MILWAUKEE, WI

SUSTAINABLE NEIGHBORHOOD ASSESSMENT

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SUSTAINABLE NEIGHBORHOOD ASSESSMENT USING LEED-ND

Through the Sustainable Neighborhood Assessment Tool developed by Global Green USA, public officials and local government staff are using the LEED for Neighborhood Development (LEED-ND) rating system to determine ways for future development in their communities to achieve high levels of environmental, economic, and social sustainability. LEED-ND integrates the principles of smart growth, walkable urbanism and green building into the first national rating system for neighborhood design. In Milwaukee, Global Green used the tool as a means to evaluate existing conditions at Westlawn Gardens, plans to identify opportunities to augment future revitalization efforts in Westlawn West, and to develop recommendations to increase both halves of the neighborhood's level of sustainability.

ENVIRONMENTAL PROTECTION AGENCY

Technical Assistance provided by Global Green USA with the US Green Building Council to the Housing Authority of the City of Milwaukee was made possible through funding from the US EPA's Office of Sustainable Communities Building Blocks for Sustainable Communities Grant Program.

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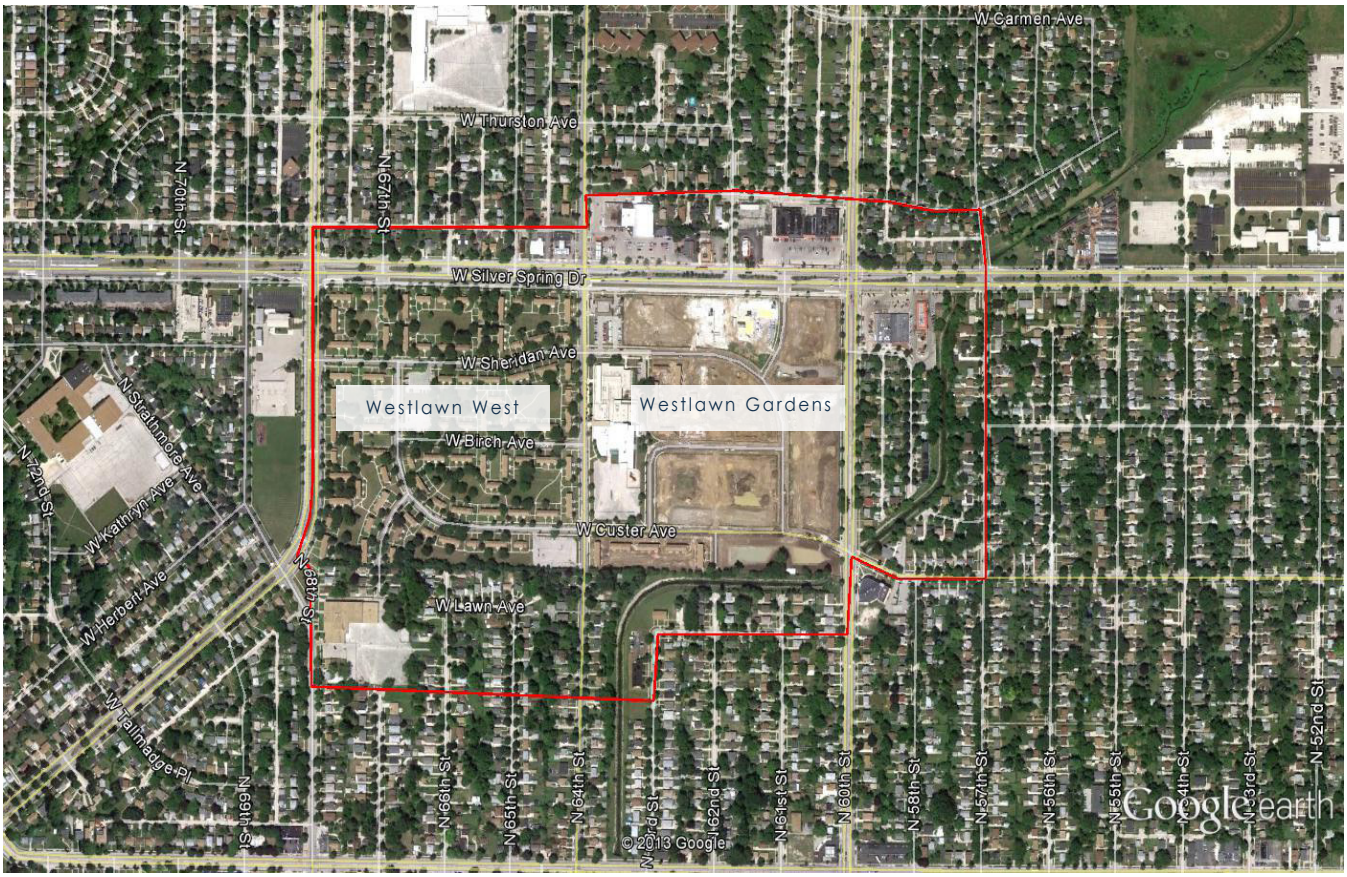
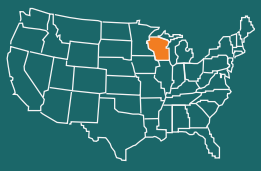


NEIGHBORHOOD LOCATION

MILWAUKEE



MILWAUKEE COUNTY

CITY OF MILWAUKEE

WESTLAWN NEIGHBORHOOD

SUSTAINABLE NEIGHBORHOOD ASSESSMENT PROCESS

The goal of the sustainable neighborhood assessment process is to identify topical and physical focus areas where policy or planning changes will promote sustainable urban development over the short and long term. To define these focus areas, Global Green USA and its team members utilize the Sustainable Neighborhood Assessment Tool, which is based on the LEED for Neighborhood Development (ND) criteria and checklist.

Prior to visiting the target neighborhood, the team conducts a thorough baseline review of existing planning documents, code requirements, and the stated city and stakeholder priorities for the neighborhood. An initial assessment is completed, with the credits in each of the three LEED-ND categories (Smart Location & Linkages, Neighborhood Pattern & Design, and Green Infrastructure & Building) marked as "achieved", "not achieved," "unknown," or "not applicable." Each credit is further ranked for the degree that it correlates to regional or local policy priorities, regulatory support, technical feasibility, market support, and stakeholder input. The checklist for the Westlawn West neighborhood is provided on pages 11-13.

This initial assessment serves as the point of departure for the Global Green team's three-day site visit and evaluation. During the visit, the team walks each block of the target neighborhood, photographs examples of positive qualities and areas for improvement, and conducts a series of meetings with targeted stakeholders, city staff, and representatives of relevant public agencies. Throughout the process, the preliminary checklist is edited and refined to incorporate the team's visual observations and contextual issues raised by stakeholders. The initial findings of the evaluation are grouped into broad categories noted on the next page in the grey box. These categories are presented and discussed at a community workshop. The dialogue and suggestions which emerge during the community workshop are incorporated into the final version of the checklist and this report.

The assessment process then enables the team to identify a series of recommendations to augment and increase the neighborhood's sustainability. The sustainability performance metrics are derived from the LEED-ND standards and serve as the technical foundation for the team's specific policy and planning recommendations. The intention of the recommendations is to suggest policy, planning, and development changes that will promote sustainablity within and around the Westlawn neighborhood, but specifically for the future phase of development.

The Global Green team's recommendations for the Westlawn are organized into four topic areas based on the team's review of the relevant regulations and plans for the neighborhood, a walking tour, and input from City staff and a number of community stakeholders. The following report contains recommendations in four areas (connections, commercial uses, energy efficiency and environmental infrastructure, and stewardship) to increase the overall level of sustainabilty in the neighborhood. Some recommendations could be implemented fairly quickly, while others will require long-term dedication and collaboration among public agencies and with private-sector partners.

NEIGHBORHOOD BACKGROUND & CATALYTIC PROJECT

The Westlawn neighborhood is geographically located approximately 7 miles northwest of downtown Milwaukee. It is at the northern most section of the "West Side" neighborhood plan area. Westlawn is the largest public housing development in the state of Wisconsin with 726 public housing units on over 75 acres. It was built in the 1950s as a superblock-physically and socially isolated from the surrounding community. Westlawn is located south of Silver Spring Drive, the neighborhood's main commercial corridor, between 60th and 68th Streets to the east and west, respectively. The development includes a school, neighborhood center, and many other resources that are well used. The Housing Authority of the City of Milwaukee (HACM) has been working for the past several years to redevelop Westlawn as a whole. This redevelopment effort includes the Westlawn Revitalization Master Plan, completed in 2009 by the HACM, Torti Gallas, Kindness Architectural and Planning, and multiple stakeholders. Upon completion of the Master Plan, the first phase of the redevelopment plan was implemented, starting with the adoption of the Detailed Planned Development in 2010. Phase 1 encompassed the eastern half of the development, in which 332 public housing units have been replaced with 250 affordable (low-income housing tax credit) units, 57 market-rate units which have not yet been built (19 home ownership and 38 rental), and 10,000 square feet of retail space that is currently unleased. Phase 1, also known as Westlawn Gardens (see map on page 3) was funded through Low-Income Housing Tax Credits (LIHTC) and was the largest LIHTC award in state history. Phase I broke ground in 2010 and is mostly complete with the exception of the market-rate units. Phase 1 is in the process of gaining LEED-ND certification.

The Westlawn Revitalization Master Plan also set the goals for the western portion of Westlawn, know as Westlawn West. The overarching goals of the redevelopment project are to:

- Reintegrate the neighborhood into the surrounding street grid and the broader community
- Establish a mixed-use neighborhood with retail and service uses on Silver Spring Dr.
- Create a mixed-income neighborhood with a variety of housing choices and opportunities for community interaction

Due to the successful redevelopment of Westlawn Gardens, the focus of Global Green's technical assistance is recommending sustainable features that can be implemented on the western half of the development project, in which the remaining 394 public housing units will be demolished and replaced with 342 affordable housing units, 115 market-rate units (89 rental and 26 home ownership), and retail space.

FOCUS AREAS

Related LEED-ND Credits

Stewardship

Category: Neighborhood Pattern & Design

- Access to Civic and Public Spaces (credit 9)
- Access to Recreation Facilities (credit 10)
- Community Outreach and Involvement (credit 12)
- Tree-Lined & Shaded Streets (credit 14)

Neighborhood Connections

Category: Smart Location & Linkages

- Bicycle Network & Storage (credit 4)

Category: Neighborhood Pattern & Design

- Walkable Streets (prerequisite & credit 1)
- Connected and Open Community (prerequisite 2)
- Street Network (credit 6)
- Mixed-Use Neighborhood Center (credit 3)
- Mixed-Income Diverse Communities (credit 4)
- Transit Facilities (credit 7)
- Access to Civic and Public Spaces (credit 9)
- Access to Recreational Facilities (credit 10)
- Community Outreach and Involvement (credit 12)
- Neighborhood Schools (credit 15)

Phase II

Category: Green Infrastructure & Building

- Certified Green Building (prerequisite & credit 1)
- Construction Activity Pollution Prevention (prerequisite)
- Building Energy Efficiency (credit 2)
- Water Efficient Landscape (credit 4)
- Min. Site Disturbance in Design and Construction (credit 7)
- Heat Island Reduction (credit 9)
- Solar Orientation (credit 10)
- On-Site Renewable Energy Sources (credit 11)
- District Heating and Cooling (credit 12)
- Infrastructure Energy Efficiency (credit 13)
- Wastewater Management (credit 14)
- Recycled Content in Infrastructure (credit 15)
- Solid Waste Management Infrastructure (credit 16)
- Light Pollution Reduction (credit 17)

NEIGHBORHOOD HIGHLIGHTS

NEW INVESTMENT

STORMWATER BMPS

NATURAL FEATURES

MATURE STREET TREES

COMMUNITY AMENITIES

PHYSICAL AND SOCIAL CONNECTIONS

Recommendation 1

RESPONSIBLE DEPARTMENTS

Depts. of City Development, Public Works, Traffic, Public Works Forestry, and Milwaukee Public Schools

Street connectivity is a key component of LEED-ND and is an issue of prime importance in Westlawn and the surrounding area. Neighborhoods with good connectivity typically have higher rates of walking, biking, and public transportation usage, along with lower transportation costs and rates of dependence on private vehicles. An increase in the physical usage of the public realm can improve public health and help to establish social connections as well, connections that are a fundamental element of a resilient community. For these positive attributes to emerge, communities must not only be internally connected but permeable to the surrounding neighborhood as well.

The physical connectivity and permeability at Westlawn is deficient due to the minimal connections to the south and the dangerous connections, where they exist, to the north. On the southern side of Westlawn, there is only one connection, at 64th Street. On the northern side, the new connection at 62nd street is clearly only intended for automobiles. This leaves safe pedestrian crossings almost 1300 feet apart, at the 60th and 64th Street signalized intersections. This distance is not conducive to walking, as evidenced by the numerous people the team witnessed dashing across traffic at the 62nd street crossing in order to patronize the existing commercial uses on the north side of the street. Even the signalized intersections at 60th and 64th streets have minimal pedestrian amenities.

The lack of connectivity to Lincoln Creek from Westlawn West is a significant missed opportunity. The creek, which is not fenced off on the southern side, could serve as an asset and a natural feature that adds to the sense of place making particularly in a neighborhood that has lost most of its other natural features, such as mature trees.

In seeking to foster social connections, neighborhood schools can be centers of pride and solidarity in a community. The existing and future investment in Westlawn provides an opportunity to change the perception of the neighborhood at large, a perception that could extend to the neighborhood schools and increase enrollment. Long term it should be a goal to attract both Westlawn residents and children from the surrounding area to attend local schools and foster parental involvement in school related activities.

Terminus of N. 66th Street looking north towards Westlawn West

1 PHYSICAL AND SOCIAL CONNECTIONS

Recommendations:

1. Remover the chain-link fence separating Lincoln Creek and Westlawn Gardens. Continue the Creek improvements that have been made downstream to this portion of the creek. Include the creek in the outdoor classroom/learning that will go on at the community gardens.

2. Construct a walking path and bridge over Lincoln Creek joining Westlawn Gardens to the neighborhood to the south. This should be done in conjunction with the build out of the parcels slated for market rate development.

3. Continue the design concept shown in the Westlawn Master Plan and connect 66th Street from the neighborhood to the south of Westlawn West all the way through to Silver Spring Drive with the goal of making this one of the most celebrated and well-designed streets throughout all of Westlawn. This can be accomplished by adhering to four major elements:

    - Save all the existing trees that would line the future extension of 66th Street to Silver Spring Drive so that mature shade trees frame the new street. Plant new and decorative or unique street trees between existing street trees, such that there is a street tree an average of every 40 feet on center

    - Stripe Class III bike lanes on the new street

    - Any residential development along this street should have minimal setbacks (no more than 15 feet)

    - Explore developing a small commercial node in conjunction with the park and community serving building proposed for the new corner of 66th Street and Custer Avenue

4. Create connections to the north across Silver Spring Drive by installing a stripped crosswalks with pedestrian activated flashers at the intersections of 62nd Street and any other intersecting north-south streets that penetrate the redeveloped Westlawn.

5. Incentivize the enrolment of Westlawn residents into Browning Elementary and other public schools within a half mile walking distance of the project's geographic center during the transition process when existing or new residents are choosing to return or locate to Westlawn West. Possible incentives include providing three months of free rent per family for students that attend neighborhood schools.

6. Support the recruitment of students from neighborhoods surrounding Westlawn to attend Browning Elementary and other nearby neighborhood school by including information and school administrator in activities on Westlawn property that target the broader community, such as the grand opening celebration, jazz festivals, community garden event, etc.

7. Start a walking school bus program for students within and surrounding Browning Elementary

Browning Elementary school at the intersection of 64th and W. Custer Avenue

COMMERCIAL AND MIXED USES

Recommendation 2

Within the LEED-ND rating system there are eight total points available for access to a diversity of land uses and the Westlawn redevelopment project is exemplary in this regard, earning six of those points in Phase I. The only missing points were in the mixed-use neighborhood centers credit, an area that is key to encouraging daily walking, biking, and transit use. If a neighborhood has this type of clustered uses within a safe and comfortable walking distance it can alleviate the financial burden of owning a car, thus reducing vehicle miles traveled (VMT), and ideally reducing automobile dependence.

The Global Green team believes that the Westlawn community can improve its commercial and retail options to better serve residents and the surrounding area during the second phase of the redevelopment. The team sees the integration of commercial and mixed-uses happening at the both the community scale and the market scale. At the community level, Westlawn West has an opportunity to target commercial uses that explicitly serve the needs of local residents and potentially be run as businesses by local residents. This will require identifying future commercial uses or tenants and fitting out the building(s) to meet the needs of the specific business.

Other community-based approaches could leverage local talents and assets. With Growing Power nearby and the forthcoming community garden, build commercial space within Westlawn West that builds upon the existing local food production movement. Promoting nutrition and the culinary industry can provide a neighborhood transformation experience unique to any other public housing developments, thus making the project more attractive to funders such as HUD's Choice Neighborhood Implementation Grant.

To pursue development opportunities that may help to diversify the existing use mix on Silver Spring Drive, the Global Green team recommends investigating New Market Tax Credits (NMTC). The Milwaukee Economic Development Corporation (MEDC) is a local certified Community Development Financial Institution (CDFI) established in 1971. The MEDC recently received $40 Million in 2012 NMTC allocations and will be using the allocations to fund among other things, real estate project which create quality permanent and construction jobs, finance minority business, create environmentally sustainable outcomes, and provide necessary goods and services for low-income community residents and low-income persons. This local expertise may provide an opportunity for the City and the Housing Authority to identify a developer interested in a redeveloping the existing commercial strip just north of Westlawn, located in an census tract eligible to use NMTCs. This effort would complement the Housing Authority's investment at Westlawn Gardens and potentially show leveraged investment for the Westlawn West Choice Neighborhood Implementation Grant application. Ultimately these strategies will increase the quantity and quality of commercial opportunities for the entire neighborhood surrounding Westlawn.

RESPONSIBLE DEPARTMENTS

Dept. of City Development,
Milwaukee Economic
Development Corporation,
Havenwoods Business
Improvement District

2 COMMERCIAL AND MIXED USES

Recommendations:

1. Engage with anchor institutions, such as Wisconsin Women's Business Initiative Corporation (WWBIC), in order to identify two businesses that could be housed in Westlawn West and construct commercial buildings that are suited specifically for those businesses. Possible examples include a Laundromat, corner store, bakery, or hair salon.

2. Develop a commercial kitchen in the southeastern most portions of Westlawn West so as to be in close proximity to the community garden. This kitchen should be programmed in coordination with Growing Power under the new partnership with the Housing Authority to further foster micro-enterprises in the nutrition and culinary industry for residents of Westlawn.

3. Meet with the Milwaukee Economic Development Corporation to discuss NMTC allocation, identified projects, including the potential commercial redevelopment north of W. Silver Spring Drive. Identify three local retail/commercial developers to contact to discuss the potential of the project.

One of two CITGO gas stations on opposite corners of W. Silver Spring Drive, a prime commercial location

Existing auto-oriented commercial uses serving Westlawn and the surrounding neighborhoods

Recommendation

ENERGY EFFICIENCY AND ENVIRONMENTAL INFRASTRUCTURE

3

RESPONSIBLE DEPARTMENTS

Community Development, Building, Engineering, Milwaukee Office of Environmental Services, & Public Works

By pursuing LEED for Neighborhood Development certification for Westlawn Gardens, the Milwaukee Housing Authority has already demonstrated a serious commitment to pursuing a broad sustainable development agenda, including a strong emphasis on energy and water efficiency in the project's new buildings. However, of the 29 points available in LEED-ND's Green Infrastructure and Buildings category, the project is only pursuing 5 points. This is one indication that in the next phase of Westlawn's overall redevelopment, more can be done to lower resource consumption and keep utility bills affordable.

The team believes the biggest opportunity for Westlawn West is underpinned by the scale of development and the fact that new subsurface infrastructure – such as water and sewer lines – will be installed. This allows for certain infrastructure strategies to be explored, strategies that are generally cost prohibitive when redevelopment is done on a building by building basis.

The scale of Westlawn West is also ideal for testing or targeting specific technologies to specific building types, much in the way that the Westlawn Gardens experimented with additional indoor air quality strategies on several homes. The scale of development also lends itself well to studying the effectiveness of standards, strategies, and technologies that are being explored at the city level and/or are subject to policy discussions statewide.

In this spirit, the recommendations below are designed not only to improve the energy and environmental performance of Westlawn West but also towards advancing the idea that Westlawn as a whole could become a place-based implementation focus of the City of Milwaukee's new sustainability plan. Such a focus could eventually drive additional resources to the project from a wider variety of sources.

Sewer waste heat recovery

3 ENERGY EFFICIENCY AND ENVIRONMENTAL INFRASTRUCTURE

Recommendations:

1. Install a solar thermal hot water system on any building with a central hot water system and/or common laundry rooms. In addition to annual rebate allocations for multifamily properties, the Milwaukee area has an active solar thermal manufacturing base, organized in the Milwaukee Metro Solar Hot Water Business Council, making corporate partnerships a viable financing mechanism.

2. Explore the viability of a block-level or site-wide wastewater heat recovery system. In a climate dominated by heating loads, the energy that has been used to heat hot water can also help satisfy space heating needs; standard concrete sewage pipes are available with heat pump hook-ups from companies such as Renewable Resource Recovery Corporation and Rainbow Concrete. These types of systems are only cost-effective when new sewer infrastructure is being installed.

3. Apply the 2012 IECC energy requirements to all new low-rise residential construction. In addition to meeting LEED-ND energy efficiency requirements and producing significant life-cycle cost savings (see table), application of the 2012 IECC energy code over a number of building types would provide valuable input to state policy-makers and the Wisconsin State Energy Office as they meet a number of upcoming federal deadlines to consider updating the state's residential energy efficiency code.

4. Conduct a Solar Photovoltaic Power Purchase Agreement feasibility study for the Westlawn West site. While third-party ownership is not currently allowed by Wisconsin state law, a feasibility study could both advance the efforts to change the law by showing what is possible and prepare the Housing Authority to implement solar photovoltaics on a large scale if and when the law does change. Industry partners and environmental advocates may be able to fund such a study.

Table A.7. Life-Cycle Cost Savings Compared to the Wisconsin State Code

Code	Zone 6	Zone 7	State Average
2009 IECC	$2,359	$3,600	$2,484
2012 IECC	$10,159	$16,134	$10,733

Recommendation

ENVIRONMENTAL STEWARDSHIP

4

RESPONSIBLE DEPARTMENTS

Dept. Public Works
Forestry, HACM,
Westlawn Property
Management

Large scale construction activities can often be hard on the land no matter how environmentally-friendly the resulting project turns out to be. This was certainly the case at Westlawn Gardens, where dozens of mature trees were sacrificed for a forward-looking plan that introduced a connected street grid and employed numerous stormwater best management practices.

There are some concerns that one by-product of the mass removal of mature trees is the powerful message that it sends regarding stewardship, not only of the natural environment but of the built environment as well. In trying to counteract anti-social behavior such as the recent vandalism at the new Kaboom! Playground in Westlawn West, symbols of environmentally ethical behavior matter, along with any direct environmental benefits they bring. Promoting stewardship of natural features can have important social benefits and a value shift in this direction among residents will certainly make the future exposure and incorporation of Lincoln Creek into the project a more successful undertaking.

As planning and design refinements for Westlawn West takes place, opportunities exist for the Housing Authority to demonstrate increased levels of environmental stewardship and incorporate existing residents in those activities. Within the Westlawn West site, the Global Green team has counted at least 19 trees over 36" in diameter and at least an equal number that stand between 28" and 35" in diameter. A number of these existing trees do not pose serious conflict with the intent of the Westlawn Master Plan and efforts should be made to save as many of them as possible.

Residents, particularly local youth and seniors, can be both short term and long term allies in this effort. Paying them to be custodians of trees designated for preservation is a way to keep resources in the community and jump-start a transition to a conservation ethic within the community. And if successful, this engagement could extend into business opportunities for local residents in landscaping and tree maintenance.

Comparison photos showing the natural asset, and visual impact, of existing street tree in Westlawn West verses new street trees in Westlawn Gardens

4 ENVIRONMENTAL STEWARDSHIP

Recommendations:

1. Develop a tree preservation strategy, with a defined approach and measurable outcomes. LEED-ND GIB Credit 7 is an excellent approach, but its performance requirements may be too aggressive for Westlawn West. Instead, the next phase of the redevelopment should follow the credit's overall structure and approach, which calls for surveying existing trees for size and health by an ISA-certified arborist and then setting percentage goals for preservation of trees of a certain size range.

2. Once specific trees have been identified for preservation, hire local youth and/or seniors to "adopt-a-tree" and become responsible for its protection. The replacement value of each preserved tree is between $500 and $2500 depending on species, size and health. Plowing these cost savings into the adopt-a-tree program should make the program self-sufficient.

3. Residents who show particular promise in the adopt-a-tree effort should be connected with tree maintenance/arborist educational opportunities.

4. Opportunities for starting a resident-owned landscape maintenance business should be explored with a local business incubator. To properly incubate this local business, the current landscaping contract for Westlawn Gardens should be transferred to the local business and a storage facility for tools and equipment should be identified or constructed as part of the next phase of development.

Kaboom! Park in Westlawn West that was improved with major community support

SUSTAINABILITY ASSESSMENT

LEED-ND Checklist

The Sustainable Neighborhood Assessment tool includes an annotated LEED-ND checklist created by Global Green. It is a key component of the process used to document and compare the assessment area against the LEED-ND prerequisites and credits. Each credit within the three credit categories (Smart Location & Linkage, Neighborhood Pattern & Design, and Green Infrastructure & Building) is marked as "achieved," "not achieved," "unknown," or "not applicable" under baseline conditions. Additional analysis has been done based on local planning policy, regulatory support, technical feasibility, market support and stakeholder input. The preliminary checklist analysis was edited and augmented during our site visit, stakeholder meetings, and after the community workshop. This information was then translated into an overall assessment of sustainable neighborhood performance.

LEED for Neighborhood Development: Project Assessment Checklist

WESTLAWN WEST

MILWAUKEE, WISCONSIN

Baseline Conditions	Local/Regional Planning Priority	Regulatory Support	Technical feasibility	Market Support	Neighborhood Need/ Stakeholder Input		
						Smart Location and Linkage	
✔						P 1	**Smart Location**
✔						P 2	**Imperiled Species and Ecological Communities**
✔						P 3	**Wetland and Water Body Conservation**
✔						P 4	**Agricultural Land Conservation**
✔						P 5	**Floodplain Avoidance**
✔						C 1	**Preferred Locations**
–						C 2	**Brownfield Redevelopment**
✔						C 3	**Locations with Reduced Automobile Dependence**
✔						C 4	**Bicycle Network**
✘						C 4	**Bicycle Storage**
✔						C 5	**Housing and Jobs Proximity**
✔						C 6	**Steep Slope Protection**
✔						C 7	**Site Design for Habitat or Wetland and Water Body Conservatior**
✘						C 8	**Restoration of Habitat or Wetlands and Water Bodies**
✘						C 9	**Long-Term Conservation Management of Habitat or Wetlands ar**

Legend	
✔	Achieved
?	Unkown
✘	Not Achieved
–	Does not exist/ NA
	Explicit support/ no technical issues
	Lack of explicit support/ minor technical issues
	Opposition/ signficant technical issues
	Not Applicable

SUSTAINABILITY ASSESSMENT

LEED-ND Checklist

LEED for Neighborhood Development: Project Assessment Checklist

WESTLAWN WEST
MILWAUKEE, WISCONSIN

Baseline Conditions	Local/Regional Planning Priority	Regulatory Support	Technical feasibility	Market Support	Neighborhood Need/ Stakeholder Input

	Legend
✔	Achieved
?	Unkown
X	Not Achieved
–	Does not exist/ NA
	Explicit support/ no technical issues
	Lack of explicit support/ minor technical issues
	Opposition/ signficant technical issues
	Not Applicable

Neighborhood Pattern and Design

✔	P 1	**Walkable Streets- Principal Entries**
✔	P 1	**Walkable Streets- Building Height to Street Width Ratio**
✔	P 1	**Walkable Streets-Continuous Sidewalks**
✔	P 1	**Walkable Streets-Garage and Service Bays**
✔	P 2	**Compact Development**
✔	P 3	**Connected and Open Community**
✔	C 1a	**Walkable Streets : Facades and Entries**
✔	C 1b	**Walkable Streets: Ground-Level Use and Parking**
X	C 1c	**Walkable Streets:Design Speed for Safe Ped and Bike Travel**
✔	C 1d	**Walkable Streets: Sidewalk Intrusions**
✔	C 2	**Compact Development**
✔	C 3	**Mixed-Use Neighborhood Centers**
✔	C 4	**Mixed-Income Housing**
✔	C 4	**Housing Diversity**
X	C 5	**Reduced Parking Footprint**
X	C 6	**Street Network**
X	C 7	**Transit Facilities**
X	C 8	**Transportation Demand Management**
✔	C 9	**Access to Civic and Public Spaces**
✔	C 10	**Access to Recreation Facilities**
✔	C 11	**Visitability and Universal Design**
✔	C 12	**Community Outreach and Involvement**
✔	C 13	**Local Food Production**
✔	C 14	**Tree-Lined and Shaded Streets**
✔	C 15	**Neighborhood Schools**

SUSTAINABILITY ASSESSMENT

LEED-ND Checklist

LEED for Neighborhood Development: Project Assessment Checklist

WESTLAWN WEST
MILWAUKEE, WISCONSIN

Baseline Conditions	Local/Regional Planning Priority	Regulatory Support	Technical feasibility	Market Support	Neighborhood Need/ Stakeholder Input

	Legend
✔	Achieved
?	Unkown
X	Not Achieved
–	Does not exist/ NA
	Explicit support/ no technical issues
	Lack of explicit support/ minor technical issues
	Opposition/ signficant technical issues
	Not Applicable

Green Infrastructure and Buildings

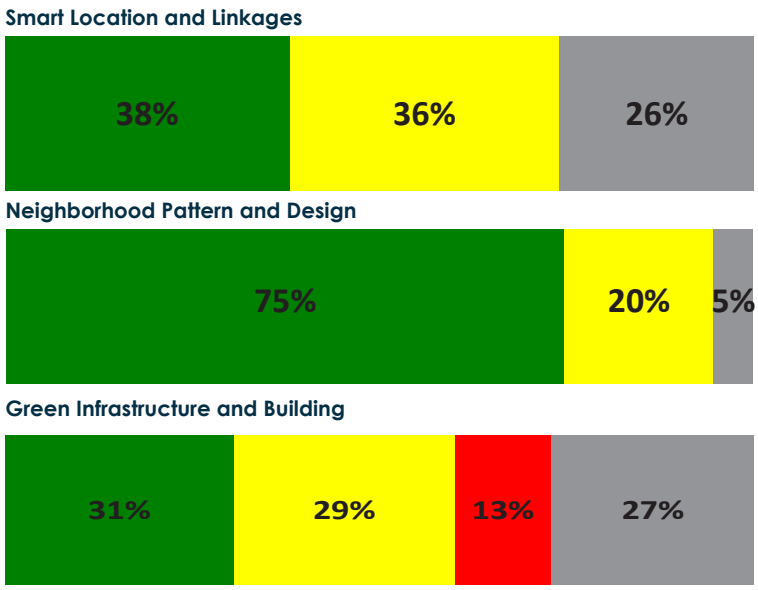
P 1	**Certified Green Building**
P 2	**Minimum Building Energy Efficiency**
P 3	**Minimum Building Water Efficiency**
P 4	**Construction Activity Pollution Prevention**
C 1	**Certified Green Buildings**
C 2	**Building Energy Efficiency**
C 3	**Building Water Efficiency**
C 4	**Water-Efficient Landscaping**
C 5	**Existing Building Use**
C 6	**Historic Resource Preservation and Adaptive Reuse**
C 7	**Minimized Site Disturbance in Design and Construction**
C 8	**Stormwater Management**
C 9	**Heat Island Reduction**
C 10	**Solar Orientation**
C 11	**On-Site Renewable Energy Sources**
C 12	**District Heating and Cooling**
C 13	**Infrastructure Energy Efficiency**
C 14	**Wastewater Management**
C 15	**Recycled Content in Infrastructure**
C 16	**Solid Waste Management Infrastructure**
C 17	**Light Pollution Reduction**

SUSTAINABILITY ASSESSMENT

LEED-ND SCORE

Based on in-field assessment, planning document review, various stakeholder meetings, and the community workshop, the Global Green team estimated which LEED-ND credits were "Likely," "Possible with Effort," "Unlikely" to be achieved, or "Not Applicable," considering existing conditions, technical feasibility, policy readiness, financial burden, and applicability to neighborhood conditions. The bar graph summary identifies the overall level of sustainable neighborhood performance for the Westlawn West development. A high percentage of credits fall into the "Likely" category, as the development builds on the experience and design of phase I- Westlawn Gardens. Of the remaining credits, a significant percentage fall within the "Possible with Effort" category, which shows the large potential for improving the sustainability of the second Phase of the development specifically by pursuing the high-priority recommendations described in this report.

The summary table below shows the numeric values extrapolated from the percentage of credits identified as "Likely" below. While these values do not correlate exactly to specific LEED-ND points, they provide an estimate of the neighborhood's potential level of future achievement. It should be noted that this is a rough measure of performance and not an exact representation of the project's level of possible certification. It should also be noted that all the prerequisites need to be achieved if certification will be pursued.



Point Requirements for LEED-ND Certification

Certified:	40-49
Silver:	50-59
Gold:	60-79
Platinum:	80+

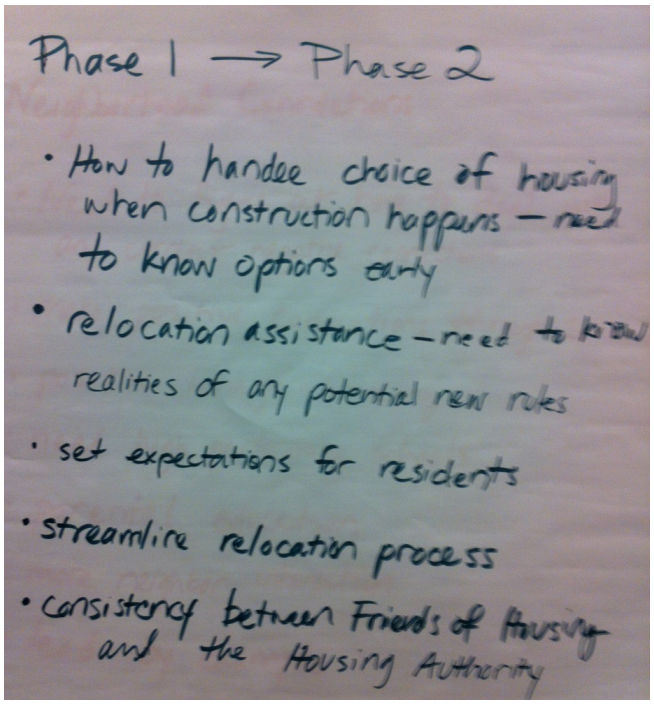
MILWAUKEE, WI

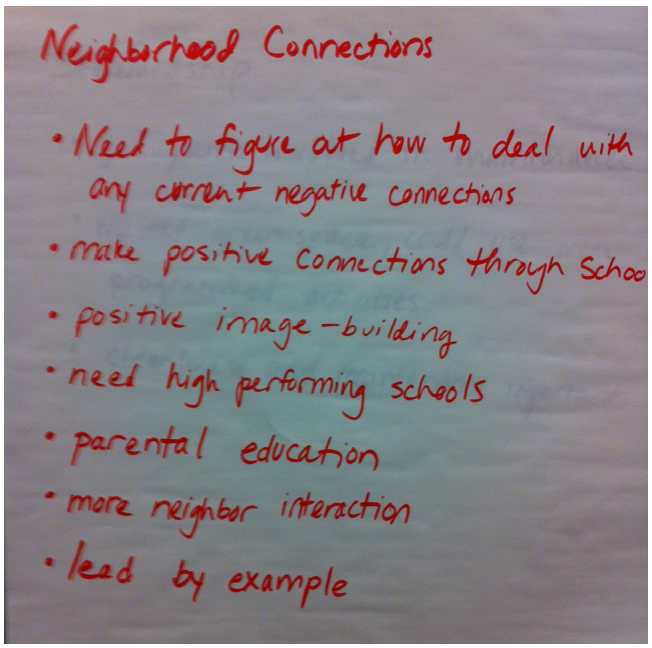
LEED for Neighborhood Development

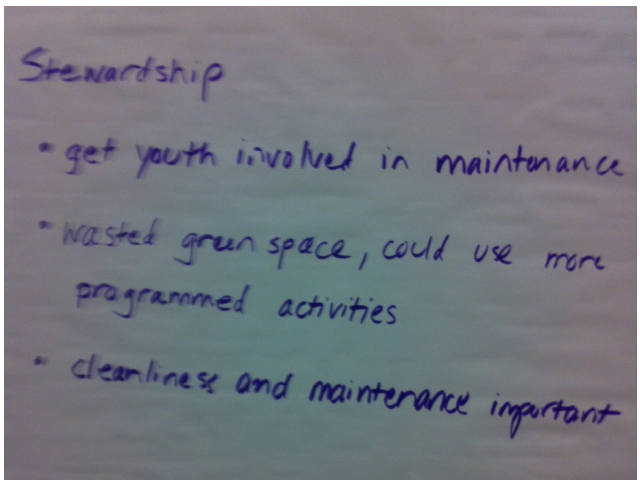
	Total	Achievable	Possible
Smart Location and Linkage	27	10	10
Neighborhood Pattern and Design	44	33	9
Green Building and Infrastructure	29	9	9
	100	52	27

WORKSHOP NOTES

Community Input







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