

### ABSTRACT

The City of Meriden has taken on the immense project of transforming the area where the International Silver Company used to be into a park where citizens will be able to socialize, educate themselves on wildlife, and the city will be able to better control flooding. The revision of the Meriden Hub into a family-friendly park will bring economic, ecological and health benefits to the city of Meriden. Through research I found that a naturalized area draws in more people from the suburbs that want somewhere to go with fresh air and aesthetically attractive scenery to exercise and enjoy themselves. The HUB will bring in a surplus of homebuyers attracted to the idea of living near a park where they can exercise and take their families, while each tree generates clear oxygen and rids the atmosphere of harmful pollutants.

### INTRODUCTION

The Meriden HUB site is undergoing construction to become a park, but many do not realize the benefits a park provides in an urban city like Meriden. In an area filled with concrete and carbon emissions, a park provides trees and other plant life to cleanse the air of pollutants while making the area more attractive to home buyers and aiding in flood-control efforts (Figure 2). The Meriden HUB was not always a construction site; it was once home to the Meriden Britannia Company (Figure 1), which then became the International Silver Company, where generations of workers manufactured affordable household products. However by 1984, the company that once brought fame and fortune to a small Connecticut city closed its doors for good.

#### 1. What are the objectives of this study?

- To identify the economic, ecological, and health benefits of having a park in a suburban/urban area.
- Compare the HUB's past as a flourishing silver company to its future projections as a park venue.

#### 2. Why is this study important?

- It shows the positive effects of a natural area (e.g. park) when placed in an suburban/urban area.



Figure 1: A late 1860's portrayal of the daily doings of the Meriden Britannia Company.



Figure 2: A projection of the layout of the future HUB site when construction is done.

### MATERIAL AND METHODS

#### Study Area

- Geographic Location:** Meriden, Connecticut
- Park Location:** The HUB is located in downtown Meriden (Figure 3).
- Environment:** The HUB is surrounded by businesses/buildings, a train station, and people from all walks of life.

#### Data Collection Protocol

- Search "ecological benefits" of parks.
- Create a document with different subtitles to group related information.
- Place related data under each subtitle.
  - e.g. Trees (purify air of pollutants that increase mortality in cities)
- Repeat for "economic benefits" and "health benefits".

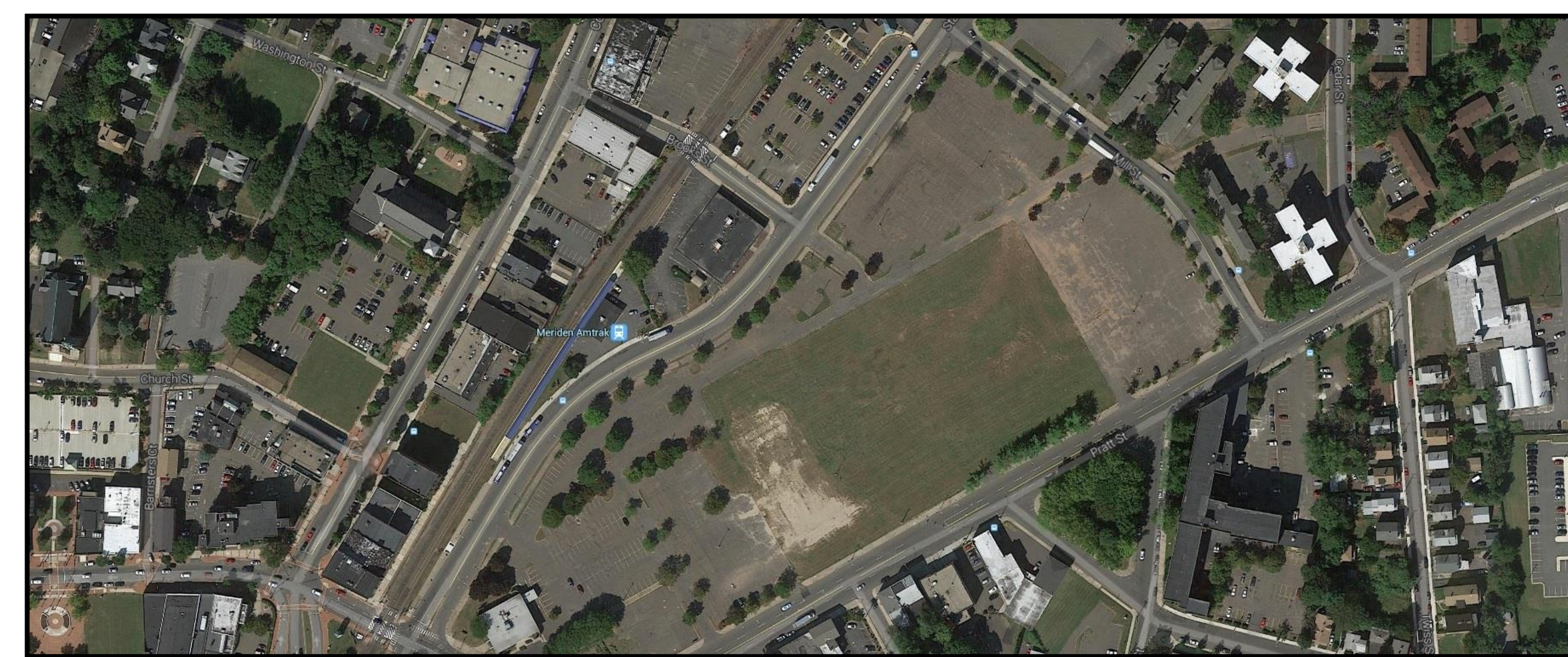


Figure 3: An aerial view of the Meriden HUB in its present location in downtown Meriden.

### RESULTS

Over 80% of humans live in urban areas. Consequently, having a park creates a healthy environment for humans that also conserves vital ecosystems that disappear as urban areas grow larger.

#### Ecological Impact:

- Trees and other vegetation purify the air of gases, ozone, and pollutants that cause respiratory problems and corrode and damage buildings, while tree canopies reduce hot urban air temperature by 5-10 degrees.
- When combined with a network of strategically planned waterways, parks transport and store storm-water runoff that could overpower city sewer systems causing costly flood damage and environmental pollution.

#### Economic Impact:

- All around the U.S. real estate brokers and homebuilders are advocating parks as one of the top residential selling points. The desire to live near parks also translates into real dollars.
- Parks can both pay for themselves and generate extra revenue. Tax revenues from increased retail activity and tourism-related expenditures further increase municipal money.

#### Health Impact:

- Contact with nature offers a range of medical benefits, including lower blood pressure and cholesterol levels, more rapid recovery from surgery, and lower self-reported stress.
- "Green Exercise", exercise in natural areas as opposed to urban streets, offers more relief of anxiety and depression.

### STATISTICS

- Homes near parks can sell up to **2,262** dollars more than homes without parks nearby.
- A study in Nebraska found that for every **dollar** spent on trails (Figure 4), about **three dollars** were saved on medical costs directly.
- 65%** of home shoppers surveyed felt that parks would seriously influence them to move to a community.

One tree generates:

- \$31,250 of oxygen
- \$62,000 pollution control
- Recycles \$37,500 worth of water
- Controls \$31,250 worth of soil erosion (US Forest Service, 2001)



Figure 4. A couple here utilizes one of Meriden's trail systems.



Figure 5. A Robin (top) and a Baltimore Oriole (bottom).

### WILDLIFE RESOURCES

Urban plantings comprise a significant proportion of the 3+ million acres of vegetated land in Connecticut. These areas have been shown to have great value to wildlife. Plantings provide food and cover to local song birds as well as migratory birds. Adaptable wildlife, such as Robins and Baltimore Orioles (Figure 5), can benefit greatly from urban vegetation. However, the value of urban plantings is not as good when invasive, non-native plants are used, as many specialist species, such as particular butterflies, rely on particular native species. Native plants almost always provide more for wildlife than invasives. Wildlife utilize parks due to the lack of predators, ample space, and readily available food sources.

### CONCLUSIONS

Parks are a clear asset to urban areas like Meriden. Hubbard Park, a renown park also located in Meriden, for example, brings in thousands of people during the Christmas season due to its decorative lights, and regularly attracts avid hikers or those who just want to observe nature. The HUB's transformation into a park will increase health by means of exercise through the linkage of Meriden's present trail systems, educate the public on wildlife, and conserve vulnerable coastal and flood zone areas, thereby reducing the loss of life from storms and surges. The concept of having a park nearby will not only entice homebuyers and increase revenue, but it will offer an aesthetic getaway in an area surrounded by concrete and buildings.

### ACKNOWLEDGEMENTS

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### REFERENCES

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