Tales of a 3-STAR Community

Laura Graham
Sustainability Coordinator
City of Des Moines
Outline

Des Moines + Sustainability History
STAR Framework
Built Environment – Public Spaces Example
STAR Score
What’s Next for Des Moines
93% of Des Moines Residents believe protecting the environment is important to them.

89% believe the City of Des Moines should invest in environmental preservation.
The **STAR Community Rating System** is the first national framework and certification program for measuring community sustainability.
Parts of the Rating System

**GOALS**
Sustainability themes with comprehensive community-level aspirations

**OBJECTIVES**
A clear, desired outcome intended to move the community toward the goal

**OUTCOME MEASURES**
Community-scale results: the measurable aim or purpose of each Objective

**ACTION MEASURES**
The steps you are taking to move the needle towards sustainability
Achieve livability, choice, and access for all where people live, work, and play

<table>
<thead>
<tr>
<th>Objective</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE-1: Ambient Noise &amp; Light</td>
<td>5</td>
</tr>
<tr>
<td>BE-2: Community Water Systems</td>
<td>15</td>
</tr>
<tr>
<td>BE-3: Compact &amp; Complete Communities</td>
<td>20</td>
</tr>
<tr>
<td>BE-4: Housing Affordability</td>
<td>15</td>
</tr>
<tr>
<td>BE-5: Infill &amp; Redevelopment</td>
<td>10</td>
</tr>
<tr>
<td><strong>BE-6: Public Spaces</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td>BE-7: Transportation Choices</td>
<td>20</td>
</tr>
<tr>
<td><strong>Goal Area Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
A natural or semi-natural open area, including all publicly-accessible parks within a jurisdiction, regardless of ownership.
Provide ample parkland based on density as follows:

- **High**: 6.8 acres per 1,000 residents
- **Intermediate-High**: 7.2 acres per 1,000 residents
- **Intermediate-Low**: 13.5 acres per 1,000 residents
- **Low**: 20.3 acres per 1,000 residents

**Step 1: Determine population density category**

Pop density = Population / Land area

Des Moines pop: 206,599 (2011)

Land area: 49,408 acres

DM pop density: 206,599 / 49,408 = 4.2
Step 2: Determine park acreage / 1,000 residents

\[
\text{Total parkland (acres)} \times 1,000 \quad \text{current population}
\]

DM parkland >= current pop x threshold / 1,000

DM parkland >= 206,599 x 20.3 / 1,000

DM parkland >= 4,194 acres

Outcome: 6,222 acres of parkland or 30.5 acres of parkland per 1,000 residents
Demonstrate that housing units in the communities are located within a ½-mile walk distance based on pop density as follows:

• High or Intermediate-High: 85%
• Intermediate-Low or Low: 70%

Outcome: 67.4%
Des Moines: 67.4% of Housing Units within ½ mile of Public Spaces

Analysis Steps:
• Create public space entry points
• Create a single mode Network Dataset with streets
• Using Network Analyst, create a ½ mile service area around the entry points
• Select and clip all Census Blocks intersecting the service area
• Calculate the percent change in Census Block area
• Use the percent change to calculate the estimated Housing Units with ½ mile of public spaces
Demonstrate that 90% of households are within 3 miles of an off-road trail [Partial credit available for 70%]

**Outcome:** 100% of the city is within 3 miles of an off-road trail
LOCAL ACTIONS

Select from the following 10 actions

1. **X** Adopt a parks and/or open space plan that promotes a community-wide network of public spaces that provide recreational, transportation, and environmental benefits

2. **□** Conduct a study regarding the economic impact of parks and public spaces on the local economy to understand their contributions to community satisfaction and tourism

3. **□** Adopt regulatory strategies or development incentives to create, maintain, and connect parks and public spaces

4. **X** Adopt design guidelines for new public spaces and improvements to existing facilities to strengthen environmental benefits and provide visitor amenities

5. **X** Participate in a local or regional alliance working to improve and expand the community-based or regional park system

6. **X** Create an advisory board to regularly receive feedback from residents and organizations regarding planning, decision-making, and other issues affecting the quality and availability of parks and public spaces

7. **X** Host or partner with a volunteer program to support parks and public space maintenance

8. **X** Provide assistance for low-income users to access and use parks and public spaces through subsidy, scholarships, and discounts

9. **X** Host programs and events in parks and public spaces that bring the community together and encourage physical activity

10. **X** Consistently invest sufficient capital and operational funding to create and maintain parks and public spaces

Outcome: Option B - 71% of citizens surveyed in 2011
Public Spaces Score

Score – 14.4/15
<table>
<thead>
<tr>
<th>Built Environment</th>
<th>Climate &amp; Energy</th>
<th>Education, Arts &amp; Community</th>
<th>Economy &amp; Jobs</th>
<th>Equity &amp; Empowerment</th>
<th>Health &amp; Safety</th>
<th>Natural Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambient Noise &amp; Light</td>
<td>Climate Adaptation</td>
<td>Arts &amp; Culture</td>
<td>Business Retention &amp; Development</td>
<td>Civic Engagement</td>
<td>Active Living</td>
<td>Green Infrastructure</td>
</tr>
<tr>
<td>Community Water System</td>
<td>Greenhouse Gas Mitigation</td>
<td>Community Cohesion</td>
<td>Green Market Development</td>
<td>Civil &amp; Human Rights</td>
<td>Community Health &amp; Health System</td>
<td>Invasive Species</td>
</tr>
<tr>
<td>Compact &amp; Complete Communities</td>
<td>Greening the Energy Supply</td>
<td>Educational Opportunity &amp; Attainment</td>
<td>Local Economy</td>
<td>Environmental Justice</td>
<td>Emergency Prevention &amp; Response</td>
<td>Natural Resource Protection</td>
</tr>
<tr>
<td>Housing Affordability</td>
<td>Industrial Sector Resource Efficiency</td>
<td>Historic Preservation</td>
<td>Quality Jobs &amp; Living Wages</td>
<td>Equitable Services &amp; Access</td>
<td>Food Access &amp; Nutrition</td>
<td>Outdoor Air Quality</td>
</tr>
<tr>
<td>Public Spaces</td>
<td>Resource Efficient Public Infrastructure</td>
<td>Workforce Readiness</td>
<td>Poverty Prevention &amp; Alleviation</td>
<td>Natural &amp; Human Hazards</td>
<td>Safe Communities</td>
<td></td>
</tr>
<tr>
<td>Transportation Choices</td>
<td>Waste Minimization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Over $1 Million spent in Green Infrastructure over the last 3 years

100% of Des Moines residents live within 3 miles of an off-road trail

5 pieces of Public Art have been commissioned in the last year

Thriving local business community with 3 year annual sales increases

Recognized for exemplary performance in Historic Preservation

High quality City Parks, 71% of residents satisfied with DSM Parks
What’s Next?

Comprehensive Plan Update & Zoning Code Update

Green Infrastructure Policy & Tree Inventory

Partnership with ISU for Community Round Table on STAR

Partnership with DMU and WHO

Continue benchmarking with STAR