

# LEED-ND Connections Tool Overview for Local Governments

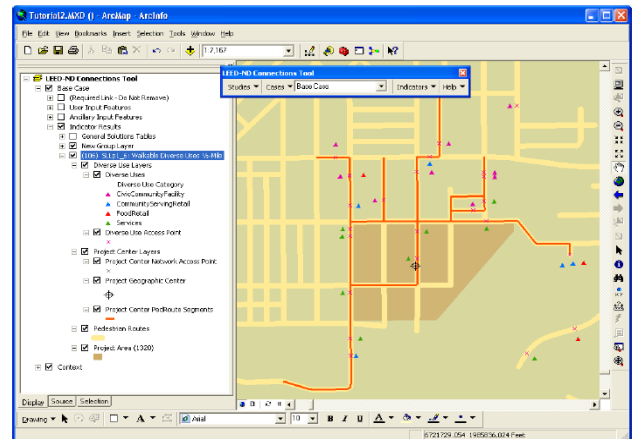
## *About the Connections Tool*

The Connections Tool is a GIS ArcMap extension that works with either ArcInfo 9.3 or ArcEditor 9.3 software. The tool can be used to evaluate a LEED-ND project design against 56 thresholds in 15 different LEED-ND prerequisites and credits. These thresholds measure walking/bicycling distance to a range of amenities, such as parks, schools, and shops, and street network connectivity expressed as intersections per square mile.

The output of the Connections Tool is a set of maps and tables used to document compliance with the 56 thresholds.

Local governments can use the Connections Tool to:

1. Help LEED-ND project teams use the Connections Tool on their projects by preparing required transportation facility data, and helping teams apply the data in project and vicinity analyses
2. Assess specific parcels of land for LEED-ND eligibility if they are under development through a public-private partnership, or if considering requiring LEED-ND certification for a certain area.



## *Considerations for Using the Connections Tool*

Most importantly, please know that the Connections Tool is only compatible with ArcGIS 9.3. Additionally, there are other important considerations when using the Connections Tool.

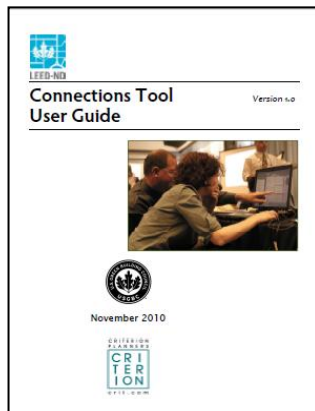
- The Connections Tool requires users with advanced GIS experience, particularly working with geometric networks.
- Data quality is the most important determinant in the amount of time that it takes to use the tool.
- All data must be provided in shapefile format. If a LEED-ND project design is in CAD format, these can be readily converted to shapefiles.
- The basic data needed are a LEED-ND project boundary; street centerlines as a ArcGIS geometric network, attributed by type, including detailed description of pedestrian and bicycle features; walk/bike/transit trip origin points; and destination points specified in LEED-ND, e.g. schools, parks, shops.

## *Benefits of Local Government Familiarity with the Connections Tool*

Local governments can accelerate the certification of neighborhoods and amplify benefits to the community by insuring that jurisdiction-wide data layers conform to Connections Tool specifications in advance of project proposals. With data already prepared, local government GIS staff can then assist LEED-ND project teams in applying the tool and obtaining more accurate results, faster.

In cases where a local government is the land developer and applicant for a LEED-ND project (or partnering with another developer on the project), the agency's GIS staff can use the tool directly to complete project documentation. City and county GIS staff may also be able to assist other special purpose agencies, such as housing authorities or urban renewal agencies, when those organizations are acting as project developers, but do not have their own in-house GIS capabilities.

If a local government is considering requiring LEED-ND certification for a particular area, some preliminary analysis can be performed with the Connections Tool. For example, determining existing intersection density can reveal whether existing conditions support LEED-ND certification or whether developer plans will need to add additional street intersections to comply with LEED-ND requirements.



## *Resources Available When Using the Connections Tool*

- A detailed User Guide.
- *Using the LEED-ND Connections Tool* – Criterion Planners has developed a training course for experienced GIS users to help them optimize their use of the Connections Tool. Information on the course can be found [here](#).

## *How to Get Started Using the Connections Tool*

Please contact Jeff Lovshin at [neighborhoods@usgbc.org](mailto:neighborhoods@usgbc.org) to request access to the Connections Tool and the User Guide.