Improving Equitable Access to New Hampshire Parks: A Collective Impact Model for Healthy People and Healthy Places

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Background and Purpose

- Although New Hampshire (NH) ranks as one of the healthiest states nationally, overall health statistics obscure pockets of neighborhood-level health inequities.
- Lower levels of leisure-time physical activity (PA) and higher prevalence of obesity and diabetes are observed among persons of lower socio-economic status, those living in rural-isolated areas, and those living in the most racially and ethnically diverse urban neighborhoods.
- To address these disparities, key stakeholders of the Healthy Eating and Active Living (HEAL) NH initiative developed the Healthy People Healthy Places (HPHP) Plan in 2014, which calls for implementing policy, programs, and environmental strategies aimed at improving the places where people live, learn, work, and play, particularly in communities with the highest need.
- The HPHP Network, a multi-sectoral partnership including health, transportation, planning, parks/recreation, agriculture, and education, was established to promote improved access to healthy foods and PA spaces.
- The Collective Impact (CI) model, a social change framework that emphasizes five conditions for success, was used to guide this effort:
  - Common agenda
  - Shared measurement
  - Mutually reinforcing activities
  - Continuous communication
  - Backbone support organization

Objectives

- A main objective of the HPHP Plan is to ensure that "all NH communities have access to indoor and outdoor recreation facilities within a reasonable distance."
- To address this objective, we conducted a baseline inventory of NH parks, which will provide important information to guide HPHP implementation strategies. This research aims to:
  1. Use secondary data sources to create an active recreation (AR) inventory for NH's 10 highest-need communities, defined at the census tract (CT) level.
  2. Assess whether park amenities vary by urban/rural status of highest-need communities.
- The presence of various natural and built outdoor recreation amenities was documented (Tables 1-2; Figs. 1-2). Fewer than half of the properties provided natural or built amenities.

How Research Was Used to Guide Programs/Policy

- Identifying areas of highest need was an important step in prioritizing actions that will lead to equitable access to safe, active environments and healthy foods.
- The NH DHHS Social Vulnerability Index (SVI) was used to identify NH's 10 highest-need communities, defined at the census tract (CT) level.
  - For example, communities/CTs with 5 or more vulnerability measures above the 90th percentile were reviewed for potential inclusion; rates of diabetes, adult and childhood obesity, and cardiovascular disease were also used to determine the highest-need communities.

Developing the Active Recreation (AR) Inventory:

- Using secondary data, an AR inventory was created for the ten target areas (spanning 14 municipalities).
- Existing databases describing publicly accessible park and recreation spaces (e.g., NH Office of Energy and Planning (OEP), Recreation Inventory, NH Granit, municipal websites, Google Earth) were reviewed.
- 294 properties were identified.

Lessons Learned

The presence of various natural and built outdoor recreation amenities was documented (Tables 1-2; Figs. 1-2). Fewer than half of the properties provided natural or built amenities.

Table 1: Natural Outdoor Recreation Amenities

<table>
<thead>
<tr>
<th>Amenity Type</th>
<th>N*</th>
<th>% of Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking Trails</td>
<td>96</td>
<td>39.7</td>
</tr>
<tr>
<td>Bike Paths</td>
<td>84</td>
<td>35.3</td>
</tr>
<tr>
<td>Fishing</td>
<td>36</td>
<td>13.9</td>
</tr>
<tr>
<td>Ice Skating</td>
<td>24</td>
<td>9.2</td>
</tr>
<tr>
<td>Boating</td>
<td>23</td>
<td>8.8</td>
</tr>
<tr>
<td>Swimming</td>
<td>21</td>
<td>8.2</td>
</tr>
</tbody>
</table>

Table 2: Built Outdoor Recreation Amenities

<table>
<thead>
<tr>
<th>Amenity Type</th>
<th>N*</th>
<th>% of Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playgrounds</td>
<td>106</td>
<td>40.6</td>
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<tr>
<td>Ball Fields</td>
<td>99</td>
<td>37.5</td>
</tr>
<tr>
<td>Picnic Areas</td>
<td>69</td>
<td>27</td>
</tr>
<tr>
<td>Basketball Courts</td>
<td>65</td>
<td>24.6</td>
</tr>
<tr>
<td>Tennis/Racquet Courts</td>
<td>30</td>
<td>11.5</td>
</tr>
<tr>
<td>Ice Skating Rink</td>
<td>17</td>
<td>6.5</td>
</tr>
<tr>
<td>Running/Jogging Tracks</td>
<td>14</td>
<td>5.3</td>
</tr>
<tr>
<td>Skate Park</td>
<td>5</td>
<td>1.9</td>
</tr>
</tbody>
</table>

* N refers to number of properties. Of 294 properties, 27 were eliminated from the initial analysis for lack of completeness.

Conclusions and Implications

- Analysis of secondary data on public parks and recreation properties in NH's highest need communities revealed several gaps in active recreation resources.
- Types of amenities varied by urban/rural status.

Next Steps:

- Partners will consider how amenities may be improved to better support PA, and how to effectively tailor strategies to maximize collective impact.

Active Recreation Inventory Analysis, by Urban/Rural Status

- Of the 284 public recreation properties, 153 were located in metropolitan (urban) areas and 114 were located in micropolitan (rural) areas.
- Micropolitan (rural) areas were significantly more likely to have:
  - Walking trails (x²=35.95, df=1, p<0.0001)
  - Bike paths (x²=37.29, df=1, p<0.0001)
  - Motorized trails (x²=10.65, df=1, p<0.001)
- Metropolitan (urban) areas were significantly more likely to have built amenities such as:
  - Playgrounds (x²=19.83, df=1, p<0.001)
  - Ball fields (x²=17.70, df=1, p<0.001)
  - Basketball courts (x²=8.04, df=1, p<0.01).

Using the Collective Impact (CI) model:

- An important outcome of NH HEAL's work was the creation of the HEAL Home, established in 2008.
- HEAL Home operates as the backbone organization by coordinating the implementation of the HPHP Plan and leading the HPHP Network.
- Each CI partner, including the State Health Department, Universities, and community coalitions, engaged in mutually reinforcing activities.