

LEED v4 Building Design and Construction

Quiz #3

LT

1. How are walking and bicycling distance measured?
 - A. Straight-line radius from a main building entrance
 - B. Straight-line radius from any building entrance
 - C. Sum of the continuous segments along public streets and sidewalks
 - D. Sum of the continuous segments along infrastructure that is safe and comfortable
2. Which of these parking spaces must be included in a projects total parking capacity? [Choose three]
 - A. Any off-street parking spaces outside the project boundary that are available to the building's users
 - B. On-street parking spaces on public rights of way
 - C. New and existing surface parking spaces
 - D. Motorbike parking spaces
 - E. New and existing garage or multilevel parking spaces
3. To earn LT Credit LEED for Neighborhood Development Location what must the team provide to confirm that the LEED ND neighborhood or plan area in which the project is located meets credit criteria? [Choose three]
 - A. Rating system and rating system version
 - B. Certification designation
 - C. Certification level and certification date
 - D. Map of certified LEED ND neighborhood or plan boundary
4. Which of these sites could a project locate the development footprint on and meet the criteria for not being built on sensitive land? [Choose two]
 - A. Previously developed land that is within 50 feet from a stream
 - B. Previously undeveloped land that is within 50 feet from a stream
 - C. Previously undeveloped land that is within 100 feet from a stream
 - D. Previously undeveloped land that is within 40 feet from a wetlands
5. A project site has had no previous development. The team determines that an adjacent wetlands extends across the project boundary and finds a small stream within the project boundary. The project team designed the development footprint such that it is not within 100 feet of the wetlands. The stream is 40 feet from the building footprint. The project team provides an impervious pedestrian pathway from the main building entrance to the stream to allow the building users access in order to satisfy the criteria for LT Credit Sensitive Land Development. Which of these applies to the project?
 - A. The project earns the credit
 - B. The project earns the credit if the pedestrian pathway is 12 feet wide
 - C. The project does not earn the credit
 - D. The project earns the credit if they locate the development footprint within 50 feet of the wetlands
 - E. The project earns the credit if they donate \$0.40 per square foot to a locally recognized land trust
6. Identify the options projects can choose to locate the project site on in order to earn LT Credit High-Priority Site. [Choose three]
 - A. Historic District
 - B. International Destination
 - C. Priority Designation
 - D. Brownfield Remediation
 - E. Redevelopment Area
 - F. Urban Community

7. What percentage of a site, prior to the project, must be previously developed land in order to be designated a previously developed site?
- 25%
 - 50%
 - 75%
 - 100%
8. Which of these can LEED for Schools projects exclude in the LT Credit Surrounding Density and Diverse Uses development density calculation? [Choose three]
- Gymnasium
 - Playgrounds
 - Soccer field
 - Physical education building
 - Football stadium concession stand
9. A LEED NC project is constructing a new office building in a central business district. The building's main entrance is within a ½ mile walking distance of the main entrance to a supermarket, bank, health club, movie theater, museum, and five restaurants. How many points could the project earn for LT Credit Surrounding Density and Diverse Uses?
- 1 point for Option 2. Diverse Uses
 - 2 points for Option 2. Diverse Uses
 - 2 points for Option 1. Surrounding Density and 1 point for Option 2. Diverse Uses
 - 2 points for Option 1. Surrounding Density and 2 points for Option 2. Diverse Uses
10. Which of these should be included on the walking map to document nearby uses for LT Credit Surrounding Density and Diverse Uses? [Choose two]
- Street names
 - Walking routes
 - Scale
 - Crosswalks
 - Bus stops
11. A new commercial building is surrounded by a variety of residential, nonresidential, and mixed-use buildings within a 1/4 mile (400-meter) radius of the project boundary. The total residential land area is 68 acres (2,962,080 square feet) and there are 680 dwelling units within ¼ mile. The nonresidential land area is 62 acres (2,700,720 square feet) and the nonresidential space (including all nonresidential buildings and nonresidential space in mixed-use buildings) within the radius totals 1,600,000 square feet. What is the Residential Density?
- 0.10 FAR
 - 0.59 FAR
 - 4356 SF / DU
 - 10 DU / acre
12. Which of these could help a LEED BD+C: Core and Shell project earn LT Credit Access to Quality Transit?
- Project is located within a ¾ mile walking distance of an existing bus rapid transit stop
 - Project is located within a ¼ mile walking distance of a planned bus rapid transit stop
 - Project is located within a ½ mile walking distance of a commuter ferry terminal
 - Project is providing a private shuttle to a light rail station that provides service on the weekdays and weekends

13. A LEED BD+C: Schools project has an attendance boundary such that 60% of the student population is within walking distance. The project site also allows pedestrian access to the site from some of the residential neighborhoods that house the planned student population. How many points could the project earn for LT Credit Access to Quality Transit?
- A. 0
 - B. 1
 - C. 2
 - D. 4
14. If existing transit service is temporarily rerouted outside the required distances for LT Credit Access to Quality Transit, 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 and are scheduled for completion within what time frame?
- A. One-year
 - B. Two-years
 - C. Five-years
 - D. The transit service cannot be counted
 - E. Certificate of occupancy
15. A LEED BD+C: New Construction and Major Renovations commercial project will have 200 full-time employees and 5 peak visitors. How many short-term bicycle storage spaces and on-site showers with changing facility do they need to provide for LT Credit: Bicycle Facilities?
- A. 1 short-term bicycle storage space and 1 shower
 - B. 2 short-term bicycle storage spaces and 1 shower
 - C. 4 short-term bicycle storage spaces and 1 shower
 - D. 4 short-term bicycle storage spaces and 2 showers
 - E. 14 short-term bicycle storage spaces and 2 showers
16. For LEED BD+C: Retail in order to qualify as a Bicycle Network for LT Credit: Bicycling Facilities which of these must be meet?
- A. Connects to 5 diverse uses that are located within a 2-mile bicycling distance from the project boundary.
 - B. Connects to 10 diverse uses that are located within a 3-mile bicycling distance from the project boundary.
 - C. Connects to 5 diverse uses that are located within a 3-mile bicycling distance from the project boundary.
 - D. Connects to 10 diverse uses that are located within a 2-mile bicycling distance from the project boundary.
17. For all projects for LT Credit: Bicycling Facilities within what distance must the short-term bicycle storage be located?
- A. 100 feet walking distance of any main entrance
 - B. 200 feet walking distance of any main entrance
 - C. 100 feet walking distance of any functional entrance
 - D. 200 feet walking distance of any functional entrance
18. Which of these would qualify as part of a bicycle network? [Choose three]
- A. Bike trails
 - B. Streets with speed limit under 30 mph
 - C. Dedicated bike lanes
 - D. Slow-speed streets

19. What is the required documentation for LT Credit: Bicycle Facilities for a LEED BD+C: Schools project?
[Choose three]
- A. Vicinity map showing bicycle network and route and distance along network to eligible destination(s)
 - B. Site plan showing bicycle storage locations
 - C. Site plan showing bicycle storage location with walking route to main entrance and bicycling route to project boundary
 - D. Calculations for storage and shower facilities
 - E. Description of programs to support bicycle use
20. Projects that have not earned points under LT Credit Surrounding Density and Diverse Uses or LT Credit Access to Quality Transit must achieve what percentage reduction from the base ratios to earn LT Credit Reduced Parking Footprint?
- A. 20%
 - B. 25%
 - C. 30%
 - D. 40%
21. A fitness club located in a central business district has no local code requiring the building to provide parking spaces. The building is 20,000 square feet and the parking capacity base ratio from the Transportation Planning Handbook is 7 spaces per 1000 square feet. No off-street parking is provided. The project will earn points for LT Credit Access to Quality Transit. To comply with LT Credit Reduced Parking Footprint requirements what is the maximum number of parking spaces that the project can provide?
- A. 140
 - B. 112
 - C. 105
 - D. 84
22. A LEED BD+C: Core and Shell project has 100 total parking spaces used by the project. To earn LT Credit Green Vehicles how many of the parking spaces must be preferred parking spaces for green vehicles and how many spaces must be alternative-fuel fueling stations?
- A. 2 preferred spaces for green vehicles. Alternative-fuel fueling stations are not required
 - B. 2 preferred spaces and 2 alternative-fuel fueling spaces
 - C. 5 preferred spaces for green vehicles. Alternative-fuel fueling stations are not required
 - D. 5 preferred spaces and 2 alternative-fuel fueling spaces
23. To qualify as a green vehicle what is the minimum green score on the American Council for Energy Efficient Economy (ACEEE) annual vehicle rating guide that must be achieved?
- A. 30
 - B. 40
 - C. 45
 - D. 50
24. What is an acceptable substitute for preferred parking for green vehicles?
- A. A discounted parking rate of at least 20%. The discounted rate must be publicly posted at the entrance of the parking area and permanently available to all of the building occupants.
 - B. A discounted parking rate of at least 20%. The discounted rate must be publicly posted at the entrance of the parking area and permanently available to every qualifying vehicle.
 - C. A discounted parking rate of at least 20%. The discounted rate must be publicly posted at the entrance of the parking area and available for two years to all of the building occupants.
 - D. A discounted parking rate of at least 20%. The discounted rate must be publicly posted at the entrance of the parking area and available for two years to every qualifying vehicle.

25. Which of these LEED Credit: Green Vehicles options can a LEED BD+C: Hospitality project use to earn the credit? [Choose two]
- A. Install electrical vehicle supply equipment (EVSE)
 - B. Provide an electrical connection at dock door locations to limit truck idling at the dock
 - C. Install liquid or gas alternative fuel fueling facilities or a battery switching station
 - D. Designate preferred parking for green vehicles