



ROCKLAND P.L.U.S.
Planning Land Use with Students

Rockland P.L.U.S. 2021 Learning Objectives

RPLUS 2021 focuses on developing sustainable communities that:

- (1) Address immediate and long-term environmental opportunities and challenges relating to energy conservation and climate change, water conservation and watershed protection, and waste reduction and materials reuse;
- (2) Integrate alternative and mass transit choices into ‘people movement’;
- (3) Engage youth in planning for economically and socially vibrant places to live and work for themselves as well as the wider community

*The program entails 3 virtual classroom visits and the development of a collaborative Google Earth presentation of the students’ local planning project. Students will participate in a **Virtual Symposium as class(es) by school with local stakeholders serving as mentors. The times will vary depending on the availability of the classes and mentors.** After presenting on their local site, students will work collaboratively with peers and professionals from across the county planning for the redevelopment of the former Empire Chair Factory in Haverstraw.*

Logistics

In each visit, we will want to project something from our website to share with the students. We will have activities and materials for the students to work with that build on each other, and in some instances, we will request them to complete a small activity in preparation for our return. We will provide a google folder for teachers that can be shared with students for all our visits. Please help us by making sure the students have access to the folders at each workshop and the work is completed for our visits.

Our website has an abundance of additional resources for students to use to help build a stronger understanding of all the planning elements and to specifically help them with their site plan. Please encourage your students to utilize these resources: <https://www.ldeo.columbia.edu/edu/plus/Rockland.html>

Surveys & Evaluations

We need your help in collecting data that helps us gauge and share the impact of the program. You will be receiving a link to a pre-workshop survey. It is very important that all the students participate in the pre and post workshop surveys, as well as the evaluation for participating students at the end of the symposium. Teacher feedback is also very important. Please be sure to complete the survey that we will be send to you at the end of the program.

VISIT 1

OUR NEEDS: Entrance to your virtual classroom and the ability to share screens and host breakout rooms.

KEY WORDS WORDS/CONCEPTS:

Sustainability	Human (Ecological) Footprint	Public Transit	Bus Rapid Transit (BRT)	Greenhouse Gas Emissions	Equity	Sea Level Rise
Climate Change	Resilience	Climate Smart Community	Complete Streets	Economic Impact	Community Task Force	Telecommuting

First Class Visit Objectives:

Students will:

- work collaboratively to discuss, weigh and select community services and design features that address the needs of individuals in a community at different ages of their life.
- consider how planning decisions impact well beyond the immediate project itself, affecting the wider community on multiple levels.
- consider how planning can influence climate and climate impacts.
- identify and discuss the interdependent social/community, economic, environmental/health features that are essential to sustainable community development.

Visit Plan -

- **Brief Introduction to partners (2 mins)**
- **Intro. Activity (8 mins) – Happiness Index:**
 - **Menimeter:** *What defines happiness?(Slide 3)*
 - **Happy Planet Index:** *(Slide 4)*
 - *Happy Planet Index measure what matters: sustainable wellbeing for all. This index was created to tell us how nations are doing at achieving long, happy, sustainable, lives*
 - *HPI Defines Happiness: wellness (social), life expectancy (economic), inequalities (equity), and ecological (environmental). You will soon see that this is very similar to how we would define a sustainable community!*
 - **Discussion: What do you think is the Happiest country on the Planet?** *(Slide 5)*
 - *Considering the results from the mentimeter, what do you think is the happiest country on the planet, why? How do you think the U.S. ranks, why?*
 - **HPI U.S. Rating** *(Slide 6 and open the website hyperlinked in the picture)*
 - *This may surprise you, but the U.S. ranks very low on the HPI (108th out of 140th)*
 - **Wellbeing & Life expectancy:**
 - *The U.S is ranked high for both wellbeing and life expectancy. Not too surprising because this is common amongst wealthy nations.*
 - **Equity:**
 - *According to HPI, U.S. is ranking high in equity. In light of 2020 events, do you agree?*
 - *Remember, their definition of equity is from the data collected from wellbeing and life expectancy, therefore, it is limited and does not tell the full story of economic and social equity between residents.*
 - *Actually, while the HPI report doesn't use the economic figures in the index, they did highlight that the **US has a problem with economic inequality.***

Poverty has increased as a result of the 2009 recession and in 2010 1 in 6 Americans lived below the poverty line.

▪ **Ecological Footprint**

- *One area that the US struggles with is our ecological footprint, so there is a lot of room for growth/improvement in this area!*
- *We can see local, regional, and national efforts being made already (keep in mind the HPI was created in 2016 so a lot has changed since then).*

● **Program Overview & Assignment (3 mins)** –

○ *Introduce program objectives/elements and what students will ‘walk away with’*

- **Discussion of Benefits/Challenges with ppt visuals (12 mins)** – *Elicit and discuss benefits and challenges/environmental impacts to individual/community, tying to supporting slides and noting key concepts on Board.*
- **Group Activity with Community Enhancing Features (CEFs) (12 mins)** – *Working in groups of 3-5, students select 5 community features that meet the needs/desires of different ages groups in a community – Child; Teen; Adult; Senior.*
- **Sharing of CEFs & where they fit in the Sustainability Venn Diagram (8 mins)** – *All come back together and one spokesperson from each group will share one chosen CEF. We discuss together with our shared screen to put it in the spheres. Groups share a chosen CEF. Class discusses how it ties to interdependent environmental, economic, and social spheres of sustainability.*

Assignment - Teacher and Student RPLUS Work between visits 1 and 2 (2 mins) – *Students will identify features in their own community AND in the County that they feel are cool, equitable, and sustainable features of living here. Students will add their ideas to a classroom Jamboard in the appropriate Sustainability spheres.*

VISIT 2

OUR NEEDS: Entrance to your virtual classroom and the ability to share screens and host breakout rooms.

KEY WORDS WORDS/CONCEPTS:

Ecosystem Services	Watershed	Green Infrastructure	Native Plants for Water Conservation	Storm Drain	Water Sense	Pervious Pavers
Energy Star	Solar Energy	Hybrid Electric Vehicles	Recycled Material Design	Pedestrian Friendly Venues	Preserve Historical/Cultural Character	Geothermal Heating and Cooling

Second Class Visit Objectives:

Students will:

- work collaboratively to rate the strengths and needs of their local community and the County using Community Assessment Table
- identify and discuss examples of sustainable projects and the range of features/planning tools for enhancing water and energy savings, protecting watersheds, providing climate mitigation and climate resiliency, and creating a socially and economically vibrant community, and climate smart communities!
- review the local site for redevelopment and an example of the illustrated poster they will create.

Visit Plan -

- ***Discussion sustainable features from ‘homework’ (8 mins)***– Students share and discuss the “cool, sustainable, and equitable” features that are found in their community and where they fit in the sustainability spheres.
- ***Community Assessment Activity (10 mins)*** – Students work in teams of 3-5 in break out rooms to complete the Community Assessment form
- ***Community Assessment Form Discussion (8 minutes)***- Discuss overall strengths, weaknesses and opportunities in the community by ranking the students answers on a Jamboard.
- ***Presentation and Discussion of Sustainable Examples & Feature Cards (10 mins)***- Students are introduced to inspiring examples of sustainable community planning and some of the specific ‘green’ features in each. These are used to introduce the Feature Cards that the students will utilize in planning for their local site.
- ***Introduction to Local Site for Redevelopment Planning (4 mins)***- Introduction of site overview & location on a map of the county, identifying nearby landmarks and features for student notes

Assignment - Teacher and Student RPLUS Work between visits 2 and 3 (2 mins) –Students are to review the specifics of their local site in conjunction with their Community Enhancing Features and Community Assessment Form to develop some ideas for what they want to develop at their local site. Be prepared to share with your group for next class!

VISIT 3

OUR NEEDS: Entrance to your virtual classroom and the ability to share screens and host breakout rooms.

KEY WORDS/CONCEPTS COVERED:

Cost Benefit Analysis	True Costs
Circular Economy	External Costs

Third Class Visit Objectives:

Students will

- Review, assess and select features for their redevelopment plan utilizing a Cost-Benefit Analysis table
- Conceptualize and sketch out a physical redevelopment plan for a local site

Visit Plan -

- ***Review Local Site, Cost Benefit Analysis Form, & Feature Cards (8)- Review materials and objectives for class period-***
 - *Quick overview of local site and feature cards*
 - *Show students how to complete the cost benefit analysis table.*
 - *Let students know they will need to complete their Google Earth presentation on their own.*
- ***Split into Site Groups for planning (22)- In groups of 3- 6 in break out rooms...***
 - *Students will first discuss the vision for the site- what does the community need? Review the Community Enhancing Features and Community Assessment Form. What do you want to develop at this site?*
 - *Then lay out feature cards and complete Cost/Benefit Analysis table before selecting features for inclusion in their redevelopment plan*
 - *Share*
- ***Google Earth Tutorial (7)- play the prerecorded tutorial for students. Any questions? Doesn't work with safari?***
- ***Review Presentation Guidelines, Image Bank, and Other Resources (5)- on the RPLUS website and briefly discuss layout, spheres of S.E.E., and division of labor for the development of their own presentation***

**** Perhaps one more check in to see how the students Google Earth Presentation****

Teachers' RPLUS work between last visit and the Symposium:

- Review presentation guidelines, on-line resources, and sample Poster Presentation
- Discuss elements to be included from their redevelopment plan, including:
 - How they S.E.E.E. their project through Social, Environmental, Economic, Equity lens/spheres
 - Location and notation of what currently exists at the site/a map overview;
 - Historical uses of the site;
 - Highlights of features of the revamped site;
 - Environment- LEED/green features; Climate Smart Community features;
 - Social & Economic –Community-building features;
 - Social & Economic - Stakeholders to be included in planning/partnering on their site and why they were chosen;
 - Site plan/design (photo of classroom drawing).
- ***Prepare and Submit Poster –***

- o **Develop Presentation** - Students work in their teams again to flesh out their plans and complete the Google Earth Presentation, providing text and selecting images from the on-line Image Bank into the feature descriptions
- o **Submit** – Share the presentations with Margie: mkt@ldeo.columbia.edu
- **Prepare group for Symposium**
 - o **Develop** – presentation plan for the Symposium
 - Outline a set of notes with key ideas to help them with their presentation, agree on each student's role in the presentation, and rehearse
 - o **Review** – symposium agenda and logistics

At the Virtual Symposium

Students will:

- present their local site plan to professionals and collect feedback on their project designs from mentors
- work collaboratively in teams with professionals/mentors to apply their planning knowledge to developing a preliminary plan for the former Empire Chair Factory in Haverstraw
- present unique key elements of their plan to the RPLUS participants