The Economic Benefits of Greenspace

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Land Conservation Makes Good Economic Sense

Every $1 invested in land conservation returns between $4 and $11 in natural goods and services.
Economic Benefits of Greenspace

1. Increases property values and attracts development
2. Serves as economic development tool
3. Provides for neighborhood linkages
4. Reduces cost of municipal services
5. Increases tourism potential
6. Improves quality of life
7. Improves health of local residents
8. Provides ecosystem services
9. Strengthens community cohesion
10. Provides community gathering space
1. Green space increases property values

- People pay higher prices for houses near parks
- Parks increase commercial rents and demand for space
- Higher property taxes can be used to pay to build and maintain the park
- A potential increase in property tax revenue alone can recover the initial cost of acquisition in a few years
Measuring the economic impact of green space in Dallas-Fort Worth

Impact of Park Proximity on Property Values

Source: Crompton 2004, 14 Neighborhood Parks, Dallas-Fort Worth Metroplex
Measuring the Economic Impact of Green Space in Pittsburgh

Source: Heinz College, Carnegie Mellon University, May, 2010
Measuring the Economic Impact of Green Space near Cleveland Metroparks

Source: The Economic Value of Cleveland Metroparks, 2011
**Enhanced residential property value due to proximity to Metroparks trails and parks**

<table>
<thead>
<tr>
<th>Total Market Value</th>
<th>Market</th>
<th>Added</th>
<th>Additional Annual Tax Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parks</td>
<td>$ 2,270,000,000</td>
<td>5 %</td>
<td>$ 114,000,000</td>
</tr>
<tr>
<td>Trails</td>
<td>$ 483,000,000</td>
<td>2 %</td>
<td>$ 9,650,000</td>
</tr>
<tr>
<td>Total</td>
<td>$ 2,760,000,000</td>
<td></td>
<td>$ 123,000,000</td>
</tr>
</tbody>
</table>

Source: The Economic Value of Cleveland Metroparks, Trust for Public Land, 2013
Rocky River Reservation

16.4% increase for abutting properties (Source: Cleveland Metroparks 2012 Hedonic Analysis)
2. Greenspace serves as an economic development tool

Parks and trails attract and retain businesses and residents
Attracts residential development

River South Eco-homes
Fairview Park, Ohio
Attracts commercial development

Emerald Necklace Inn

Inn at Brandywine Falls
Stimulates re-investment in urban areas
Helps reclaim brownfield areas
...as well as revitalize cities
3. Provides for neighborhood linkages
Connects neighborhoods with activity hubs

West Creek Connector

New York City High Line
Ohio & Erie Canal Towpath Trail

- 86 miles completed (2014)
- 15 miles to be constructed
- Will connect Cleveland to New Philadelphia
- Parallels Ohio & Erie Canalway National Scenic Byway
- Connects major park nodes, including Cleveland Metroparks, Stark Parks, Metroparks Serving Summit County and CVNP
Creating a Green Line Parks and Open Space System

- $957 million public investment transit line linking Minneapolis and St. Paul
- Connects diverse residential neighborhoods, business districts and anchor institutions
- Will serve to catalyze economic development
- Will require a significant investment in a corridor-wide greenspace system to maximize redevelopment

Source: Greening the Green Line, City of Minneapolis, City of Saint Paul and The Trust for Public Land, August, 2014
Greening the Green Line: Public and private strategies to integrate parks & open space in Minneapolis’ Green Line development

Source: Greening the Green Line, City of Minneapolis, City of Saint Paul and The Trust for Public Land, August, 2014
4. Reduces cost of municipal services

- Waste Collection
- Education
- Police protection
- Fire protection
- EMS services
- Utilities
Greenspace provides much more of a reduction in adverse conditions than other types of development that may require costly mitigation. These include:

- Noise
- Pollution
- Traffic congestion
- Infrastructure deterioration
5. Increases tourism potential

• Outdoor recreation is an important subset of the tourism industry
• Parks and trails make a community an attractive place to visit
• Tourists’ activities, the number of visitors, and tourist spending determine the contribution of parks and trails to the tourism economy
• Visitors may pay usage fees and spend money in the region
Tourism’s Multiplier Effect

- Federal, state, and local parks in Ohio attract millions of visitors each year who spend money in the local economy and support local jobs.
- These various levels of government each make contributions that are essential to the establishment and maintenance of park spaces and trails.
6. Improves Quality of Life

Businesses and residents seek locations with high quality of life — including parks, open space and accessible outdoor outdoor recreation.
Greenspace as an amenity

- Parks and trails attract and retain businesses and residents
- Open spaces contribute positively to the reputation of the area as a nice place to live, work and play
7. Improves health of local residents

- When people have access to trails and parks, they exercise more
- Exercise reduces illness in people of all ages
- There can be significant medical cost savings realized by those who are physically active
68.5% of adults are overweight or obese; 34.9% are obese.

31.8% of children and adolescents are overweight or obese; 16.9% are obese.

Source: National Health and Nutrition Examination Survey, 2010
For the first time in two centuries, the current generation of children in America will have shorter life expectancies than their parents.

Cost to society = $147 billion and 300,000 premature deaths per year.

Source: Center for Disease Control, 2013
Regular physical activity is one of the most important things that can be done to improve health. It can help:

- Control weight
- Reduce risk of cardiovascular disease
- Reduce the risk of type 2 diabetes
- Reduce the risk of certain cancers
- Strengthen bones and muscles
- Improve mental health
- Improve seniors’ ability to do daily activities and prevent falls
- Increase chances of living longer
Exercise is beneficial to everyone’s health
usually
Parks provide recreational value

- Parks and trails afford value to residents by providing access to recreational opportunities at low or no cost
- Without parks and trails, residents would have to pay for similar recreational experiences privately
How Parks Improve Health

Trust for Public Land, 2013
Parks are a great way to keep people active

If you build it, they will come—and exercise.
Significant levels of exercise occur in parks
Parks relieve anxiety and improve mental health
Park improvements foster increased usage
Trails and pathways invite a variety of users
<table>
<thead>
<tr>
<th>Activity</th>
<th>Annual Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Walk or hike</td>
<td>3,040,000</td>
</tr>
<tr>
<td>2. Explore nature, view wildlife</td>
<td>2,260,000</td>
</tr>
<tr>
<td>3. Walk a dog</td>
<td>1,440,000</td>
</tr>
<tr>
<td>4. Use exercise stations</td>
<td>928,000</td>
</tr>
<tr>
<td>5. Run or jog</td>
<td>885,000</td>
</tr>
<tr>
<td>6. Bike on mountain bike trails</td>
<td>822,000</td>
</tr>
<tr>
<td>7. Bike on paved trails or paths</td>
<td>369,000</td>
</tr>
</tbody>
</table>

Source: Cleveland Metroparks, 2013
Programmed activities in parks are highly beneficial.
Exercise is one of the easiest ways to stay healthy.
Fitness Zones attract new users to parks
Fitness Zone® Program
Fitness Zones

- Free with access 24/7
- User-friendly and designed for all ages and abilities
- Sturdy, weather and vandalism resistant
- Typically 6 - 8 pieces
Fitness Zones: Benefits

• Increases access to fitness improvement opportunities
• Promotes wellness by building stronger bodies, improving heart rates, burning calories and relieving stress
• Promotes social ties and builds community
• Increases park usage
Fitness Zones: Evaluation*

- Fitness Zone users reported coming to the park more frequently and engaging in more exercise sessions per week than other park users.

- People in Fitness Zones engaged in substantially more moderate to vigorous physical activity than those in other park activity areas.

- Additionally, the percentage of people engaging in moderate to vigorous physical activity increased, even in park areas excluding the Fitness Zone.

* Excerpts from presentation by Rand Corporation researchers at the 2011 Active Living Research Annual Conference
A 40-year Record of Success

• Working through 30 state offices, TPL has completed more than 5,000 park and conservation projects from the wilderness to the inner city.

• Recognizing that 80% of the population now lives in metropolitan areas, over the last 10 years TPL has refocused attention on urban parks.

• To date, TPL has installed 62 Fitness Zones® and is working on 23 more.
8. Provides ecosystem services

- Mitigates air pollution
- Absorbs carbon & cools the air
- Preserves water quality
- Reduces imperviousness
- Controls storm water runoff & flooding
- Provides habitat
Improves air quality

- Air pollutants increase the need to clean and repair buildings and other infrastructure.
- Trees and shrubs in parks and trails improve air quality by filtering out air pollutants.
- This filtration cleans the air and helps communities avoid the costs associated with pollution.
Absorbs carbon and reduces heat island effect
Improves water quality

- Open spaces filter surface water before it enters lakes, streams or groundwater recharge areas
Lake Erie Harmful Algal Blooms

August 2011

October 2011
Reduces imperviousness in cities...
...and suburbs
Ecosystem services of trees

One tree in its lifetime:

- $62K air pollution control
- $37K water recycling
- $31K oxygen
- $31K soil erosion control
Controls storm water and flooding

Parks and trails can reduce the costs of stormwater management by capturing precipitation and/or slowing its runoff
## Annual stormwater cost savings from Cleveland Metroparks trails and parks

<table>
<thead>
<tr>
<th></th>
<th>inches</th>
<th>amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual rainfall</td>
<td>38.10</td>
<td>2,770,000,000 cu.ft.</td>
</tr>
<tr>
<td>Runoff with parks</td>
<td>4.39</td>
<td>319,000,000 cu.ft.</td>
</tr>
<tr>
<td>Runoff without parks</td>
<td>10.30</td>
<td>745,000,000 cu.ft.</td>
</tr>
<tr>
<td>Runoff reduction</td>
<td>5.88</td>
<td>427,000,000 cu.ft.</td>
</tr>
<tr>
<td>Runoff reduction rate</td>
<td>57 %</td>
<td></td>
</tr>
<tr>
<td>Cost of treating stormwater</td>
<td></td>
<td>$ 0.01</td>
</tr>
<tr>
<td>Total savings from parks</td>
<td></td>
<td>$ 5,120,000</td>
</tr>
</tbody>
</table>
Provides habitat and biodiversity
9. Strengthens Community Cohesion

The economic value of social capital is not entirely identifiable and is in some ways priceless, but it is possible to tally up a proxy based on real numbers - the amount of time and money that residents donate to their parks. In 2011, 2,952 volunteers donated over 111,000 hours to Cleveland Metroparks.
Fosters a sense of community
and a place to learn about the natural environment
10. Provides community gathering space

Source: Smith/JJR

Source: LANDstudio
Greenspace Has Never Been More Important

- As many as 2 out of 3 city residents do not have access today to a nearby park, playground, or open space
Even greening up small lots can make a difference
Pocket Parks
Neighboring Property Owner Option
Urban Gardens

While vacant lots drag down the value of surrounding properties, community gardens have the opposite effect.
TPL has a wealth of experience measuring the economic benefits of land conservation

Recent publications:
- Return on Investment in Parks and Open Space in Massachusetts (2013)
- The Economic Benefits of Cleveland Metroparks (2013)
New Hampshire’s ROI Report

- Land and Community Heritage Investment Program funds were being redirected to fill state budget gaps
- ROI: 11 to 1
- Released July 2014
- Plan to use in support of Legislative Committee to study the current status of land conservation in NH. Committee report to be released November 2014
Massachusetts ROI Report

- Environmental bond bill funds exhausted
- ROI: 4 to 1
- Released at State House media event September 2013
- Currently being used in support of new environmental bond bill
Clean Ohio Fund ROI Report

- 2008 Clean Ohio bond funds for land conservation and trails unspent
- ROI: 4 to 1
- Released during budget, March 2013
- Remaining $52 million in bonds released for land conservation and trails
Case Study: Cleveland Metroparks

The Economic Benefits of Cleveland Metroparks

October, 2013
Estimated annual benefit of Cleveland Metroparks trails and parks is $855 million

<table>
<thead>
<tr>
<th>Benefit Category</th>
<th>Benefit Subcategory</th>
<th>Land Use Type</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhanced property values and government cost savings</td>
<td>Enhanced property value</td>
<td>Parks</td>
<td>$114,000,000</td>
</tr>
<tr>
<td></td>
<td>Additional property value*</td>
<td>Trails</td>
<td>$ 9,650,000</td>
</tr>
<tr>
<td></td>
<td>Additional property tax</td>
<td>Parks</td>
<td>$ 2,870,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trails</td>
<td>$ 226,000</td>
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<tr>
<td>Stormwater retention value</td>
<td></td>
<td>Parks and trails</td>
<td>$ 5,120,000</td>
</tr>
<tr>
<td>Air pollution removal value</td>
<td></td>
<td>Parks and trails</td>
<td>$14,400,000</td>
</tr>
<tr>
<td>Recreation and tourism</td>
<td>Park tourism value</td>
<td>Parks and trails</td>
<td>$ 733,000,000</td>
</tr>
<tr>
<td></td>
<td>Tourism spending</td>
<td>Parks and trails</td>
<td>$ 50,500,000</td>
</tr>
<tr>
<td></td>
<td>Sales tax on tourist spending*</td>
<td>Parks and trails</td>
<td>$ 40,400,000</td>
</tr>
<tr>
<td></td>
<td>Direct use value</td>
<td>Parks and trails</td>
<td>$ 59,500,000</td>
</tr>
<tr>
<td></td>
<td>Human health value</td>
<td>Parks and trails</td>
<td>$ 855,000,000</td>
</tr>
</tbody>
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**The Trust for Public Land**

**Land for People**
Cleveland Metroparks Levy Support

- In the November 2013 levy, voters were asked to approve a 10 year renewal of 1.8 mills and an increase of 0.9 mills
- Approval would generate 62% of an $89 million annual budget
- Passed with 70% of the vote
Parks generally have limited public opposition
…..but it does happen

Bad idea, owners say
Riverbank trails proposal draws protest

LETTERS
Orange bike path vote is a meaningless charade

To the editor:

Three cheers to Orange Village Council for allowing the fate of the bike paths to rest with us — the common people. After having missed a funding deadline, the first

Bicycle path is removed

Residents stand firm on removal of Crocker bike path

by Jacqi Templeton

NORTH OLMSTED - North Olmsted’s newest Councilman, Thomas O’Grady, was ready to take a stand in support of residents who have been fighting for the return of the bike path.

Road to the Metroparks Bradley Woods Reservation.

After much discussion, the decision to remove the bike path was settled by the council in 1992, at the request of two homeowners’ associations for development on the road.

because it was done without a contract.

But the city has no intention of not paying. “It was an honest mistake,” said Bohmman.

The city has introduced legislation that will authorize the work after the fact.

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