

design/education/movement: a non-linear exploration

or:

movement design/education movement
design education/movement education
education design/design movement

SCOTT BOYLSTON |

Professor of Design for Sustainability, SCAD
Director, Emergent Structures



Be
Perfect
every day of the year

Prices start from Rs. 3000/- onwards.

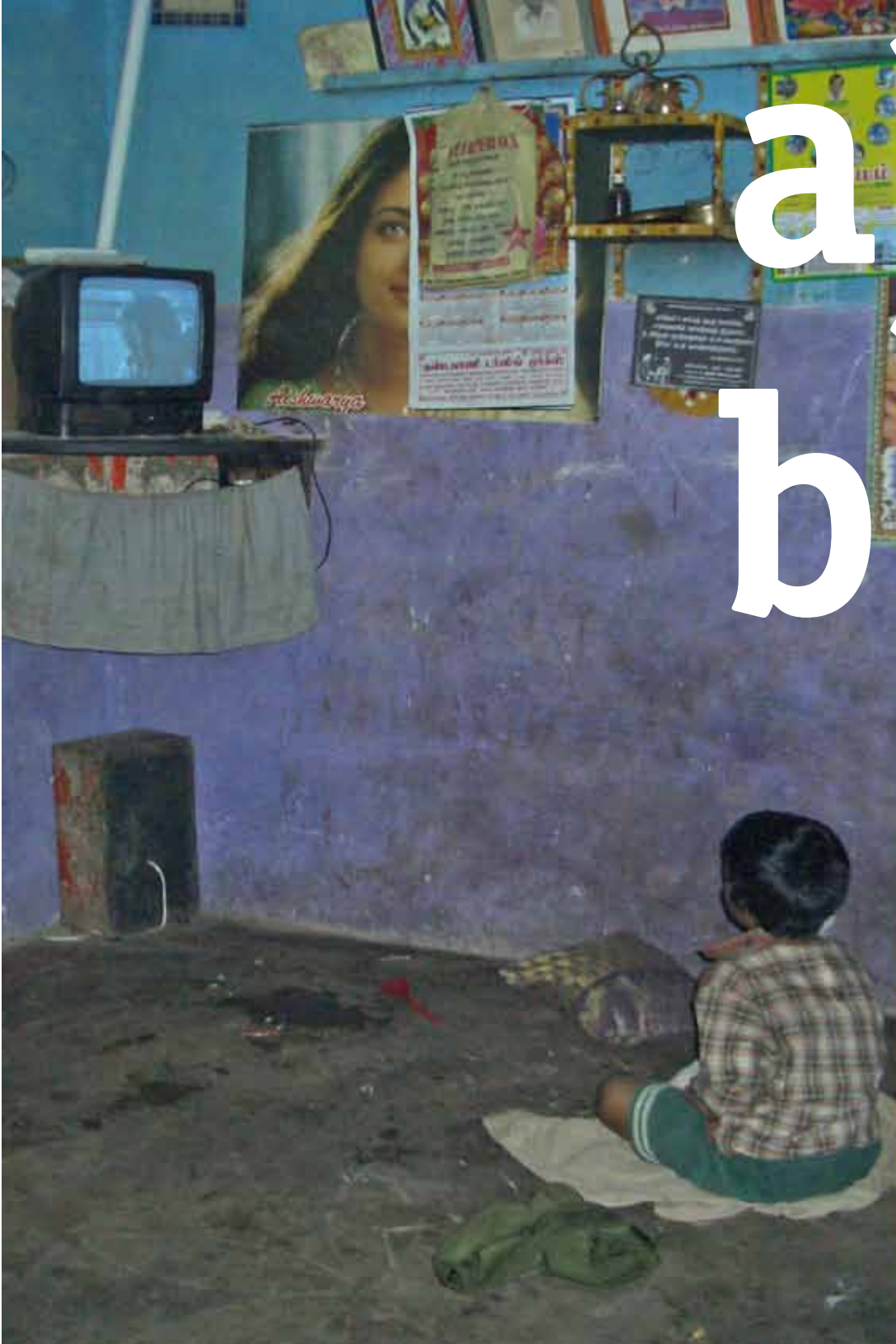
CATHEDRAL ROAD | PANAGAL PARK | SPENCER PLAZA





**design =
defining
a range
of options**





a)
b)



“When there is no room for choice, because the solution is dictated by strong social conventions and/or technological constraints, *there is no design.*”

—Ezio Manzini

Gins

Cotton Gins
and products

Eli Whitney
Cotton Gin

Patented March 14
1794

72-X

Fig. 1

March 14, 1794

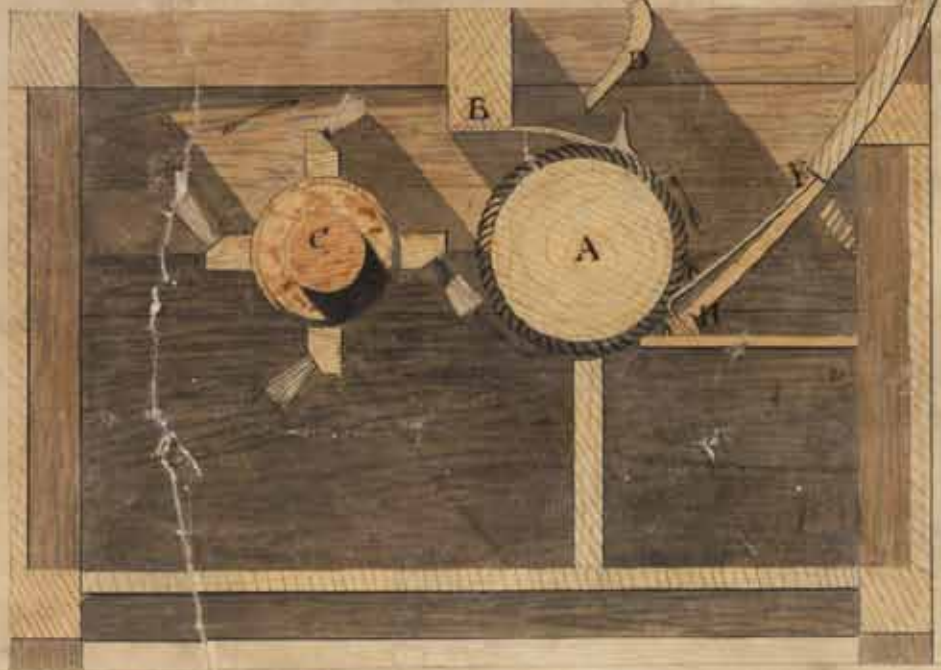
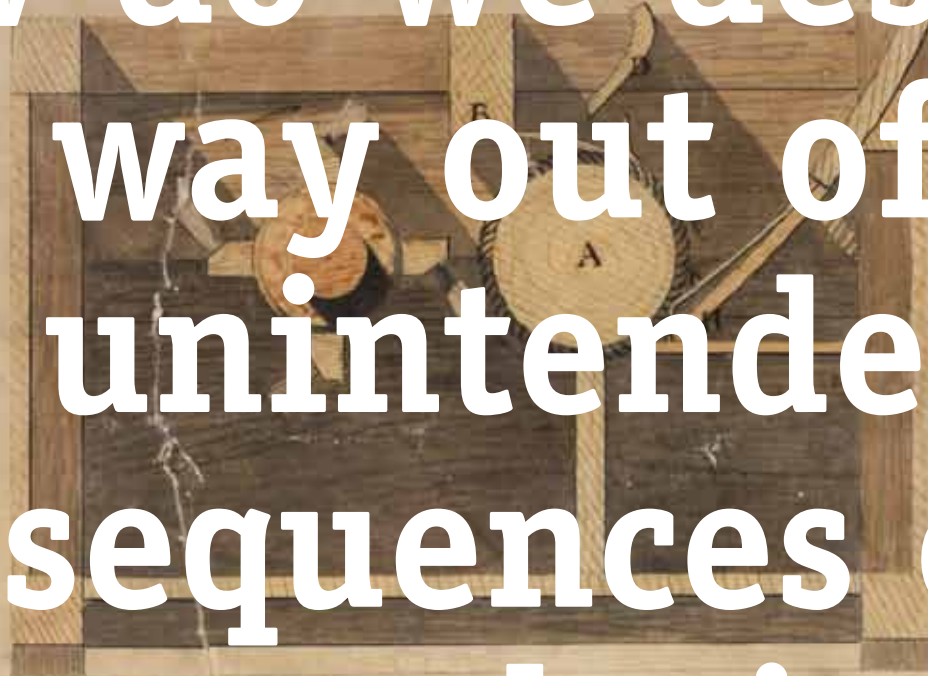


Fig. 2



how do we design
our way out of
the unintended
consequences of
our own design?



Eli Whitney
Cotton Gin

March 14, 1794

72-X

Cotton Gins
and products



Facilitating creative solutions
within systems in crisis...
and within systems *of* crisis.

SCAD | DESIGN FOR SUSTAINABILITY
MASTERS of ARTS / MASTERS of FINE ARTS

Facilitating creative solutions
within systems in crisis...
and within systems *of* crisis.

SCAD | DESIGN FOR SUSTAINABILITY

MASTERS of ARTS / MASTERS of FINE ARTS

YEAR ONE:

Global Cultural Theory \\ Applied Theories of Sustainability \\ Principles of Sustainable Materials
Methods of Contextual Research \\ Sustainable Practices in Design \\ **Organizational Behavior**
Interdisciplinary Studio 1 \\ Design Leadership & Environmental Justice \\ **Directed Elective**

YEAR TWO:

Interdisciplinary Studio 2 \\ **Directed Elective** \\ Thesis 1
Design in Response to Crisis \\ **Free Elective** \\ Thesis 2
Directed Elective \\ Internship \\ Thesis 3

SCAD | DESIGN FOR SUSTAINABILITY
MASTERS of ARTS / MASTERS of FINE ARTS

Facilitating creative solutions within systems in crisis... and within systems *of* crisis.

3 arenas:

Technical Innovation | Social Innovation | Meaning Innovation

SCAD | DESIGN FOR SUSTAINABILITY
MASTERS of ARTS / MASTERS of FINE ARTS

Facilitating creative solutions within systems in crisis... and within systems *of* crisis.

3 arenas:

Technical Innovation | **Social Innovation** | **Meaning Innovation**

resource productivity

cradle to cradle

low toxicity

biomimicry

industrial ecology

service and flow

life cycle analysis

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service and flow

life cycle analysis

legitimizing alternatives

debunking product-based

well being

quantifying value

enabling perceptual leaps

information design

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Member: DESIS-USA

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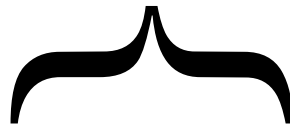
SCAD | DESIGN FOR SUSTAINABILITY
MASTERS of ARTS / MASTERS of FINE ARTS

Member: DESIS-USA

Facilitating creative solutions within systems in crisis... and within systems *of* crisis.

3 arenas:

| **Social Innovation** |



Technical Innovation | Meaning Innovation

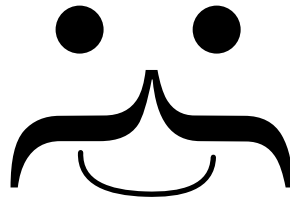
SCAD | DESIGN FOR SUSTAINABILITY
MASTERS of ARTS / MASTERS of FINE ARTS

Member: DESIS-USA

Facilitating creative solutions within systems in crisis... and within systems *of* crisis

3 arenas:

| **Social Innovation** |



Technical Innovation | Meaning Innovation







design

designed

human

designed

contingent

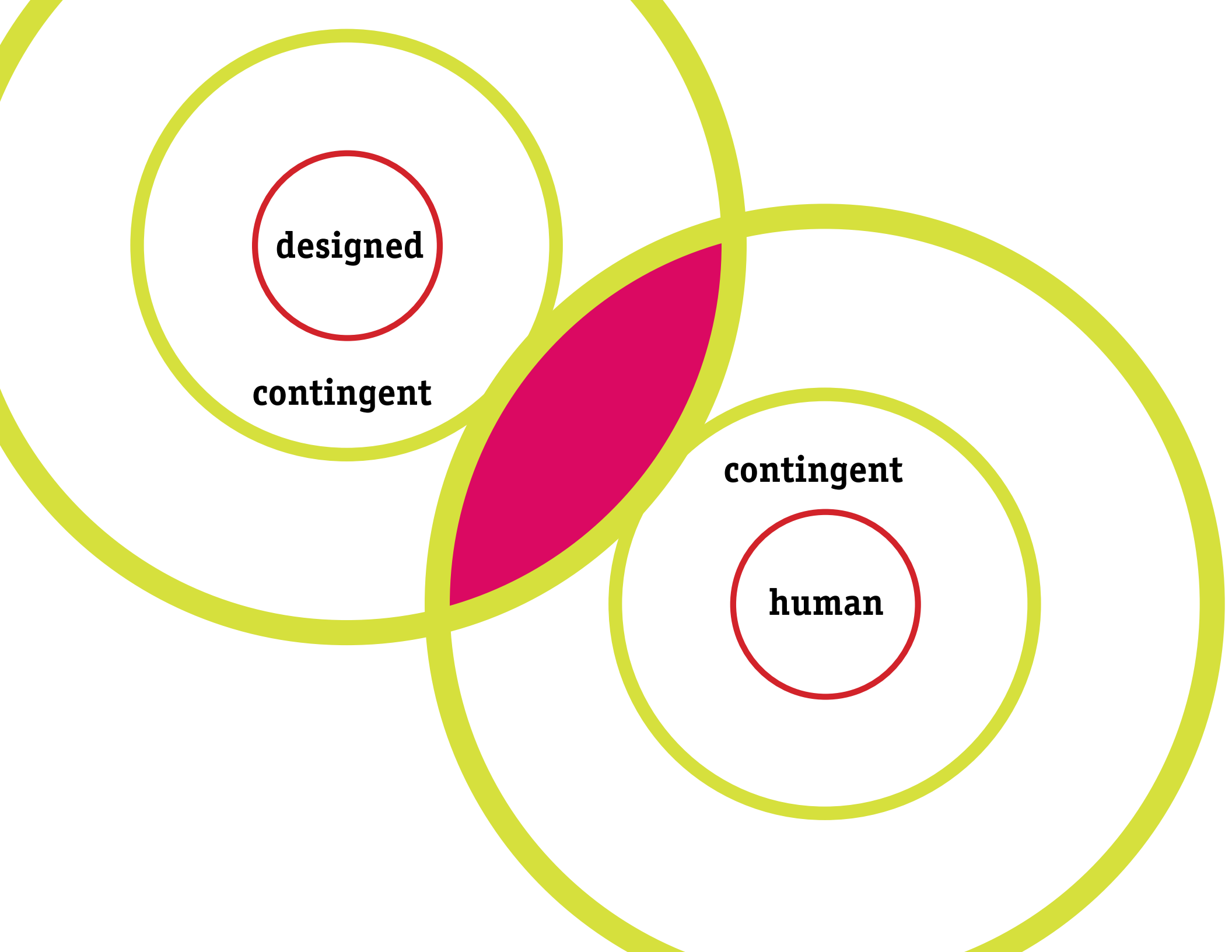
human

designed

contingent

contingent

human



designed

contingent

contingent

human



emergent

**“Living systems cannot
be controlled, they can
only be disturbed.”**

**“...creating conditions
rather than
giving directions.”**

—Fritjof Capra

Facilitating creative solutions within systems in crisis... and within systems of crisis.

Technical Innovation | **Social Innovation** | Meaning Innovation

How do you teach navigational skills within complex systems when confined by classroom walls?

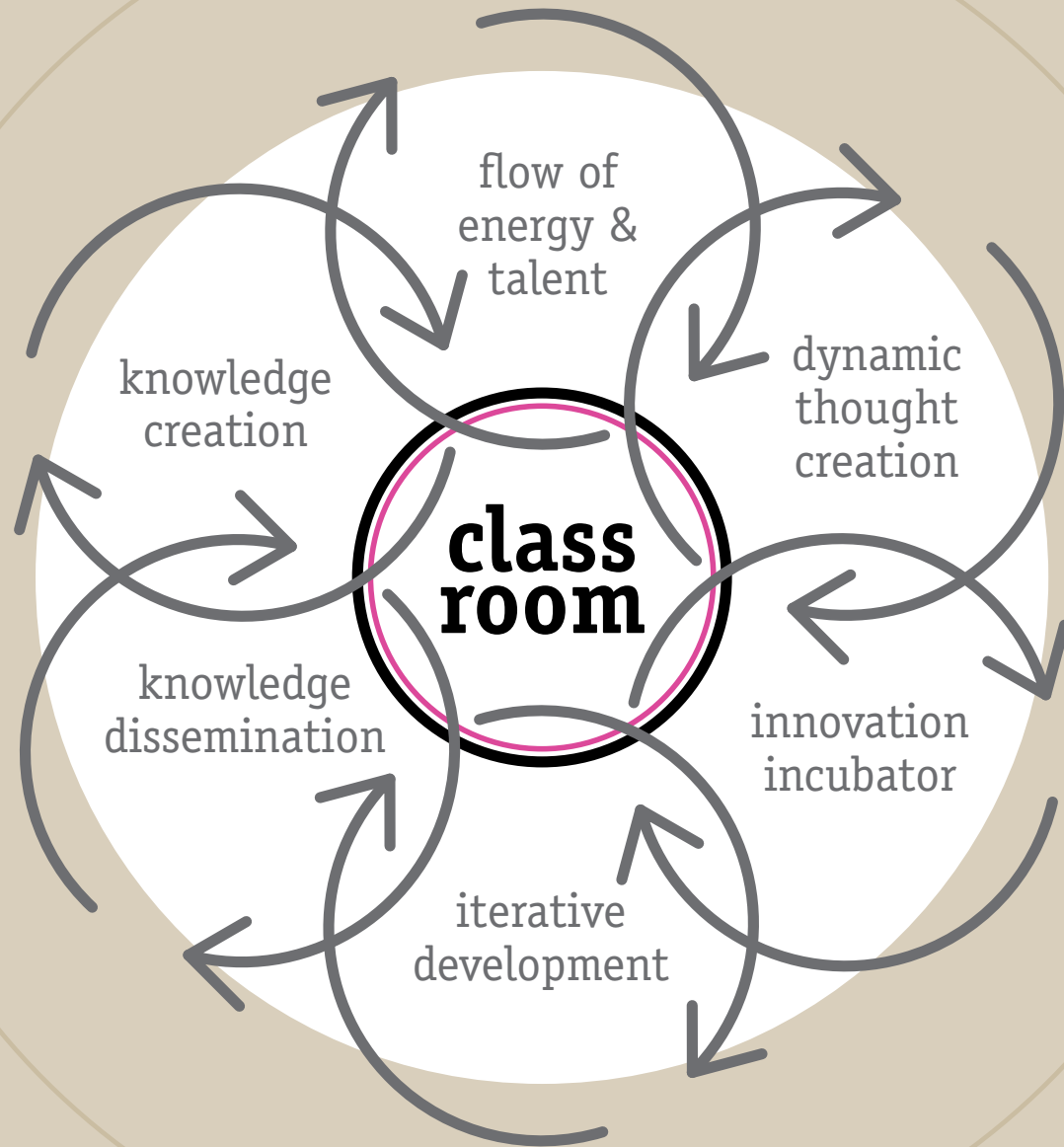
Facilitating creative solutions within systems in crisis... and within systems of crisis.

Technical Innovation | **Social Innovation** | Meaning Innovation

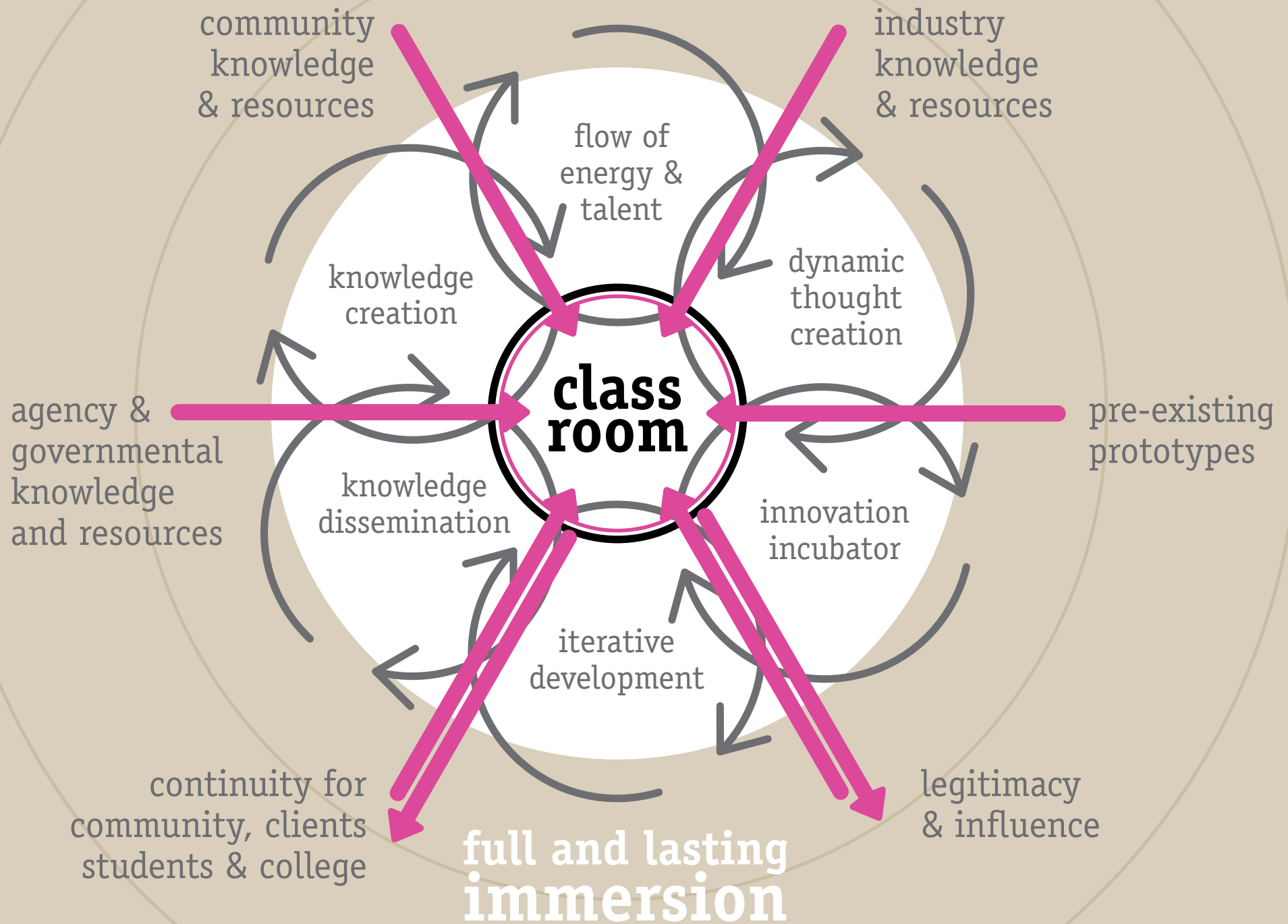
How do you teach navigational skills within complex systems when confined by classroom walls?

YOU DON'T.

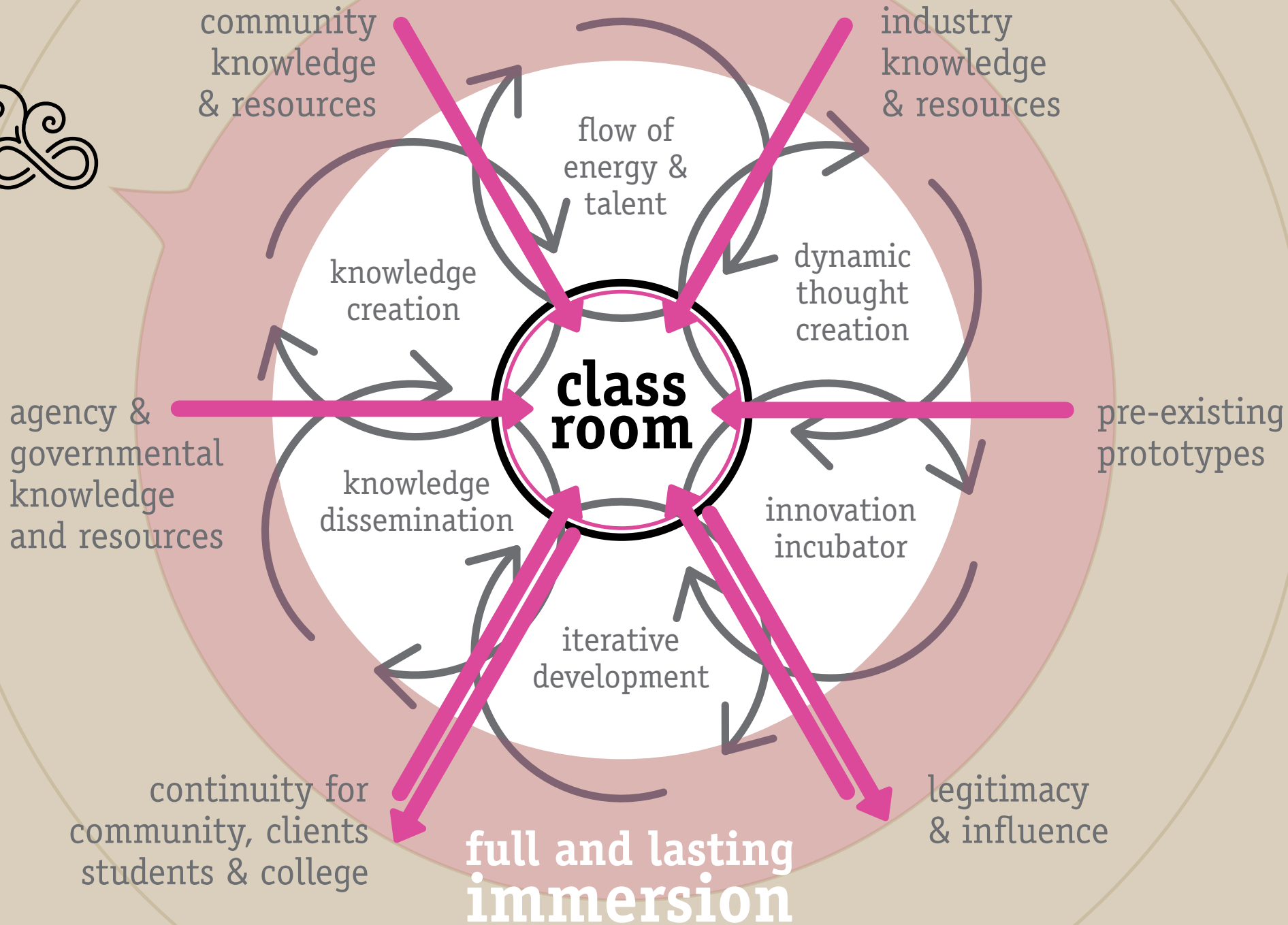
'real world'



facilitated interaction with the 'real world'



facilitated interaction with the 'real world'





emergent structures

Negotiating the spaces between the internal and the external.

Continuity of access.

sustainability 101:



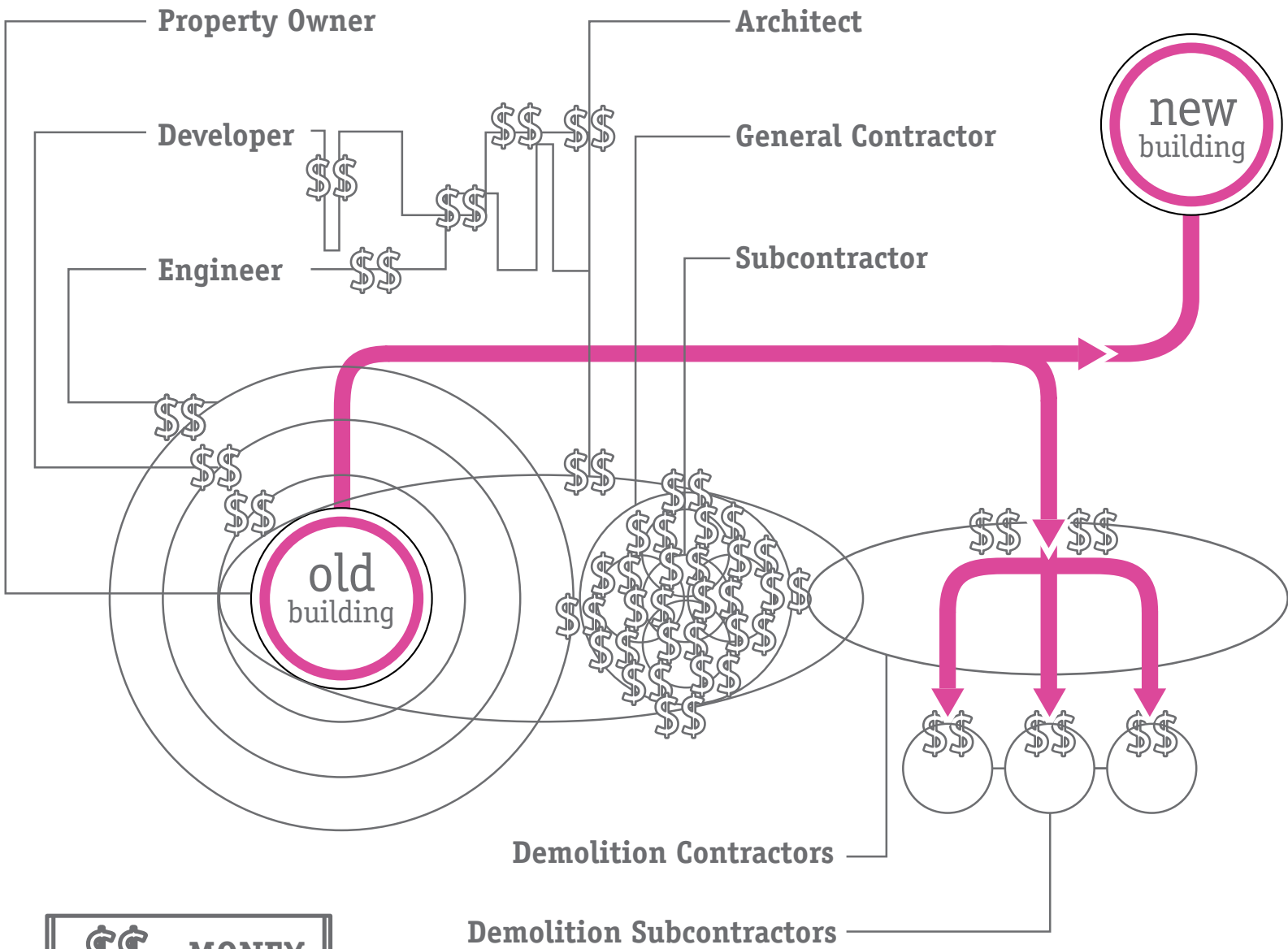
sustainability 101:


techno-
logical
bottom-
feeding

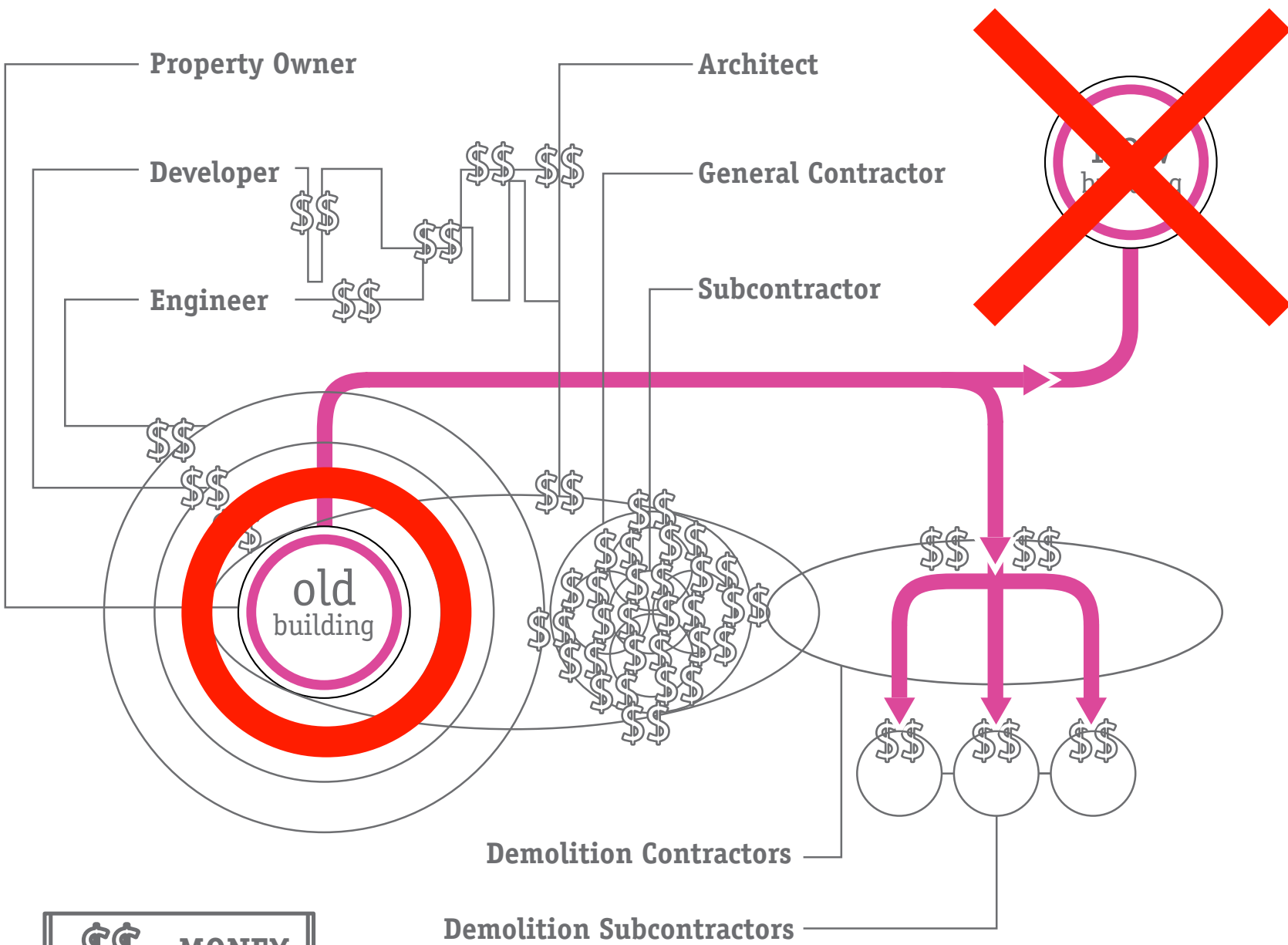


**76,500,000
tons of
demo waste
landfilled
every year.**

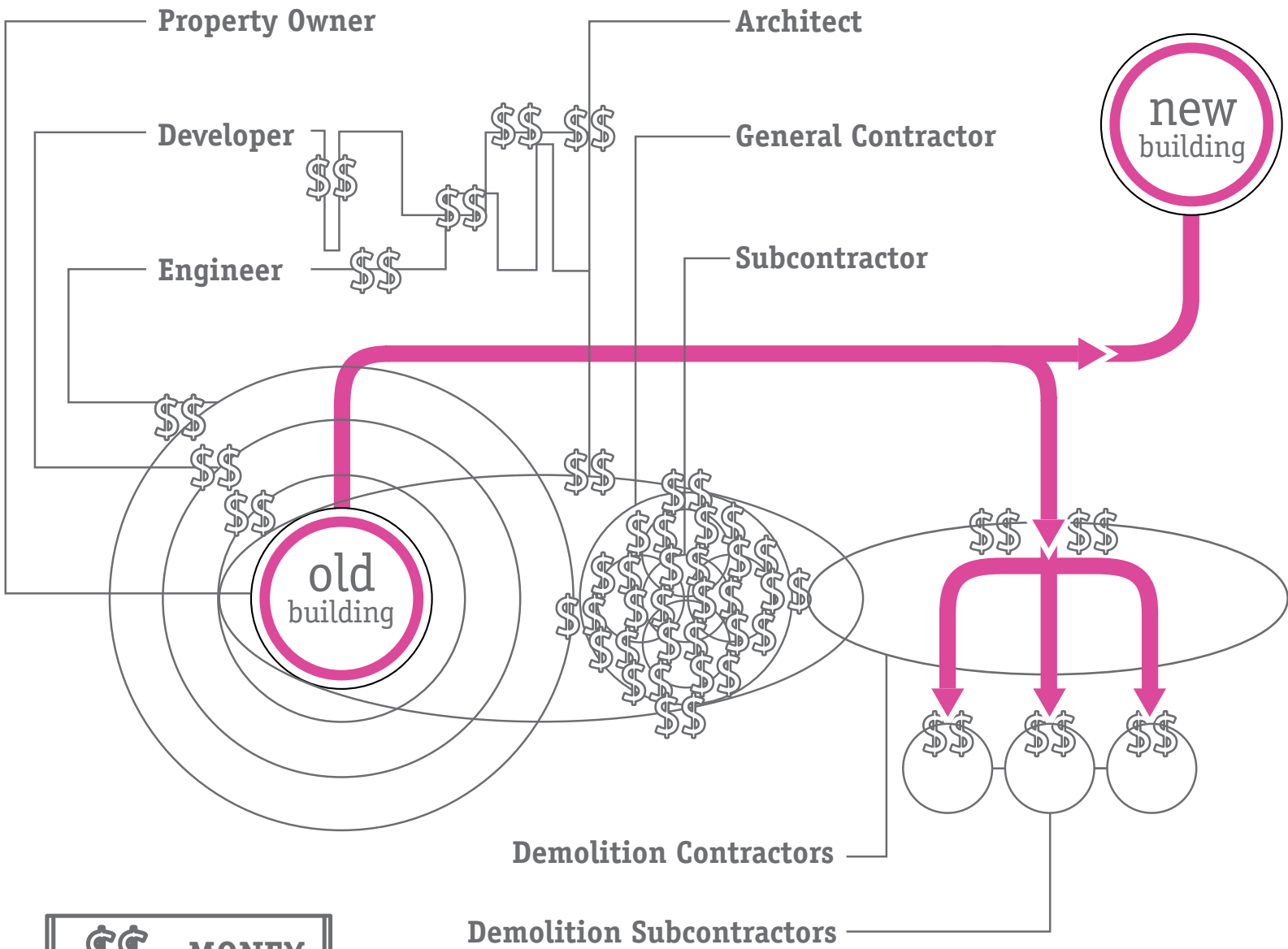
76,500,000
tons of
material wealth
landfilled
every year.




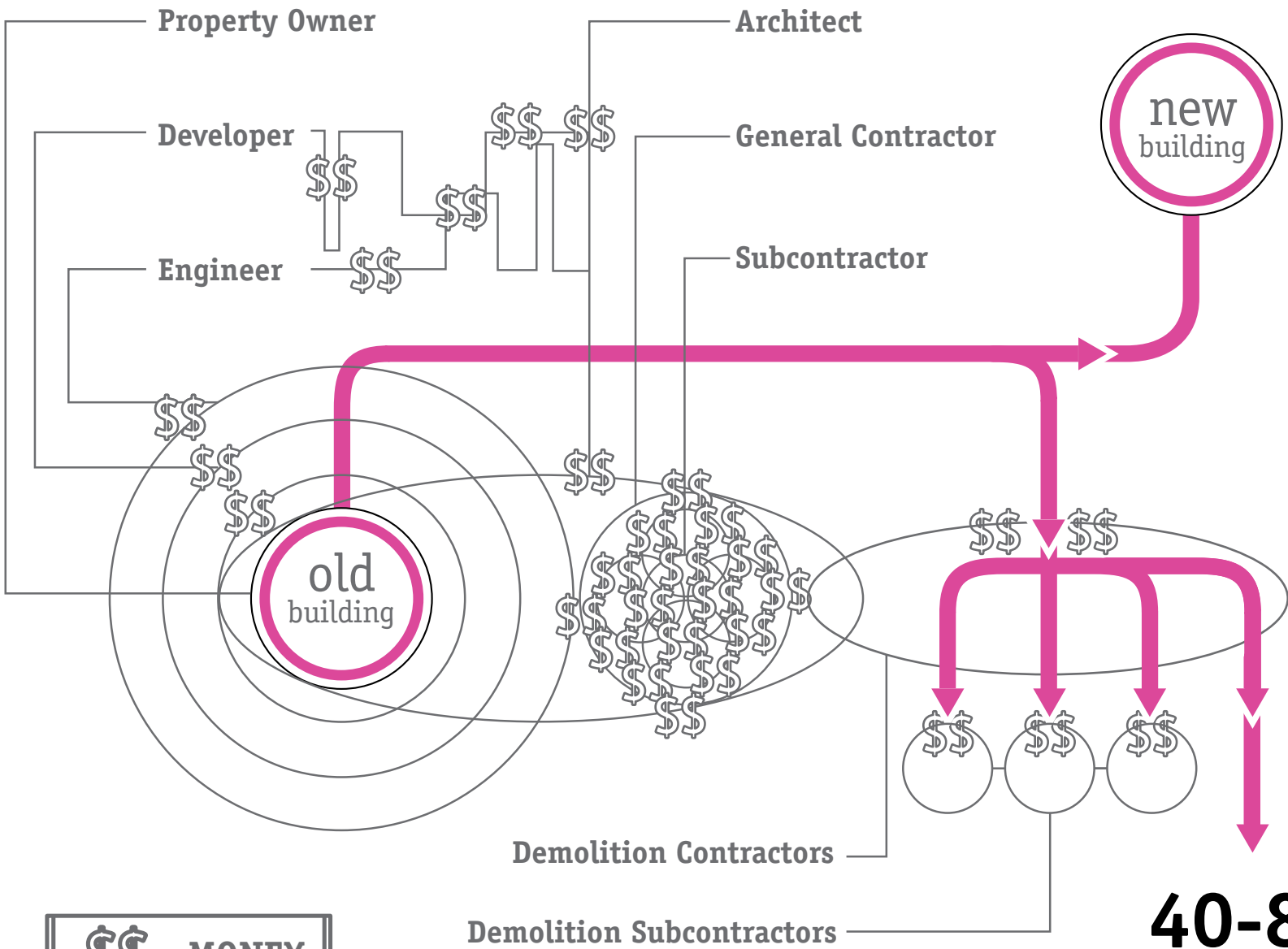
\$\$	MONEY
	TRUST



\$\$	MONEY
	TRUST

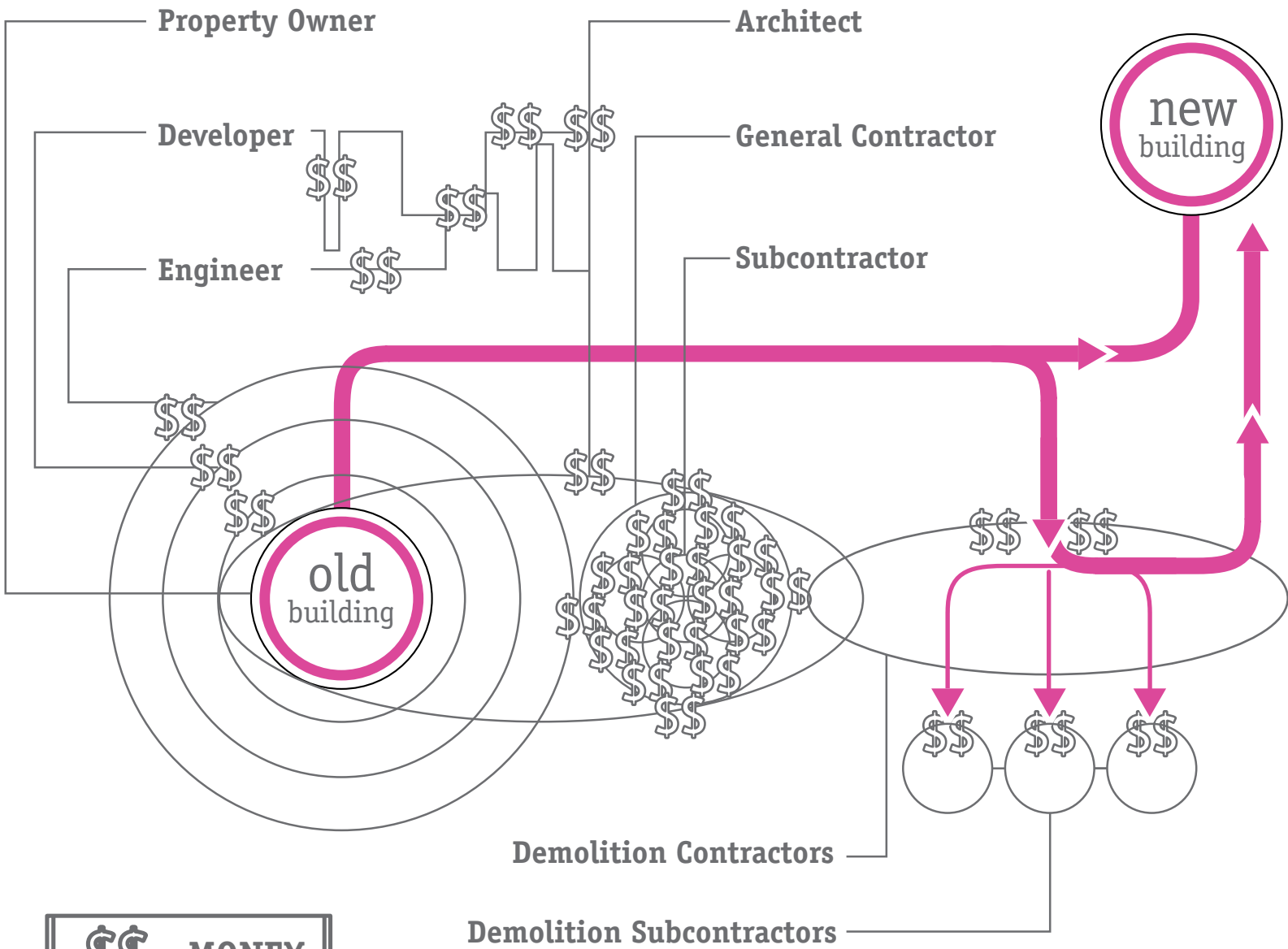



\$\$	MONEY
	TRUST

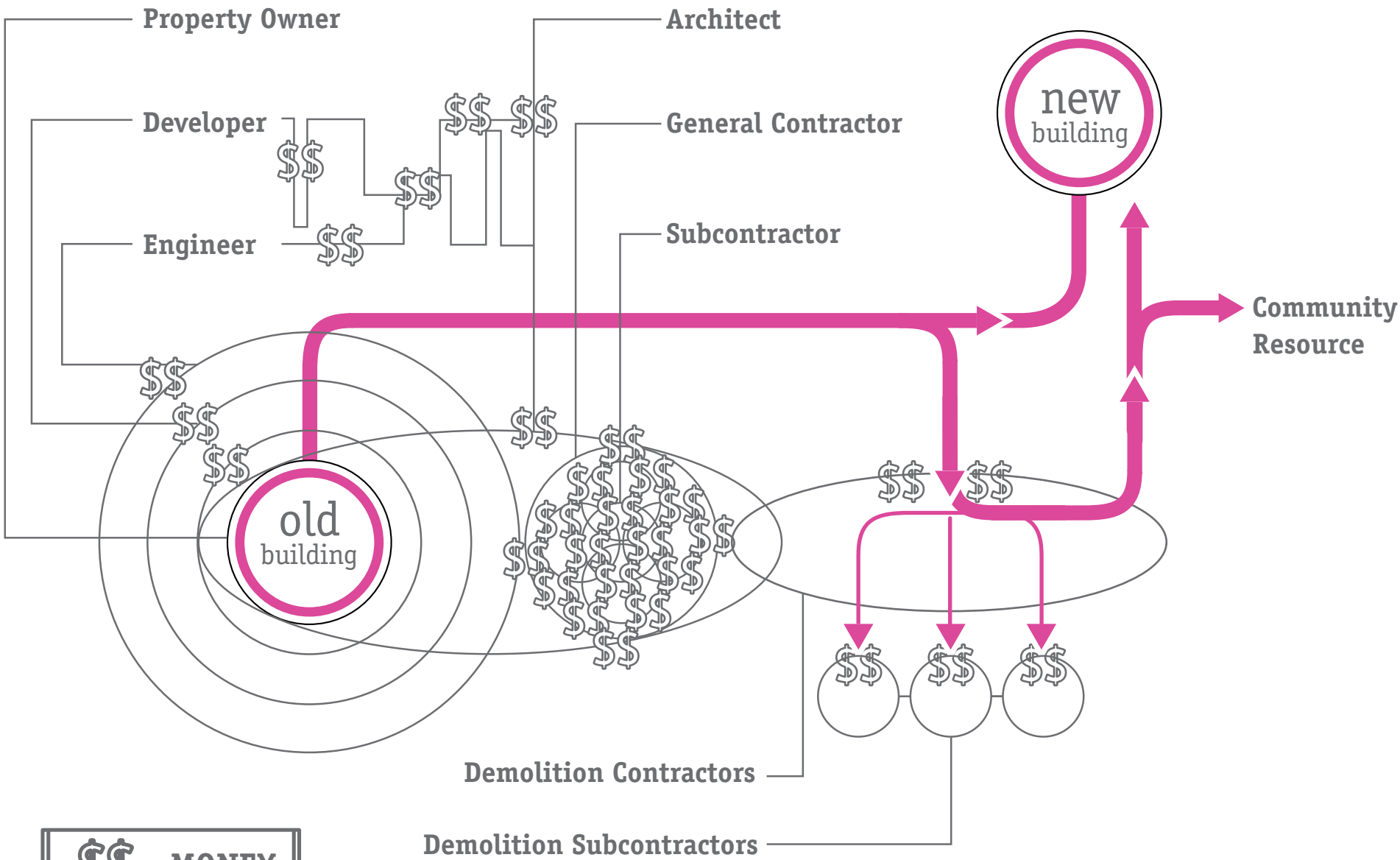


40-80%

\$\$	MONEY
	TRUST

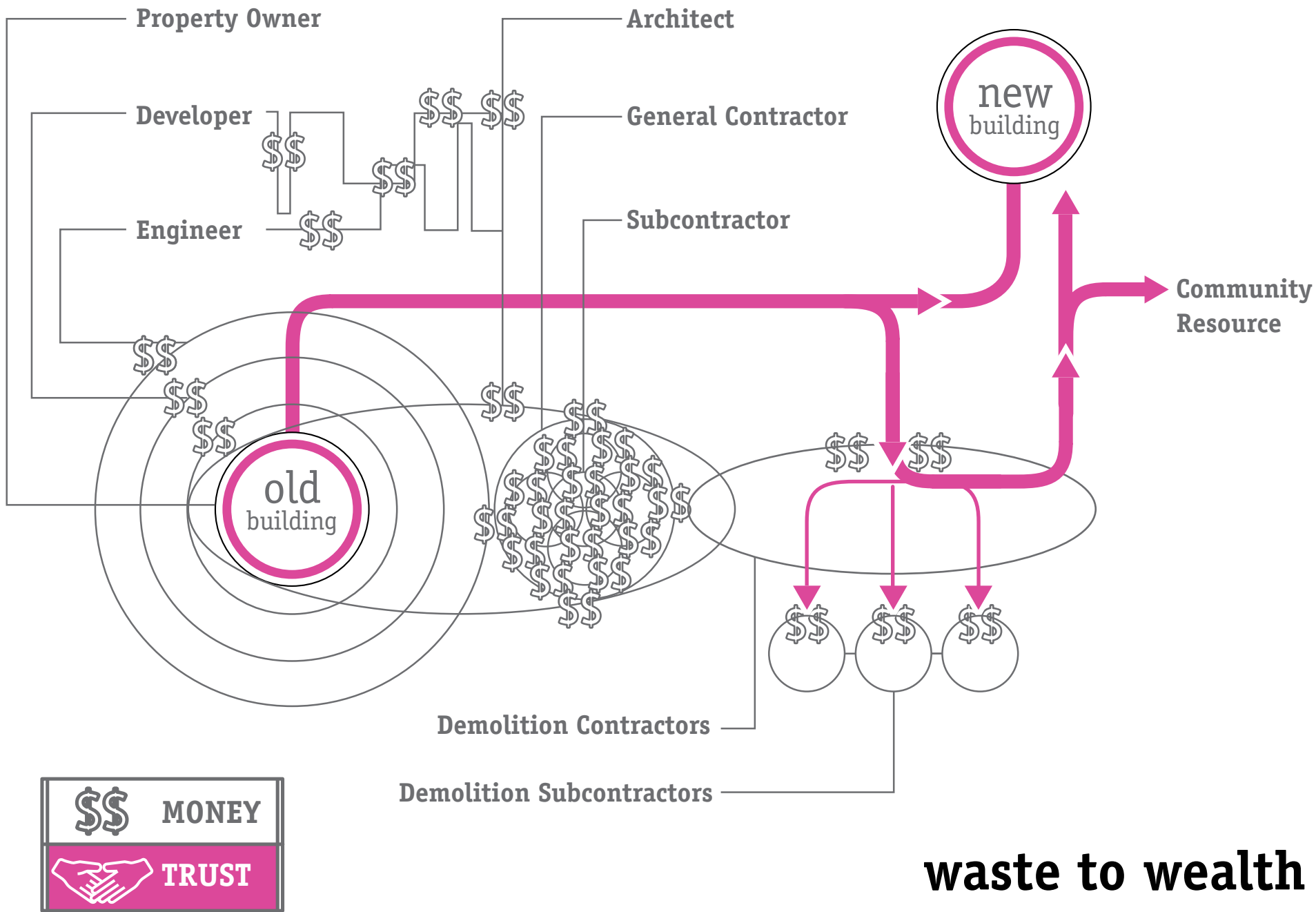


\$\$	MONEY
	TRUST

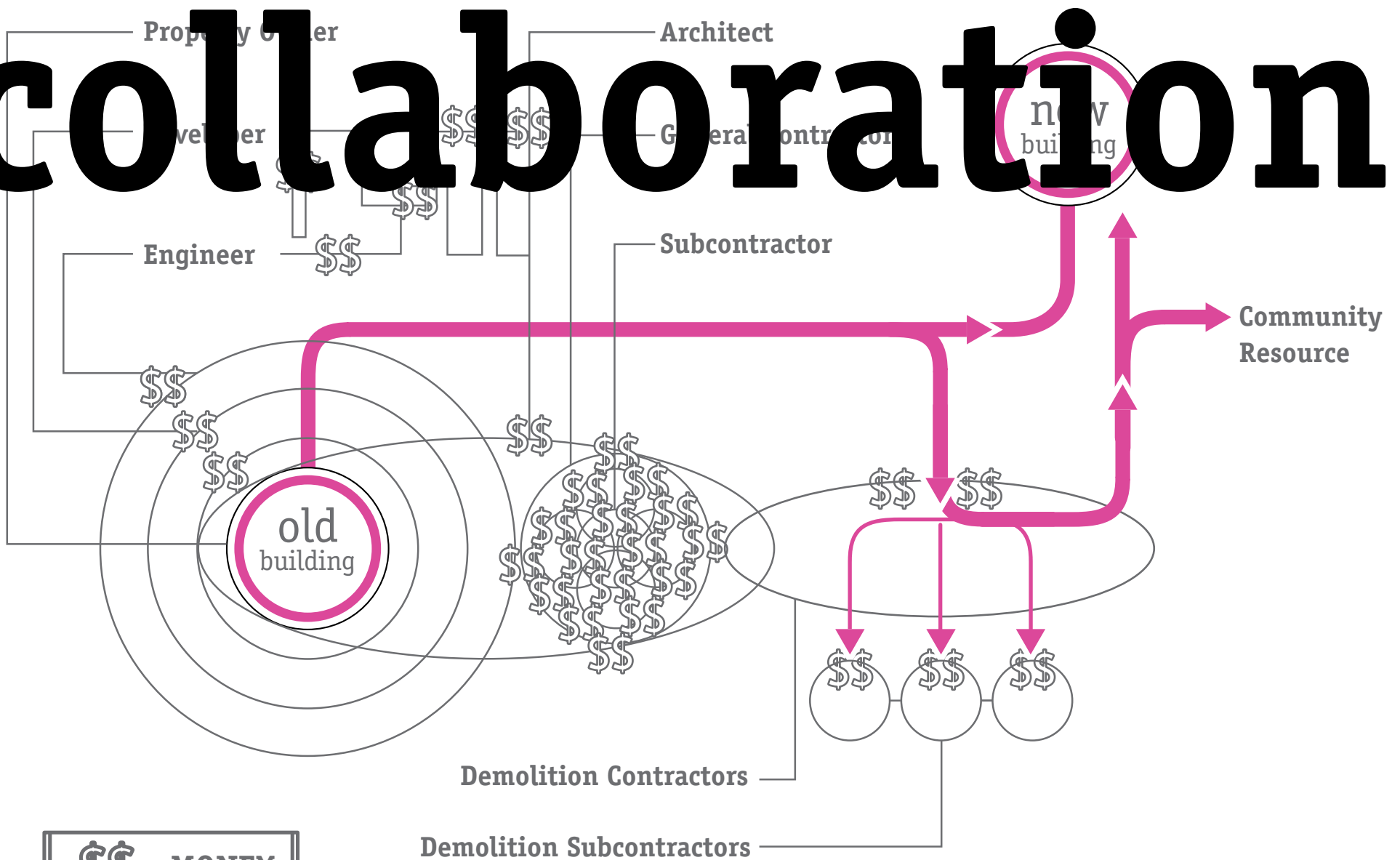


\$\$	MONEY
	TRUST

waste to wealth



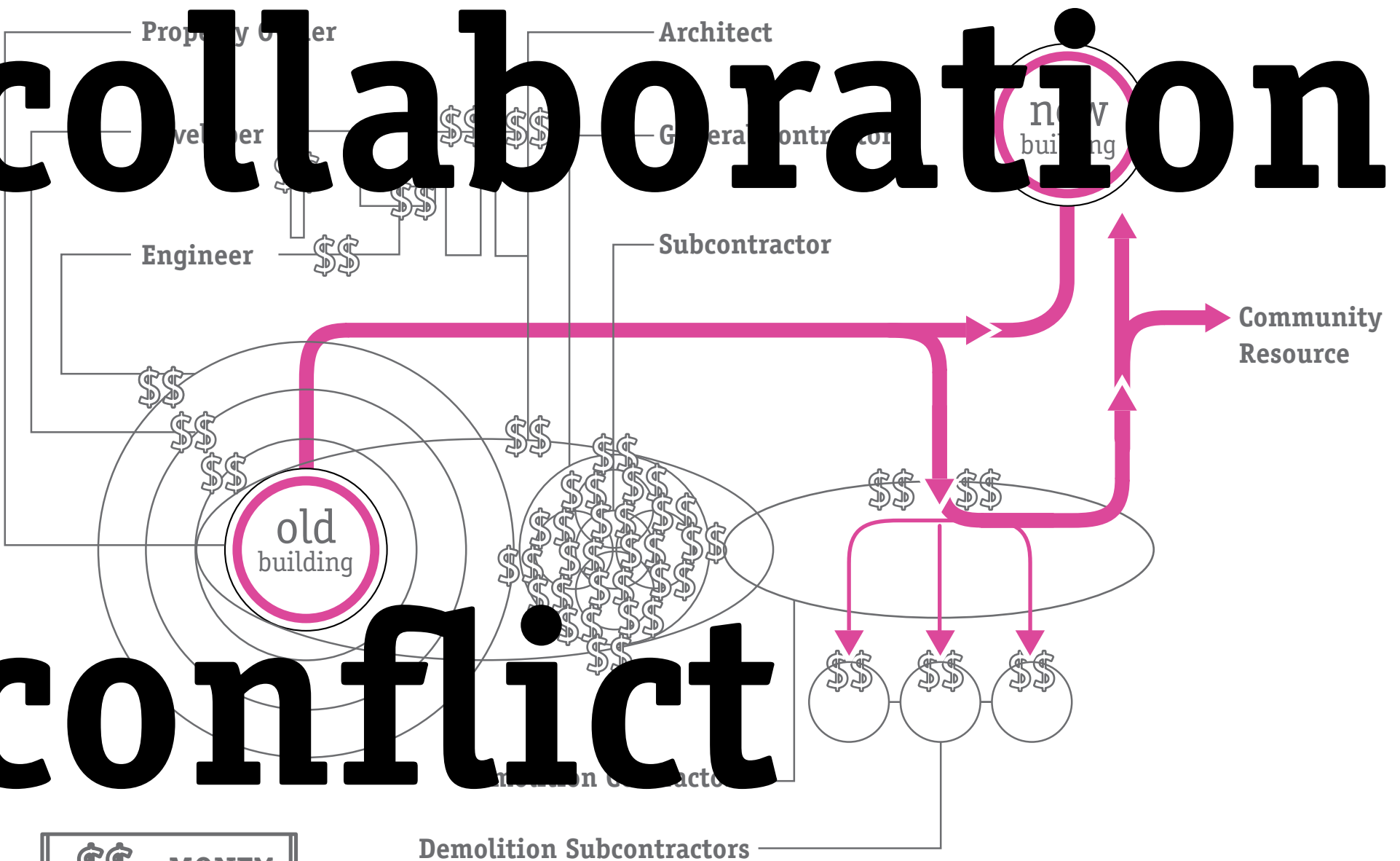
collaboration



\$\$	MONEY
	TRUST

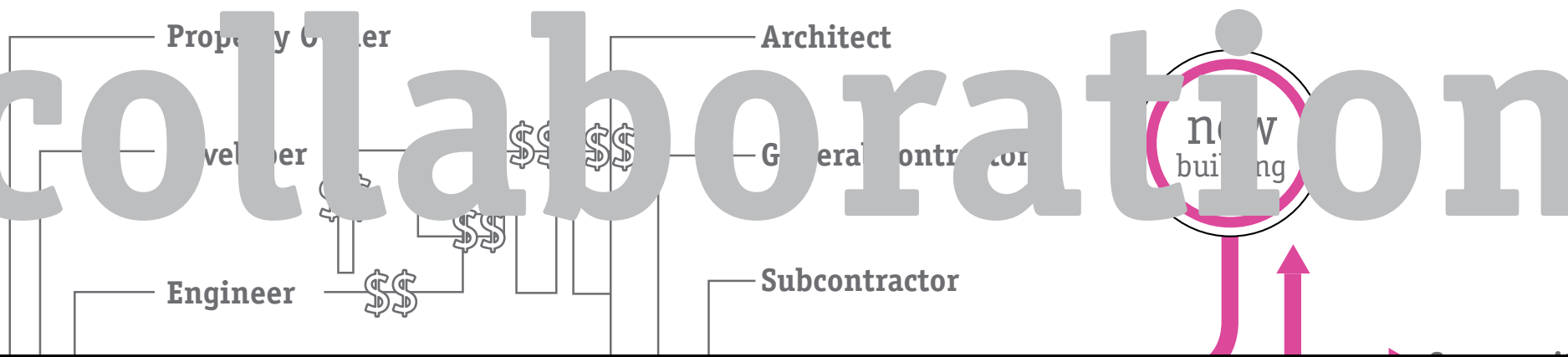
collaboration

conflict



\$\$	MONEY
	TRUST

collaboration

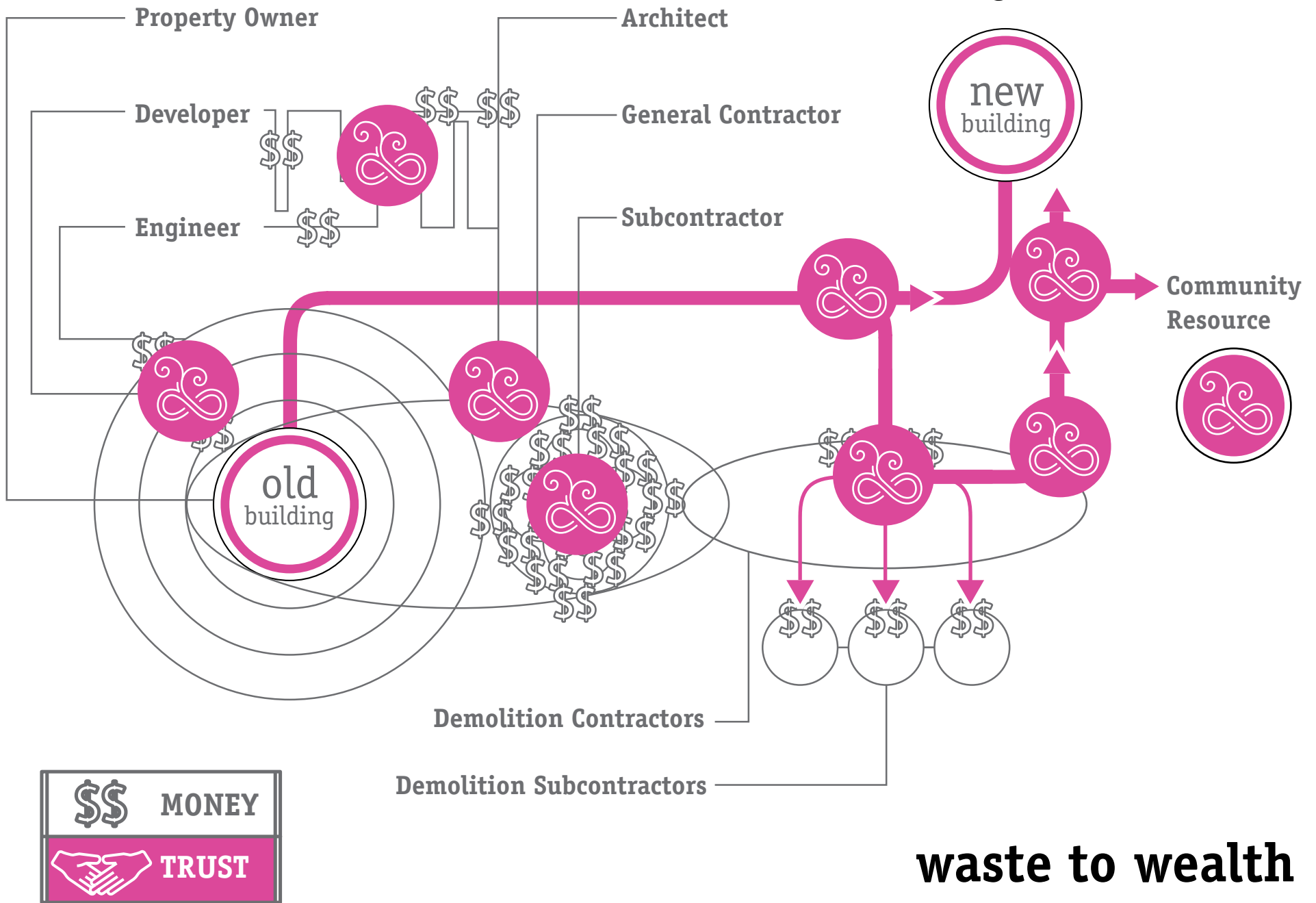


conflict

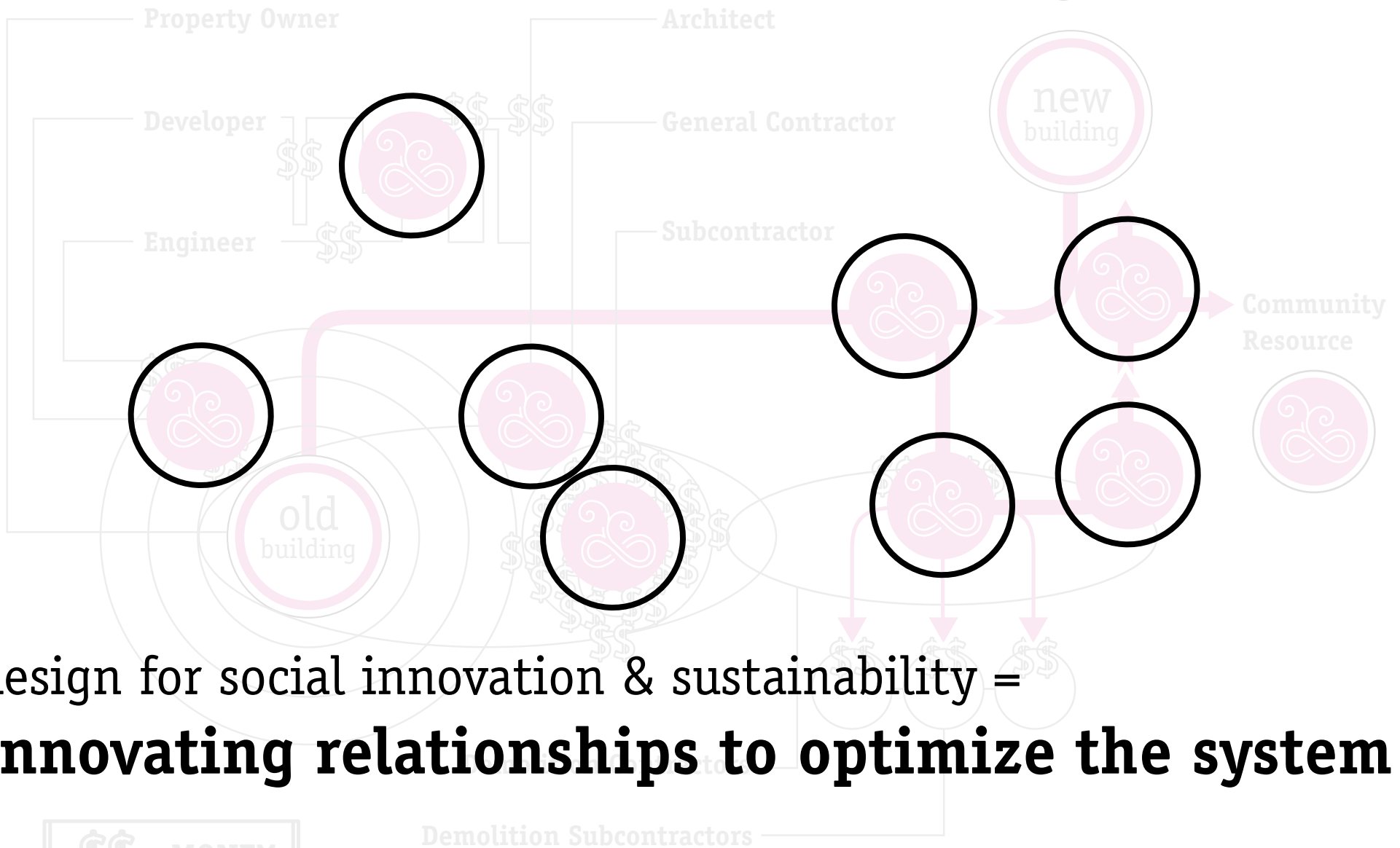


\$\$	MONEY
	TRUST

waste to wealth

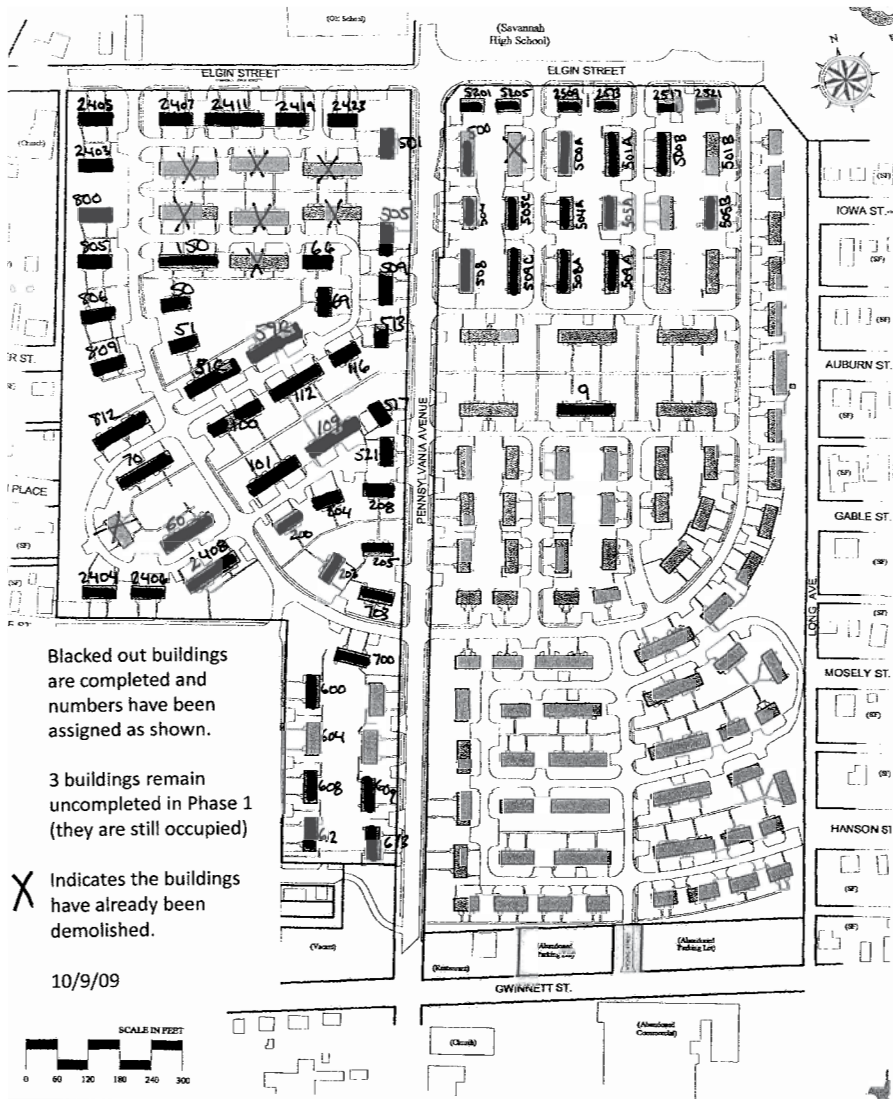


emergent structures

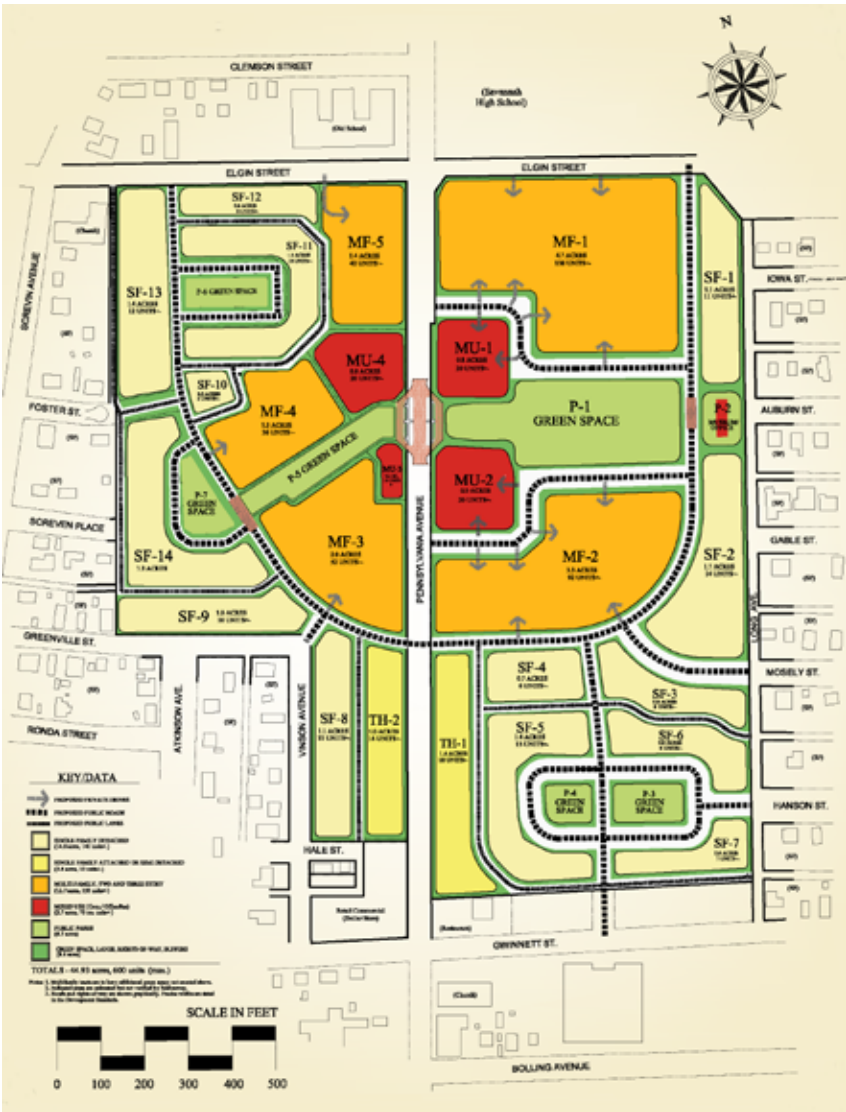


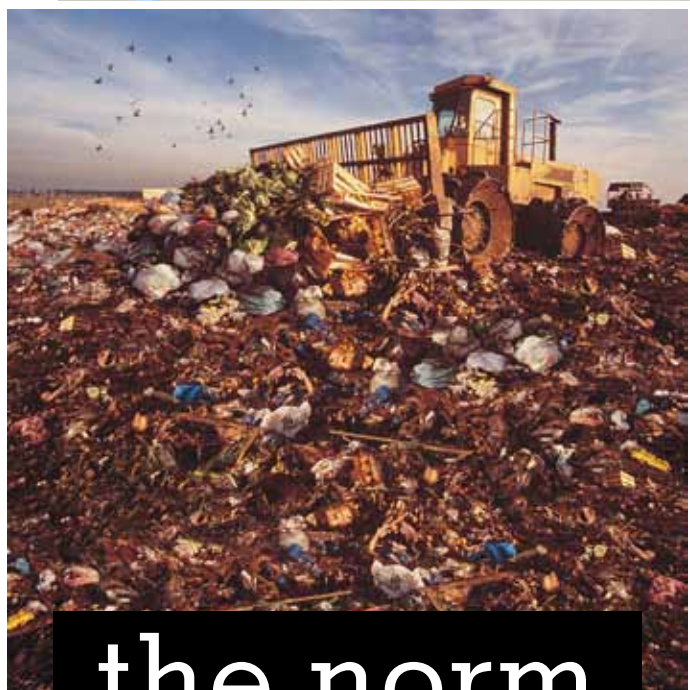






210 houses remaining

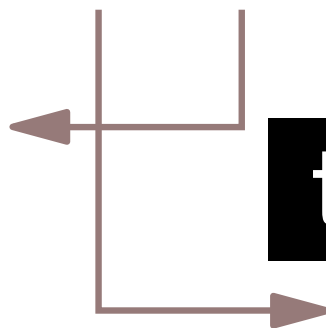




- flooring
- tables
- chairs
- counters
- roof repairs
- house repairs
- greenhouses
- shelving
- cabinets
- decks
- fencing
- art
- houses

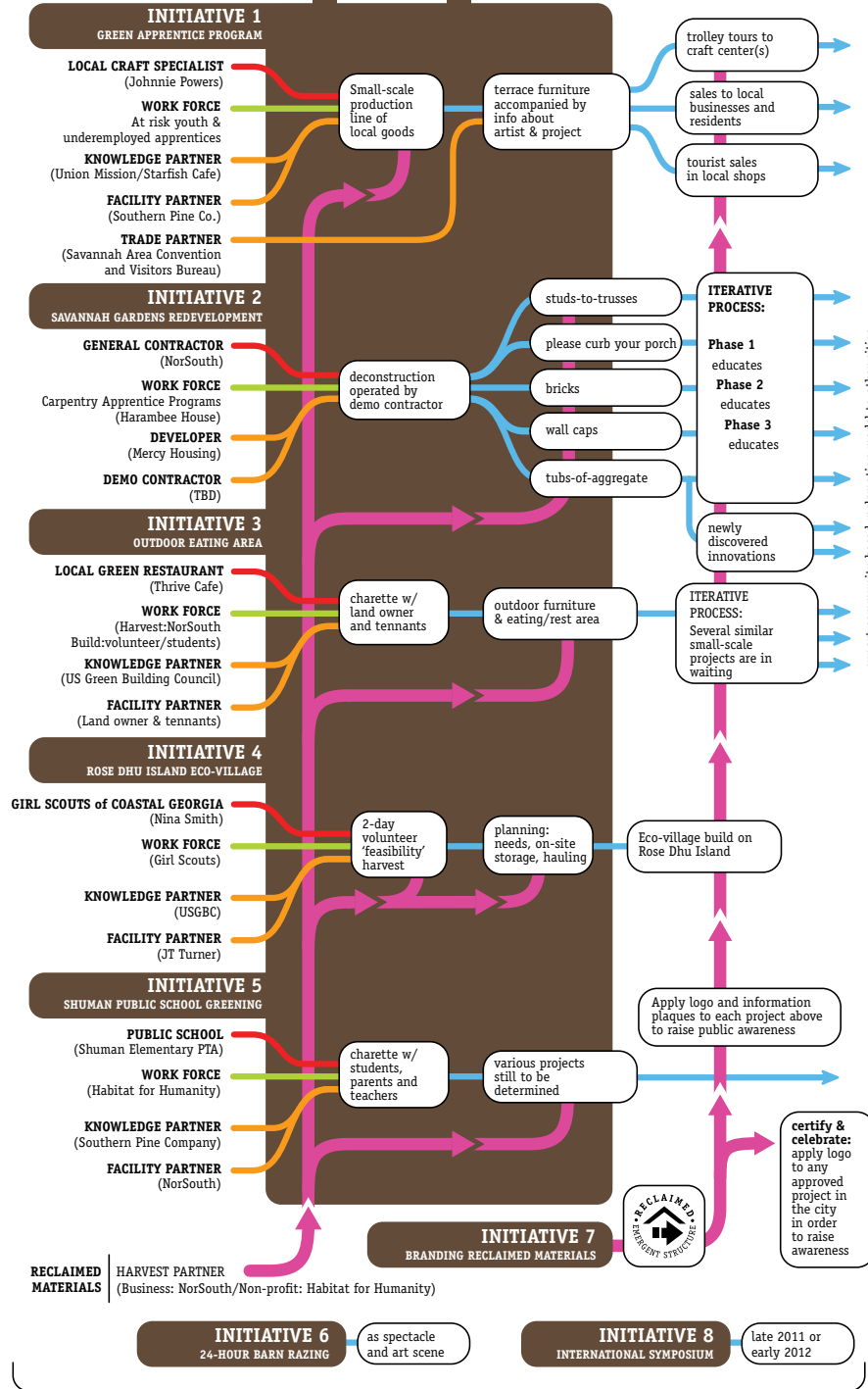
the 'new'

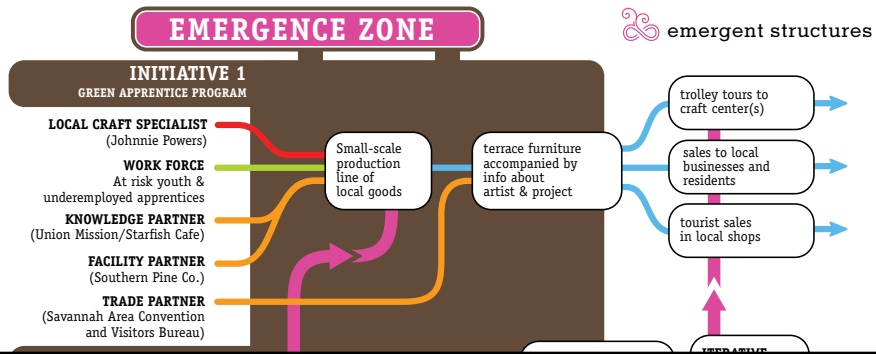
the norm



EMERGENCE ZONE

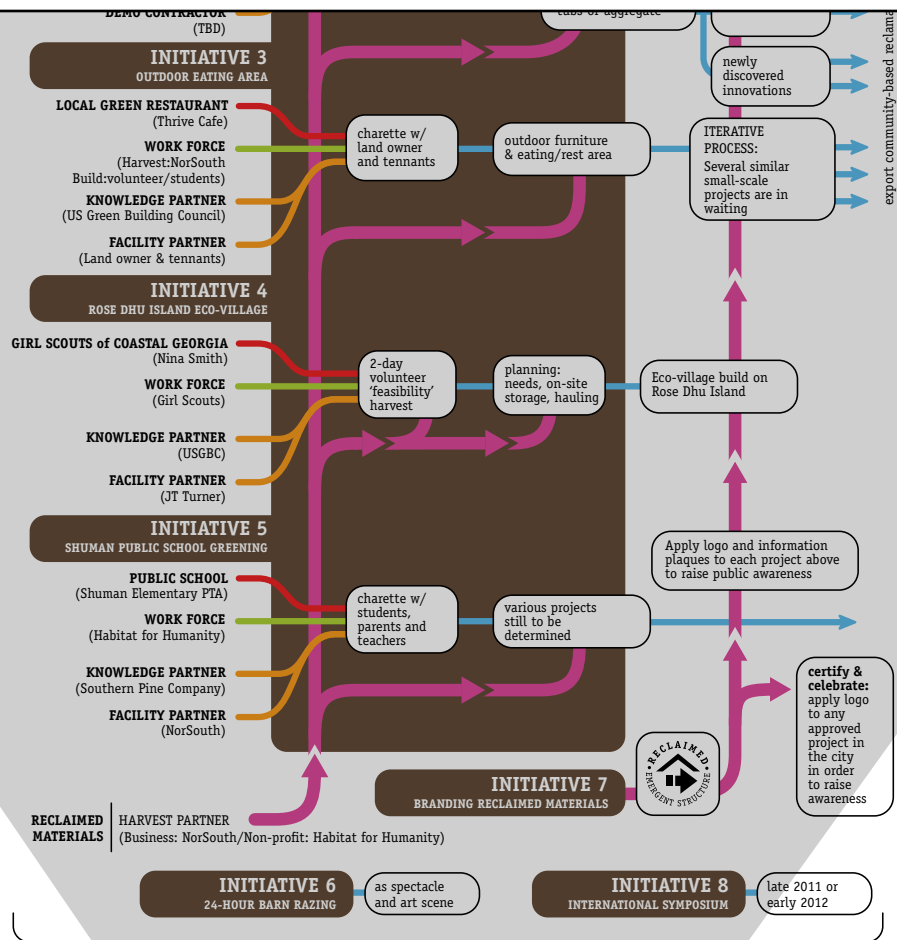
emergent structures





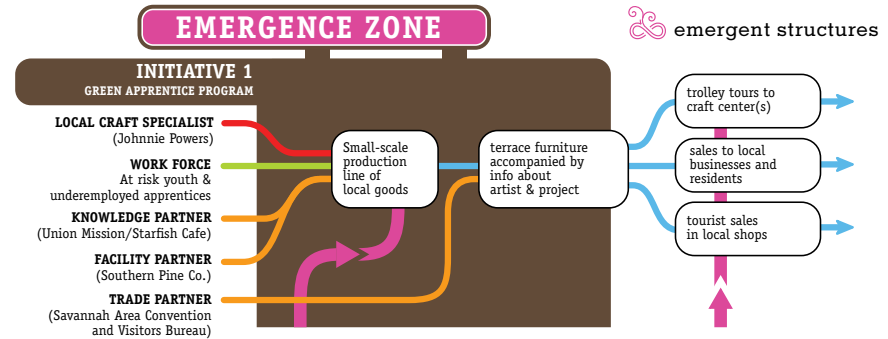
**Design for Sustainability
Department at SCAD**

facilitation // knowledge generation // data collection // manpower
promotion // adaptative strategies // iterative growth // dissemination

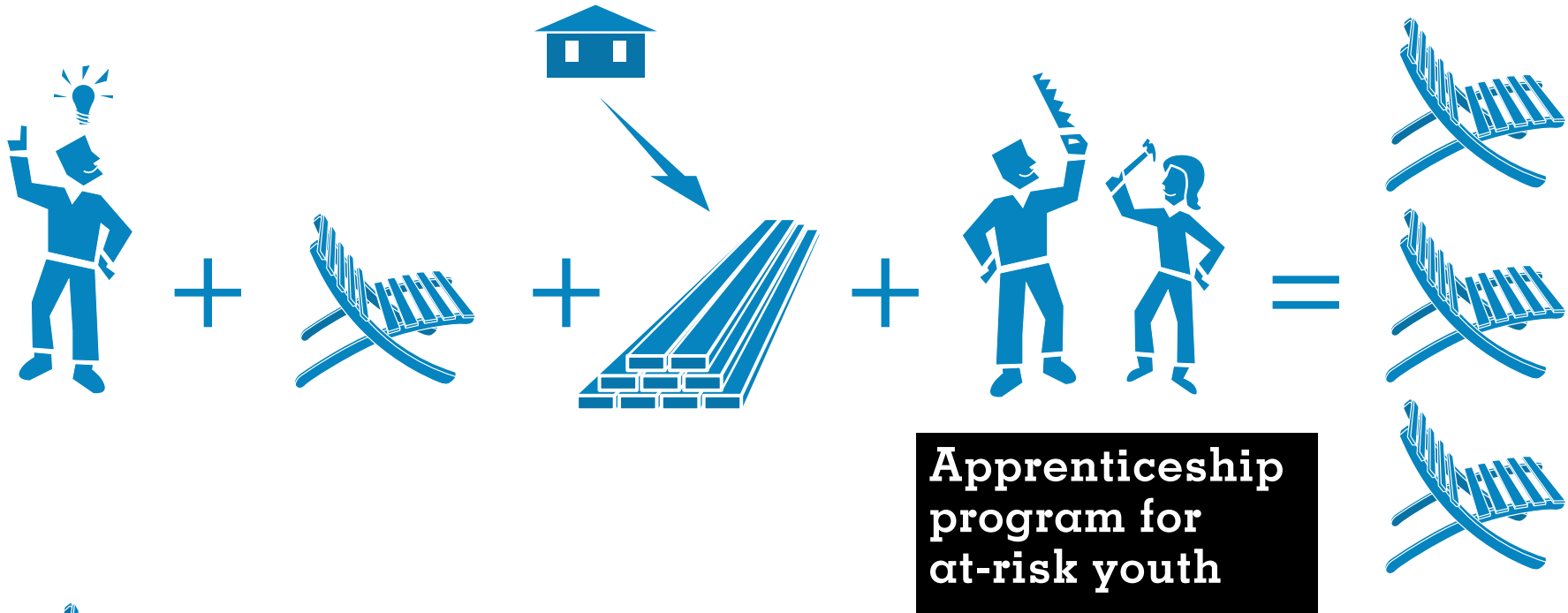




INITIATIVE 1



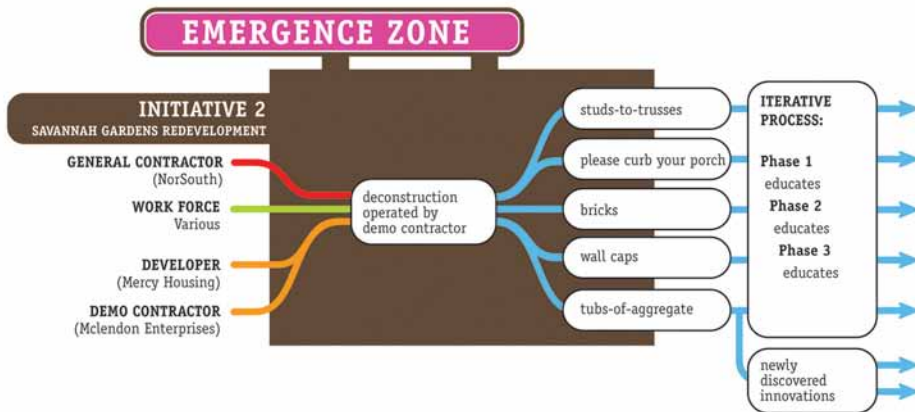
EARLY STAGES :: Locating and nurturing *Positive Deviants*
 Grant writing with city-run poverty reduction agency
 Outreach to Savannah Visitors Bureau
 Best practices research
 Incubator capacity building





ENGAGING INDUSTRY //// learning.

thousands of studs removed from the first 39 buildings to be repurposed for Phase One redevelopment.





ENGAGING INDUSTRY //// learning. and teaching thousands of studs removed from the first 39 buildings to be repurposed for Phase One redevelopment.

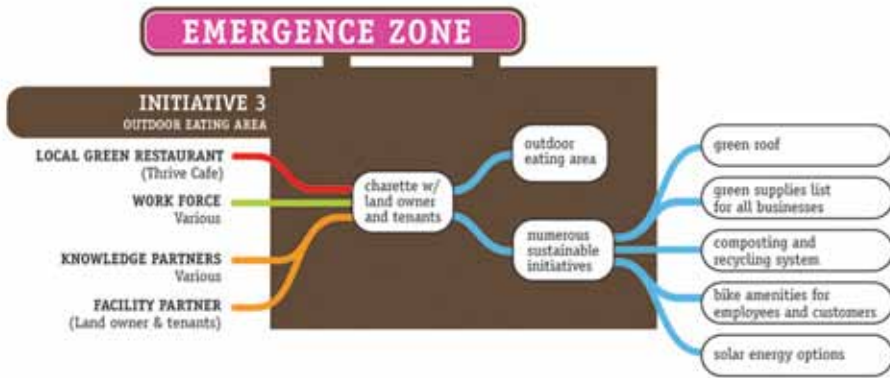
REDUCTION of CARBON EMISSIONS by 7 METRIC TONS



**A pulse of change *ideas*
creates the rhythm of change *actions*.**

A pulse of change *ideas*
creates the rhythm of change *actions*...

and a rhythm
of change *actions*
creates the pulse
of change *ideas*.



home gift ideas catering about

Thrive
A CARRY OUT CAFE

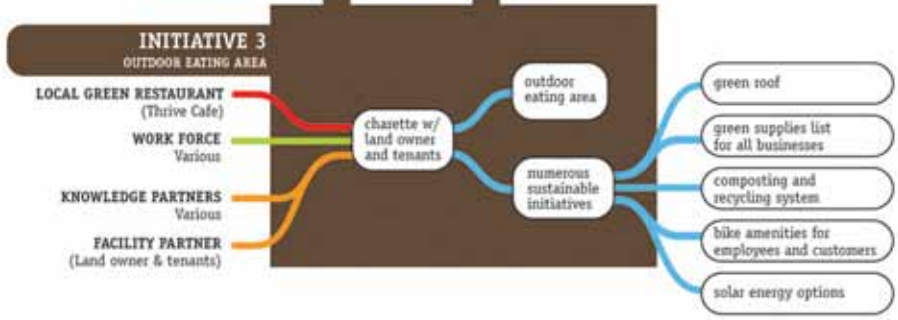
912 • 868 • 4234 thrivega@aol.com 47001 Hwy 868, Suwanee GA, 30110 (map)

INITIATIVE 3

Menu
for August 4th, 2010

<p>☛ Soups</p> <ul style="list-style-type: none"> - Tuscan Bean - Chilled Carrot Ginger Velvet <p>☛ Lunch</p>	<p>☛ Dinner</p> <ul style="list-style-type: none"> - Mac & Cheese - Tuscan Herb Roasted Chicken - Meat Lasagna - Curried Potato & Tomato 	<p>Hours</p> <p>Monday - Friday 11am - 8pm</p> <p>Saturday 11am - 8pm</p> <p>Sunday Closed</p>	<p>Almond & Olive Green Certified Restaurant</p> <p>THIS SITE IS ECO-FRIENDLY</p>
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EMERGENCE ZONE



green this.

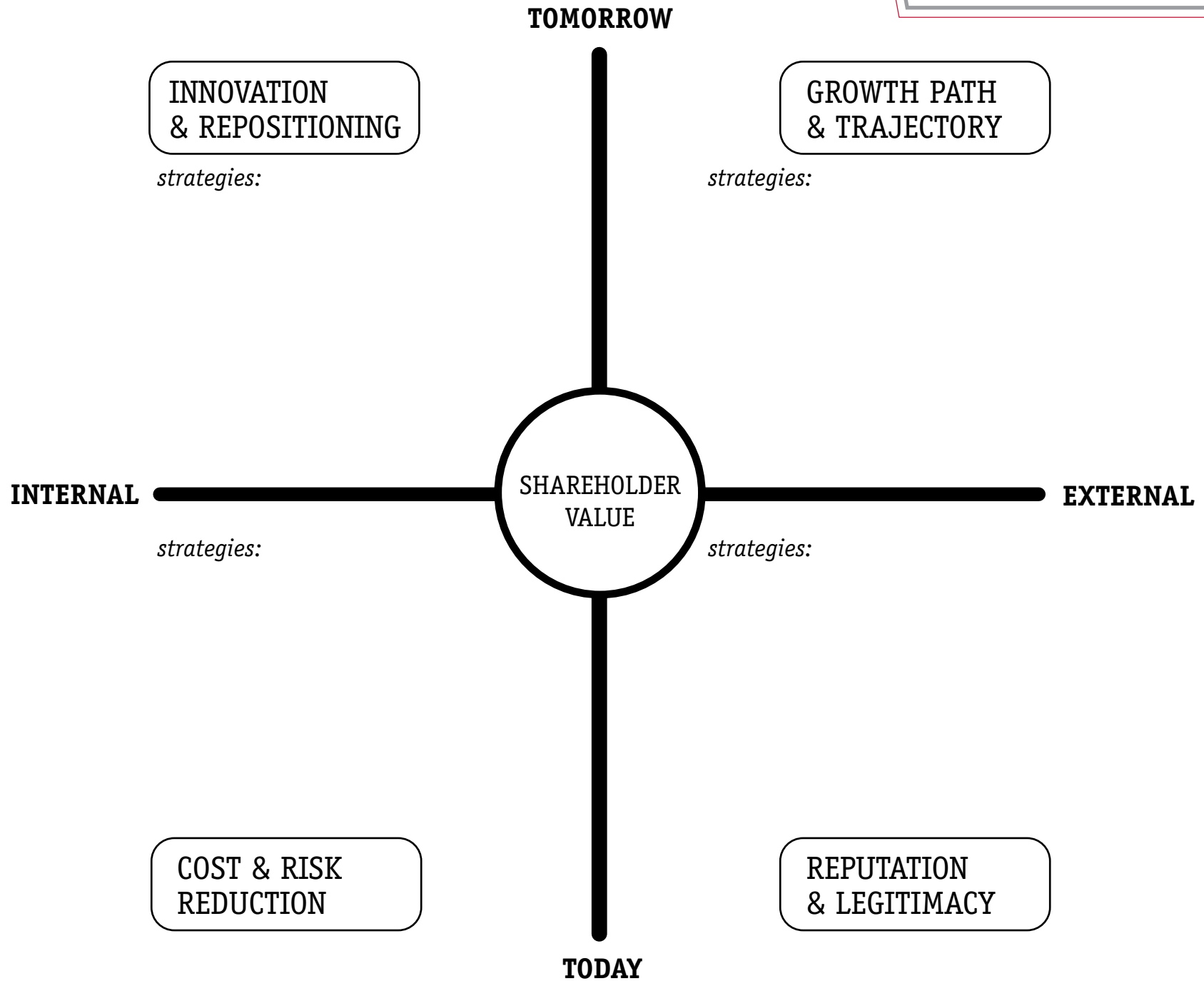


Janet

CO-OWNER OF WILEY'S: BUSINESS SIDE

- Former public school teacher & competitive BBQ competitor
- Widely known destination for BBQ
- New restaurateur
- Fast turnover but needs more seating
- Environmental ambitions but cost-conscious
- Electric bill = monthly rent

green them.





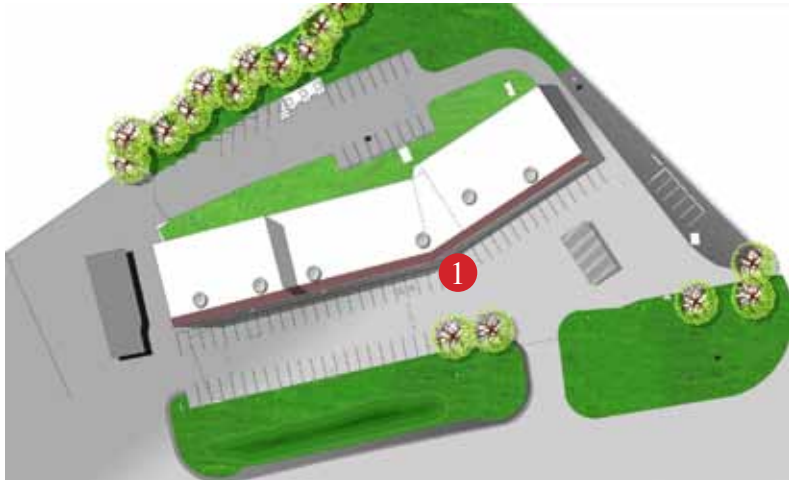
“Get the system in the room.”



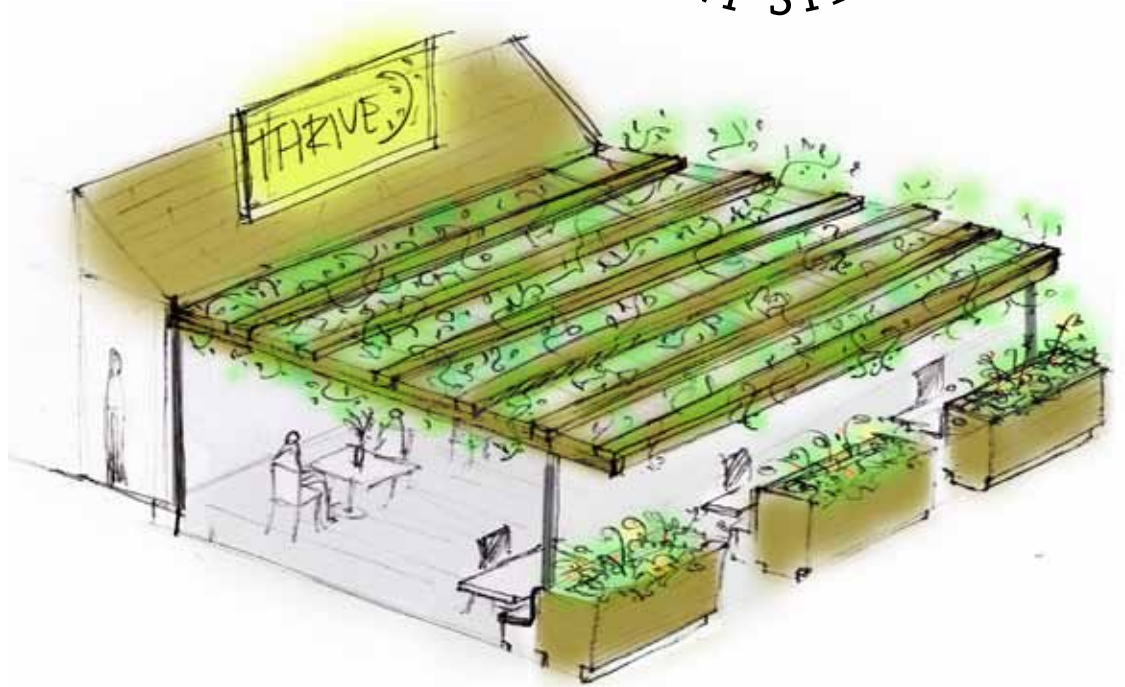
SAVANNAH TREE FOUNDATION



Outdoor Eating Area



Alternative 1-A



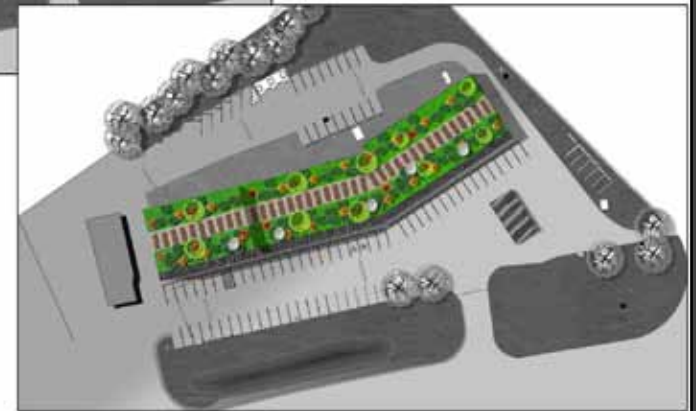
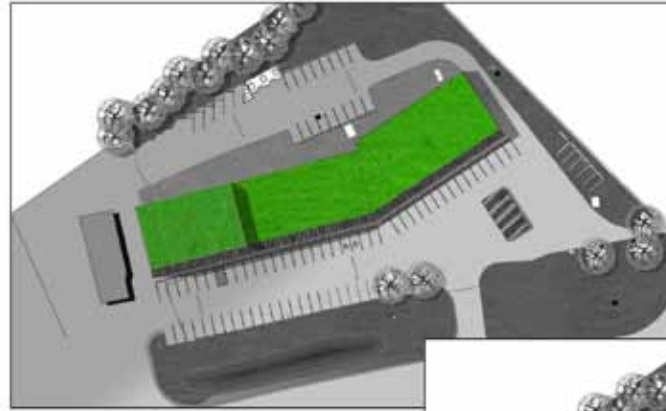
Alternative 1-B

turned skeptics into believers

discovered business needs
that can be met through
sustainable means

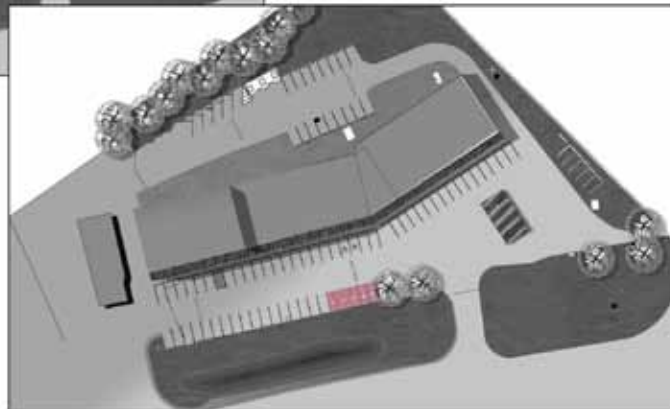
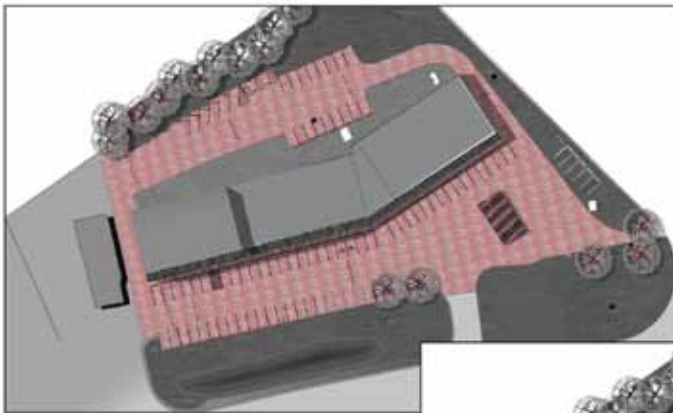
Sustainable Practices :: Whitemarsh Plaza, Savannah, Georgia

Green Infrastructure



Sustainable Practices :: Whitemarsh Plaza, Savannah, Georgia

Green Infrastructure



uncovered state funding
opportunities

facilitated the intersections

leadership and guidance
where needed





A pulse of change *ideas*
creates the rhythm of change *actions*...

and a rhythm
of change *actions*
creates the pulse
of change *ideas*.

MOVEMENT ACTION PLAN (MAP) /// Bill Moyer

DOING DEMOCRACY ::

The MAP Model for Organizing Social Movements

MOVEMENT ACTION PLAN (MAP) //// 4 ROLES

CITIZEN

Shows how the movement advocates for the common good and stands for widely accepted values.

REBEL

Protest injustice, often through nonviolent direct actions such as marches, rallies, petition campaigns, civil disobedience, street corner vigils, pamphleteering and group visits to public officials and hearings. Call public attention, stimulate public dialog, and confronting recalcitrant powerholders

SOCIAL CHANGE AGENT

Movement organizers. Focus on public education, nurture future leaders, and organize new segments of the community. As they adapt the framing of movement issues to the needs of disparate constituencies, they build the movement's strength. They also continue to deepen their analysis, encouraging others to seek underlying causes and be open to a major paradigm shift.

REFORMER

Work closely with mainstream institutions negotiating for change by filing lawsuits, testifying at hearings, lobbying, participating in officials meetings. Provide research, training and consultation

MOVEMENT ACTION PLAN (MAP) //// 8 STAGES

NORMAL TIMES

Problems exist, but are largely unrecognized, invisible, or not publicly discussed.

PROVING THE FAILURE OR LIMITATIONS OF EXISTING INSTITUTIONS

Recognized by a few, and efforts are made through mainstream channels

RIPENING CONDITIONS

Growing awareness. Public education begins, activists mobilize, small victories.

TAKE-OFF

Clearly on the public agenda with hot debate. Often spurred by a 'trigger event.'
Groups proliferate, new tactics evolve, and the movement seems to be everywhere.

PERCEPTIONS OF FAILURE

Those who believed change would be easy suffer burnout, leave the movement or become more aggressive. Aggression undermines popular support.

BUILDING MAJORITY PUBLIC SUPPORT

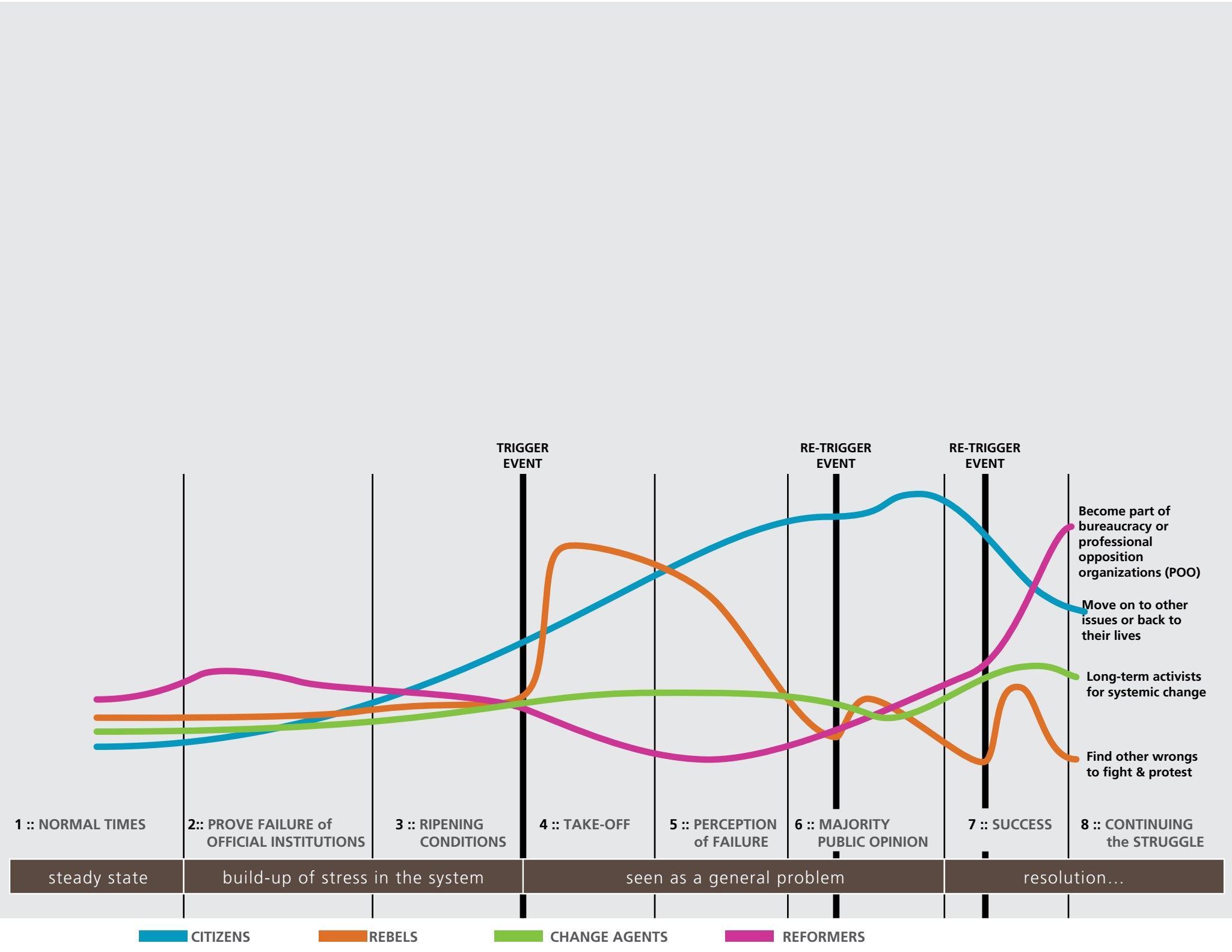
Public education campaigns, and 'next step' strategies. Innovations in framing show how the issue affects all segments of society.

SUCCESS

Broad public support. Powerholders supportive, if only for pragmatic reasons.

CONTINUING THE STRUGGLE

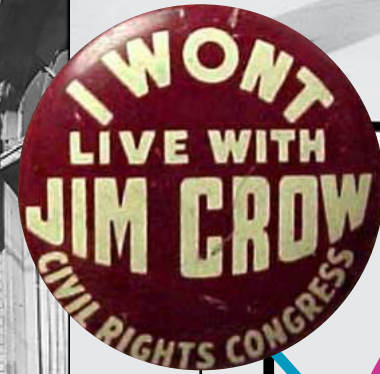
Implementation of agreements monitored. Guard against backward trends.



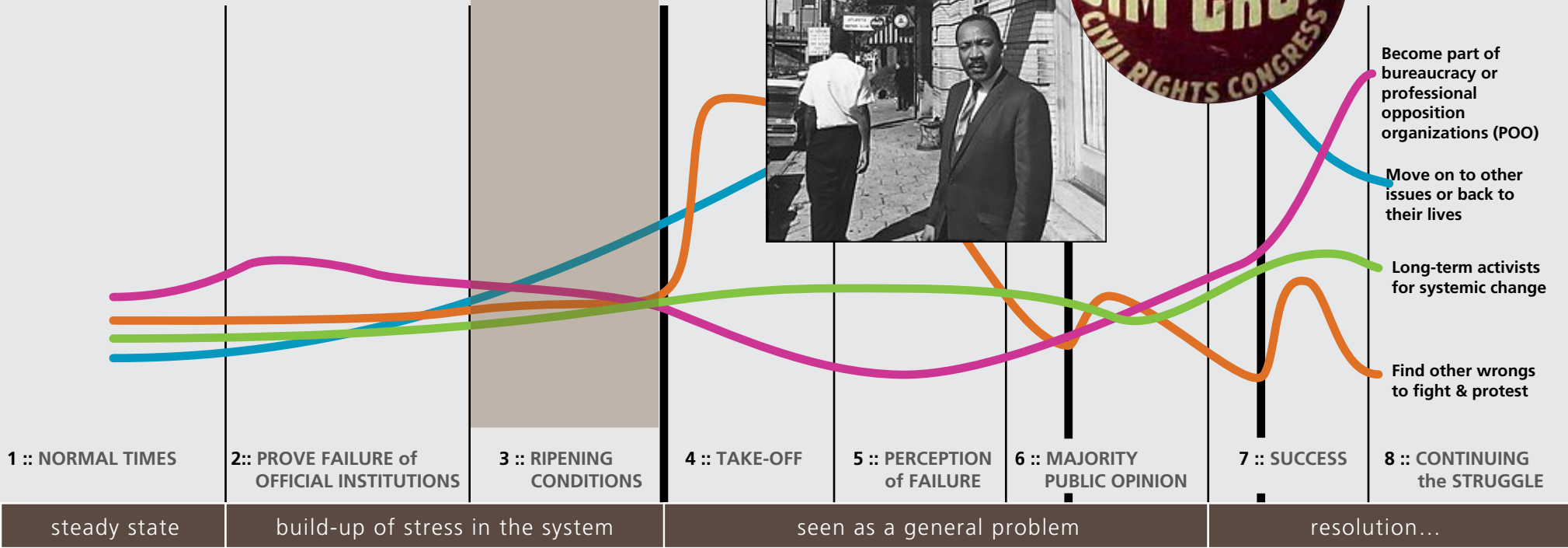
AMERICAN CIVIL RIGHTS



1956 - 1959



TRIGGER EVENT



CITIZENS

REBELS

CHANGE AGENTS

REFORMERS



INITIATIVE 4

GIRL SCOUTS OF HISTORIC GEORGIA ::

Centennial Celebration of the founding of Girl Scouts of America :: 2012

ECO-CAMP ON ROSE DHU ISLAND

Strategic Partner ::

US Green Building Council





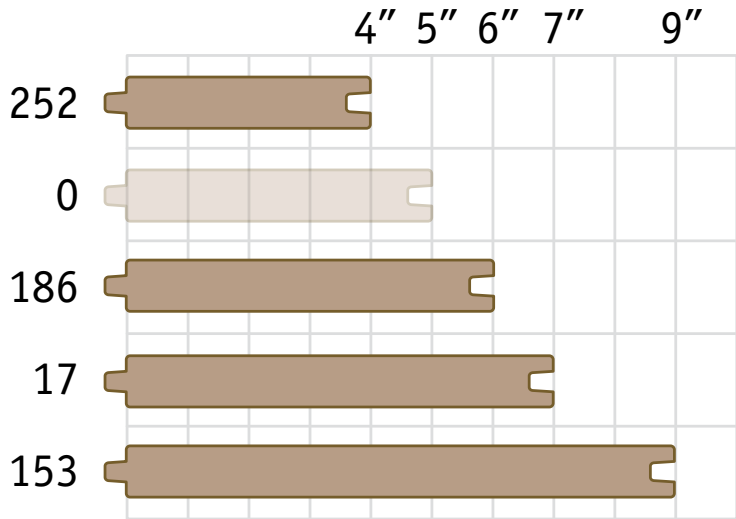
UNBUILD IT, AND THEY WILL COME ::

Turning skeptics into believers through demonstration projects.

Building a knowledge base for green jobs industries.

BUILDING ONE

Roof decking panels :: heart pine 4' long
DENAILED & ready for action





1: july 23



2: july 24



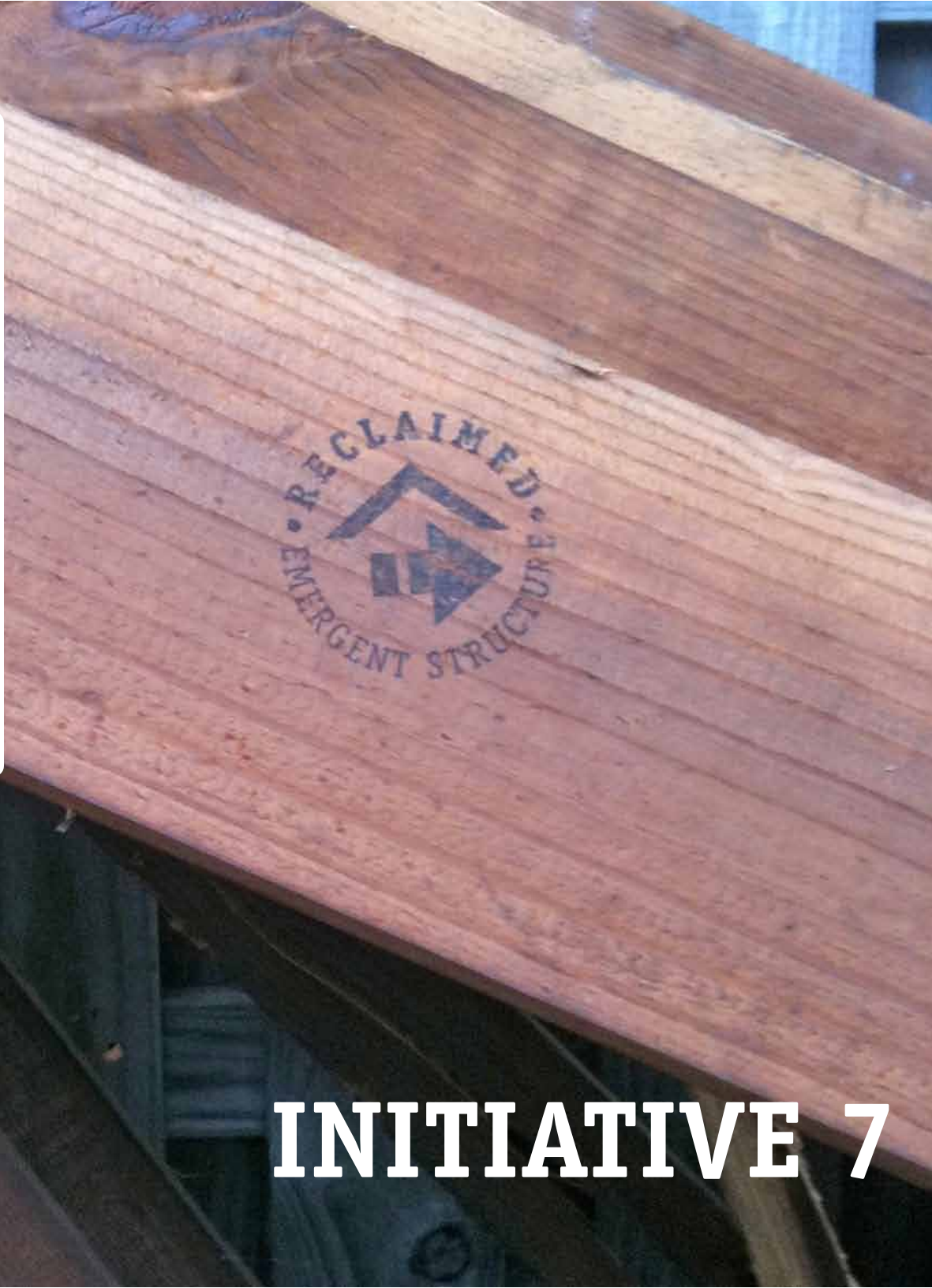
3: august 20

4: Sept 20

AIA Georgia Legacy Charette

5: 2011

**Design & Build for Girl Scouts
Centennial celebration**



INITIATIVE 7

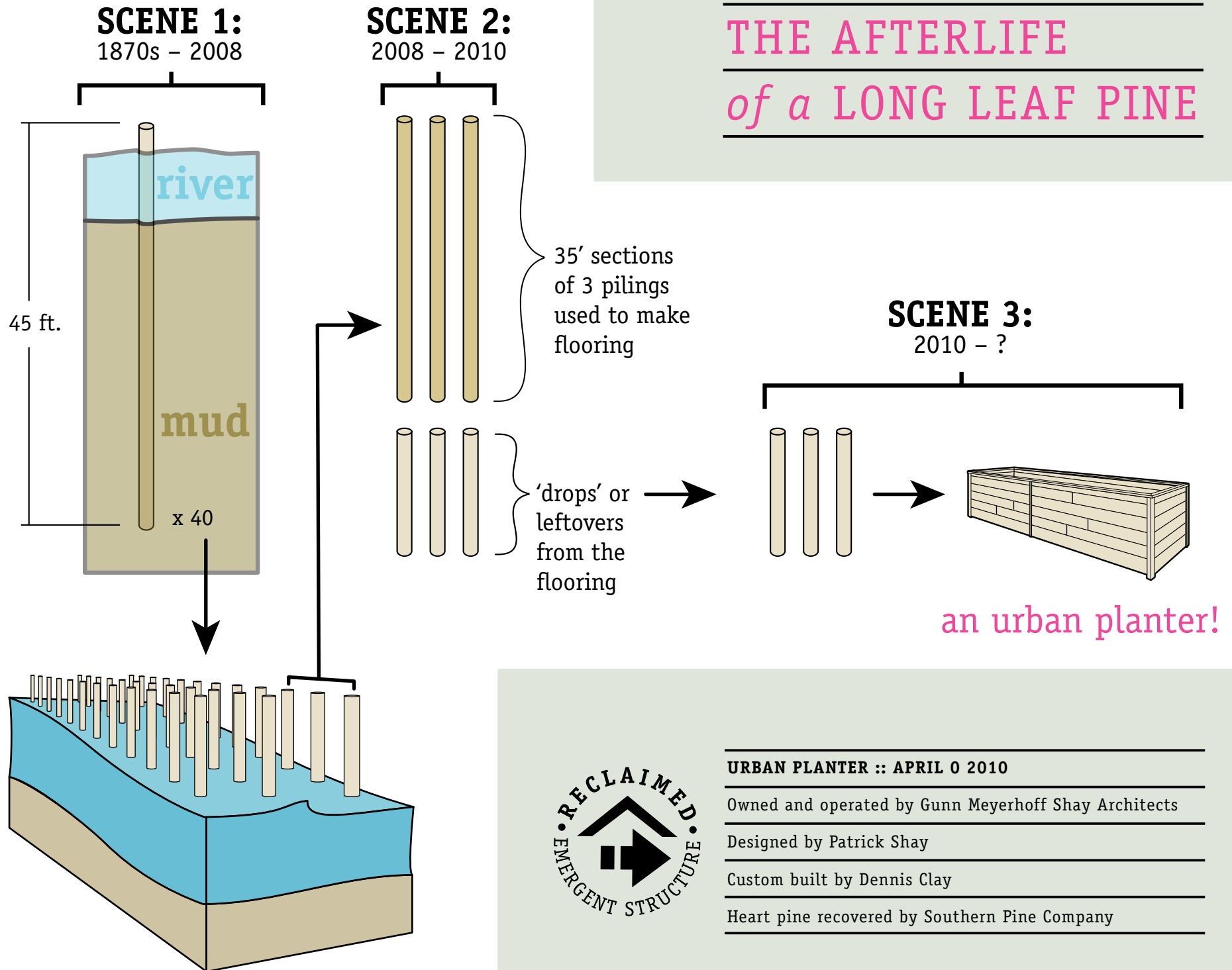


- promote ‘positive deviants’ already in the community
- raise awareness
- create educational tools
- incentivize behavior



THE AFTERLIFE

of a LONG LEAF PINE



URBAN PLANTER :: APRIL 0 2010

Owned and operated by Gunn Meyerhoff Shay Architects

Designed by Patrick Shay

Custom built by Dennis Clay

Heart pine recovered by Southern Pine Company





this ain't junk

A close-up photograph of a hand with gold-painted fingernails holding two buttons. The hand is positioned on the left side of the frame, with the thumb and index finger holding the buttons. The background is a solid, dark black. The buttons are small and round, one with a wood-grain pattern and the other with a white background and black dots.

this ain't junk

For more information about material reclamation visit www.emergentstructures.com



this ain 't junk


For more information about material reclamation visit www.emergentstructures.com

this ain't junk



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© Adrian Perez-Pena



this ain't junk

EMERGENT STRUCTURES PROJECT

BUILDING MATERIAL HARVEST DAY

SATURDAY
NOVEMBER 7, 2009
9am - 4pm

come for an hour or the whole day!

Emergent Structures reclaims building materials from demolition sites and helps distribute them to be reused in restoration, furniture and art. Everyone is free to take any of the building materials harvested!

The site is located at the Sixteenth Estates on Pennsylvania Avenue, half mile north of Dunwoody in East Savannah, GA. This is a great opportunity for students, faculty and staff to work with contractors, developers, community organizations, craftsmen and artists who are at the forefront of the sustainable movement.

Please wear work boots or sneakers (no open toes shoes), work clothes and gloves and bring hammers, screwdrivers and crowbars. Liability waivers must be signed, and material handling is the responsibility of the individual. If you have any questions please contact Kathy Fitz at kfitz@emergentstructures.com.





Gallery shows to pique public interest

INITIATIVE 8

photographers
documentary film makers
oral historians
historians
sociologists
anthropologists
preservationists
architects
craftsmen
artists
social entrepreneurs
and so on...

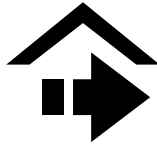
Symposium on
reclaiming building
materials



SCAD | Design for Sustainability: *enhancing continuity*

Fall 2009

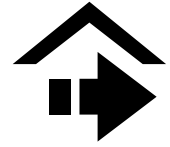
INTERIOR DESIGN STUDENTS



- detailed floorplans
- catalog of materials in 30 units
- reclamation of non-structural materials

Winter 2010

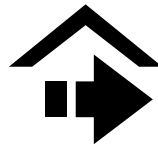
DESIGN for SUSTAINABILITY CLASS



- Conceptual map making of the social and political terrain
- Extensive cataloging of structural materials
- 3-dimensional, extracted view model of buildings
- engage construction company that wins bid for Phase One
- devise on-site re-use concepts; present to strategic partners
- engage local non-profits serving minorities and developing green jobs programs (*Harambee House, Union Mission, etc.*)
- create Community Outreach toolkit
- internship with local preservation company

Spring 2010

GRAPHIC DESIGN CLASS

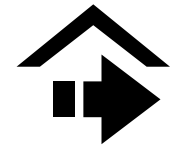


- Earth Day booth for education and advocacy
- promotional kit for economic growth opportunities or local reclamation projects
- community advocacy research and booklet
- public school poster campaign on innovative reuse
- prototype curriculum for elementary school lesson plans

—Common area furniture for Phase One designed by
FURNITURE DESIGN CLASS

Summer 2010

DESIGN or SUSTAINABILITY CLASS

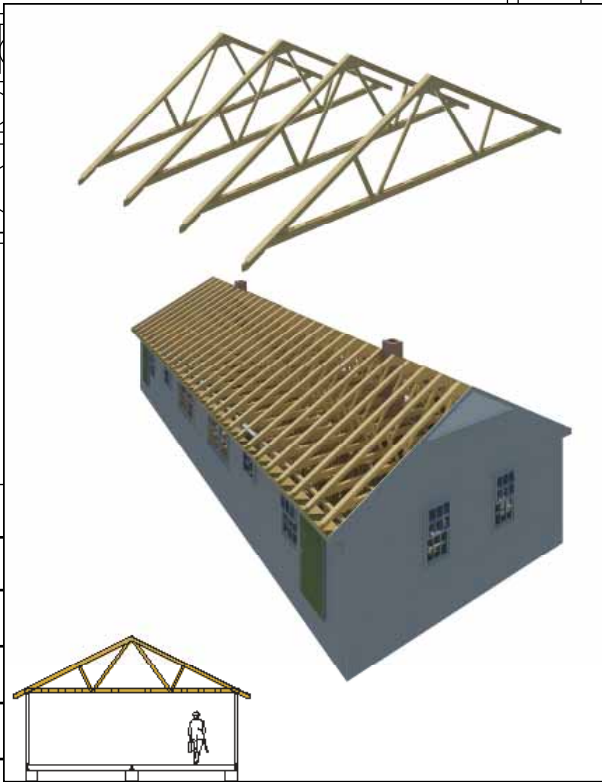
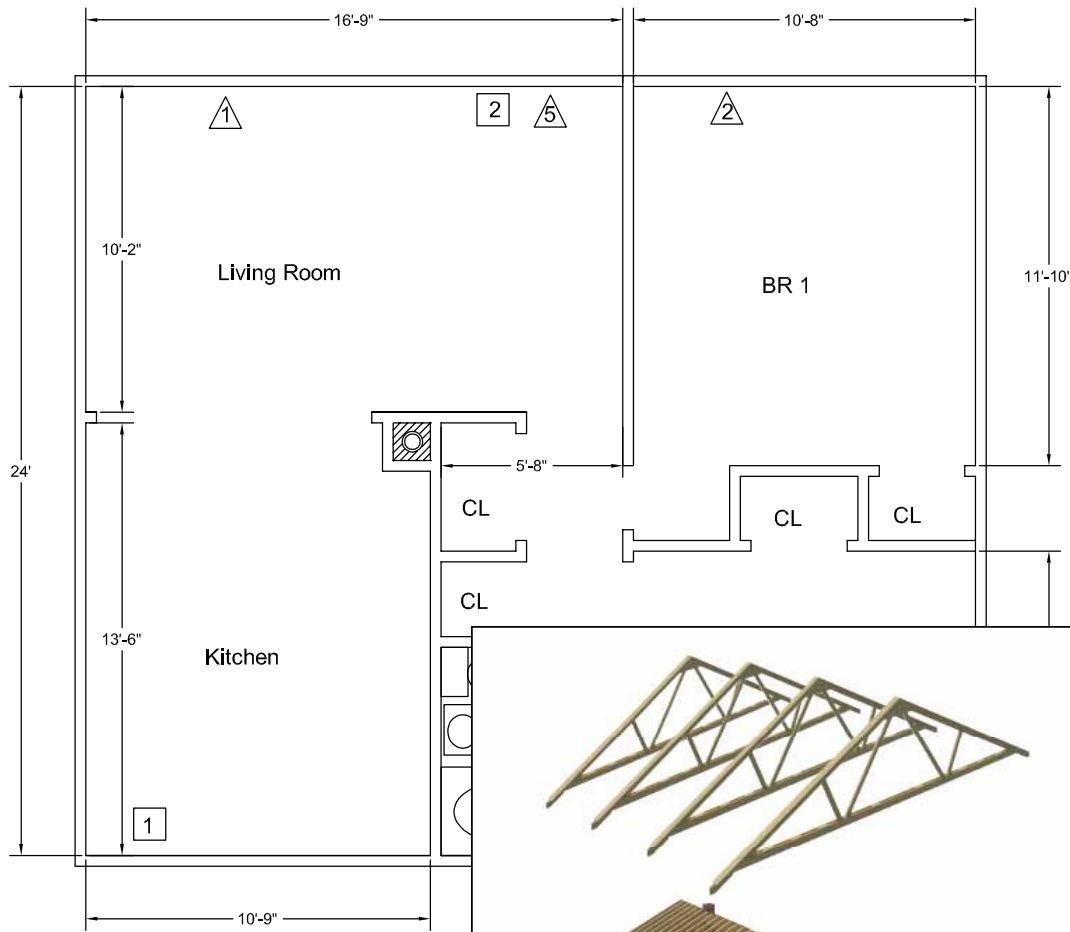


- “Springboard” project with Thrive Restaurant and prototypical American suburban strip mall
- Statistical research ‘brigade’ descends upon the Girl Scouts reclamation project to determine the quantity and quality of the deconstruction process

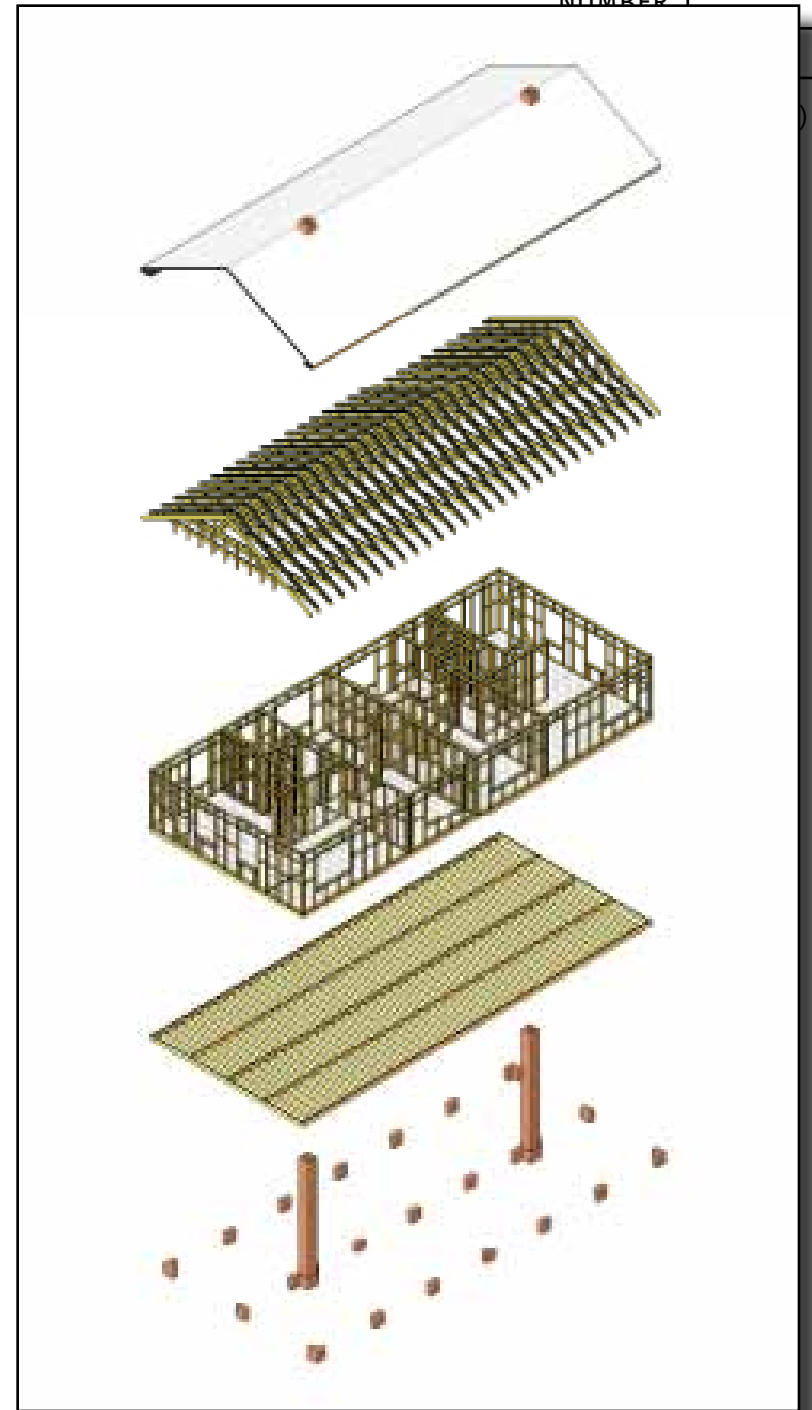
—Promotional video being made by
DYNAMIC TYPOGRAPHY CLASS

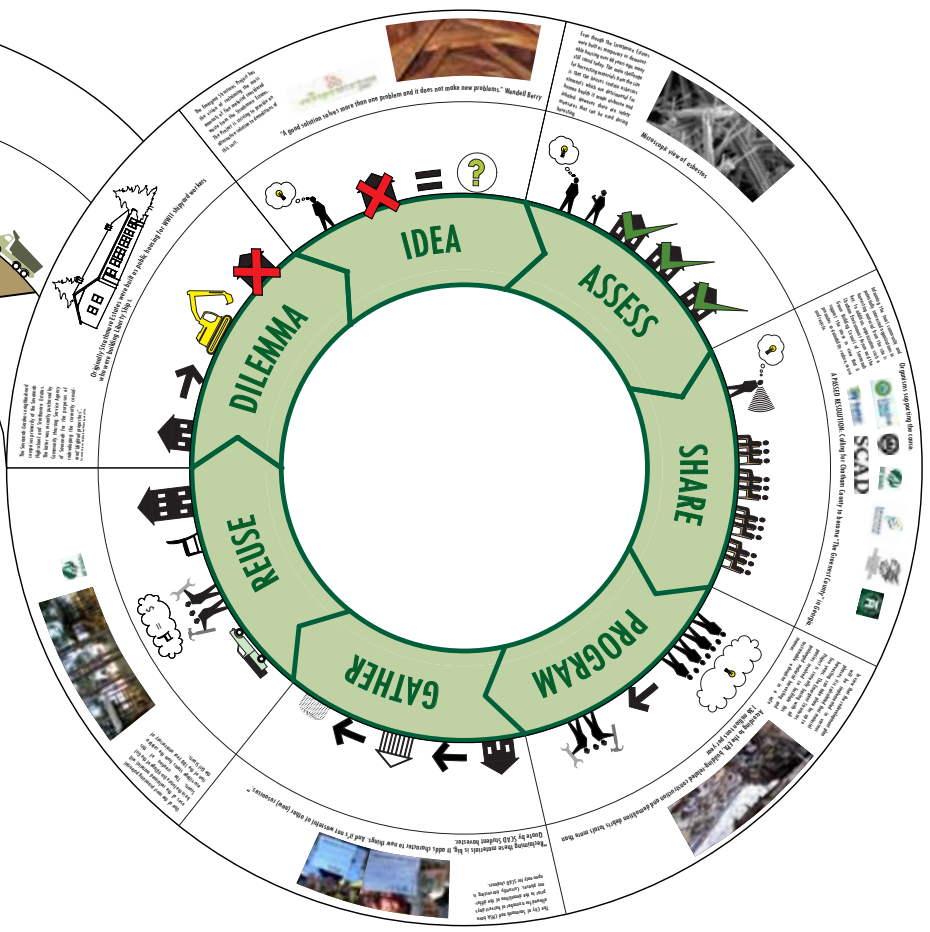
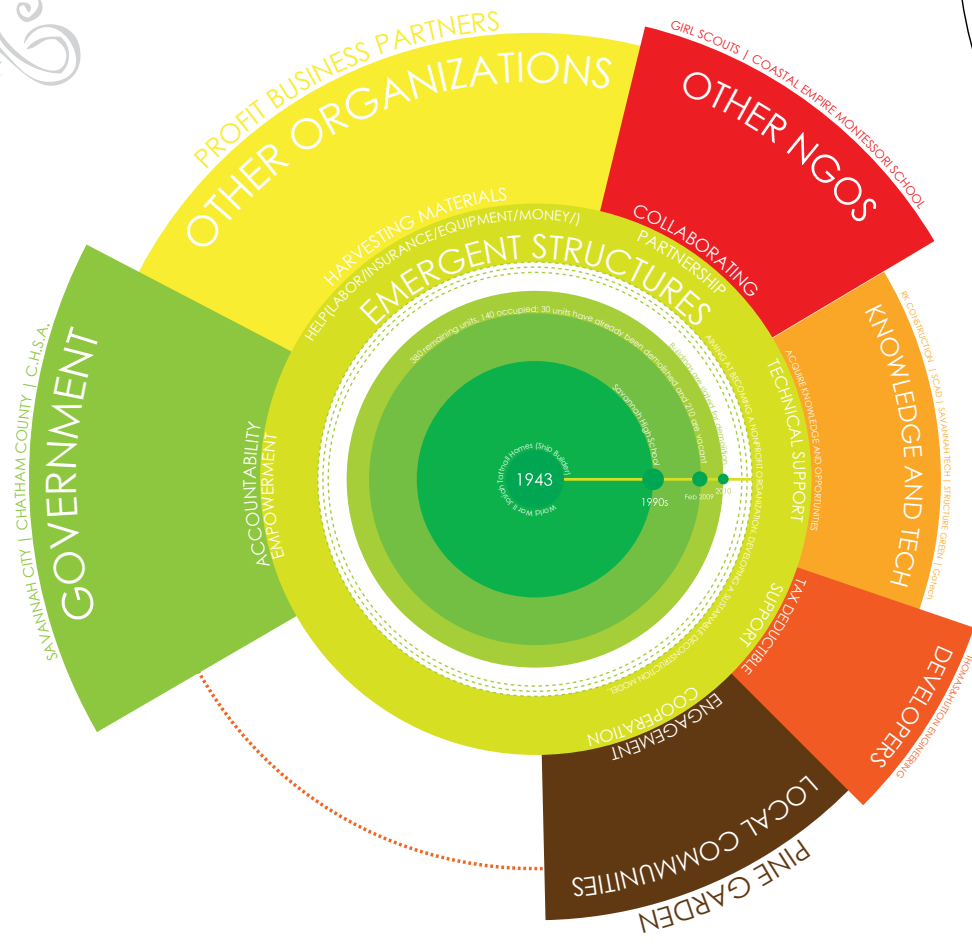
NAME

BUILDING
NUMBER



	y	n
toilet		
bathroom sink		
medicine cabinet		
kitchen sink		
kitchen shelving		
closet shelving		

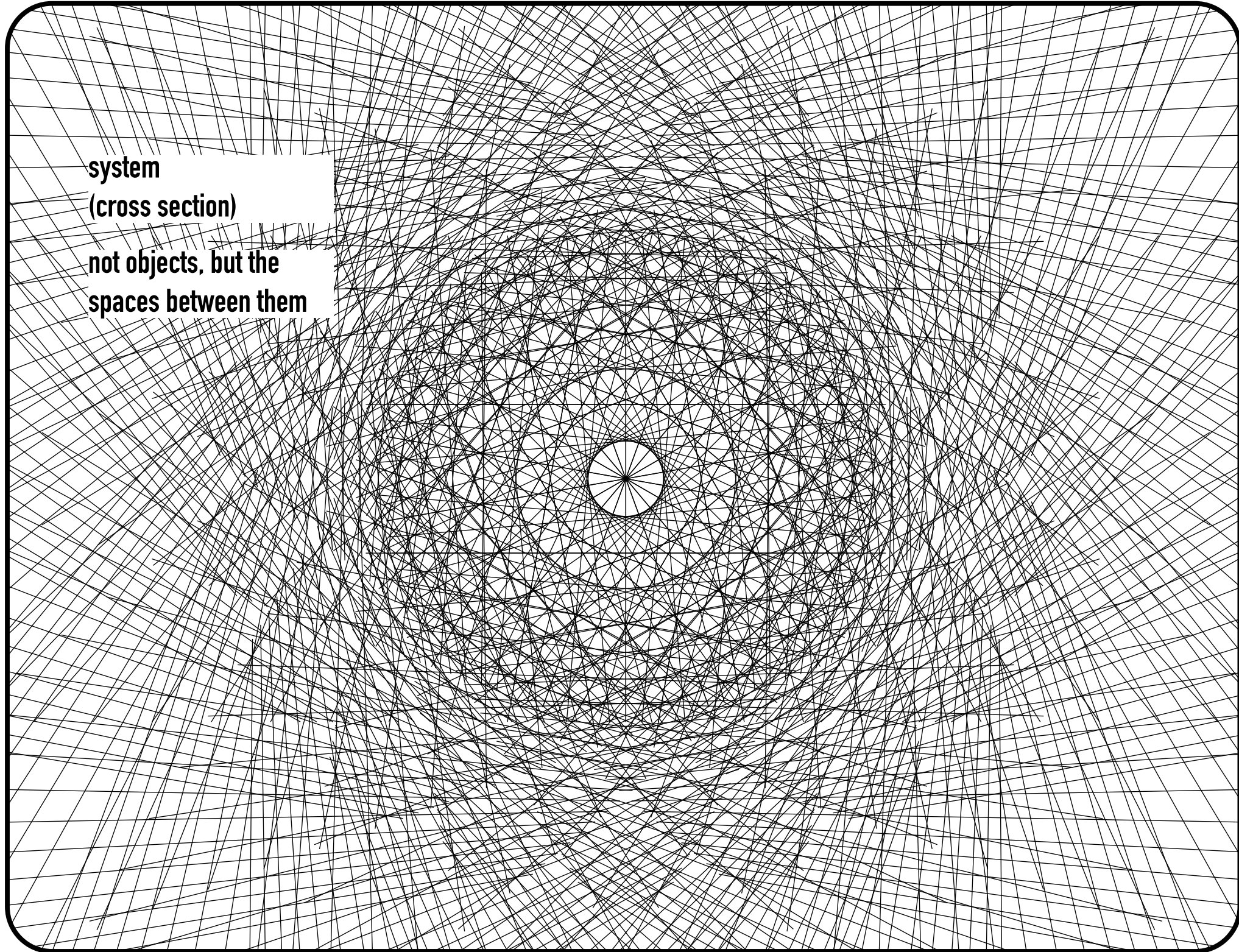






**system
(cross section)**

**not objects, but the
spaces between them**





this is not a board



this is not a board

it's a springboard for sustainable change.

PLACE YOUR CITY HERE

195,000 public housing units have met the wrecking ball across the country since 2006, **and over 230,000 more units are scheduled for demolition**, according to the US Housing and Urban Development Department.

A pulse of change *ideas*
creates the rhythm of change *actions*...

and a rhythm
of change *actions*
creates the pulse
of change *ideas*.

Facilitating creative solutions
within systems in crisis...
and within systems of crisis.

DESIS |
Design for Social Innovation
and Sustainability

Designers Accord |
“The Toolkit” for Integrating
Sustainability into Design Education

SCAD | DESIGN FOR SUSTAINABILITY
MASTERS of ARTS / MASTERS of FINE ARTS

Member: DESIS-USA

Facilitating creative solutions within systems in crisis... and within systems *of* crisis.

3 arenas:

Technical Innovation | **Social Innovation** | **Meaning Innovation**

resource productivity

cradle to cradle

low toxicity

biomimicry

industrial ecology

service and flow

life cycle analysis

legitimizing alternatives

debunking product-based

well being

quantifying value

enabling perceptual leaps

information design

design/education/movement: a non-linear exploration

or:

movement design/education movement
design education/movement education
education design/design movement

SCOTT BOYLSTON |

Professor of Design for Sustainability, SCAD
Director, Emergent Structures