



# **Credit Guidance**

Location and Transportation

## LT Credit:

LEED for Neighborhood Development Location (not available)

CAMPUS	MANDATORY	PRIORITY	AVAILABLE
Vancouver			N1 /A
Okanagan			N/A

# LT Credit: Sensitive Land Protection

CAMPUS	MANDATORY	PRIORITY	AVAILABLE
Vancouver	1		1
Okanagan	1		]

#### GUIDANCE

Currently there are no sites certified under the LEED ND rating system on the UBC Vancouver or Okanagan Campus. Should this condition change, the Guide will be updated to reflect this credit and project teams may apply the available points toward their score.

#### REQUIREMENTS

All projects must comply as per LEED BD+C v4.1.

**VANCOUVER RESOURCES** 

<u>Appendix A - UBC Integrated</u> Sustainability Process

BC Conservation Data Centre

Vancouver Campus Plan

**OKANAGAN RESOURCES** 

Appendix A - UBC Integrated
Sustainability Process

BC Conservation Data Centre

Okanagan Campus Plan

Okanagan Whole Systems Infrastructure Plan

UBC Okanagan Campus Environmental
Sensitivity Analysis, refer to Ecological
Assessment Figure 2 - Ecosystem
Polygons - ESA Full Campus

#### GUIDANCE

Projects must comply with Option 1: Previously Developed Land whenever applicable. Should Option 1 be unavailable, credit achievement is required via Option 2: Avoidance of Sensitive Land.

Projects must assess current site conditions and ecological status of the site at the time of design. It is imperative that an assessment of species and ecosystems at risk, floodplains and water bodies are considered for each development project on the campus; site assessments should be conducted early in the process and align with and inform the steps required by the <a href="Integrative Process">Integrative Process</a> credit the <a href="Site">Site</a> <a href="Assessment">Assessment</a> credit, both identified as mandatory for both campuses. Public online resources such as the provincial registry of red list and blue lists, ecologically sensitive mapped areas, human health, and campus resources can be used for this credit.

### LT Credit:

# High Priority Site and **Equitable Development**

CAMPUS	MANDATORY	PRIORITY	AVAILABLE
Vancouver		2	2
Okanagan		2	2

#### REQUIREMENTS

Projects teams are strongly encouraged to pursue this credit through any available option.

VANCOUVER RESOURCES

UBC Engagement Principles

Equity & Inclusion Policies

Vancouver Campus Plan

**UBC** Risk Management Services

OKANAGAN RESOURCES

**UBC** Engagement Principles

**Equity & Inclusion Policies** 

Okanagan Campus Plan

**UBC Risk Management Services** 

#### GUIDANCE

#### Option 1

Path 1: Economically Disadvantaged Community Location
Path unavailable to both Vancouver and
Okanagan campuses.

Path 2: Brownfield Remediation

No contaminated sites have been identified on either campus. However, project teams are advised to consult with UBC Risk Management Services if future conditions indicate contamination may have occurred

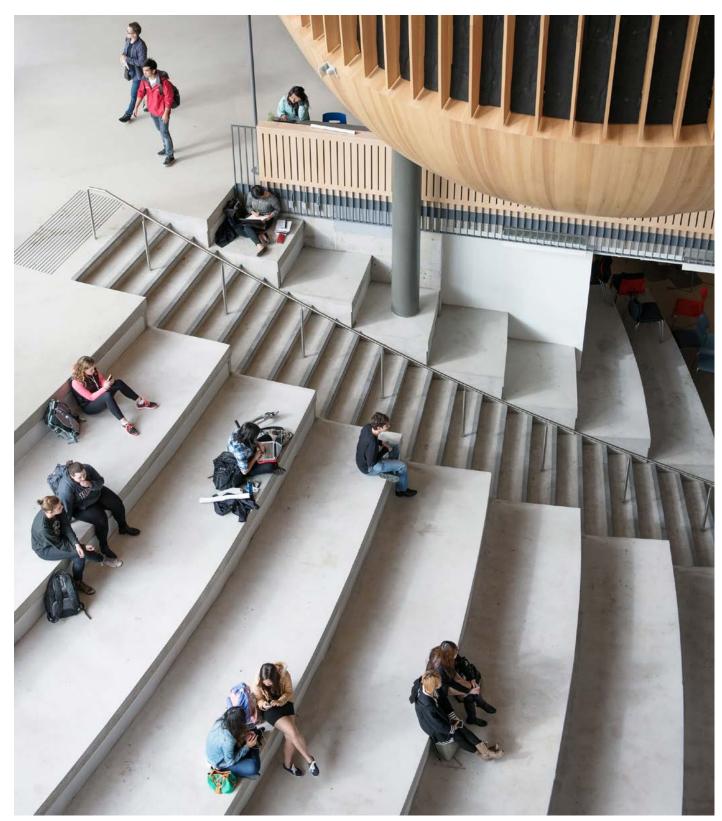
#### Option 2

Path 1: Equity & Community Benefits

Project teams pursuing this option should aim to address disparities in the project's community by engaging local stakeholders who are vulnerable, disadvantaged, or underrepresented. An equity plan should comply with UBC's Equity-related Policies. Projects are encouraged to liaise with the relevant Campus Planning office to develop a plan that aligns with current practices and processes already in place, such as consultation and stakeholder engagement or established relationships with partner organizations.

#### Path 2: Equitable Development

This path may be applicable to student housing projects. Teams wishing to pursue this credit should be in touch with the relevant Campus Planning office to determine compliance.



Student Union Building, UBC Vancouver Campus

## LT Credit:

# **Surrounding Density** and Diverse Uses

CAMPUS	MANDATORY	PRIORITY	AVAILABLE
Vancouver	2	3	г
Okanagan	2	3	5

#### REQUIREMENTS

All projects must comply to earn at least two points. Vancouver projects may comply via any available option; for Okanagan projects, Option 2 is the most likely and efficient compliance path.

#### **VANCOUVER RESOURCES**

Appendix B - Vancouver Campus:

Surrounding Density and

Diverse Uses Maps

Walk Score

**UBC Vancouver GIS Data** 

#### **VANCOUVER GUIDANCE**

**Option 1:** Surrounding Density (2–3 points)

To confirm compliance with Option 1, locate the project on the Vancouver Campus Surrounding Density and Diverse Uses Maps in Appendix B. Campus development density has been calculated using the Combined Density methodology and mapped for use by all future projects. Most project sites will be in zones with surrounding density of greater than 8,035 sq.m/ha buildable land to earn three points. <u>UBC Vancouver GIS</u> data can be accessed online to calculate density.

#### **Option 2:** Diverse Uses (1–2 points)

To confirm compliance with Option 2, locate the project site on the Vancouver Campus Surrounding Density and Diverse Uses Map in Appendix B. The map provides only general use types to account for the wide range and variability of campus amenities over time. Project teams are encouraged to consult online campus maps, Google maps and to review amenities on the ground to confirm applicable amenities at the time of certification. If the analysis indicates a lack of amenities within the required distance, contact Campus Planning to determine if future planned amenities may be able to contribute.

### **Option 3:** Walkable Location (1-5 points)

The majority of the Vancouver Campus will achieve a <u>Walk Score</u> between 67-72 earning two or three of a possible five points. Note that projects attempting Option 3 are not eligible to pursue points under Option 1 or 2.

#### OKANAGAN RESOURCES

Appendix B - Okanagan Campus:
Surrounding Density and
Diverse Uses Maps

Walk Score

**UBC** Okanagan GIS Data

#### OKANAGAN GUIDANCE

**Option 1:** Surrounding Density (2–3 points)

Depending on where a project site is located, Okanagan campus surrounding density may be below the minimum threshold to earn points under this option. Refer to the Okanagan Campus Surrounding Density and Diverse Uses Maps in Appendix B. <u>UBC Okanagan GIS data</u> can be accessed online to calculate density.

#### **Option 2:** Diverse Uses (1–12 points)

To confirm compliance with Option 2, locate the project site on the Okanagan Campus Surrounding Density and Diverse Uses Maps in Appendix B. The map provides only general use types to account for the wide range and variability of campus amenities over time. Project teams are encouraged to consult online campus maps, Google maps and to review amenities on the ground to confirm applicable amenities at the time of certification. If the analysis indicates a lack of amenities within the required distance, contact Campus Planning to determine if future planned amenities may be able to contribute.

#### **Option 3:** Walkable Location

The majority of the Okanagan Campus currently has a <u>Walk Score</u> below the minimum threshold to earn points under this option, but teams may wish to consider it if circumstances change. Project teams are encouraged to check the Walk Score for their specific project location.

### LT Credit:

# **Access to Quality Transit**

CAMPUS	MANDATORY	PRIORITY	AVAILABLE
Vancouver	2	3	Г
Okanagan	2	3	5

#### **REQUIREMENTS**

All projects must comply as per LEED BD+C v4.1 to earn at least two points.

Appendix C - Vancouver
Campus: Transit Map

TransLink Transit Schedules

#### VANCOUVER GUIDANCE

Transit analysis completed for the Vancouver campus includes the UBC Bus Exchange and trolley loop as well as all bus stops in and around UBC. The UBC Vancouver campus is served by local, regional, and rapid bus service. However, note that the rapid bus service does not meet the definition of Bus Rapid Transit used by LEED, which states that buses must operate on exclusive lanes or other transit rights of way. To confirm compliance, refer to the Vancouver Campus: Transit Map in Appendix C to determine if the project site is within 400m walking distance of a bus stop, bus loop or the UBC Exchange.

#### Current daily one-way transit service on campus is:

- Wesbrook Mall north of UBC Bus Exchange:
   192 weekday trips, 93 weekend trips
- Wesbrook Mall between UBC Bus Exchange and University Boulevard: 747 weekday trips, 520 weekend trips
- Wesbrook Mall south of University Boulevard: 488 weekday trips, 337 weekend trips
- University Boulevard west of Wesbrook Mall:
   199 weekday trips, 151 weekend trips
- Along the 68 Bus Route on local campus roads:
   50 weekday trips, 47 weekend trips

Transit trip counts are provided for the convenience of estimation only. Daily transit service should be confirmed for each project at the time of documentation.

#### OKANAGAN RESOURCES

Appendix C - Okanagan Campus: Transit Map

Kelowna BC Transit Schedules

#### OKANAGAN GUIDANCE

UBC Okanagan Exchange is a bus terminal for the Kelowna Regional Transit System located at the Okanagan campus. Buses serve Lake Country, Vernon, Kelowna International Airport, Kelowna, and West Kelowna, including the 97 RapidBus. Note that the 97 RapidBus does not meet the definition of Bus Rapid Transit used by LEED, which states that buses must operate on exclusive bus lanes or other transit rights of way.

A transit analysis has been conducted for the Kelowna campus; to confirm project compliance, refer to the Okanagan Campus: Transit Map in Appendix C to determine if the project site is within 400m walking distance of a bus stop or the Exchange.

#### Current daily one-way transit service on campus is:

- Innovation Drive: 72 weekday trips; 33 weekend trips
- University Way: 213 weekday trips; 108 weekend trips
- Alumni Avenue: 21 weekday trips; 0 weekend trips

Transit service is provided for the convenience of estimation only. Daily transit service should be confirmed for each project at the time of documentation.

# LT Credit: **Bicycle Facilities**

CAMPUS	MANDATORY	PRIORITY	AVAILABLE
Vancouver	1		1
Okanagan	1		I

#### REQUIREMENTS

All projects must comply as per LEED BD+C v4.1.

#### VANCOUVER RESOURCES

Appendix D - Vancouver

Campus: Cycling Network and

Diverse Uses Map

**UBC Vancouver Cycling Map** 

Vancouver Campus Plan Part 3: 2.5.5

Bicycle parking and 2.5.6 End of

Trip Facilities

UBC Vancouver Campus Map

City of Vancouver Cycling Map

#### VANCOUVER GUIDANCE

All roads on campus have a speed limit of 30km/hr, allowing them to be considered as part of the bicycle network as defined by the LEED BD+C LEED v4.1 Reference Guide. All other infrastructure that may be considered as part of the network is identified in Appendix D Vancouver Campus: Cycling Network and Diverse Uses Map.

All projects must ensure that bicycle parking and end of trip facilities are provided and installed in accordance with the Vancouver Campus Plan Design Guidelines sections 2.5.5: Bicycle Parking and 2.5.6: End-of-Trip-Facilities. In some cases the Design Guidelines may be more stringent than LEED. Projects must comply with the most stringent requirement.

On-site bike sharing stations within the project boundary are eligible to count for 50% of long-term and short-term storage.

#### OKANAGAN RESOURCES

Appendix D - Okanagan
Campus: Cycling Network and
Diverse Uses Map

**UBCO Campus Map** 

Okanagan Campus Design Guidelines section 2.4.2: Bike Racks and Lockers

City of Kelowna Bike Routes

#### OKANAGAN GUIDANCE

All local roads on campus have a speed limit of 30 km/hr, allowing them to be considered as part of the bicycle network as defined by the LEED BD+C LEED v4.1 Reference Guide. All other infrastructure that may be considered as part of the network is identified in Appendix D Okanagan Campus: Cycling Network and Diverse Uses Map.

All projects must ensure that bicycle parking and end of trip facilities are provided and installed in accordance with the UBC Okanagan Campus Design Guidelines section 2.4.2: Bike Racks and Lockers. In some cases the Design Guidelines may be more stringent than LEED. Projects must comply with the most stringent requirement

On-site bike sharing stations within the project boundary are eligible to count for 50% of long-term and short-term storage.

## LT Credit:

# Reduced Parking Footprint

CAMPUS	MANDATORY	PRIORITY	AVAILABLE
Vancouver		1	1
Okanagan		1	I

#### **REQUIREMENTS**

All projects are strongly encouraged to pursue this credit.

VANCOUVER RESOURCES
UBC Parking

**UBC Vancouver Parking Rates** 

TransLink Fares

#### VANCOUVER GUIDANCE

Projects are encouraged to pursue Option 3: Unbundled Parking as the most efficient path to compliance. In the rare instance that a project includes parking within the project site boundary, teams should liaise with Campus Planning and UBC Parking to confirm that spaces will be allocated and used in manner aligned with the credit requirements.

Note that all buildings must provide off-street loading bays; these spaces are not to be included in the parking footprint calculation.

Option 1: No Parking or Reduce Parking and Option 2: Carshare Option 1 or 2 may be pursued if circumstances are appropriate. Parking calculations must account for all existing and new off-street parking spaces that are leased or owned by UBC, including parking that is outside the project boundary but is used by the project (all parkades and surface parking lots across campus). Any new parking spaces created by the project, or existing parking spaces that are intended to be used or reserved by the project, must be clearly identified for review and approval by Campus Planning and UBC Parking accordingly.

#### **Option 3:** Unbundling Parking

The current daily parking rate at the UBC Vancouver campus exceeds the cost of TransLink's daily, three-zone round trip using a **stored value rate**. The daily **cash value rate** for a round trip three-zone fare is more expensive than the current daily parking rate. Projects are encouraged to submit for credit compliance using the **stored-value rate**. Parking rates and transit fares are subject to change, so projects must confirm costs in advance of credit documentation. Project teams are encouraged to work with UBC Parking to ensure parking cost is greater than the transit fare.

#### OKANAGAN RESOURCES

UBC Okanagan Parking Services

**UBC Okanagan Parking Rates** 

BC Transit Fares - Kelowna

#### OKANAGAN GUIDANCE

Projects are encouraged to pursue Option 3: Unbundled Parking as the most efficient path to pursue compliance. In the rare instance that a project includes parking within the project site boundary, teams should liaise with Campus Planning and Parking Services to confirm that spaces will be allocated and used in manner aligned with the credit requirements.

Note that all buildings must provide off-street loading bays; these spaces are not to be included in the parking footprint calculation.

**Option 1:** No Parking or Reduce Parking and **Option 2:** Carshare

Option 1 or 2 may be pursued if circumstances are appropriate. Parking calculations must account for all existing and new off-street parking spaces that are leased or owned by UBC, including parking that is outside the project boundary but is used by the project (all parkades and surface parking lots across campus). Any new parking spaces created by the project, or existing parking spaces that are intended to be used or reserved by the project, must be clearly identified for review and approval by Campus Planning and Parking Services accordingly.

#### **Option 3:** Unbundling Parking

The daily parking rate at the UBC Okanagan campus exceeds the cost of BC Transit's round trip adult fare. Parking rates and transit fares are subject to change, so projects should confirm costs in advance of credit documentation. Project teams are encouraged to work with Parking Services to ensure parking cost is greater than the transit fare.

# LT Credit:

# **Electric Vehicles**

CAMPUS	MANDATORY	PRIORITY	AVAILABLE
Vancouver		1	1
Okanagan		1	1

#### REQUIREMENTS

Projects are encouraged to pursue compliance with credit requirements if appropriate within the context of the project.

VANCOUVER RESOURCES

UBC Transportation Plan (Oct 2014)

UBC Electric Vehicle
Charging Locations

**UBC** Parking

OKANAGAN RESOURCES

<u>UBC Okanagan Transportation Plan</u>

UBC Okanagan Parking Services

#### GUIDANCE

Electric vehicle charging stations are encouraged and may be appropriate for select projects with on-site parking. All electric vehicle parking spaces and supply equipment are designated and managed by UBC Parking according to campus demand. Where electric vehicle parking currently exists, spaces are provided at the same cost as regular vehicles and electric charging is offered for a nominal hourly rate. Project teams are encouraged to liaise with UBC Parking to explore options and opportunities for electric vehicle charging stations.

Alternatively, LEED v4.1 awards points for installing charging infrastructure for 10% of parking or at least six stalls. Project teams are encouraged to consider this option where relevant and appropriate.



Electric Vehicle Parking, UBC Okanagan Campus