LEED for Neighborhood Development Rating System

Proposed Draft for Ballot

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Smart Location & Linkage

SLL Prerequisite 1: Smart Location

Required

Intent

Encourage development within and near existing communities and public transit infrastructure. Encourage improvement and redevelopment of existing cities, suburbs and towns while limiting expansion a region's development footprint to appropriate circumstances. Reduce vehicle trips and miles traveled. Reduce the risk of obesity, heart disease, and hypertension by encouraging daily physical activity associated with walking and bicycling.

Requirements

FOR ALL PROJECTS

Either a) locate the project on a site served by existing publicly-owned **water and wastewater infrastructure** or b) locate the project within a legally adopted, publicly-owned planned water and wastewater service area, and provide new water and wastewater infrastructure for the project.

AND

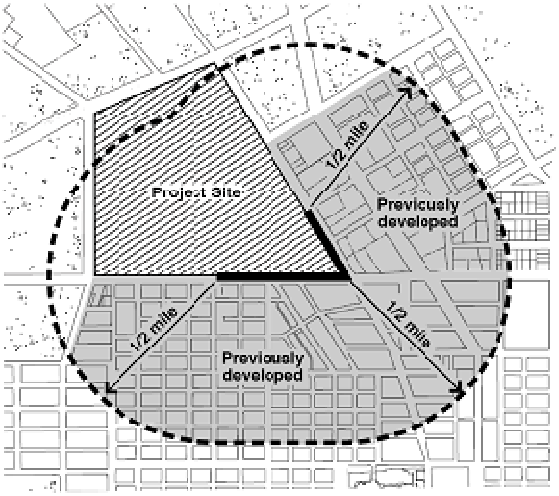
OPTION 1 – INFILL SITES
Locate the project on an **infill site**;

OR

OPTION 2 – ADJACENT SITES WITH CONNECTIVITY

Locate the project on an **adjacent site** where the **connectivity** of the site and adjacent land is at least 90 intersections/sq. mile as measured within a ½ mile distance of a continuous segment of the project boundary, equal to or greater than 25% of the project boundary, that is adjacent to previous development. Existing external and internal intersections may be counted if they were not constructed or funded by the project developer within the last 10 years.

Locate and/or design the project with a through-street and/or non-motorized right-of-way (non-motorized rights-of-way may count for no more than 20% of the total) intersecting the project boundary at least every 600 feet on average, and at least every 800 feet, to connect with an existing street and/or right of way outside the project. Exemptions to this requirement found in NPDp3: Connected and Open Community do not apply to this option;



SLL p1, OPTION 2:
Adjacent Site (part 1)

SLLp1, Option 2:
Adjacent Site (part 2)

OR

OPTION 3 –TRANSIT CORRIDOR OR ROUTE WITH ADEQUATE TRANSIT SERVICE

Locate the project on a site with existing and/or planned transit service so that at least 50% of dwelling units and non-residential building entrances (inclusive of existing buildings) are within a ¼ mile walk distance of bus and/or streetcar stops, or within a ½ mile walk distance of bus rapid transit stops, light or heavy rail stations, and/or ferry terminals, and the transit service at those stops in aggregate meets the minimums listed in the tables below (both weekday and weekend trip minimums must be met).

Weekend trips must include service on both Saturday and Sunday. Commuter rail must serve more than one Metropolitan Statistical Area (MSA) and/or the area surrounding the core of an MSA.

	Weekday: Minimum Daily Trips	Weekend: Minimum Daily Trips
Projects with a Combination of Transit Service Types (Bus, Rail, Streetcar, or Ferry Service)	60	40
Projects with ONLY Commuter Rail or Ferry Service	24	6

In the case of planned service, the project must demonstrate one of the following:

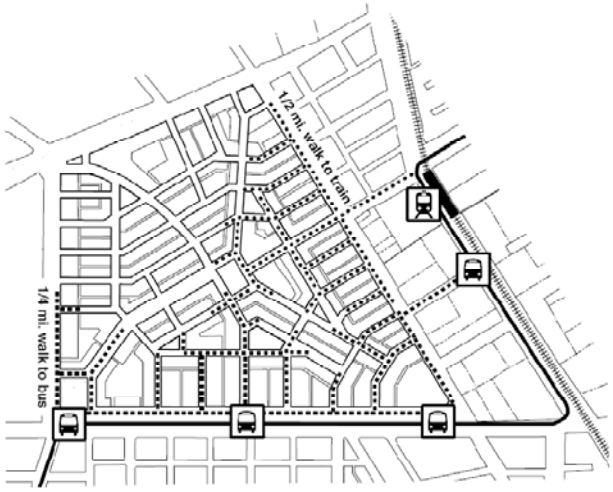
a. The relevant transit agency has a signed Full Funding Grant Agreement (FFGA) with the Federal Transit Administration (FTA) that includes a revenue operations date (ROD) for the start of

transit service. The ROD must be no later than the occupancy date of 50% of total project building square footage.

b. For bus, streetcar, bus rapid transit, or ferry service, the transit agency must certify that it has an approved budget that includes specifically allocated funds sufficient to provide the planned service at service levels described above and that service at these levels will commence no later than occupancy of 50% of total project square footage.
c. For rail service other than streetcars, the transit agency must certify that preliminary engineering for a rail line has commenced; AND

    1. A state legislature or local subdivision of the state has authorized the transit agency to expend funds for the establishment of rail transit service that will commence no later than occupancy of 50% of total project square footage; or

    2. A municipality has dedicated funding or reimbursement commitments from future tax revenue for the development of stations, platforms, or other rail transit infrastructure that will service the project no later than occupancy of 50% of project total square footage.



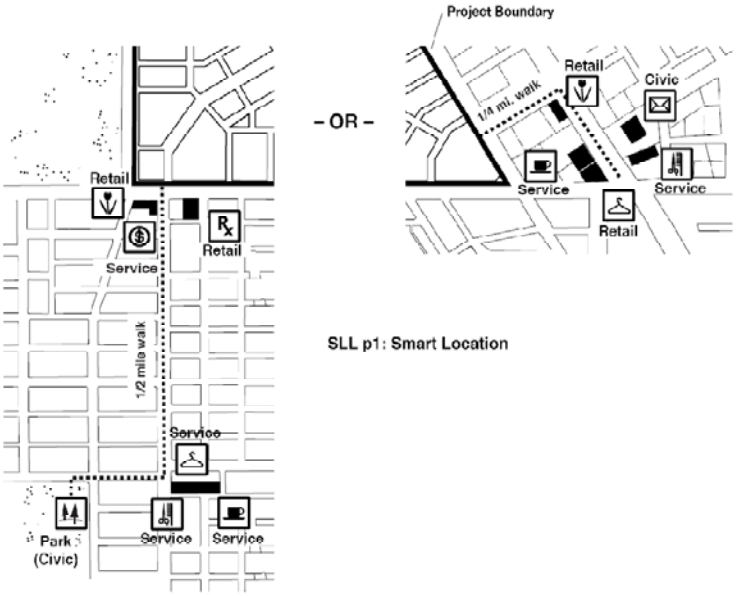
SLL p1: Smart Location
OPTION 3

OR

OPTION 4 – SITES WITH NEARBY NEIGHBORHOOD ASSETS

Include a residential component equaling at least 30% of the project's total building square footage (exclusive of portions of parking structures devoted exclusively to parking), and locate the project near existing neighborhood shops, services, and facilities so that the project boundary is within ¼ mile walk distance of at least 5 of the diverse uses defined in the Appendix, or so that the project geographic center is within ½ mile walk distance of at least 7, of the diverse uses defined in the Appendix. In either case the qualifying uses must include at least one food retail use and at least one use from each of two other diverse use categories with the following limitations: a) uses may not be counted in two categories, e.g. a school or place of worship may be counted only once even if it also contains a daycare facility; b) a mixed use building containing several uses as distinctly operated enterprises with separate exterior entrances may count each as a separate use, but no more than half of the minimum number of diverse uses can be situated in a single building or under a common roof; c) a diverse use may only be counted twice,

e.g. two restaurants and d) a single retail store of any type may only be counted once even if it sells products associated with multiple use types;



SLL p1: Smart Location

Smart Location & Linkage

SLL Prerequisite 2: Imperiled Species and Ecological Communities Conservation

Required

Intent

Conserve imperiled species and ecological communities.

Requirements

FOR ALL PROJECTS

Consult with the state Natural Heritage Program, and state fish and wildlife agencies, to determine if species listed as threatened or endangered under the federal Endangered Species Act, the state's endangered species act, or species or ecological communities classified by NatureServe as GH (possibly extinct), G1 (critically imperiled) or G2 (imperiled), have been found on the site, or have a high likelihood of occurring on the site due to the presence of suitable habitat and nearby occurrences;

AND

If the above consultations are inconclusive and site conditions indicate that species or ecological communities could be present, using a qualified biologist, perform biological surveys using accepted methodologies during appropriate seasons to determine whether species listed as threatened or endangered under the federal Endangered Species Act, the state's endangered species act, and species or ecological communities classified by NatureServe as GH (possibly extinct), G1 (critically imperiled) or G2 (imperiled) occur or have a high likelihood of occurring on the site due to the presence of suitable habitat and nearby occurrences.

AND

OPTION 1 – NO SPECIES OR ECOLOGICAL COMMUNITY PRESENT OR LIKELY

The consultation and, if necessary, biological surveys in the above paragraphs determine that no such imperiled species or ecological communities have been found or have a high likelihood of occurring;

OR

OPTION 2 – SPECIES OR ECOLOGICAL COMMUNITY FOUND: COMPLY WITH HCP

Comply with an approved Habitat Conservation Plan (HCP) under the Endangered Species Act for each identified species or ecological community;

OR

OPTION 3 – SPECIES OR ECOLOGICAL COMMUNITY FOUND: PREPARE HCP EQUIVALENT

Work with a qualified biologist , a non-governmental conservation organization, or the appropriate state, regional, or local agency to create and implement a conservation plan that includes the following:

a. Identification and mapping of the geographic extent of the habitat and the appropriate buffer, not less than 100 feet, according to best available scientific information.
b. To the maximum extent practicable, provide protection of the identified habitat and buffer in perpetuity by donating or selling the land or a conservation easement on the land to an accredited land trust or relevant public agency.
c. If onsite protection can be accomplished, analysis of threats from development and a monitoring and management plan that eliminates or significantly reduces the threats.
d. If any portion of habitat and buffer identified in (a) cannot be protected in perpetuity, quantification of the impacts by acres or number of plants and/or animals affected, and on-site or off-site protection from development in perpetuity for an equal or greater amount of the affected habitat of similar or better quality by donating or selling the land, or a conservation easement on the land, to an accredited land trust or relevant public agency.

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SLL Prerequisite 3: Wetland and Water Body Conservation

Required

Intent

Preserve water quality, natural hydrology, habitat, and biodiversity through conservation of water bodies and wetlands.

Requirements

Limit development impacts on wetlands, water bodies, and surrounding buffer land according to the requirements below.

OPTION 1 – SITES WITH NO WETLANDS, WATER BODIES, LAND WITHIN 50 FEET OF WETLANDS, AND LAND WITHIN 100 FEET OF WATER BODIES

Locate the project on a site that includes no wetlands, no water bodies, no land within 50 feet of wetlands, and no land within 100 feet of water bodies;

OR

OPTION 2 – SITES WITH WETLANDS, WATER BODIES, LAND WITHIN 50 FEET OF WETLANDS, OR LAND WITHIN 100 FEET OF WATER BODIES

a. Locate the project such that pre-project wetlands, water bodies, land within 50 feet of wetlands, and land within 100 feet of water bodies shall not be impacted by new development, unless the development is minor improvements or is on previously developed land

OR

b. Earn at least one point under GIB Credit 8: Stormwater Management, and limit any impacts beyond minor improvements to less than the percentage of buffer land given in the following table:

Residential Density (du/acre) of the project*	Non-Residential Density (FAR) of the project*	Percentage of buffer land** where impacts beyond minor improvements are allowed
> 25	> 1.75	≤ 20%
> 18 and ≤ 25	> 1.25 to ≤ 1.75	≤ 15%
> 10 and ≤ 18	> .75 to ≤ 1.25	≤ 10%
≤ 10	≤ .75	≤ 5%

*For this option, mixed use projects may use either the residential or non-residential density of the project to determine the percentage of allowable impacts, regardless of which is higher

** For this option, buffer width may be variable as long as the total area of buffer land is equal to the area of land within 50 feet of wetlands and/or within 100 feet of water bodies, minus excluded features as described above. The minimum buffer width, however, is 25 feet for wetlands and 50 feet for water bodies, measured from the edge of the wetland or water body. In the minimum buffer, only minor improvements and/or improvements that result in no ecological impairment of the wetland or water body, as determined by a qualified biologist, are allowed.

AND

FOR ALL PROJECTS

Comply with all local, state, and federal regulations pertaining to wetland and water body conservation.

The following features are not considered wetlands, water bodies, or buffer land that must be protected for the purposes of this prerequisite:

- Previously developed land
- Man-made water bodies (such as industrial mining pits, concrete-lined canals, or stormwater retention ponds) that lack natural edges and floors, or that lack native ecological communities in the water and along the edge
- Man-made linear wetland that is the result of the interruption of natural drainages by existing rights of way
- Wetlands that were man-made incidentally, and that are assessed as performing poorly (i.e., with a "poor" rating) for all measured wetland functions. Wetland quality assessment must be performed by a qualified biologist using a method that is accepted by state or regional permitting agencies

Minor improvements within the wetland buffer or water body buffer may be undertaken in order to enhance appreciation for wetlands and water bodies, provided such facilities are open to public access. Such improvements shall only include:

a. Bicycle and pedestrian pathways no more than 12 feet wide, of which no more than 8 feet may be impervious
b. Activities to maintain or restore native natural communities and/or natural hydrology
c. One single-story structure not exceeding 500 square feet per 300 linear feet of buffer, on average
d. Grade changes necessary to ensure public access
e. Clearings not exceeding 500 square feet for tables, benches, and access for non-motorized recreational watercraft. Limit of one per 300 linear feet of buffer, on average. Off-street parking is not considered a minor improvement
f. Removal of the following trees: hazardous trees; up to 75% of dead trees; trees under 6" diameter at breast height; trees under 40% condition rating; and up to 20% of trees over 6" diameter at breast height with condition rating 40% or higher. Condition rating must be based on an assessment by an International Society of Arboriculture (ISA) Certified Arborist using ISA standard measures.
g. Brownfield remediation activities

Direct impacts to wetlands and water bodies are prohibited, except for minimal impact structures, such as an elevated boardwalk, that allow access to the water for educational and recreational purposes. Replacement of structures that protrude into wetlands or water bodies, provided that the replacement structure has the same or smaller footprint, and a similar height to the existing structure, is allowed.

Smart Location & Linkage

SLL Prerequisite 4: Agricultural Land Conservation

Required

Intent

Preserve irreplaceable agricultural resources by protecting prime and unique farm and forest lands from development.

Requirements

FOR ALL PROJECTS

Locate the project on a site that is not within a state or locally designated agricultural preservation district, unless any changes made to the site conform to the requirements for development within the district (as used in this requirement, district does not equate to land-use zoning);;

AND

OPTION 1 – SITES WITHOUT IMPACTED SOILS

Locate the project development footprint on a site such that the footprint contains no prime soils, unique soils, or soils of state significance as identified in a state Natural Resources Conservation Service soil survey;

OR

OPTION 2 – INFILL SITES

Locate the project on an **infill site**;

OR

OPTION 3 – SITES SERVED BY TRANSIT

Comply with SLLp1, Option 3 – Transit Corridor or Route with Adequate Transit Service;

OR

OPTION 4 – DEVELOPMENT RIGHTS RECEIVING AREA

Locate the project within a designated receiving area for development rights under a publicly administered farmland protection program that provides for the transfer of development rights from lands designated for conservation to lands designated for development;

OR

OPTION 5 – SITES WITH IMPACTED SOILS

Mitigate the encroachment of the development footprint on any impacted project land with prime soils, unique soils, or soils of state significance, as identified in a state Natural Resources Conservation Service soil survey, through the purchase of easements providing permanent protection from development on land with comparable soils in accordance with the following ratios based upon densities per acre of buildable land:

For projects located in metropolitan/micropolitan statistical areas with a population equal to or greater than 250,000:

Residential Density (DU per acre of buildable land available for residential use)	**Non-residential Density (FAR of buildable land available for non-residential uses)**	**Mitigation Ratio (acres of easement : acres of project on prime/unique/significant soil)**
> 7 and ≤ 8.5	> 0.50 and ≤ 0.67	2 to 1
> 8.5 and ≤ 10	> 0.67 and ≤ 0.75	1.5 to 1
> 10 and ≤ 11.5	> 0.75 and ≤ 0.87	1 to 1
> 11.5 and ≤ 13	> 0.87 and ≤ 1.0	.5 to 1
> 13	> 1.0	No mitigation

For projects located in metropolitan/micropolitan statistical areas with a population less than 250,000:

Residential Density (DU per acre of buildable land available for residential use)	**Non-residential Density (FAR of buildable land available for non-residential uses)**	**Mitigation Ratio (acres of easement : acres of project on prime/unique/significant soil)**
> 7 and ≤ 8	> 0.50 and ≤ 0.58	2 to 1
> 8 and ≤ 9	> 0.58 and ≤ 0.67	1 to 1
> 9 and ≤ 10	> 0.67 and ≤ 0.75	.5 to 1
> 10	> 0.75	No mitigation

All off-site mitigation shall be located within 100 miles of the project.

Up to 15% of the impacted soils area that are designated for community gardens, if permanently dedicated for such use, may be exempted from the density requirements and may also count towards the mitigation requirement for the remainder of the site. For the purpose of defining the numerator in the FAR, those portions of parking structure devoted exclusively to parking shall be excluded.

The mitigation ratio for a mixed use project is calculated by: 1) determining the total square footage of all residential and non-residential uses; 2) calculating the percentages of the total square footage that the

residential and non-residential components each represent; 3) determining the density of each component as measured in dwelling units per acre and FAR, respectively; 4) determining which mitigation ratio the residential and non-residential components would align with separately according to the table above; 5) if the mitigation ratios are different, multiply the mitigation ratio of the residential component by the percentage of the total square footage it represents (as determined in step 2) and multiply the mitigation ratio of the non-residential component by the percentage of the total square footage it represents (as determined in step 2); and 6) average the two ratios and mitigate at that ratio.

Smart Location & Linkage

SLL Prerequisite 5: Floodplain Avoidance

Required

Intent

Protect life and property, promote open space and habitat conservation, and enhance water quality and natural hydrological systems.

Requirement

OPTION 1- SITES WITHOUT FLOODPLAINS

Locate on a site that does not contain any land within a 100-year high or moderate-risk floodplain as defined and mapped by the Federal Emergency Management Agency (FEMA) or a state or local floodplain management agency, whichever is most recent;

OR

OPTION 2- INFILL OR PREVIOUSLY DEVELOPED SITES WITH FLOODPLAINS

Locate the project on an **infill site** or a **previously developed** site or in a non-conveyance area of river or coastal floodplain without storm surge potential where compensatory storage is used in accordance with a FEMA approved mitigation plan. Comply with the National Flood Insurance Program (NFIP) requirements for developing any portions of the site that lie within a 100-year high or moderate risk floodplain as defined and mapped by FEMA, or a state or local floodplain management agency, whichever is most recent. If the project includes construction of any critical facility including, but not limited to, hospitals, water and sewage treatment facilities, emergency centers and fire and police stations, the critical facility must be designed and built so as to be protected and operable during a 500-year event (as defined by FEMA);

OR

OPTION 3- ALL OTHER SITES WITH FLOODPLAINS

For projects where part(s) of the site is located within a 100-year high or moderate risk floodplain as defined and mapped by the FEMA or a state or local floodplain management agency, whichever is most recent, develop only on portions of the site that are not in the floodplain, or that have been previously developed, or that are in a non-conveyance area of river or coastal floodplain without storm surge potential where compensatory storage is used in accordance with a FEMA approved mitigation plan. Previously developed portions in the floodplain must be developed according to NFIP requirements. If development includes construction of any critical facility, as described above, the critical facility must be designed and built so as to be protected and operable during a 500-year event (as defined by FEMA).

Smart Location & Linkage

SLL Credit 1: Preferred Locations

1 to 10 Points

Intent

Encourage development within existing cities, suburbs, and towns to reduce adverse environmental and public health impacts associated with sprawl. Reduce development pressure beyond the limits of existing development. Conserve natural and financial resources required for construction and maintenance of infrastructure.

Requirements

A project may earn a maximum of 10 points by achieving any combination of requirements in the following three options:

OPTION 1 – LOCATION TYPE

Locate the project in one of the following locations:

a. An **infill site** that is also a **previously developed** site (5 points)
b. An infill site that is not a previously developed site (3 points)
c. An **adjacent site** that is also a previously developed site (2 points)
d. A previously developed site that is not an adjacent or infill site (1 points)

AND/OR

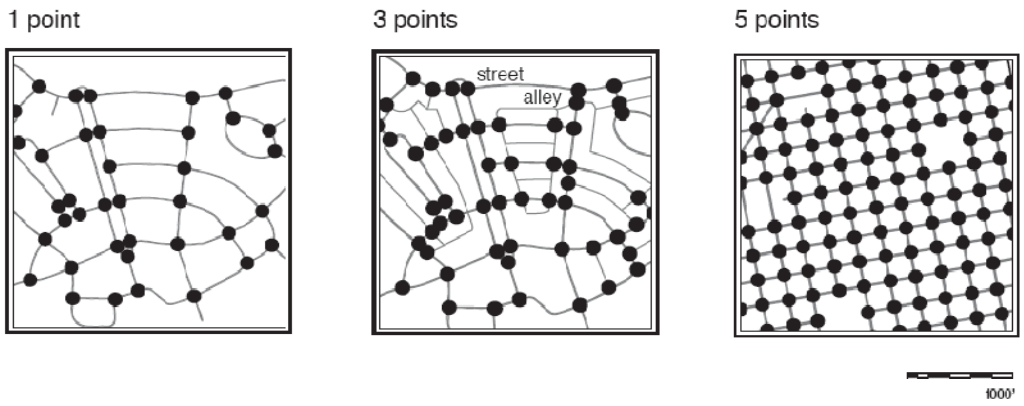
OPTION 2 – CONNECTIVITY

Locate the project in an area that has the following existing **connectivity** within a 1/2 mile distance from the project boundary:

a. ≥400 intersections/square mile (5 points)
b. ≥350 and <400 intersections/square mile (4 points)
c. ≥300 and <350 intersections/square mile (3 points)
d. ≥250 and <300 intersections/square mile (2 points)
e. ≥200 and <250 intersections/square mile (1 point)

Intersections within the site may be counted if the intersections were not constructed or funded by the developer within the last 10 years.

SLLc1 Preferred Locations
Option 2- Connectivity



AND/OR

OPTION 3 – DESIGNATED HIGH-PRIORITY LOCATIONS

Achieve the following (3 points):

Provide affordable housing so that the project is eligible to earn at least two points under option 2 in NPD Credit 4: Mixed-Income Diverse Communities; and

locate the project in one of the following high-priority redevelopment areas: EPA National Priorities List, Federal Empowerment Zone, Federal Enterprise Community, Federal Renewal Community, Department of Justice Weed and Seed Strategy Community, Department of the Treasury Community Development Financial Institutions Fund Qualified Low-Income Community (a subset of the New Markets Tax Credit Program), the U.S. Department of Housing and Urban Development's Qualified Census Tracts (QCT) or Difficult Development Areas (DDA).

Smart Location & Linkage

SLL Credit 2: Brownfields Redevelopment

1 to 2 Points

Intent

Encourage the reuse of land by developing sites that are complicated by environmental contamination, and thereby reduce pressure on undeveloped land.

Requirements

OPTION 1 – BROWNFIELD SITES (1point)

Locate the project on a site, part or all of which is documented as contaminated (by means of an ASTM E1903-97 Phase II Environmental Site Assessment or a local Voluntary Cleanup Program), or on a site defined as a brownfield by a local, state or federal government agency; and remediate site contamination such that the controlling public authority approves the protective measures and/or clean-up as effective, safe, and appropriate for the future use of the site;

OR

OPTION 2 – HIGH-PRIORITY REDEVELOPMENT AREAS (2 points)

Achieve the requirements in Option 1; and

locate the project in one of the following high-priority redevelopment areas: EPA National Priorities List, Federal Empowerment Zone, Federal Enterprise Community, Federal Renewal Community, Department of Justice Weed and Seed Strategy Community, Department of the Treasury Community Development Financial Institutions Fund Qualified Low-Income Community (a subset of the New Markets Tax Credit Program), the U.S. Department of Housing and Urban Development's Qualified Census Tracts (QCT) or Difficult Development Areas (DDA).

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Smart Location & Linkage

SLL Credit 3: Locations With Reduced Automobile Dependence

1 to 7 Points

Intent

Encourage development in locations shown to have multi-modal transportation choices or otherwise reduced motor vehicle use. Reduce greenhouse gas emissions, air pollution, and other adverse environmental and public health impacts associated with motor vehicle use.

Requirements

Points earned under Options 1 and 2 may not be combined.

OPTION 1 – TRANSIT-SERVED LOCATION

Locate the project on a site with existing transit service so that at least 50% of dwelling units and non-residential building entrances (inclusive of existing buildings) are within a ¼ mile walk distance of bus or streetcar stops, or within a ½ mile walk distance of bus rapid transit stops, light or heavy rail stations, or ferry terminals, and the transit service at those stops in aggregate meets the minimums listed in the tables below (both weekday and weekend trip minimums must be met to earn points at a particular threshold).

Weekend daily trips must include service on both Saturday and Sunday. Commuter rail must serve more than one Metropolitan Statistical Area (MSA) and/or the area surrounding the core of an MSA.

Projects with a Combination of Transit Service Types - Bus, Rail, Streetcar or Ferry Service

Weekday - Minimum Daily Trips	Weekend – Minimum Daily Trips	Points Earned
60	40	1
76	50	2
100	65	3
132	85	4
180	130	5
246	150	6
320	200	7

Projects with ONLY Commuter Rail or Ferry Service

Weekday - Minimum Daily Trips	Weekend – Minimum Daily Trips	Points Earned

24	6	1
40	8	2
60	12	3

Projects served by two or more transit routes such that no one route provides more than 60% of the prescribed levels may add one bonus point to the above, provided the number of total points claimed is no greater than 7.

Projects where existing transit service is temporarily re-routed outside the required distances for less than two years may achieve this option with a local transit agency commitment to restore complying routes with service at or above levels prior to the re-routing.

Projects greater than 125 acres can achieve the credit by locating the project on a site with existing transit service so that at least 40% of dwelling units and non-residential building entrances (inclusive of existing buildings) are within a ¼ mile walk distance of bus or streetcar stops, or within a ½ mile walk distance of bus rapid transit stops, light or heavy rail stations, or ferry terminals, and the transit service at those stops in aggregate meets the minimums listed in the tables above (both weekday and weekend trip minimums must be met to earn points at a particular threshold), as long as the 40% complies with NPDp2 and any portion of the project beyond the 1/4-mile and/or ½-mile walk distances has SLLp1 Option 3 compliant planned transit service.

Projects greater than 500 acres can achieve the credit by locating the project on a site with existing transit service so that at least 30% of dwelling units and non-residential building entrances (inclusive of existing buildings) are within a ¼ mile walk distance of bus or streetcar stops, or within a ½ mile walk distance of bus rapid transit stops, light or heavy rail stations, or ferry terminals, and the transit service at those stops in aggregate meets the minimums listed in the tables above(both weekday and weekend trip minimums must be met to earn points at a particular threshold), as long as the 30% complies with NPDp2 and any portion of the project beyond the 1/4-mile and/or ½-mile walk distances has SLLp1 Option 3 compliant planned transit service.

OR

OPTION 2 – MPO LOCATION WITH LOW VMT

Locate the project within a region served by a Metropolitan Planning Organization and within a transportation analysis zone where the current annual home-based Vehicle Miles Traveled (VMT) per capita has been demonstrated by MPO research derived from a household transportation survey to be no more than 90% of the average of the metropolitan region. The research must be derived from transportation surveys conducted within ten years of the date of submission for LEED for Neighborhood Development certification. Additional credit may be awarded for increasing levels of performance, as indicated in the following table:

Percent of average regional per capita VMT	Points Earned
81% to 90%	1
71% to 80%	2
61% to 70%	3
51% to 60%	4
41% to 50%	5

31% to 40%	6
30% or less	7

Smart Location & Linkage

SLL Credit 4: Bicycle Network and Storage

1 Point

Intent

Promote bicycling and transportation efficiency, including reduced vehicle miles traveled. Support public health by encouraging utilitarian and recreational physical activity.

Requirements

BICYCLE NETWORK

Design and/or locate the project to meet at least one of the three requirements below:

a. An existing bicycle network of at least five continuous miles in length is within ¼ mile bicycling distance of the project boundary.

b. If the project is 100% residential, there is an existing bicycle network that begins within ¼ mile bicycling distance of the project boundary, and connects to a school or employment center within three miles bicycling distance.

c. There is a connection to an existing bicycle network within ¼ mile bicycling distance of the project boundary that allows at least ten diverse uses (see Appendix) to be reached within three miles bicycling distance from the project boundary;

AND

BICYCLE STORAGE

Provide bicycle parking and storage capacity according to the following new building types:

a. **Multi-unit Residential:** Provide at least one secure, enclosed bicycle storage space per occupant for 30% of the planned occupancy but no fewer than one per unit. Provide secure visitor bicycle racks on-site, with at least one bicycle space per 10 new dwelling units but no fewer than four spaces per project site.

b. **Retail:** Provide at least one secure, enclosed bicycle storage space per new retail worker for 10% of retail worker planned occupancy. Provide new visitor/customer bicycle racks on-site, with at least one bicycle space per 5,000 square feet of retail space, but no fewer than one bicycle space per business or four bicycle spaces per project site, whichever is greater. Provide at least one on-site shower with changing facility for any development with 100 or more new workers and at least one additional on-site shower with changing facility for every 150 new workers thereafter.

c. **Non-residential other than Retail:** Provide at least one secure, enclosed bicycle storage space per new occupant for 10% of planned occupancy. Provide new visitor bicycle racks on-site with

at least one bicycle space per 10,000 square feet of new commercial non-retail space but not fewer than four bicycle spaces per building. Provide at least one on-site shower with changing facility for any development with 100 or more new workers and at least one additional on-site shower with changing facility for every 150 new workers thereafter.

Secure, enclosed bicycle storage must be located in key-accessed areas easily accessible to residents and/or workers with bicycles. Provide informational signage for accessing storage facilities.

Visitor and customer bicycle racks must be positioned in areas clearly visible from a primary entrance of the building, served with night lighting, and protected from damage from nearby vehicles. All bicycle storage must be located within 100 feet of each building's main entries. For retail buildings or other buildings with multiple main entries, bicycle racks must be proportionally disbursed within 100 feet of business or other main entries.

Shower and changing facility requirements may be met by providing the equivalent of free access to on-site health club shower facilities, where health club can be accessed without going outside. Provide informational signage for accessing shower facilities.

Smart Location & Linkage

SLL Credit 5: Housing and Jobs Proximity

1 - 3 Points

Intent

Encourage balanced communities with a diversity of uses and employment opportunities.

Requirements

OPTION 1 – PROJECT WITH AFFORDABLE RESIDENTIAL COMPONENT (3 points)

Include a residential component equaling at least 30% of the project's total building square footage (exclusive of parking structures), and locate and/or design the project such that the geographic center (or boundary if the project exceeds 500 acres) is within a ½ mile walk distance of a number of existing full-time equivalent jobs equal to or greater than the number of dwelling units in the project; and satisfy the requirements necessary to earn at least one point under Option 2 of NPD Credit 4: Mixed-Income Diverse Communities;

OR OPTION 2 – PROJECT WITH RESIDENTIAL COMPONENT (2 points)

Include a residential component equaling at least 30% of the project's total building square footage (exclusive of parking structures), and locate and/or design the project such that the geographic center (or boundary if the project exceeds 500 acres) is within a ½ mile walk distance of a number of existing full-time equivalent jobs equal to or greater than the number of dwelling units in the project;

OR

OPTION 3 – INFILL PROJECT WITH NON-RESIDENTIAL COMPONENT (1 point)

Include a non-residential component equaling at least 30% of the project's total building square footage (exclusive of parking structures), and locate on an **infill site** whose geographic center (or boundary if the project exceeds 500 acres) is within a ½ mile walk distance of an existing rail transit, ferry, or tram stop, and within a ½ mile walk distance of a number of existing dwelling units equal to or greater than 50% of the number of new full-time equivalent jobs created as part of the project.

Smart Location & Linkage

SLL Credit 6: Steep Slope Protection

1 Point

Intent

Minimize erosion to protect habitat and reduce stress on natural water systems by preserving steep slopes in a natural, vegetated state.

Requirements

FOR ALL PROJECTS

All options apply to natural or constructed slopes that exist. Those portions of project sites with slopes up to 20 feet in elevation (toe to top; the toe is a distinct break between a 40% slope and lesser slopes) that are more than 30 feet in any direction from another slope greater than 15% are exempt from the requirements, although more restrictive local regulations may apply;

AND

OPTION 1 – NO DISTURBANCE OF SLOPES OVER 15%

Locate on a site that has no existing slopes greater than 15%, or avoid disturbing portions of project sites that have existing slopes greater than 15%;

OR

OPTION 2 – PREVIOUSLY DEVELOPED SITES WITH SLOPES OVER 15%

On portions of previously developed sites with existing slopes greater than 15%, restore the slope area with native plants or non-invasive adapted plants according to the table below:

% Slope	% Restoration
>40%	100%
26% to 40%	60%
15% to 25%	40%

and develop CC&Rs, development agreements, or other binding documents that will protect the specified steep slope areas in perpetuity;

and comply with the requirements of Option 3 on any slope over 15% that has not been previously developed;

OR

OPTION 3 – UNDEVELOPED SITES WITH SLOPES OVER 15%

On sites that are not previously developed, protect existing slopes over 15% as follows:

a. Do not disturb slopes greater than 40% and do not disturb portions of the project site within 50 feet horizontally of the top of the slope, and 75 feet horizontally from the toe of the slope.
b. Limit development to no more than 40% of slopes between 25%-40%, and to no more than 60% of slopes between 15%-25%.
c. Locate development such that the percentage of the development footprint that is on existing slopes less than 15% is greater than the percentage of **buildable land** that has existing slopes less than 15%.
d. Develop CC&Rs, development agreements, or other binding documents that will protect the specified steep slope areas in perpetuity.

Smart Location & Linkage

SLL Credit 7: Site Design for Habitat or Wetland/Water Body Conservation

1 Point

Intent

Conserve native plants, wildlife habitat, wetlands and water bodies.

Requirements

OPTION 1 – SITES WITHOUT SIGNIFICANT HABITAT OR WETLANDS/WATER BODIES

Locate the project on a site that does not have significant habitat, as defined in Option 2 of this credit, and that does not have land within 100 feet of such habitat, and fulfill the requirements of Options 1 or 2(a) under SLL Prerequisite 3: Wetland and Water Body Conservation;

OR

OPTION 2 – SITES WITH SIGNIFICANT HABITAT

Work with both the state's Natural Heritage Program and the state fish and wildlife agency, to delineate identified significant habitat on the site. Do not disturb significant habitat or portions of the site within an appropriate buffer around the habitat. The geographic extent of the habitat and buffer shall be identified by a qualified biologist, a non-governmental conservation organization or the appropriate state or regional agency. Protect significant habitat and its identified buffers from development in perpetuity by donating or selling the land, or a conservation easement on the land, to an accredited land trust or relevant public agency (a deed covenant is not sufficient to meet this requirement). Identify and commit to ongoing management activities, along with parties responsible for management and funding available, so that habitat is maintained in pre-project condition, or better, for a minimum period of three years after the project is built out. The requirement for identifying ongoing management activities may also be met by earning SLLc9: Long-term Conservation Management of Wetlands/Water Bodies. Significant habitat for this credit includes:

a. Habitat for species that are listed or are candidates for listing under state or federal endangered species acts, habitat for species of special concern in the state, and/or habitat for those species and/or ecological communities classified as G1, G2, G3 and/or S1 and S2 species by NatureServe ; and

b. Locally or regionally significant habitat of any size, or patches of predominantly native vegetation at least 150 acres in size (irrespective of whether some of the 150 acres lies outside the project boundary); and

c. Habitat flagged for conservation under a regional or state conservation or green infrastructure plan;

OR

OPTION 3 – SITES WITH WETLANDS/WATER BODIES

Design the project to conserve 100% of all water bodies, wetlands, land within 100 feet of water bodies, and land within 50 feet of wetlands on the site. Using a qualified biologist, conduct an assessment, or compile existing assessments, showing the extent to which those water bodies and/or wetlands perform the following functions: 1) water quality maintenance, 2) wildlife habitat protection, and 3) hydrologic function maintenance, including flood protection. Assign appropriate buffers (not less than 100 feet for water bodies and 50 feet for wetlands) around the wetlands and water bodies based upon the functions provided, contiguous soils and slopes, and contiguous land uses. Do not disturb wetlands, water bodies, and their buffers, and protect them from development in perpetuity by donating or selling the land, or a conservation easement on the land, to an accredited land trust or relevant public agency (a deed covenant is not sufficient to meet this requirement). Identify and commit to ongoing management activities, along with parties responsible for management and funding available, so that habitat is maintained in pre-project condition, or better, for a minimum period of three years after the project is built out. The requirement for identifying ongoing management activities may also be met by earning SLLc9: Long-term Conservation Management of Wetlands/Water Bodies. The project may not earn this option if it has negative impacts on habitat for species identified in Option 2 (a).

AND

FOR ALL PROJECTS

The following features are not considered wetlands, water bodies, or buffer land that must be protected for the purposes of this credit:

- Previously developed land
- Man-made water bodies (such as industrial mining pits, concrete-lined canals, or stormwater retention ponds) that lack natural edges and floors, or that lack native ecological communities in the water and along the edge
- Man-made linear wetland that is the result of the interruption of natural drainages by existing rights of way
- Wetlands that were created incidentally by human activity, and that are assessed as performing poorly (i.e., with a “poor” rating) for all measured wetland functions. Wetland quality assessment must be performed by a qualified biologist using a method that is accepted by state or regional permitting agencies

Smart Location & Linkage

SLL Credit 8: Restoration of Habitat or Wetlands/Water Bodies

1 Point

Intent

Restore native plants, wildlife habitat, wetlands, and water bodies, that have been harmed by previous human activities.

Requirements

Using only native plants, restore pre-development native ecological communities, or pre-development water bodies or wetlands, on the project site in an area equal to or greater than 10% of the development footprint. Work with a qualified biologist to ensure that restored areas will have habitat, including native species assemblages and hydrology that likely occurred in pre-development conditions. Protect such areas from development in perpetuity by donating or selling the land, or a conservation easement on the land, to an accredited land trust or relevant public agency (a deed covenant is not sufficient to meet this requirement). Identify and commit to ongoing management activities, along with parties responsible for management and funding available, so that restored areas are maintained for a minimum period of three years after the project is built out or the restoration is completed, whichever is later. The requirement for identifying ongoing management activities may also be met by earning SLLc9: Long-term Conservation Management of Wetlands/Water Bodies. The project may not earn this credit if it has negative impacts on habitat for species identified in Option 2 (a) of SLLc7.

Smart Location & Linkage

SLL Credit 9: Long-term Conservation Management of Habitat or Wetlands/Water Bodies

1 Point

Intent

Conserve native plants, wildlife habitat, wetlands and water bodies.

Requirements

Create and commit to implementing a long-term (at least 10-year) management plan for new or existing on-site native habitats, and/or water bodies and wetlands, and their buffers, and create a guaranteed funding source for management. Involve a person from a natural resources agency, a natural resources consulting firm, or a qualified biologist in writing the management plan and conducting or evaluating the ongoing management. The plan shall include biological objectives consistent with habitat and/or water resource conservation, and it must identify a) procedures, including personnel to carry them out, for maintaining the conservation areas; b) estimated implementation costs and funding sources; and c) threats that the project poses for habitat and/or water resources within conservation areas (e.g., introduction of exotic species, intrusion of residents in habitat areas) and measures to substantially reduce those threats. The project may not earn this credit if it has negative impacts on habitat for species identified in Option 2 (a) of SLLc7.

Neighborhood Pattern & Design

NPD Prerequisite 1: Walkable Streets

Required

Intent

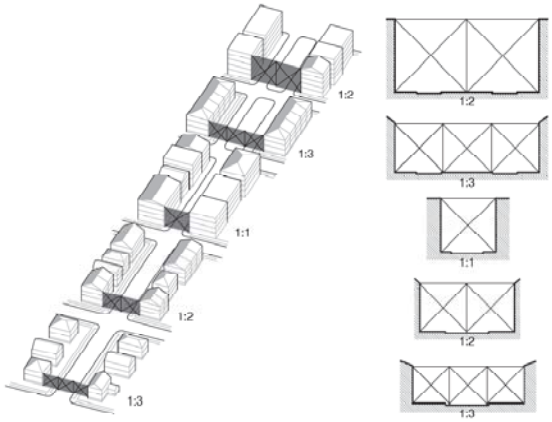
Promote transportation efficiency, including reduced vehicle miles traveled. Promote walking by providing safe, appealing, and comfortable street environments that support public health by reducing pedestrian injuries and encouraging daily physical activity.

Requirements

Design and build the project such that all of the following are achieved:

a. For 90% of new building frontage, a principal functional entry on the front façade faces a public space such as a street, square, park, paseo, or plaza, but not a parking lot, and is connected to sidewalks or equivalent provisions for walking. The square, park, or plaza shall be at least 50 feet wide at a point perpendicular to each entry.

b. At least 15% of existing and new street frontage within and bordering the project has a minimum building-height-to-street-width ratio of 1:3, or a minimum of one foot of building height for every three feet of street width.
   - Alleys and driveways are excluded.
   - Non-motorized rights-of-way may be counted toward the 15% requirement, but 100% of such spaces must have a minimum building-height-to-street-width ratio of 1:1.
   - Street frontage is measured in linear feet.
   - Projects with bordering street frontage are only responsible for meeting their proportional share of the height-to-width ratio, i.e. only on the project side of the street.
   - Building height is measured to eaves or the top of the roof for a flat roof structure, and street width is measured façade-to-façade. For block frontages with multiple heights and/or widths, use average heights or widths weighted by each segment's linear share of total block distance



Walkable Streets: building height to street width

c. Continuous sidewalks, or equivalent all-weather provisions for walking, are provided along both sides of 90% of streets or frontage within the project, including the project-side of streets bordering the project. New sidewalks, whether adjacent to streets or not, must be at least 8 feet wide on retail or mixed use blocks and at least 4 feet wide on all other blocks. Equivalent provisions for walking include woonerfs and all-weather surface footpaths. Alleys, driveways, and reconstructed existing sidewalks are excluded from these calculations.
d. No more than 20% of the street frontages within the project are faced directly by garage and service bay openings.

Projects located in a designated historic district subject to review by a local historic preservation entity are exempt from (b), (c), and (d) if approval for compliance is not granted by the review body. Projects located in historic districts listed in or eligible for listing in a State Register or the National Register of Historic Places that are subject to review by a State Historic Preservation Office (SHPO) or the National Park Service, are exempt from (b), (c), and (d) if approval for compliance is not granted.

Neighborhood Pattern & Design

NPD Prerequisite 2: Compact Development

Required

Intent

Conserve land. Promote livability, walkability, and transportation efficiency including reduced vehicle miles traveled (VMT). Leverage and support transit investments. Reduce public health risks by encouraging daily physical activity associated with walking and bicycling.

Requirements

OPTION 1 – PROJECTS IN TRANSIT CORRIDORS

For projects with existing and/or planned (applies to planned service complying with SLLp1 funding commitments) transit service greater than or equal to the 2-point threshold in SLLc3 Option 1, build any residential components of the project at the densities specified below:

1. For residential components located within the SLLc3-specified walk distances of transit service as defined above: twelve or more dwelling units per acre of buildable land available for residential uses
2. For residential components falling outside of the specified walk distances of transit service as defined above: seven or more dwelling units per acre of buildable land available for residential uses

AND

Build any non-residential components of the project at the densities specified below:

1. Non-residential components located within the SLLc3-specified walk distances of transit service as defined above: 0.80 FAR or greater of buildable land available for non-residential uses
2. Non-residential components falling outside of the specified walk distances of transit service as defined above: 0.50 FAR or greater of buildable land available for non-residential uses

If the project location is serviced by a transit agency which has specified guidelines for minimum service densities that are greater than the densities required by this prerequisite, then the project shall meet the transit agency's minimum service densities instead.

OR

OPTION 2 – ALL OTHER PROJECTS

Build any residential components of the project at a density of seven or more dwelling units per acre of buildable land available for residential uses.

AND

Build any non-residential components of the project at a density of 0.50 FAR or greater of buildable land available for non-residential uses;

AND

FOR ALL PROJECTS

Density calculations include all planned and existing buildings within the project boundary, excluding those portions of parking structures devoted exclusively to parking.

The specified density must be achieved within five years of the date that the first building of any type is occupied.

When a residential or non-residential component of the project meets the minimum density requirement, but the other component does not, include only the qualifying density. Use that component's dwelling units per acre or non-residential floor area in the numerator and the total buildable land area in the denominator. If the resulting density meets the minimum requirement, the prerequisite is achieved.

Neighborhood Pattern & Design

NPD Prerequisite 3: Connected and Open Community

Required

Intent

Promote communities that are physically well-connected within and beyond development projects. Encourage the design of projects in existing communities that promote transportation efficiency through multimodal transportation choices and promote public health through increased physical activity.

Requirements

OPTION 1 – PROJECTS WITH INTERNAL STREETS

Design and build the project such that its internal **connectivity** is at least 140 intersections/square mile. Designate all streets and sidewalks that are counted toward the connectivity requirement as available for general public use and not gated. Gated areas are not considered available for public use, with the exception of education and health care campuses, and military bases, where gates are used for security purposes.

AND

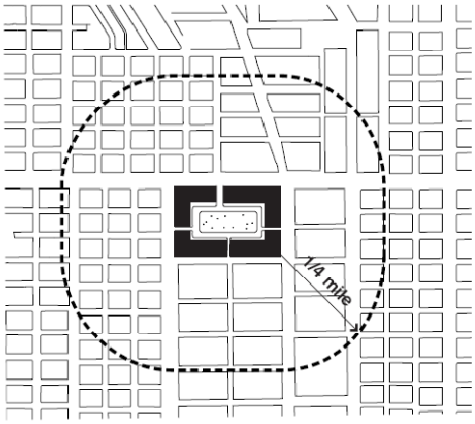
Design and build the project with at least one through-street and/or non-motorized right-of-way intersecting, or terminating at, the project boundary at least every 800 feet, or at existing abutting street intervals and intersections, whichever is the shorter distance. Non-motorized rights-of-way may count for no more than 20% of the total. This does not apply to portions of the boundary where connections cannot be made because of physical obstacles; e.g. prior platting of property and construction of improvements (such as existing buildings) that constitute barriers; slopes over 15%; water bodies and wetlands; railroad and utility rights-of-way; existing limited–access motor vehicle rights-of-way; and parks and dedicated open space.

NPD p3: Connected & Open Community
Option 1

OR

OPTION 2 – PROJECTS WITHOUT INTERNAL STREETS

Locate the project such that the connectivity of the existing streets within ¼ mile of the project boundary is at least 90 intersections/square mile. Confirm that all streets and sidewalks that are counted toward the connectivity requirement are available for general public use and not gated. Gated areas are not considered available for public use, with the exception of education and health care campuses, and military bases, where gates are used for security purposes.



NPD p3: Connected & Open Community
Option 2

Neighborhood Pattern & Design

NPD Credit 1: Walkable Streets

1 to 12 Points

Intent

Promote transportation efficiency, including reduced vehicle miles traveled. Promote walking by providing safe, appealing, and comfortable street environments that support public health by reducing pedestrian injuries and encouraging daily physical activity.

Requirements

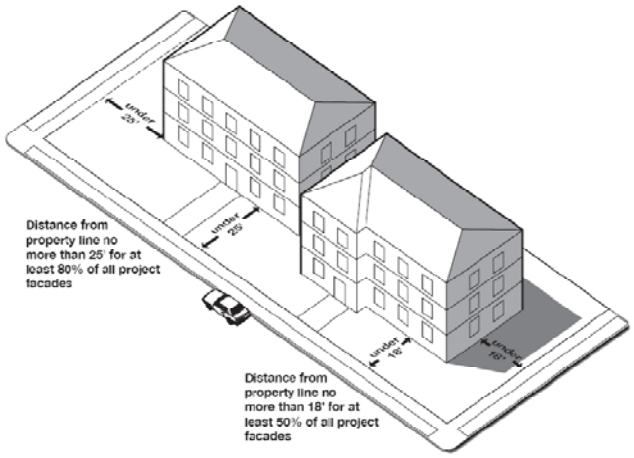
A project may earn a maximum of 12 points according to the schedule below:

Number of items achieved	Points Earned
2-3	1
4-5	2
6-7	3
8-9	4
10	7
11	8
12	9
13	10
14	11
15 – 16	12

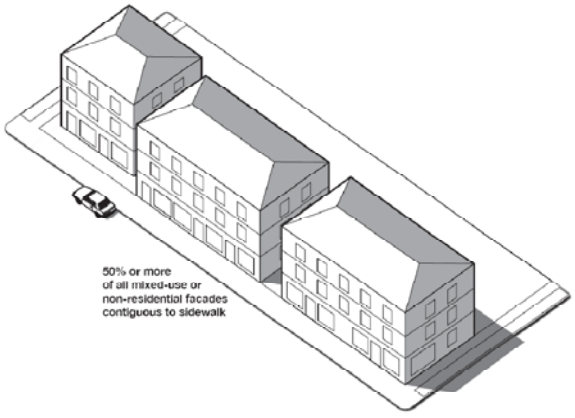
Facades & Entries

a. At least 80% of the total linear feet of street-facing building facades in the project are no more than 25 feet from the property line.

b. At least 50% of the total linear feet of street-facing building facades in the project are no more than 18 feet from the property line.

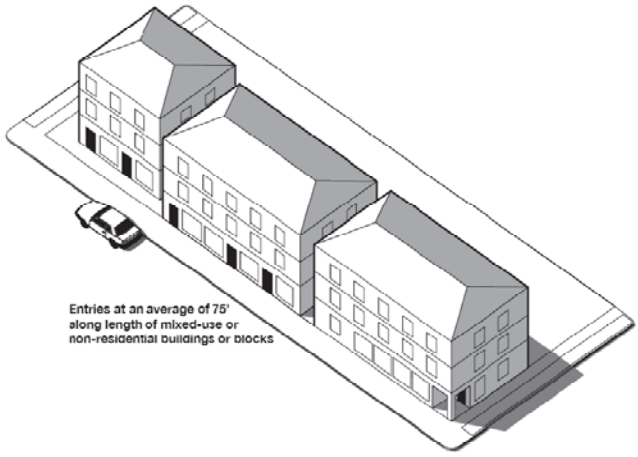


c. At least 50% of the total linear feet of mixed use and non-residential street-facing building facades in the project are within one foot of the sidewalk, or equivalent provision for walking.



d. Functional building entries occur at an average of 75 feet or less along non-residential or mixed use buildings or blocks.

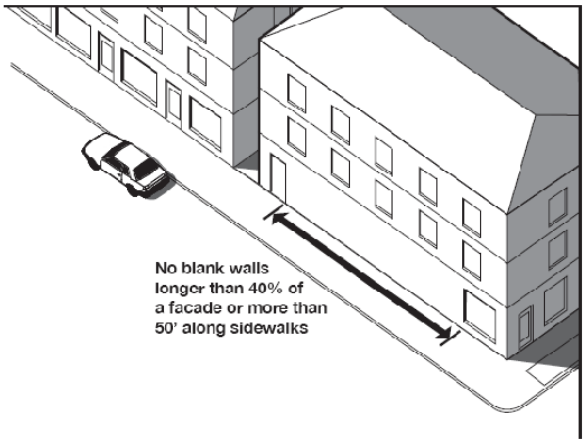
e. Functional building entries occur at an average of 30 feet or less along non-residential or mixed use buildings or blocks (items (d) and (e) are cumulative).



Ground-Level Use & Parking

f. All ground-level retail, service, and trade uses that face a public space have clear glass on at least 60% of their façades between 3 and 8 feet above grade.

g. No blank walls (without doors or windows) longer than 40% of a façade, or more than 50 feet occur along sidewalks, whichever is less.

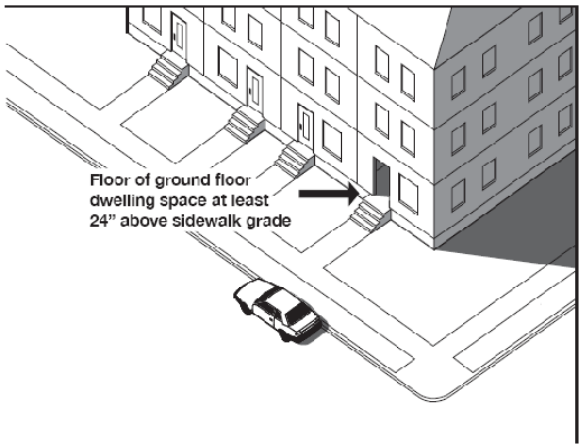


h. Any ground-level retail, service, or trade windows must be kept open and visible (un-shuttered) at night, and this must be stipulated in CC&Rs or other binding documents.

i. On-street parking is provided on a minimum of 70% of both sides of all new and existing streets including the project side of bordering streets. The percent of on-street parking shall be measured by comparing the length of street designated for parking to the total length of the curb along each street, including curb cuts, driveways, and intersection radii. Space within the parking lane that is occupied by corner bulb-outs (within 24 feet of an intersection), transit stops, and motorcycle/bicycle parking may be counted as designated for parking in this calculation. Woonerfs are not considered streets for this subsection.

j. Continuous sidewalks, or equivalent provisions for walking, are provided along both sides of all streets within the project, including the project-side of streets bordering the project. New sidewalks, whether adjacent to streets or not, must be at least 10 feet wide on retail or mixed use blocks and at least 5 feet wide on all other blocks. Equivalent provisions for walking include woonerfs and all-weather surface footpaths at least 5 feet wide. Note that these requirements specify wider sidewalks than required by NPDp1: Walkable Streets.

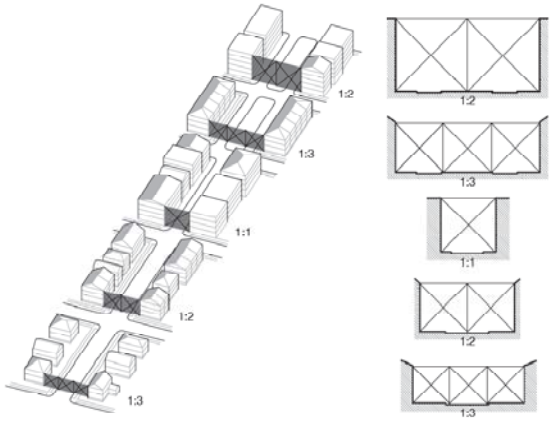
k. If the project has ground-floor dwelling units, the principal floor of at least 50% of those units must have an elevated finished floor elevation no less than 24 inches above the sidewalk grade. Below-grade basement spaces and/or accessory dwelling units (ADUs) are exempt from this requirement.



l. In non-residential or mixed use projects, 50% or more of the total number of office buildings include ground floor retail along 60% of the length of the street façade and 100% of mixed use buildings include ground floor retail, live/work, and/or ground floor dwelling units along at least 60% of the street level facade; and all businesses and/or other community services on the ground floor are accessible directly from sidewalks along a public space such as a street, square, paseo, or plaza, but not a parking lot.

m. At least 40% of all street frontage within the project has a minimum building-height-to-street-width ratio of 1:3, or a minimum of one foot of building height for every three feet of street width. Alleys and driveways are excluded. Non-motorized rights-of-way may be counted toward the 40% requirement, but 100% of such spaces must have a minimum building height-to-street width ratio of 1:1. Street frontage is measured in linear feet. Projects with bordering streetscape are only responsible for meeting their proportional share of the height-to-width ratio. Building height is measured to eaves, or to the top of the roof for a flat roof structure , and street width is measured façade-to-façade. For block frontages with multiple heights and/or widths, use average

heights or widths weighted by each segment's linear share of total block distance.



Walkable Streets: building height to street width

Design Speeds for Safe Pedestrian and Bicycle Travel

n. 75% of new exclusively residential streets within the project are designed for a target speed of no more than 20 mph.

o. 70% of new non-residential and/or mixed use streets within the project, are designed for a target speed of no more than 25 mph. A multi-way boulevard, with travel lanes separated from access lanes by medians, may apply this requirement to its outer access lanes only (exempt through lanes), provided that pedestrian crosswalks exist across the boulevard at intervals no greater than 800 feet.

Sidewalk Intrusions

p. At-grade crossings with driveways account for no more than 10% of the length of sidewalks within the project.

Neighborhood Pattern & Design

NPD Credit 2: Compact Development

1 to 6 Points

Intent

Encourage development in existing areas to conserve land and protect farmland and wildlife habitat. Promote livability, walkability, and transportation efficiency including reduced Vehicle Miles Traveled (VMT). Improve public health encouraging daily physical activity associated with alternative modes of transportation and compact development.

Requirements

Design and build the project so that residential and non-residential components achieve the densities per acre of buildable land shown in the table below (excluding those portions of parking structures devoted exclusively to parking).

Residential Density (DU/acre)	Non-residential Density (FAR)	Points Earned
> 10 and ≤ 13	> 0.75 and ≤ 1.0	1
> 13 and ≤ 18	> 1.0 and ≤ 1.25	2
> 18 and ≤ 25	> 1.25 and ≤ 1.75	3
> 25 and ≤ 38	> 1.75 and ≤ 2.25	4
> 38 and ≤ 63	> 2.25 and ≤ 3.0	5
> 63	> 3.0	6

The specified densities must be achieved within five years of the date that the first building of any type is occupied.

The scoring of a mixed use project is calculated with a weighted average by: 1) determining the total square footage of all residential and non-residential uses; 2) calculating the percentages of the total square footage that the residential and non-residential components each represent; 3) determining the density of each component as measured in dwelling units per acre and FAR respectively; 4) determining how many points the residential and non-residential component each earns separately according to the table above; 5) if the points are different, multiplying the point value of the residential component by the percentage of the total square footage it represents (as determined in step 2) and multiply the point value of the non-residential component by the percentage of the total square footage it represents (as determined in step 2); and 6) adding the two scores together.

Neighborhood Pattern & Design

NPD Credit 3: Mixed-Use Neighborhood Centers

1 to 4 Points

Intent

Cluster diverse land uses in accessible neighborhood and regional centers to encourage daily walking, biking and transit use, reduce vehicle miles traveled (VMT) and automobile dependence, and support car free living.

Requirements

FOR ALL PROJECTS

Locate and/or design the project such that 50% of its dwelling units are within a 1/4-mile walk distance of the number of diverse uses (see Appendix) in the table below, including at least one use from each of the four diverse use categories. For projects with no dwellings, 50% of dwelling units within 1/4 mile of the project boundary shall be within a 1/4-mile walk distance of the number of diverse uses (see Appendix) in the table below, including at least one food retail use and at least one use from each of two other diverse use categories. Uses may be inside or outside the project, and be existing diverse uses or planned diverse uses.

The specified number of diverse uses must be in place by the time percentages of occupancy are in place, as indicated in the following table (exclusive of portions of parking structures devoted to parking):

Number of uses	Percent of project total sq. ft. occupancy at which uses must be in place	Points Earned
4 – 6	20%	1
7 – 10	30%	2
11 – 18	40%	3
≥ 19	50%	4

Per neighborhood center, the following restrictions apply:

a) uses may not be counted in two categories, e.g. a school or place of worship may be counted only once even if it also contains a daycare facility;

b) a mixed use building containing several uses as distinctly operated enterprises with separate exterior entrances may count each as a separate use, but no more than half of the minimum number of diverse uses can be situated in a single building or under a common roof;

c) a diverse use may only be counted twice, e.g. two restaurants and

d) a single retail store of any type may only be counted once even if it sells products associated with multiple use types;

FOR PROJECTS 40 ACRES OR GREATER

Cluster diverse uses into neighborhood centers as follows:

Number of Uses	Minimum Number of Uses Clustered in a Neighborhood Center	Points Earned
4 – 6	3	1
7 – 10	5	2
11 – 18	7	3
≥19	9	4

Within each neighborhood center, the principal entries of the diverse uses must be within a 300 ft walk distance from a single common point that represents the center of the diverse uses for 1 or 2 points, or within a 400 ft walk distance for 3 and 4 points.

Also, projects with multiple centers must determine points earned based on the number of uses in the centers weighted by the percent of total dwelling units within a ¼-mile walk distance from each center's common point.

AND

FOR PROJECTS WITH REGIONAL-SERVING RETAIL OF 150,000 OR MORE SQ. FEET

Projects with retail uses totaling 150,000 or more square feet, if they have at least one retail establishment totaling 75,000 or more square feet, shall also earn a minimum of one point for SLL Credit 3: Reduced Automobile Dependence under Option 1 (planned transit service can be counted), and for every additional 50,000 square feet of retail above 150,000 square feet, earn an additional SLLc3 point.

In the case of planned service, the project must demonstrate one of the following:

d. The relevant transit agency has a signed Full Funding Grant Agreement (FFGA) with the Federal Transit Administration (FTA) that includes a revenue operations date (ROD) for the start of transit service. The ROD must be no later than the occupancy date of 50% of total project building square footage.
e. For bus, streetcar, bus rapid transit, or ferry service, the transit agency must certify that it has an approved budget that includes specifically allocated funds sufficient to provide the planned service at service levels described above and that service at these levels will commence no later than occupancy of 50% of total project square footage.
f. For rail service other than streetcars, the transit agency must certify that preliminary engineering for a rail line has commenced; AND

    1. A state legislature or local subdivision of the state has authorized the transit agency to expend funds for the establishment of rail transit service that will commence no later than occupancy of 50% of total project square footage; or

    2. A municipality has dedicated funding or reimbursement commitments from future tax revenue for the development of stations, platforms, or other rail transit infrastructure that will service the project no later than occupancy of 50% of project total square footage.

Neighborhood Pattern & Design

NPD Credit 4: Mixed-Income Diverse Communities

1 to 7 Points

Intent

Promote socially equitable and engaging communities by enabling residents from a wide range of economic levels, household sizes, and age groups to live within a community.

Requirements

Meet the requirements of one or more options below.

OPTION 1 – DIVERSITY OF HOUSING TYPES

Include a sufficient variety of housing sizes and types in the project such that the total variety of planned and existing housing within the project achieves greater than 0.5 according to the following Simpson Diversity Index calculation using the housing categories below. Projects of less than 125 acres may calculate the Simpson Diversity Index for the area within ¼ mile of the project's geographic center.. The Simpson Diversity Index calculates the probability that any two dwelling units in a project randomly selected will be of a different unit type.

Score = $1 - \sum (n/N)^2$,

where n = the total number of dwelling units in a single category, and
N = the total number of dwelling units in all categories.

Simpson Diversity Index Score	Points Earned
> 0.5 and < 0.6	1
≥ 0.6 and < 0.7	2
≥ 0.7	3

Housing categories are defined for the purposes of this calculation as (dwelling unit net sq. ft. exclusive of garage):

Detached residential – large	> 1250 sq. ft.
Detached residential – small	≤ 1250 sq. ft.
Duplex or townhouse - large	> 1250 sq. ft.
Duplex or townhouse - small	≤ 1250 sq. ft.
Dwelling unit in a multi-unit building with no elevator - large	> 1250 sq. ft.
Dwelling unit in a multi-unit building with no elevator – medium	> 750 sq. ft. and ≤ 1250 sq. ft.
Dwelling unit in a multi-unit building with no elevator - small	≤ 750 sq. ft.
Dwelling unit in a multi-unit building with elevator four stories or fewer - large	> 1250 sq. ft.

Dwelling unit in a multi-unit building with elevator four stories or fewer – medium	> 750 sq. ft. and ≤ 1250 sq. ft.
Dwelling unit in a multi-unit building with elevator four stories or fewer - small	≤ 750 ft.
Dwelling unit in a multi-unit building with elevator of five to eight stories - large	> 1250 sq. ft.
Dwelling unit in a multi-unit building with elevator of five to eight stories – medium	> 750 sq. ft. and ≤ 1250 sq. ft.
Dwelling unit in a multi-unit building with elevator of five to eight stories – small	≤ 750 sq. ft.
Dwelling unit in a multi-unit building with elevator nine stories or more - large	> 1250 sq. ft.
Dwelling unit in a multi-unit building with elevator nine stories or more – medium	> 750 sq. ft. and ≤ 1250 sq. ft.
Dwelling unit in a multi-unit building with nine stories or more - small	≤ 750 sq. ft.
Live/work large	> 1250 sq. ft.
Live/work small	≤ 1250 sq. ft.
Accessory Dwelling Unit – large	> 1250 sq. ft.
Accessory Dwelling Unit – small	≤ 1250 sq. ft.

Townhouse and live/work units may be ground related and/or within a multi-unit or mixed use building. Double counting is prohibited. Each dwelling may be classified in only one category. The number of stories in a building is inclusive of the ground floor regardless of its use.

AND/OR

OPTION 2 – AFFORDABLE HOUSING

Include a proportion of new rental and/or for-sale dwelling units priced for households earning below area median income (AMI). Rental units must be maintained at affordable levels for a minimum of 15 years. Existing dwelling units are exempt from requirement calculations. A maximum of three points may be earned by meeting any combination of thresholds in the following table.

Rental Dwelling Units				For Sale Dwelling Units			
Priced up to 60% AMI		Priced up to 80% AMI		Priced up to 100% AMI		Priced up to 120% AMI	
% of Total Rental Units	Points Earned	% of Total Rental Units	Points Earned	% of Total For Sale Units	Points Earned	% of Total For Sale Units	Points Earned
5	1	10	1	5	1	8	1
10	2	15	2	10	2	10	2
15	3	25	3	15	3	--	--

AND/OR

OPTION 3 – MIXED-INCOME DIVERSE COMMUNITIES

If a project earns at least two points in Option 1 and at least two points in Option 2 (at least one of which must be earned by providing housing at or below 100% AMI), an additional point is earned.

Neighborhood Pattern & Design

NPD Credit 5: Reduced Parking Footprint

1 Point

Intent

Design parking to increase the pedestrian orientation of projects and minimize the adverse environmental effects of parking facilities. Reduce public health risks by encouraging daily physical activity associated with walking and bicycling.

Requirements

For new non-residential buildings and multi-unit residential buildings, either do not build new off-street parking lots, or locate all new off-street surface parking lots at the side or rear of buildings, leaving building frontages facing streets free of surface parking lots;

AND

Use no more than 20% of the total development footprint area for all new off-street surface parking facilities, with no individual surface parking lot larger than 2 acres. For the purposes of this credit, surface parking facilities include ground-level garages unless they are under habitable building space. Underground or multi-story parking facilities can be used to provide additional capacity, and on-street parking spaces are exempt from this limitation;

AND

Provide bicycle parking and storage capacity according to the following new building types:

a. **Multi-unit residential:** Provide at least one secure, enclosed bicycle storage space per occupant for 30% of the planned occupancy but no fewer than one per unit. Provide secure visitor bicycle racks on-site, with at least one bicycle space per 10 dwelling units but no fewer than four spaces per project site.

b. **Retail:** Provide at least one secure, enclosed bicycle storage space per retail worker for 10% of retail worker planned occupancy. Provide visitor/customer bicycle racks on-site, with at least one bicycle space per 5,000 square feet of retail space, but no fewer than one bicycle space per business or four bicycle spaces per project site, whichever is greater. Provide at least one on-site shower with changing facility for any development with 100 or more planned workers and at least one additional on-site shower with changing facility for every 150 planned workers thereafter.

c. **Non-residential other than retail:** Provide at least one secure, enclosed bicycle storage space per occupant for 10% of planned occupancy. Provide visitor bicycle racks on-site with at least one bicycle space per 10,000 square feet of commercial non-retail space but not fewer than four bicycle spaces per building. Provide at least one on-site shower with changing facility for any development with 100 or more planned workers and at least one additional on-site shower with changing facility for every 150 planned workers thereafter.

Secure, enclosed bicycle storage must be located in key-accessed areas easily accessible to residents and/or workers with bicycles. Provide informational signage for accessing storage facilities.

Visitor and customer bicycle racks must be positioned in areas clearly visible from a primary entrance of the building, served with night lighting, and protected from damage from nearby vehicles. All bicycle storage must be located within 100 feet of each building's main entries. For retail buildings or other buildings with multiple main entries, bicycle racks must be proportionally disbursed within 100 feet of business or other main entries.

Shower and changing facility requirements may be met by providing the equivalent of free access to on-site health club shower facilities, where health club can be accessed without going outside. Provide informational signage for accessing shower facilities.

AND

For new non-residential and mixed use buildings, provide carpool and/or shared-use vehicle parking spaces equivalent to 10% of the total automobile parking for each non-residential and mixed use building on the site. Signage indicating such parking spots must be provided, and the parking spots must be within 200 feet of entrances to buildings served.

Neighborhood Pattern & Design

NPD Credit 6: Street Network

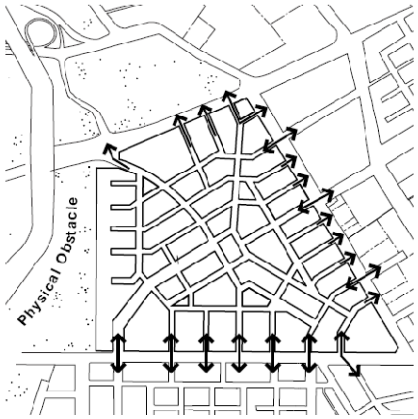
1 to 2 Points

Intent

Promote communities that are physically well-connected within and beyond development projects. Encourage the design of projects that incorporate high levels of internal connectivity, and locations in existing communities, to conserve land and promote multimodal transportation. . Improve public health by encouraging daily physical activity and reducing the negative impacts of motor vehicle emissions.

Requirements

Design and/or locate projects so that there is a through-street and/or non-motorized rights-of-way intersecting, or terminating at, the project boundary at least every 400 feet, or at existing abutting street intervals and intersections, whichever is the shorter distance. Include a pedestrian or bicycle through-connection in at least 90% of any new culs-de-sac. This does not apply to portions of the boundary where connections cannot be made because of physical obstacles created by: prior platting of property and construction of improvements (such as existing buildings) that constitute barriers; slopes over 15%; water bodies and wetlands; railroad and utility rights-of-way; existing limited-access motor vehicle rights-of-way; and parks and dedicated open space.



NPD c6: Street Network

AND

Locate and/or design the project such that its internal **connectivity**, and/or the connectivity within a 1/4 mile distance of the project boundary falls within one of the ranges listed in the following table:

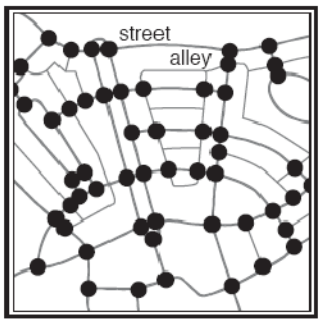
Connectivity	Points Earned
> 300 and ≤400	1

> 400	2

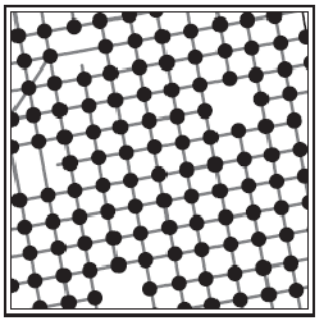
Designate all streets and sidewalks that are counted toward the connectivity requirement as available for general public use and not gated. Gated areas are not considered available for public use, with the exception of education and health care campuses, and military bases, where gates are used for security purposes.

NPDc6: Connectivity

300-400 intersections/sq. mi.
1 point



>400 intersections/sq. mi.
2 points



1000'

Neighborhood Pattern & Design

NPD Credit 7: Transit Facilities

1 Point

Intent

Encourage transit use and reduce driving by providing safe, convenient, and comfortable transit waiting areas and safe and secure bicycle storage facilities for transit users.

Requirements

Work with the transit agency or agencies serving the project to identify transit stop locations within and/or bordering the project boundary where transit agency-approved shelters, and any other agency-required improvements, including bicycle racks, will be installed no later than construction of 50% of total project square footage. At those locations, install transit agency-approved shelters and any required improvements, or provide funding to the transit agency for such installations. Shelters must be covered and at least partially enclosed to buffer wind and rain, with seating and illumination. If agency-required, bicycle racks must have a two-point support system for locking of frame and wheels, and must be securely affixed to the ground or a building.

AND

Work with the transit agency or agencies serving the project to identify transit stop locations within and bordering the project boundary where the agency determines that transit stops will be warranted within two years of project completion, whether through increased ridership on existing service resulting from the project, or at locations where future transit is planned. At those locations, reserve space for transit shelters and any required improvements, including bicycle racks. In lieu of or in addition to new stops, this requirement can be satisfied with a commitment from the transit agency to provide increased service to the 50% build-out stops.

AND

Work with the transit agency or agencies serving the project to provide kiosks, bulletin boards, and/or signs that display transit schedules and route information at each public transit stop within and/or bordering the project.

Neighborhood Pattern & Design

NPD Credit 8: Transportation Demand Management

1 to 2 Points

Intent

Reduce energy consumption, pollution from motor vehicles, and adverse public health impacts by encouraging multi-modal travel.

Requirements

FOR ALL PROJECTS

Earn one point for every two options achieved below, for a maximum of two points. For the purposes of this credit, existing buildings and their occupants are exempt from the requirements.

OPTION 1 – TDM PROGRAM

Create and implement a comprehensive transportation demand management (TDM) program for the project that reduces weekday peak period motor vehicle trips by at least 20% compared to the forecasted trip generation for the project without the TDM strategies; and fund for a minimum of three years following buildout of the project. The TDM program must be prepared by a qualified transportation professional, and the trip reduction effects of Options 2, 3, 4 or 5 may not be included in calculating the 20% threshold ;

OR

OPTION 2 – TRANSIT PASSES

Provide transit passes valid for at least one year, subsidized to be half of regular price or cheaper, to each occupant locating within the project during the first three years of project occupancy (or longer). Publicize the fact that subsidized transit passes are available to project occupants;

OR

OPTION 3 – DEVELOPER-SPONSORED TRANSIT

Provide year-round, developer-sponsored private transit service (with vans, shuttles, buses) from at least one central point in the project to other major transit facilities, and/or other destinations such as a retail or employment center, with service no less frequent than45 daily weekday trips and 30 daily weekend trips . The service must begin when the project total square footage is 20% occupied or sooner, and must be guaranteed for at least three years beyond project buildout. Twenty percent occupancy is defined as residents living in 20% of the project dwelling units and/or employees working in 20% of the total non-residential square footage of the project.

Provide transit stop shelters and bicycle racks adequate to meet projected demand but no less than one shelter and one bicycle rack at each transit stop. Shelters must be covered and at least partially enclosed (adequate to buffer wind and rain), with seating and illumination. Bicycle racks adequate to meet demand but no less than one at each stop. Bicycle racks must have a two point support system to allow for locking of frame and wheels and must be securely affixed to the ground or a building.

OR

OPTION 4 – VEHICLE SHARING

Locate the project such that 50% of the dwelling units and non-residential building entrances are within a ¼ mile walk distance of at least one vehicle in a vehicle-sharing program, and publicize through signage and other means the availability and benefits of the vehicle-sharing program to project occupants. If the project has more than 100 dwelling units and/or employees and has transit service no less than 60 daily weekday trips and 40 daily weekend trips,, at least one additional vehicle for every 100 dwelling units and/or employees must be available and the parking space(s) must be dedicated as part of the project and accessible to any/all vehicle-sharing members. If the project has more than 100 dwelling units and/or employees but does not have transit service at the frequencies specified above, at least one additional vehicle for every 200 dwelling units and/or employees must be available and the parking space(s) must be dedicated as part of the project and accessible to any/all vehicle-sharing members. Where new vehicle locations are created, a vehicle share program must begin when the project total square footage is 20% occupied or sooner, and must commit to providing vehicles to the locations for at least2 years. Twenty percent occupancy is defined as residents living in 20% of the project dwelling units and/or employees working in 20% of the total non-residential square footage of the project;;

OR

OPTION 5 – UNBUNDLING OF PARKING

For 90% of multi-unit residential units and/or non-residential square footage, their associated parking spaces are sold or rented separately from the dwelling units and/or non-residential square footage.

Neighborhood Pattern & Design

NPD Credit 9: Access to Civic & Public Space

1 Point

Intent

Improve physical and mental health and social capital by providing a variety of open spaces close to work and home to facilitate social networking, civic engagement, physical activity, and time spent outdoors.

Requirements

Locate and/or design project so that a civic or passive use space such as a square, park, paseo, or plaza at least 1/6 acre in area, lies within a ¼ mile walk distance of 90% of planned and existing dwelling units and non-residential building entrances. Spaces less than 1 acre must also have a proportion no narrower than 1 unit of width to 4 units of length;

AND

For projects larger than 7 acres, locate and/or design the project so that the median size of civic or passive use spaces within and/or contiguous to the project is at least 1/2 acre.

Neighborhood Pattern & Design

NPD Credit 10: Access to Recreation Facilities

1 Point

Intent

Improve physical and mental health and social capital by providing a variety of recreational facilities close to work and home to facilitate physical activity and social networking.

Requirements

Locate and/or design the project so that a publically-accessible outdoor recreation facility at least one acre in area, or a publicly-accessible indoor recreational facility of at least 25,000 square feet, lies within ½ mile walk distance of 90% of new and existing dwelling units and non-residential building entrances. Outdoor recreation facilities must consist of physical improvements and may include, but are not limited to, tot lots for children, swimming pools, and sports fields such as baseball diamonds.

Neighborhood Pattern & Design

NPD Credit 11: Visitability and Universal Design

1 Point

Intent

Enable the widest spectrum of people, regardless of age or ability, to more easily participate in community life by increasing the proportion of areas usable by people of diverse abilities.

Requirements

OPTION 1 – PROJECTS WITH DWELLING UNITS

For each dwelling unit developed within the following residential building types, design to the applicable requirements specified:

Single-Dwelling Unit Buildings: Design a minimum of 20% of the dwelling units (and not less than one) in accordance with ICC/ANSI A117.1, Type C: Visitable Unit, all of which shall have open space plan with primary functions that include area for cooking, eating, social gathering, as well as a sleeping area, and a full bathroom.

Multi-Unit Building with Two or Three Dwelling Units: Design a minimum of 20% of the dwelling units (and not less than one) in accordance with ICC/ANSI A117.1, Type C: Visitable Unit, all of which shall have a kitchen, dining area, living area, full bathroom and bedroom on the accessible level. If a project has both attached and detached single dwelling unit buildings, the requirements shall apply to each type separately. Similarly, if a project has both 2- and 3- dwelling unit buildings, the requirements shall apply to each type.

Multi-Unit Buildings with 4 or more Dwelling Units (including mixed-use buildings with dwelling units): Design a minimum of 20% of the dwelling units (and not less than one) to incorporate the universal design requirements stated below, or comply with Option 2.

Universal Design Requirements - Choose at least one of the following three strategies

I. Throughout the home, include at least 5 of the following universal design features to facilitate universal function, access, and user-ability:

- Easy-to-grip lever door handles
- Easy-to-grip cabinet and drawer loop handles
- Easy-to-grip locking mechanisms on doors and windows
- Easy-to-grip single-lever faucet handles
- Easy touch rocker or hands-free switches
- Motion-detector lighting at entrance, in hallways and stairwells, in closets; and, motion detector light switches in garages, utility spaces and basements
- Large, high contrast print for controls, signals, and the house/unit numbers
- Built-in shelf, bench or table, with knee space below, located outside entry door, with weather protection over entry door, such as porch or stoop with roof, awning or other overhead covering

- Clear door opening width (32 in. minimum) for all doorways
- Tread at the entrance, on stairs, and on other areas where slipping is common with color contrast difference between stair treads and risers
- Interior floor surfaces (e.g., low-pile carpets, hard-surface flooring) that provide easy passage for a wheelchair or walker with color contrast between floor surfaces and trim. (Note: no carpet in kitchen or bathrooms, or other wet areas of the dwelling unit)

OR

II. On the main floor of the home (or on another floor, if an elevator or stair lift is provided), include a 5 ft. turning radius in the kitchen, and at least 4 of the following universal design features to facilitate universal function, access and user-ability (Note: all kitchens shall have hard-surface flooring and all plumbing fixtures shall have single lever controls):

- Variable height (28 in.-42 in.) work surfaces such as countertops, sinks and/or cooktops (may be adjustable)
- Clear knee space under sink and cooktops. May be open knee space or achieved by means of removable base cabinets or fold-back or self-storing doors. Cooktops and ranges with front or side-mounted controls. Wall mounted ovens at height to accommodate adult in seated position.
- A toe kick area at the base of lower cabinets with a minimum height of 9 inches with full extension drawers and shelves in at least half (by volume) of the cabinets
- Contrasting color treatment between countertops, front edges, and floor
- Adjustable height shelves in wall cabinets
- Glare-free task lighting to illuminate work areas without too much reflectivity

OR

III. On the main floor of the building (or an another floor, if an elevator or stair lift is provided), include all of the following:

In at least one accessible bedroom,

- size to accommodate a twin bed with 5 ft turning radius around the bed
- install a clothes closet with a 32 in. clear opening with adjustable height closet rods and shelves

In at least one full bathroom on the same floor as the bedroom (Note: all bathrooms shall have hard-surface flooring and all plumbing fixtures shall have single lever controls and hand-held shower heads in tub/shower),

- provide adequate maneuvering space with 30 in. x 48 in. clear floor spaces at each fixture
- center toilet 18 in. from any side wall, cabinet, or tub, and clear space of 3 ft in front of toilet
- install broad blocking in walls around toilet, tub and/or shower for future placement and relocation of grab bars
- provide knee space under lavatory (may be open knee space or achieved by means of removable base cabinets or fold-back or self-storing doors)
- install long mirror with bottom no more than 36 in. above finished floor and top at least 72 in. high

OR

OPTION 2 – PROJECTS WITH NON-COMPLIANT PUBLIC RIGHTS-OF-WAY OR ACCESSIBLE TRAVEL ROUTES

For projects with only non-residential components, or residential components that are not within the scope of Option 1 , but that have public rights-of-way or other publicly-accessible travel routes within the project that are not in compliance with Americans With Disabilities Act (private sector facilities, and local and state government facilities) or the Architectural Barriers Act (federally funded facilities), design, construct, and/or retrofit 100% of the rights-of-way and/or travel routes in accordance with the ADA-ABA Accessibility Guidelines, as applicable.

Neighborhood Pattern & Design

NPD Credit 12: Community Outreach and Involvement

1 to 2 Points

Intent

Encourage project selection and design that is responsive to community needs by encouraging community participation in the project design and planning and by involving the people who live or work in a community in deciding how it should be improved or how it should change over time.

Requirements

OPTION 1 – COMMUNITY OUTREACH (1 point)

Meet with adjacent property owners, residents, business owners, and workers; local planning and community development officials; and any persons currently residing and/or working on the project site to solicit and document their input on the proposed project prior to commencing a design;

AND

Work directly with community associations and/or the local government to advertise an open community meeting, other than an official public hearing, to generate comments on project design from the beginning;

AND

Host an open community meeting, other than an official public hearing, to solicit and document public input on the proposed project at the beginning of project design;

AND

Modify the project's conceptual design as a direct result of community input, or if modifications are not made, explain why community input did not generate design modifications;

AND

Establish ongoing means for communication between the developer and the community throughout the design and construction phases; and, in cases where the developer maintains any control during the post-construction phase;

OR

OPTION 2 – CHARRETTE (2 points)

Comply with Option 1 and conduct a design charrette or interactive workshop of at least two days in length and open to the public that includes, at a minimum, participation by a representative group of

nearby property owners, residents, business owners, and workers in the preparation of conceptual project plans and drawings;

OR

OPTION 3 – LOCAL ENDORSEMENT PURSUANT TO EVALUATION PROGRAM (2 points)

Comply with Option 1 and obtain an endorsement from an ongoing local or regional nongovernmental program that systematically reviews and endorses smart growth development projects under a rating and/or jury system.

Neighborhood Pattern & Design

NPD Credit 13: Local Food Production

1 Point

Intent

Promote community-based food production, improve nutrition through increased access to fresh produce, support biodiversity preservation of small farms producing a wide variety of crops, reduce the negative environmental impacts of large-scale industrialized agriculture, and support local economic development that increases the economic value and production of farmlands and community gardens.

Requirements

FOR ALL PROJECTS

Establish CC&Rs or other forms of deed restrictions that do not prohibit areas for growing produce, including greenhouses, on any portion of residential front, rear, or side yards; or on balconies, patios or rooftops. Greenhouses, but not gardens, may be prohibited in front yard areas that face the street;

AND

OPTION 1 – NEIGHBORHOOD FARMS AND GARDENS

Dedicate permanent and viable growing space and/or related facilities (such as greenhouses) within the project at the square footage areas specified below (exclusive of existing dwellings). Provide fencing, watering systems, garden bed enhancements (such as raised beds), secure storage space for tools, solar access, and pedestrian access for these spaces. Ensure that the spaces are owned and managed by an entity that includes occupants of the project in its decision-making, such as a community group, homeowners association, or public body.

Project density (dwelling units/acre)	Required growing space (sq ft per dwelling unit)
> 7 and ≤14	200
> 14 and ≤ 22	100
> 22 and ≤ 28	80
> 28 and ≤ 35	70
> 35	60

Established community gardens outside the project boundary, but within a 1/2 mile walk distance of the project's geographic center, can satisfy this option if the garden otherwise meets all of the option requirements;

OR

OPTION 2 – COMMUNITY SUPPORTED AGRICULTURE (CSA)

Purchase shares in a CSA program located within 150 miles of the project site for at least 80% of dwelling units within the project (exclusive of existing dwelling units) for two years, beginning with each dwelling unit's occupancy until the 80% threshold is reached. Shares must be delivered to within 1/2 mile of the project geographic center on a regular schedule, which shall not be less than twice per month at least four months of the year;

OR

OPTION 3 – PROXIMITY TO FARMERS' MARKET

Locate the project's geographic center within a 1/2 mile walk distance of an existing or planned farmer's market that does, or will, operate at least once weekly for at least five months annually. Farmer's market vendors may only sell items grown within 150 miles of the project site. For a planned farmer's market, firm commitments are required from farmers and vendors to initiate the market's full operation no later than 50% occupancy of project total square footage and to meet all other requirements.

Neighborhood Pattern & Design

NPD Credit 14: Tree-Lined and Shaded Streets

1 to 2 Points

Intent

Encourage walking, bicycling, and transit use. Reduce urban heat island effects. Improve air quality. Discourage excessive motoring speeds. Reduce cooling loads in buildings. Increase evapotransporation.

Requirements

OPTION 1 – TREE-LINED STREETS (1 point)

Design and build the project to provide street trees on both sides of at least 60% of new and existing streets within the project and on the project-side of bordering streets, between the vehicle travel way and walkway, at intervals averaging no greater than 40 feet (excluding driveways and utility vaults);

AND/OR

OPTION 2 – SHADED STREETS (1 point)

Trees or other structures provide shade over at least 40% of the length of sidewalks on streets included within or contiguous to the project. In the case of shade from trees, shade must be provided within ten years of landscape installation. The estimated crown diameter (the width of the shade if the sun is directly above the tree) is used to calculate the shaded area.

AND

FOR ALL PROJECTS INVOLVING STREET TREE PLANTINGS

Obtain a registered landscape architect's determination that planting details are appropriate to growing healthy trees in the project context, including species of trees, root mediums, and width and soil volume of planter strips or wells, and to confirm that the selected tree species are not considered invasive in the project context according to the USDA or the state agricultural extension service.

Neighborhood Pattern & Design

NPD Credit 15: Neighborhood Schools

1 Point

Intent

Promote community interaction and engagement by integrating schools into the neighborhood fabric. Support student health by encouraging walking and bicycling to school.

Requirements

Include a residential component in the project that constitutes at least 30% of the project's total building square footage; and locate or design the project so that at least 50% of project dwelling units are within a ½ mile walk distance of an existing or new elementary or middle school building entrance or within a 1 mile walk distance of an existing or new high school building entrance. In the case of a new school, the relevant school district or equivalent organization must commit in a legally binding warrant that the school will be provided at or before occupancy of 50% of the project dwelling units.

Streets within and/or bordering the project boundary that provide routes from dwelling units to the school site must have a complete network of sidewalks on both sides of such streets, and either bicycle lanes or traffic control and/or calming measures on the streets. If the school is planned as part of the project, it must be designed so that pedestrians and cyclists can easily access building entrances without crossing bus zones, parking entrances, and student drop-off areas;

AND

New school campuses must not exceed the following:

High schools – 15 acres
Middle schools –10 acres
Elementary schools – 5 acres

Schools combining grade levels from more than one category may use the threshold from the grade level with the higher allowable acreage.

Facilities on the school site for which there is a formal joint-use agreement with another entity, such as athletic facilities, playgrounds, and multipurpose spaces in buildings, may be deducted from the total site area of the school.

Green Infrastructure & Buildings

GIB Prerequisite 1: Certified Green Building

Required

Intent

Encourage the design, construction and retrofit of buildings that utilize green building practices.

Requirements

Design, construct, or retrofit one whole building within the project to be certified through: LEED for New Construction, LEED for Existing Buildings: Operations & Maintenance, LEED for Homes, LEED for Schools, LEED for Retail: New Construction or LEED for Core and Shell (with at least 75% of the floor area certified under LEED for Commercial Interiors or LEED for Retail: Commercial Interiors), or through a green building rating system requiring review by independent, impartial third-party certifying bodies as defined by ISO/IEC 17021.

Green Infrastructure & Buildings

GIB Prerequisite 2: Minimum Building Energy Efficiency Required

Intent

Encourage the design and construction of energy efficient buildings that reduce air, water, and land pollution and adverse environmental impacts from energy production and consumption.

Requirements

For 90% of the building floor area (rounded up to the next whole building) of all non-residential buildings, mixed use buildings, and multi-unit residential buildings four stories or greater constructed as part of the project or undergoing major renovations as part of the project:

New buildings constructed as part of the project must, on average, demonstrate a 10% improvement over ANSI/ASHRAE/IESNA Standard 90.1-2007 (with errata but without addenda[1]). Buildings undergoing major renovations as part of the project must, on average, demonstrate a 5% improvement over ANSI/ASHRAE/IESNA Standard 90.1-2007.

Projects shall document building energy efficiency using one or a combination of the following:

a. Produce a LEED compliant energy model following the methodology outlined in the LEED rating system appropriate to each building's scope, including demonstration by a whole building project computer simulation using the Building Performance Rating Method in Appendix G of ANSI/ASHRAE/IESNA Standard 90.1-2007. Appendix G of Standard 90.1-2007 requires that the energy analysis done for the building performance rating method include all energy costs associated with the building project. Projects in California may use Title 24-2005, Part 6 in place of ANSI/ASHRAE/IESNA Standard 90.1-2007.

b. Comply with the prescriptive measures of the ASHRAE Advanced Energy Design Guide listed below appropriate to each building's scope. Project teams must comply with all applicable criteria as established in the Advanced Energy Design Guide for the climate zone in which the building is located.

    - ASHRAE Advanced Energy Design Guide for Small Office Buildings 2004 (office occupancy buildings less than 20,000 sq. ft.)
    - ASHRAE Advanced Energy Design Guide for Small Retail Buildings 2006 (retail occupancy buildings less than 20,000 sq. ft.)
    - ASHRAE Advanced Energy Design Guide for Small Warehouses and Self Storage Buildings 2008 (warehouse or self-storage occupancy less than 50,000 sq. ft.)

[1] Project teams wishing to use ASHRAE approved addenda for the purposes of this credit may do so at their discretion. Addenda must be applied consistently across all LEED credits.

- ASHRAE Advanced Energy Design Guide for K-12 School Buildings (K-12 school occupancy less than 200,000 sq. ft.)

c. Comply with the prescriptive measures identified in the Advanced Buildings™ Core Performance™ Guide developed by the New Buildings Institute The building must meet the following requirements:

- Less than 100,000 square feet.
- Comply with Section 1: Design Process Strategies, and Section 2: Core Performance Requirements.
- Office, school, public assembly, and retail projects less than 100,000 square feet must comply with Section 1and Section 2 of the Core Performance Guide.
- Other project types less than 100,000 square feet implement the basic requirements of the Core Performance Guide.
- Health care, warehouse and laboratory projects are ineligible for this path.

If method (a) is used for all of the floor area evaluated in this prerequisite, then total percentage improvement is calculated as a sum of energy costs for each building compared to a baseline. If any other combination of methods (a), (b), and (c) are used, total percentage improvement is calculated as a weighted average based on building floor area. In determining the weighted average, buildings pursuing (a) will be credited at the percentage value determined by the energy model. Buildings pursuing (b) or Option (c) will be credited at 12% better than ANSI/ASHRAE/IESNA Standard 90.1-2007 for new buildings and 8% better for existing building renovations;

AND

For new single-family residential buildings and new multi-unit residential buildings three stories or fewer:

90% of new buildings must meet ENERGY STAR or equivalent criteria. Projects may demonstrate compliance with ENERGY STAR criteria either through the prescriptive requirements of a Builder Option Package, Home Energy Rating System (HERS) index, or a combination of the two.

Green Infrastructure & Buildings

GIB Prerequisite 3: Minimum Building Water Efficiency Required

Intent

Reduce impacts to natural water resources, and reduce burdens on community water supply and wastewater systems.

Requirements

For non-residential buildings, mixed use buildings, and multifamily residential buildings four stories or more:

Indoor water use in new buildings and buildings undergoing major renovations as part of the project must, on average, use 20% less water than baseline buildings. The baseline shall meet the requirements of the Energy Policy Act of 1992 and subsequent rulings by the Department of Energy, requirements of the Energy Policy Act of 2005, and the plumbing code requirements as stated in the 2006 editions of the Uniform Plumbing Code or International Plumbing Code as to fixture performance. Calculations are based on estimated occupant usage and shall include only the following fixtures and fixture fittings (as applicable to the project scope): water closets, urinals, lavatory faucets, showers, kitchen sink faucets and pre-rinse spray valves.

The water efficiency threshold shall be calculated as a weighted average of water usage for the buildings constructed as part of the project based on their conditioned square footage. Projects may also follow the LEED for Multiple Buildings and On-Campus Building Application Guide alternative calculation methodology to show compliance with this prerequisite;

National Efficiency Baselines for Commercial Water-Using Fixtures, Fittings and Appliances (adapted from information developed and summarized by the U.S. EPA Office of Water)	
Fixtures, Fittings and Appliances	**Current Baseline**
Commercial Toilets	1.6 gpf[2] Except blow-out fixtures: 3.5-gpf
Commercial Urinals	1.0 gpf

[2] EPAct 1992 standard for toilets applies to both commercial and residential models.

National Efficiency Baselines for Commercial Water-Using Fixtures, Fittings and Appliances (adapted from information developed and summarized by the U.S. EPA Office of Water)	
Fixtures, Fittings and Appliances	**Current Baseline**
Commercial Lavatory (restroom) Faucets	2.2-gpm at 60 psi - Private applications only (hotel-motel guest rooms, hospital patient rooms) 0.5 gpm at 60 psi[3] all others except private applications 0.25 gallons per cycle for metering faucets
Commercial Pre-rinse Spray Valves (for food service applications)	Flow rate ≤ 1.6 gpm (no pressure specified; no performance requirement)

Outside the scope of water use reduction calculation

Commercial Steam Cookers	No Water Use Standard
Commercial Dishwashers	No Water Use Standard
Automatic Commercial Ice Makers	No Water Use Standard
Commercial Clothes Washers (Family-sized)	MEF ≥ 1.26 ft3/kWh; WF ≤ 9.5 gal/cycle/ft3

National Efficiency Baselines for Residential Water-Using Fixtures, Fittings and Appliances (adapted from information developed and summarized by the U.S. EPA Office of Water)	
Fixtures, Fittings and Appliances	**Current Baseline**
Residential Toilets	1.6 gpf[4]
Residential Lavatory (Bathroom) Faucets	2.2 gpm at 60 psi
Residential Kitchen Faucet	
Residential Showerheads	2.5 gpm at 80 psi per shower stall[5]

Outside the scope of water use reduction calculation

Residential Clothes Washers	No Water Use Standard
Standard Size and Compact Residential Dishwashers	No Water Use Standard

[3] In addition to EPAct requirements, the American Society of Mechanical Engineers standard for public lavatory faucets is 0.5 gpm at 60 psi (ASME A112.18.1-2005). This maximum has been incorporated into the national Uniform Plumbing Code and the International Plumbing Code.

[4] EPAct 1992 standard for toilets applies to both commercial and residential models.

[5] Residential shower compartment (stall) in dwelling units: The total allowable flow rate from all flowing showerheads at any given time, including rain systems, waterfalls, bodysprays, bodyspas, and jets, shall be limited to the allowable showerhead flow rate as specified above (2.5-gpm) per shower compartment, where the floor area of the shower compartment is less than 2,500 sq.in. For each increment of 2,500 sq.in. of floor area thereafter or part thereof, an additional showerhead with total allowable flow rate from all flowing devices equal to or less than the allowable flow rate as specified above shall be allowed. Exception: Showers that emit recirculated non-potable water originating from within the shower compartment while operating are allowed to exceed the maximum as long as the total potable water flow does not exceed the flow rate as specified above.

AND

For new multi-unit residential buildings three stories or fewer and new single-family residential buildings:

90% of buildings must use a combination of water fixtures that would earn 3 points through the Indoor Water Use credit of LEED for Homes 2008.

Green Infrastructure & Buildings

GIB Prerequisite 4: Construction Activity Pollution Prevention Required

Intent

Reduce pollution from construction activities by controlling soil erosion, waterway sedimentation and airborne dust generation.

Requirements

Create and implement an Erosion and Sedimentation Control (ESC) Plan for all new construction activities associated with the project. The ESC Plan shall use practices such as phasing, seeding, grading, mulching, filter socks, stabilized site entrances, preservation of existing vegetation and other Best Management Practices (BMPs) to control erosion and sedimentation in run-off during construction from the entire project site. The ESC Plan shall list the BMPs employed and describe how the BMPs accomplish the following objectives:

a. Prevent loss of soil during construction by stormwater runoff and/or wind erosion, including, but not limited to, topsoil stockpiling for reuse.

b. Prevent sedimentation of any impacted stormwater conveyance systems or receiving streams.

c. Prevent polluting the air with dust and particulate matter.

The Erosion and Sedimentation Control Plan must illustrate how the ESC Plan will:

a. Preserve Vegetation and Mark Clearing Limits
b. Establish and Delineate Construction Access
c. Control Flow Rates
d. Install Sediment Controls
e. Stabilize Soils
f. Protect Slopes
g. Protect Drain Inlets
h. Stabilize Channels and Outlets
i. Control Pollutants
j. Control De-Watering
k. Maintain the BMPs
l. Manage the ESC Project

The BMPs shall be selected from those identified in the Washington State Department of Ecology Stormwater Management Manual for Western Washington: Volume II -- Construction Stormwater Pollution Prevention (2005 edition) or locally-approved equivalent, whichever is more stringent, and must comply with all federal, state, and local erosion and sedimentation control regulations.

Green Infrastructure & Buildings

GIB Credit 1: Certified Green Buildings

1 to 5 Points

Intent

Encourage the design, construction, and retrofit of buildings that utilize green building practices.

Requirements

OPTION 1 – PROJECTS WITH 10 OR FEWER HABITABLE BUILDINGS

Design, construct, or retrofit one building as part of the project, beyond the prerequisite, to be certified under one of the following LEED building rating systems: LEED for New Construction, LEED for Existing Buildings, LEED for Homes, LEED for Schools, LEED for Retail: New Construction or LEED for Core & Shell (with at least 75% of the floor area certified under LEED for Commercial Interiors or LEED for Retail: Commercial Interiors) or through a green building rating system requiring review by independent, impartial third-party certifying bodies as defined by ISO/IEC 17021. Additional points (no more than 5 total) may be earned for each additional certified building that is part of the project;

OR

OPTION 2 – PROJECTS OF ALL SIZES

Design, construct, or retrofit a percentage of the total project building square footage, beyond the prerequisite requirement, to be certified under one of the LEED building rating systems listed above or through a green building rating system requiring review by independent, impartial third-party certifying bodies as defined by ISO/IEC 17021. Points are available as follows:

Percent of project sq.ft. certified	Points Earned
≥10% and <20%	1
≥20% and <30%	2
≥30% and <40%	3
≥40% and < 50%	4
≥50%	5

AND

FOR ALL PROJECTS

Detached accessory dwelling units must be counted as separate buildings. Accessory dwellings attached to a main building are not counted separately.

Green Infrastructure & Buildings

GIB Credit 2: Building Energy Efficiency

2 Points

Intent

Encourage the design and construction of energy efficient buildings that reduce air, water, and land pollution and adverse environmental impacts from energy production and consumption.

Requirements

For 90% of the building floor area (rounded up to the next whole building) of all non-residential buildings, mixed use buildings, and multi-unit residential buildings four stories or greater constructed as part of the project or undergoing major renovations as part of the project:

New buildings constructed as part of the project must, on average, demonstrate an 18% (1 point) or 26% (2 points) improvement over ANSI/ASHRAE/IESNA Standard 90.1-2007(with errata but without addenda[6]).. Buildings undergoing major renovations as part of the project must, on average, demonstrate a 14% (1 point) or 22% (2 points) improvement over ANSI/ASHRAE/IESNA Standard 90.1-2007.

Projects shall document building energy efficiency using one or a combination of the following:

a. Produce a LEED compliant energy model following the methodology outlined in the LEED rating system appropriate to each building's scope, including demonstration by a whole building project computer simulation using the Building Performance Rating Method in Appendix G of ANSI/ASHRAE/IESNA Standard 90.1-2007. Appendix G of Standard 90.1-2007 requires that the energy analysis done for the building performance rating method include all energy costs associated with the building project. Projects in California may use Title 24-2005, Part 6 in place of ANSI/ASHRAE/IESNA Standard 90.1-2007.

b. Comply with the prescriptive measures of the ASHRAE Advanced Energy Design Guide listed below appropriate to each building's scope. Project teams must comply with all applicable criteria as established in the Advanced Energy Design Guide for the climate zone in which the building is located.

    - ASHRAE Advanced Energy Design Guide for Small Office Buildings 2004 (office occupancy buildings less than 20,000 sq. ft.)
    - ASHRAE Advanced Energy Design Guide for Small Retail Buildings 2006 (retail occupancy buildings less than 20,000 sq. ft.)
    - ASHRAE Advanced Energy Design Guide for Small Warehouses and Self Storage Buildings 2008 (warehouse or self-storage occupancy less than 50,000 sq. ft.)

[6] Project teams wishing to use ASHRAE approved addenda for the purposes of this credit may do so at their discretion. Addenda must be applied consistently across all LEED credits.

- ASHRAE Advanced Energy Design Guide for K-12 School Buildings (K-12 school occupancy less than 200,000 sq. ft.)

c. Comply with the prescriptive measures identified in the Advanced Buildings™ Core Performance™ Guide developed by the New Buildings Institute The building must meet the following requirements:

- Less than 100,000 square feet.
- Comply with Section 1: Design Process Strategies, and Section 2: Core Performance Requirements.
- Office, school, public assembly, and retail projects less than 100,000 square feet must comply with Section 1and Section 2 of the Core Performance Guide.
- Other project types less than 100,000 square feet implement the basic requirements of the Core Performance Guide.
- Health care, warehouse and laboratory projects are ineligible for this path.

If method (a) is used for all of the floor area evaluated in this prerequisite, then total percentage improvement is calculated as a sum of energy costs for each building compared to a baseline. If any other combination of methods (a), (b), and (c) are used, total percentage improvement is calculated as a weighted average based on building floor area. In determining the weighted average, buildings pursuing (a) will be credited at the percentage value determined by the energy model. Buildings pursuing (b) or (c) will be credited at 12% better than ANSI/ASHRAE/IESNA Standard 90.1-2007 for new buildings and 8% better for existing building renovations;

AND

For new single-family residential buildings and new multi-unit residential buildings three stories or fewer:

90% of new buildings achieve a Home Energy Rating System (HERS) index score of at least 75.

Green Infrastructure & Buildings

GIB Credit 3: Building Water Efficiency

1Point

Intent

Reduce impacts to natural water resources, and reduce burdens on community water supply and wastewater systems.

Requirements

For non-residential buildings, mixed use buildings, and multifamily residential buildings four stories or more:

Indoor water use in new buildings and buildings undergoing major renovations as part of the project must, on average, use 40% less water than baseline buildings. The baseline shall meet the requirements of the Energy Policy Act of 1992 and subsequent rulings by the Department of Energy, requirements of the Energy Policy Act of 2005, and the plumbing code requirements as stated in the 2006 editions of the Uniform Plumbing Code or International Plumbing Code as to fixture performance. Calculations are based on estimated occupant usage and shall include only the following fixtures and fixture fittings (as applicable to the project scope): water closets, urinals, lavatory faucets, showers, kitchen sink faucets and pre-rinse spray valves.

The water efficiency threshold shall be calculated as a weighted average of water usage for the buildings constructed as part of the project based on their conditioned square footage. Projects may also follow the LEED for Multiple Buildings and On-Campus Building Application Guide alternative calculation methodology to show compliance with this credit;

National Efficiency Baselines for Commercial Water-Using Fixtures, Fittings and Appliances (adapted from information developed and summarized by the U.S. EPA Office of Water)

Fixtures, Fittings and Appliances	Current Baseline
Commercial Toilets	1.6 gpf[7] Except blow-out fixtures: 3.5-gpf
Commercial Urinals	1.0 gpf

[7] EPAct 1992 standard for toilets applies to both commercial and residential models.

Fixtures, Fittings and Appliances	Current Baseline
Commercial Lavatory (restroom) Faucets	2.2-gpm at 60 psi - Private applications only (hotel-motel guest rooms, hospital patient rooms) 0.5 gpm at 60 psi[8] all others except private applications 0.25 gallons per cycle for metering faucets
Commercial Pre-rinse Spray Valves (for food service applications)	Flow rate ≤ 1.6 gpm (no pressure specified; no performance requirement)

Outside the scope of water use reduction calculation

Commercial Steam Cookers	No Water Use Standard
Commercial Dishwashers	No Water Use Standard
Automatic Commercial Ice Makers	No Water Use Standard
Commercial Clothes Washers (Family-sized)	MEF ≥ 1.26 ft3/kWh; WF ≤ 9.5 gal/cycle/ft3

National Efficiency Baselines for Residential Water-Using Fixtures, Fittings and Appliances (adapted from information developed and summarized by the U.S. EPA Office of Water)

Fixtures, Fittings and Appliances	Current Baseline
Residential Toilets	1.6 gpf[9]
Residential Lavatory (Bathroom) Faucets	2.2 gpm at 60 psi
Residential Kitchen Faucet	
Residential Showerheads	2.5 gpm at 80 psi per shower stall[10]

Outside the scope of water use reduction calculation

Residential Clothes Washers	No Water Use Standard
Standard Size and Compact Residential Dishwashers	No Water Use Standard

AND

For new multi-unit residential buildings three stories or fewer and new single-family residential buildings:

90% of buildings must use a combination of water fixtures that would earn 5 points through the Indoor Water Use credit of LEED for Homes 2008.

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[8] In addition to EPAct requirements, the American Society of Mechanical Engineers standard for public lavatory faucets is 0.5 gpm at 60 psi (ASME A112.18.1-2005). This maximum has been incorporated into the national Uniform Plumbing Code and the International Plumbing Code.

[9] EPAct 1992 standard for toilets applies to both commercial and residential models.

[10] Residential shower compartment (stall) in dwelling units: The total allowable flow rate from all flowing showerheads at any given time, including rain systems, waterfalls, bodysprays, bodyspas, and jets, shall be limited to the allowable showerhead flow rate as specified above (2.5-gpm) per shower compartment, where the floor area of the shower compartment is less than 2,500 sq.in. For each increment of 2,500 sq.in. of floor area thereafter or part thereof, an additional showerhead with total allowable flow rate from all flowing devices equal to or less than the allowable flow rate as specified above shall be allowed. Exception: Showers that emit recirculated non-potable water originating from within the shower compartment while operating are allowed to exceed the maximum as long as the total potable water flow does not exceed the flow rate as specified above.

Green Infrastructure & Buildings

GIB Credit 4: Water Efficient Landscaping

1 Point

Intent

Limit or eliminate the use of potable water, and other natural surface or subsurface water resources on project sites, for landscape irrigation.

Requirements

Reduce water consumption for outdoor landscape irrigation by 50% from a calculated mid-summer baseline case. Reductions may be attributed to any combination of the following items, among others:

- Plant species, density and microclimate factor
- Irrigation efficiency
- Use of captured rainwater
- Use of recycled wastewater
- Use of water treated and conveyed by a public agency specifically for non-potable uses
- Use of other non-potable water sources such as stormwater, air conditioning condensate, and foundation drain water

Projects with no new or existing landscape irrigation requirements automatically meet credit requirements.

Groundwater seepage that is pumped away from the immediate vicinity of buildings slabs and foundations can be used for landscape irrigation and meet the intent of this credit. However, it must be demonstrated that doing so does not affect site stormwater management systems.

Green Infrastructure & Buildings

GIB Credit 5: Existing Building Reuse

1 Point

Intent

Extend the life cycle of existing building stock to conserve resources, reduce waste, and reduce adverse environmental impacts of new buildings related to materials manufacturing and transport.

Requirements

Reuse the existing habitable building stock, achieving the greater of the two benchmarks specified below (based on surface area):

a. 50% of one existing building structure (including structural floor and roof decking) and envelope (including exterior skin and framing, and excluding window assemblies and non-structural roofing material).

b. 20% of the total existing building stock (including structure and envelope, as defined above).

Hazardous materials that are remediated as a part of the project scope shall be excluded from the calculation of the percentage maintained.

AND

FOR ALL PROJECTS

Do not demolish any historic buildings, or portions thereof, or alter any cultural landscapes as part of the project.

An exception is granted only in instances where approval for such action is provided by the appropriate review body. For buildings listed locally, approval must be granted by the local historic preservation review board, or equivalent body. For buildings listed in a State Register or in the National Register of Historic Places, approval must appear in a programmatic agreement with the State Historic Preservation Office;

Green Infrastructure & Buildings

GIB Credit 6: Historic Resource Preservation and Adaptive Use

1 Point

Intent

Encourage the preservation and adaptive use of historic buildings and cultural landscapes that represent significant embodied energy and cultural value, in a manner that preserves historic materials and character-defining features.

Requirements

To achieve this credit, at least one historic building or cultural landscape must be present on the project site.

Do not demolish any historic buildings, or portions thereof, or alter any cultural landscapes as part of the project.

An exception is granted only in instances where approval for such action is provided by the appropriate review body. For buildings or landscapes listed locally, approval must be granted by the local historic preservation review board, or equivalent body. For buildings or landscapes listed in a State Register or in the National Register of Historic Places, approval must appear in a programmatic agreement with the State Historic Preservation Office;

If any historic building in the project site is to be rehabilitated, rehabilitate in accordance with local review or federal standards for rehabilitation, whichever is more restrictive, using one of the following approaches:

a. Obtain approval, in the form of a "certificate of appropriateness," from a locally appointed historic preservation commission or architectural review board for any exterior alterations or additions
b. If federal funds are used for the project, then the project must obtain confirmation from a State Historic Preservation Office or the National Park Service that the rehabilitation satisfies the Secretary of the Interior's Standards for Rehabilitation.
c. If a building or site is listed in or determined eligible for the National Register of Historic Places, but is not subject to Federal or local review board review, then the project must have a preservation professional on the team who meets the federal qualifications for historic architect and provides a review of the project to attest to its conformance to the Secretary of the Interior's Standards for the Treatment of Historic Properties.

Green Infrastructure & Buildings

GIB Credit 7: Minimize Site Disturbance In Design and Construction

1 Point

Intent

Preserve existing non-invasive tree canopy, native vegetation and pervious surfaces.

Requirements

OPTION 1 – DEVELOPMENT FOOTPRINT ON PREVIOUSLY DEVELOPED LAND

Locate 100% of the development footprint on areas that are **previously developed** and for which 100% of the zone of construction impact is previously developed;

OR

OPTION 2 – UNDEVELOPED PORTION OF PROJECT REMAINS UNDISTURBED

Depending on the density of the project, do not develop or disturb a portion of the land that has not been previously developed on the site, exclusive of any land preserved by codified law or a prerequisite of LEED for Neighborhood Development; or exempt areas designated as non-buildable in land-use comprehensive plans and stipulate in CC&Rs or other binding documents that the undisturbed area will be protected from development in perpetuity. Densities and minimum percentages are as follows (mixed use projects must use the lowest applicable density or calculate a weighted average per the methodology in NPD Credit 2: Compact Development):

Residential Density (DU/acre)	Non-Residential Density (FAR)	Minimum percent of previously undeveloped area to leave undisturbed
< 15	< .50	20%
15-21	.50 – 1.0	15%
> 21	> 1.0	10%

For portions of the site that are not previously developed, identify limits of disturbance through the creation of construction impact zones that, at minimum, limits disturbance to: 40 feet beyond the building perimeter; 10 feet beyond surface walkways, patios, surface parking and utilities less than 12 inches in diameter; 15 feet beyond street curbs and main utility branch trenches; and 25 feet beyond constructed areas with permeable surfaces (such as pervious paving areas, stormwater detention facilities and playing fields) that require additional staging areas in order to limit compaction in the constructed area;

AND

FOR ALL PROJECTS

Survey the site to identify:

a. Trees in good or excellent condition as determined by an International Society of Arboriculture (ISA) Certified Arborist,

b. Any Heritage or Champion trees of special importance to the community as defined by a government forester because of their age, size, type, historical association or horticultural value,

c. The diameter of all trees that are over 6 inches in diameter at breast height (DBH) at 4 feet 6 inches above ground, and

d. Any invasive species of tree present on the site, and whether those species threaten the health of other trees to be preserved on the site, as determined by an ISA Certified Arborist.

Preserve the following on the site that are also identified as in good or excellent condition:

a. All Heritage or Champion Trees identified, and any tree with a DBH over 50% of the state champion DBH for the species.

b. A minimum of 75% of all non-invasive trees (including the above) over 18 inches DBH, and

c. A minimum of 25% of all non-invasive trees (including the above) that are over 12 inches DBH if deciduous, and 6 inches DBH if conifer.

Tree condition ratings must be based on assessment by an ISA Certified Arborist using ISA-approved assessment measures.

Develop a plan, in consultation with and approved by an ISA Certified Arborist, for the health of the trees, including fertilization and pruning, and construction tree protection specifications which are to include protection fencing located at the drip line of each tree or 1 foot for 1 inch caliper or the tree drip line, whichever is larger, and specifying that if trenching or other disturbance is necessary within the drip line, this work must be done by hand. If disturbance includes a permanent excavation of 3 feet or deeper, the excavation shall start from a point not closer than 15 feet from the tree's drip line. If an ISA Certified Arborist has determined that the health of the trees to be preserved is threatened by invasive vegetation, develop a plan for invasive vegetation reduction to the maximum extent possible. Stipulate in CC&Rs or other binding documents that the undisturbed area of the preserved trees will be protected from development in perpetuity.

Green Infrastructure & Buildings

GIB Credit 8: Stormwater Management

1 to 4 Points

Intent

Reduce pollution and hydrologic instability from stormwater, reduce flooding, promote aquifer recharge, and improve water quality through the emulation of undeveloped natural hydrological conditions.

Requirements

Implement a comprehensive stormwater management plan for the project that retains on-site the below-specified rainfall volume through infiltration, evapotranspiration, and reuse. Rainfall volume is based on the project's development footprint, any other areas that have been graded so as to be effectively impervious, and any pollution-generating pervious surfaces, such as landscaping, that will receive treatments of fertilizers or pesticides.

The percentile rainfall event referenced in the table below is the event (total rainfall that fell on a given day in the record) whose precipitation total is greater than or equal to X percent of all rainfall events over a 20 – 40+ year period. For example: in some locations a 95th percentile storm would be represented by a number such as 1.5 inches, which would then be the volume to retain. To determine the volume to be retained, projects may use NOAA published national rainfall data, run an approved stormwater model, or independently gather local rain gauge data and rank rainfall events. One hundred percent of the water volume from rainfall events less than or equal to the X percentile event shall not be discharged to surface waters except in cases where the discharge of harvested and reused runoff is authorized or allowed to be discharged into sanitary treatment systems.

Percentile rainfall event determining rainfall volume to be retained	**Points earned**
80%	1
85%	2
90%	3
95%	4

Projects that earn at least two points via the above table may earn one additional point for meeting one of the following site characteristics up to a maximum credit total of four points.

- 1 point: The project is located on a **previously developed** site
- 1 point: The project is located on a site which meets the definition of brownfield in SLLc2: Brownfields Redevelopment.
- 1 point: The project is designed to be transit ready by having all of the following characteristics:

- Earn at least 2 points under NPD Credit 1: Walkable Streets
- Earn at least 2 points under NPD Credit 2: Compact Development
- Earn at least 2 points under NPD Credit 3: Mixed-Use Neighborhood Centers

The BMPs shall be selected from those identified in the 2005 edition of the *Washington State Department of Ecology Stormwater Management Manual for Western Washington: Volume V - Runoff Treatment BMPs* or locally-approved equivalent, whichever is more stringent, and must comply with all federal, state, and local regulations. The stormwater management plan must include a season specific maintenance plan for the BMPs demonstrating continuous performance of the stormwater management system.

For stormwater reuse systems not on a combined stormwater and sewer system the total water reused for indoor use shall not exceed 90% of the average annual rainfall.

Stormwater BMPs (except cisterns) shall be designed to drain down within 72 hours.

Green Infrastructure & Buildings

GIB Credit 9: Heat Island Reduction

1 Point

Intent

Reduce heat islands[11] to minimize impact on the microclimate, and human and wildlife habitat.

Requirements

OPTION 1 – NON-ROOF MEASURES

Use any combination of the following strategies for 50% of the non-roof site hardscape (including roads, sidewalks, courtyards, parking lots, parking structures, and driveways):

a. Provide shade from open structures such as those supporting solar photovoltaic panels, canopied walkways, vine pergolas, all with a Solar Reflectance Index (SRI) of at least 29; or

b. Have paving materials with a SRI of at least 29; or

c. Open grid pavement system (at least 50% pervious); or

d. Provide shade from tree canopy (within ten years of landscape installation);

OR

OPTION 2 – HIGH REFLECTANCE AND VEGETATED ROOFS

Use roofing materials that have a SRI equal to or greater than the values in the table below for a minimum of 75% of the roof area of all new buildings within the project; or install a vegetated ("green") roof for at least 50% of the roof area of all new buildings within the project. Combinations of SRI compliant and vegetated roof can be used provided that they collectively cover 75% of the roof area of all new buildings (use equation in Option 3).

Roof Type	Slope	SRI
Low-Sloped Roof	≤ 2:12	78
Steep-Sloped Roof	> 2:12	29

OR

OPTION 3 – MIXED NON-ROOF AND ROOF MEASURES

Use any of the strategies listed under Options 1 and 2 that, in combination, meet the following criteria:

[11] thermal gradient differences between developed and undeveloped areas

(Area of Non-Roof Measures / 0.5) + (Area of SRI Roof / 0.75) + (Area of Vegetated Roof / 0.5) ≥ Total Site Hardscape Area + Total Roof Area

Green Infrastructure & Buildings

GIB Credit 10: Solar Orientation

1 Point

Intent

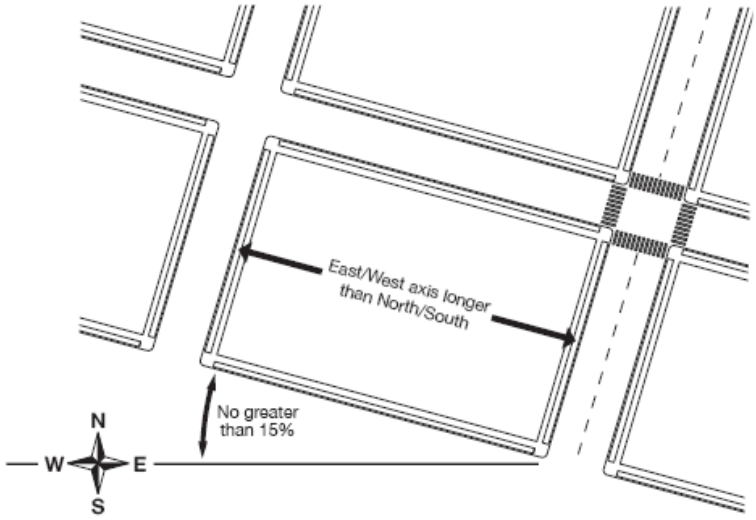
Achieve enhanced energy efficiency by creating optimum conditions for the use of passive and active solar strategies.

Requirements

OPTION 1 – BLOCK ORIENTATION (FOR PROJECTS EARNING AT LEAST 2 POINTS UNDER NPD CREDIT 2: COMPACT DEVELOPMENT)

Locate the project on existing blocks, or design and orient the project, such that 75% or more of the blocks, have one axis within plus or minus 15 degrees of geographical east/west, and the east/west lengths of those blocks are at least as long, or longer, as the north/south lengths of the blocks; and

earn at least two points under NPD Credit 2: Compact Development;

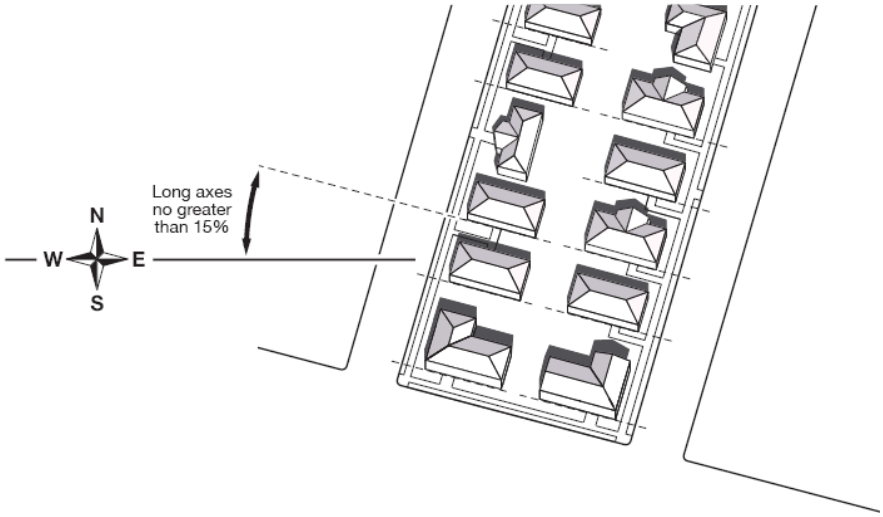


OR

OPTION 2 – BUILDING ORIENTATION (AVAILABLE FOR ALL PROJECTS)

Design and orient 75% or more of the project total building square footage (excluding existing buildings) such that one axis of each qualifying building is at least 1.5 times longer than the other, and the longer axis is within 15 degrees of geographical east/west axis. The length to width ratio shall be applied only to the length of walls enclosing conditioned spaces; walls enclosing unconditioned spaces such as garages,

arcades, or porches cannot contribute to credit achievement. The surface area of equator-facing vertical surfaces and slopes of roofs of buildings counting towards credit achievement must not be more than 25% shaded at the time of initial occupancy measured at noon on winter solstice.



Green Infrastructure & Buildings

GIB Credit 11: On-Site Renewable Energy Sources

1 to 3 Points

Intent

Encourage on-site renewable energy production to reduce the adverse environmental and economic impacts associated with fossil fuel energy production and use.

Requirements

Incorporate on-site non-polluting renewable energy generation technologies such as solar, wind, geothermal, small scale/micro hydroelectric, and biomass with production capacity of at least 5% of the project's annual electrical and thermal energy cost (exclusive of existing buildings), as established through an accepted building energy performance simulation tool. Additional points awarded as described in the table.

Percentage of annual electrical and thermal energy cost	Points Earned
5 %	1
12.5 %	2
20 %	3

Green Infrastructure & Buildings

GIB Credit 12: District Heating & Cooling

2 Points

Intent

Encourage the development of energy-efficient neighborhoods by employing district heating and cooling strategies that reduce energy use and adverse energy-related environmental impacts.

Requirements

Incorporate into the project a district heating and/or cooling system for space conditioning and/or water heating of new buildings in the project (at least 2 buildings total) such that at least 80% of the project's annual heating and/or cooling consumption is provided by the district plant. Project teams may choose to exclude single-family residential buildings and existing buildings of any type from the consumption calculation.

The efficiency of each component of the system which is regulated by ANSI/ASHRAE/IESNA Standard 90.1-2007 must have an overall efficiency performance at least 10% better than specified by the ANSI/ASHRAE/IESNA Standard 90.1 - 2007 Prescriptive Requirements. Additionally, annual district pumping energy consumption over and above 2.5% of the annual thermal energy output of the heating and cooling plant (with one kWh of electricity equal to 3,413 Btu) must be offset by increases in regulated component efficiency beyond the 10% improvement over ANSI/ASHRAE/IESNA Standard 90.1-2007 already specified by this credit. Combined Heat and Power (CHP) district systems can achieve this credit by demonstrating equivalency relative to the above criteria.

Green Infrastructure & Buildings

GIB Credit 13: Infrastructure Energy Efficiency

1 Point

Intent

Reduce adverse environmental impacts from energy used for operating public infrastructure.

Requirements

Design, purchase, or work with the municipality to install all new infrastructure, including but not limited to traffic lights, street lights, and water and wastewater pumps, to achieve a 15% annual energy reduction below an estimated baseline energy use for this infrastructure. The baseline is calculated with the assumed use of lowest first-cost infrastructure items.

Green Infrastructure & Buildings

GIB Credit 14: Wastewater Management

1 - 2 Points

Intent

Reduce pollution from wastewater and encourage water reuse.

Requirements

Design and construct the project to retain on-site at least 25% of the average annual wastewater generated by the project (exclusive of existing buildings), and reuse that wastewater to replace the use of potable water. An additional point may be awarded as described in the table below. Provide on-site treatment to a quality required by state and local regulations for the proposed reuse. The percentage of wastewater diverted and reused is calculated by determining the total wastewater flow using the design case after GIBp3 calculations, and demonstrating that 25% or more of that volume is reused on-site.

Percentage of Wastewater Reused	Points Earned
25%	1
50%	2

Green Infrastructure & Buildings

GIB Credit 15: Recycled Content in Infrastructure

1 Point

Intent

Use recycled and reclaimed materials to reduce the adverse environmental impacts of extracting and processing virgin materials.

Requirements

Use materials for new infrastructure such that the sum of post-consumer recycled content, in-place reclaimed materials, and one-half of the pre-consumer recycled content constitutes at least 50% of the total mass of infrastructure materials.

For purposes of calculating achievement of this credit, materials in all of the following infrastructure items which are present in the project must be counted:

- Roadways, parking lots, sidewalks, unit paving, and curbs
- Water retention tanks and vaults
- Base and subbase materials for the above
- Stormwater, sanitary sewer, steam energy distribution and water piping

Recycled content shall be defined in accordance with ISO/IEC 14021 - Environmental labels and declaration - Self-declared environmental claims (Type II environmental labeling).

Green Infrastructure & Buildings

GIB Credit 16: Solid Waste Management Infrastructure

1 Point

Intent

Reduce the volume of waste deposited in landfills. Promote the proper disposal of hazardous wastes.

Requirements

Meet at least four of the following five requirements and publicize their availability and benefits:

a. Include at least one recycling or reuse station as part of the project available to all project occupants dedicated to the separation, collection, and storage of materials for recycling including, at a minimum, paper, corrugated cardboard, glass, plastics and metals; or locate project in a local government jurisdiction that provides recycling services for these materials.

b. Include at least one drop-off point as part of the project available to all project occupants for office or household potentially hazardous wastes such as paints, solvents, oil, batteries; or locate project in a local government jurisdiction that provides services for collecting these materials. If a plan for post-collection disposal or use does not exist, establish one;

c. Include at least one compost station or location(s) as part of the project available to all project occupants dedicated to the collection and composting of food, leaf, and yard wastes; or locate project in a local government jurisdiction that provides services for composting materials. If a plan for post-collection use does not exist, establish one;

d. Include litter receptacles on mixed use and non-residential streets, with recycle containers adjacent to other receptacles or recycled containers integrated into the design of the receptacle, on every block or at least every 800 feet, whichever is shorter.

e. Recycle and/or salvage at least 50% of non-hazardous construction and demolition debris. Develop and implement a construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal and whether the materials will be stored on-site or commingled. Excavated soil and land-clearing debris do not contribute to this credit. Calculations can be done by weight or volume, but must be consistent throughout.

Green Infrastructure & Buildings

GIB Credit 17: Light Pollution Reduction

1 Point

Intent

Minimize light trespass from project sites, reduce sky-glow to increase night sky access, improve nighttime visibility through glare reduction, and reduce adverse impacts on wildlife environments.

Requirements

For purposes of this credit, shared portions of a project are areas and facilities dedicated to common use (publically or privately-owned).

All exterior lighting shall:

- In residential areas, provide for at least 50% of the luminaires to have fixture-integrated lighting controls that use motion sensors to reduce light levels by at least 50% when no activity has been detected for 15 minutes.
- In all shared areas, have automatic controls capable of turning off exterior lighting when sufficient daylight is available and when the lighting is not required during nighttime hours, and shall meet the total exterior lighting power allowance requirements of Table xxx.

AND

Stipulate CC&Rs or other binding documents to require continued adherence to these standards.

AND

Document which one or more of the lighting zones defined below describes the project; and for all areas defined above in shared areas, follow the requirements from Table www below for those specific zones (when two or more of the following zones border the project, use the most stringent uplight requirements, and use the adjacent Zone for light trespass requirements). Please note that the light trespass portions of Table www may also be met via an alternative path in Table yyy. Where roadway lighting is part of the project, such lighting shall meet the requirements for the defined zones.

Table www – Allowable Light Trespass and Uplight per Lighting Zone

Lighting Zone - Definition of Lighting Zone	Maximum Allowed Horizontal and Vertical Illuminance at the Site Boundary (fc)	Maximum Allowed Horizontal and Vertical Illuminance at the specified distance beyond the Site Boundary (fc)	Percentage of Fixture Lumens Allowed to be Emitted Above 90 degrees or higher from nadir (straight down)
LZ0 - Undeveloped areas within national parks, state parks, forest land and rural areas and sites immediately adjacent to areas officially recognized as ecologically sensitive by the local zoning authority	0	0 at 0’	0%
LZ1 - Developed areas within national parks, state parks, forest land and rural areas	0.01	.01 at 0’	0%
LZ2** - Areas predominantly consisting of Residential zoning, Neighborhood business districts, Light industrial with limited nighttime use, and Residential mixed use areas	0.10	.02 at 10’	1%
LZ3** - All other areas not included in LZ0, LZ1, LZ2 or LZ4 (this would include Commercial/Industrial and High-Density Residential)	0.20	.05 at 15’	2%
LZ4** - High activity commercial districts in major metropolitan areas. To be LZ4 the area must be so designated by the local jurisdiction such as the local zoning authority	0.60	.05 at 15’	5%

****For Zones 2, 3, & 4:** For project boundaries that abut public rights-of-way, light trespass requirements may be met relative to the curb line instead of the project boundary

For All Zones: Illuminance generated from a single luminaire placed at the intersection of a private vehicular driveway and public roadway accessing the site is allowed to use the centerline of the public roadway as the site boundary for a length of 2 times the driveway width centered at the centerline of the driveway when complying with trespass requirements specified below.

For All Zones: Compliance for the light trespass requirements may alternately be met by only using luminaires that comply with Table yyy Backlight and Glare luminaire ratings.

Table xxx – Allowable lighting power densities per Lighting Zone

	Zone 0	Zone 1	Zone 2	Zone 3	Zone 4
All exterior improved areas (except those listed below)	0.04 W/sq.ft	0.04 W/sq.ft	0.06 W/sq.ft	0.10 W/sq.ft	0.13 W/sq.ft
Walkways	0.7 W/linear ft.	0.7 W/linear ft.	0.7 W/linear ft.	0.8 W/linear ft.	1.0 W/linear ft.
Landscaping	No Allowance	0.04 W/sq.ft	0.05 W/sq.ft	0.05 W/sq.ft	0.05 W/sq.ft
Entrance Doors (per linear foot of doorway)	20W	20W	20W	30W	30W
Entry Canopies	0.25 W/sq.ft	0.25 W/sq.ft	0.25 W/sq.ft	0.40 W/sq.ft	0.40 W/sq.ft
Illuminated face of Building Facades	No Allowance	No Allowance	2.5W/linear foot	3.75W/linear ft.	5.0W/linear foot

The total exterior lighting power allowance for all SHARED exterior applications is the sum of the individual allowances for areas that are to be illuminated, as specified here. The following lighting is exempted from these LPD requirements when their controls meet the above requirements and are independent of the controls for non-exempt lighting:

- Specialized signal, directional and marker lighting associated with transportation
- Advertising and directional signage
- Lighting that is integral to equipment or instrumentation and is installed by its manufacturer
- Lighting for theatrical purposes, including performance, stage, film production and video production
- Lighting for athletic playing fields
- Temporary lighting (lighting that is installed for no more than 30 days and then removed for at least 30 days)
- Lighting for industrial production, material handling, transportation sites and associated storage areas
- Theme elements in theme/amusement parks

Lighting used to highlight features of public monuments and registered historic landmark structures or buildings.

Table yyy - Backlight and Glare luminaire ratings (Alternate method for meeting light trespass requirements in Table www)

A luminaire may be used if it is rated as follows according to the Lighting Zone of the Site. If the luminaire is installed in other than the intended manner, the rating shall be determined to account for the actual photometric geometry. Exception: Luminaires where it can be documented that at least 98% of their emitted lumens are intercepted by man-made structures within the project. In either case, luminaires equipped with adjustable mounting devices permitting alteration of luminaire aiming in the field shall not be permitted.

Table yyy - Backlight and Glare luminaire ratings					
	Lighting Zone 0	Lighting Zone 1	Lighting Zone 2	Lighting Zone 3	**Lighting Zone 4**
Allowed Backlight Rating					
>2 mounting heights from property line	B0	B1	B2	B3	**B4**
1 to 2 mounting heights from property line and properly oriented*	B0	B1	B2	B3	**B3**
0.5 to 1 mounting height to property line and properly oriented*	B0	B0	B1	B2	**B2**
<0.5 mounting height to property line adjacent to a street and properly oriented*	B0	B0	B1	B2	**B2**
<0.5 mounting height to property line and properly oriented*	B0	B0	B0	B1	**B2**
Allowed Glare Rating	**G0**	**G1**	**G2**	**G3**	**G4**

** The luminaire must be mounted with backlight towards the property line.*

Note: Backlight and Glare ratings are defined based on specific lumen limits for IESNA TM-15-07 solid angles, Addendum A.

Innovation & Design Process

IDP Credit 1: Innovation and Exemplary Performance

1 to 5 Points

Intent

Provide projects with the opportunity to be awarded points for exemplary performance above the requirements set by the LEED for Neighborhood Development Rating System and/or innovative performance in green building, smart growth, or new urbanist categories not specifically addressed by the LEED for Neighborhood Development Rating System.

Requirements

In writing, identify the intent of the proposed innovation credit, the proposed requirement for compliance, the proposed submittals to demonstrate compliance, and the design approach and strategies that might be used to meet the requirements.

One point is awarded for each IDPc1 earned. No more than 5 IDPc1 credits may be earned.

Note: No more than 3 Exemplary Performance Credits will be awarded in the Innovation in Design category

Innovation & Design Process

IDP Credit 2: LEED Accredited Professional

1 Point

Intent

Support the integrated planning and design required for a LEED for Neighborhood Development project, and streamline the application and certification process.

Requirements

At least one principal member of the project team shall be a LEED Accredited Professional.

OR

At least one principal member of the project design team shall be a professional who is credentialed with regard to smart growth as determined by the Natural Resources Defense Council in consultation with Smart Growth America.

OR

At least one principal member of the project design team shall be a professional who is credentialed with regard to new urbanism as determined by the Congress for the New Urbanism.

NOTE

A separate LEED AP exam track for professionals wanting to specialize in the LEED for Neighborhood Development rating system will be available in early 2010 at which point this IDP Credit can be achieved if a principal member of the project design team is accredited as a result of passing this exam.

RP Credit 1: Regional Priority Credit

1-4 Points

Intent

Provide incentive for the achievement of credits that address geographically-specific environmental, social equity, and public health priorities.

Requirements

Earn up to four of the six Regional Priority credits. These credits have been identified by subject matter experts representing the U.S. Green Building Council (Regional Councils and Chapters), the Congress for the New Urbanism (Chapters and membership in regions without Chapters), and Smart Growth America (members of Smart Growth America's State and Local Caucus or their designees) as having additional regional importance for the project's location. A database of Regional Priority credits and their geographic applicability will be available on the USGBC website – www.usgbc.org.

One point is awarded for each Regional Priority credit earned. No more than 4 Regional Priority credits may be earned. Non-U.S. projects are not eligible for Regional Priority credits.

Appendix of Diverse Uses

Food Retail
Supermarket
Other food store with produce

Community-Serving Retail

Clothing store or department store selling clothes
Convenience store
Farmer's market
Hardware store
Pharmacy
Other retail

Services
Bank
Gym/Health club/Exercise studio
Hair care
Laundry/dry cleaner
Restaurant/café/diner (excluding establishments with only drive-throughs)

Civic/Community Facilities
Adult/senior care (licensed)
Child care (licensed)
Community/recreation center
Cultural arts facility (museum, performing arts)
Educational facility (including K-12 school, university, adult education center, vocational school, community college)
Family entertainment venue (theater, sports)
Government office where the public is served on-site
Place of worship
Medical clinic or office where patients are treated
Police orfire station
Post office
Public library
Public park
Social services center

Adapted from Criterion Planners, INDEX neighborhood completeness indicator, 2005.

Definitions

Adjacent site – A site having at least 25% of its boundary bordering land that has been **previously developed.** For the purpose of this definition, a **street** does not constitute previously developed land; instead, the status of the property on the other side of the street is considered. Any fraction of the boundary that borders waterfront other than a stream is excluded from the calculation. A site is still considered adjacent if the 25% adjacent portion of its boundary is separated from previously developed parcels by undeveloped, permanently protected land averaging no more than 400 feet in width, and no more than 500 feet in any one place. The undeveloped land shall be permanently preserved as natural area, riparian corridor, park, greenway, agricultural land, or designated cultural landscape. Permanent pedestrian paths connecting the project through the protected parcels to the adjacent site may be counted to meet the requirement of SLLp1, option 2 that the project be connected to the adjacent parcel by a through-street or non-motorized right-of-way every 600 ft on average, provided that the path or paths traverse the undeveloped land at no more than a 10% grade for walking by persons of all ages and physical abilities.

Definition: Adjacent Site

Buildable land – The portion of the site where construction can occur, including land voluntarily set aside and not constructed upon. When used in **density** calculations, buildable land excludes: public rights of way and land excluded from development by codified law or LEED for Neighborhood Development prerequisites. An applicant may exclude additional land not exceeding 15% of the buildable land base defined above, IF the following conditions are present:

a. The land is protected from residential and non-residential construction by easement, deed restriction, or other enforceable legal instrument;

AND

b. Either 25% or more of the boundary of each contiguous parcel proposed for exclusion borders a water body or areas outside the project boundary that are protected by codified law; or ownership of, or management authority over, the exclusion area is transferred to a public entity.

Connectivity – The number of publicly accessible street intersections per square mile, including intersections of streets with dedicated alleys and transit rights-of-way, and intersections of streets with non-motorized rights-of-way (up to 20% of total intersections). If one must both enter and exit an area through the same intersection, such an intersection and any intersections beyond that point are not counted; intersections leading only to **culs-de-sac** are also not counted**.** The square mileage shall exclude water bodies, parks over a 1/2-acre, public facility campuses, airports, rail yards, slopes over 15%, and areas non-buildable under codified law or the rating system. Street rights-of-way may not be excluded.

Cultural Landscape is an officially-designated geographic area, including both cultural and natural resources, associated with a historic event, activity, or person or exhibiting other significant cultural or

aesthetic values.

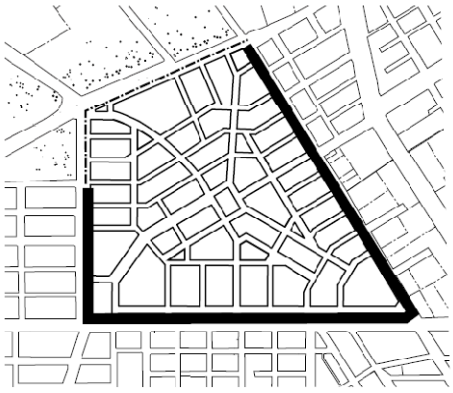
Historic building – A building or structure listed or determined to be eligible as a historic structure or building or structure or as a contributing building or structure in a designated historic district, due to its historic, architectural, engineering, archeological, or cultural significance. The building or structure must be designated as historic by a local historic preservation review board or similar body, be listed in a state register of historic places, be listed in the National Register of Historic Places, or have been determined eligible for listing in the National Register.

Historic district – A group of buildings, structures, objects and sites, of varying sizes, that have been designated as historically and architecturally significant and categorized as either contributing or non-contributing.

Infill site –A site that meets any of the following four conditions:

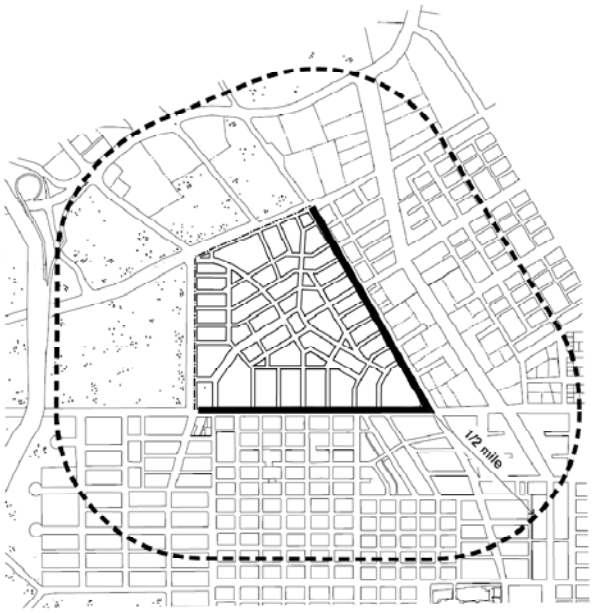
1) at least 75% of its boundary borders parcels that individually are at least 50% previously developed, and that in aggregate are at least 75% previously developed;
2) the site, in combination with bordering parcels, forms an aggregate parcel whose boundary is 75% bounded by parcels that individually are at least 50% previously developed, and that in aggregate are at least 75% previously developed;
3) at least 75% of the land area, exclusive of rights-of-way, within a ½ mile distance from the project boundary is previously developed; or
4) the lands within a ½ mile distance from the project boundary have a pre-project connectivity of at least 140 intersections per square mile.

For the purpose of this definition, a street does not constitute previously developed land; instead the status of property on the other side of the street is considered. For parts 1 and 2 above, any fraction of the perimeter that borders waterfront other than a stream is excluded from the calculation.



Definition: Infill Site (1)

Definition: Infill Site (2)



Definition: Infill Site (3)

Previously developed – Land that has been altered (alterations may exist now or in the past) by paving, construction, and/or land use that would typically have required regulatory permitting to have been initiated, including a platted lot on which a building was constructed if the lot is no more than one acre; previous development on lots larger than one acre is defined as the development footprint and land alterations associated with the footprint. Land that is not previously developed and altered landscapes resulting from current or historical clearing or filling, agricultural or forestry use, or preserved natural area use are considered undeveloped land. The date of previous development permit issuance constitutes the date of previous development, but permit issuance in itself does not constitute previous development.

Woonerf – A street, also known as a home zone, shared zone, or living street, where pedestrians have priority over vehicles and which have a posted speed limit no greater than 10 miles per hour. Physical elements within the roadway, such as shared surfaces, plantings, street furniture, parking, and play areas, slow traffic and invite pedestrians to use the entire right of way.

Additional Definitions (that were not public commented)

Accessory dwelling unit – A subordinate dwelling unit that is attached to a principal building, or contained in a separate structure on the same property as the principal unit.

Adapted (or introduced) plants – Plants that reliably grow well in a given habitat with minimal attention from humans in the form of winter protection, pest protection, water irrigation, or fertilization once root systems are established in the soil. Adapted plants are low maintenance but not invasive.

Alley – A publicly-accessible right-of-way, generally located mid-block, which can accommodate slow-speed motor vehicle movement, bicycling and walking. An alley provides access to the side or rear of abutting properties for loading, parking, and other service functions, minimizing the need for these functions to be located along streets. An alley may be publicly dedicated or privately owned and deeded in perpetuity for general public use.

Applicant – The entity that prepares the LEED-ND project submission and is responsible for project implementation. An applicant may be the developer or another cooperating entity.

Area median income – The median income of a county as defined and available from the U.S. Department of Housing and Urban Development.

Bicycle network – A continuous network consisting of any combination of physically designated in-street bicycle lanes at least 5 feet wide, off-street bicycle paths or trails at least 8 feet wide for a two-way path and at least 5 feet wide for a one-way path, and/or streets designed for a target speed of 25 miles per hour or slower.

Block – Land bounded by the project boundary, transportation or utility rights-of-way that may be publicly dedicated or privately owned and deeded in perpetuity for general public use, waterfront, and/or comparable land division features.

Brownfield – Real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminate.

Buildout – The time at which all **habitable buildings** on the project are complete and ready for occupancy.

Bus rapid transit – An enhanced bus system that operates on exclusive bus lanes or other transit rights-of-way in order to combine the flexibility of buses with the efficiency of rail.

Community supported agriculture (CSA) – A farm operation for which a community of individuals pledges support so that the farmland becomes, either legally or informally, the community's farm. The growers and consumers provide mutual support, sharing the risks and benefits of food production. Consumers receive portions of the farm's harvest throughout the growing season.

Construction impact zone – The project's development footprint plus the areas around the improvement where construction crews, equipment, and/or materials are staged and moved during construction.

Covenants, conditions and restrictions (CC&Rs) – Limitations that may be placed on a property and its use, and which are made a condition of holding title or lease.

Cul-de-sac: A street segment that terminates without intersecting another street segment.

Density – Density is the amount of building structures constructed on the project site, measured for residential buildings as dwelling units per acre of **buildable land** available for residential uses, and for non-residential buildings as the **floor area ratio** of buildable land area available for non-residential uses. In both cases, structured parking is excluded.

Developer - A public and/or private entity that controls a majority of the project's **buildable land** and is committed to making a majority of the investments required for the project implementation described in the LEED-ND submission.

Development footprint – The total land area of a **project** site covered by buildings, streets, parking areas, and other typically impermeable surfaces constructed as part of the project.

Dwelling unit – Living quarters intended for long-term occupancy that provide facilities for cooking, sleeping, and sanitation. This does not include hotel rooms.

Employment center – A non-residential area of at least five acres with a job density of at least 50 employees per net acre.

Exist/Existing – An element or condition measured in the rating system is considered existing if it is present on the date of submission of LEED-ND certification documents.

Floor Area Ratio (FAR) – The **density** of non-residential land use, exclusive of parking. It is the total non-residential building floor area divided by the total **buildable land** area available for non-residential structures. For example, on a site with 10,000 square feet of buildable land area, an FAR of 1.0 would be 10,000 square feet of building floor area. On the same site, an FAR of 1.5 would be 15,000 square feet of built floor area; an FAR of 2.0 would be 20,000 built square feet and an FAR of 0.5 would be 5,000 built square feet.

Functional entry – An entryway that is designed to be used by pedestrians and is open during regular business hours. This does not include any door exclusively designated as an emergency exit, or a garage door not designed as a pedestrian entrance.

Graywater – Untreated household wastewater which has not come into contact with toilet waste. Gray water includes used water from bathtubs, showers, bathroom wash basins, and water from clothes-washers and laundry tubs. It shall not include wastewater from kitchen sinks or dishwashers, unless superseded by graywater definitions as established by the authority having jurisdiction in their areas.

Habitable building – A structure intended for living, working, or other types of occupancy. Habitable structures do not include stand-alone garages and utility structures such as pump stations.

Home energy rating system (HERS) Index – A scoring system established by the Residential Energy Services Network (RESNET) in which a home built to the specifications of the HERS Reference Home (based on the 2006 International Energy Conservation Code) scores a HERS Index of 100, while a net zero energy home scores a HERS Index of 0. The lower a home's HERS Index, the more energy efficient it is in comparison to the HERS Reference Home.

Invasive plants – Plants that may be either indigenous or non-indigenous species or strains that are characteristically adaptable, aggressive, have a high reproductive capacity and tend to overrun the ecosystems in which they inhabit.

Metropolitan and micropolitan statistical area – Metropolitan and micropolitan statistical areas (metro and micro areas) are geographic entities defined by the U.S. Office of Management and Budget (OMB) for use by Federal statistical agencies in collecting, tabulating, and publishing Federal statistics. The term "Core Based Statistical Area" (CBSA) is a collective term for both metro and micro areas. A metro area contains a core urban area of 50,000 or more population, and a micro area contains an urban core of at least 10,000 (but less than 50,000) population. Each metro or micro area consists of one or more counties and includes the counties containing the core urban area, as well as any adjacent counties that have a high degree of social and economic integration (as measured by commuting to work) with the urban core.

Multi-unit residential - Four or more residential units sharing a common entry.

Native (or indigenous) plants – A plant is considered native at a site if existing information suggests the species did, or would have occurred on that site or within the subject county prior to widespread land

alterations that accompanied European Settlement. Cultivars of native plants may be considered native plants.

Park – A publicly-accessible area that is permanently maintained in a semi-natural condition for human recreation and relaxation using soil, grass, water, flora, and/or recreation improvements.

Paseo – A publicly accessible pedestrian path, at least 4 feet wide and no more than 12 feet wide, that provides shortcuts between buildings and through the block, connecting street frontages to rear parking areas, mid-block courtyards, alleys, or other streets. A paseo may be roofed for up to 50% of its length and may be privately owned or publicly dedicated.

Planned Occupancy – The highest estimate of building occupants based on planned use(s) and industry standards for square foot requirements per employee. The minimum planned occupancy for multi-unit residential buildings shall be one person for studio units, 1.5 persons for one-bedroom units, and 1.25 persons per bedroom for two or more bedroom units.

Planned diverse use - A use outside the project boundary that has received a building permit and is under construction at the time of the first Certificate of Occupancy being issued for any building in the LEED-ND project.

Plaza – A publicly-accessible gathering space that is integrated as part of the street network, with vehicular, bicycle, and/or pedestrian travel through the space. A plaza is generally paved, is spatially defined by building fronts paralleling at least 66% of its perimeter, and may be privately owned or publicly dedicated.

Post-consumer – Generated by households or commercial, industrial or institutional facilities in their role as end-users of a product, which can no longer be used for its intended purpose.

Potable water – Meets or exceeds EPA's drinking water quality standards and is approved for human consumption by the state or local authorities having jurisdiction; it may be supplied from wells or municipal water systems.

Pre-consumer – Diverted from the waste stream during the manufacturing process. It does not include the reutilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.

Pre-development – Before any development occurred on the site. Pre-development conditions describe the natural conditions of the site prior to any human alteration, e.g. development of roads or buildings.

Previously developed site – A site that consisted of at least 75% **previously developed** land **pre-project.**

Pre-project – Before the **project** was initiated, but not necessarily before any development or disturbance took place. Pre-project conditions describe conditions on the date the developer acquired rights to a majority of the buildable land on the project site through purchase or option to purchase.

Prime soils – Soils with chemical, hydrographic and topological properties that make them especially suited to the production of crops as defined by the U.S. Natural Resources Conservation Service.

Project – The land, water, and construction that constitutes the project application. A project applicant does not have to own or control all land or water within a project boundary, but all of the area within the project boundary must comply with prerequisites and attempted credits.

Project boundary – The platted property line of the **project** defining land and water within it. Projects located on publicly-owned campuses that do not have internal property lines shall delineate a sphere of influence line to be used in place of a property line. The phrase 'project site' is equivalent to the land and water inside the project boundary. The project may not contain non-contiguous parcels, but parcels can be separated by public rights-of-way. Projects may also have enclaves of non-project properties that are not subject to the rating system, but such enclaves cannot exceed two percent of the total project area and cannot be described as certified.

School – A kindergarten, elementary, or secondary institution for the academic instruction of children.

Single-family residential - all residential units not defined as multi-unit residential are treated as single-family, including single, duplex, triplex, row house, townhouse and semi-attached residential building types.

Street – A dedicated right-of-way that can accommodate one or more modes of travel, but excluding alleys and paseos. A street is suitable for primary entrances and provides access to the front and/or sides of buildings and lots. A street may be privately owned as long as it is deeded in perpetuity for general public use. A street must be an addressable thoroughfare (for mail purposes) under the standards of the applicable regulating authority.

Square (also **Green**): an publicly-accessible open area for gatherings that is wholly or partially bounded by segments of the street network. A square can be landscaped or a combination of landscape and paved, is spatially defined by building fronts paralleling at least 45% of its perimeter, and may be privately owned or publicly dedicated.

Unique soils – Soils with chemical, hydrographic and topological properties that make them especially suited to specific crops, as defined by the U.S. Natural Resources Conservation Service.

Walk distance – The distance that a pedestrian must travel between origins and destinations without obstruction, in a safe and comfortable environment on a continuous network of sidewalks, all-weather surface footpaths, crosswalks, **woonerfs**, or equivalent pedestrian facilities.

Water bodies – The surface water of a stream (first order and higher, including intermittent streams) arroyo, river, canal, lake, estuary, bay, or ocean; but excluding irrigation ditches.

Water and wastewater infrastructure – Publicly-owned water and wastewater infrastructure, excluding septic and mound wastewater treatment systems.

Wetlands – Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas, but exclude irrigation ditches unless delineated as part of an adjacent wetland.

Vehicle miles traveled (VMT) – The number of miles traveled by motor vehicles in a specified period of time, such as a day or a year, by a number of motorists in absolute or per capita terms.