LEED Pilot Credit Library

Pilot Credit 9: Street Network

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Applicable Rating Systems

This credit is available for pilot testing by the following LEED project types:

- Homes
- Homes Mid-Rise

Intent

To promote *projects* that are well connected to the community at large. To encourage development within *existing* communities that minimizes vehicle miles traveled. To improve public health by encouraging daily physical activity

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Requirements

Locate the project in an area of high intersection density. High intersection density is defined as an area with existing streets and sidewalks with a density of at least 90 intersections per square mile. Water bodies and publicly owned parks are not included in the calculation

- All streets and sidewalks that are counted toward the connectivity requirement must be 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.
- Sidewalk intersections may be counted only if they are a unique and dedicated *right of way*
- Publicly accessible *alleys* may be counted.
- The closest intersection to a dead end or cul-de-sacs is not counted.
- Count intersections within a ¼ mile radius of project boundary.

Number of intersections within ¼ mile radius (for a project on a small lot)	Number of intersections within 1 square mile	Points
18	90	1

Credit Submittals

General:

1. Register for Pilot Credit(s) here.
2. Register a username at LEEDuser.com, and participate in online forum
3. Submit feedback survey; supply PDF of your survey/confirmation of completion with credit documentation

Credit Specific:

To gain credit, submit an aerial map of the project and surrounding area. Create a circle with a ¼ mile radius, and mark each intersection within that radius with the following caveats:

- All streets and sidewalks that are counted toward the connectivity requirement must be 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.
- Sidewalk intersections may be counted only if they are a unique and dedicated *right of way*
- Publicly accessible *alleys* may be counted.
- Intersections leading to cul-de-sacs are not counted.

Credit is earned for projects with an intersection density of at least 90 qualified intersections per square mile.

See submittal example below

Additional Questions

- Did you find that the number of intersections near your project was an effective measure of project connectivity to the local community?
- If the number of intersections was low, can you identify a reason (rural setting, proximity to a large open space etc.)
- Do you think the requirement thresholds should be increased or decreased? Why?
- Would you consider your project site to be well connected (i.e., meets the intent of this credit)? Is this reflected in your intersection count?

Background Information

This credit uses intersection density as a proxy for the level of community connectivity, transit accessibility and walkability. Intersection density corresponds closely to block size: the greater the intersection density, the smaller the blocks. Small blocks contribute to neighborhood walkability. In recent years, a growing body of research has confirmed that intersection density is one of the most important factors for encouraging pedestrian tra-

vel. Intersection density is also associated with fewer vehicle miles traveled, reduced risk of fatalities and serious injuries from auto crashes, faster emergency response, and, in conjunction with complementary urban design, reduced incidence of burglary.

Submittal Example from LEED for Neighborhood Development 2009 Reference Guide

Changes from previous version of pilot credit:

Changes made 11/01/2010:

- Changed Applicable Rating Systems: removed NC, CI, CS, Schools, Retail, Healthcare and EB:O&M, added Homes Mid-Rise
- Added metric for 1 square mile of intersections
- 2nd bullet: changed “unique” to “unique and dedicated”
- 4th bullet: changed “intersections with” to “intersections leading to”
- Added example submittal graphic

Changes made 3/1/2011

- Changed title from “Open and Connected Community”
- Eliminated higher threshold, and changed the lower threshold from 300 intersections per square mile to 90.
- 1st bullet: changed “all weather pathways” to “sidewalks”

Changes made 3/1/2012:

- Changed title to Street Network