

# Participatory modeling for stormwater planning and economic development

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Calumet Stormwater Collaborative

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# Starting point

- Fundamental questions about:
  - Problem definition
    - Flooding as an issue
    - Links to economic development (incinerator, quarry)
  - Ways to address problem
    - Separate wish lists
    - Unclear framework
  - Details about project
    - Partners
    - What will be funded
    - Acronyms!

## Wish lists:

- Large banquet hall
- Outdoor wedding area
- Hiking trails
- Gateway
- Veterans memorial
- Amphitheater
- Nature center
- Lots of lighting
- Guard house
- Football arena

# Participatory modeling workshops

- **January 11**      RainReady Robbins
- **February 10**      Lake Katherine
- **March 10**      Robbins Community Center
- **June 6**      Kellar Middle School
- **July 14**      Turner Elementary School

# Causal Loop Diagrams

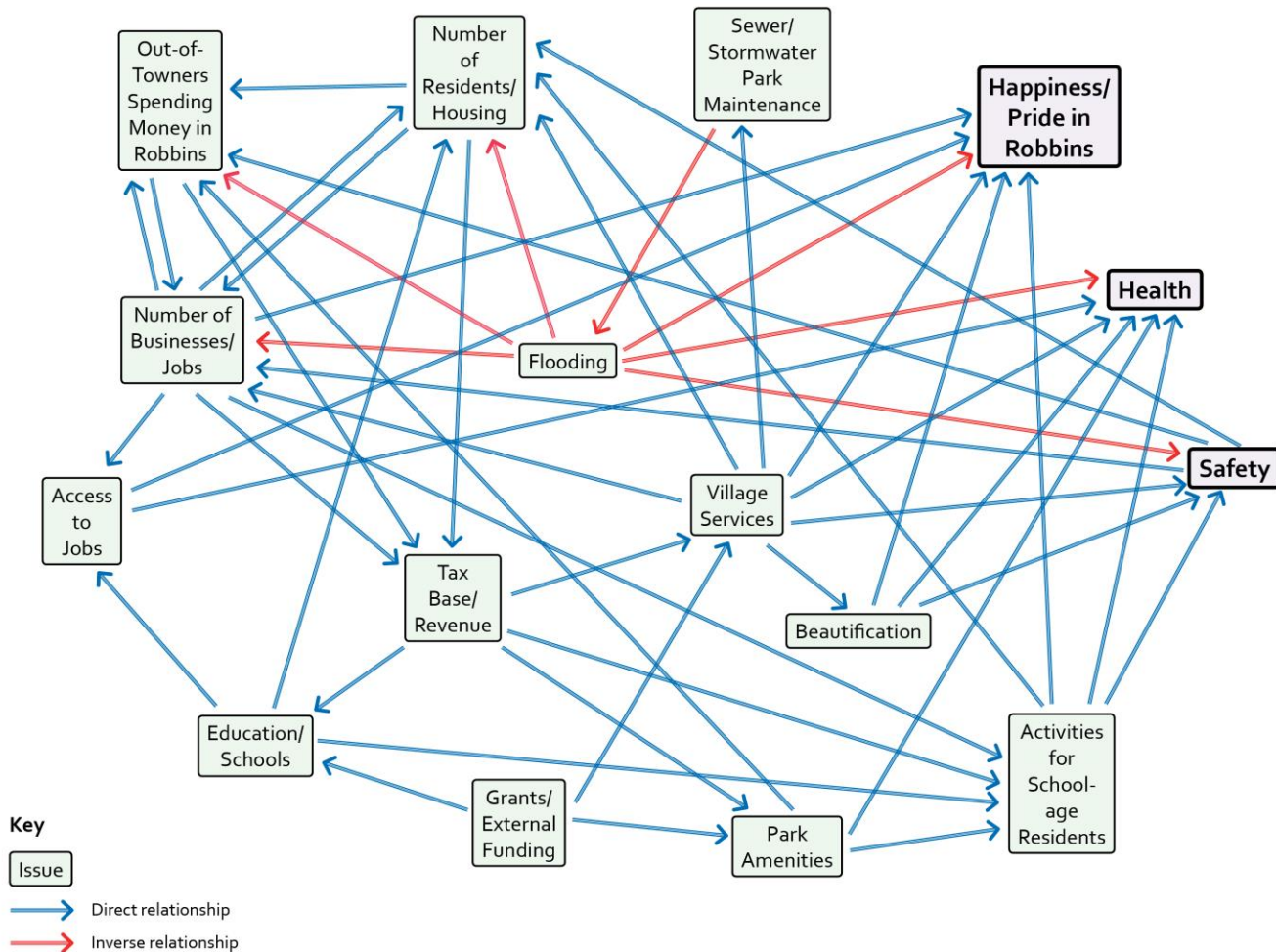


## Focus Areas

- Happiness
- Health
- Safety

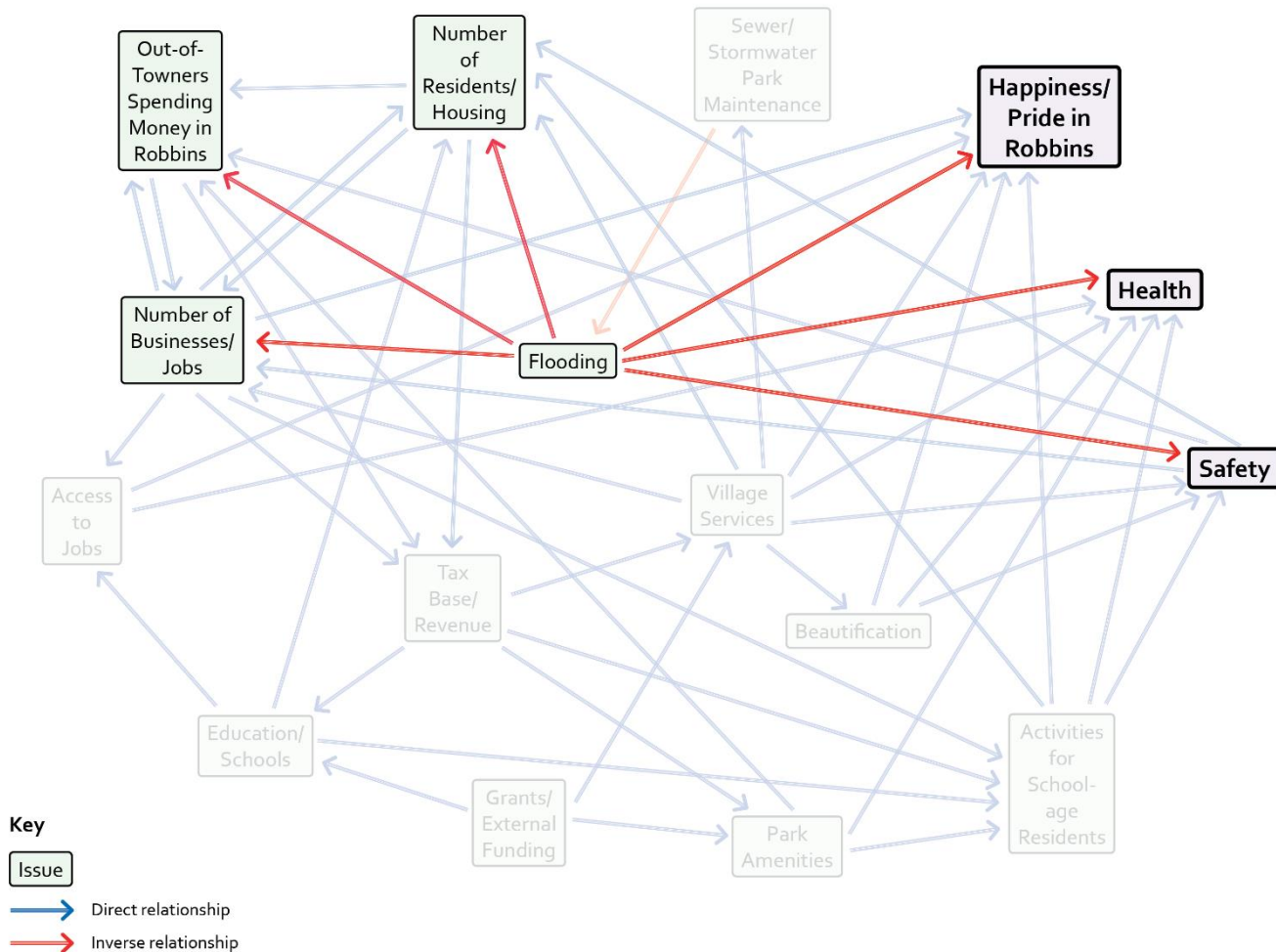


# Big Picture

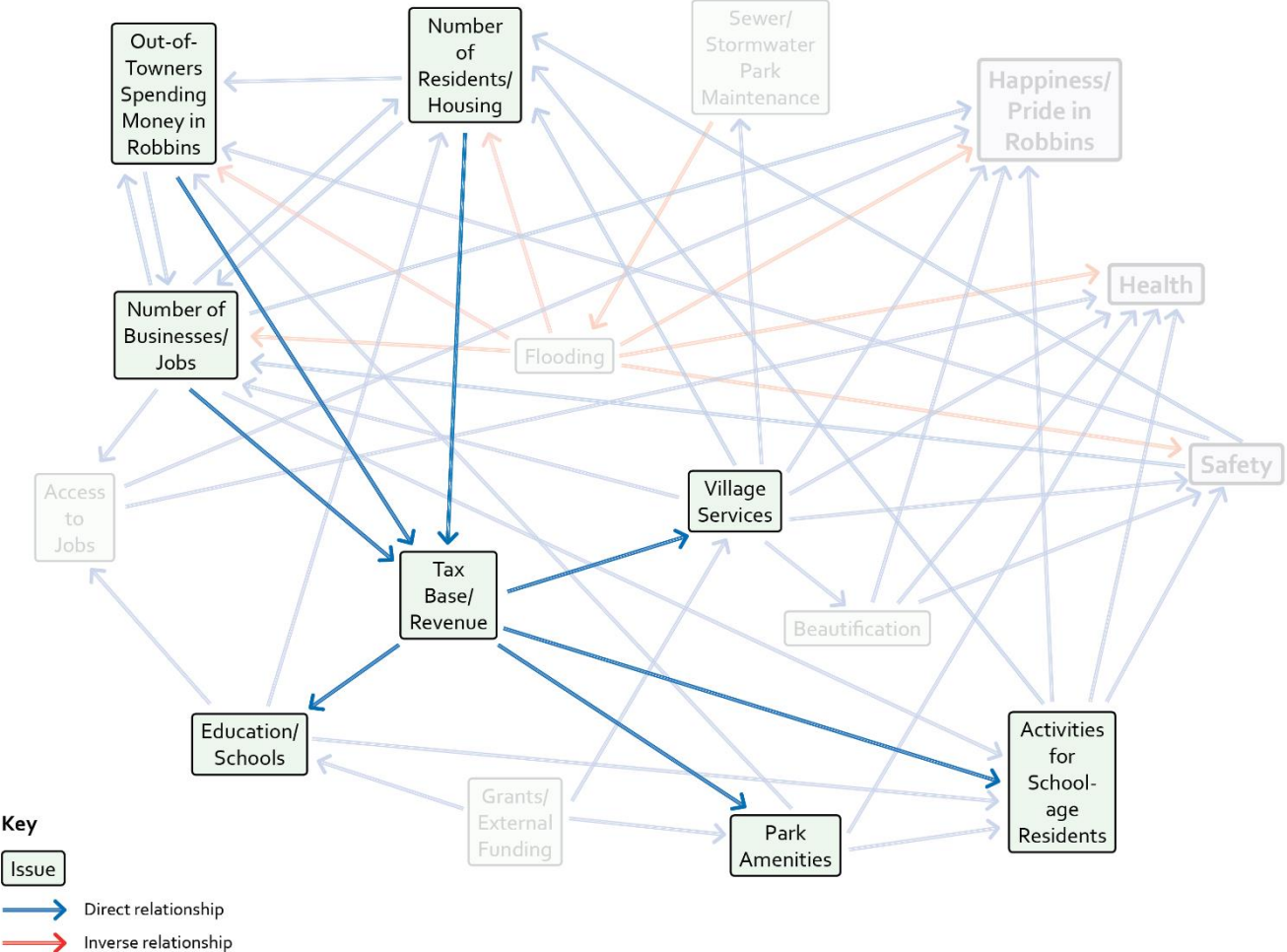




# Flooding



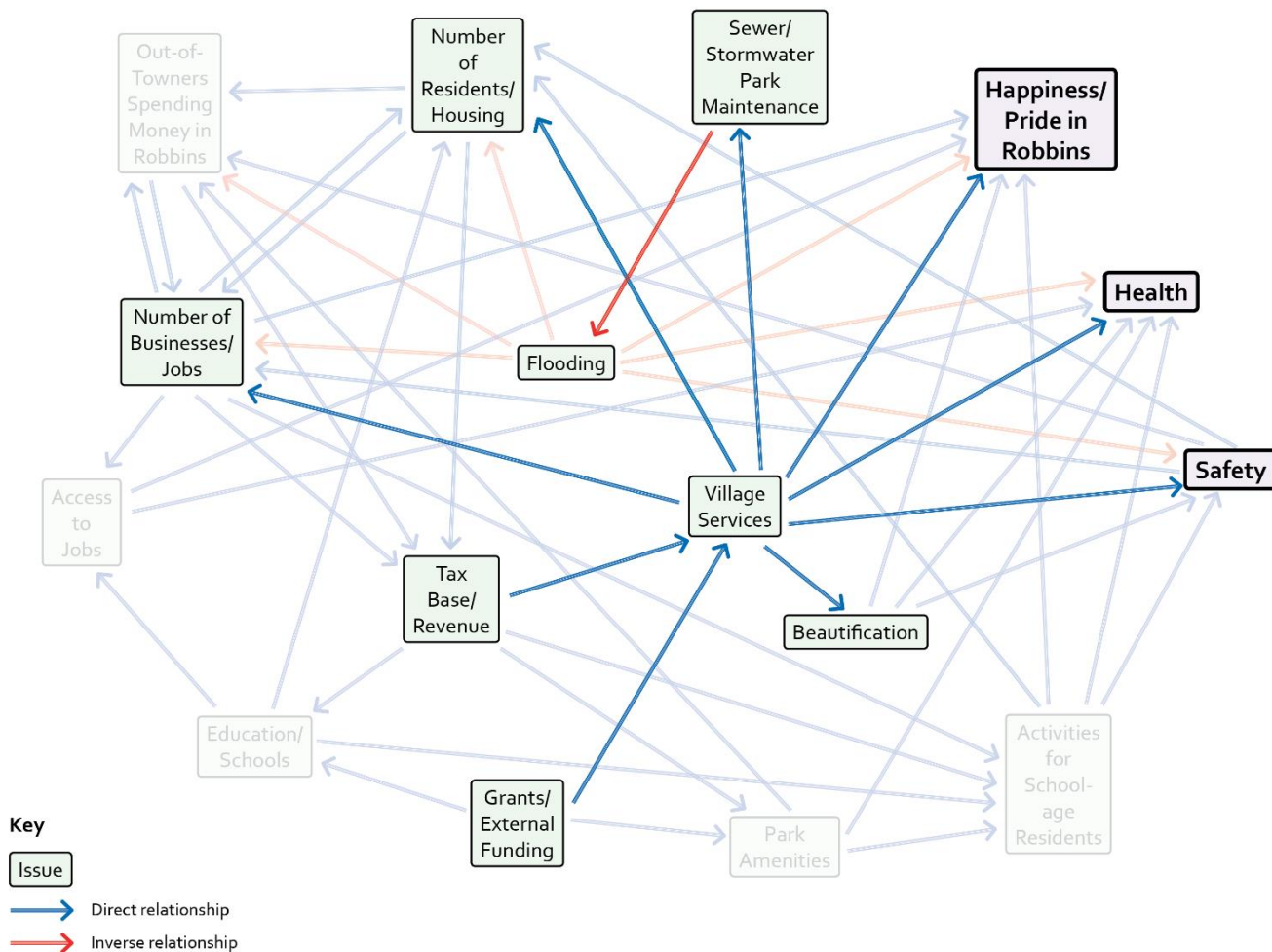
# Tax Base and Revenue



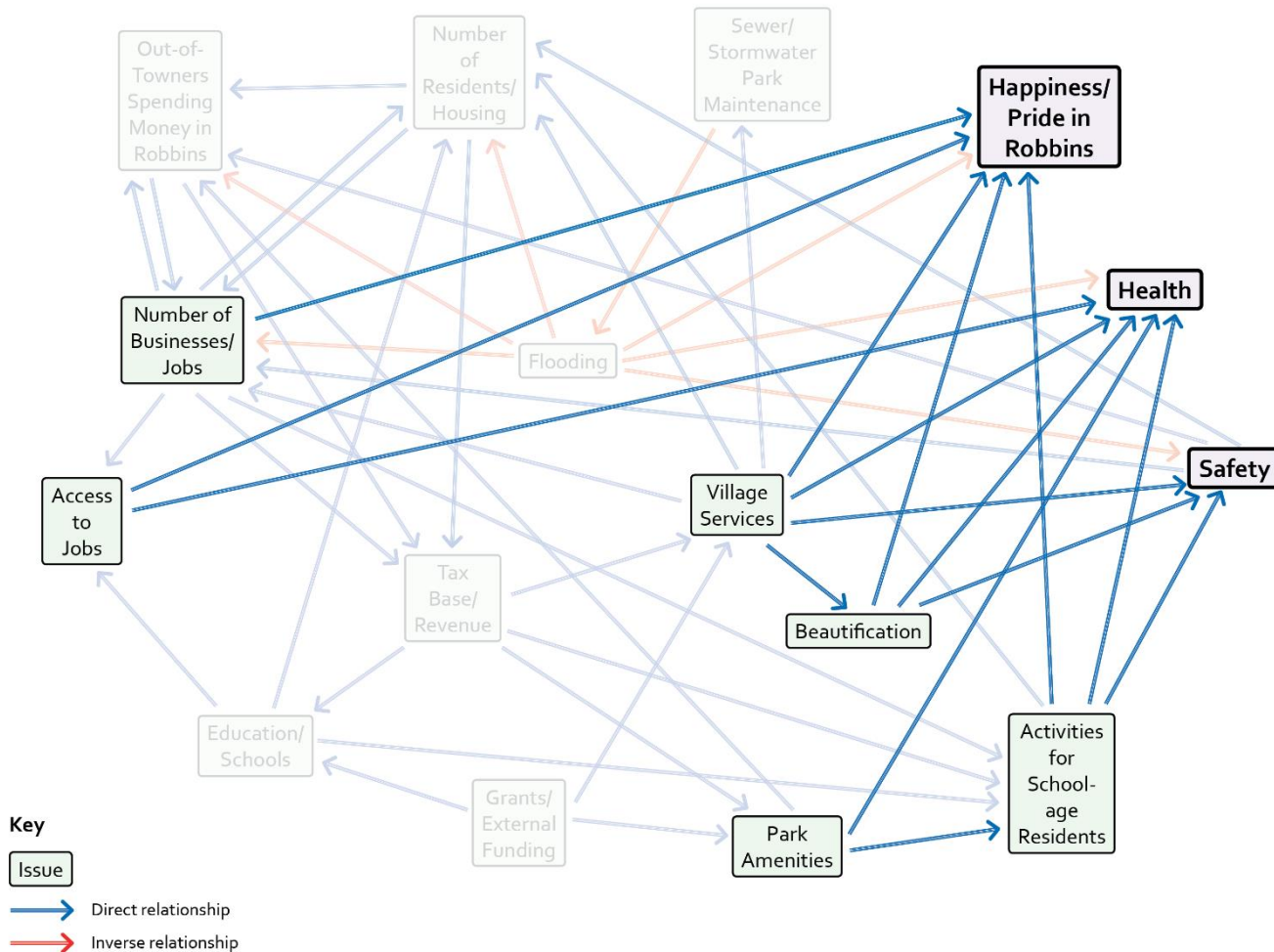




# Village Services



# Happiness, Health, and Safety





# Mapping





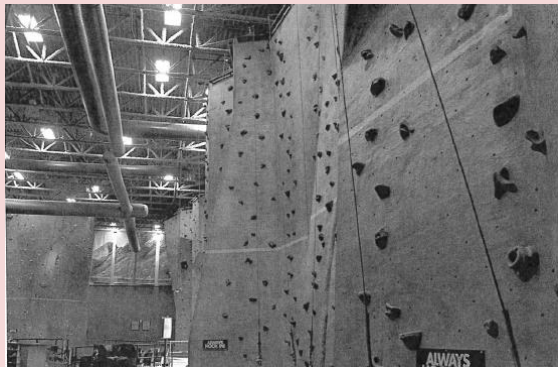


# Design activity





# Pre-workshop Homework (collage)



# Pre-workshop Homework (written)

NAME: [REDACTED]

DATE: \_\_\_\_\_

## —Preparing for the Designing Robbins Workshop—

**Instructions:** This homework has two parts, a set of written questions and a collage. You do not have to do these in a particular order; you can start on either section, and you can go back and forth as you work.

**Written response:** Please complete this simple assignment about the kinds of park you would like to have where you live. Consider each question and answer thoughtfully; there are no right or wrong answers.

**Complete by Friday, May 25 and give to Assistant Principal Cohen.**

**1. 'When's and 'why's.** In three sentences or less, explain when and why you usually visit a park.

So I only go to the park to play basket. Also to take my lil cuz. water park

**2. Thinking about favorites.** Think about parks you have visited. Which park was your favorite, and why? What kinds of things did you do there?

The water park by the soul bc it had a gym, basketball water park swings.

**3. Make a wish list.** If you were designing a park for the Village or City in which you live, what activities would you include in the park? Make a list of all the things (ex. cookout shelters, basketball courts, fishing docks, bicycle paths, etc.) that you want in the park.

10 basketball 40 bike path  
 20 pool 50 A park with a net on it so you can go and chill.  
 30 swings 60 water fall  
 70 A walking trail  
 80 A food truck  
 90 concession stand  
 100 some were people can sit.  
 110 cook out place were you can buy food  
 120 foot ball  
 130 lil play area for 2-5

**4. Describe time spent in your park.** Tell us what you would do in your park, both in warm and cold weather. What would you do on a weekday in your park? What would you do on a weekend?

	WARM WEATHER	COLD WEATHER
WEEKDAY	I will ride my bike or I would walk also I would go play basketball.	We play snow Ball fights.
WEEKEND	On the weekend we will run a full game of basket. We will race on bikes. Also play foot ball or take my lil brother to the park.	Or I just Play my game

**5. Tell us of any concerns.** Are there any obstacles that might prevent you from enjoying the park (ex. not on your bus route, too far from home, your parents worry, etc.)? How could these be fixed?

PROBLEMS -	SOLUTIONS -
I t bc to far away	

\*[Add additional pages, if necessary.]

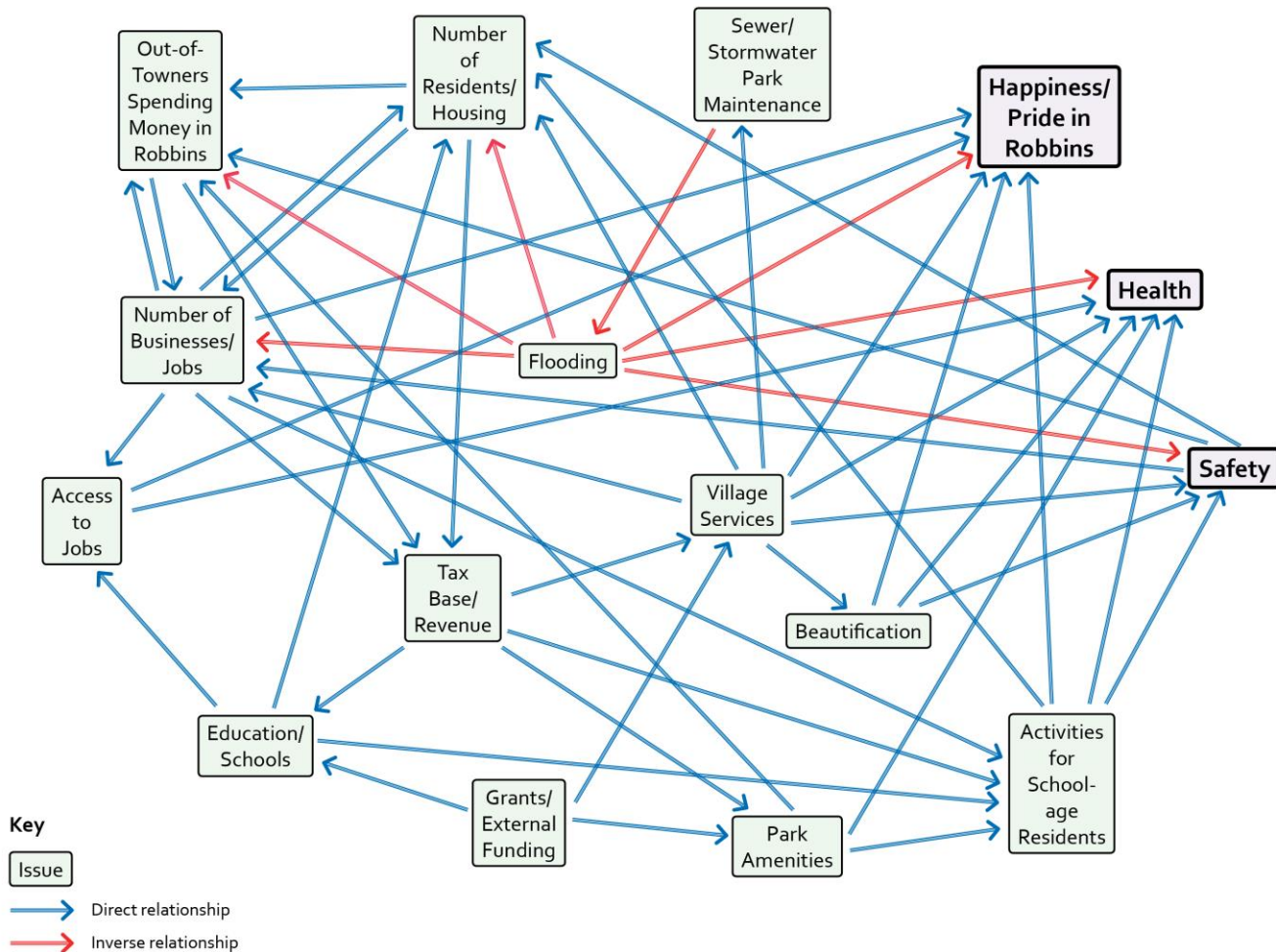


# Structured Facilitation



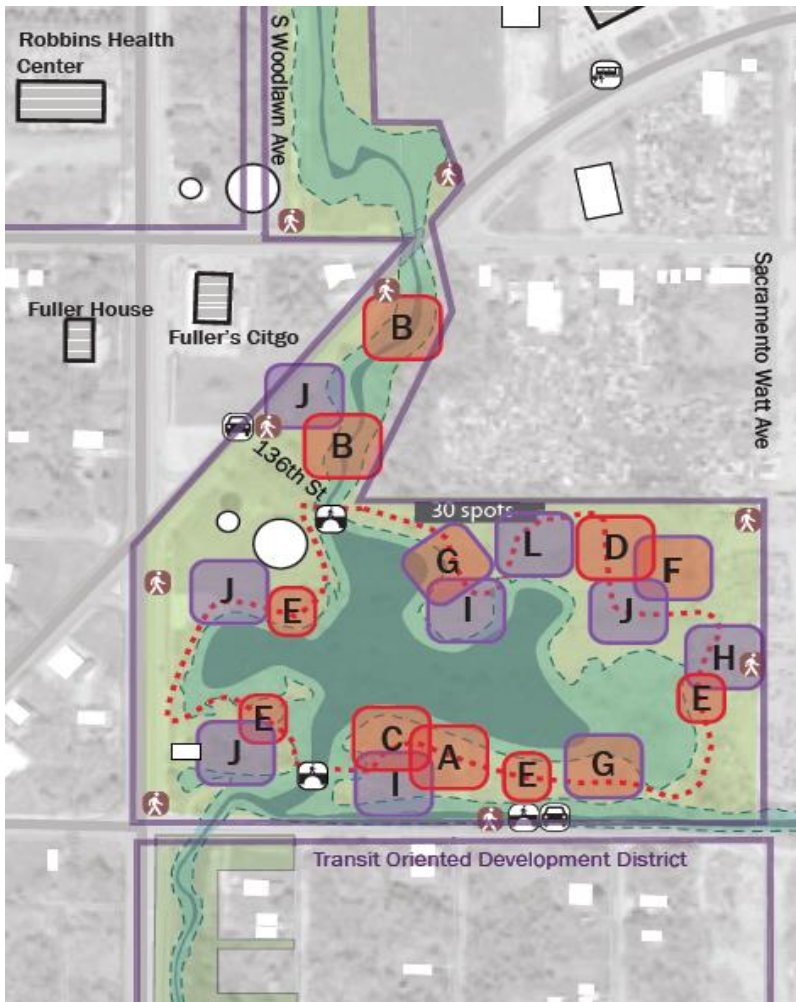
# Measures of Impact

# Systems view





# Updated Design



- A. Multi-Purpose Facility
- B. Waterfall
- C. Nature Center
- D. Restroom Facility
- E. Heritage
- F. Amphitheater
- G. Playground
- H. Sledding/Climbing Hill
- I. Picnic Area/BBQ
- J. Overlook Area
- K. Dirt Bike Track\*
- L. Sport Fields
- M. Swimming Pool\*

\*cannot be accommodated in park



# Understanding the project, partners, and funding

- Formation of steering committee
- Collective wish list/goals
- More nuanced discussion, identification of barriers and opportunities, and innovation towards implementation
- Agreement on pathways forward

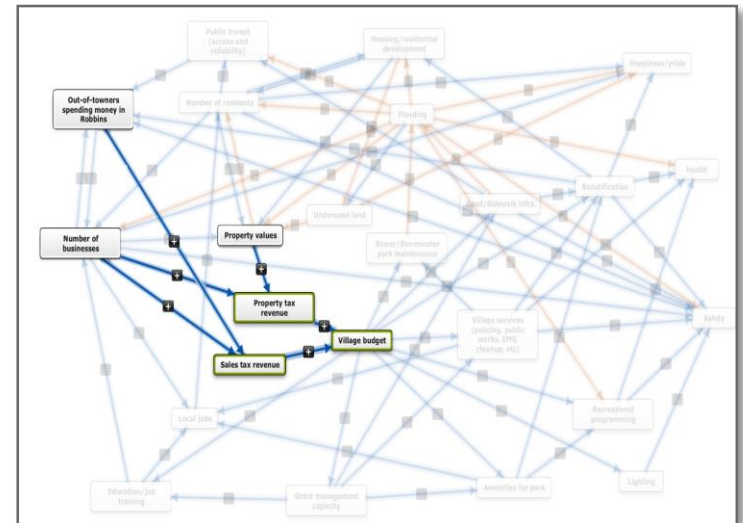
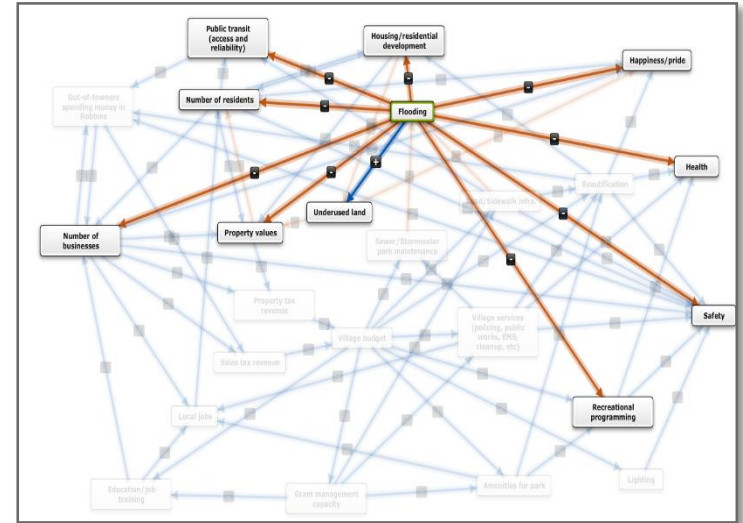
# Understanding connections

## Linkages

- What is affected by flooding?
- What affects the village budget?
- What does the village budget support?

## Facilitated discussion about how to support desired outcomes

- Generating long-term revenue
- Engaging youth
- The role of safety



# Understanding tradeoffs

## Spatial

- Siting: Space for parking, stormwater storage capacity
- Access and entrance locations
- Links to TOD and Industrial District

## Financial

- Prioritization of amenities by revenue potential
- Ways to attract outside money
- Flexible sizing and function of amenities

# Developing agency

- Ownership of planning tools
  - We made this diagram, we know how to draw it, let's do it again.
  - This is *our* facilitator
  - This is *our* planner
- Advocacy
  - Engaged residents answer fundamental questions of newer participants
- Self-reliance
  - Identifying local resources (people and funding)
  - From demanding to owning

# Developing pathways toward implementation

- Prioritization of strategies by short-, medium- and long-term
- Innovative local approaches with multiple impacts
  - BBQ Areas and Playgrounds = “eyes on the park” until more formal security measures can be implemented
  - Community garden next to site of future Nature Center; begin to establish and formalize programming
  - Leveraging local resources for construction of park elements (e.g., ice skating rink, BBQ shelters, playground installation)
- Identification of high-priority elements which need external funding (i.e., restroom facilities, security features)

# Main Takeaways



# Lessons learned: Scaffolding

- Relationship building and collaborative design:
  - with, rather than for (all ages and backgrounds)
  - getting something out of each activity
  - continuous adaptation
- Systems thinking and innovation: tradeoffs and self reliance
  - CLD
  - Mapping
  - Art!
  - Structured facilitation, focusing on needs
- Ownership and building social capital

# Thank you!

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