Career Exploration Extension

Grades 9-12
Create a Nature Space! Unit
Career: Urban/City Planner

Videos

Urban Planner http://ow.ly/tuDg50CF6d7

Urban Planner V2 http://ow.ly/Ks5X50CF6fS

Designing Future Cities: Alternative Energy http://ow.ly/AfqJ50CF6pF

Future City http://ow.ly/JaUG50CF6qU

Printable Resources & Evidence Piece

Read the attached articles and complete the activity.

- ❖ Urban Green Spaces www.chescoplanning.org/MuniCorner/Tools/UrbanPark.cfm
- ❖ 6 Urban Green Space Projects That Are Revitalizing U.S. Cities
  https://smartgrowth.org/6-urban-green-space-projects-that-are-revitalizing-u-s-cities/
- ❖ METROPOLIS: A green CITY OF YOUR OWN!
  https://planning-org-uploaded-media.s3.amazonaws.com/publication/download_pdf/Metropolis.pdf (edited down to 23 pages)

6 Urban Green Space Projects That Are Revitalizing U.S. Cities

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By Joanna Parkman via **Care2**

City living can be a major obstacle to enjoying the outdoors, but urban designers and civic planners are pushing to change that.

Say hello to innovative and sustainable mixed-use urban green space projects. Or you could just call them parks.

What makes a few acres of grass a worthy investment? Time and time again, urban green spaces have been shown to improve **public health outcomes**, protect **water quality**, and **decrease violence**. Parks can also alleviate some of the emotional symptoms of urban life, including **stress and anxiety**.

Children, in particular, can reap huge benefits from an open place safe for play and exploration. One recent study points to **improvements in attention and memory** for young students with more green space around their schools. And some pediatricians are opting to hand out "**park prescriptions**" for overweight or obese patients.

Furthermore, public green spaces can revive abandoned parts of the city, converting **brownfields**, vacant lots and former industrial sites into vibrant areas for community activities, ranging from free symphonies to good old pick-up soccer games.

Unfortunately, green spaces don't always bring about positive change. With more aesthetically pleasing urban landscapes comes inevitable gentrification. This usually takes the form of higher property values driving out longtime residents and disproportionately impacting low income populations and people of color. Neighborhoods with **community gardens** are a prime example.

But that's not to say we shouldn't continue to implement green space projects. One strategy to combat this sort of resident turnover lies in making neighborhoods "**just green enough**" to reap the benefits, while still deterring greedy developers. Regardless of scope, green space projects should strive to take a participatory approach that accounts for a diversity of stakeholders. Genuine **local involvement** remains the key to longterm positive impact.

Here are several standout examples of green space successes:

Atlanta BeltLine

The **Atlanta BeltLine** has gone from master's thesis to tourist attraction in an impressive span of just 17 years. The greenway inhabits an old railroad corridor encircling the city's downtown and connects **45 neighborhoods**and a number of parks. Most notably, the BeltLine boasts an **affordable housing program** to protect vulnerable residents from displacement. Free exercise classes, a lantern parade, and an arboretum are just a sampling of the BeltLine's many attractions. And you certainly can't miss the abundant murals and street art courtesy of projects like **Living Walls** and **Tiny Doors ATL**.

Brooklyn Bridge Park

Brooklyn Bridge Park is quite the sight. 85 acres of waterfront property offer breathtaking views of Manhattan that you can enjoy while playing volleyball or fishing. Bocce and the infamous **carousel** add to the park's charm. Oh, and there's **free public kayaking** too. On the educational side of things, the Brooklyn Bridge Park Conservancy operates an **Environmental Education Center** that reaches more than 10,000 students each year. Children can get a firsthand look at local ecology with the Center's seining program.

Railroad Park

Railroad Park graces Birmingham, Alabama's downtown with its 19 acres of green space. The park distinguishes itself by integrating the industrial history of the city while featuring sustainable design elements like a bio-filtration wetlands area. Over 600 trees, three skate bowls,and the **Birmingham History Wall** also coexist here. Camille Spratling, the park's executive director, notes that Railroad Park acts as a **unifier**, "a place where people of all walks of life in the city come together." And with Birmingham's rich legacy of **civil rights activism**, that might just be its best feature.

Klyde Warren Park

Klyde Warren Park is one of the more imaginative green spaces out there. The park was constructed as a five acre deck over an eight lane highway. Klyde Warren helps connect downtown Dallas by allowing for pedestrian and bicycle traffic between Uptown and the Dallas Arts District. Dallas' city parks manager **John Reynolds** reports that Klyde Warren has transformed the surrounding urban environment: "Being out there now, it has changed from an inhospitable, no-man's land to a pretty comfortable space. It was almost overwhelming how much noise and traffic was there. It's a lot calmer than I ever anticipated."

Millenium Park

Millennium Park might be most well-known for "the bean," an irresistibly shiny sculpture actually entitled Cloud Gate. But details aside, Chicago's world-class public park is impressive for a number of reasons. The park, designed in part by legendary architect Frank Gehry, used to be an untouchable **industrial wasteland**. Now it's anything but with a **five acre perennial garden** and a state-of-the-art **concert venue**. The Boeing Galleries offer outdoor viewing of public art exhibitions, ensuring that art is accessible to everyone. Beyond that, Millennium Park boasts the title of **world's largest green roof**–24.5 acres of it!

The High Line (and the Lowline?)

Nowadays a trip to New York City seems to be synonymous with a visit to **The High Line**. The park inhabits a preserved railway formerly threatened by demolition. Garden designer Piet Oudolf found inspiration in the wild vegetation springing up from the abandoned train tracks and let this tiny bit of urban wilderness dictate the style of future plantings. That means native and low maintenance varieties make up most of what you'll encounter. The High Line itself functions as a green roof with both plants and porous pathways absorbing water and limiting stormwater runoff. Drip irrigation, integrated pest management and composting demonstrate the park's commitment to **sustainability**. And it wouldn't be New York without an ample supply of **art**.

You may not know about the High Line's future sibling, the **Lowline**. The plan is to take over the former Williamsburg Bridge Trolley Terminal and use cutting edge solar technology to create an underground green space. The Lowline would be the **world's first underground park**. And now there are murmurs that a "**Green Line**" will run along Broadway. Props to NYC for getting behind urban parks.

What's your favorite green space?
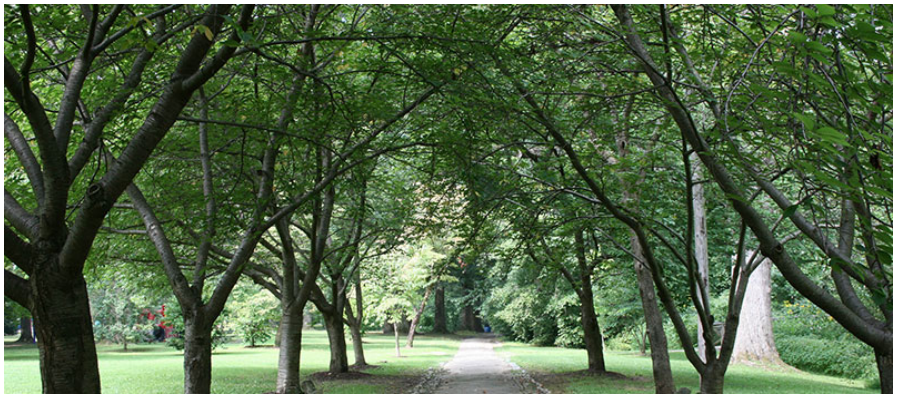
Photo Credit: Thinkstock

https://smartgrowth.org/6-urban-green-space-projects-that-are-revitalizing-u-s-cities/

Urban Green Spaces

Traditionally, urban "green spaces" such as meadows, wooded areas and other natural areas were found only in parks, but more recently urban green spaces include urban forestry. The ability to experience green spaces in Urban Landscapes is useful for promoting physical and emotional health and general well-being. Urban green space provides relief from the hardscape that is prevalent in urban environments, and offers opportunities for both passive and active recreation. The provision of urban green spaces has become an essential element of public health policy. This tool examines the process of establishing, expanding and improving urban public parks, forests and recreation facilities.

Advantages

The establishment of urban parks, forestry, green spaces and recreation facilities offer residents the following advantages:

- **Open Space:** Access to open space, the enjoyment of natural surroundings and access to a wide variety of recreation opportunities can be achieved through this tool.

- **Energy Conservation:** Establishing recreation facilities in urban landscapes allows residents close and easy access to the facilities they need, which saves the costs and energy of travelling to remote locations.

- **Access to Recreational Opportunities: The enjoyment of natural surroundings and access to a wide variety of recreation opportunities is sometimes called "Green Recreation".**

- **Cost Effectiveness:** Beyond the positive sociological impacts on residents, urban parks have a much lower annual cost per unit area than developed land. While annual park maintenance does require a budget, it is much lower than providing street maintenance, water and sewer service, etc., for residential, commercial or industrial uses. While parks do not generate tax revenue, some municipalities offset park costs by renting certain park facilities for group events.

- **Environmental Benefits:** Urban green areas and forests offer positive attributes which include improving air quality, relieving urban heat island effects, reducing stormwater volume and providing habitat for wildlife. Urban forests can used as windbreaks, steep slope stabilization and erosion reduction, stormwater runoff infiltration, and as buffers between dissimilar uses.

- **Increased Property Value:** Proximity to wooded areas has also been shown to increase property value.

- **Economic Development:** Establishing quality recreation facilities in an urban location can attract customers from the surrounding area, which can spur economic development in urban centers.

Limitations

The establishment of urban parks, forestry, green spaces and recreation facilities can be subject to the following limitations:

- **Funding:** The primary limitation to establishing these facilities in an urban location is funding. Private investment in urban recreation facilities has a greater potential for realization than urban forests and parks that are more often funded by the local municipality. The current economic environment has municipal governments struggling to maintain their level of service to the community, so funding for these facilities and even funding for grant matching has been difficult.

- **Ongoing Maintenance:** When trees in natural areas become diseased or die, they can rot and fall, thus providing habitat for animals that live in such environments. However, urban trees must be maintained to avoid falling or dropping limbs.

How to Use This Tool

An urban municipality that is interested in establishing parks, forests and recreation facilities should revise its future land use map in its comprehensive plan to identify areas where these uses would be located. This might include the creation of a new category on the future land use map or a text revision to add these uses to the existing appropriate use category. The municipality should also consider creating an official map that identifies parcels and corridors that could accommodate the establishment of parks, urban forests and recreation facilities. The municipality should then review its zoning ordinance to add these uses to the applicable zoning district or create a new zoning district that would specifically accommodate these uses.

Municipal policy makers should be flexible regarding the location of urban green features. These elements can involve use of abandoned industrial sites and river or stream corridors as well as unused transportation facilities and infrastructure. A notable example of a transportation facility that was converted into an urban green space is the High Line on New York City's west side, which converted an unused elevated railway into a linear greenway and park. Since its opening in 2009, The High Line attracted over two million visitors and is expected to generate economic benefits for the surrounding neighborhoods.

The High Line, located on Manhattan's West Side, NYC. Source: *korafotomorgana,* used by permission

The municipality should also specifically permit a range of appropriate active and passive recreational activities in the urban park and forest area. By encouraging a variety of activities, public safety can be enhanced and a wide range of recreational needs can be met. Additional support facilities may also be needed, such as water fountains or shops and restaurant that meet the needs of the park's users.

Parks, recreation facilities and urban forests could be combined on a single former industrial site or form nodes in urban trail networks. Urban forests could be combined with a trail network along river and stream corridors. This would help stabilize steep banks, improve water quality by shading the river or stream for fresh water fish species, provide shade for the trail users while improving the scenery, suppressing noise, improving air quality and serving as a buffer between different areas of the city.

As an element of urban infrastructure, the trees themselves can outlast nearly all man-made structures. For example, some species of hardwoods in the northeastern United States have average lifetimes of 150-200 years. Depending on the site of an urban forest and the actual growing conditions, a municipality could develop an urban forestry plan that also involves tree harvesting. If furniture quality hardwoods specie were planted and replaced as they were harvested, in the long term an urban forest might even be self-supporting. (However, many sawmills will not accept urban trees due to the potential presence of embedded nails or wires that can damage sawmill equipment. Care must be taken to find an appropriate user for urban timber.)

Traditionally in the Urban Landscape, land for parks and recreation was in low supply and often expensive to acquire. More recently, the availability of land and acquisition price has become more attractive to municipalities and non-profit groups, due in part to changes in the country's industrial base, with large urban locations for industries such as the steel industry becoming available for redevelopment. This is the case for the City of Coatesville and Phoenixville Borough. Both Coatesville and Phoenixville are redeveloping former foundries and steel mills. While such brownfields can include negative aspects related to their previous uses, they can be extensive in area and are comparatively flat.

Examples

The *Riverwalk in the City of Coatesville* ▶ is a trail that begins at a former steel mill site on Route 30 and continues north along the Brandywine River. The trail will accommodate pedestrians and bicyclists. In the Borough of Phoenixville, the Strategic Plan for the French Creek Corridor and Downtown Business District describes three trail sections that traverse the former steel mill site along both sides of the French Creek. These trail sections will link up with surrounding regional trail networks.

City of Coatesville's Riverwalk

Related References

The protection of natural resources is a required component of a municipal or multi-municipal comprehensive plan that is authorized in the *Pennsylvania Municipalities Planning Code (MPC).* ▶ Section 301.(a)(6) states that the comprehensive plan shall contain a plan for the protection of natural resources including, but, not limited to, wetlands and aquifer recharge zones, woodlands, steep slopes, prime agricultural land, floodplains, and unique natural areas. These areas can also be found in urban landscapes. The Pennsylvania Municipalities Planning Code can be accessed online.

GETTING STARTED

Before you begin designing your own city it is helpful to think about places you already know about. What are places you like and don't like in your hometown (or another city you are familiar with)?

My Favorite Urban Space

What is your favorite urban space in your city (or another city you know about)? Draw a picture, map, or plan of this space that shows what makes it special.

Least Favorite Urban Space (Existing)

What is your least favorite urban space? Draw a picture, map, or plan that shows what makes this place undesirable:

Least Favorite Urban Space (Proposed)

How could your least favorite place be changed to make it better? Draw your ideas to make it safer, healthier, or more enjoyable:

CONGRATULATIONS! You just finished your first urban planning project!