

BOX-CITY

Urban Ecosystem / Community

Spring 2020 | Hilliard Art Museum - University of Louisiana at Lafayette

Grades 6 - 12



Your Name: _____

The Name of your Box-City: _____

Urban Ecosystem

Ecosystem: the flows and relationships between various actors in a defined environment

How is an urban ecosystem similar to other ecosystems? Why might the tools scientists use to study ecosystems be helpful to urban designers?

Community Wants and Needs

Shelter	Economic	Social-Cultural	Green Space
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Models and Scale



1 ft = 1 ft



6 in = 1 ft



1/2 in = 1 ft

Scale Model: a representation of something in which all the parts have dimensions in the same mathematical proportion as the original

What different information can you learn from each type of model?

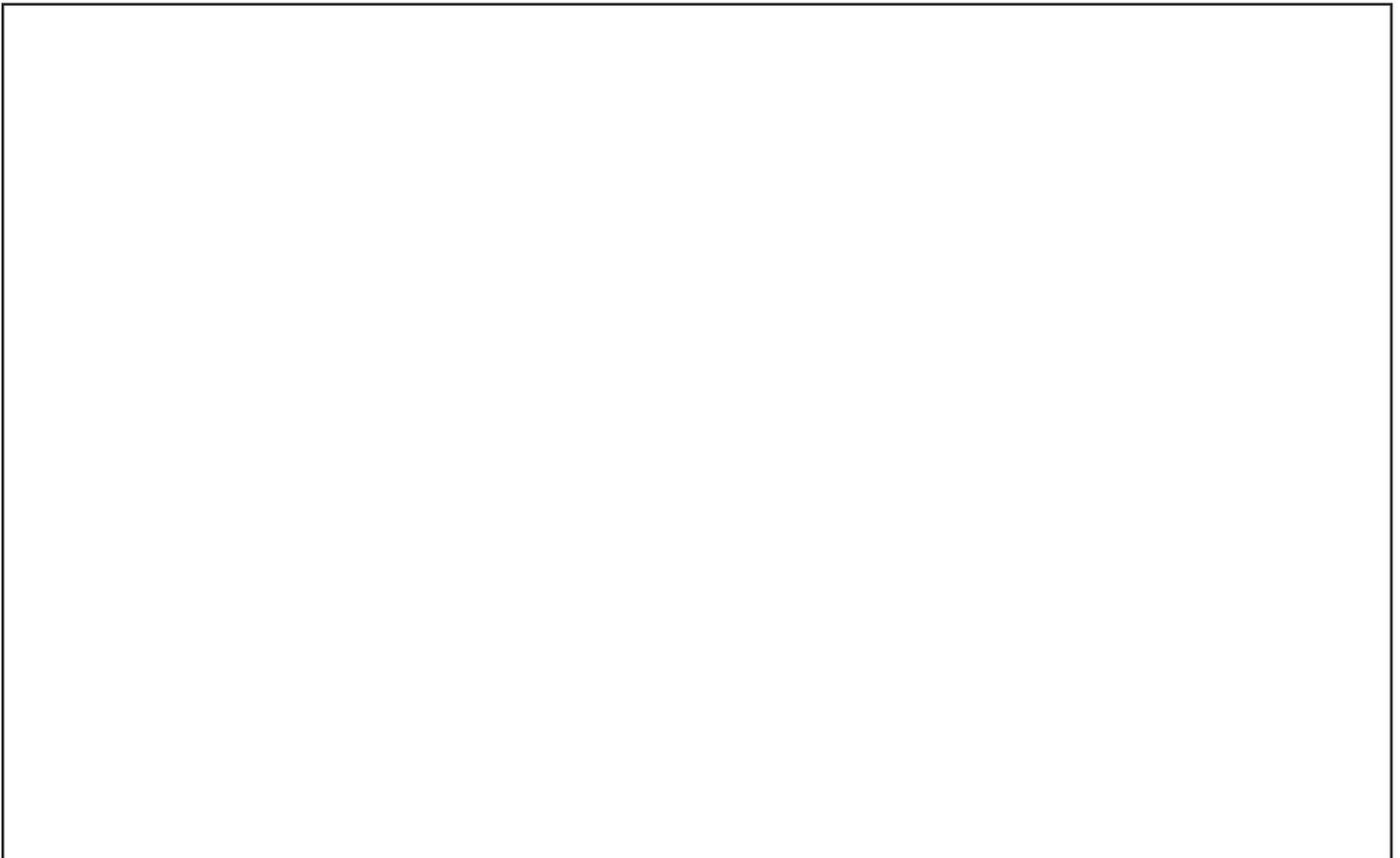
Describe what it would be like to live in the 8' x 8' living unit. How many people do you think can live in that space?

Building BOX-CITY

City Building Code:

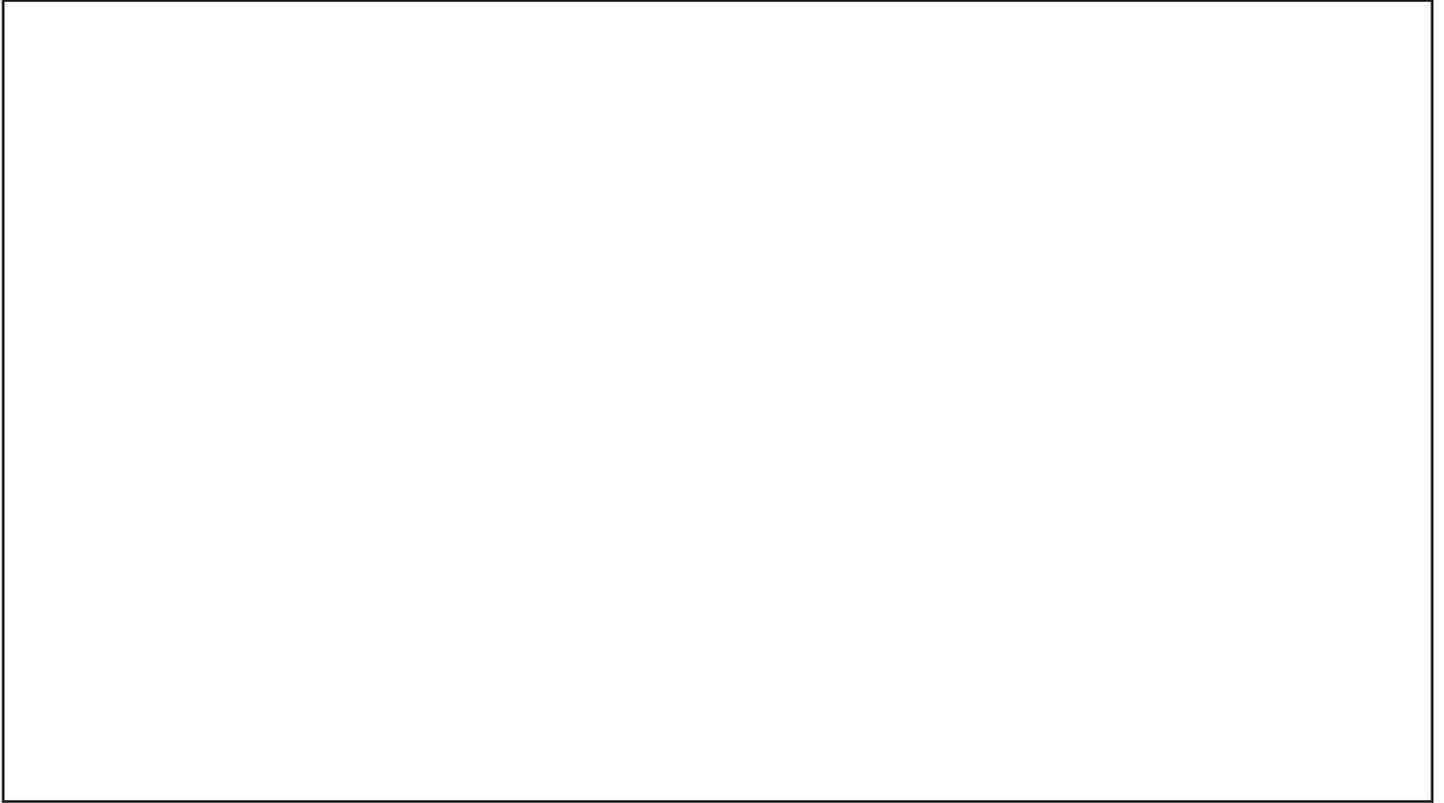
- Each box must have an exterior doorway.
- Everyone in the city's population must have a living space.
- No more than two people can live in a unit.
- Before moving a box, make sure the path is clear.

BOX-CITY 1.0 Use the space below to plan or draw a map of your BOX-CITY:



Explain how your BOX-CITY meets the needs of the community:

BOX-CITY 2.0 Use the space below to plan or draw a map of your adapted BOX-CITY:



1. How well did your city adapt to the ecosystem disturbance?

2. How have the flows and patches in your city changed?

3. Which BOX-CITY design do you think is more resilient?
Explain why.

Patch Dynamics

Patch Dynamics: an approach ecologists use to study and map patterns in the landscape of an ecosystem

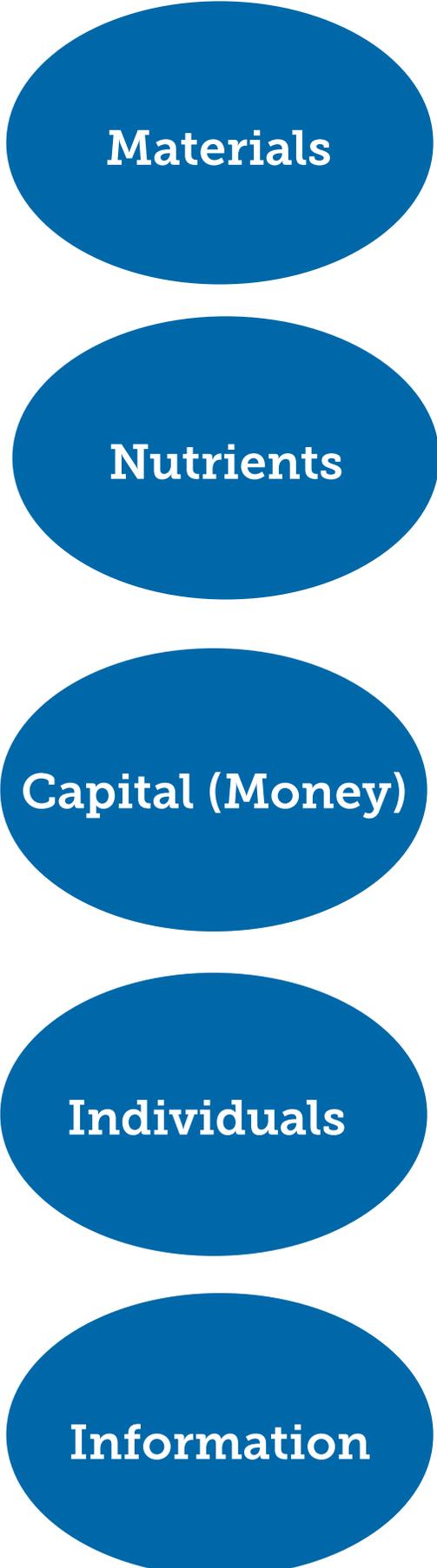
Patch: a spatial area that is different from its neighboring areas

Flow: movement of people or items through a community

Zone: a section of a city that is created for a particular use. Examples: commercial zones or residential zones

Chose one flow example and diagram how it moves across different zones and patches.

Flows



Materials

Nutrients

Capital (Money)

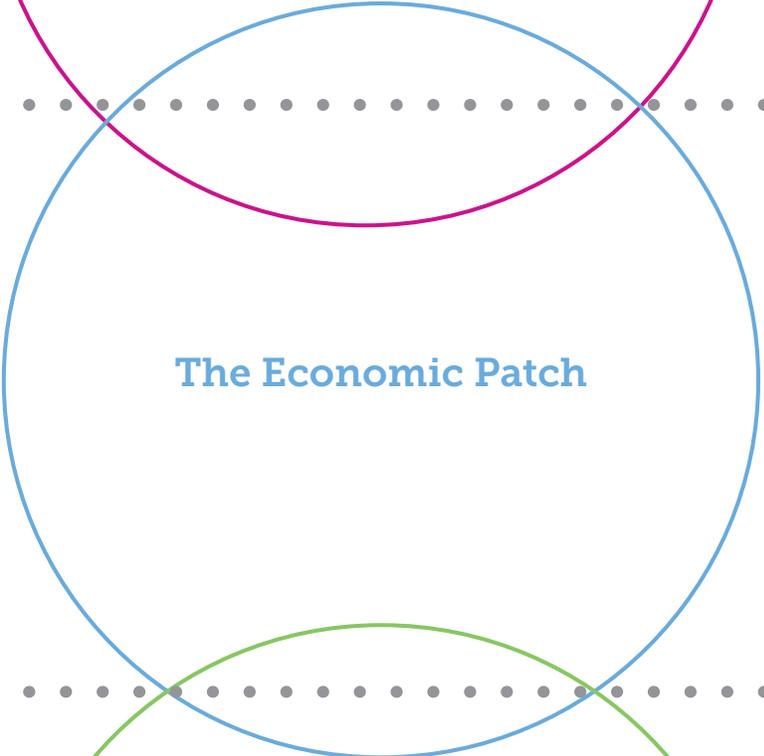
Individuals

Information



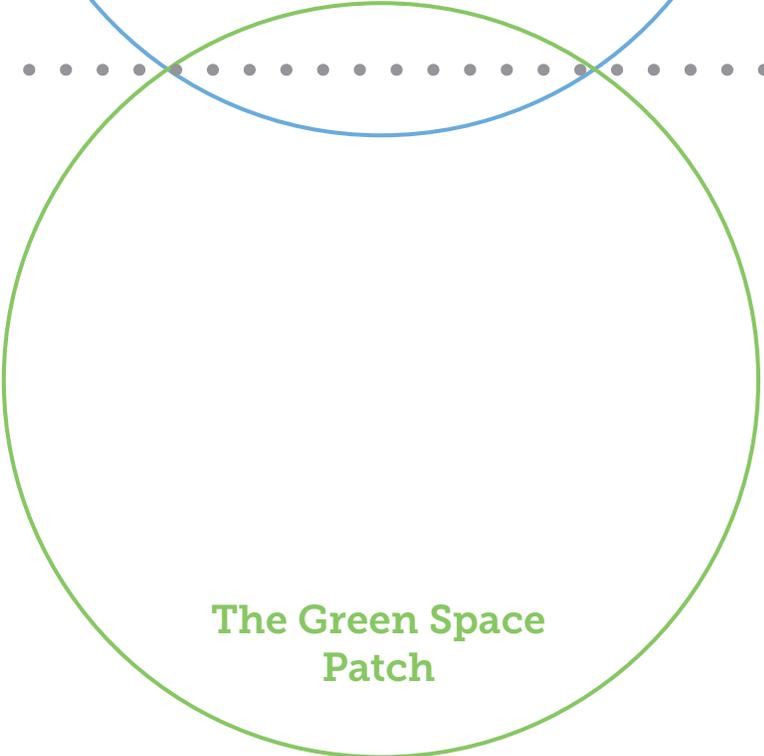
The Social-Cultural Patch

Zone 3



The Economic Patch

Zone 2



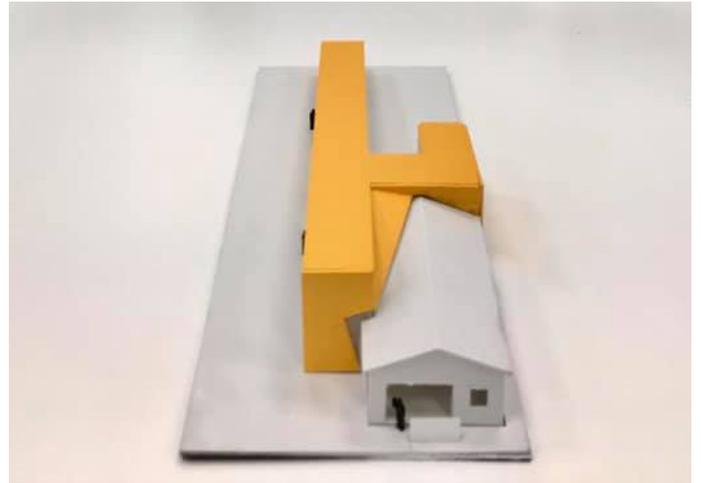
The Green Space Patch

Zone 1

Case Study: West End District, New Iberia, LA



1/ 16 in = 1 ft



1/ 16 in = 1 ft

Building Challenge: Create a design for a city lot that will improve the quality of life in the neighborhood and attract new residents.

For what needs or uses is your lot zoned? How does your design help the neighborhood become more resilient?

Feedback Loops: Having a Conversation

Which model or idea do you think would improve the community the most?
Leave your feedback next to the model. Tell us your best idea.

Shelter

Economic

**Social-
Cultural**

Green space

Post-Visit Activity: Designing Solutions For Your Community

Think of your school as a human ecosystem. How do people and things flow through the school? What systems operate in the school? Draw an ecosystem flowchart or use patch dynamics to map out different use areas in the school.

Draw your flowchart or dynamic patch map below:

A large, empty rectangular box with a thin black border, intended for the student to draw their flowchart or dynamic patch map. The box occupies the majority of the lower half of the page.

