SLS’ Approach to Creating Sustainable Communities
1. As an Integrated System – with an emphasis on projects and initiatives that address two or more spheres
2. With a special focus on Society, incl. Equity and Voice

“The overriding aim of global economic development must surely be to enable humanity to thrive in the safe and just space, ending human deprivation while keeping within safe boundaries of natural resource use locally, regionally, and globally.”

- Kate Raworth, Oxfam Doughnut

Website: http://www.kateraworth.com/doughnut/
Focusing on VOICE means supporting shared leadership and community-driven change

Increasing level of community involvement, impact, trust and communication

From Schematic of Community Engagement Continuum (EPA, 2015; NCER CEnR Primer; note that this is one piece of a larger diagram)

Read more about our Partnership Principles in our BIG IDEAS:
http://serve-learn-sustain.gatech.edu/big-ideas
HOW DOES SLS APPROACH SUSTAINABLE COMMUNITIES?

3. And an emphasis on developing and using Technology to support community visions that benefit Society and Nature.
HOW CAN TECHNOLOGY ASSIST COMMUNITIES IN SUPPORTING SOCIETY AND NATURE?

Address basic needs and advance equity
Nurture civic participation and amplify community voices
Strengthen social ties and other connections to place
Bolster human capital
Preserve cultural diversity
Nurture vibrant, diverse economies
Support local innovation, entrepreneurship, and ownership

Protect natural resources
Preserve and restore biological diversity
Reduce energy use
Manage and recycle waste

WHAT ARE SUSTAINABLE COMMUNITIES ANYWAY?
WHAT ARE WE ASPIRING TO CREATE?

“Just sustainabilities is ...‘the need to ensure a better quality of life for all, now and into the future, in a just and equitable manner, whilst living within the limits of supporting ecosystems’”

- Julian Agyeman, Tufts University

• SLS does not have one definition of a “sustainable community”
• Rather, we bring diverse stakeholders together to continually create new visions of sustainable communities, and of the ways in which science and technology can help humans and nature flourish, now and in the future, in Georgia, the U.S., and around the globe
• With our strong emphasis on Social Sustainability, including equity and voice, we align well with the definition of “Just Sustainabilities” above from Julian Agyeman, Professor of Urban and Environmental Policy and Planning at Tufts University, who is a leading scholar on the intersections between justice and sustainability and a co-founder of the concept of “just sustainabilities”
# Sustainable Communities “Big Ideas” at Georgia Tech – This is How We Prepare Students to Do This Work

## Serve

### Partnership Principles

<table>
<thead>
<tr>
<th></th>
<th>Honor Multiple Ways of Knowing</th>
<th>Reciprocal Teaching and Learning</th>
<th>Doing Good in Your Neighborhood</th>
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<tr>
<td></td>
<td>Shared value</td>
<td>Asset-Based Engagements</td>
<td>Long-Term Relationships</td>
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## Sustain

### Adaptive Learning

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<th>Reflection</th>
<th>Cognitive Flexibility</th>
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<td>Long-Term Visiting</td>
<td>Broad-Based Learning Communities</td>
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## Learn

### Methods

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<th>Experimentation</th>
<th>Leadership</th>
<th>Community Research</th>
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<td>Scientific Method</td>
<td>Teamwork &amp; Facilitative Leadership</td>
<td>Values-Based Leadership</td>
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<td>Environmental Assessment</td>
<td>Storytelling</td>
<td>Prototyping</td>
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<td>Ecological Footprint</td>
<td>IPAT Equation</td>
<td>Understanding Local History &amp; Context</td>
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<td>Information Visualization</td>
<td>Digital Storytelling &amp; Documentary Media</td>
<td>Ethnography</td>
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## Concepts

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<th>Science &amp; Technology</th>
<th>Governance</th>
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<td>Social, Cultural &amp; Environmental Context</td>
<td>Participatory Processes &amp; Civic Engagement</td>
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<td>Technology for Social Good</td>
<td>Managing the Commons</td>
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<td>Voice &amp; Agency</td>
<td>Systems</td>
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<td>Democratic Process</td>
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<th>Systems</th>
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<td>Smart Cities</td>
<td>Social &amp; Environmental Determinants of Health</td>
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<td>Sustainable Urban Development</td>
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<td>Infrastructure: Physical, Technological, Social</td>
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<th>Equity, Justice &amp; Diversity</th>
<th>Energy Efficiency</th>
<th>Lifecycle Thinking</th>
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<td>Interconnectedness</td>
<td>Cultural, Linguistic &amp; Biological Diversity</td>
<td>Rebound Effect</td>
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<td>Environmental Justice</td>
<td>Spatiotemporal Relations</td>
<td>Food-Energy-Water Nexus</td>
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## Action

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<th>GT as an Anchor Institution</th>
<th>GT as a Living Lab</th>
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<td>Results-Based Accountability</td>
<td>Local &amp; Global Collaborative Action</td>
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<td>Social Entrepreneurship</td>
<td>Collaborative Community Innovations</td>
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Lifecycle Analysis & Thinking

How would you describe this big idea?

Lifecycle Analysis (LCA) is a specific analytical approach to evaluating the impact of human artifacts. It is engaging lifecycle thinking by guiding decision makers to consider each stage of that artifact's lifecycle, from material extraction through production, use, and disposal, and consider the impacts of those stages. Social LCA (S-LCA) is a particular emerging form of LCA that focuses on the social impacts. Impacts include workers rights and safety, community building, living conditions, fair competition. These impacts may be negative or positive, and our understanding and definitions of types of impacts is still improving. Many researchers are still working on methodological approaches to S-LCA.

How is this big idea applied to your work?

Much of my work is in environmental LCA, and S-LCA shares its origins in this approach. In fact, the reasons we care about environmental LCA are for its impacts on worker safety and local health and fair use and stewardship of resources. The interconnections between the design of artifacts, environmental systems, and social systems are highly complex, and in order to make smarter decisions and be able to predict un-intended consequences, we need to model these social and environmental aspects of artifacts.

Learn more:

Social Hot Spot Database
Guidelines for Social Life Cycle Assessment of Products
WE TEACH, RESEARCH, & TAKE ACTION ESPECIALLY AROUND THESE KEY ISSUES

- Good Health & Well-being
- Water & Green Infrastructure
- Climate Change & Energy
- Sustainability Education & Youth Leadership
- Innovation for Sustainable Communities
- Global Sustainability & Cultural Diversity
- GT Sustainable Campus
- Civic Data & Design
OUR ULTIMATE GOAL IS TO:
ACT LOCAL TO ACHIEVE A GLOBAL VISION – UN SDGS

Learn more about our UN University Greater Atlanta Regional Centre of Expertise on Education for Sustainable Development (RCE):
serve-learn-sustain.gatech.edu/atlanta-un-rce