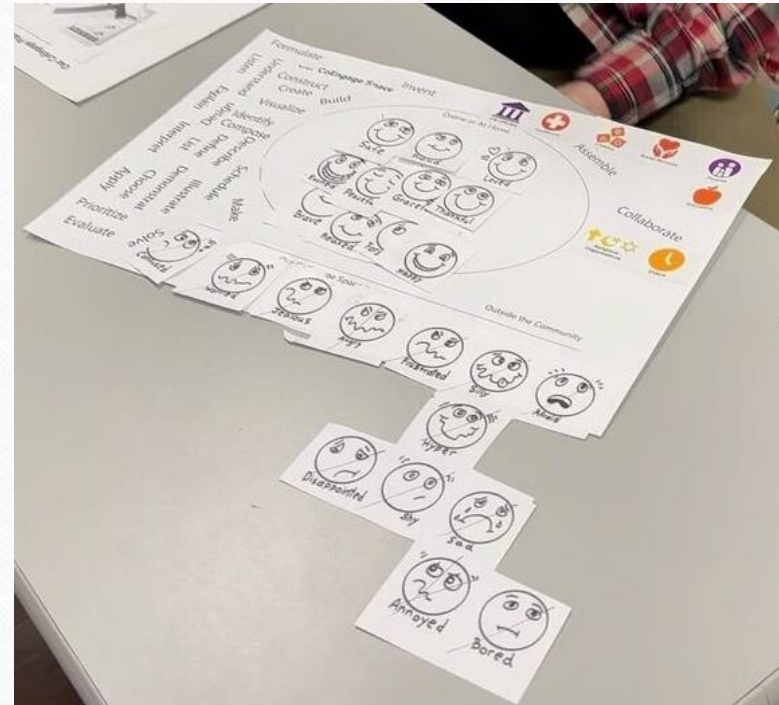


They prioritized what issues their community is facing, with 14 sharing in-depth past or envisioned future stories to further convey their perspective.



These activities took place within a two-block radius of the Bronzeville Growers' Market.

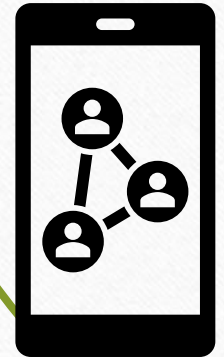
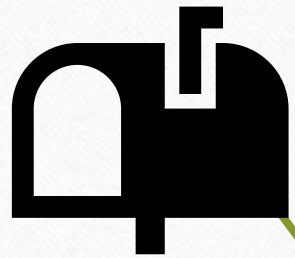
# Gathering Community Input



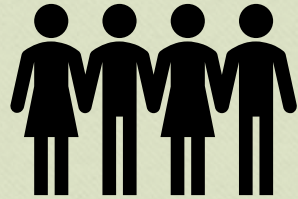


# Receiving Community Input

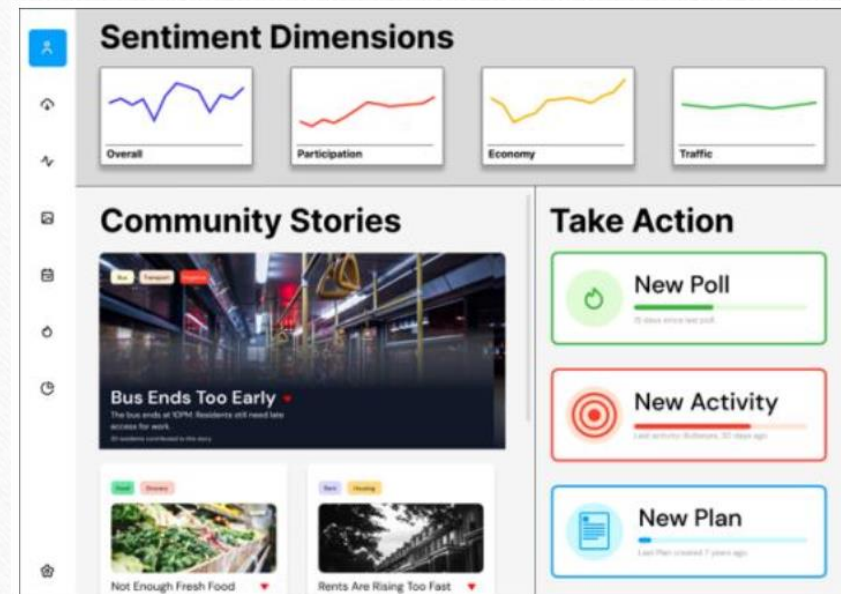
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# Understanding Problems




Human-Machine Teaming






# Engage the Community in Evaluation



## Not Enough Fresh Food

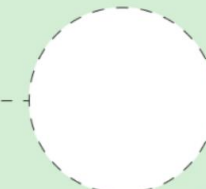
Fresh fruit, vegetables, and meat are currently difficult to access, but it was not always this way. 20 residents contributed to this story.

Less than fifty years ago, there was not only a grocery store on the Near East Side, there were multiple. Since the last of these groceries closed, there has not been a grocery store built to replace them. Multiple grocery stores have been proposed, including an Aldi which had a location selected. Despite these blockers over the years, the neighborhood has adapted. Check out the video and articles online for more histories about the neighborhood's past grocery stores and stories of current neighbors making an impact.



**Do you relate to this story?**  
Contribute your story about food access in the neighborhood on the back of this card and return mail.


Contact your planner at (614)XXX-XXXX PERCC@co.oh.gov 123 State St.



**This week from PERCC**  
Bullseye Workshops at your local library  
M-Saturday 9A-7P

**Near East Commission Meeting**  
Thursday 7-8P

View the new Grocery concept video.  
Go to [bit.ly/grocery\\_concept](http://bit.ly/grocery_concept), use the QR code above, or ask your local librarian.



## Share your experience

How far away is the grocery store you use?  
from home \_\_\_\_\_ miles  
from work \_\_\_\_\_ miles

How well is the city addressing food access in your neighborhood?  
 Very Poorly  
 Poorly  
 Neutral  
 Well  
 Very Well

How do you get to the grocery store?  
 Car  
 Bus  
 Bike  
 Walk

Share with a Bullseye!  
 I would like to receive a bullseye at home.

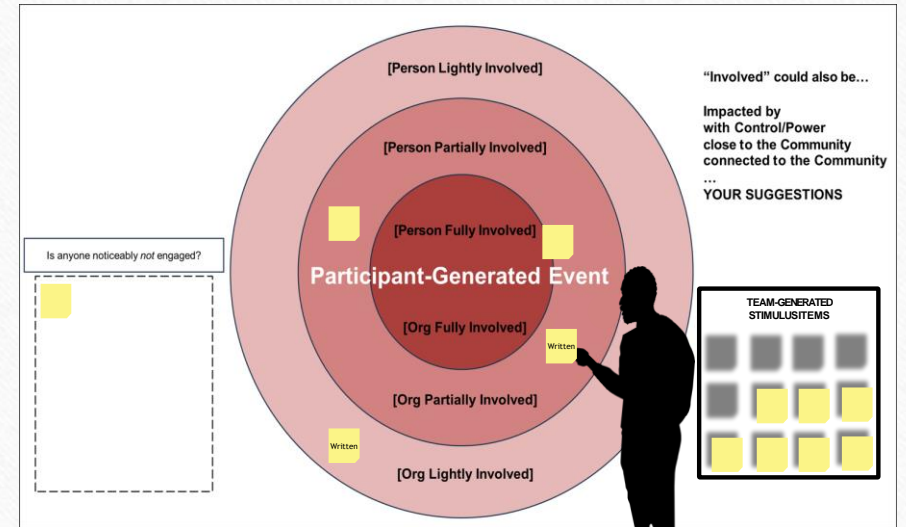
PERCC  
123 State St.  
Columbus, OH

Contact your planner at (614)XXX-XXXX PERCC@co.oh.gov 123 State St.



# Communicate, Implement and Monitor New Neighborhood Plan

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# Next Steps

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- Facilitate **co-design sessions** with Near East Side community members to build requirements of:
  - How MaRC toolkits will be delivered to the community (electronically and in physical form)
  - How community members will build stories with it
  - How they will narrate the stories, and how they will send the stories in for analysis
  - How they want to see the results of that analysis
- Send out **MaRC toolkits**
- **Update our online engagement strategies** to reflect community feedback
- **Present initial findings** to the Near East Area Commission (NEAC) as well as an online and physical version shared to the community
- Future: Envision that PERCC will represent an important first step and lessons learned will **translate to other communities nationwide**