

Creating Criteria for Selecting Massachusetts Greenspace

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Division of Conservation
Services (DCS)

“Green spaces are sparse or poorly maintained in the urban core of many American cities where minority and low income people concentrate”

-Approaching Environmental Health Disparities and Green Spaces: An Ecosystem Services Perspective



| Locations → | New York NY | Miami FL | Boston MA | Portland OR | Dallas TX | Atlanta GA |
|---------------------|------------------------|---------------------|----------------------|------------------------|----------------------|-----------------------|
| Per Person → | 146 sq ft | 166 sq ft | 168 sq ft | 856 sq ft | 870 sq ft | 1,023 sq ft |
| City → | 45.2 sq mi | 2.8 sq mi | 4.1 sq mi | 19.9 sq mi | 41.8 sq mi | 17.8 sq mi |
| Ranking → | #15 | #14 | #13 | #3 | #2 | #1 |

| | | | | | | |
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Why is this?



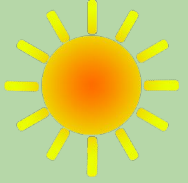
Our Purpose

The goal of this project was to to assist the DCS by determining the most important factors to consider when determining a vacant lot's potential as a greenspace, as well as to determine which type of space is most suited for the selected parcel based on those factors.

The path to reconstruction



Step 1: Preliminary Literature Analysis



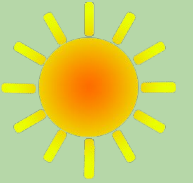
Categories of data collected:

- Benefits
- Challenges
- Incentives

Why these categories?



Step 2: Interviews with Key Groups



Who do we interview?

- City planners from MA
- Other Greening Programs



Step 2.1: Interviews with City Planners in MA

1. What are the city's goals for green space?
2. Do you have any examples of a vacant lot or other land that was reconstructed into green spaces/recreational area? What were the criteria for selecting those lots? What went well? What could have gone better?
3. What are the types of trade offs for competing interests when it comes to vacant lots, housing/green space?
 - a. How would you justify restoring a vacant lot for green space instead of housing?
4. If you had all the resources you needed and there are hundreds of vacant lots, what would be your perfect solution to vacant lots?

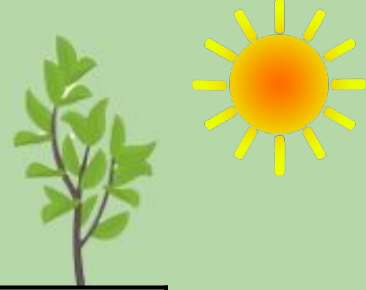


Step 2.2: Interviews with Greening Programs

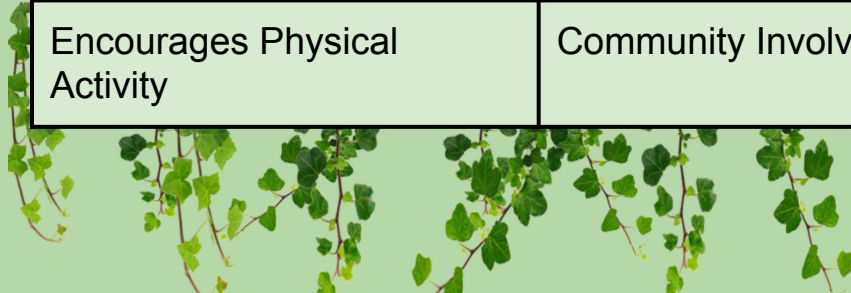
1. Could you tell us more about the program? What were the goals behind it, how were locations selected, what was accomplished?
2. What kinds of green space were created? How were decisions made and what are the priorities? and why?
3. Do you feel the program has been successful? Why or why not?
4. What were the main challenges with the program and how did you overcome these challenges?
5. What were the incentives for the conversion of parcels of land into green space which helped the program to be successful?



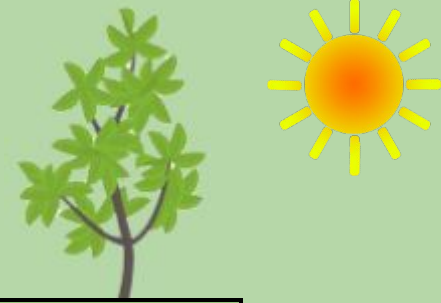
Step 3: Bringing the Data Together



| Benefits | Challenges | Incentives |
|--|-----------------------|--|
| Reduce UHI | Funding | Tax Credit |
| Better Air Quality | Maintenance Costs | Beautifies Neighborhoods |
| Reduce Flooding & Pollution of Environment | Staff Size | Cheaper than Grey Infrastructure Long Term |
| Better Mental Health | Competition | Flat Fee for Water |
| Encourages Physical Activity | Community Involvement | Community Involvement |



Step 4: Compile a Set of Criteria



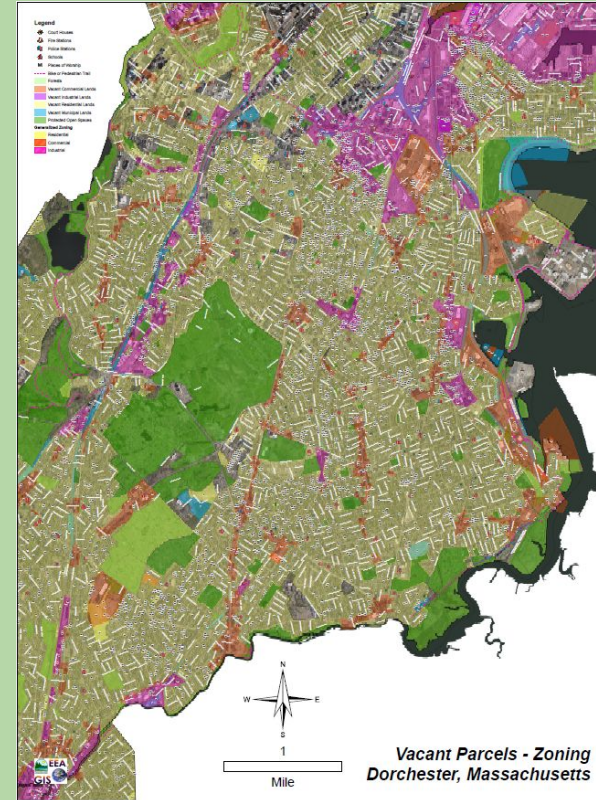
| Types of Space | Natural Characteristics | Ownership and Community |
|---------------------------|-------------------------|-------------------------------------|
| Land Protected by City | Soil Quality | Open Space Land Trust |
| Zoning | Air Quality | Environmental Justice Neighborhoods |
| Types of Public Buildings | Slopes | Types of Owners for land |
| City Boundaries | Temperature | |
| | Flooding Potential | |
| | Bodies of Water | |

Ben helped us by placing these layers onto a GIS map for Dorchester, New Bedford, and Worcester

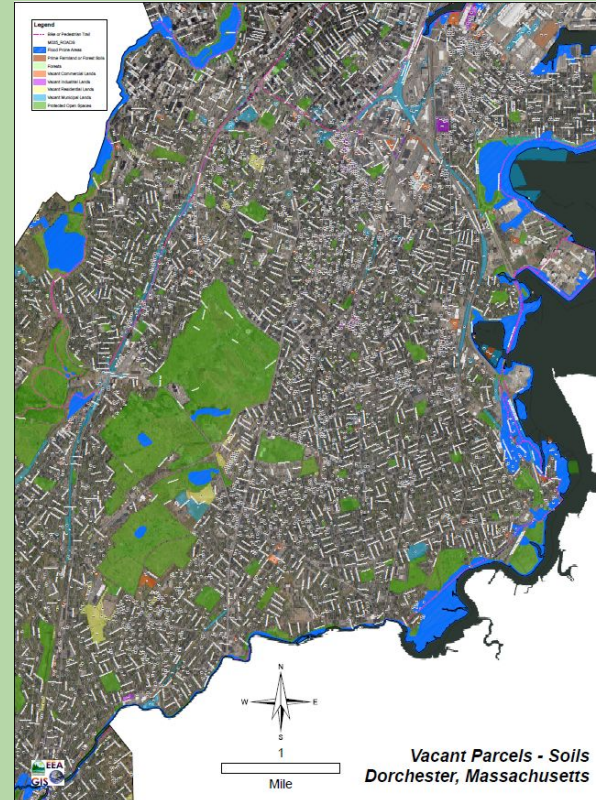
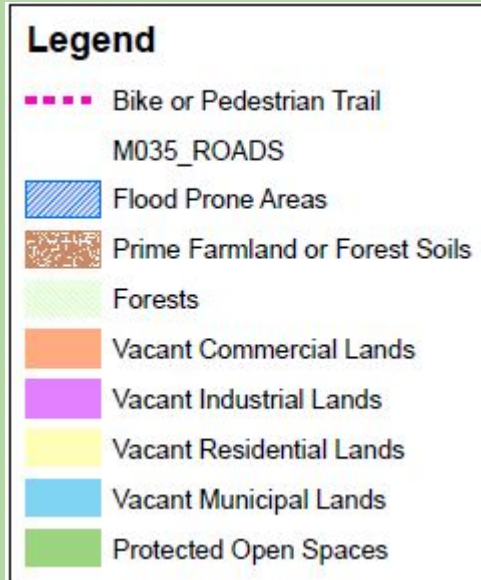
Boston Map #1: Zoning

Legend

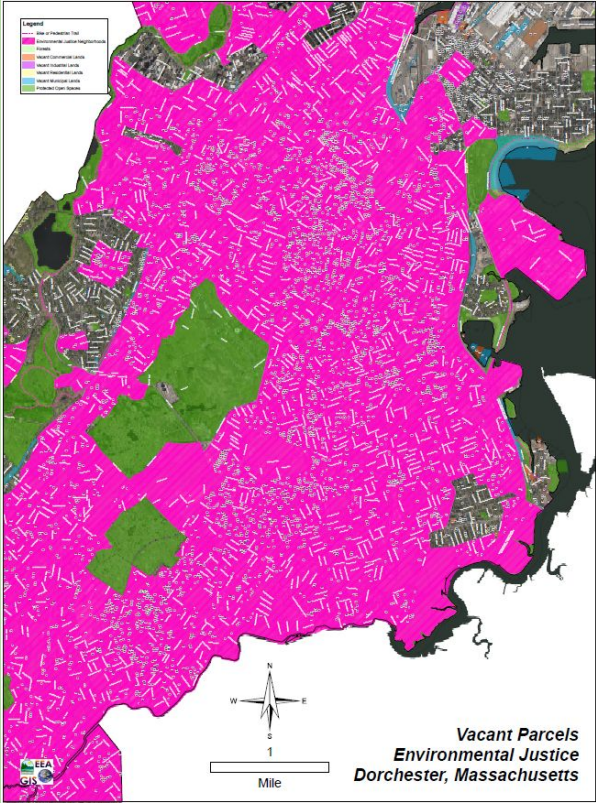
-  Court Houses
-  Fire Stations
-  Police Stations
-  Schools
-  Places of Worship
-  Bike or Pedestrian Trail
-  Forests
-  Vacant Commercial Lands
-  Vacant Industrial Lands
-  Vacant Residential Lands
-  Vacant Municipal Lands
-  Protected Open Spaces
- Generalized Zoning**
 -  Residential
 -  Commercial
 -  Industrial



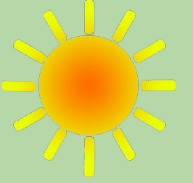
Boston Map #2: Soils



Boston Map #3: Environmental Justice



Step 5: Synthesizing our Recommendations



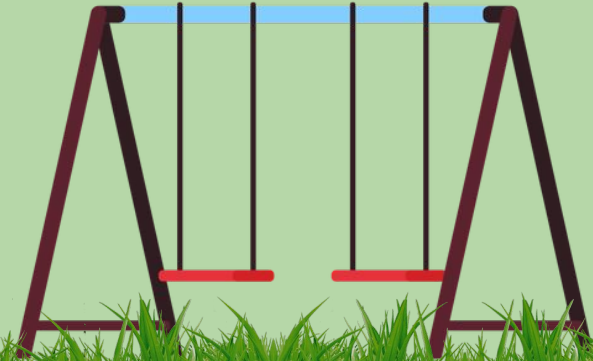
Two Parts:

- Determining the best location for a vacant lot
- Determining the type of green space to implement



Selecting a Vacant Lot: What to Look For?

- Community Involvement
- Proximity to Other Amenities
- Other Physical Characteristics



How to Determine What Type of Lot to Use

- What does the Community want?
- What does the Community need out of the Parcel?
- How can a compromise be made?



<https://love.lambeth.gov.uk/leake-street-pocket-park-opening/>



Parcel #1

Location: 40 Delano St. New Bedford, MA

Legend

- Police Stations
- Court Houses
- Fire Stations
- Schools
- Places of Worship
- Bike or Pedestrian Trail
- Forests
- Tax-Title Lands
- Commercial Vacant Lands
- Vacant Industrial Lands
- Vacant Residential Lands
- Municipal Vacant Lands
- Protected Open Spaces

Generalized Zoning

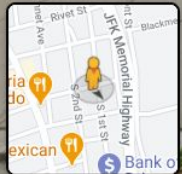
- Residential
- Industrial



40 Delano St
New Bedford, Massachusetts



Street View



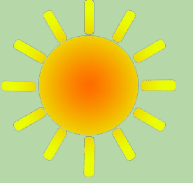
Google



Additional Recommendations

- Commonwealth grant program that funds a longer time period for community involvement
- Commonwealth grant program that help with maintenance for the first five years





Any Questions?

