From EnergyStar to EcoDistricts

THE EVOLUTION OF SUSTAINABLE AFFORDABLE HOUSING

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Disconnected Urban Planning & Investment
Connected & Integrated Urban Planning & Investment
3 reasons to build sustainable affordable housing
Where we started: LEED-ND
Smart Location and Linkage

- Infill Development
- Preservation of Natural Habitat and Features
- Avoidance of Floodplains
- Brownfield Redevelopment
- Transit / Bicycle / Pedestrian Connectivity
- Connections to Jobs
Smart Site Location
Neighborhood Pattern & Design

- Walkable, Open, Shaded, Pedestrian-Friendly
- Compact, mixed-use and mixed-income
- Reduced parking and connected street grids
- Transit and bike-friendly
- Access to public space, recreation and schools
- Universal Design/Visitability
- Community Outreach & Local Food Production
Neighborhood Pattern & Design
Green Infrastructure & Buildings

- Certified buildings and energy/water efficiency in buildings and infrastructure
- Construction pollution prevention
- Water-efficient landscaping & stormwater management
- Building reuse / adaptive reuse
- Heat island reduction / solar orientation / light pollution reduction
- Renewable energy
- District heating and cooling
Green Infrastructure & Buildings
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What we did next: Green Homes
Building Enterprise Green homes

- Integrative Design
- Location & Neighborhood Fabric
- Site Improvements
- Water Conservation
- Energy Efficiency
- Materials Beneficial to the Environment
- Healthy Living Environment
- Operations and Maintenance
Use Life-Cycle Analysis to Set Priorities
## Life-Cycle Analysis Example

<table>
<thead>
<tr>
<th>Material Type</th>
<th>Initial Cost $/sq.ft</th>
<th>20-year Cost $/sq ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpet Sheet (including pad)</td>
<td>$2.75</td>
<td>$23.17</td>
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<tr>
<td>Vinyl Plank</td>
<td>$3.75</td>
<td>$9.35</td>
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<tr>
<td>Linoleum Sheet</td>
<td>$4.25</td>
<td>$10.57</td>
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<tr>
<td>Carpet Square</td>
<td>$6.00</td>
<td>$50.33</td>
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<tr>
<td>Wood (Engineered laminate)</td>
<td>$6.00</td>
<td>$10.48</td>
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<tr>
<td>Ceramic/Porcelain Tile</td>
<td>$6.50</td>
<td>$12.32</td>
</tr>
<tr>
<td>Linoleum Tile</td>
<td>$6.50</td>
<td>$16.13</td>
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<tr>
<td>Wood (Solid, prefinished)</td>
<td>$8.00</td>
<td>$15.16</td>
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<tr>
<td>Bamboo</td>
<td>$9.00</td>
<td>$17.04</td>
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<tr>
<td>Service</td>
<td>Unit</td>
<td>Cost</td>
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<tr>
<td>-------------------------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Cooling</td>
<td>$/kBTU</td>
<td>$1,021</td>
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<tr>
<td>Heating</td>
<td>$/kBTU</td>
<td>$3,881</td>
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<tr>
<td>Electric Base Load</td>
<td>kWh/yr</td>
<td>$4,788</td>
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<tr>
<td>Fossil Fuel Base Load</td>
<td>mmBtu</td>
<td>$3,000</td>
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</tbody>
</table>

**Total Spend:** $13,358
Our next frontier
EcoDistricts Protocol
RESULTS FRAMEWORK

RESULT: All families are stable and thriving

Priority Programming

Housing Stability

Community Understanding & Collaboration

Resident Engagement
Be results-based and data-driven.

Bring attention to and act on disparities, recognizing that race, class and culture impact outcomes.

Use oneself as an instrument of change to move a result.

Master the skills of “adaptive leadership.”

Collaborate with others.
NEARING A VISION: Themes

- "Our Ability to Endure"
- "Our Ability to Connect"
- "Our Ability to Build Wealth"
- "Our Ability to Protect"

**Sustainability**

**Connectivity**

**Productivity & Wealth Building**

**Safety**
Sustainability: Our Ability to Endure

• Beyond Bricks and Mortar
• Public Safety
• Physical and Mental Health
• Housing as a Social Determinant of Health
• Access to resources (fresh produce, transportation, etc.)
• Being Green
Green Garden Bakery-Minneapolis, MN

- Young people of color from Heritage Park - North Minneapolis who are driven by a passion to change the world.
- Urban farming and school based education.
- Healthy vegetable-based desserts for every diet (vegan, gluten free, sugar free), and markets them using sustainable practices.
- Pay-what-you-want.
- Donate proceeds back into the community.
- Community engagement at all ages.
- www.greengardenbakery.org