Evaluating Environmental Justice and Organizational Partnerships for Green Space in Worcester, MA

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Race and Income are Direct Factors in Distributing Environmental Goods

Environmental Justice:

Fair distribution of resources and attention to environmental issues to all areas of a region without consideration for race, ethnicity, or income.
Equity is a Driving Force for Understanding Human-Environment Relations When Looking at Environmental Justice

“An equitable city improves circumstances for those with more limited choices.”

“Using a top tier mindset while catering to lower and middle class needs.”

-Jeremy Nowak (2018)
“In the fourth quadrant (lower right), working-class people are motivated to take on green-collar jobs and start green businesses.”

-Van Jones
Environmental Justice is Especially Relevant to Shrinking Cities

Shrinking Cities:
Cities that experience drastic population loss generally associated with deindustrialization.
Green Space Has Particular Value in Shrinking Cities

<table>
<thead>
<tr>
<th>Urban greening effect (sources)</th>
<th>Environmental</th>
<th>Social</th>
<th>Economic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide opportunity to create community through social interactions</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Increase physical activity opportunities</td>
<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>Reduce Crime and Domestic Violence</td>
<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>Increase Potential Consumer Spending</td>
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The Civic Sector an Important Vehicle for Creating Equitable Green Space
The Civic Sector Needs Organizational and Financial Resources to Further Their Mission

Nonprofit Organizations

Community/Organizational Resources
- Local Volunteers
- Supportive Mission

Financial Resources
- Individual Donors
- Corporate Sponsors
- Governmental Grants
- Memberships
- Merchandising
Partnerships are Critical to the Success of Environmental Nonprofit Organizations

“No single agent possesses the capabilities to address the multiple facets, interdependencies, and scales of environmental problems.”

Lemos and Agrawal (2006).
Our Sponsor: Park Spirit of Worcester, Inc.

- Connect with Neighboring Organizations
- Create Outreach and Target a Diverse Audience
- Protect, Promote, and Restore the 61 Parks of Worcester
Worcester Has a Diverse Demographic

Worcester Demographic
- Other: 2.9%
- Asian: 6.8%
- Black: 11.7%
- Hispanic: 22.8%

Massachusetts Demographic
- Other: 7.0%
- Asian: 6.6%
- Black: 3.1%
- Hispanic: 11.8%
- White: 71.5%

U.S. Census 2016
Worcester Residents Have Lower Than Average Household Income

Average Household Income

- National: $61,372
- Massachusetts: $77,385
- Worcester: $41,561

U.S. Census 2016
Our Research Approach For Analyzing Worcester’s Green Space

Is there a case to be made for environmental justice in Worcester parks?

How do partnerships and resources play into improving park advocacy?

The group with a Worcester Park Representative
We Analyzed Environmental Justice for Park Management in Worcester
Diversity for this mapping is the likelihood of two individuals randomly selected from the same area being different racially or ethnically.
Parks Visited

A  Elm Park
B  Newton Hill
C  Coes Knife Park
D  Columbus Park
E  Knights of Columbus Park
F  Castle Park
G  University Park
H  Shale St Playground
I  Holmes Field
J  South Worcester Playground
K  Shore Park
L  Morgan Landing
M  Indian Lake Beach
N  Worcester Common

= Central  = South West
= South Central  = North
= East
Shore Park received about $200,000 from the city for the construction of a new bathroom and storage unit.
Holmes Field is currently under construction with new baseball fields, tennis courts, and play areas coming soon.
Castle park received $2 million to fully fund all phases of their master plan.
Three years ago, Elm park received several million dollars for benches, lights, paths, bridges, and retaining the surrounding walls.
The South Worcester Playground will receive $250,000 for the next four years to complete master plan.
There is Limited Park Funding Available in the City's Budget
Park Improvements Illustrate Worcester’s Changing Mindset

$50 million Increase for Park Capital Budget

Parks and Rec Staff Nearly Doubled

Creation of 3 Dog Parks, After Strict Prohibition
Park Improvements Illustrate Worcester’s Changing Mindset

Park Improvement Map Legend:
- Green Hill Park
- Castle Park
- Crompton Park
- City Hall
- Elm Park
- Coes Park
- Shore Park
- Providence Street Playground
- Grant Square Park
- Holmes Field
- Mulcahy Field
- South Worcester Playground
- University Park
- Betty Price Park
- Hadwen Park
- Institute Park
- Lake Park
- Bennett Field
- Indian Hill
- Bell Hill Park
City Officials are Increasing Focus on Green Space and Healthy Living

“At one time, quality parks were seen as luxury in Worcester; now we see them as a necessity”
- A High Ranking City Official

“About ten years ago there was a big increase in park revitalization from the city.”
- A Neighborhood Park Representative

Brandon and Steven with City Manager Augustus
Environmental Justice is Not an Issue for Park Management in Worcester

The city has equitably distributed funding to green space around Worcester.
We characterized the types of organizational partnerships and resources that strengthen parks advocacy.

Evaluate Green Space Partnerships and Organizational Resources

Raw Data Collection

Interviews

Record Key Themes as Data Points

Distribute Resource Sharing Information

Analysis

Ways for Partnerships to Improve Park Advocacy
Cohesive Partnerships are the Key to Increased Funding and Green Space Benefits

**Transparent Relationships**
- Aligning Mission Statements
- Constant Communication

**Resource Sharing Through Partnerships**
- Donations
- Programming
- Outreach Programs
- Funding
- Safety
- Volunteer Support/Staff

**Driven Group of Park Advocates with a common goal working to get the most out of Worcester’s Green Space**
Safety, programming, and financial partnerships are the most critical for immediate park improvement

<table>
<thead>
<tr>
<th>Safety Partnerships</th>
<th>Determined Through City and Community Interviews</th>
<th>University Park &amp; WPD</th>
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</thead>
</table>
| Programming Partnerships | 8/13 Parks Want improved Programming  
6/13 Interested in Concert Series | Coes Park & Seven Hills Foundation |
Further Research Themes

Capital Improvements vs Maintenance

"Capital Improvements are only as good as the ability to maintain them"
- A Park Spirit Board Member

Politics Play a Role in Green Space

“No votes equals no political action”
- A Neighborhood Park Representative
Park Spirit Moving Forward: Enhancement of Community Communication

Green Space Advocacy Open House

1. Help different groups understand each other's needs
2. Build a priority plan for park improvements
3. Creates a cohesive communication format between green space organizations
Park Spirit Moving Forward

Continue Improvements to Park Programming

Dispersing of focus to parks with little representation
Organizational Shift Opens New Doors


Our team would like to thank our sponsor Park Spirit for giving us numerous sources of information to complete our project, our advisor Professor Foo for guiding us through our IQP experience, and anyone who helped us collect information for our project results and deliverables.