

*Putting*  
**Youth**  
*on the Map*

Making Youth  
Data Matter  
Curriculum

2nd Edition

Center for  
Regional  
Change

2017

**UCDAVIS**  
CENTER FOR REGIONAL CHANGE

## UC Davis Center for Regional Change (CRC)

The CRC is a catalyst for innovative, collaborative, and action-oriented research. It brings together faculty and students from different disciplines, and builds bridges between university, policy, advocacy, business, philanthropy and other sectors. The CRC's goal is to support the building of healthy, equitable, prosperous, and sustainable regions in California and beyond. Learn more! Visit the CRC website. To contact us directly, email [crcinfo@ucdavis.edu](mailto:crcinfo@ucdavis.edu) or call us at (530) 752-3007.

Visit the CRC's website at

<http://regionalchange.ucdavis.edu>

Email: [crcinfo@ucdavis.edu](mailto:crcinfo@ucdavis.edu)

Phone: (530) 752-3007

Fax: (530) 752-5056

2019 Wickson Hall, One Shields Ave,  
Davis, CA 95616

# TABLE OF CONTENTS

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04

ACKNOWLEDGMENT



05

INTRODUCTION



06

CURRICULUM OVERVIEW

10

Curriculum Organization



12

CURRICULUM MODULES

13

Module 1

22

Module 2

30

Module 3

47

Module 4



59

OTHER RESOURCES

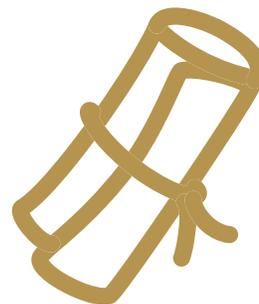


61

APPENDIX

# ACKNOWLEDGEMENT

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On behalf of the UC Davis Center for Regional Change (CRC), I am thrilled to share this new curriculum, Making Youth Data Matter. This curriculum represents a powerful example of the CRC's mission to develop collaborative research to inform the building of healthy, prosperous, sustainable regions in California and beyond. It also represents a labor of love for many CRC-affiliated faculty, staff, students and community partners. In particular, I would like to acknowledge the leaders in the development of this resource.

- Dr. Nancy Erbstein, Department of Human Ecology, built on her decades of experience with Youth-Led Participatory Action Research to lead the Making Youth Data Matter project.
- Mr. Sergio Cuellar, the CRC's Community Outreach and Engagement Coordinator, drew on his youth empowerment expertise to co-lead curriculum development and lead the piloting of the curriculum.
- Dr. Sheryl-Ann Simpson, Department of Human Ecology, applied her expertise in participatory planning to co-design the curriculum.
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We are thankful for the generous financial support from The California Endowment and the University of California Center for Collaborative Research for an Equitable California.

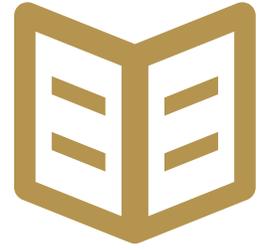
Finally —and most importantly -- we express our awe and inspiration from the thousands of typically under-represented youth who aim to create a healthier, more just world through use of research and action.

In partnership,

Jonathan London  
Director, UC Davis Center for Regional Change

# INTRODUCTION

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The past twenty-five years have brought exponential growth in the field of youth participatory action research (YPAR). During this same time period, our ability to access, analyze, visualize and share data and analyses has increased tremendously. However, efforts to ensure that young civic actors have full access to these information resources have been limited. With this curriculum we aim to support young researchers' access to and use of data and analyses that may complement their social change efforts—potentially as context, as additive information, and/or as a focus of critique and further development.

Beyond providing information and skills to access online data maps, other tools to support participatory mapping, and ideas about how to use these analyses to inform community change, this curriculum cultivates critical geographic data literacy. By critical geographic data literacy, we mean the understanding that data, maps and research are powerful tools that can be used to empower or disempower and cause ease or dis-ease, the knowledge that no single dataset provides a complete and complex vantage point on experience, the skills to use geospatial data and research responsibly in this context, and active engagement in what it means to employ geographic agency for social good.

This curriculum is aimed not only at young people, but at adult allies who support and collaborate with them. We provide here a set of strategic lessons and activities that can be tailored to multiple contexts (e.g. out-of-school youth and community programs, classrooms, organizing initiatives, leadership fellowships, etc.).

# CURRICULUM OVERVIEW

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The curriculum includes four modules: (1) Map Matters, (2) Introduction to Putting Youth on the Map, (3) Digging into Putting Youth on the Map, and (4) Putting Youth on the Map for Change.

## MODULE 1: MAP MATTERS

Map Matters activities provide opportunities to consider why we should care about data and maps.

### Activity 1.1: Data and Mapping Breakdown

- Youth participants share how they feel about data and mapping, how they use maps in their lives, whether/how they use maps and data in their community change work, and where the data and maps they use come from.

### Activity 1.2: Mapping Matters

- Youth participants explore how maps have been used to oppress and resist through a skit-based activity focused on the impacts of redlining and (un)incorporation.

### Activity 1.3: Mapping in Our Community

- This activity involves bringing in local speakers or speakers on locally relevant efforts to share how maps are being used to create positive community change.

## MODULE 2: INTRODUCTION TO PUTTING YOUTH ON THE MAP (PYOM)

Introduction to Putting Youth on the Map provides an overview of PYOM resources and how to navigate the online tool.

### Activity 2.1: Map Chat

- This activity introduces key terms through creating group body sculptures in order to begin preparing youth to use, produce and present data maps.

### **Activity 2.2: PYOM Overview**

- Youth participants review a prezzi for a quick overview of PYOM, why it was built, what indices are featured and what they can do with the tool.

### **Activity 2.3: How to Create Maps**

- After a live review of how to navigate PYOM, youth participants complete a scavenger hunt that involves looking for data on their communities and also comparing their communities to others.

## **MODULE 3: DIGGING INTO PUTTING YOUTH ON THE MAP**

Digging into Putting Youth on the Map provides a deeper understanding of analyses and maps available on the website and builds capacity to critically use data.

### **Activity 3.1: Vocabulary Relay Race**

- Teams of youth race to link up key terms to definitions in order to review terms introduced through Map Chat.

### **Activity 3.2: Body Mapping**

- Although adult policy-makers, practitioners and researchers tend to treat youth through silos such as “education,” “health,” etc., young people experience these issue areas as interconnected. One Putting Youth on the Map tool—the Youth Well-Being Index (YWI)—provides a holistic measure of youth wellness to help facilitate holistic approaches to supporting young people. This activity begins to introduce the YWI by having participants draw a map of a body, label body parts with related YWI domains, list out barriers they’ve experienced with respect to each domain/body part and identify how these domains are interconnected.

### **Activity 3.3: PYOM Jeopardy**

- Youth learn about what an index is through comparison with a school report card and hear about two Putting Youth on the Map indices. Participants then team up to play Indices Jeopardy to reinforce their new index knowledge.

### **Activity 3.4: Youth Vote Breakdown**

- Youth learn about California Civic Engagement Project Youth Voting Data. Participants will learn about how to use youth voting data as part of their advocacy and action strategy.

### **Activity 3.5: Beyond Indices**

- Youth participate in another scavenger hunt to explore other types of data maps available on Putting Youth on the Map related to their local advocacy interests, including those illustrating Youth Demographics, Food Access, Transportation Access, Youth Voting, Adequacy of Financial Resources, Truancy and Suspension rates and more.

### **Activity 3.6: The Data-ing Game**

- The Data-ing Game helps youth become critical data consumers who understand how to assess data/map quality and know that all data have limitations. Using the model of the Dating Game show, participants help Map match up with the best possible Dataset. Dataset participants answer questions about: the trustworthiness of their source, their representativeness, their accuracy and their visual display. The audience supports Map's deliberation about which dataset is the best match, given Map's objectives. Choices are increasingly less clear over three rounds.

## MODULE 4: PUTTING YOUTH ON THE MAP FOR CHANGE

Putting Youth on the Map for Change provides opportunities to practice PYOM resources in combination with local knowledge to make change.

### **Activity 4.1: Getting to Know PYOM Resources**

- Youth learn about PYOM resources to support Participatory Action Research (PAR), including links to other online youth data and data map sources, links to online participatory mapping tools, and examples of youth mapping to make change.

### **Activity 4.2: Other Tools for Community Change**

- Youth are introduced to other tools for change, Participatory Action Research (PAR) and Participatory Mapping. Youth learn concepts, see examples and create their own maps.

### **Activity 4.3: YPAR/Mapping Simulation**

- Youth complete a Participatory Action Research project simulation, exploring the issues of food access and student success on PYOM, mapping data based on their local knowledge using Google Maps and using their findings in an advocacy context.

### Curriculum Organization

The guide is organized in four sections, reflecting each of the modules. Within each section are instructions for all activities. Supplemental materials for specific activities are provided in appendices. We've engaged youth in the full curriculum using various timelines: a two-day workshop, four four-hour sessions, and two-hour sessions twice per week over several weeks. Here each module is presented as one workshop, however we encourage users to adapt these lesson plans to local program structures, youth interests, and community resources and needs.

Each activity plan includes the following elements.

#### **Goals**

These reflect specific goals for the participants (e.g. to familiarize participants with the PYOM site) and, in some cases, for the facilitator (e.g. to find out how familiar the participants are with online mapping).

#### **Materials Needed**

Items needed for the activity (such as chart paper, markers, game materials, etc).

#### **Activity Preparation**

Facilitator preparation required to facilitate this activity, including:

- Required prep which is crucial to activity success (for example, accessing key weblinks or preparing activity printouts);
- Highly recommended prep that may be very useful in helping an activity run smoothly; and
- Recommended prep for facilitators who are unfamiliar with mapping.

#### **Preparation Time**

Estimated time needed for preparation.

#### **Activity Time**

Estimated time for the full activity (assuming approximately 15 participants).

### **Introduction and Key Concepts**

An overview of key activity concepts and suggested language for introducing the activity.

### **Activity Instructions**

Step-by-step instructions for each part of the activity.

### **Activity Debrief**

Discussion questions to reinforce key concepts, assess participants' understanding of key concepts and clarify links between the activity and the overall focus on using data mapping to support community change.

### **Suggested Language**

Key points for the facilitator to make, with suggested language (feel free to adapt the language provided here as appropriate for you and youth participants).

### **Facilitator Notes (will run throughout the document)**

Tips, suggestions, language reminders, etc. to assist the facilitator in successfully running the workshop and adapting it to local interests, needs and resources.

### **Sharing Your Experience**

We welcome your feedback on this curriculum and your implementation ideas! To learn about upcoming training opportunities, share feedback with the Center for Regional Change and tell others about how your community is using these tools, please email [rcinfo@ucdavis.edu](mailto:rcinfo@ucdavis.edu) or call us at (530) 752-3007.

# CURRICULUM MODULES

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01

Map Matters

02

Introduction to Putting  
Youth on the Map

03

Digging Into Putting  
Youth on the Map

04

Putting Youth on the  
Map for Change

## MODULE

# 01

## Map Matters Agenda



### Goals

- Develop an understanding of the importance of data and mapping
- Understand how data and mapping have been used historically
- Discuss how data and mapping can be used in your local work

### Agenda

180 min



Check-In/Introduction

15 min

Ice Breaker

30 min



Workshop Series Introduction

10 min

Activity 1.1A: *Data and Mapping Breakdown pt. 1*

25 min

Break

10 min

Activity 1.2: *Mapping Matters*

55 min

Activity 1.3: *Mapping Impacts at Home*

25 min

Activity: 1.1B: *Data and Mapping Breakdown pt. 2*

20 min

Next Steps/Closeout

15 min



## Facilitator Notes

- 1) This template demonstrates how to present the curriculum via a one-day training per module. However, the modules can be presented in many different ways to fit various schedules.
- 2) Ice Breakers and Team Building activities are a great way to get youth ready and energized. Have ideas on hand and feel free to use them throughout.
- 3) It's important to check in and check out of every meeting. This will support facilitation by providing information about young people's readiness to engage with the challenging, and often personal, issues being discussed, as well as their understanding and feelings at the end of the day.

## Activity 1: Data and Mapping Breakdown

### Goals

- De-mystify data and maps/mapping
- Create community maps and plot out relevant happenings and patterns
- Start learning to be critical consumers of data

### Materials

- Chart Paper
- Markers
- Tape
- Issue Cards (Appendix I.1)

### Prep Work

- Prepare issue cards
- Prepare map to model activity for students

60 min



### Introduction and Key Concepts

**Suggested Language:** We're going to be talking about who produces maps and data and how they can be used. Before we jump in, I want to get to know a little about how you all experience maps.



### Ice-Breaker Discussion Questions

- o How many of us have used maps before?
- o How have we used maps?
- o Who created the maps?
- o How have we seen data and maps used (for example, in our schools, in this organization's work, in other agencies)?

**Suggested Language:** Maps are very important for all of the reasons you have stated. And we can start to see how maps can be helpful and possibly hurt our communities. Over the next while, we're going to learn more about the importance of using maps and data and introduce you to a tool that will help you use maps and data for the work we're doing in our community. So before we dive into all of that, we want to start off by having you all show us the community from your viewpoint by making a map.

## Activity I.I.A: cont.

20 min



## Instructions

- Break participants into pairs.
- Have each pair take a sheet of chart paper.
- Ask each pair to create a map of their community (i.e. the community where they live).
- Ask participants to outline the boundaries of their communities and to put up community landmarks (such as schools, parks, city hall, etc.).
- Ask each pair to also brainstorm about
  - places that youth hang out or spaces that youth often fill;
  - personal landmarks (e.g. places the participant or their family frequent, places that participants think are special or supportive, and/or places participants try to avoid).
- Give each group 1 minute to present their maps.

**Debrief with these questions:**

- How did it feel to create the maps?
- Was it difficult to decide what to put on your map?
- Why did you choose the points on the map that you shared?
- Even though we created maps of the same community, did you see differences?
- What does that tell you about maps and who creates them?



**Suggested Language:** So when we use maps we need to be aware of who made the map, for what purpose and from what perspectives. Good job on your maps, hold on to them because we will be using these maps again later in the day.

### Activity 1.1.B: cont.

20 min



**Suggested Language:** (For use *after* Activity 1.3) Let's go back to the maps you created and start to tell a deeper story of your community. Earlier you presented maps of some of the cool and important places, as well as some of the youth spaces. Now that we've seen the impact that maps can have on building communities, we want you to depict where young people are experiencing issues in your community.

#### Instructions:

- Provide each pair of participants with a stack of issue cards.
- Have them place issue cards on their map where youth are experiencing them.
- Encourage participants to draw more on their maps, connect multiple issues to one place or connect multiple places to a single issue if necessary.



#### Presentations

- Ask each pair to present their maps. Have the participants share:
  - Where they put the issues on the maps;
  - Why they placed the issues in those locations;
  - What they know about the issue;
  - Ideas about how to address the issues (think about the positive resources on the map!).

#### Debrief using these questions.

- How did it feel to place the issues on your maps?
- Do you see how maps can help tell community stories?
- What are some ways that maps can be used to affect your community?



### Activity I.I.B: cont.

**Suggested Language:** Thank you for sharing community stories. The issues that you placed on the maps are reflected in the UC Davis Center for Regional Change Youth Well Being Index and Youth Vulnerability Index maps, as well as other maps available on Putting Youth on the Map. This is an interactive web-based mapping tool that allows you to create and print maps to help you use data to make community change. We'll dive in to Putting Youth on the Map in the next module.



### Facilitator Notes

- 1) We want to get a basic understanding of the participants' views regarding data and mapping.
- 2) Remember, these are suggested remarks—please feel free to adapt the language and content as appropriate to your site.
- 3) For this exercise if you have youth from different communities, you might want to pair folks from the same communities together.
- 4) To give the youth participants an example, create your own community map that includes the landmarks suggested by the prompts.
- 5) Highlight that almost all maps to some extent reflect the interest and knowledge of the map maker(s) and that the maps can be easily manipulated to tell a certain story.
- 6) Using the community map that you showed earlier, provide an example for this part of the exercise. Use issue cards and also drawing on the map to show how the participants can be creative with the ways they mark and describe the issues.
- 7) Use this conversation to help get the participants thinking about how maps can be used to strengthen their community, as well as how maps can be used to harm communities.

## Activity 1.2: Mapping Matters

### Goals

- Learn how maps can be powerful tools
- Understand that maps can be used to oppress and make change

### Materials

- Mapping Scenario Sheets (Appendix 1.2.A and 1.2.B)
- Chart Paper
- Markers

### Prep Work

- Print out Scenarios and maps
- Get familiar with both the Scenarios and Subjects

30 min



## Facilitator Notes

- 1) Suggested remarks: feel free to adapt the language and content for your site.
- 2) Think of ways that your life has been affected by maps. You might have a story about your community where you grew up, or about your family histories. For example, one family history described by a facilitator highlighted how the shifting of Mexican/US borders on the map resulted in his family suddenly finding themselves living in the US rather than Mexico. The goal is to show how maps can help to tell your story.
- 3) These scenarios can be overwhelming, especially if this is the first time that participants have heard about redlining and/or unincorporated areas. Preparing adult or youth co-facilitators to support participant understanding can be helpful. If you are the sole facilitator for the activity, ensure that you make yourself available to each group to assist them and consider extending the time allocated to this activity.

Activity 1.2: cont.

55 min



Introduction and Key Concepts:

05 min

- **Suggested Language:** Now that we have discussed Data and Mapping and our experiences with them, we will look at how maps have been used as a powerful tool—a tool of oppression and a tool for social justice. We will also learn about their impacts in our communities.
- Facilitator gives an example of how maps and/or data have affected their own life.
- **Suggested Language:** Now let's take a look at some other examples of how data and mapping have been used to impact communities.



Activity Instructions

**Activity 1.2.A (Preparation for Role Playing)**

25 min

- Break participants into 2-4 groups.
- Hand each group a scenario sheet.
- Have groups take 20 minutes to:
  - Read through the scenario;
  - Answer the guiding questions;
  - Develop a 3-minute role-play based on their scenario.



**Activity 1.2.B (Role Play Presentation)**

15 min

- Have each group perform their 3-minute role-play and answer questions from the rest of the group.

**Activity Debrief**

10 min

- Debrief as a full group using these discussion questions.
  - What jumped out at you about these scenarios?
  - What was the role of maps in these scenarios?
  - Who used the maps, and how did they use them?
  - Do you see the effects of these types of practices in your community?
  - Do you think that these kinds of practices have lasting impacts on communities?
  - Could either of the scenarios be seen as a positive way to use data and maps?
  - What do you feel about the power of mapping and data after this exercise?

## Activity 1.3: Mapping in Our Community

### Goals

- Learn about mapping efforts that have been used for community change in our own communities
- Have youth start thinking about how they can use maps and data in the work that they are currently involved in

### Materials

- Powerpoint or other presentation materials
- Maps or reports



### Prep Work

- Prepare a presentation of mapping work that is being conducted in your community and that is creating positive changes; Or
- Bring in a representative of the mapping project to speak of their process and the impacts of the mapping work in the community.



## Facilitator Notes

- 1) The materials used for this presentation will depend on who you are bringing in to present the mapping work in the community. Please ensure that these materials are all youth-friendly in nature.
- 2) Prior to bringing in a guest speaker or presenter, you can prepare the youth by discussing what the presentation will be about. You can also ask them to brainstorm questions that they may want to ask the presenter. This can help with the group dynamics in situations where the participants do not feel comfortable enough to ask questions immediately after the presentation.

## Activity 1.3: cont.

25 min



## Introduction and Key Concepts:

- **Suggested Language:** We have now seen how maps and data have historically impacted communities through practices like redlining and unincorporated areas. But now we want to look at how our own community is using maps and data to create change. Today we have brought in [insert presenters name] to speak about how they are using maps and data to create change in our community.

## Activity Instructions

- Presentation
- Question and Answer Session
  - Ask the participants if they have questions about the presentation, the mapping project and its impacts on the community.

15 min

05 min



## Activity Debrief

- Debrief using these discussion questions:
  - Has anyone heard of the work presented?
  - How do we feel about using maps for our own work in the community?
  - How can you see yourself using maps to support the work that you are doing in your community?

05 min

MODULE

# 02

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## Introduction to Putting Youth on the Map

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### Goals

- Introduce PYOM as an interactive tool
- Learn about the possibilities and limitations of PYOM
- Gain a basic understanding of navigating the PYOM site

Agenda	<b>125 min</b> 
Check-in/Introductions	05 min
Team Builder	05 min
Review/Overview	05 min
Activity 2.1: <i>Map Chat Sculptures</i>	30 min
Activity 2.2: <i>PYOM Overview</i>	20 min
Break	05 min
Activity 2.3: <i>How to Create Maps</i>	45 min
Next Steps/Closeout	10 min

## Activity 2.1: Map Chat Sculptures

### Goals

- Become familiar with mapping terms

### Materials

- Vocabulary term sheet
- Vocabulary term and definition cards

### Activity Preparation

- Prepare a mapping sculpture to model for the youth
- Print and cut out Vocabulary Sheet (Appendix 2.1.A)
- Print and cut out Vocabulary Term Cards (Appendix 2.1.B)

30 min



### Introduction and Key Concepts

**Suggested Language:** Putting Youth on the Map (PYOM) is a great tool for youth advocates. PYOM puts data into the hands of youth to amplify their voices and experiences. But it's not enough to just learn how to use the tool. You must also learn the language of data and mapping. Why do you think that's important?



## Activity 2.1: cont.

30 min



## Instructions

**1. Vocabulary Review and Map Chat Sculpture preparation**

- Break youth into two or four groups.
- Hand out the PYOM Vocabulary Sheets.
- Give each group 5 to 7 minutes to read over the terms and definitions.
- Lay out both sets of the Vocabulary Cards face down on a table.
- Have a representative from each group select 5 Vocabulary Cards. These are the cards that the group will use for their sculptures.
- For each term, have groups take 5 minutes to prepare a Map Chat Sculpture (a physical pose representing the term's definition).

**2. Present Map Chat Sculptures**

- Have groups get into the pose they created for that term.
- Have each group say what term the sculpture represents, read the definition aloud, and explain how the sculpture represents the term.

 **Facilitator Notes**

- 1) It is important for participants to build up their vocabulary of mapping terms, so when they are presenting data they can use appropriate language to describe their work. A strong vocabulary will also allow the youth to code switch (use professional or adult terms and also have the ability to break these concepts down in a language familiar to their peers).
- 2) Consider creating an example of a Map Chat Sculpture to demonstrate for the youth. Make sure participants understand that they cannot use your pose, and have to come up with their own. They may use props, but make sure that the props are used to create a group pose, not to demonstrate the word. (For example, using their Facebook App to show the definition of social media would not be an appropriate usage of a prop).
- 3) Note that the vocabulary cards will be used later in the curriculum for the Vocabulary Relay Race.

## Activity 2.2: Putting Youth on the Map Overview

### Goals

- Learn how to navigate PYOM

### Materials

- Projector/Monitor
- Computers
- Internet Access

### Activity Preparation

For this example, share how you (the facilitator) might use PYOM for community planning or advocacy work. Try not to use an example from the actual community or participants' work. If you were raised in another California community use that community as your example, or look to find another community similar to yours and use that. You'll want to have the participants learn from your example and generate their own ideas for potential local uses.

**40 min**

### Introduction and Key Concepts

**Suggested Language:** Now that we have learned about the power of maps and data, and have just learned some of the key language of mapping, it's time to introduce you to a mapping tool, Putting Youth on the Map (PYOM).

## Activity 2.2: cont.

20 min



## Instructions

**Prezi Presentation**

- On your computer connected to a projector go to the Navigating the Maps video: <http://interact.regionalchange.ucdavis.edu/youth/navigate.html#navigation>
  - o Walk through the Prezi with the participants, pausing for questions.



**Suggested Language:** Now that you've seen an introduction to Putting Youth on the Map, I'm going to share an example of how I would use it for my own work.

**Live Demo**

- Key Concepts to showcase in the demonstration:
  - o How to locate a community,
  - o Zooming in and out,
  - o Changing the maps,
  - o Showcasing the pop-up boxes on the indices,
  - o Moving through the layers of data on index maps,
    - Index
    - Domains
    - Indicators
  - o Printing maps,
  - o Using maps and data for advocacy.

 **Facilitator Notes**

- 1) The Navigating the Maps video will show the youth how to use the site. This is a good way to present the site if there are any Wifi challenges.
- 2) The video requires an internet connection.
- 3) The live demo and description of potential uses is an important part of the training. This does require internet access. If internet access is a problem, it's possible to make a powerpoint presentation using screenshots to highlight different features.

## Activity 2.3: How to Create Maps

### Goals

- Get familiar with online mapping sites (in this activity we will use Putting Youth on the Map as an example)
- Learn how to create, print and save maps
- Consider how we can use the PYOM maps and data for our own work

### Materials

- Computers
- Flash drive
- Scavenger Hunt Activity Cards (Index 2.3.A)
- Prezi Presentation
- PYOM Walk-through Script (index 2.3.B)

### Activity Preparation

- Review the “Navigating Maps” Prezi on the PYOM navigation page (<http://interact.regionalchange.ucdavis.edu/youth/navigate.html#navigation>)
- Review the PYOM Walk-through script (Appendix 2.3.B)
- Create a PYOM Walk-through that is relevant to your geographic area. Use the PYOM Walk-through provided as a template
- Print and cut out Scavenger Hunt Cards (Appendix 2.3.A)

**60 min**

### Introduction and Key Concepts

**Suggested Language:** So we now know more about PYOM and how it can be used. It’s time for you all to see how you can create maps that you want.



#1

## Activity 2.3: cont.

60 min



## Instructions

**Activity 2.3.B PYOM Walk-through**

15 min

- Facilitator will provide an overview of PYOM (Use PYOM Walk-through Script or customized version)

**Activity 2.3.A Scavenger Hunt Activity**

40 min

- **Suggested Language:** Now that we have a better sense of how PYOM works, let's get hands-on. We're going to have a scavenger hunt. This scavenger hunt will allow you to try out PYOM. This is not a race, and there are no right or wrong answers. So take your time, follow the directions and as you're hunting think about how you can use this tool for the work that you are doing in your community.
- **Round 1:** Find a community/neighborhood and its Index scores
  - Have each participant get the first set of Scavenger Hunt cards.
  - Allow approximately 5 minutes to complete activities.
  - Ask 2 participants to share their scores and work.
- **Round 2:** Compare two communities
  - Hand out the second set of Scavenger Hunt cards.
  - Allow approximately 10 minutes to complete activities.
  - Ask 2 new participants to share their work.
- **Round 3:** Create maps to communicate
  - Hand out the third set of Scavenger Hunt cards.
  - Allow approximately 15 minutes to complete activities.
  - Have participants save their maps on a Flash Drive to share.
  - Ask new participants to share their saved maps and discuss how they will support the communications scenario.



## Activity 2.3: cont.

## Activity Debrief

10 min

**Suggested Language:** You all did an awesome job today with your Scavenger Hunt work! Lets talk a bit about it.

- How did you all feel about PYOM before working on it a bit today?
- Do you feel more comfortable using PYOM now?
- Do you see yourself using this site for the change work you will be/are doing in your community?
- Do you still have some concerns about using PYOM on your own? Are there some topics we should go over more?

Next session we are going to build on our work today. Besides being able to create maps, we need to understand what the data mean and what makes certain data credible so we can use it effectively. So next session we'll peel back more layers of this site to learn about that.

 **Facilitator Notes**

- 1) Create a scenario using the PYOM scenario guide or come up with your own custom scenario. The goals of the scenario are to tell a story of your community based on PYOM data. It is important to show all the key functions of PYOM and to highlight how to use the site. It is also crucial to drill down through the Youth Well-Being Index to domain level data, and then down to indicator data.
- 2) Round 1 Scavenger Hunt Cards are a set of 4 different data tasks from the four domains of the Youth Well-Being Index. If you are working with a large group of youth and will be breaking them up into small groups for this exercise, give 1 card to each group. If you are working with a small group give each student 2 cards or all 4 cards to work through.

Be sure to check whether the data requested are available in your community. If not, select another place to focus or revise the cards to focus on data that are available.

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## Digging Into Putting Youth on the Map (PYOM)

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### Goals

- Learn about the language of data
- Gain a deeper understanding of the Youth Well Being Index (YWI) and the Youth Vulnerability Index (YVI)
- Become familiar with the analyses of youth voting
- Learn about other data available on PYOM

Agenda	240 min 
Check-In/Introduction	10 min
Activity 3.1: <i>Vocabulary Relay Race</i>	10 min
Activity 3.2: <i>Body Mapping</i>	30 min
Break	05 min
Activity 3.3: <i>PYOM Jeopardy</i>	40 min
Activity 3.4: <i>Youth Vote Breakdown</i>	60 min
Activity 3.5: <i>Beyond Indices</i>	25 min
Break	05 min
Activity 3.6: <i>Data-ing Game</i>	45 min
Next Steps/Closeout	10 min

## Activity 3.1: Vocabulary Relay Race

### Goals

- Get familiar with mapping/data terms



### Materials

- Tape
- Vocabulary Term Sheet (Appendix 2.1.A)
- Vocabulary Term and Definition Cards (Appendix 2.1.B)

### Activity Preparation

20 min



- Find an open space within the meeting area that you are currently using, or, alternatively, prepare an outside space where you will have access to a wall or a large flat surface.
- Set up 2 chairs or small tables near the wall/flat surface, and 2 more chairs or small tables a short run away from them.
- Make two sets of Vocabulary Term Cards and Definition Cards.
- Have pre-cut tape ready.
- Keep one copy of the Vocabulary Term Sheet ready to check the accuracy of participant definitions.

### Introduction and Key Concepts

**Suggested Language:** Welcome back, today we are going to start off with a quick activity to get our motors running and also to continue to build upon our last session. As we talked about earlier, it's important that we not only learn how to use maps and data in our work, but understand the language used in mapping. We also want to learn to use this language when we're presenting our work.

## Activity 3.1: cont.

15 min



## Instructions

- Split the participants into 2 groups. Have each group stand near a chair/table furthest from the wall or flat space, facing the wall/flat space.
- On each table by a group lay out the Vocabulary terms face down. (Make sure that there is one set for each group).
- On the opposite chair/table by the wall/flat space, place the Definition Cards face down. Also place the pre-cut pieces of tape nearby. The participants will use them to tape the Definition and Vocabulary terms together onto the wall.
- Explain that this is a relay race. When you, the facilitator, indicate that time has started, one team member of each group will take a Vocabulary Term Card, run to the opposite side of the space, and find the Definition Card that matches with the Term Card. Once the participant has found the match, the participant will tape the pair of cards together on the wall.
- The participant will then run back to their team and tag the next member.
- The next member of the team will repeat this process.
- Once a team has matched all the terms with their definitions they will yell "DONE."
- You (the facilitator) should then check that the terms are correctly matched with their definitions.
- The team that first successfully matches the terms and definitions wins.

## Activity Debrief

- Debrief as a whole group with the following questions:
  - What did you think of the game?
  - Which words do you feel ready to use in your work?
  - Which words/definitions are still unclear?



## Facilitator Notes

- 1) It's important to continue to find ways to build participants' vocabulary. This is the second activity in the curriculum where the participants develop vocabulary used in mapping and data. Use your creativity to infuse more opportunities for practicing using these terms in your training sessions.

## Activity 3.2: Body Mapping

### Goals

- Discuss examples of multiple, interconnected issues that youth face in their communities
- Learn about the holistic approach of the Putting Youth on the Map (PYOM) indices

### Materials

- Butcher/flip chart paper
- Markers
- Tape
- Projector
- Laptop or computer
- Body Mapping Prompts (Appendix 3.2)

### Activity Preparation

45 min



- Have chart paper available
- Create a sample body map to show participants
- Print out the 'Body Mapping Prompts' handout or write the prompts (based on the handout) on a piece of butcher paper

### Introduction and Key Concepts

**Suggested Language:** During our last couple of gatherings you have been introduced to Putting Youth on the Map. We briefly looked at the maps and data available on PYOM and discussed how we can use the site for our work. But as we've said before, it's not enough to just know how to use the site. It's also important to understand the data that we're using. We will take a more in-depth look at the data used in PYOM in this module. We'll start by finding out more about the approach taken to bring different pieces of data together to create the Indices, which makes the PYOM unique. As we all know, the data used in PYOM are all publicly available, which means that anyone can access and use this information. The data used for PYOM have been carefully selected to reflect various issues that youth face and also provide a holistic approach to wellness. Instead of focusing on one issue at a time, as is typical when adults work on youth issues, PYOM helps us look at how youth are experiencing combinations of different factors. PYOM does this based on youth input and new research showing that the issues that youth face (for example in education, health, community involvement, social relationships) are all connected. In this exercise we'll think about the different issues youth face in your community around education, social relationships, community involvement and health.

## Activity 3.2: cont.

60 min



## Instructions

- Group participants into pairs.
- Hand out a piece of chart paper and some markers to each group.
- Ask each group to draw a body outline on their chart paper
  - Make sure that the body outline has a head, two hands, two feet and a heart.
  - Have the participants label the body parts in the following way:
    - Head = Education
    - Hands = Social Relationships
    - Feet = Community Involvement
    - Heart = Health.
- After sharing your example body map, have the participants write down the issues, barriers, and/or stresses that they know young people face for the different categories (or body parts).
- Have each group present their body maps.



#1

05 min

15 min

30 min

## Activity Debrief

- **Suggested Language:** As we can see, in reality youth don't just face issues one at a time. For the most part, the issues that youth face are interconnected and cross over multiple categories. When PYOM was being developed, the researchers wanted to reflect this reality in the analyses and maps as much as possible given data limitations. So the Youth Well-Being Index and Youth Vulnerability Index take a holistic approach and use a combination of different types of measures to help us understand youth wellness and whether communities are providing support to keep youth on track and out of vulnerable situations.
  - Show on PYOM the pop-up boxes for your community with YWI and YVI scores and comment as follows.

10 min

"You will see that the categories that we asked you to label and address are the domains of the Youth Well-Being Index. Many of the issues that you shared about youth in your communities are part of the Youth Vulnerability Index as indicators."

Ask the participants whether they have any questions and make sure that you address any confusion before moving on to the next activity.



## Facilitator Notes

1) If you are working with a large number of participants, use groups of four.

### Activity 3.3: PYOM Jeopardy

#### Goals

- Learn more about the concept of an index
- Get familiar with the Youth Well-Being Index (YWI) and the Youth Vulnerability Index (YVI)

#### Materials

- Laptops
- YWI & YVI PowerPoint (Supplementary Materials)
- PYOM Jeopardy PowerPoint or Slides (Appendix 3.3)
- Projector
- YWI & YVI Video

#### Activity Preparation

- Laptops set up to <https://www.youtube.com/watch?v=doID3LSdIpk>

60 min



#### Introduction and Key Concepts

**Suggested Language:** As we discussed during the Body Mapping activity, it is not enough to just learn how to use the PYOM site. We want you to be able to talk about the data, what it means and why it is important. We are going to start to dig deeper into the Putting Youth on the Map data. There are a large number of maps on PYOM, but many relate to two indices developed by the Center for Regional Change.

Ask:

- Can someone tell me what an analytical index is?
- Does anyone know what a grade point average is? Can someone explain how that works?



**Suggested Language:** An index provides a summary assessment based on multiple measures. So, for example, a GPA provides an overall assessment of classroom learning by combining grades in each course, which are in turn based on grades on tests, quizzes, papers, projects, etc. A GPA usually averages grades. Many indices use averaging, including the YWI, although there are various ways to calculate them. For example, the Regional Opportunity Index, another tool we'll see later, uses something called a geometric mean.

## Activity 3.3: cont.

40 min



## Instructions

30 min

**Activity 3.3: Prepare for Jeopardy**

- Break the group into two teams.
- Have each group set up a laptop station and watch the video on YWI and YVI.
- Inform participants that it is important to take notes as the following Jeopardy game will be based on the video.
- Have one group make a brief presentation on what they learned about the YWI from the video. Have the other group present on the YVI.
- Have a Q & A session to ensure that the participants have understood the main points from the video.

**Activity 3.3: PYOM Jeopardy**

- Have groups sit on opposite sides of the table or room.
- Flip a coin to decide which group plays first.
- Have the first group select a category and value from the Jeopardy slides (see Appendix 3.3).
- Each group will have one minute to answer the question.
  - If they get the answer right they get the amount of points assigned to the question.
  - If they get it wrong, the other team has 30 seconds to steal the points by providing the correct answer.
- Then the second group selects a category and value.
- Continue these steps until all categories have been completed.
- Conduct the final round.
  - Let each group see the final round question.
  - Give each group 1 minute to write their answer and select how much they would like to wager.
  - Share the actual answer.
  - Add the amount they wagered to the point total if they get it right, or subtract the amount they wagered if they get it wrong to calculate final scores.
  - Declare a winning team!

## Activity 3.3: cont.

10 min

## Debrief

**Debrief as a full group with the following questions:**

- How comfortable would you now feel about explaining the Youth Well-Being Index and the Youth Vulnerability Index to someone else?
- Is there anything in this activity that stood out to you?
- Which parts of the indices would it be helpful to review more?

 **Facilitator Notes**

- 1) The Prezi is a great tool to help youth understand the indices, but if you do not have access to enough laptops or computers to view it, you can always print out the slides of the YWI & YVI PowerPoint (link in the appendix) and hand out the printed slides to the groups.
- 2) A GPA is a type of index that might be familiar to participants. Use the YWI & YVI PowerPoint in the Supplementary Materials folder ([interact.regionalchange.ucdavis.edu/youth/resources.html#learn](https://interact.regionalchange.ucdavis.edu/youth/resources.html#learn)) to show the GPA/Index slides, and help youth use their knowledge of GPAs to understand the YWI.
- 3) It is important to check for understanding before moving away from this activity. You can always come back for a refresher, but you want to be careful to not overload participants with too much information at one time.

## Activity 3.4: Youth Vote Breakdown

### Goals

- Gain a deeper understanding of youth voter data provided by the California Civic Engagement Project (CCEP)
- Learn how to use the CCEP voter data to describe a community's level of voter participation.

### Materials

- Laptops
- Projector
- Activity cards (Appendix 3.4.A)
- Ballot Box Instructions (Appendix 3.4.B)
- 2014 youth vote fact sheet (Appendix 3.4.C)
- Issue Cards (Appendix I.1)

### Activity Preparation

15 min



- Required preparation for activity
  - Ensure that you are able to access youth voter data on PYOM.
  - Prepare the printouts for this activity.
  - Prepare a demonstration of CCEP Youth Voter Data Use to help youth better understand how to use the data for advocacy.
- Recommended preparation
  - Brainstorm real-world examples of youth political action (e.g. youth petitioning a city council for resources/services) in communities.

### Introduction and Key Concepts

**Suggested Language:** The intent of this activity is to introduce how usage of youth voter data can inform youth efforts in communities.

## Activity 3.4: cont.

**Activity 3.4.A: What is Voter data and why should we care about it?**

20 min

- Divide the participants into two groups.
- Hand out the two sets of cards so that one group will hold the rate cards, the other group will hold the outcome cards.
- Ask each group to discuss what they think is their match.
- Have the participants go find their match.
- Once the participants have found their matches, ask the participants to come together as a full group and then announce the correct matches.
- Ask for youth reaction using the following questions.
  - Is anything surprising or concerning?
  - What are consequences of low or high turnout?
- Facilitator summarizes why voting is important.
  - **Suggested Language:** Youth voting data helps to show the level of youth involvement in formal policy-making and planning. Voter data can also be used to help target areas of under-engaged youth in order to increase youth participation and ultimately help bring about policies that better meet the needs of young people and their families.

**Activity 3.4.B: Voter Data on PYOM**

15 min

- Demonstrate youth voter data on PYOM

**Activity 3.4.C: Youth Voice at the Ballot Box**

20 min

- Have youth break into groups of two and work at computer stations.
- Hand out the Ballot Box Worksheet and have group members take turns looking up their county (Round 1) and neighborhoods (census tract level - Round 2) with each type of youth voting data variable.
- Ask groups to talk about the data points they find for each neighborhood and write them down.
- Ask group members to discuss what the data points mean and to describe each group member's neighborhood participation based on the data from the PYOM site.

Activity 3.4: cont.

**Activity Debrief:**

Debrief as a full group with the following questions

- Why is youth voter participation important?
- What is youth voter data?
- Why is understanding the level of youth voter participation in a community useful?

 **Facilitator Notes**

1) Use your prepared demonstration here.

### Activity 3.5: Beyond Indices

25 min



#### Goals

- Get familiar with the other data maps available in PYOM.

#### Materials

- Laptops/Computers
- Projector
- Other Map Description Handout (Appendix 3.5.A)
- Other Maps Scavenger Hunt Cards (Appendix 3.5.B)

### Activity Preparation

45 min



- Prepare a demonstration of all of the other maps available in the “Other” section of PYOM.

### Introduction and Key Concepts

**Suggested Language:** We have now learned about the major data portions of Putting Youth on the Map (Youth Well-Being Index, Youth Vulnerability Index and CCEP Youth Voting Data). But there is more to PYOM. PYOM also houses a host of other maps that youth advocates have found valuable. Let’s take a look at those now.

### Facilitator Walk Through

10 min

- Open Up PYOM.
- Using only 2 map panels, open up the “Other” Map section and Select a map per panel.
- Describe the map.
- Repeat until you have gone through all of the “other” map categories.



### Other Maps Scavenger Hunt:

15 min

- Break group into pairs.
- Hand out the Other Maps Scavenger Hunt Cards and the Other Map Description handout.
- Have each pair work through the scavenger hunt cards.
- Have pairs present what they found.



### Activity 3.5: cont.

#### Debrief

- What do you think of the other maps on PYOM?
- Are these helpful?
- How can you see using these other maps?

**Suggested Language:** Now you know all about the data and maps provided in Putting Youth on the Map. As we have mentioned before it is important to understand the data we use for our advocacy. Remember, you can always go to the “Metadata” section of the website to learn more or to refresh your memory.



### Facilitator Notes

- 1) Use the metadata section in the Learn about PYOM portion of the site to get information on the other maps. Also make sure to click on ⓘ to show and learn more about the map.
- 2) You can extend this section to have youth go through all of the maps, by turning this section into multiple rounds.

## Activity 3.6: The Data-ing Game

60-70 min



### Goals

- Learn what makes data “good” and/or “bad”
- Become more critical data consumers

### Materials

- Data Criteria Chart Paper
- Participant Roles and Scripts (Appendix 3.6.A)
- Trainer Notes (Appendix 3.6.B)
- The Data-ing Game Roles PowerPoint (Appendix 3.6.C)
- Participant Data Maps (Appendix 3.6.D)
- Data Criteria Handout (Appendix 3.6.E)
- Data-ing Game Show PowerPoint Slides (Appendix 3.6.F)

### Activity Preparation

90 min



- Create Data Criteria Chart (copy bold points on following page)
- Print out
  - Participant Roles
  - Participant Scripts
  - Participant Data Maps
- Set up PowerPoint

### Introduction and Key Concepts

**Suggested Language:** In the past few activities, we have learned about the Youth Well-Being Index and Youth Vulnerability Index, discussed criteria used to select the best available data, and seen how the indices combine different data. Now it is time to think critically about data. As you may remember, we talked about how maps and data can be used to oppress and to make change in the Mapping Matters activity. Data can be manipulated and used to support certain agendas. Data can also be inaccurate or partially accurate. ALL data have limitations—there are almost always factors that prevent any dataset from telling the “full story.” So it’s important that we become conscious consumers of data, and that we look at our data critically to make sure that we use the best available data and that we account for limitations.

### Activity 3.6: cont.

Here are some key concepts to think about when using data and maps.



- **Source Trustworthiness**

- o What are the source's biases (what is their agenda)?
- o Does the source have adequate skills/resources to collect/process the data?

- **Data Accuracy**

- o Was the information collected likely correct/accurate (e.g. survey questions are not leading, participants likely provided accurate information)?
- o Was the information likely to be accurately entered into the data system?
- o Are the data up-to-date (or is the most recent data available)?
  - Are you confident that the analyses were done well (e.g. mathematical analyses are likely correct)?

- **Representation**

- o Are the data representative enough of all locations and/or populations of interest (consider margins of error, participation rates, where surveys were/were not administered, whether data collection used strategies to reach people who speak limited/no English, etc.).

- **Data Display**

- o How do map breakpoints affect the "story" told by the map?
- o Do the geographic units used for display visually distort interpretation? If yes, then how?
- o How do colors used for display affect visual interpretation?

**Suggested Language:** To practice our critical skills, we want to try and help our really good friend, Map, select the best Data match. We are going to play a little game called the Data-ing Game. Here is how it is going to work.

## Activity 3.6: cont.

## Activity Instructions

**Role Selection**

05 min

- Select 4 participants to play the main roles of the game which are:
  - The Map
  - Data Contestant 1
  - Data Contestant 2
  - Data Contestant 3
- The rest of the group will play the role of Map's close friends. They will also be the live audience and will help the Map decide which Data Contestant is the best match.

**Game Preparation**

05 min

- Hand the 4 selected youth a role sheet and script for their roles.
- Give them 10 minutes to read through the role play sheet and to read through their script individually.
- Break the remaining 'live audience' into 4 groups and hand each group a role play instruction sheet that coincides with the following 4 categories.
  - Source Trustworthiness
  - Accuracy
  - Representation
  - Visual Display
- Have each 'live audience' group take 10 minutes to read through their role sheets on what they should look for in the contestants' answers, and how they should score the contestants.

**Activity 3.6: Game Show**

45 min

- You, the facilitator, will be the game show host! Using the game show script, conduct the following parts of this activity.
  - Welcome and Introduction to the Data-ing Game (3 min)
  - Introduce the Contestants (3 min)
  - Round 1 Questions (10 min)
  - Selecting the Data (3 minutes)
  - Round 2 Questions (10 min)
  - Selecting the Data (3 minutes)
  - Round 3 Questions (10 min)
  - Selecting the Data (3 minutes)

## Activity 3.6: cont.

## Debrief

10 min

- **Debrief as a full group using these discussion questions:**

- o What did you think of this activity?
- o Do you now have a better understanding of the importance of using the best possible data?
- o Do you all feel that you can start differentiating between stronger and weaker data?

**Suggested Language:** It's important to understand that all data have limitations—no dataset is 100% accurate for all people in all places at all times. You always have to make compromises with the data that you use. The key is to get the best available data, know as much as possible about their limitations, think through how those limitations might affect your analyses and recommendations and let your audience know about these issues. We know that the data we use on PYOM has limitations, but these data were also the best that we could find which matched with our goals for the project. We describe these limitations on the website in the “Metadata” section. Let's take a look at this on the PYOM website.



## Facilitator Notes

- 1) It's important to not make this a lecture but to engage the participants by asking questions to check their understanding of the different criteria. For example, one possible question is: What would trustworthiness mean when we are thinking of a data source?
- 2) For each round of the game, you can have the same 4 participants be the Map and the Data participants, and have remaining group members be the audience. You can also switch the roles after each round to give everyone a chance to be a participant and to be part of the audience. If you would like your participants to only play the role of the audience, you can enlist the help of other staff to play the roles of the Map and Data participants. You can also make this activity lively by creating props or costumes for the Map and Data participants.
- 3) Giving the participants a tour of the Metadata section of the PYOM website is a great way to show the importance of identifying limitations. Encourage the youth to think about their own data collection or data use. Ask them to brainstorm steps they might want to take when sharing data to demonstrate the integrity of their work.

## Putting Youth on the Map for Change

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### Goals

- Learn how PYOM complements Youth Participatory Action Research and Participatory Mapping processes
- Gain a basic understanding of participatory tools for change
- Learn how to use Google maps
- Find out how to use PYOM to support a participatory mapping and research process

### Agenda

Activity 4.1: *Getting to Know PYOM Resources* 60 min

Activity 4.2: *Other Tools for Community Change* 60 min

- 4.2.A: *YPAR Concept Activity*
- 4.2.B: *Participatory Mapping Walk Through (Google)*

Activity 4.3: *YPAR/Mapping Simulation* 60 min

Closeout and Celebrate

## Activity 4.1: Getting To Know PYOM Resources

### Goals

- Get youth familiar with the resource pages of PYOM

### Materials

- Laptops
- Projector

### Activity Preparation

- Get familiar with the resource pages on PYOM site
- Prepare a walk-through demo of the resource page

15 min



### Activity

60 min



### Introduction and Key Concepts

**Suggested Language:** Now that we have learned about the functions and data on PYOM, we want to show you all the resources available to you on the Learn About PYOM Section of the website.

#### About PYOM:

- Who can use it
- What you can do
- Project Partners
- Project Sponsors
- How to contact us

#### Data:

- Metadata
  - Learn about all the data
- Download the data
- Equity Analyses

### Activity 4.1: cont.

#### Resources:

- Links to other data sites
- Tools
  - Other participatory mapping sites
- Learn
  - PYOM Curriculum

#### Action:

- Calendar of Events
- Stories
  - How youth are using PYOM
- Photo Gallery

#### Maps:

- Navigation (Tutorials)

#### **Debrief:**

Are there any questions on how to use the Learn About PYOM Section?

As we get into using the tool for our work, we will be utilizing this section just as much as the mapping site. We will use this to learn more about the data we are using in our maps, to find other data that may not be on PYOM, and to share our work using PYOM.

## Activity 4.2.A: Other Tools for Community Change Youth Participatory Action Research (YPAR) Concept Activity

### Goals

- Learn about participatory processes that can drive community change (YPAR and participatory mapping/PGIS)
- Gain a basic understanding of how to use participatory mapping/PGIS in combination with PYOM

### Materials

- Laptops
- Projector
- Markers
- YPAR Concepts Handout (Appendix 4.2.A)

### Activity Preparation

- Write down the YPAR brainstorm terms on a piece of butcher paper
- Print out the YPAR Concepts Handout

### Activity

60 min



### Introduction and Key Concepts

**Suggested Language:** We've been exploring the Putting Youth on the Map tool for the past few activities. We've learned about the importance of data and maps in community work, and especially the importance of youth using data and maps to advocate for positive changes. Now we want to try out some complementary strategies. These include Youth Participatory Action Research (YPAR) and Participatory Mapping.

- Does anyone have any experience with YPAR or Participatory Mapping?

## Activity 4.2.A: cont.

## Instructions

- Organize participants into four small groups.
- Create a sheet of butcher paper for each of the four following terms: Youth-Led, Research, Participatory and Action. Each term should be written in large font at the top of the butcher sheet. Place the four labeled butcher sheets around the room in a way that the participants can easily move from one butcher sheet station to the next.
- Have each group start at a butcher sheet station. Give each group 2 minutes to brainstorm definitions for the terms and write them on the sheet.
- After 2 minutes at each station, ask the groups to rotate to a new station.
- Repeat this until every group has had the chance to brainstorm for each of the four terms.
- Ask the participants to get back into a large group and then discuss each term.

**Prompts for Introduction to YPAR Concepts Activity:**

- What is Youth-Led?
  - What does it mean for a process to be youth led?
- What is research?
  - What is your experience?
  - Who does it?
  - Why do it?
- What is participatory?
  - Define
- What is action?
  - Define
- Put it together...
  - Youth Participatory Action Research is...
  - YPAR Key Concepts (handout)
    - o Go through the Handout with students (Appendix 4.2.A)



Activity 4.2.A: cont.

**Activity Debrief:**

**Suggested Language:** Often when decision-makers are making decisions for youth, young people are not asked to be part of the discussion. YPAR provides a way for youth to bring information and insights to planning, policy-making, design, organizational development and/or advocacy processes.

Discussion prompt

- Do you feel that it is important to have young people as participants at the decision-making table when the decisions being made directly affect young people? Why or why not?



**Facilitator Notes**

- 1) Use these as prompts to help youth at each station think about what to brainstorm for the terms.
- 2) For a great example of the power of YPAR visit <https://www.youtube.com/watch?v=ARx77Di9SXc>

## Activity 4.2.B: Other Tools for Community Change Participatory Mapping Walk Through



### Goals

- Learn about participatory processes that can drive community change (YPAR and participatory mapping/PGIS)
- Gain a basic understanding of how to use participatory mapping/PGIS in combination with PYOM

### Materials

- Laptops
- Projector
- Markers
- Google Maps How-To Handout (Appendix 4.2.B)

### Activity Preparation

- Sign participants into Google Maps
- Print out Google Maps How-To Handout

40-60 min



### Activity

#### Introduction and Key Concepts

**Suggested Language:** Participatory Mapping is another tool that uses youth data and experience for community education and change.

Participatory Mapping allows youth to represent spatial knowledge of communities using maps. For example, maps can be used to show how issues affect certain community locations, highlight the proximity of resources, identify special places, etc. Participatory mapping can involve tools ranging from pens and paper to mural production to geographic information systems (GIS). There are many online tools to help you get started with Participatory Mapping. We will briefly discuss these websites when we discuss the other resources on PYOM.

### Activity 4.2.B: cont.

Today we'll work with one tool that might be familiar, Google Maps. We are going to go through a little tutorial to learn how to use Google Maps and then we will put it all together to work on a simulation using PYOM and Google Maps.

#### Instructions

- Break group up into pairs or small groups of no more than four.
- Hand out the Google Maps How-To handout.
- Have students follow the instructions on the handout to create maps.
- After youth have created their maps, ask them to present their group work.



#### Activity Debrief:

Debrief as a full group with the following questions:

- Is it important to use maps in your work?
- What are the benefits of using visual maps? The downsides?

#### Facilitator Notes

- 1) You can do both the YPAR activity and Participatory Mapping activity in the same session, or separate them to spend more time on each individual concept.
- 2) Google Maps requires a sign in. If the participants don't have a Google account, please make sure to sign them up to Google prior to this activity or create a project specific account which they can use to access the work that they save.

## Activity 4.3: YPAR/Mapping Simulation

### Goals

- Practice Youth Participatory Action Research (YPAR)
- Introduce how to use PYOM and participatory mapping to support YPAR.

### Materials

- 5 envelopes
- Markers
- Tape
- Station directions (Appendix 4.3.A and/or B)
- Laptops



30 min



### Activity Preparation

- Plan on 30 minutes of preparation time to create activity stations.
  - Print and cut the station directions from Appendix 4.3.A and/or B.
  - Each station should have an envelope containing the directions for that station.
  - Each station should also have flip chart paper for participants to write up their answers to the station questions.
  - For Station 1, identify the census tract(s) in your community that participants will consider when looking at the Food Access and Adequate Income maps. Hint: select tracts that are opposite (one tract doing well and one not doing as well, High and Low) to deepen the discussion.

60 min



### Activity

## Activity 4.3: cont.

### Introduction and Key Concepts

**Suggested Language:** Now that you have learned about Putting Youth on the Map, the functions, the data and how to navigate and create maps, this section will show you different ways in which PYOM can be used in your existing work and with other participatory processes.

Today we'll work with one tool that you might be familiar with, Google Maps. If you need extra review, work through the tutorial in Appendix 4.2.B further. Then we will work on a simulation using PYOM and Google Maps.

### Instructions

- Divide participants into groups so that each group has at least 2 people to go through each station in order, completing tasks provided in the envelopes.
- For the “Data Collection” station use online images, or consider extending the time period to let youth go to actual stores/places.
- Upon completing all stations' tasks, the groups should have presentations prepared. Have them share their findings and recommendations.

### Activity Debrief:

Once the youth teams have presented their findings and recommendations, debrief the full group by discussing questions such as:

- o What was enjoyable about the research process? What was challenging?
- o How could we incorporate research into our community change work?
- o Can you see ways to use existing maps and/or maps we make as part of our local research? Our community change work?

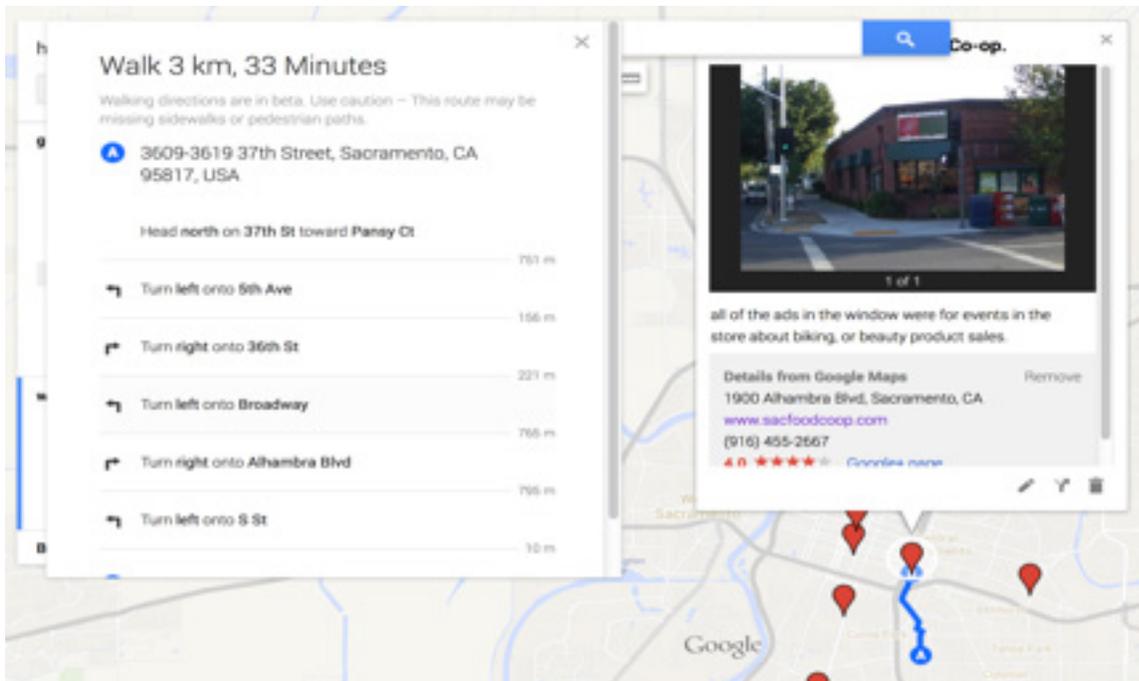
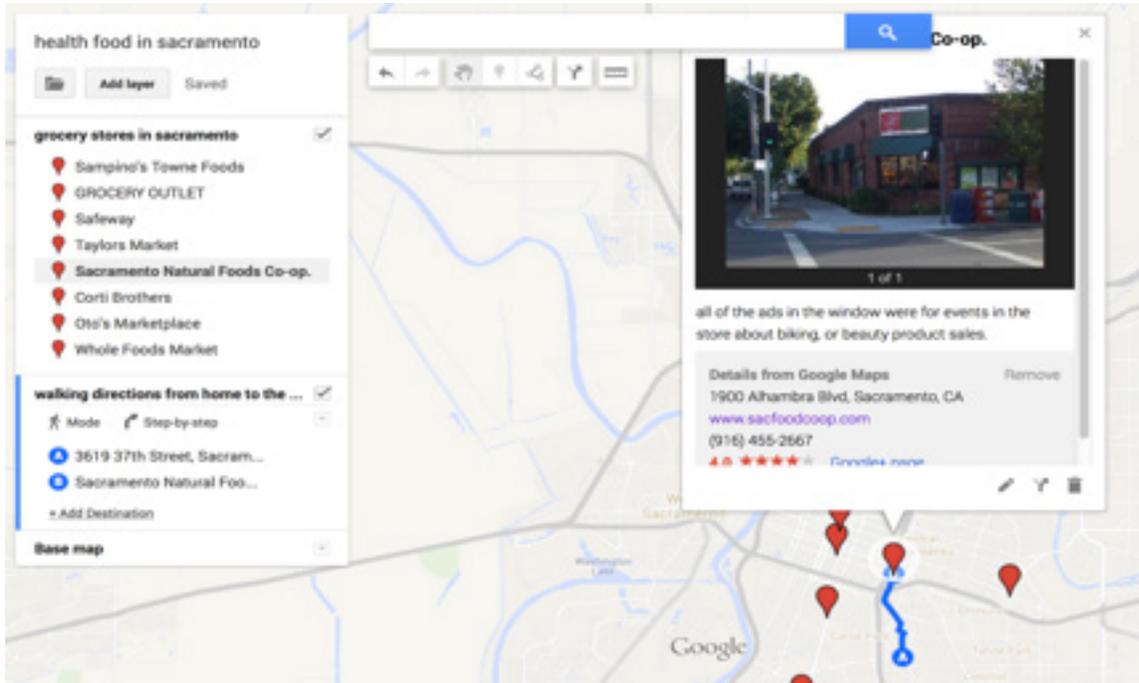


### Facilitator Notes

- 1) Pick the focus (food or youth spaces) which is most relevant to your work. Or, if you have a large group, break them into two groups with one focused on food and the other on youth spaces.

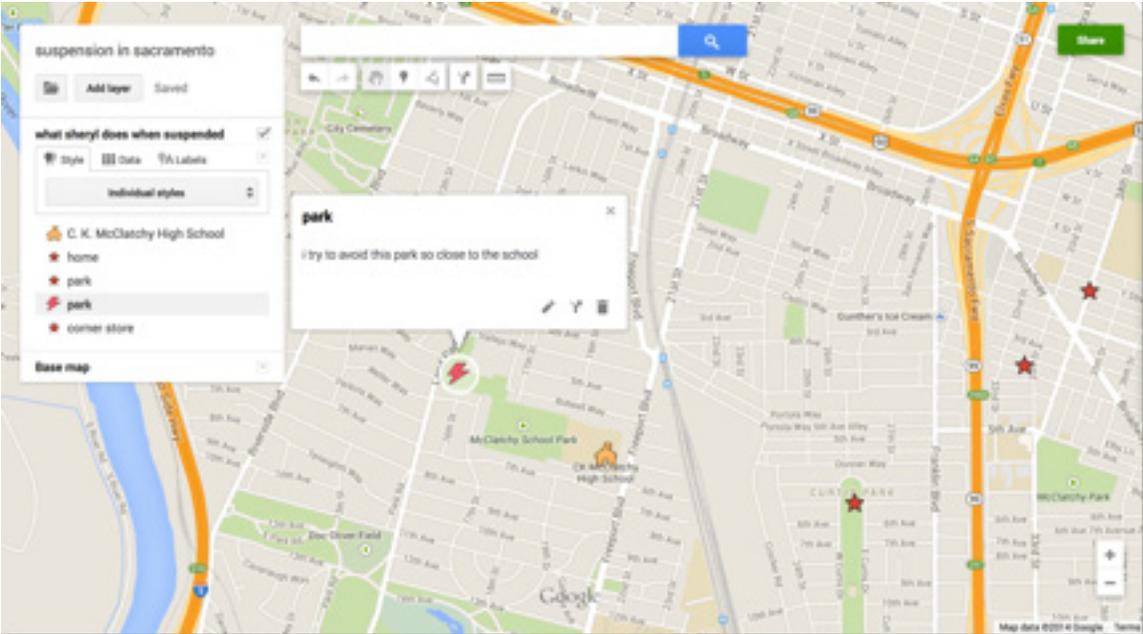
Activity 4.3.A: cont.

Mapping Simulation Example



Activity 4.3.B: cont.

Simulation Map Example



# OTHER RESOURCES

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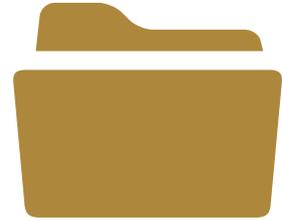
Please visit [interact.regionalchange.ucdavis.edu/youth/resources.html](https://interact.regionalchange.ucdavis.edu/youth/resources.html) to

- Find links to other online sources of youth data and youth data maps, and
- Access online tools for uploading and mapping your own data.



# APPENDICES

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## Module 1. Mapping Matters

- Mapping and Data Breakdown
  - Appendix 1.1 Issue Cards
- Mapping Matters
  - Appendix 1.2.A Redlining Scenario
  - Appendix 1.2.B Unincorporated Scenario

## Module 2. Introduction to Putting Youth on the Map

- Map Chat
  - Appendix 2.1.A Vocabulary Term Sheet
  - Appendix 2.1.B Vocabulary Term and Definition Cards
- PYOM Overview
  - Appendix 2.2 'What is on PYOM' Prezi Script
- How To Create Maps
  - Appendix 2.3.A Scavenger Hunt Cards
  - Appendix 2.3.B PYOM Walk-through Script

## Module 3. Digging into Putting Youth on the Map

- Vocabulary Relay Race
  - Appendix 2.1.A Vocabulary Term Sheet
  - Appendix 2.1.B Vocabulary Term and Definition Cards
- Body Mapping
  - Appendix 3.2 Body Mapping Prompts
- PYOM Jeopardy
  - Appendix 3.3 Jeopardy PowerPoint
- Youth Vote Breakdown
  - Appendix 3.4.A Activity Cards
  - Appendix 3.4.B CCEP Youth Voice at the Ballot Box
  - Appendix 3.4.C Youth Vote Factsheet (optional)
- Beyond Indices
  - Appendix 3.5 Beyond Indices Other Map Descriptions
- Data-ing Game
  - Appendix 3.6.A The Data-ing Game Contestant Roles and Scripts
  - Appendix 3.6.B Trainer Notes for the Data-ing Game
  - Appendix 3.6.C The Data-ing Game Roles PowerPoint
  - Appendix 3.6.D The Data-ing Game Participant Map PDFs
  - Appendix 3.6.E Data Criteria Handout
  - Appendix 3.6.F The Data-ing Game Show PowerPoint

## Module 4. Putting Youth on the Map for Change

- Other Tools for Community Change
  - Appendix 4.2.A Youth Participatory Action Research
  - Appendix 4.2.B Google Maps How-To-Handout
- YPAR/Mapping Simulation
  - Appendix 4.3.A Food Access Simulation Instructions
  - Appendix 4.3.B Youth Spaces Simulation Activity

## Module I

### Module I. Mapping Matters Appendices

#### Mapping and Data Breakdown

- Appendix 1.1 Issue Cards
  - For use in Activity 1.1.B.
  - Print multiple copies of the cards and cut. Participants will use these cards to demonstrate how the issues from the cards play out in their communities.

#### Mapping Matters

- Appendix 1.2.A Redlining Scenario
  - For use in Activity 1.2
  - Print copies of the full packet for all the participants in the group. Ask the participants to focus on the scenario and the script for the role-playing activity.
  - After the presentations, go over the actual examples of the redlining maps and the language used by the HOLC to describe the maps.
- Appendix 1.2.B Unincorporated Scenario
  - For use in Activity 1.2
  - Print a copy of the full packet for all the participants. Ask the participants to focus on the scenario and the script for the role-playing activity.



## I.1 Issue Cards

Use the following issue cards for Activity I.1.B. Make multiple copies and then cut out each individual issue card.

-----Cut Here-----

Education	Relationships with Peers
High Poverty	Relationships with Adults
Homelessness	Youth Employment
Violence	Health



## 1.2.A Redlining Scenario

### Directions:

1. As a group, take 5 minutes to read over the redlining description below.
2. After reading the description, take 10 minutes to come up with a 3-minute skit. Make sure that you show how maps were used in your skit!

### INTRODUCTION

Owning your own home is a big part of the 'American Dream'. Not only does owning a home give you a place to live, but in the US, homeownership is also connected to a person's wealth. Buying a home is the biggest transaction that most people will ever make in their lifetime. A house is also usually something that you buy with the expectation that it will be worth even more in the future; so you can sell it at a later date and earn money. Since a house is such a large purchase, most people need a mortgage to buy their home. A mortgage is a loan that is paid back over many years—usually over a period of 25 or 30 years.

In 2014, 65% of all households in the USA lived in homes they owned. But there are differences in homeownership rates depending on the race and ethnicity, and income of a family or household.

- 73% of White households live in homes they own, but only 43% of all-Black households, and 46% of all-Latino households live in homes they own. Only 55% of any household that is not all-White live in a home they own.
- 80% of households at the top half of the income ladder live in homes they own vs. 50% of households on the bottom.

These differences didn't happen by accident. From the mid 1930s into the 1960s, public and private mortgage lenders made it difficult for people and families of color to buy houses by redlining, which relied upon maps.

### WHAT IS REDLINING?

Redlining was a practice where mortgage lenders such as banks and federal agencies refused to make loans to households in certain neighborhoods. Maps were made with lines drawn around neighborhoods where the houses were old or considered out of style, and that had low quality infrastructure like roads, sewers or few green spaces.

But the most important driver of redlining was who lived in the neighborhood. A neighborhood would be redlined if it had been “infiltrated” by populations described as “lower grade,” “detrimental,” or “undesirable.” These were code for African American families, but also for Mexican-American, Japanese-American, Filipino-American and Jewish families. Even people described as Russian, Irish, German or “dark Portuguese” were considered “undesirable.” Also racially/ethnically diverse areas were considered “lower grade.”

No matter what your income was or how responsible you were, it was almost impossible to get a mortgage if you lived in a redlined neighborhood. Redlining also made it difficult to get insurance for your house or property, or loans to make home repairs. This meant families living in these neighborhoods couldn’t buy their homes or make improvements. Restricted covenants in all-White neighborhoods-- legal agreements that made it illegal to sell a home to a family of color-- made it difficult to move out of redlined neighborhoods. Real estate agents would use redlining maps to direct White families away from redlined neighborhoods, and to make sure that families of color didn’t cross the line into “desirable” neighborhoods.

## REDLINING MAPS

The Home Owners Loan Corp (HOLC) made some of the best known redlining maps for major cities all across the country. HOLC maps divided residential areas into four types: green, blue, yellow and red. Green was the best, and red was the worst. Here are brief descriptions of each of the categories (the actual descriptions are attached to this document).

- Red: “Undesirable” populations, low home-ownership rate, poor infrastructure (no or conservative loan)
- Yellow: transitioning to “infiltrated” by undesirables, older homes, poor infrastructure (conservative loan)
- Blue: Good populations and infrastructure but somewhat outdated (loans 10-15% below limit)
- Green: “Homogenous” population, well-planned, new housing stock (maximum loans)

Once these maps were exposed, they were used to organize against housing discrimination!

**Skit:** Take 10 minutes to create a 3 minute skit using these roles.

### Home Buyer:

The Smith Family (home buyers, middle class, white family): You want to buy a house in the newly built-up part of town; on the maps it is the Green district, where the houses are bigger, the schools are better and the neighborhoods are known to be safer than the community you live in now. You currently live in the Yellow district of the community. You know that you qualify for the house and the loan; you have been great at paying all of your bills on time and other loans you have for your cars have also been paid on time. You make more than enough to qualify for the home loan of \$45,000. You feel that you need to get out of your current neighborhood because the community is changing and there are a lot of undesirable people moving in.

### The Home Owner looking to make repairs:

The Johnson Family (low income, family of color): You are a Home Owner in a red district. Your house is an older home and is in need of a new roof and you would like to add on to the house to make room for your growing family. You have excellent credit and with two incomes you and your spouse make more than enough to qualify for the \$10,000 loan. You go to the bank to ask for a loan and you also have the equity in your home to put down as collateral.

**Bank/Home Loan Company:**

You are the only Home Loan Company in town, and you have been the biggest lender for new home loans and home repairs. It is widely known that your guidelines are very strict. On top of that, your lending is guided by maps that divide the residential areas of the city into Red, Yellow, Blue and Green districts. Use the color descriptions from the 'Redlining Maps' section in the scenario to make your decision on whom to give a loan to.

**FYI: Actual HOLC Map Descriptions**

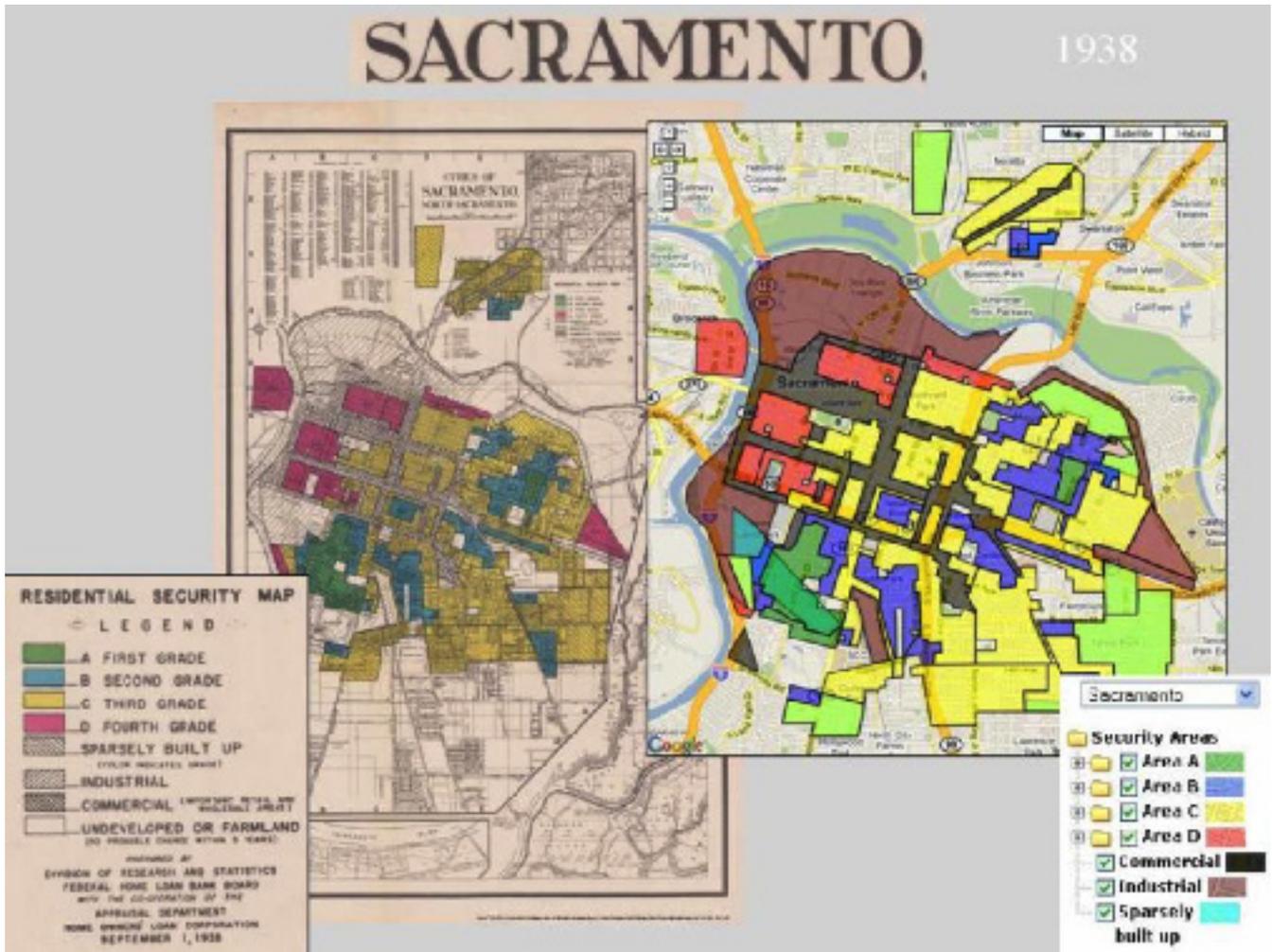
"Red areas represent those neighborhoods in which the things that are now taking place in the Yellow neighborhoods, have already happened. They are characterized as undesirable populations or infiltration (folks of color moving into once white spaces) of it. Low percentage of home ownership, very poor maintenance and often vandalism prevail. Unstable incomes of the people and difficult collections are usually prevalent. The areas are broader than the so-called slum districts. Some mortgage lenders may refuse to make loans in these neighborhoods and other will lend only on a conservative basis."

"Yellow areas are characterized by age, and characterized as not a place where people want to live. It is looked at by those with more resources as a place that has infiltration of a lower grade population (people of color, low income); what makes this place undesirable are things like inadequate transportation, insufficient utilities, perhaps heavy tax burdens, poor maintenance of homes, etc. Generally, these areas have reached the transition period. Good mortgage lenders are more conservative in the Yellow areas and hold loan commitments under the lending ratio for the Green and Blue areas."

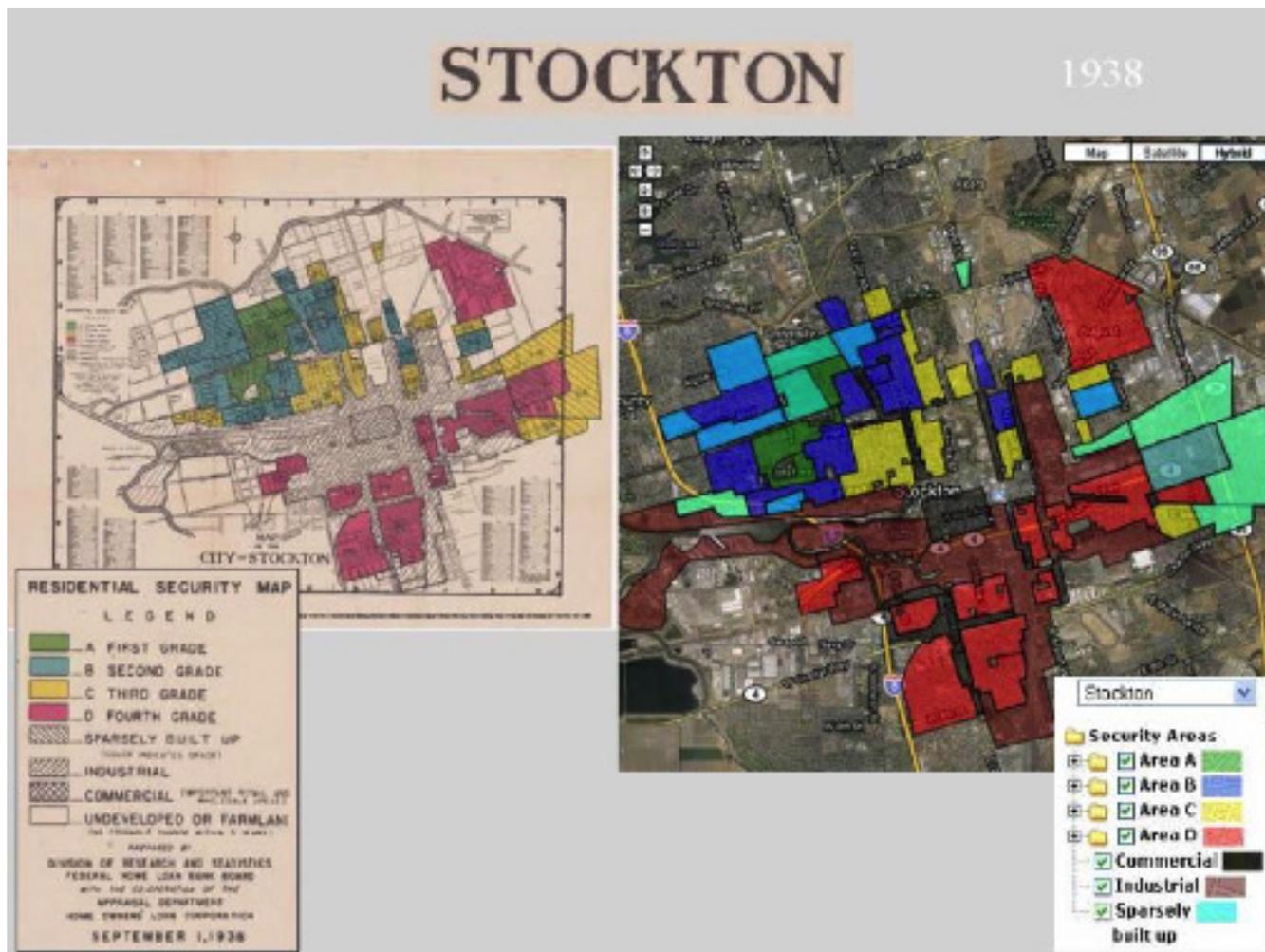
"Blue areas, as a rule, are completely developed. They are like a 1935 automobile still good, but not what the people are buying today who can afford a new one. They are the neighborhoods where good mortgage lenders will have a tendency to hold loan commitments 10-15% under the limit."

"Green areas are "hot spots"; they are not yet fully built up. In nearly all instances they are the new well planned sections of the city, and almost synonymous with the areas where good mortgage lenders with available funds are willing to make their maximum loans to be amortized over a 10-15-year period -- perhaps up to 75-80% of the appraisal. They are homogeneous; in demand as residential locations in "good time" or "bad"; hence on the upgrade."

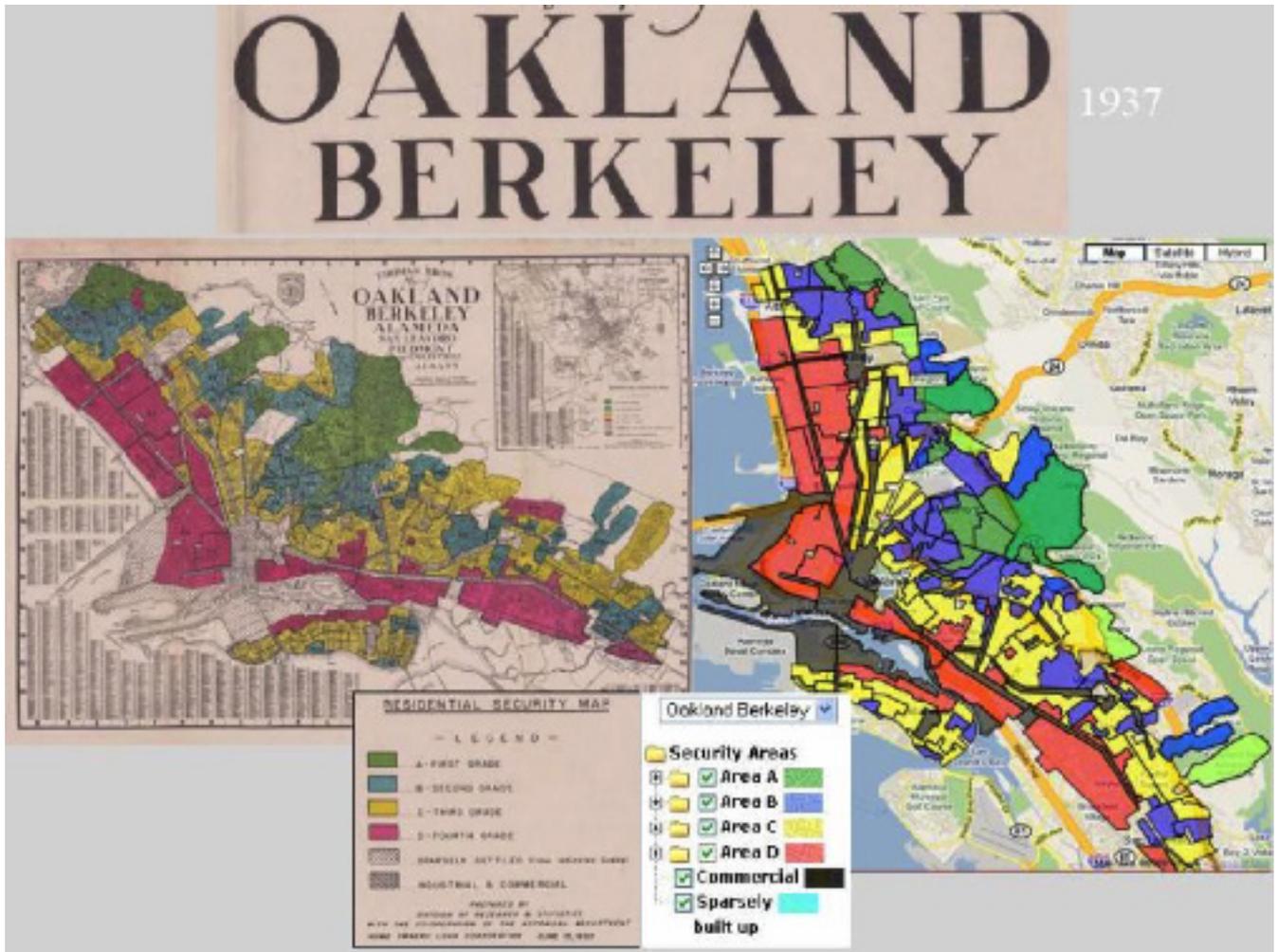
Redlining Map



## Redlining Map



Redlining Map



## I.2.B Unincorporated Areas Scenario

### Directions:

1. As a group, take 5 minutes to read over the scenerio description below.
2. After reading the description, take 10 minutes to come up with a 3-minute skit. Make sure that you show how maps were used in your skit!

### Introduction

City governments are in charge of most of our everyday infrastructure including sidewalks, sewers, street-lights, libraries and clean water. But what if you live in an area with no city government? Unincorporated areas are places that sit outside of municipal boundaries, and 1.8 million people in California live in unincorporated areas. While some of these areas are wealthy suburbs where residents might be able to pay for their own services, most are home to families with low incomes. In the San Joaquin Valley, 300,000 people live in low-income or disadvantaged unincorporated areas. These areas are also more likely to have Latino and African American residents.

Lines on the map become invisible fences that divide unincorporated areas from cities. These fences are built by politicians who can annex an unincorporated area or can use Extraterritorial Jurisdiction (ETJ) to make changes in areas within their sphere of influence. When a city annexes an area it makes it part of the city. The city then has to provide services to residents, and those residents can vote in local elections. Spheres of influence are usually a ring around a city where municipal politicians can use their ETJ to create new zoning maps and plans for the way an area can be used and developed without any of the responsibilities, like providing sewage or trash pick up.

A city might use maps to find new wealthy suburbs that it would then annex in order to increase its property tax revenue – the money cities collect from homeowners. Politicians (for example, a city council) might also use ETJ to change the zoning in a disadvantaged unincorporated area for uses they don't want in their own city. These uses could be anything from waste disposal to golf courses.

Maps can also be used for education and organizing to show that communities of color are being excluded from municipal services, and to show the conditions in unincorporated areas.

### Clarifying Questions:

- What does it mean to annex?
- What is a sphere of influence?
- What are some reasons a city wouldn't annex a community in their sphere of influence?

**Skit Roles:** Take 10 minutes to create a 3-minute skit. Use the roles below to create your skit.

**Scenario:** Welcome to \_\_\_\_\_. You are a small but growing community in the Central Valley. Your community is mainly agricultural but has seen growth in the past few years. Because of the recent drought many farmers have been working with developers to get their land annexed and developed. The areas to the north and northeast of the city are a big point of discussion. The developers are working with the land owners and want to have the unincorporated community to the north of the city annexed and the northeast area rezoned.

**City Council Member 1:** You are in favor of annexing the unincorporated community north of the city limits. You know that this community has a very high tax base that will help the city, and will also help pay for many of the existing infrastructures needed. While you support annexing this community you are not in favor of annexing the neighboring community to the east. This is currently a place with multiple mobile home parks, and home to some prime land that is close to the freeway and that has the potential for very profitable development. You would like to see this community rezoned for commercial use and a possible golf course, using your ETJ.

**City Council Member 2:** You are also in favor of annexing the community to the north as well as annexing the unincorporated area to the east of it. You fear that using the ETJ on the unincorporated area to the northeast will displace many people, and would like to annex both areas to utilize the peoples' ability to vote and to work with them to develop the area to match the needs of that community.

**Developer:** You have plans to build a new housing development and a high-end shopping center in the unincorporated area to the north of the city. You have been working with City Council Member 1 to annex this area. You are also trying to have the council use their Extraterritorial jurisdiction (ETJ) to rezone the unincorporated area to the northeast. You have plans to build a golf course there.

**Community Members:** You are a coalition of Environmental Justice advocates, city residents, and residents of the unincorporated area to the northeast. You are fighting to stop the council from using the ETJ to rezone the area. You would like to have the community have a say on what happens to the land and are concerned that rezoning the area that has a number of mobile home parks on it will push people out of their homes and will leave them with no affordable housing options.



## Module 2

### Module 2. Introduction to Putting Youth on the Map Appendices

#### Map Chat

- Appendix 2.1.A Vocabulary Term Sheet
  - For use in Activity 2.1 and Activity 3.1
  - Print out the sheet and have the participants go over the terms and definitions for both activities.
- Appendix 2.1.B Vocabulary Term and Definition Cards
  - For use in Activity 2.1 and Activity 3.1
  - Print out two sets of cards and cut. Do not print double sided.

#### How to Create Maps

- Appendix 2.3.A Scavenger Hunt Cards
  - For use in Activity 2.3
  - Print out multiple copies of the cards and cut. For Round 1 make sure to use all 4 scenarios.
- Appendix 2.3.B PYOM Walk Through Script
  - For use in Activity 2.3
  - Print out and use to walk through a demonstration on how to use PYOM.
  - This is optional - you may also decide to create your own demonstration based on this script.



## 2.1.A Vocabulary Terms

**Map:** A graphic representation of the features of a place. Those features might be physical (elevations, the shapes of the continents), built (roads, buildings), or even social (how many youth live in an area, how many people voted in an area).

**Margin of error:** A statistical measure expressing the amount of random sampling error in a survey's results, or how confident you can be in a result. The higher the margin of error, the less confidence you can have in a result.

**Analytical index:** Provides an analytical shortcut built upon and pointing to multiple data points.

**Census tract:** Small, relatively permanent statistical geographic subdivisions that generally have a population size between 1,200 and 8,000 people.

**County:** A political and administrative division of a state, providing certain local governmental services.

**Geographic scale:** The relationship between a distance on a map, chart, or photograph and the corresponding distance on the Earth's surface.

**GIS (Geographic Information Systems):** A computer system for capturing, storing, organizing, analyzing and displaying data related to positions on Earth's surface.

**Map legend:** A table on a map or chart that lists and explains the symbols used.

**Webmaps:** Interactive maps that let people search for and save spatial information, and in some cases add new information to the map.

**Redlining:** The practice of housing lenders systematically denying or limiting financial services to specific neighborhoods, usually because people are poor or nonwhite.

**Unincorporated area:** An area of land that is not governed by its own local municipal organization.

**U.S. Census:** A procedure of systematically acquiring and recording information about the United States' population, which occurs every 10 years as mandated by the United States Constitution.

**Social media:** Virtual communities and networks that support social interaction among people in which they create, share or exchange information and ideas.

**Web 2.0:** The second stage of development of the World Wide Web, characterized by the change from static web pages to dynamic or user-generated content and the growth of social media.



- Do Not Print Double Sided -

### 2.1.B Vocabulary term and definition cards

A graphic representation of the features of a place. Those features might be physical (elevations, the shapes of the continents), built (roads, buildings), or even social (how many youth live in an area, how many people voted in an area)

Provides an analytical shortcut built upon and pointing to multiple data points

A statistical measure expressing the amount of random sampling error in a survey's results, or how confident you can be in a result. The higher the margin of error the less confidence you can have in a result

Small, relatively permanent statistical geographic subdivisions of a county that generally have a population size between 1,200 and 8,000 people



- Do Not Print Double Sided -

A political and administrative division of a state, providing certain local governmental services

A computer system for capturing, storing, organizing, analyzing and displaying data related to positions on Earth's surface

The relationship between a distance on a map, chart, or photograph and the corresponding distance on the Earth's surface

A table on a map or chart that lists and explains the symbols used



- Do Not Print Double Sided -

Interactive maps that let people search for and save spatial information, and in some cases add new information to the map

An area of land that is not governed by its own local municipal organization

The practice of housing lenders systematically denying or limiting financial services to specific neighborhoods, usually because people are poor or nonwhite

A procedure of systematically acquiring and recording information about the members of a given population, which occurs every 10 years as mandated by the United States Constitution



- Do Not Print Double Sided -

Virtual communities and networks that support social interaction among people in which they create, share or exchange information and ideas

**Map**

The second stage of development of the World Wide Web, characterized by the change from static web pages to dynamic or user-generated content and the growth of social media

**Margin of Error**



- Do Not Print Double Sided -

**Census Tract**

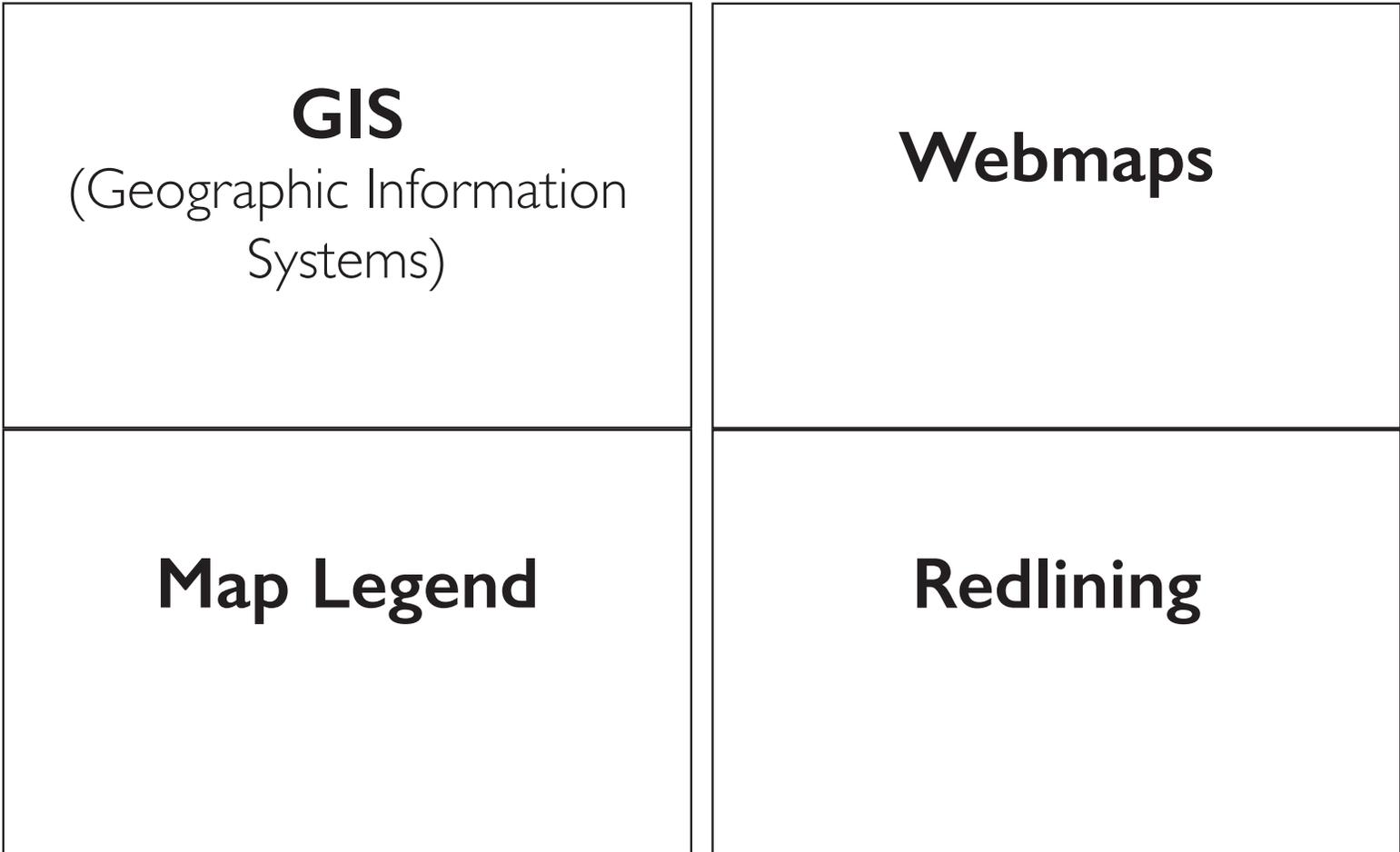
**County**

**Analytical Index**

**Geographic Scale**



- Do Not Print Double Sided -





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**Unincorporated  
Area**

**Social Media**

**U.S. Census**

**Web 2.0**



## 2.3.A PYOM Scavenger Hunt Cards

### Scavenger Hunt Round 1

Welcome to the Putting Youth on the Map Scavenger Hunt. Follow the directions below to find the information needed.

**Directions:**

**Step 1:** Click the “Location” icon in panel 1. Select “School Districts” from the drop down menu and enter the name of your school district. Click the magnifying glass icon or press the “enter” key.

**Step 2:** Click on your highlighted school district on the map. Find the “Youth Well-Being Index” score in the pop-up box.

**Step 3:** How does your well-being score compare to the “State Average” for well-being?

---

**Step 4:** Using the “Score Breakdown” graph in the bottom half of the “Youth Well-Being Index” pop up box, write down your overall score for the “Education” domain \_\_\_\_\_

### Scavenger Hunt Round 1

Welcome to the Putting Youth on the Map Scavenger Hunt. Follow the directions below to find the information needed.

**Directions:**

**Step 1:** Click the “Location” icon in Panel 1. Select “School Districts” from the drop down menu and enter the name of your school district. Click the magnifying glass icon or press the “enter” key.

**Step 2:** Click on your highlighted school district on the map. Find the “Youth Well-Being Index” score in the pop-up box.

**Step 3:** How does your Youth Well-Being score compare to the “State Average” for well-being?

---

**Step 4:** Using the “Score Breakdown” graph in the bottom half of the “Youth Well-Being Index” pop up box, write down your overall score for the “Health” domain \_\_\_\_\_

### Scavenger Hunt Round 1

Welcome to the Putting Youth on the Map Scavenger Hunt. Follow the directions below to find the information needed.

#### Directions:

**Step 1:** Click the “Location” icon in Panel 1. Select “School Districts” from the drop down menu and enter the name of your school district. Click the magnifying glass icon or press the “enter” key.

**Step 2:** Click on your highlighted school district on the map. Find the “Youth Well-Being Index” score in the pop-up box.

**Step 3:** How does the local well-being score compare to the “State Average” for well-being?

---

**Step 4:** Using the “Score Breakdown” graph in the bottom half of the “Youth Well-Being Index” pop up box, write down your overall score for the “Social” domain \_\_\_\_\_

### Scavenger Hunt Round 1

Welcome to the Putting Youth on the Map Scavenger Hunt. Follow the directions below to find the information needed.

#### Directions:

**Step 1:** Click the “Location” icon in Panel 1. Select “School Districts” from the drop down menu and enter the name of your school district. Click the magnifying glass icon or press the “enter” key.

**Step 2:** Click on your highlighted school district on the map. Find the Youth Well-being Index score in the pop-up box.

**Step 3:** How does the local well-being score compare to the “State Average” for well-being?

---

**Step 4:** Using the “Score Breakdown” graph in the bottom half of the “Youth Well-being Index” pop up box, write down your overall score for the “Community” domain \_\_\_\_\_



## Scavenger Hunt Round 2

### Directions:

**Step 1:** Click the “Location” icon in Panel 1. Select “School Districts” from the drop down menu and enter the name of your school district. Click the magnifying glass icon or press the “enter” key.

**Step 2:** Click on the “Map 1” button at the top of the map.

**Step 3:** In the “Make a Map” pop-up box, click on the “+” icon next to “Youth Well-Being Index.” Click on the “+” icon next to “Education.” Click the “High School Graduation Rate” link.

**Step 4:** Click the “X” at the top of the pop-up box and click on your highlighted school district.

What is your school district’s high school graduation rate? \_\_\_\_\_

**Step 5:** Click on the  icon

Using the “High School Graduation Rate by Race/Ethnicity” Graph, what is the graduation rate of Black students compared to White students? \_\_\_\_\_

**Step 6:** Click on the bar labeled “Black.”

**Step 7:** Click on the “California” icon at the top of the map to create the map showing all the graduation rates for all black students.

**Step 8:** Using the map legend to determine the color of your district:

- Find one community with a similar graduation rate for Black students
  - What is the name of the school district? \_\_\_\_\_
  - What is their graduation rate for Black students? \_\_\_\_\_
- Find one community that has a higher graduation rate for Black students
  - What is the name of the school district? \_\_\_\_\_
  - What is their score? \_\_\_\_\_



### Scavenger Hunt Round 3

**Directions:** In this round you create maps that could help you advocate for the need to raise your school's graduation rates.

**Step 1:** You should be able to answer the following:

- What is your school district's high school graduation rate? (Print this map)
- Which racial/ethnic groups are graduating at the lowest and the highest rates in the district?
- What is the rate for young men and young women?
- How many youth are graduating "ready for university" (Print this Map)
- Which racial/ethnic groups are ready for university at the lowest and the highest rates in the district?

**Step 2:** In another panel, change the map to the Youth Well-Being Index and select a school district near yours that has better graduation rates (Hint: darker colors=more graduating).

Why do you think they are doing better?

**Step 3:** In the "Other" section of the Map button drop down menu, select the "Percent Out of Work and Out of School" map. Find your community using the location button. What is the percentage out of work and out of school for your community? How do you think this is affected by the Graduation Rate?

**Step 4:** Using the "Other" section, look at the Truancy and Suspension rates map for high schools. Find your school district using the location button.

**Step 5:** Select the "Truancy Rates (high school)" map (print this map). Answer the following questions:

- What high school has the highest truancy rates in your district?
  - What is the rate? (hint: click points on map for rates)
- What high school has the lowest truancy rate in the district?
  - What is the rate?
- Do you think truancy affects your district graduation rates?

**Step 6:** Using the "Suspension Rates (High School) Map" (print this map), see which school has the highest suspension rate.

Answer the following questions

- What school has the highest suspension rate?
  - What is the rate?
- What school has the lowest suspension rate in the district?
  - What is the rate?
- Do you think school discipline affects your district graduation rate?

**Step 7:** Put it all together

After looking at the data and maps, use the information and maps you have to prepare a 3-minute presentation about helping raise the districts Graduation and University Readiness rates. (Allow youth to print the maps if possible)



### 2.3.B PYOM Walk-through Script

Let's explore how to make the maps you want. [Click "Interactive Maps" on the home page]

When you enter the mapping site, you will see three "panes." These are your palettes where you can create your customized maps. They initially load with maps of the Youth Well-Being Index (YWI), the Youth Vulnerability Index (YVI), and the Citizen Voting Age Population: % Youth. As an overall guide,

- The Youth Well-Being Index and related data maps use school district boundaries. All other maps are based on either census tracts, which are areas containing about 5000 people, counties, or CCDs (roughly towns). In areas with high population density (such as in cities) census tracts are small, and in low density areas (such as in rural areas) these are larger.
- On all maps, darker colors always symbolize "more" of whatever the map is measuring, and lighter colors mean "less."
- Click the "i" button at the bottom of the map panel to learn more about the map.
- You can scroll over buttons on the site to learn about their function.

You can customize maps in many ways, depending on your goal (or just your curiosity!)

- You can change the number of map panels.
- You can change the map you see by using the "Change Map" button to pick a map type [show button in the top tool bar, or each of 3 panels, show how you can click + button to see more, create a domain map in Panel 2 and an indicator map in Panel 3]
- A Street Map is our default base map. You can change the "fade" to reveal the base maps below. You can change the base map, to see Terrain (showing elevation and ground cover), an Aerial View, or a grey canvas view with no base map. [change back to street]
- You can zoom in and out in 3 ways: using the + and – magnification buttons, by double clicking on any spot on the map, and by holding down the "shift" key and highlighting an area.
- You can get to a specific place by clicking the Location button and typing in a location.
- You can include or hide the legend by clicking the legend button (click off and back on)
- You can see and hide a map's data sources by clicking the ⓘ button
- You can zoom all three maps together, by having the Sync Maps function set to "Both". By selecting the Sync Maps function for "Scale", this will allow you to look at different locations at the same zoom level.
- By having the Sync Maps function set to "Location", this will allow you to sync maps to the same location.
- By having the Sync Maps function to set "None", this will allow you to have three independent panels.
- You can jump back to the full California view by clicking this California-shaped button.
- To learn more about a place on a map, click it to see a pop-up box. Many map pop-ups show how scores or data for that location compare to a statewide mean [show example in panel 1 YWI]. For YWI and YVI index scores, which are made up of multiple components, the pop-up will also show information for those sub-scores. For example for the YWI, the popup will show the education, social relationships, community involvement and health scores.
- If you're interested in seeing the state map for one of these areas, say health – click the bar on the chart, and it will change the map to the health map.



## Module 3

### Module 3. Digging into Putting Youth on the Map Appendices

#### Vocabulary Relay Race

- Appendix 2.1.A Vocabulary Term Sheet
  - For use in Activity 2.1 and Activity 3.1
  - Print out the sheet and have the participants go over the terms and definitions for both activities.
- Appendix 2.1.B Vocabulary Term and Definition Cards
  - For use in Activity 2.1 and Activity 3.1
  - Print out two sets of cards and cut.
  - Do not print double sided.

#### Body Mapping

- Appendix 3.2 Body Mapping Prompts
  - For use in Activity 3.2
  - Print these prompts out and hand out one per participant.
  - You can also put these up on butcher paper.

#### PYOM Jeopardy

- Appendix 3.3 Jeopardy PowerPoint
  - For use in Activity 3.3
  - Do not show this to participants. This is to be used during the game portion.
  - Follow the link to download the PowerPoint.

#### Youth Vote Breakdown

- Appendix 3.4.A Activity Cards
  - For use in Activity 3.4.A
  - Print out cards and cut.
  - Do not print double sided.
- Appendix 3.4.B CCEP Youth Voice at the Ballot Box
  - For use in Activity 3.4.B
  - Print and hand out the scenario cards to the youth.

## Beyond Indices

- Appendix 3.5.A Beyond Indices Other Map Descriptions
  - For use in Activity 3.5
  - You can either print it out and give to the participants and/or place this document on the overhead projector and walk through it with the participants.
- Appendix 3.5.B Beyond Indices Scavenger Hunt Cards
  - Find in Supplementary Materials

## Data-ing Game

- Appendix 3.6.A The Data-ing Game Contestant Roles and Scripts
  - For use in Activity 3.6
  - Print out copies of the roles for the participants.
  - Print out copies of the audience roles and hand out to the participants not participating in the actual game (that is, those who are not the 'map' or 'contestants').
- Appendix 3.6.B Trainer Notes for The Data-ing Game
  - Print these notes to guide the facilitator through the process of the game
- Appendix 3.6.C The Data-ing Game Roles PowerPoint
  - If you would like to give each participant their own role, print out the PowerPoint and hand them out to the individual participants.
- Appendix 3.6.D The Data-ing Game Participant Map PDFs
  - Print these out and hand to the respective contestants, so that they will know how to describe their maps for the game show.
- Appendix 3.6.E Data Criteria Handout
  - Print and hand out to all participants.
  - These will also help guide the audience in helping to select the best data for each round.
  - For the criteria discussion, you may want to put these concepts on a piece of butcher paper.
- Appendix 3.6.F The Data-ing Game Show PowerPoint
  - For use as the Game Show visual
  - As each question is asked and answered, you can place this PowerPoint on a projector so the audience can follow along visually.

### 3.1 Vocabulary Relay Race

See pages 78-92 for Vocabulary terms and Cards.

### 3.2. Body Mapping Prompts

Use these prompts to help fill in your body maps

#### Education:

- What issues are youth facing at school?
- What issues are youth facing when it comes to succeeding in school? (these issues can be both in or out of school)

#### Health:

- What issues/barriers keep youth from gaining access to quality health care?
- What issues keep young people from being physically fit?
- What issues are keeping young people from fighting off illness?

#### Social Relationships:

- What are the things that make it difficult for youth to have good relationships with:
  - Peers
  - Family
  - Adults (in school and community)

#### Community Involvement:

- What issues keep youth from being involved in their community?
  - Think about what causes lack of involvement.
  - Who or what keep the youth from being engaged?
- 

### 3.3 PYOM Jeopardy

[Download PowerPoint from the Supplementary Materials link on the PYOM Site Resources page under the Learn section]

<http://interact.regionalchange.ucdavis.edu/youth/resources.html#learn>



- Do Not Print Double Sided -

<p>What percentage of all California eligible youth (citizens age 18-24) voted in the November 2014 general election?</p>	<p><b>8.2%</b> <b>(or 285,000)</b></p>
<p>How many people voted in the finale of American Idol's 10th season?</p>	<p><b>122 million</b></p>
<p>1) How many youth age 18 to 19 were arrested in California in 2014? vs. 2) How many youth age 18 and 19 voted in the November 2014 election?</p>	<p><b>1) 116,000</b> <b>2) 54,000</b></p>



- Do Not Print Double Sided -

### 3.4.A Activity Cards

<p>Which communities are more likely to have high quality civic engagement programs for youth?</p>	<p><b>High income communities with a high proportion of white residents</b></p>
<p>1) What is the age group most contacted by political candidates and campaigns? vs. 2) What is the age group least contacted by political candidates and campaigns?</p>	<p><b>1) Senior citizens 2) Youth (age 18-24)</b></p>



### 3.5.A Beyond Indices

Use these descriptions on the “other” maps on PYOM to help you understand the maps and how they can be of use to you.

#### **Adequate Financial Resources**

This map shows the percentage of youth ages 12-17 growing up in households earning adequate income to meet basic needs.

#### **STDs (Gonorrhea)/ STDs (Chlamydia)**

The California Department of Public Health describes gonorrhea as “a common sexually transmitted infection caused by a bacterium called *Neisseria gonorrhoeae*.” Infection can cause serious reproductive health problems, such as pelvic inflammatory disease (PID) and infertility. Gonorrhea also can cause infections in newborn babies. Tests and effective treatments are available.

The California Department of Public Health describes chlamydia as “a common sexually transmitted infection caused by a bacterium called *Chlamydia trachomatis*.” Infection is often without symptoms, and if not treated, can cause serious reproductive health problems such as pelvic inflammatory disease (PID) and infertility. Chlamydia also can cause infections in newborn babies. Tests and effective treatments are available.

#### **Youth Out of Work and Out of School**

Young people who are out of work and out of school often lack access to support for well-being. This map shows the “out of school/out of work” rates of 20-24 year olds for geographical areas that contain a census population of at least 100,000 people.

#### **Truancy**

Truancy rates in California schools for 2012-2013. CDE calculates truancy rates as the number of students with unexcused absence or tardiness on 3 or more days divided by the total enrollment (see <http://www.cde.ca.gov/ls/ai/tr/> for more information about truancy). This map does NOT include truancy rates for school programs for incarcerated youth and home schools. All other school sites were geocoded using school addresses available through CDE when data were downloaded.

#### **Suspension**

CDE calculates suspension/expulsion rates as the number of students who committed one or more Federal Offense Category acts during the academic year and were subsequently suspended or expelled from school divided by the total enrollment. Grounds for suspension or expulsion are defined by California Education Code EC 48900 (see [http://www.gusd.net/cms/lib03/CA01000648/Centricity/Domain/58/EC\\_%C2%A748900.pdf](http://www.gusd.net/cms/lib03/CA01000648/Centricity/Domain/58/EC_%C2%A748900.pdf)). Here we present school data for 2012-2013. As of the 2012-13 school year, a student who commits multiple offenses that lead to a single suspension are counted only once per suspension, whereas prior to 2011-2012, schools

counted the number of offenses committed which likely resulted in students being counted more than once for the same suspension. This map does NOT include suspension/expulsion rates for school programs for incarcerated youth and home schools. All other school sites were geocoded using school addresses available through CDE when data were downloaded on 5/20/14.

### **Food Access**

The Healthy Food Financing Initiative (HFFI) Working Group has defined a food desert as, “a low-income census tract where a substantial number or share of residents has low access to a supermarket or large grocery store”. Our food access maps show the percentage and number of children ages 0 to 17 who have low access to grocery stores. Low access is defined as living more than 1/2 mile from a supermarket or large grocery store in urban tracts, and more than 10 miles from a supermarket or large grocery store in rural tracts.

### **Building Healthy Communities Boundaries**

The source for this is Healthy City, the research and mapping program of Advancement Project. Building Healthy Communities is a ten-year, comprehensive community initiative supported by The California Endowment. In 14 places across California, residents are using their power to make health happen in their neighborhoods, schools and with prevention.

### **Distance to Transit Stop (meters)**

This map shows the distance in meters from the population-weighted centroid of census block groups to the nearest transit stop. (Source: EPA Smart Location Database, Publically available GTFS data, 2012)

### **Percentage of Households with 0, 1, or 2+ Cars (3 maps)**

Three individual maps show the percentage of households that do not own an automobile, percentage of households that own 1 automobile and percentage of households that own 2+ automobiles respectively. (Source: ACS 2006-2010)

### **Transit Service Frequency**

Frequency of combined transit service within 0.25 miles of block group boundary per hour during evening peak period. (Source: EPA Smart Location Database, Publically available GTFS data, 2012)

### **Correctional Facilities**

This dataset represents prison boundaries. (Source: Homeland Infrastructure Foundation-Level Data, downloaded August 2016)

### 3.6.A The Data-ing Game

#### Participant Roles and Scripts

Welcome to the Data-ing game.

In each round a Map is going to be looking for the perfect data for their project.

For each Map the ideal dataset is: Trustworthy, Accurate, Representative, Accurately Visualized

#### Round One

Welcome to the first round — Let's meet Map number 1 who is hoping to help youth advocates research high school dropout rates in California, and identify schools across the state with the highest rates of graduation.

Questions for the Data contestants

Q1: Tell us who collected your data?

Q2: Tell us how old you are?

Q3: Tell us about your survey sample?

Q4: Can you show us some results?

Data #1

A1: I was collected by a company in Michigan that mostly does web design for restaurants.

A2: I am just five years young.

A3: Sure, my results come from an extensive survey of every high school senior from two high schools in Eureka, CA.

A4: Shares colorful, unlabelled charts and banners.

Data #2

A1: I was collected by the California Department of Education or "CDE," the state agency to which all public schools have to report educational data.

A2: I am six months old, but I'll be updated again at the end of the next school year.

A3: I come from reports required of every public school in California.

A4: Shares CDE data via a well-labeled chart.

Data #3

A1: I was collected by a very nice lady named Yulia Vann.

A2: Well, it's been a while since Yulia has had a chance to update me, so I'm about twelve years old.

A3: Well, Yulia actually surveyed a group of grandparents to see how they thought their grandchildren were probably doing in school.

A4: Shares very unclear bar graph.

## Round Two

Welcome to the second round of the data-ing game — In this round we have a Map that wants us all to get moving. This Map is going to help our very own city council to improve the sidewalks and bike paths.

Questions for the Data contestants

Q1: Tell us where you're from.

Q2: What's your favorite survey question?

Q3: Who do you spend time with when you are doing a survey?

Q4: Can you show us some data?

Data #1

A1: I was collected by a transportation advocacy group.

A2: My favorite survey question is probably: "How far do you walk in a week?"

A3: I really like the quiet life, so I tend to just stick to the suburbs when I am doing my surveys.

A4: Shows bar chart reflecting lack of data for downtown area.

Data #2

A1: I was collected by a small group that organizes an event called "drive to work week."

A2: You know surveys take a lot of time, so usually we just sort of guess what people are thinking.

A3: The great thing about not doing surveys is that it gives me more time to drive around in my car by myself, and not have to talk to anyone.

A4: My results are actually private so I can't show them to you.

Data #3

A1: I was collected by the California Department of Transportation, you can just call them DoT.

A2: I really like asking people if they ride their bike in the city, and if they say no I like to ask why not.

A3: I'm a real people person, so I try to spend time with everyone, usually I'll just go door to door in the whole city when I'm doing a survey.

A4: Shows bar chart of data broken out for males and females without information on numbers of survey participants.

## Round Three

Welcome to the last round of the data-ing game — In this round we have a Map that's looking to support environmental justice. This map is going to help a legal advocacy center trying to show the impact of Superfund sites in the Central Valley of California. (Superfund sites are abandoned places with toxic waste that might pollute the environment around them).

Questions for the Data contestants

Q1: Tell us who collected your data?

Q2: How would you describe yourself? What kind of data are you, and where do you come from?

Q3: How do you feel about sharing?

Q4: Will you show us some results?

Data #1

A1: I was collected by a university research team.

A2: I am an index of toxic exposure for all of California.

A3: Well, I love to share my index results from all over the state, but I can't really talk about the different domains that make up the index.

A4: I've created this 300 page report.

Data #2

A1: I was collected by a group sponsored by a chemical company. I can't really tell you which one though.

A2: I am a database of all the Superfund sites in the US including their current conditions.

A3: You can buy all of my data and metadata for what I think is a reasonable price.

A4: I've created this beautiful website to share our research, and it's available to all subscribers.

Data #3

A1: I was collected by a network of youth community organizers.

A2: I am a collection of soil and air samples from neighborhoods in Los Angeles, San Francisco and Sacramento.

A3: I love to share. All of my data is freely available to anyone who wants to see it

A4: Our youth team has created this website to share our methods and research. It's not slick, but it works.

**Audience Roles:** Your job as the audience is to help the Map select the perfect data match to display. During the game, the Map will ask very important questions of the Data participants. Use these data criteria to help the Map select the perfect data match.

- **Source Trustworthiness**
  - What are the source's biases (what is their agenda)?
  - Does the source have adequate skills/resources to collect/process the data?
- **Data Accuracy**
  - Was the information collected likely correct/accurate (e.g. survey questions are not leading, participants likely provided accurate information)?
  - Was the information likely to be accurately entered into the data system?
  - Are the data up-to-date (or is the most recent data available)?
  - Are you confident that the analyses were done well (e.g. mathematical analyses are likely correct)?
- **Representation**
  - Are the data representative enough of all locations and/or populations of interest (consider margins of error, participation rates, where surveys were/were not administered, whether data collection used strategies to reach people who speak limited/no English, etc.).
- **Data Display**
  - How do map breakpoints affect the “story” told by the map?
  - Do the geographic units used for display visually distort interpretation? If yes, then how?
  - How do colors used for display affect visual interpretation?



### 3.6.B Trainer Notes for the Data-ing Game

#### Round 1

In this round there is a clear winner - Data #2.

The source is an organization that has the ability and skills to collect and analyze the data. It is very representative since all high schools are included, is up to date and will be regularly updated. In the data display there is information about the sources, methods, and opportunity to learn more about the data.

For Data #1, the source doesn't seem to have the skills to collect this type of data, and the data is not representative, comes from just two high schools, and is a bit out of date. The data are fun to look at, but doesn't have any information about sources or substance. Data #3 were also collected by someone who doesn't seem to have the skills to collect the data, are not representative, are very out of date, and are not presented well (for example "success" is misspelled).

#### Round 2

In this round it is a little bit less clear. Data #2 is not a good choice. The organization collecting the data is biased, they are asking the wrong questions to help understand biking and walking, and their data is not representative. Finally, we can't evaluate their data display since they won't share it.

Data #1 and Data #3 are pretty equal. They were both collected by groups that should have the skills to collect and analyze the data. They have both asked good questions, and they display their data in clear informative ways. But Data #1 is not as representative since it ignores the downtown and rural areas.

#### Round 3

This round is the one that doesn't really have a clear right answer. It shows that sometimes there are no perfect data, but you have to choose the data that work best for your question or project, or even combine data from different sources.

Each source is very different, but has the skill to collect the data and analyze it. All of the data also seem like they could be accurate. Some problems with Data #1 are that the university research group will only share their finished index, so it's hard to evaluate how accurate they actually are. Also their report is not very accessible since they only provide a long, complicated report. Some of the problems with Data #2 are that the group might be biased, (but they are willing to share all of the information you need to evaluate their work) and the data might be expensive. Data #3 is free, and the group that collected it will share all data, but the map is interested in the Central Valley of California, and most of these data comes from outside of the Valley. But maybe we could use their methods to collect our own data.

### 3.6.C The Data-ing Game Roles PowerPoint

[Download PowerPoint from the PYOM Resources Page as part of the Download Supplemental Material Link]

<http://interact.regionalchange.ucdavis.edu/youth/resources.html#learn>

### 3.6.D Participant Data Maps

[Download PDF files from the PYOM Resources Page as part of the Download Supplemental Material Link]

<http://interact.regionalchange.ucdavis.edu/youth/resources.html#learn>

### 3.6.E Data Criteria Handout

What to look for when critically looking at data that you are using or that is being used in maps.

- **Source Trustworthiness**
  - What are the source's biases (what is their agenda)?
  - Does the source have adequate skills/resources to collect/process the data?
- **Data Accuracy**
  - Was the information collected likely correct/accurate (e.g. survey questions are not leading, participants likely provided accurate information)?
  - Was the information likely to be accurately entered into the data system?
  - Are the data up-to-date (or is the most recent data available)?
  - Are you confident that the analyses were done well (e.g. mathematical analyses are likely correct)?
- **Representation**
  - Are the data representative enough of all locations and/or populations of interest (consider margins of error, participation rates, where surveys were/were not administered, whether data collection used strategies to reach people who speak limited/no English, etc.).
- **Data Display**
  - How do map breakpoints affect the "story" told by the map?
  - Do the geographic units used for display visually distort interpretation? If yes, then how?
  - How do colors used for display affect visual interpretation?

### 3.6.F Data-ing Game Show PowerPoint

[Download PowerPoint from the PYOM Resources Page as part of the Download Supplemental Material Link]

<http://interact.regionalchange.ucdavis.edu/youth/resources.html#learn>

## Module 4

### Module 4. Putting Youth on the Map for Change Appendices

#### Other Tools for Community Change

- Appendix 4.2.A Youth Participatory Action Research Concepts
  - For use in Activity 4.2.A
  - Print out copies and hand out to participants
  - You may also want to display this on the projector while walking through the document
- Appendix 4.2.B Google Maps How-To Handout
  - For use in Activity 4.2.B
  - Print out copies and hand out to participants
  - You may also want to display this on the projector while walking through the document

#### YPAR/Mapping Simulation

- Appendix 4.3.A Food Access Simulation Instructions
  - Print out and cut as instructed
  - Place each station in an envelope and label with the appropriate station number
  - Place stations around the room
- Appendix 4.3.B Youth Spaces Simulation Instructions
  - Print out and cut as instructed
  - Place each station in an envelope and label with the appropriate station number
  - Place stations around the room

## 4.2.A Youth Participatory Action Research Concepts (adapted from Youth in Focus Stepping Stones Curriculum (2002))



### Young people define the project (often in collaboration with adult allies)

- What they want to accomplish with their research in order to foster stronger, more equitable conditions
- What they want to research

### Young people design data collection tools

- Consider the trade-offs of different data collection methods and select those that will work best
- Develop instruments such as: surveys, interview or focus group protocols, observation guidelines, photo voice prompts, etc.
- Decide how to use these tools to hear from a specific population
- Clarify whose perspectives are missing or under-represented given our approach

### Young people collect data

- Put the tools to use to collect the data needed

### Young people analyze the data

- Come up with a systematic way to look at the data collected and see what themes emerge with respect to our questions
- See if themes emerge that our questions did not anticipate
- See if new questions or puzzles emerge

### Young people create recommendations

- Based on the findings, suggest ideas, options, solutions, and/or other research that might be important

### Young people develop and implement action plans

- Figure out how to share findings and recommendations with key stakeholders
- Figure out next steps for follow-up to support action

## 4.2.B Google Maps How-To Handout

Access to official data is important for community change work, but official data doesn't always tell the whole story. YPAR and participatory mapping are important tools to help us “talk back” to the officially available data.

Participatory mapping – lets you add your own data to maps

That data can come in many forms

- hand-drawn maps
- something that you've measured or counted
- pictures, drawings, video and sound you add to the map to bring the topic to life

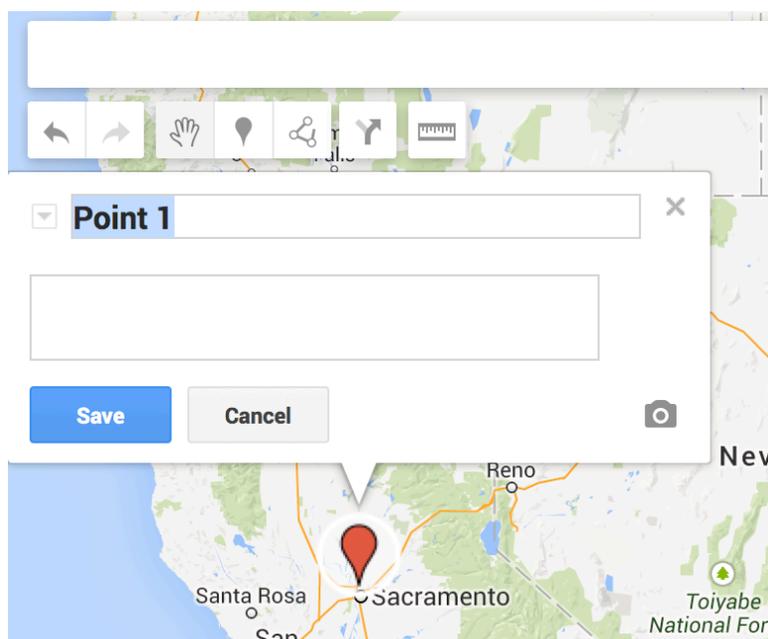
There are many different tools for online participatory mapping, but we're going to start with one that is familiar to many of us: Google Maps



You need to sign into Google to use the mapping tools

To create a map:

- 1) Go to [www.google.com/maps/d/](http://www.google.com/maps/d/) and click on “Create A New Map”.
- 2) Sign in to Google Account.
- 3) Click on “Untitled Map” to give your map a title and a description.



To draw placemarkers, paths and shapes

1) To draw a point, select the placemaker button and click your point on the map.

You can name your point, and add text to describe what is going on at this point, or you can tell a story about the place. You can also include links to websites in the text box.

You can add pictures and videos at the point, by clicking on the camera icon in the bottom-right corner.

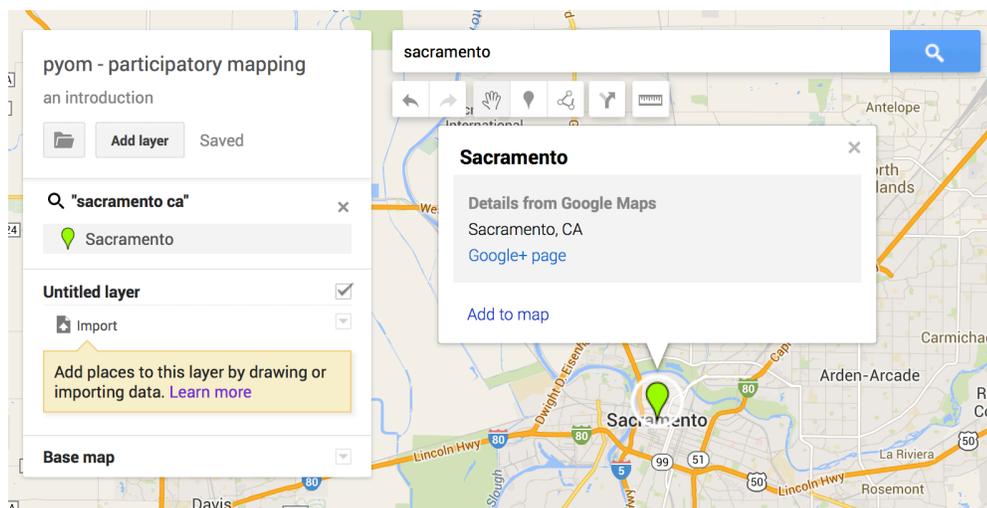
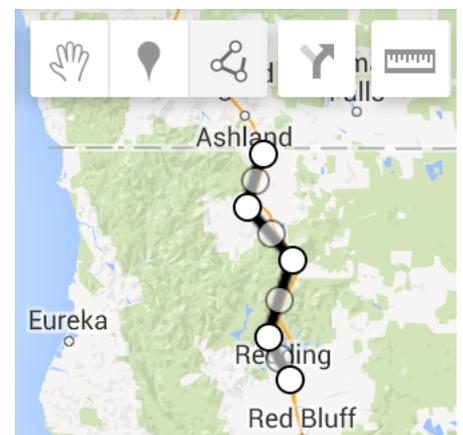
Search for some video or a picture to add to the map.

2) To draw a line or polygon select the line tool and add points along the line.

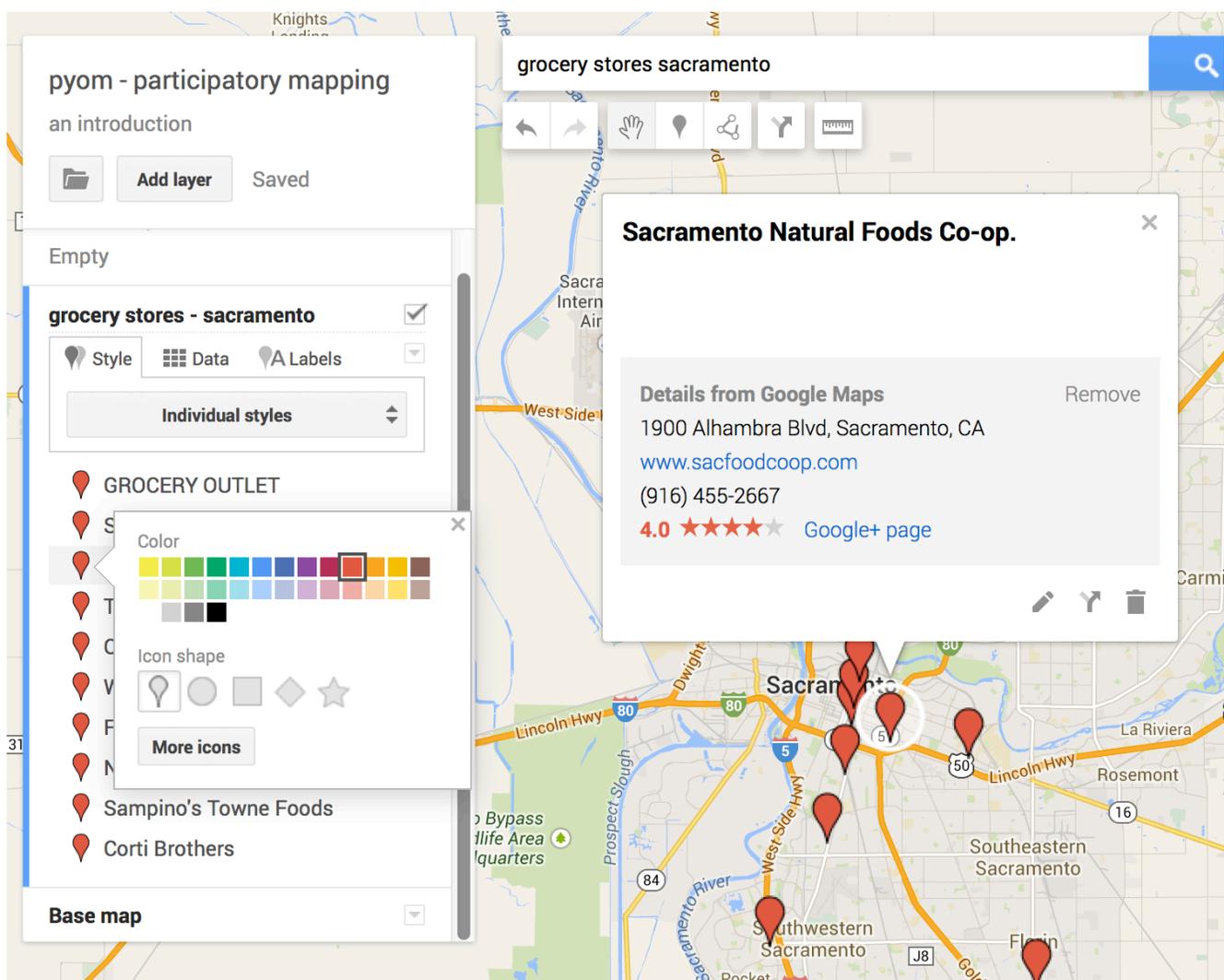
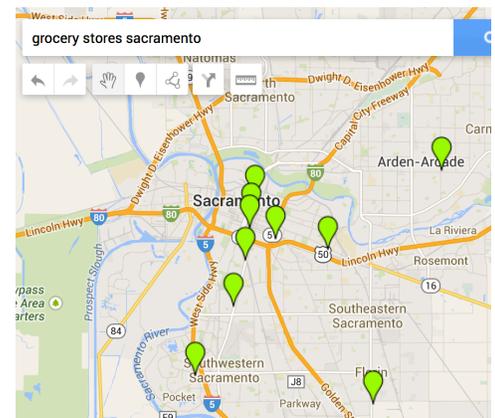
Double click to end the line, and to make a polygon you have to click a second time on the first point.

Just like a point you can add a name, text, pictures and video to a line or a polygon.

### To add a point or line using Google search



- 1) To add a point (or group of points) you can use the search bar at the top of the map just like you would do with Google map.
- 2) When you click on the results in the menu on the left a pop up window will appear at the point and you can click “Add to map” to add it to your map layers.
- 3) You can search for a particular address, or a group of things. For example, searching for “grocery stores Sacramento” gives us these results.
- 4) If you click the add line button, you will see the option to add directions to your map for walking, driving and biking.



## Making Edits and Changing the Appearance of your Maps

- 1) The style tab lets you change the shape and color of the map icons. You can make individual changes or make a change for all of the icons in a layer.
- 2) The layer tab lets you add layers to the points on the map.
- 3) You can delete a layer by selecting the arrow just right of the layers tab.
- 4) You can also make edits to a point, line or polygon by selecting the pencil icon at the bottom-right of the popup box for the feature. You can delete it by selecting the trashcan icon.
- 5) You can also change the base map to suit the type of data you are adding to your participatory map, by selecting the arrow in the Base map row at the bottom of the menu and choosing a style.

### Facilitator Notes

- 1) It is possible that some of the participants will not have their own Google account. One suggestion in such a circumstance is to open a group account at the site that the facilitator can sign folks into.



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### 4.3.A Simulation Instructions

Print and cut out the directions and place in separate envelopes per station.

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Congratulations! You have embarked on a journey of research. It will be a challenging and hopefully fun experience.

Here is your mission:

- You have been asked by a community organization to conduct some research on barriers to eating healthy, high quality food in your community.
- Your task is to research community access to healthy and affordable food.
- The organization wants to find out where food stores are located and the quality of these stores.
- This research will be used to advocate for bringing more healthy food options to the community.
- The envelopes located at the stations around the room hold directions to guide you in your journey. Good luck!
- Please Proceed to Station 1

-----Cut Here-----

#### Station 1: Goals and Framework Setting (15 min)

**Directions:** Welcome to the start of your journey! You know what you need to research, but what is this research really about? Your team will have 15 minutes to answer some questions and do some background work on Putting Youth on the Map ([interact.regionalchange.ucdavis.edu/youth](http://interact.regionalchange.ucdavis.edu/youth)). Split your group so that half the members are answering the Project Questions and half are collecting data online to answer the Data Questions. Write your answers on the flip chart paper provided.

#### Project Questions:

- What is the overall purpose of this research?
- Who is this research serving?
- What do we/they want to learn?
- Who else should we talk with to get key information?
- Who needs to buy into our research design?

#### Data Questions:

Using PYOM follow the directions below and answer the questions in bold text.

1. In all panels use the Location button to locate your community (city, state and zip)
2. In panel 1 (left pane)
  - a. Use the map 1 button and click on the "Other" "+" button
  - b. Click to open the food access map (%)
  - c. What is the percentage of young people who live "far" from a grocery store?
  - d. How many young people live "far" from a grocery store? (Hint: see Food Access (#))



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3. In panel 2 (center pane)
  - a. Use the Map 2 button to open up the “Youth Vulnerability Index”. Click on the “+” button
  - b. Click to open up the “Poverty Rate: County” map
  - c. Click on your location to see your county poverty rate
  - d. What was the county score?
  
4. In Panel 3 (right pane)
  - a. Using the Map 3 button open up the “Other” “+” button
  - b. Click to open the Adequate Financial Resources map
  - c. Click on your location to see the percentage of young people living with Adequate Financial Resources
  - d. What percentage of young people is living with adequate financial resources?
  - e. What is the rate of youth living without adequate resources? (hint: subtract the answer to question (d) from 100)

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## Station 2: Research Design (10 min)

Now that you are clear about your research goals and you have collected some background information, you have 10 minutes to develop your research design.

### Instrument Selection:

Out of a range of possible data collection strategies (focus groups, observations, surveys and participatory mapping), today you will use participatory mapping.

### Instrument Development:

Based on your knowledge of places with limited grocery store access in your community, youth poverty levels, and youth access to adequate financial supports, pick 2-3 questions from the list below that you would like to answer on your map.

- Where are grocery stores located?
  - What is the quality of the produce in the stores?
  - What is it like around the stores (e.g how does it look, safety, etc.)?
  - How can people get to the stores?



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### Station 3: Data Collection (10 min)

Ok, now that you are equipped with your research design, it's time to roll. You will have 10 minutes to collect your data and add it to the map.

Use Google Maps to create your map. Remember that you can pin point the locations and add descriptions that help answer the prompts above. If you need a refresher watch this tutorial ([https://support.google.com/mymaps/answer/3024396?hl=en&ref\\_topic=3188329](https://support.google.com/mymaps/answer/3024396?hl=en&ref_topic=3188329)) or ask your facilitator.

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### Station 4: Data Analysis (15 min)

After having collected data, what does it all mean? You have 15 minutes to analyze your data and see how it complements or not the data on PYOM.

Using the data map you have created, answer these questions.

1. What do these data tell you about your location, and the quality and/or accessibility of healthy, affordable food in your community? What do they not tell you?
2. Based on the map you created, what are the top two recommendations you would make for your community? What's your evidence? Write this on flip chart paper (Hint: you could write "We recommend \_\_\_\_\_ because our data shows \_\_\_\_\_.")
3. On the flip chart paper write/draw how your recommendations will improve the overall well-being of young people in your district. [Hint: You could write or draw something like...  
Our recommendations will improve
  - Health by \_\_\_\_\_
  - Education by \_\_\_\_\_
  - Community Involvement by \_\_\_\_\_
  - Social Relationships by \_\_\_\_\_.

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### Station 5: Presentation (10 min)

You've made your case in print, now let us hear it.

You have 5 minutes to prepare a 3 minute presentation describing your research to the organization representatives. Think about

- Which key points will most strongly and clearly communicate what you learned and what you recommend?
- How can you present these in a clear and engaging way?



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### 4.3.B Simulation Instructions

Print and cut out the directions and place in separate envelopes per station.

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Congratulations! You have embarked on a journey of research. It will be a challenging and hopefully fun experience.

Here is your mission:

- You have been asked by a youth organization to help them choose a site for their new program space.
- They are really interested in working with youth who are not working, and out of school during the day.
- Your task is to research where youth might be during the day, what they are doing.
- This research will be used by the youth organization to choose their site, and advocate for more youth resources.
- The envelopes located at the stations around the room hold directions to guide you in your journey.  
Good luck!
- Please Proceed to Station I

-----Cut Here-----

#### Station I: Goals and Framework Setting (15 min)

**Directions:** Welcome to the start of your journey! You know what you need to research, but what is this research really about? Your team will have 15 minutes to answer some questions and do some background work on Putting Youth on the Map ([interact.regionalchange.ucdavis.edu/youth](http://interact.regionalchange.ucdavis.edu/youth)). Split your group so that half the members are answering the Project Questions and half are collecting data online to answer the Data Questions. Write your answers on the flip chart paper provided.

#### Questions:

- What is the overall purpose of this research?
- Who is this research serving?
- What do we/they want to learn?
- Who else should we talk with to get key information?
- Who needs to buy into our research design?



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### Background Data work:

Using PYOM follow the directions below and answer the questions.

1. In all panels use the Location button to locate your community (ex. Sacramento, CA 95828)
2. In panel 1 (left pane)
  - a. Use the map 1 button and click on the “Other” “+” button
  - b. Click to open the truancy rate high school map
  - c. Look at the truancy rates of the high schools in your community, and neighboring communities
3. In panel 2 (center pane)
  - a. Use the Map 2 button to open up the “Youth Vulnerability Index”. Click on the “+” button
  - b. Click to open up the “Poverty Rate: County” map
  - c. Click on your location to see what the County’s rate of poverty is for your community
  - d. What was the county score?
4. In Panel 3 (right pane)
  - a. Using the Map 3 button open up the “Other” “+” button
  - b. Click to open the percent out of work and out of school map
  - c. Click on your location to see the percentage of young people who are out of school and out of work.
  - d. What is the rate of youth who are out of school and out of work?

-----Cut Here-----

### Station 2: Research Design (10 min)

Now that you have set the goals and framework for your research, you will have 10 minutes to develop your research design.

#### Instrument Selection:

Out of a range of possible research instruments (focus groups, observations, surveys, and participatory mapping), you will use participatory mapping.

#### Instrument Development:

Based on your knowledge of the truancy rates, youth poverty rate and percentage of young people who are out of school and out of work in your community, select 2-3 topics from the list below that you would like to map that will help you meet your learning and research goals.

Topics:

- Where do youth hang out when they are expelled or suspended?
- What are youth doing in these places?
- How do they get there?
- What do youth see around these places?



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### Station 3: Data Collection (10 min)

Ok, equipped with your research design, it's time to roll. You will have 10 minutes to collect your data and add it to the map.

Use Google Maps to create your map. Remember that you can pin point the locations and add descriptions that help answer the prompts above. If you need a refresher watch this tutorial ([https://support.google.com/mymaps/answer/3024396?hl=en&ref\\_topic=3188329](https://support.google.com/mymaps/answer/3024396?hl=en&ref_topic=3188329)) or ask your facilitator.

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### Station 4: Data Analysis (15 min)

After having collected data, what does it all mean? You have 15 minutes to analyze your data and see how it complements or not the data on PYOM.

Using the data map you have created, answer these questions.

- What does this data tell you about your research questions? What does it not tell you?
- Based on the map you created, what recommendations would you make for your community?

Document your recommendations. Be explicit about how your data backs up your recommendations noting what you found through your mapping.

Using PYOM, explain how your recommendations will improve the overall well-being of young people in your district. Connect your recommendations to the domains that it will help improve.

- Health
- Education
- Community Involvement
- Social Relationships

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### Station 5: Presentation (10 min)

You've made your case in print, now let us hear it.

You have 2 minutes to prepare a 3 minute oral presentation to describe your research to the organization representatives.

- What are the key points that will most effectively communicate the essence of the research, and how can these be presented in an informative and engaging way?