

COMPARISON:

NGBS Green vs. LEED ND

Abstract

The 2020 National Green Building Standard (NGBS) Chapter 4 Site Design and Development is a more robust and rigorous rating system than LEED 2018 for Neighborhood Development (LEED ND) that is recognized, on par or more stringent, as a green building rating system for residential projects at the federal, state, and local level. This report examines the differences and advantages of NGBS Chapter 4 Site Design and Development.

Summary

This analysis was performed by Home Innovation Research Labs, which serves as certification agency for the **ICC-700 National Green Building Standard (NGBS)**. Home Innovation Labs is a nearly 60-year-old, internationally recognized, accredited product testing and certification laboratory located in Maryland. Our work is focused on the residential construction industry, and our mission is to improve the affordability, quality, performance, and durability of housing by helping overcome barriers to innovation. Our core competency is as an independent, third-party product testing and certification lab, making us uniquely suited to administer a green certification program for residential buildings.

This report seeks to compare the LEED Neighborhood Development (LEED ND) rating system and certification with NGBS Green Land Development Certification. While the rating systems are not identical, there are significant parallels between the two programs. Most of

the green development practices within the NGBS Chapter 4 Site Design and Development and LEED ND overlap, making the two rating systems equivalent in scope and intent.

Evaluating certification equivalency requires a comparison of four elements of the programs:

1. The rating system's goals
2. The process for the development and maintenance of the rating system
3. The rating system's substantive requirements
4. The rigor of the verification and certification process and procedures

A comparison of these four elements demonstrates that NGBS Green Land Development Certification is at least equivalent to LEED ND certification.

Both the NGBS and LEED ND rating systems promote and recognize high-performing, sustainable communities that offer a variety

of uses and unique places for residents to live, work, and play. Both systems followed a consensus-based process for their development, although only the NGBS has won approval as an ANSI-approved American National Standard. This means the NGBS development process is reviewed and approved by ANSI, an independent third-party, to ensure all stakeholders' due process rights were met through stringent requirements for a collaborative, publicly open, balanced, and consensus-based review, and approval process. There is no higher validation of a standard's development process or the resultant standard than approval by a standard developing organization such as ANSI.

NGBS Green Land Development Certification is a great tool for builders and developers to utilize to meet Environmental, Social, and Governance (ESG) goals for their residential real estate portfolio. The Land Development Certification has many practices that can help meet environmental and social goals including an emphasis on health and wellness. Both the NGBS Land Development and LEED ND rating systems award certification points to land developments that incorporate: (1) local food production; (2) development density; (3) and walkability. The NGBS takes it a step further and awards for: (4) community composting; (5) insect mitigation; and (6) smoking prohibitions. Both certification programs are well aligned with the GRESB Framework and thus can help contribute toward a higher GRESB score and ranking, with practices from Chapter 4 Site Design and Development of the NGBS completely satisfying indicator DRE2 Site Selection Requirements ([download a full breakdown](#)).

Although there are differences in structure and compliance criteria, the NGBS Chapter 4 Site Design and Development section and LEED ND are functional equivalents. Since it was developed, the NGBS has been consistently considered as on par, or more stringent, than LEED as a green building rating system for

residential projects at the federal, state, and local level. For example:

- **On the federal level, HUD recognizes the NGBS and LEED as equivalents.** In its 2023 funding notice, Allocations for Community Development Block Grant Disaster Recovery and Implementation of the CDBG-DR Consolidated Waivers and Alternative Requirements Notice, HUD cited the NGBS as an acceptable green standard for reconstruction efforts along with LEED. [Docket No. FR-6368-N-01]
- **Congress declared NGBS or LEED as equally suitable for military housing construction and renovation.** [Public Law No: 113-291, Section 2807]
- **Along with nearly 30 state recognized Qualified Allocation Plans, federal agencies such Fannie Mae and Freddie Mac also recognize the NGBS by name as on-par, or more stringent to, other residential green rating systems such as LEED.**
- **States such as Maryland and New York, as well as several local jurisdictions, provide financial incentives for residential buildings certified to either the NGBS or LEED.**
- **Local jurisdictions – e.g., Dallas, Texas; Baltimore, Md.; Miami, FL; and Anne Arundel and Howard Counties in Maryland – have deemed the NGBS as equivalent to LEED for their local incentives or mandates.**

To date, not a single jurisdiction has refused to recognize the NGBS as an alternative compliance path for any regulatory or incentive program where we have asked them to make an equivalency decision. For a more complete listing of where the NGBS has been recognized, visit www.homeinnovation.com/NGBSGreenIncentives

Because LEED was first to market, an accomplishment that we recognize and commend, Home Innovation is typically asked

to answer the question, “Is the NGBS equivalent to LEED?” As noted above, jurisdictions when asked inevitably to deem the NGBS and LEED as substantive equivalents regarding requirements as **green rating systems**. However, the two should also be compared regarding equivalency as **certification programs**. In this regard, we assert that NGBS Green is the most robust and rigorous certification program available on the market for green and sustainable residential construction and development as a result of its status as an ANSI-approved consensus standard administered by an accredited third-party organization with nearly 60 years expertise in residential construction.

Sustainability Goals

Both the NGBS and LEED ND are intended to promote sustainable communities and reduce the impacts of land development. Development projects that incorporate practices, such as smart location strategies, green building and infrastructure techniques, and efficient neighborhood and building design, have an opportunity to reduce their environmental footprint, and even potentially enhance the quality of life for those living in and around the new communities.

Importantly, the NGBS Land Development certification is available for any land development or community that has at least one residential building. There is no limit or restriction on the uses of other buildings within that community.

The NGBS is designed as a comprehensive green rating system for residentially-used buildings.

The NGBS addresses land development requirements in Chapter 4-Site Design and Development. The remaining NGBS sections are applicable to building construction and renovations. In contrast, LEED ND is designed specifically for land development, requiring

buildings seeking certification within a LEED ND development to use another green rating system, such as LEED for Homes or LEED for New Construction (NC).

Both NGBS Chapter 4 and LEED ND are structured around three major sections/themes:

1. Smart Location
2. Neighborhood Pattern & Design
3. Green Infrastructure & Buildings

Within each of these major sections, the rating systems recognize best practices for sustainable development. Most green practices overlap.

While most content is shared, there are some differences in the approach taken by each rating system. However, this difference in approach does not change the outcome with respect to incorporating practices such as smart location strategies, green building and infrastructure techniques, and efficient neighborhood and building design into land development.

The NGBS's philosophy is to encourage implementation of the best environmental practices for land development that integrate, complement, and uplift local planning and zoning. The NGBS provides planners and developers with flexibility to recognize regional differences in development patterns, housing types, and preferences; allow innovative approaches and techniques; and consider the vast array of cultures, family living and housing styles, and business and retail needs that may need to be addressed within an individual community. The 2020 NGBS includes additional practices related to public health and safety, allowing the Standard to promote flexibility, sustainability, and community wellness.

Conversely, where the NGBS is focused on the intent of the green practices, LEED ND works more like a design and zoning standard. Consider, for example, the concept of walkable streets. In LEED ND, the rating system uses 1.5 pages to describe what is meant by a “walkable street” and includes very specific requirements

regarding building frontage, height-to-street-width ratio, and detailed sidewalk requirements. While LEED ND states that it is not intended to replace zoning codes or comprehensive plans, such prescriptive design requirements are more traditionally the purview of local jurisdictions that have a better understanding of the form of local development that they wish to promote through local regulations. In contrast, the NGBS provides points toward certification for “walkways, bikeways, street crossings, and entrances designed to promote pedestrian activity.” The NGBS is focused on developers ensuring that residents can walk and bike within and throughout the neighborhood to areas where they live, work, and play without prescribing specifically how that is accomplished. Some NGBS Green neighborhoods attain points toward certification using bike trails and pedestrian walkways. Other NGBS Green neighborhoods earn points by more traditional sidewalks and bike lanes on streets. A few NGBS Green neighborhoods provide all these amenities as choices for the residents. The NGBS’s goal isn’t the specific design of the street; rather, it is getting people out of their cars whenever possible. The NGBS language is clear, straightforward, and performance oriented. Because its specific design details are flexible, the NGBS is structured to better support and uplift local zoning requirements.

Another difference between the NGBS Site Selection Chapter and LEED ND is applicability of the rating systems to a variety of land developments. The NGBS is more flexible than LEED ND, because, while it promotes a range of sustainable land development practices, it does not set mandates that favor one specific development form (e.g., neo-traditional urbanism) over others. LEED ND singularly defines sustainable development as high-density grid development. This non-negotiable prerequisite makes LEED ND inappropriate and impractical for many communities in the United States. By contrast, the NGBS takes into consideration the variety of communities that

could benefit from incorporating green and sustainable development practices into land use decisions, without being located within a dense urban setting. The NGBS promotes connectivity, density, various land uses, multi-modal transportation, and environmentally sensitive design and construction practices through its extensive point-based system. It was the belief of the NGBS Consensus Committee, which was confirmed through the NGBS’s extensive public comment process, that there is value to having a green development rating system that could help improve the sustainability of all residential developments – big and small; rural, suburban, and urban; neo-traditional developments à la Andres Duany, or those in the style of Ian McHarg who used ecology as a basis for design and planning. LEED ND limits its applicability largely to developments with relatively high densities that are extensions of existing neighborhoods, limiting its scope and utility.

Process for Development and Maintenance of the Rating System

The NGBS is the first and only residential green rating system to undergo the full consensus process and receive approval from the American National Standards Institute (ANSI) as an American National Standard. ANSI approval is important because it is a third-party confirmation of balance, representation, openness, consensus, and due process in the standard’s development process. The Consensus Committee that developed the first version of the NGBS (2008) was comprised of 42 individuals representing a variety of government agencies, municipalities, home building industry stakeholders, and nonprofit organizations, including the US Green Building Council (USGBC), which administers LEED. The 2015 and 2020 NGBS versions followed similarly rigorous and inclusive development processes. The 2024 NGBS is currently under development and is expected to be submitted for ANSI review next year.

USGBC’s rating system development process suggests a consensus-based approach to development of its LEED rating system, but it is not a true consensus standard. To participate in the LEED development process, one must be a USGBC member. This factor would disqualify LEED from being accepted as a true consensus standard, as the development process is not open. Since 2006, USGBC has

been an approved ANSI-accredited Standards Development Organization (SDO) with an approved ANSI Process that allows for a broad, consensus-oriented development process that requires formal responses to all comments submitted. However, despite being accredited and afforded credibility by the ANSI brand, USGBC has not followed the ANSI process in its LEED development.

Certification Compliance Requirements

Both the NGBS and LEED have mandatory practices that must be completed to attain certification at any level. LEED ND has a total of 12 prerequisites; the NGBS has three mandatory practices.

Both rating systems provide four certification levels. NGBS land developments can attain One Star, Two Stars, Three Stars, or Four Stars. LEED ND offers Certified, Silver, Gold, and Platinum.

The NGBS requires far more points to attain certification at any level (95 points compared to LEED’s requirement for 40), but also provides a far greater selection of green development practices so that developers can select the practices that make the most sense for the location, scale, and type of development [See Tables below].

NGBS Certification Level Points

	1 Star	2 Stars	3 Stars	4 Stars
Points	95-121	122-148	149-175	176+

LEED ND Certification Level Points

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

Certification Criteria: Smart Location & Linkages

The NGBS and LEED ND include many identical practices or practices that are similar in intent. Both rating systems include practices related to: (1) Avoiding environmentally sensitive areas; (2) Developing near existing infrastructure and transportation options; and (3) Designing for natural resources and wildlife protection.

The NGBS includes several practices related to project management and team formation; there are no corresponding LEED equivalents. These practices serve to help developers manage and execute the environmental practices outlined in their design documents. The inclusion of these unique practices further highlights the fact that the NGBS is performance-based, not a design standard.

Certification Criteria: Neighborhood Pattern & Design

Both rating systems recognize communities that are: (1) Walkable; (2) Connected to transit facilities; (3) Compact; and (4) Mixed-use. Both rating systems also recognize communities with shade trees and community gardens for local food production.

Most of the LEED ND practices for this section have corresponding practices in the NGBS, with three exceptions - the NGBS does not have practices for land developments specifically related to mixed-income communities; visitability and universal design; and neighborhood schools. The NGBS instead addresses visitability, universal design, and walkable community resources at the building level.

Certification Criteria: Green Infrastructure & Buildings

The purpose of this section is to reduce the environmental impact of a community’s-built infrastructure through established criteria for buildings, landscaping, stormwater

management, and driveways/parking. Over half of the LEED ND credits in this section have an NGBS equivalent.

Although LEED ND is a land development rating system, many practices are focused on buildings that will be eventually constructed on the development. In contrast, Chapter 4 of the NGBS specifically covers only the land development activities planned for the site. The NGBS land development green practices and certification are separate from the NGBS building certification.

Certification Criteria: Innovation and Design Process

LEED ND’s Innovation Credit is wide open for applicants to submit what they believe will meet the credit’s intent. The NGBS is more specific in what are considered innovative practices regarding green development. The NGBS allows the Adopting Entity to permit alternative compliance methods should a green practice meet the intent of the NGBS, however, to date Home Innovation has not approved any alternative compliance methods or practices that are not found in the 2020 NGBS.

NGBS Green certification is more thorough than LEED in that every project seeking NGBS Green certification must have an Accredited Verifier guiding the project through the various inspections and certification. [See page 7.] Section 402: Project Team, Mission Statement, and Goals serves a similar function to the LEED practice. It encourages coordination across qualified professionals to ensure that the goal of certification is met. While NGBS includes practices related to project management within the Site Design and Development chapter, this is in addition to the NGBS Green Verifier required for each project seeking certification.

In contrast, LEED ND has a dedicated section for Design Process. LEED ND awards one point if a LEED Accredited Professional is on the project design team but it is not a requirement. This practice is meant to encourage team

integration and streamline the application/certification process, not for any specific sustainability benefit related to a project’s design.

Certification Criteria: Regional Priority

LEED ND offers credits for green development practices that are a regional priority for a given location. The NGBS does not allow credits for practices that have a specific regional priority; However, as explained above, NGBS provides for greater flexibility to account for the diversity found within local jurisdictions. We find that developments incorporate those green development practices from the NGBS’s broad array of practices that make the most sense for the project’s geographic location.

Verification Requirements

NGBS Green certification requires independent, third-party verification. To be NGBS Green Certified, every green project is subject to independent, in-field verification. Developers must hire an Accredited NGBS Green Verifier who is responsible for plan review and visual inspection of the green practices in the development.

Home Innovation Labs qualifies, trains, and accredits building professionals to provide independent verification services for builders and developers participating in our NGBS Green certification program. Verifiers must first demonstrate they possess experience in residential construction and green building before they are eligible to take the verifier training. Potential verifiers must complete thorough training on exactly how to verify NGBS practices, then pass a written exam before receiving Home Innovation accreditation. Verifiers renew their accreditation annually.

Home Innovation reviews every inspection report to ensure national consistency and accuracy in the verification reports. Further, we regularly audit our verifiers and the verifications they perform as part of our internal quality assurance program.

LEED ND has a documentation-based verification program that does not require any on-site, independent verification that green practices were implemented as designed.

Comparison: Verification Requirements

NGBS Site Development	LEED ND
Every NGBS project is required to be inspected by a third-party, accredited NGBS Green Verifier. Self-certification is not permitted. Practices must be visually inspected by an independent verifier to receive points after the land development activities are complete.	LEED ND certification is a documentation-based verification program. Each LEED rating system and version thereof has unique documentation requirements to complete a LEED certification application. Within the LEED certification application, a series of required documents, attestations, data, or other information must be indicated in order to demonstrate the satisfaction of each minimum program requirement (MPR), prerequisite, and attempted credit.

Certification Activity

NGBS Site Development			LEED ND		
Certification Level	Certified Projects	Certification Percentage	Certification Level	Certified Projects	Certification Percentage
1 Star	1	4%	Certified	8	16%
2 Stars	4	14%	Silver	15	30%
3 Stars	7	25%	Gold	24	48%
4 Stars	16	57%	Platinum	3	6%
	28 ¹			50 ²	

¹ Currently, there are 28 land developments that have earned NGBS Green Certification with certification dates from 5/18/2009 to 4/25/2023

² There are currently 50 neighborhood developments that have received LEED ND: Plan Certification with certification dates from 9/28/2011 to 5/12/2023.

Regardless of size or location, all communities are eligible to be certified under the NGBS if some of the parcels will eventually be developed with at least one residential building. Certification of the land development is completely independent of the certification of the buildings ultimately constructed within the development, although certification of the land development may help residential buildings obtain points toward certification.

A major emphasis in NGBS Green certification is that careful planning and education leads to a more holistic and efficient development. The Land Development Certification was designed to be inclusive of all development styles and densities, from dense urban developments to more rural single-family neighborhoods, enabling all residential developers who implement sustainable development practices to earn certification. This pragmatic approach recognized that regardless of location, any proposed development could have a smaller environmental impact if best green practices were incorporated.

Over 57% of NGBS Green Land Certifications (see above) awarded are Four Stars, proving

the efficacy of sustainability and resilience as focal points before ground break, the various resources the NGBS offers, the wide range of above code practices, and the adaptability to all forms of residential construction. While Land Development Certification is completely independent of the home or multifamily building certification, many practices that earn points toward land development certification can help buildings earn certification. Additionally, Land Development Certification is free when the deed covenant requires all eligible buildings to seek NGBS Green Certification.

LEED ND offers two similar rating systems to accomplish the intent of NGBS Land and Development (LEED ND: Plan & LEED ND: Built Project). The most comparable of the two is LEED ND: Plan, suitable for projects in the planning stage or with less than 75% of its total building floor area constructed.

The certification level across LEED ND is a more natural distribution, with most neighborhood developments falling in the middle of the pack with Silver and Gold level certifications and only one development earning the prestigious Platinum certification level. At first glance, the

data seems to suggest LEED ND has more stringent requirements, but in practice, the difficulty to achieve higher certifications is a consequence to the rating system being designed for dense urban developments that incorporate affordable housing rather than primarily performance driven metrics that directly benefit the environment.

Conclusion

As demonstrated above, the 2020 National Green Building Standard (NGBS) Chapter 4-Site Design and Development is clearly equivalent with LEED 2018 for Neighborhood Development (LEED ND). While the rating

systems are structured very differently, most of the green development practices overlap. For communities of all sizes and density thresholds, the NGBS offers a flexible, performance-based rating system. The NGBS can also promote and award coordination, supervision, and communication amongst project team members, laborers, and residents via the required Accredited NGBS Green Verifiers. LEED ND, on the other hand, is a more rigid, and document-driven rating system most suitable for urban developments that offers credit for a LEED professional to operate as a liaison to make the admin side of certification more efficient.

About Home Innovation Research Labs & NGBS

Home Innovation Research Labs is a full-service research, testing, and consulting firm focused removing barriers to innovation in the building industry. We help our clients to improve the quality, durability, affordability, and performance of building products as well as single and multifamily homes. Home Innovation provides an integrated, multidisciplinary team – including professionals in market research, building science analysis, laboratory testing, and standards development – to solve our clients’ most difficult product and technology issues. All of these skills manifest in our NGBS Green program - the largest residential green certification program in the nation. From product development and launch through improvement and certification, we help to find a home for innovation in the construction industry.

The ICC 700 National Green Building Standard® (NGBS) was developed based on decades of research and experience in residential building. It was the first point-based rating system focused on green residential construction, remodeling, and land development to be approved by the American National Standards Institute (ANSI). As an ANSI-approved standard, the NGBS was developed by a consensus committee and is subject to periodic review and public comment. Home Innovation serves as the administrator of this process and as the training and certification organization for the NGBS.

Learn more about Home Innovation and the NGBS at www.HomeInnovation.com

Appendix A: Point Comparison Charts

NGBS Practices in Correspondence with LEED ND

NGBS Site Design & Development			LEED ND V4		
Certification Level	Certified Projects	Possible Points; Mandatory (M)	Certification Level	Certified Projects	Possible Points; Prerequisite (P)
401.1 Infill site	Infill site is selected	7	Smart Location and Linkage (SLL): Preferred Locations	Location type, connectivity	10
401.2 Greyfield site	Greyfield site is selected	7			
401.3 Brownfield site	Brownfield site is selected	8	SLL: Brownfield Remediation	Brownfield site, high-priority redevelopment area	2
402.1 Team	Knowledgeable team is established	4	Innovation (IN): LEED Accredited Professional	Encourage team integration and streamline application and certification process	1
402.2 Training	Training is provided to on-site supervisors	3		<i>No corresponding LEED Practice</i>	
402.3 Project checklist	A checklist of green development practices is followed	4 M		<i>No corresponding LEED Practice</i>	
402.4 Development agreements	Development agreements for certified green buildings	6	Green Infrastructure and Buildings (GIB): Certified Green Building Required	Encourage the design, construction, and retrofit of buildings using green building practices	P
403.1 Natural resources	Natural resource considerations for site plan	28 M	SLL: Imperiled Species and Ecological Communities Conservation	Consult with Natural Heritage Program fish and wildlife	P
403.2 Building	75% minimum of building site with longer dimension of structure to face within 20 degrees of south	6	Green Infrastructure and Buildings (GIB): Solar Orientation	Block orientation, building orientation	1
403.3 Slope disturbance	Slope disturbance is minimized	17	SLL: Steep Slope Protection	Minimize erosion	1

NGBS Site Design & Development			LEED ND V4		
Certification Level	Certified Projects	Possible Points; Mandatory (M)	Certification Level	Certified Projects	Possible Points; Prerequisite (P)
403.4 Soil disturbance and erosion	Stormwater Pollution Prevention Plan (SWPPP) developed	13	GIB: Construction Activity Pollution Prevention	Reduce pollution by controlling soil erosion, waterway sedimentation and airborne dust	P
403.5 Stormwater management	Stormwater management system designed to use low-impact development/green infrastructure	27	GIB: Rainwater Management	Reduce runoff volume and improve water quality	4
403.6 Landscape plan	Landscape plan developed to limit water/energy use and preserve natural environment	107	GIB: Outdoor Water Use Reduction	Reduce water consumption	2
			SLL: Site Design For Habitat Or Wetland And Water Body Conservation	Conserve native plants, wildlife habitat, wetlands and water bodies	1
			GIB: Minimized Site Disturbance	Preserve existing noninvasive trees, native plants and pervious surfaces	1
403.7 Wildlife habitat	Wildlife habitat considerations	12	GIB: Heat Island Reduction	Reduce heat islands	1
			SLL: Site Design For Habitat Or Wetland And Water Body Conservation	Conserve native plants, wildlife habitat, wetlands and water bodies	1
403.8 Operation and maintenance plan	Operation and maintenance manual is prepared	6	Neighborhood Pattern and Design (NPD): Community Outreach and Involvement	Encourage responsiveness to community needs	2
403.9 Existing buildings	Existing buildings are reused	22	GIB: Building Reuse	Extend life cycle of buildings and conserve resources	1
403.10 Existing and recycled materials	Existing material salvaged and reincorporated into development or recycled	15	GIB: Recycled and Reused Infrastructure	Extracting and processing virgin materials by using recycled and reclaimed materials	1
403.11 Demolition of existing building	Demolition waste management plan is developed	10	GIB: Solid Waste Management	Reduce volume of waste deposited in landfills	1

NGBS Site Design & Development			LEED ND V4		
Certification Level	Certified Projects	Possible Points; Mandatory (M)	Certification Level	Certified Projects	Possible Points; Prerequisite (P)
403.12 Environmentally sensitive areas	Environmentally sensitive areas are avoided	17	SLL: Long-Term Conservation Management of Habitat Or Wetlands And Water Bodies	Conserve native plants, wildlife habitat, wetlands, and water bodies	1
404.1 On-site supervision and coordination	Supervision and coordination provided during clearing, grading etc.	5		<i>No corresponding LEED practice</i>	
404.2 Trees and vegetation	Designated trees and vegetation are preserved	13	NPD: Tree-lined and Shaded Streetscapes	Reduce urban heat island effects, improve air quality, increase evapotranspiration	2
404.3 Soil disturbance and erosion	On-site soil disturbance and erosion are minimized	31	GIB: Construction Activity Pollution Prevention	Reduce pollution by controlling soil erosion, waterway sedimentation and airborne dust	P
404.4 Wildlife habitat	Measures are implemented to support wildlife	21	SLL: Site Design For Habitat Or Wetland And Water Body Conservation	Conserve native plants, wildlife habitat, wetlands and water bodies	1
405.1 Driveways and parking areas	Driveways and parking areas are minimized	18	GIB: Heat Island Reduction	Reduce heat islands	1
405.2 Street widths	Pavement widths are minimized	14			
405.3 Cluster development	Cluster development to preserves natural and scenic qualities of site	10	NPD: Compact Development	To conserve land and protect farmland and wildlife habitat	6

NGBS Site Design & Development			LEED ND V4		
Certification Level	Certified Projects	Possible Points; Mandatory (M)	Certification Level	Certified Projects	Possible Points; Prerequisite (P)
405.4 Planning	Innovative planning techniques implemented	20	NPD: Access to Civic and Public Space	Provide open space close to work and home	1
			Innovation (IN): Innovation credit	Encourage projects to achieve exceptional or innovative performance	5
405.5 Wetlands	Constructed wetlands used	8	SLL: Restoration of Habitat Or Wetland And Water Body Conservation	Restore native plants, wildlife habitat, wetlands and water bodies	1
405.6 Multi-modal transportation	Multi-modal transportation access is provided	54	LT: Access to Quality Transit	Access to multimodal transportation	7
			SLL: Housing and Jobs Proximity	To encourage balanced communities with a proximate housing and employment opportunities.	3
405.7 Density	Average density maximized	10	NPD: Compact Development	To conserve land and protect farmland and wildlife habitat	6
405.8 Mixed-use development	Mixed-use development incorporated	9	NPD: Mixed-use Neighborhoods	Support car-free living by providing access to diverse land uses	4
405.9 Open space	Open space within 1/2 mile available to community	2	NPD: Connected and Open Community	Conserve land and promote multimodal transportation	2
405.10 Community garden(s)	Local food production for residents	5	NPD: Local Food Production	Promote environmental and economic benefits of community-based food production	1
405.11 Insect mitigation	Site designed to mitigate hazards from insects	19		<i>No corresponding LEED practice</i>	
405.12 Smoking prohibition	Signs are provided prohibiting smoking	6		<i>No corresponding LEED practice</i>	

LEED ND Practices in with No Corresponding NGBS Practice

LEED ND V4		
Certification Level	Certified Projects	Possible Points; Prerequisite
SLL: Floodplain Avoidance	To protect life and property, promote open space and habitat conservation, and enhance water quality and natural hydrologic systems.	Prerequisite
NPD: Housing Types and Affordability	To promote socially equitable and engaging neighborhoods by enabling residents from a wide range of economic levels, household sizes, and age groups to live in a community.	7
NPD: Visitability and Universal Design	To increase the proportion of areas usable by a wide spectrum of people, regardless of age or ability.	1
NPD: Community Outreach and Involvement	To encourage responsiveness to community needs by involving the people who live or work in the community in project design and planning and in decisions about how the project should be improved or changed over time.	2
NPD: Neighborhood Schools	To promote community interaction and engagement by integrating schools into the neighborhood. To improve students' health by encouraging walking and bicycling to school.	1
GIB: Minimum Building Energy Performance	To encourage the design and construction of energy-efficient buildings that reduce air, water, and land pollution and environmental damage from energy production and consumption.	Prerequisite
GIB: Indoor Water Use Reduction	To reduce indoor water consumption.	Prerequisite
GIB: Optimize Building Energy Performance	To encourage the design and construction of energy-efficient buildings that reduce air, water, and land pollution and adverse environmental effects from energy production and consumption.	2
GIB: Renewable Energy Production	To reduce the environmental and economic harms associated with fossil fuel energy by increasing self-supply of renewable energy.	3
GIB: District Heating and Cooling	To encourage the development of energy-efficient neighborhoods by employing district heating and cooling strategies that reduce energy use and energy-related environmental harms.	2
GIB: Infrastructure Energy Efficiency	To reduce the environmental harms from energy used for operating public infrastructure.	1
GIB: Solid Waste Management	To reduce the volume of waste deposited in landfills and promote the proper disposal of hazardous waste.	1
GIB: Light Pollution Reduction	To increase night sky access, improve nighttime visibility, and reduce the consequences of development for wildlife and people.	1
Regional Priority Credit: Region Defined	To provide an incentive for the achievement of credits that address geographically specific environmental, social equity, and public health priorities.	4

Most of the LEED ND practices with no corresponding NGBS practice in Chapter 4, Site Design and Development can be found throughout the other chapters of the NGBS with the exception of:

- NPD: Housing Types and Affordability
- NPD: Visitability and Universal Design
- NPD: Community Outreach and Involvement
- Regional Priority Credit: Region Defined

The three NPD credits are a consequence of LEED ND being tailored to urban developments, awarding credits for affordable housing and community involvement rather than a performance driven metric that directly benefits the environment. The fourth credit is ambiguous and varies by region, often the regional priority credit is another opportunity for projects to earn points in categories already addressed in prerequisite or preceding credits.