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| C:\Users\bjaco\AppData\Local\Microsoft\Windows\INetCache\Content.Word\SLS-Teaching-Toolkit-Logo_Stacked-Initials.jpg | Introduction to Equitable and Sustainable Development | | |
| **Discipline:** All | **Type:** In-Class Exercise; Discussion; Reading | **Time Commitment:** 1-2 class periods | **Category**: Equity, Justice & Sustainability |
| **Big Ideas:** [Infrastructure: Physical, Technological, Social](https://serve-learn-sustain.gatech.edu/big-idea/infrastructure-physical-technological-social) ; [Sustainable Urban Development](https://serve-learn-sustain.gatech.edu/big-idea/sustainable-urban-development) ; [Inequality, Poverty, and Sustainable Development](https://serve-learn-sustain.gatech.edu/big-idea/inequality-poverty-and-sustainable-development) | | | |
| **OVERVIEW:**  This tool uses the Atlanta BeltLine project to introduce students to key concepts in Equitable and Sustainable Development, particularly as it pertains to large infrastructure projects. Through a combination of take-home readings, lecture, and in-class group activity, students will explore the successes, and critiques of the BeltLine project. Equally important, they will learn to define what infrastructure means, what it does, and how we can impact its development in order to achieve equity and sustainability.  This tool was created by Bethany Jacobs and Dave Ederer. | | | |
| **INSTRUCTIONS:**  The tool below provides detailed instructions for a take-home reading assignment, in-class lecture, and in-class activity. | | | |
| **SLS STUDENT LEARNING OUTCOMES & ASSESSMENT:**  The Serve-Learn-Sustain toolkit teaching tools are designed to help students achieve not only SLS student learning outcomes (SLOs), but the unique learning outcomes for your own courses. Reflection, concept maps, rubrics, and other assessment methods are shown to improve student learning. For resources on how to assess your students’ work, please review our [Assessment Tools](http://serve-learn-sustain.gatech.edu/tool-category/assessment).  **This tool achieves SLO 1 and 3. See the end of this tool for further details.** | | | |

**Want Help?**

Jennifer Hirsch is the contact for this tool. You can reach her at [jennifer.hirsch@gatech.edu](mailto:jennifer.hirsch@gatech.edu)

Introduction to Equitable and Sustainable Development

**Overview**

This tool uses the Atlanta BeltLine project to introduce students to key concepts in Equitable and Sustainable Development, particularly as it pertains to large infrastructure projects. Through a combination of take-home readings, lecture, and in-class group activity, students will explore the successes, and critiques of the BeltLine project. Equally important, they will learn to define what infrastructure means, what it does, and how we can impact its development in order to achieve equity and sustainability.

**Instructions**

This tool comprises three parts: 1) a pre-class reading assignment; 2) an in-class lecture; and 3) an in-class group activity. We encourage you to take two class periods to use this tool, especially if you teach a 50-min course. It is possible for a 75-min class to complete the tool in one class period, if necessary.

Refer to the numbered instructions below for how to proceed with using this tool:

1. For the class period that you intend to begin using the tool, assign “Infrastructure and the Atlanta BeltLine” and “Equitable and Sustainable Development Key Concepts.” These readings provide an overview of the Atlanta BeltLine, as well as a description of the key concepts framework. The document also links to a short reading and a video. Students should familiarize themselves with all these materials before class.
2. Depending on whether or not you intend to take one or two class periods for this tool, you can begin class by discussing the Key Concepts, or, you can head directly into presenting the [“What is Infrastructure?”](https://serve-learn-sustain.gatech.edu/sites/default/files/documents/Toolkit-Docs/what_is_infrastructure.pptx) PowerPoint lecture. We encourage you to familiarize yourself with the slide Notes prior to presenting the lecture, and to edit the presentation as you see fit.
3. Preferably on day two, divide your students into five groups and distribute “Historic Old Fourth Ward Park,” located below.
   1. Prior to class, download the [Key Concepts Cards](https://serve-learn-sustain.gatech.edu/sites/default/files/documents/Toolkit-Docs/student_workshop_key_concepts_and_questions_0.docx). Print, and cut out each of the cards (which include a Key Concept and accompanying questions). Distribute one Card per group. Also distribute one piece of butcher paper per group, and markers.
   2. Give the students 20-30 minutes to review the reading and discuss and respond to their Key Concept card as a group. The Card includes instructions for using the butcher paper to reflect (in text and images) on their key concept and the Historic Old Fourth Ward Park.

For Class 1:   
1.1: Infrastructure and the Atlanta BeltLine

As cities across the U.S. address the challenges of sustainability, they often turn to large infrastructure projects intended to support natural systems (e.g., air, water, green space) and improve quality of life for residents. Urban infrastructure is defined as the systems of facilities and services that allow cities to function, such as the energy grid, road and trail networks, water systems, storm water systems, and waste systems. For many, these projects have become a key component of what we think of as “sustainable development”:

To prepare for our next class, please read this entire document, as well as:

Gravel, Ryan (GT alum whose master’s thesis led to the BeltLine). *TEDTalk*. [“How an old loop of railroads is changing the face of a city”](https://www.ted.com/talks/ryan_gravel_how_an_old_loop_of_railroads_is_changing_the_face_of_a_city) (11.5 mins).

Immergluck, Dan. [“Sustainable for Whom? Large-Scale Sustainable Urban Development Projects and “Environmental Gentrification”](http://serve-learn-sustain.gatech.edu/sites/default/files/documents/sustainable_for_whom_immergluck_shelterforce_2017.pdf) (4pgs).

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”[[1]](#footnote-1)

Many of these development projects have garnered international attention - such as New York City’s High Line, the River District in Portland, Oregon, and Discovery Green of Houston, Texas. Here in Atlanta, we also have one such project that has put Atlanta on the global map for sustainable development: The BeltLine, an urban redevelopment project that is turning 22 miles of abandoned railways into a corridor connecting 45 neighborhoods via transit, multi-use trails, and parks.

The BeltLine evokes a lot of excitement, but it also raises concerns, particularly about how such large infrastructure projects can lead to gentrification and displacement: the process whereby high income, predominantly white residents move into newly developed areas, replacing low income or working-class residents and business owners - particularly those of color. In losing the latter, we also lose valuable, valid, and existing community culture.

Through this course, you’ll have the opportunity to explore how environment, economy, equity and society shape large infrastructure projects like the BeltLine and are shaped by them.

1.2: Equitable and Sustainable Development: Key Concepts

In the coming weeks, consider how the issues we’re discussing connect to you. You are many things: a citizen, a human being, and a future professional in your discipline. In all of those capacities, you have a responsibility to think about the impacts of your choices on society, culture, the economy, and the environment. Let the key concepts below guide your thinking and learning as we move forward.

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| *#1* | *Infrastructure serves multiple purposes.* | Sometimes we look at a major infrastructure project and focus on one of its functions, but good infrastructure can serve several functions. The BeltLine provides a transportation corridor for transit, walking, and biking, while it also mitigates flooding, creates business opportunities, restores greenspace, and showcases artists. |
| *#2* | *Development decisions impact both human and non-human life.* | Humans are just one piece of a complex and dynamic system. Therefore, our decisions need to take all forms of life into consideration. For example, the City of Seattle requires a proportion of new development to include vegetation, which offsets a portion of habitat loss attributed to development. |
| *#3* | *Values influence development decisions.* | Individuals and communities (professional, geographical, cultural, socioeconomic) bring their values and beliefs to every decision, whether they mean to or not. These values impact infrastructure development. For instance, a city may transform a vacant lot into a community garden, but if neighborhood residents do not value farming or lack proper guidance, then the garden may fall into disrepair. |
| *#4* | *Infrastructure development impacts different communities in different ways.* | Because infrastructure projects have multiple uses and multiple effects, we must consider why each project is being built, and whom it serves. Development outcomes have different impacts on different groups, and what may be useful to one group may be neutral or even harmful to another. For example, the Old Fourth Ward Skate Park serves as a social and recreational space for youth, but some nearby homeowners view it as a nuisance because it brings noise. |
| *#5* | *Your voice is a powerful and necessary tool in assuring that large development projects benefit existing communities and benefit nature.* | Government and business entities almost always end up controlling large development projects. To ensure that these projects benefit communities, individuals and communities need to organize and act. They must use their experiences and expertise to contribute a strong voice, one that will influence the direction of projects that impact, for example, the closing of neighborhood schools, a large infrastructural endeavor that impacts local educational practices and access to quality schooling in one’s neighborhood. |

For Class 2:   
Historic Old Fourth Ward Park: Histories and Contexts

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| **The Park**  **1800s.** The site of the Historic Old Fourth Ward Park starts as the Ponce de Leon Springs. It supplies water to the city of Atlanta.  **Early 1900s.** Developers build an amusement park at Ponce Springs, and later fill the lake in order to build a baseball stadium.  **1928.** Sears-Roebuck builds its southeastern retail and distribution headquarters.  **1986.** Sears-Roebuck discontinues operations on the site.  **1990.** the City of Atlanta purchases the Sears building and converts it into office space for city operations, renaming it "City Hall East." However, only about 10% of the site is actively used, costing taxpayers for a vacant property. In addition, the site’s basement frequently floods, and the area is known for having high crime rates.[[2]](#endnote-1)  **2011.** The City of Atlanta finally determines to address the chronic flooding issues in the area. The typical solution in such situations, building a large cistern underground to control stormwater runoff, would cost $40 million. But Atlanta takes a different route: it builds a park, with a retention pond that can sustain runoff from a 500-year flood for $17 million less than the cistern. The park includes event spaces, walking and bike trails, a splashpad, and a skatepark, and has spurred many businesses.[[3]](#endnote-2)  **2014.** As a direct result of the park, Jamestown Properties purchases and renovates the City Hall East site, turning it into the largest adaptive reuse project in Atlanta’s history, including 1.1 million square feet of retail, office space, and apartments now known as "Ponce City Market." |  | **The Old Fourth Ward**  The Springs are an important community space for Atlantans. Many visit the Ponce de Leon Lake to cool off during the summers.  African Americans become the majority demographic in The Old Fourth Ward during the first half of the 20th century, with many middle- and upper-class black neighborhoods.[[4]](#endnote-3)  The Old Fourth Ward was Martin Luther King Jr.’s boyhood home, and an important site for civil rights activism in the midcentury. Today, it includes the [Martin Luther King. Jr Historic Site](https://www.nps.gov/malu/index.htm).  Though the Ponce de Leon Lake no longer exists, water has been running in the same direction for thousands of years. As a result, there are frequent floods, bringing sewage and wastewater runoff. This hurts the majority-black community living in the Old Fourth Ward.  In 2000, the Old Fourth Ward is 80% black and 16% white.[[5]](#endnote-4)  Before the Park, this area of the Old Fourth Ward is an important living and congregation spot for some of Atlanta’s least-valued citizens, such as the homeless and prostitution communities. These communities are ousted by development, rather than included in a vision for a safer Fourth Ward.  Furthermore, with BeltLine redevelopment, rents and property values skyrocket.[[6]](#endnote-5) Citizens and homeowners receive frequent, unsolicited attempts to buy them out cheap,[[7]](#endnote-6) and promises to create affordable housing falter.[[8]](#endnote-7) As a result, many of the communities that created the Old Fourth Ward, and are the trustees of its history, can no longer afford to live there.[[9]](#endnote-8) In 2010, the black population has dropped to 55.9% and the white population has risen to 34.6%.4 In Atlanta itself, the black population has dropped from 67% in 1990 to 54% in 2016.5 |

**Resources for Further Reading**

If you’re interested in expanding your understanding of the Atlanta BeltLine, check out these other Serve-Learn-Sustain tools and resources:

Hyde, Allen. ["Don’t Forget about the People Who Are Already Here: Teaching Urban Sociology through Oral Histories in Grove Park."](https://www.atlantastudies.org/2019/03/26/allen-hyde-dont-forget-about-the-people-who-are-already-here-teaching-urban-sociology-through-oral-histories-in-grove-park/)

Immergluck, Dan. "Large Redevelopment Initiatives, Housing Values and Gentrification: The Case of the Atlanta Beltline." Urban Studies 46, no. 8 (2009): 1723-745.

[Living Infrastructure: The Atlanta Beltline](https://serve-learn-sustain.gatech.edu/living-infrastructure-atlanta-beltline)

Loukissas, Yanni. [“The Atlanta Map Room: Documenting the Connections and Disjunctions between Civic Data and Lived Experiences in the City”](https://www.atlantastudies.org/2018/12/04/local-data-design-lab-the-atlanta-map-room/)

[SLS Case Study: The Atlanta BeltLine](https://serve-learn-sustain.gatech.edu/sls-case-study-atlanta-beltline)

SLS Student Learning Outcomes

1. Identify relationships among ecological, social, and economic systems.
2. Demonstrate skills needed to work effectively in different types of communities.
3. Evaluate how decisions impact the sustainability of communities.
4. Describe how to use their discipline to make communities more sustainable.\*

\* *Note:* SLO 4 is intended to be used by upper division, project-based courses such as Capstone.

1. World Commission on Environment and Development. *Our Common Future.* Oxford University Press

   (1987). [↑](#footnote-ref-1)
2. **References**

   . [Weible, David. "Ponce City Market: Atlanta's History in the Making." National Trust for Historic Preservation (2013).](https://www.google.com/url?q=https://savingplaces.org/stories/ponce-city-market-atlantas-history-making%23.WyklZadKh9M&sa=D&ust=1529426986319000&usg=AFQjCNEzUMre55ToC5FKrU_c3UgIrfT8Sw) [↑](#endnote-ref-1)
3. . [ASCE, American Society of Civil Engineers. "Atlanta Historic Fourth Ward Park Project."](https://www.google.com/url?q=https://www.asce.org/templates/sustainability-profile.aspx?id%3D24439&sa=D&ust=1529426753872000&usg=AFQjCNGytK0cp9gVXUEZfavr-UhxEphpBA) [↑](#endnote-ref-2)
4. . Lands, LeeAnn. *The Culture of Property Race, Class, and Housing Landscapes in Atlanta, 1880-1950*. Politics and Culture in the Twentieth-century South. Athens, Ga.: University of Georgia Press, 2009. [↑](#endnote-ref-3)
5. . 2000 and 2010 Census Redistricting Data (Public Law 94-171). [↑](#endnote-ref-4)
6. . [Housing Justice League and Research Action Cooperative. BeltLining: Gentrification, broken promises, and hope on Atlanta’s Southside (2017).](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwjoj_HjwODbAhVtp1kKHYZHBS8QFggpMAA&url=https%3A%2F%2Fstatic1.squarespace.com%2Fstatic%2F59da49b712abd904963589b6%2Ft%2F59dedb75f7e0ab47a08224b5%2F1507777424592%2FBeltlining%2BReport%2B-%2BHJL%2Band%2BRA%2BOct%2B9.pdf&usg=AOvVaw08YGzQ7JL8EZcRlwMb2rQ2) [↑](#endnote-ref-5)
7. . [Powers, Benjamin. "Putting the Brakes on Runaway Gentrification in Atlanta." CITYLAB, (2017).](https://www.citylab.com/equity/2017/11/putting-the-brakes-on-runaway-gentrification-in-atlanta/545555/)  [↑](#endnote-ref-6)
8. . [Mariano, Willoughby, Lindsey Conway and Anastaciah Ondieki. “How the Atlanta Beltline broke its promise on affordable housing.” *The Atlanta Journal-Constitution* (2017).](https://www.myajc.com/news/local/how-the-atlanta-beltline-broke-its-promise-affordable-housing/0VXnu1BlYC0IbA9U4u2CEM/) [↑](#endnote-ref-7)
9. . Immergluck, Dan. "Large Redevelopment Initiatives, Housing Values and Gentrification: The Case of the Atlanta Beltline." *Urban Studies* 46, no. 8 (2009): 1723-745. [↑](#endnote-ref-8)