

# Design a Resilient Future







#### **Driving Question:**

What action can we take now to make our community more resilient to (wildfire/flooding/drought)?

#### What You Will Be Doing:

- Interview community experts and stakeholders to define a specific problem to address in the community to increase resilience to natural hazards.
- Design a solution for the specific problem identified.







# **Design Thinking Introduction**

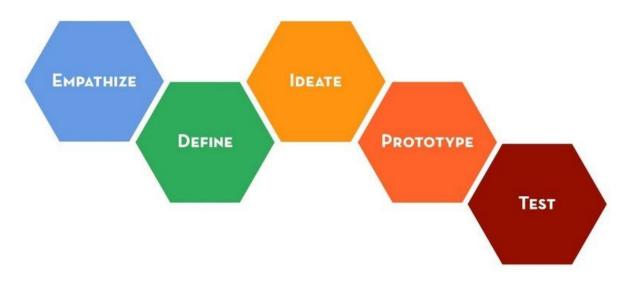


Image from: Stanford d.School

Design Thinking is a process for creative problem solving, which can be applied to developing resilience strategies to answer our driving question: **What actions** can we take to make our community more resilient to (wildfire/flood/drought)?









#### FOCUS ON HUMAN VALUES

Empathy for the people you are designing for and feedback from these users is fundamental to good design.

#### SHOW DON'T TELL

Communicate your vision in an impactful and meaningful way by creating experiences, using illustrative visuals, and telling good stories.













#### EMBRACE EXPERIMENTATION

Prototyping is not simply a way to validate your idea; it is an integral part of your innovation process. We build to think and learn.



#### BE MINDFUL OF PROCESS

Know where you are in the design process, what methods to use in that stage, and what your goals are.











#### CRAFT CLARITY

Produce a coherent vision out of messy problems. Frame it in a way to inspire others and to fuel ideation.



#### **BIAS TOWARD ACTION**

Design thinking is a misnomer; it is more about doing than thinking. Bias toward doing and making over thinking and meeting.











#### RADICAL COLLABORATION

Bring together innovators with varied backgrounds and viewpoints. Enable breakthrough insights and solutions to emerge from the diversity.









## Part 1: Empathize & Research

In the first stage of the Design Thinking Process, gather information from stakeholders in your community to investigate problems your community may have in regards to planning for or responding to natural hazards.

Ideas for experts and stakeholders to interview:

- City/town or county office of emergency management staff
- County/city planning and development office staff
- County planning commission members
- Public lands (USFS, BLM, etc.) staff
- City/town community experts on resilience or sustainability







# Parts 2 & 3: Capture Findings & Take a Stand

Reflect on the interview(s) with the expert or community member to narrow in on a specific area within the sector that you would like to work on. Create a Point of View Statement to guide the rest of the design process.

"As a test, a good point of view statement:

- Provides focus and frames the problem
- Inspires your team
- Provides a reference for evaluating competing ideas
- Empowers team members to make decisions in response to the high-level goals of the team
- Fuels brainstorms by suggesting "how might we" statements
- Captures the hearts and minds of people you meet
- Saves you from the impossible task of developing solution concepts that are all things to all people
- You revisit and reformulate as you learn by doing
- Guides your innovation efforts."

(d.school bootcamp bootleg)







# Part 3: Example Point of View Statements

- The fire chief needs a way to get the word out about the wildfire fuel mitigation service because wildfire risk is high in our area, and there are a lot of homes in the wildland-urban interface that need to become more firewise.
- Our community residents need more information about where to buy and how to plant water-saving native plants because we are in a drought and Kentucky bluegrass lawns use a lot of water.
- Our school needs a way to redesign and rebuild our track because it gets flooded each year and is unusable for a few weeks.







# Parts 4 & 5: Generate Solutions & Capture Feedback

Now it's time to come up with ideas! When you are brainstorming with your group, build on each other's ideas with "yes, and" instead of saying "yes, but." Now is the time to think big without being critical.

#### During the feedback session, consider asking these questions:

- What is your point of view statement?
- What did you learn in your interview that made you come up with your ideas?

Tell the other group which of the five ideas is your favorite (most innovative, most practical, most effective), and why. Ask these questions about your favorite idea:

- Who will your idea benefit?
- Will your idea promote resilience and help a community bounce back after a natural hazard? Is it a long term or short term idea?
- What kinds of resources will you need to carry out your idea?
- What kinds of challenges do you think you'll face?





## Part 6: Reflect & Develop the Best Solution

With the feedback you were just given, decide to focus on one of your ideas, and start to develop it further.

#### Consider the following questions:

- What is the scope of your idea? Is local, regional, national?
- What steps would you need to take to implement the idea?
- What resources would you need to implement the idea?
- How would your idea benefit the community?
- What challenges do you foresee?
- Once you've implemented the idea, how would you make sure it is sustainable and continues on without you?

Write answers to these questions and sketch your idea in your student worksheet.







#### Parts 7 & 8: Build Your Solution and Get Feedback

#### It's time to make your idea tangible!

"A prototype can be *anything* that takes a physical form – be it a wall of post-it notes, a role-playing activity, a space, an object, an interface, or even a storyboard for a video." (<u>d.school bootcamp bootleg</u>)

Have fun!







# Part 9: Reflect & Generate an Improved Solution

Incorporate the feedback on your prototype to refine your idea even further, and make it the best it can be.

#### Consider the following questions once more:

- What is the scope of your idea? Is local, regional, national?
- What steps would you need to take to implement the idea?
- What resources would you need to implement the idea?
- How would your idea benefit the community?
- What challenges do you foresee?
- Once you've implemented the idea, how would you make sure it is sustainable and continues on without you?
- How would you educate others about the value of your idea?
- What is the justification for your idea? Include anecdotes from your interview(s) to explain why the idea is important for the community.





