

**LEED Green Associate**

**Activity #3 –Location and Transportation (LT)**

Before completing this Activity Read: GA02 - Pgs. 55-57 & GA09 – Pgs. 12-30 (see lorisweb.com)

Note the following abbreviations are used in this activity:

- NC LEED BD+C: New Construction and Major Renovation
- CS LEED BD+C: Core and Shell Development
- S LEED BD+C: Schools
- R LEED BD+C: Retail
- DC LEED BD+C: Data Centers
- WDC LEED BD+C: Warehouses and Distribution Centers
- HOS LEED BD+C: Hospitality
- HC LEED BD+C: Healthcare

Although the LEED BD+C reference guide does not number the LEED prerequisites and credits, for this exercise they have been numbered in the order presented in the credit category.

**Fill-In, Multiple Choice, Matching**

1. Test your knowledge of how well you know the names of the credits for the Location and Transportation (LT) credit category:

Credit	Name
C1	
C2	
C3	
C4	
C5	
C6	
C7	
C8	

2. Match the intent shown below to the prerequisite or credit:

Credit	ANS
LT – C1	
LT – C2	
LT – C3	
LT – C4	
LT – C5	
LT – C6	
LT – C7	
LT – C8	

	INTENT
A	To avoid the development of environmentally sensitive lands and reduce the environmental impact from the location of a building on a site.
B	To conserve land and protect farmland and wildlife habitat by encouraging development in areas with existing infrastructure. To promote walkability, and transportation efficiency and reduce vehicle distance traveled. To improve public health by encouraging daily physical activity.
C	To promote bicycling and transportation efficiency and reduce vehicle distance traveled. To improve public health by encouraging utilitarian and recreational physical activity.
D	To avoid development on inappropriate sites. To reduce vehicle distance traveled. To enhance livability and improve human health by encouraging daily physical activity.
E	To minimize the environmental harms associated with parking facilities, including automobile dependence, land consumption, and rainwater runoff.
F	To encourage project location in areas with development constraints and promote the health of the surrounding area.
G	To reduce pollution by promoting alternatives to conventionally fueled automobiles.
H	To encourage development in locations shown to have multimodal transportation choices or otherwise reduced motor vehicle use, thereby reducing greenhouse gas emissions, air pollution, and other environmental and public health harms associated with motor vehicle use.

3. List examples of existing infrastructure that well-located buildings could take advantage of:
  - 1.
  - 2.
  - 3.
  - 4.
  - 5.
  - 6.
4. List alternatives to private automobile use encouraged by the Location and transportation (LT) credit category:
  - 1.
  - 2.
  - 3.
  - 4.
5. Reusing \_\_\_\_\_ developed land, cleaning up \_\_\_\_\_ sites, and investing in disadvantaged areas conserve \_\_\_\_\_ land and ensure efficient delivery of services and infrastructure.
6. Measuring walking and bicycling distances by how far a pedestrian and bicyclist would travel from a point of origin to a destination is known as the \_\_\_\_\_.
7. List examples of infrastructure that makes a walking path safe and comfortable for pedestrians:
  - 1.
  - 2.
  - 3.
  - 4.

8. List examples of infrastructure that makes bicycling safe and comfortable for bicyclists:
- 1.
  - 2.
  - 3.
9. When determining total parking capacity, include all the \_\_\_\_\_-street spaces available to the project building's users. This may include spaces both \_\_\_\_\_ and \_\_\_\_\_ the project boundary.
10. List the parking spaces that must be included when determining a projects total parking capacity:
- 1.
  - 2.
  - 3.
11. List the parking spaces that should not be included when determining a projects total parking capacity:
- 1.
  - 2.
  - 3.
12. \_\_\_\_\_ parking spaces have the shortest walking distance to the \_\_\_\_\_ entrance of the project, exclusive of spaces designated for \_\_\_\_\_.
13. Although not encouraged, preferred parking areas and signage for carpool and vanpool vehicles and green vehicles may be combined if \_\_\_\_\_ of total parking capacity is reserved with this signage and both \_\_\_\_\_ and \_\_\_\_\_ credits are achieved.
14. LT Credit LEED for Neighborhood Development Location Requirements  
 Locate the project within the boundary of a development certified under \_\_\_\_\_ (Stage 2 or Stage 3 under the Pilot or 2009 rating systems, Certified Plan or Certified Project under the LEED v4 rating system).
- Projects attempting this credit are \_\_\_\_\_ eligible to earn points under other \_\_\_\_\_ credits.

15. Complete Table 1. Points for LEED ND location:

Table 1. Points for LEED ND location				
Certification Level	Points BD+C (NC, R, DC, WDC, HOS)	Points BD+C (CS)	Points BD+C (S)	Points BD+C (HC)
Certified				
Silver				
Gold				
Platinum				

16. LT Credit Sensitive Land Protection requirements:

OPTION 1.

Locate the development \_\_\_\_\_ on land that has been \_\_\_\_\_.

Or

OPTION 2.

Locate the development footprint on land that has been \_\_\_\_\_  
or that does not meet the following criteria for sensitive land:

- 1.
- 2.
- 3.
- 4.
- 5.

Minor improvements within the \_\_\_\_\_ and \_\_\_\_\_ body buffers may be undertaken to enhance appreciation of them, provided such facilities are open to \_\_\_\_\_.

Only the following improvements are considered minor:

Bicycle and pedestrian pathways no more than \_\_\_\_\_ wide (3.5 meters), of which no more than \_\_\_\_\_ (2.5 meters) may be impervious;

Activities to maintain or restore \_\_\_\_\_ natural communities and/or natural \_\_\_\_\_;

One single-story structure per \_\_\_\_\_ (90 linear meters) on average, not exceeding \_\_\_\_\_ (45 square meters);

Grade changes necessary to ensure \_\_\_\_\_ access;

Clearings, limited to one per \_\_\_\_\_ (90 linear meters) on average, not exceeding \_\_\_\_\_ (45 square meters) each;

Removal of the following tree types:

\_\_\_\_\_ trees, up to \_\_\_\_\_ of dead trees

Trees less than \_\_\_\_\_ inches (150 millimeters) diameter at breast height

Up to \_\_\_\_\_ of trees more than \_\_\_\_\_ inches (150 millimeters) diameter at breast height with a condition rating of \_\_\_\_\_ or higher.

Trees under \_\_\_\_\_ condition rating

The condition rating must be based on an assessment by an \_\_\_\_\_ certified by the International Society of Arboriculture (ISA) using ISA standard measures, or \_\_\_\_\_ equivalent for projects outside the U.S.

\_\_\_\_\_ remediation activities.

17. One strategy for lessening the environmental consequences of a building is to select a site that has \_\_\_\_\_ and then to limit the building's \_\_\_\_\_ to the \_\_\_\_\_ developed area.

18. List the options for LT Credit High Priority Site and complete the requirements:

OPTION 1. \_\_\_\_\_

Locate the project on an \_\_\_\_\_ location in a \_\_\_\_\_ district.

OR

OPTION 2. \_\_\_\_\_

Locate the project on one of the following:

a site listed by the EPA \_\_\_\_\_;

a \_\_\_\_\_ site;

a \_\_\_\_\_ site;

a \_\_\_\_\_ site;

a Department of the Treasury \_\_\_\_\_

Fund Qualified Low-Income Community (a subset of the New Markets Tax Credit Program);

a site in a U.S. Department of Housing and Urban Development's \_\_\_\_\_ (QCT)

or Difficult Development Area (DDA); or

a \_\_\_\_\_ equivalent program administered at the \_\_\_\_\_ level for projects outside the U.S.

OR

OPTION 3. \_\_\_\_\_

Locate on a \_\_\_\_\_ where \_\_\_\_\_ or \_\_\_\_\_ contamination has been identified, and where the local, state, or national authority (whichever has jurisdiction) requires its \_\_\_\_\_ . Perform \_\_\_\_\_ . to the satisfaction of that authority.

19. LT Credit Surrounding Density and Diverse Uses requires:

NC, CS, S, R, DC, HOS

OPTION 1 – Surrounding Density

Locate on a site whose surrounding existing density within a \_\_\_\_\_ (400-meter) radius of the project boundary meets the values in Table 1. Use either the “separate residential and nonresidential densities” or the “combined density” values.

Complete Table 1A. Points for average density within 1/4 mile of project (imperial units)

Table 1A. Points for average density within 1/4 mile of project (imperial units)				
Combined Density	Separate Residential and Nonresidential Densities		Points BD+C (except Core and Shell)	Points BD+C (Core and Shell)
	Square feet per acre of buildable land	Residential Density (DU/acre)		

**Schools Only**

School projects earning LT Credit Surrounding Density and Diverse Uses following OPTION 1. Surrounding Density may exclude what types of spaces from the development density calculations?

- 1.
- 2.

AND/OR

OPTION 2. Diverse Uses

Construct or renovate a building or a space within a building such that the building's main entrance is within a \_\_\_\_\_ (800-meter) walking distance of the \_\_\_\_\_ entrance of \_\_\_\_\_ to \_\_\_\_\_ (1 point) or \_\_\_\_\_ or more (2 points) existing and publicly available diverse uses (listed in Appendix 1).

The following restrictions apply.

A use counts as only \_\_\_\_\_ type (e.g., a retail store may be counted only once even if it sells products in several categories).

No more than \_\_\_\_\_ uses in each use type may be counted (e.g. if five restaurants are within walking distance, only two may be counted).

The counted uses must represent at least \_\_\_\_\_ of the \_\_\_\_\_ categories, exclusive of the building's primary use.

#### Warehouses and Distribution Centers

##### OPTION 1. Development and Adjacency

Construct or renovate the project on a \_\_\_\_\_ developed site that was used for \_\_\_\_\_ or \_\_\_\_\_ purposes (2 points).

OR

Construct or renovate the project on a site that is both a \_\_\_\_\_ developed and an \_\_\_\_\_ site. The adjacent sites must be currently used for \_\_\_\_\_ or \_\_\_\_\_ purposes (3 points).

AND/OR

##### OPTION 2. Transportation Resources

Construct or renovate the project on a site that has \_\_\_\_\_ or \_\_\_\_\_ (1 point) or \_\_\_\_\_ (2 points) of the following transportation resources:

The site is within a \_\_\_\_\_ (16 kilometer) driving distance of a main logistics hub, defined as an airport, seaport, intermodal facility, or freight village with intermodal transportation.

The site is within a \_\_\_\_\_ (1 600-meter) driving distance of an on-off ramp to a highway.

The site is within a \_\_\_\_\_ (1 600-meter) driving distance of an access point to an active freight rail line.

The site is served by an active \_\_\_\_\_.

In all cases, a planned transportation resource must be sited, funded, and under construction by the date of the \_\_\_\_\_ and complete within \_\_\_\_\_ months of that date.

#### Healthcare

##### OPTION 1. Surrounding Density

Locate on a site whose surrounding existing density within a \_\_\_\_\_ (400-meter) radius of the project boundary is:

1. At least \_\_\_\_\_ dwelling units per acre (17.5 DU per hectare) with a \_\_\_\_\_ floor-area ratio. The counted density must be existing density, not zoned density, or
2. At least \_\_\_\_\_ square feet per acre (5050 square meters per hectare) of buildable land.

For previously developed existing rural healthcare campus sites, achieve a minimum development density of \_\_\_\_\_ square feet per acre (6 890 square meters per hectare).

OR

OPTION 2. Diverse Uses

Construct or renovate a building on a site such that the building’s main entrance is within a \_\_\_\_\_ (800-meter) walking distance of the main entrance of at least \_\_\_\_\_ operational and publicly accessible uses (listed in Appendix 1).

The following restrictions apply.

A use counts as only \_\_\_\_\_ type (e.g., a retail store may be counted only once even if it sells products in several categories).

No more than \_\_\_\_\_ uses in each use type may be counted (e.g. if five restaurants are within walking distance, only two may be counted).

The counted uses must represent at least \_\_\_\_\_ of the \_\_\_\_\_ categories, exclusive of the building’s primary use.

20. List the categories for uses types:

- 1.
- 2.
- 3.
- 4.
- 5.

21. To be considered a previously developed site, the land area must be \_\_\_\_\_ previously developed

22. LT Credit Access to Quality Transit requirements:

NC, CS, DC, WDC, HOS

Locate any functional entry of the project within a \_\_\_\_\_ (400-meter) walking distance of existing or planned \_\_\_\_\_, \_\_\_\_\_, or \_\_\_\_\_ stops, or within a \_\_\_\_\_ (800-meter) walking distance of existing or planned \_\_\_\_\_, light or heavy \_\_\_\_\_ stations, \_\_\_\_\_ stations, or commuter \_\_\_\_\_ terminals. The transit service at those stops and stations in aggregate must meet the minimums listed in Tables 1 and 2. Planned stops and stations may count if they are \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ construction by the date of the \_\_\_\_\_ and are complete within \_\_\_\_\_ months of that date.

Both \_\_\_\_\_ and \_\_\_\_\_ trip minimums must be met.

Qualifying transit routes must have \_\_\_\_\_ route service (service in opposite directions).

For each qualifying transit route, only trips in \_\_\_\_\_ direction are counted towards the threshold.

If a qualifying transit route has multiple stops within the required walking distance, only trips from \_\_\_\_\_ stop are counted towards the threshold.

Complete Table 1. Minimum daily transit service for projects with multiple transit types (bus, streetcar, rail, or ferry)

Table 1. Minimum daily transit service for projects with multiple transit types (bus, streetcar, rail, or ferry)			
Weekday Trips	Weekend Trips	Points BD+C (except Core and Shell)	Points BD+C (Core and Shell)

Complete Table 2. Minimum daily transit service for projects with commuter rail or ferry service only

Table 2. Minimum daily transit service for projects with commuter rail or ferry service only		
Weekday Trips	Weekend Trips	Points (All Projects)

Projects served by \_\_\_\_\_ or more transit routes such that no one route provides more than \_\_\_\_\_ of the documented levels may earn \_\_\_\_\_ additional point, up to the maximum number of points.

If existing transit service is temporarily rerouted outside the required distances for less than \_\_\_\_\_ years, the project may meet the requirements, provided the local transit agency has committed to restoring the routes with service at or above the prior level.

Schools

OPTION 1. Transit-Served Location (1-4 points)

Locate any functional entry of the project within a \_\_\_\_\_ (400-meter) walking distance of existing or planned \_\_\_\_\_, \_\_\_\_\_, or \_\_\_\_\_ stops, or within a \_\_\_\_\_ (800-meter) walking distance of existing or planned \_\_\_\_\_, light or heavy \_\_\_\_\_ stations, \_\_\_\_\_ stations, or commuter \_\_\_\_\_ terminals. The transit service at those stops and stations in aggregate must meet the minimums listed in Tables 1 and 2. Planned stops and stations may count if they are \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ construction by the date of the \_\_\_\_\_ and are complete within \_\_\_\_\_ months of that date.

Qualifying transit routes must have \_\_\_\_\_ route service (service in opposite directions).

For each qualifying transit route, only trips in \_\_\_\_\_ direction are counted towards the threshold.

If a qualifying transit route has multiple stops within the required walking distance, only trips from \_\_\_\_\_ stop are counted towards the threshold.

Complete Table 1. Minimum daily transit service for projects with multiple transit types (bus, streetcar, rail, or ferry)

Table 1. Minimum daily transit service for projects with multiple transit types (bus, streetcar, rail, or ferry)	
Weekday Trips	Points

Complete Table 2. Minimum daily transit service for projects with commuter rail or ferry service only

Table 2. Minimum daily transit service for projects with commuter rail or ferry service only	
Weekday Trips	Points

Projects served by \_\_\_\_\_ or more transit routes such that no one route provides more than \_\_\_\_\_ of the prescribed levels may earn \_\_\_\_\_ additional point, up to the maximum number of points.

If existing transit service is temporarily rerouted outside the required distances for less than \_\_\_\_\_ years, the project may meet the requirements, provided the local transit agency has committed to restoring the routes with service at or above the prior level.

OR

**OPTION 2. Pedestrian Access**

Show that the project has an attendance boundary such that the specified percentages of students live within no more than a \_\_\_\_\_ (1200-meter) walking distance (for grades \_\_\_\_\_ and below, or ages \_\_\_\_\_ and below), and \_\_\_\_\_ (2400-meter) walking distance (for grades \_\_\_\_\_ and above or ages \_\_\_\_\_ and above) of a \_\_\_\_\_ entry of a school building. Points are awarded according to Table 3.

Complete Table 3. Points for student population within walking distance

Percentage of Students	Points

In addition, locate the project on a site that allows \_\_\_\_\_ access to the site from \_\_\_\_\_ residential neighborhoods that house the planned student population.

**Healthcare**

Locate any functional entry of the project within a \_\_\_\_\_ (400-meter) walking distance of existing or planned \_\_\_\_\_, \_\_\_\_\_, or \_\_\_\_\_ stops, or within a \_\_\_\_\_ (800-meter) walking distance of existing or planned \_\_\_\_\_, light or heavy \_\_\_\_\_ stations, \_\_\_\_\_ stations, or commuter \_\_\_\_\_ terminals. The transit service at those stops and stations in aggregate must meet the minimums listed in Tables 1 and 2. Planned stops and stations may count if they are \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ construction by the date of the \_\_\_\_\_ and are complete within \_\_\_\_\_ months of that date.

Both \_\_\_\_\_ and \_\_\_\_\_ trip minimums must be met.

Qualifying transit routes must have \_\_\_\_\_ route service (service in opposite directions).

For each qualifying transit route, only trips in \_\_\_\_\_ direction are counted towards the threshold.

If a qualifying transit route has multiple stops within the required walking distance, only trips from \_\_\_\_\_ stop are counted towards the threshold.

Complete Table 1. Minimum daily transit service for projects with multiple transit types (bus, streetcar, rail, or ferry)

Weekday Trips	Weekend Trips	Points

Complete Table 2. Minimum daily transit service for projects with commuter rail or ferry service only

Table 2. Minimum daily transit service for projects with commuter rail or ferry service only		
Weekday Trips	Weekend Trips	Points

Projects served by \_\_\_\_\_ or more transit routes such that no one route provides more than \_\_\_\_\_ of the documented levels may earn \_\_\_\_\_ additional point, up to the maximum number of points.

If existing transit service is temporarily rerouted outside the required distances for less than \_\_\_\_\_ years, the project may meet the requirements, provided the local transit agency has committed to restoring the routes with service at or above the prior level.

23. LT Credit Bicycle Facilities requirements:

NC, CS, DC, WDC, HOS

Bicycle Network

Design or locate the project such that a functional entry and/or bicycle storage is within a \_\_\_\_\_ (180-meter) \_\_\_\_\_ distance or \_\_\_\_\_ distance from a bicycle network that connects to at least \_\_\_\_\_ of the following:

at least \_\_\_\_\_ diverse uses (see Appendix 1);

a \_\_\_\_\_ or \_\_\_\_\_ center, if the project total floor area is \_\_\_\_\_ or more residential; or

a \_\_\_\_\_, light or heavy \_\_\_\_\_ station, \_\_\_\_\_ station, or \_\_\_\_\_ terminal.

All destinations must be within a \_\_\_\_\_ (4800-meter) bicycling distance of the project boundary.

Planned bicycle trails or lanes may be counted if they are \_\_\_\_\_ funded by the date of the certificate of occupancy and are scheduled for completion within \_\_\_\_\_ of that date.

Bicycle Storage and Shower Rooms

Case 1. Commercial or Institutional Projects

Provide \_\_\_\_\_ bicycle storage for at least \_\_\_\_\_ of all \_\_\_\_\_ visitors, but no fewer than \_\_\_\_\_ storage spaces per building.

Provide \_\_\_\_\_ bicycle storage for at least \_\_\_\_\_ of all regular building occupants, but no fewer than \_\_\_\_\_ storage spaces per building in addition to the short-term bicycle storage spaces.

Provide at least \_\_\_\_\_ on-site shower with changing facility for the first \_\_\_\_\_ regular building occupants and \_\_\_\_\_ additional shower for every \_\_\_\_\_ regular building occupants thereafter.

Case 2. Residential Projects

Provide \_\_\_\_\_ bicycle storage for at least \_\_\_\_\_ of all \_\_\_\_\_ visitors but no fewer than \_\_\_\_\_ storage spaces per building.

Provide \_\_\_\_\_ bicycle storage for at least \_\_\_\_\_ of all regular building occupants, but no less than \_\_\_\_\_ storage space per residential unit.

Case 3. Mixed-Use Projects

Meet the Case 1 and Case 2 storage requirements for the \_\_\_\_\_ and \_\_\_\_\_ portions of the project, respectively.

## For all Projects

Short-term bicycle storage must be within \_\_\_\_\_ (30 meters) walking distance of any \_\_\_\_\_ entrance. Long-term bicycle storage must be within \_\_\_\_\_ (30 meters) walking distance of any \_\_\_\_\_ entry.

Bicycle storage capacity may not be \_\_\_\_\_-counted: storage that is fully allocated to the occupants of nonproject facilities cannot also serve project occupants.

\_\_\_\_\_ projects should refer to Appendix 2, Default Occupancy Counts, for occupancy count requirements and guidance.

## Schools

### Bicycle Network

Design or locate the project such that a functional entry and/or bicycle storage is within a \_\_\_\_\_ (180-meter) \_\_\_\_\_ distance or \_\_\_\_\_ distance of a bicycle network that connects to at least \_\_\_\_\_ of the following:

at least \_\_\_\_\_ diverse uses (see Appendix 1); or

a \_\_\_\_\_, light or heavy \_\_\_\_\_ station, \_\_\_\_\_ station, or \_\_\_\_\_ terminal

All destinations must be within a \_\_\_\_\_ (4800-meter) bicycling distance of the project boundary.

Provide \_\_\_\_\_ bicycle lanes that extend at least to the \_\_\_\_\_ of the school property with no barriers (e.g., fences) on school property.

Planned bicycle trails or lanes may be counted if they are \_\_\_\_\_ funded by the date of the certificate of occupancy and are scheduled for completion within \_\_\_\_\_ of that date.

### Bicycle Storage and Shower Rooms

Provide long-term bicycle storage for at least \_\_\_\_\_ of all regular building occupants (excluding students grade \_\_\_\_\_ and younger), but no fewer than \_\_\_\_\_ storage spaces per building.

Provide at least \_\_\_\_\_ on-site shower with changing facility for the first \_\_\_\_\_ regular building occupants (excluding students) and \_\_\_\_\_ additional shower for every \_\_\_\_\_ regular building occupants (excluding students) thereafter.

Long-term storage spaces must be easily accessible to occupants and be within \_\_\_\_\_ feet (30 meters) walking distance of any \_\_\_\_\_ entrance. Bicycle storage capacity may not be \_\_\_\_\_-counted: storage that is fully allocated to the occupants of nonproject facilities cannot also serve project occupants.

## Retail

### Bicycle Network

Design or locate the project such that a functional entry and/or bicycle storage is within a \_\_\_\_\_ (180-meter) \_\_\_\_\_ distance or \_\_\_\_\_ distance from a bicycle network that connects to at least \_\_\_\_\_ of the following:

at least \_\_\_\_\_ diverse uses (see Appendix 1);

a \_\_\_\_\_, light or heavy \_\_\_\_\_ station, \_\_\_\_\_ station, or \_\_\_\_\_ terminal.

All destinations must be within a \_\_\_\_\_ (4800-meter) bicycling distance of the project boundary.

Planned bicycle trails or lanes may be counted if they are \_\_\_\_\_ funded by the date of the certificate of occupancy and are scheduled for completion within \_\_\_\_\_ of that date.

### Bicycle Storage and Shower Rooms

Provide at least \_\_\_\_\_ short-term bicycle storage spaces for every \_\_\_\_\_ square feet (465 square meters), but no fewer than \_\_\_\_\_ storage spaces per building.

Provide long-term bicycle storage for at least \_\_\_\_\_ of regular building occupants, but no fewer than \_\_\_\_\_ storage spaces per building in addition to the short-term bicycle storage spaces.

Provide at least \_\_\_\_\_ on-site shower with changing facility for the first \_\_\_\_\_ regular building occupants and \_\_\_\_\_ additional shower for every \_\_\_\_\_ regular building occupants thereafter.

Short-term bicycle storage must be within \_\_\_\_\_ (30 meters) walking distance of any \_\_\_\_\_ entrance.

Long-term bicycle storage must be within \_\_\_\_\_ (30 meters) walking distance of any \_\_\_\_\_ entry.

Bicycle storage capacity may not be \_\_\_\_\_-counted: storage that is fully allocated to the occupants of nonproject facilities cannot also serve project occupants.

Provide a bicycle \_\_\_\_\_ program for employees or bicycle \_\_\_\_\_ for employees and customers.

Route assistance must be provided in a manner easily accessible to both \_\_\_\_\_ and customers.

For projects that are part of a \_\_\_\_\_ complex only: If bicycle storage spaces have been provided in the complex in which the project is located, determine the number of spaces that may be attributed to the project by dividing the project's \_\_\_\_\_ area by the \_\_\_\_\_ floor area of the development (buildings only) and multiplying the percentage result by the total number of spaces. If this number does not meet the credit requirement, the project must provide additional bicycle storage.

#### Healthcare

##### Bicycle Network

Design or locate the project such that a functional entry and/or bicycle storage is within a \_\_\_\_\_ (180-meter) \_\_\_\_\_ distance or \_\_\_\_\_ distance from a bicycle network that connects to at least \_\_\_\_\_ of the following:

at least \_\_\_\_\_ diverse uses (see Appendix 1);

a \_\_\_\_\_, light or heavy \_\_\_\_\_ station, \_\_\_\_\_ station, or \_\_\_\_\_ terminal.

All destinations must be within a \_\_\_\_\_ (4800-meter) bicycling distance of the project boundary.

Planned bicycle trails or lanes may be counted if they are \_\_\_\_\_ funded by the date of the certificate of occupancy and are scheduled for completion within \_\_\_\_\_ of that date.

##### Bicycle Storage and Shower Rooms

###### Case 1. Commercial or Institutional Projects

Provide short-term bicycle storage for at least \_\_\_\_\_ of all \_\_\_\_\_ visitors, but no fewer than \_\_\_\_\_ storage spaces per building.

Provide long-term bicycle storage for at least \_\_\_\_\_ of regular building occupants (excluding patients), but no fewer than \_\_\_\_\_ storage spaces per building in addition to the short-term bicycle storage spaces.

Provide at least \_\_\_\_\_ on-site shower with changing facility for the first \_\_\_\_\_ regular building occupants (excluding patients) and \_\_\_\_\_ additional shower for every \_\_\_\_\_ regular building occupants thereafter.

###### Case 2. Residential Projects

Provide \_\_\_\_\_, \_\_\_\_\_ bicycle storage for at least \_\_\_\_\_ of all regular building occupants (excluding patients) measured at \_\_\_\_\_ periods, but no less than \_\_\_\_\_ storage space per residential unit.

For all Projects

Short-term bicycle storage must be within \_\_\_\_\_ (30 meters) walking distance of any \_\_\_\_\_ entrance. Long-term bicycle storage must be within \_\_\_\_\_ (30 meters) walking distance of any \_\_\_\_\_ entry.

Bicycle storage capacity may not be \_\_\_\_\_-counted: storage that is fully allocated to the occupants of nonproject facilities cannot also serve project occupants.

24. LT Credit Reduced Parking Footprint requirements:

Do not exceed the \_\_\_\_\_ local code requirements for parking capacity.

Provide parking capacity that is a percentage reduction below the \_\_\_\_\_ ratios recommended by the Parking Consultants Council, as shown in the \_\_\_\_\_ Handbook, 3rd edition, Tables 18-2 through 18-4.

Case 1. Baseline Location

Projects that have not earned points under LT Credit \_\_\_\_\_ or LT Credit \_\_\_\_\_ must achieve a \_\_\_\_\_ reduction from the base ratios.

Case 2. Dense and/or Transit-Served Location

Projects earning \_\_\_\_\_ or more points under either LT Credit Surrounding Density and Diverse Uses or LT Credit Access to Quality Transit must achieve a \_\_\_\_\_ reduction from the base ratios.

For All Projects

The credit calculations must include all \_\_\_\_\_ and \_\_\_\_\_ off-street parking spaces that are leased or owned by the project, including parking that is \_\_\_\_\_ the project boundary but is used by the project. On-street parking in public rights-of-way is \_\_\_\_\_ from these calculations.

For projects that use \_\_\_\_\_ parking, calculate compliance using the project's share of the pooled parking. Provide preferred parking for carpools for \_\_\_\_\_ of the total parking spaces after reductions are made from the base ratios. Preferred parking is not required if no \_\_\_\_\_ parking is provided.

Mixed-use projects should determine the percentage reduction by first \_\_\_\_\_ the parking amount of each use (as specified by the base ratios) and then determining the percentage reduction from the aggregated parking amount.

Do not count parking spaces for \_\_\_\_\_ and \_\_\_\_\_ vehicles unless these vehicles are regularly used by employees for \_\_\_\_\_ as well as \_\_\_\_\_ purposes.

LT Credit Reduced Parking Footprint Exemplary Performance

Case 1. Achieve a \_\_\_\_\_ parking reduction from the base ratios.

Case 2. Achieve a \_\_\_\_\_ parking reduction from the base ratios.

25. LT Credit Green Vehicles Requirements:

NC, CS, DC, HOS, R, HC

Designate \_\_\_\_\_ of all parking spaces used by the project as \_\_\_\_\_ parking for green vehicles. Clearly identify and enforce for sole use by \_\_\_\_\_ vehicles. Distribute preferred parking spaces \_\_\_\_\_ among various parking sections (e.g. between short-term and long-term spaces).

Green vehicles must achieve a minimum green score of \_\_\_\_\_ on the American Council for an Energy Efficient Economy (ACEEE) annual vehicle rating guide (or local equivalent for projects outside the U.S.).

A discounted parking rate of at least \_\_\_\_\_ for green vehicles is an acceptable substitute for preferred parking spaces. The discounted rate must be publicly posted at the \_\_\_\_\_ of the parking area and \_\_\_\_\_ available to \_\_\_\_\_ qualifying vehicle.

In addition to preferred parking for green vehicles, meet one of the following two options for alternative-fuel fueling stations:

#### Option 1. Electric Vehicle Charging

Install electrical vehicle supply equipment (EVSE) in \_\_\_\_\_ of all parking spaces used by the project. Clearly identify and reserve these spaces for the sole use by plug-in electric vehicles. EVSE parking spaces must be provided in addition to preferred parking spaces for green vehicles.

The EVSE must:

Provide a Level \_\_\_\_\_ charging capacity (208 – 240 volts) or greater.

Comply with the relevant \_\_\_\_\_ or \_\_\_\_\_ standard for electrical connectors, such as SAE Surface Vehicle Recommended Practice J1772, SAE Electric Vehicle Conductive Charge Coupler or IEC 62196 of the International Electrotechnical Commission for projects outside the U.S.

Be \_\_\_\_\_ or internet addressable and be capable of participating in a \_\_\_\_\_-response program or \_\_\_\_\_ pricing to encourage \_\_\_\_\_ charging.

OR

#### Option 2. Liquid, gas, or battery facilities

Install \_\_\_\_\_ or \_\_\_\_\_ alternative fuel fueling facilities or a battery switching station capable of refueling a number of vehicles per day equal to at least \_\_\_\_\_ of all parking spaces.

Schools

#### Option 1. Green passenger vehicles

Designate \_\_\_\_\_ of all parking spaces used by the project as \_\_\_\_\_ parking for green vehicles. Clearly identify and \_\_\_\_\_ for sole use by green vehicles. Distribute preferred parking spaces proportionally among various parking sections (e.g. between short-term and long-term spaces).

Green vehicles must achieve a minimum green score of \_\_\_\_\_ on the American Council for an Energy Efficient Economy (ACEEE) annual vehicle rating guide (or local equivalent for projects outside the U.S.)

A discounted parking rate of at least \_\_\_\_\_ for green vehicles is an acceptable substitute for \_\_\_\_\_ parking spaces. The discounted rate must be publicly posted at the \_\_\_\_\_ of the parking area and \_\_\_\_\_ available to \_\_\_\_\_ qualifying vehicle.

In addition to preferred parking for green vehicles, meet one of the following two options for alternative-fuel fueling stations:

#### Path 1. Electric Vehicle Charging

Install electrical vehicle supply equipment (EVSE) in \_\_\_\_\_ of all parking spaces used by the project. Clearly identify and \_\_\_\_\_ these spaces for the sole use by plug-in electric vehicles. EVSE \_\_\_\_\_ must be provided in addition to preferred parking spaces for green vehicles.

The EVSE must:

Provide a Level \_\_\_\_\_ charging capacity (208 – 240 volts) or greater.

Comply with the relevant \_\_\_\_\_ or \_\_\_\_\_ standard for electrical connectors, such as SAE Surface Vehicle Recommended Practice J1772, SAE Electric Vehicle Conductive Charge Coupler or IEC 62196 of the International Electrotechnical Commission for projects outside the U.S.

Be \_\_\_\_\_ or internet addressable and be capable of participating in a \_\_\_\_\_-response program or \_\_\_\_\_ pricing to encourage \_\_\_\_\_ charging.

OR

Path 2. Liquid, gas, or battery facilities

Install \_\_\_\_\_ or \_\_\_\_\_ alternative fuel fueling facilities or a battery switching station capable of refueling a number of vehicles per day equal to at least \_\_\_\_\_ of all parking spaces.

OR

Option 2. Green buses and school-owned vehicles

Develop and implement a plan for every \_\_\_\_\_ serving the school to meet the following emissions standards within \_\_\_\_\_ years of the building certificate of occupancy:  
nitrogen oxide (NOx) emissions of \_\_\_\_\_ grams or less per brake horsepower-hour; and  
particulate matter emissions of \_\_\_\_\_ grams or less per brake horsepower-hour.

Emission standards must be met for \_\_\_\_\_ bus and not by an average of the entire fleet serving the school.

Develop and implement a plan for \_\_\_\_\_ of all other (non-bus) vehicles owned or leased to serve the school to be green vehicles. Green vehicles must achieve a minimum green score of \_\_\_\_\_ on the \_\_\_\_\_ (ACEEE) annual vehicle rating guide (or local equivalent for projects outside the U.S).

Warehouses and Distribution Centers

Option 1. Alternative-Fuel Vehicles (1 point)

Provide an on-site fleet with at least \_\_\_\_\_ yard tractor that is powered by \_\_\_\_\_, \_\_\_\_\_, or \_\_\_\_\_. Provide on-site charging or refueling stations for the vehicles. Liquid or gas refueling stations must be separately \_\_\_\_\_ or located outdoors.

OR

Option 2. Reduced Truck Idling (1 point)

Provide an electrical connection for at least \_\_\_\_\_ of all dock door locations to limit truck idling at the dock.