This guide is to be used for the Sustainable Transport Credits in the Transport Category.
Document Information

For information on this document, please contact:

Green Building Council of Australia
(02) 8239 6218
greenstar@gbca.org.au

This document is updated regularly. It can be found at www.gbca.org.au

Change Log

<table>
<thead>
<tr>
<th>Release</th>
<th>Date</th>
<th>Description of changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Star - Design &amp; As Built v1.0 Release 1</td>
<td>16/10/2014</td>
<td>Initial release</td>
</tr>
<tr>
<td>Green Star - Design &amp; As Built v1.1 Release 1</td>
<td>22/07/2015</td>
<td>Re-released for Design and As Built v1.1, no changes.</td>
</tr>
</tbody>
</table>

Use of Trademarks

All third-party trademarks are the property of their respective owners. All third-party trademarks referenced in this document are used in an editorial fashion and not to the detriment of the trademark holders.

Intellectual Property Rights & Confidentiality

© Copyright Green Building Council of Australia

No part of this document or the information contained within it may be (a) used for any purpose other than that stated within this document by the recipient; or (b) reproduced, transmitted or translated in any form or by any means, electronic, mechanical, manual, optical or otherwise, without prior written permission of Green Building Council of Australia.
# Table of Contents

1. Introduction .................................................................................................4
2. Glossary of Terms .......................................................................................5
3. Performance Path - Sustainable Transport credit development ..................5
4. How the calculator works ............................................................................6
5. Where to find the calculator and how to enter data ....................................6
6. Travel Plan ..................................................................................................9
   6.1.1 Site-specific transport assessment .......................................................9
   6.1.2 Design features for alternative transport ...........................................9
   6.1.3 Operational opportunities for alternative transport .........................9
   6.1.4 Building users' information ...............................................................10
7. Determining the reference case ..................................................................10
   7.1 Mode share ..........................................................................................10
   7.2 Avoided trips .......................................................................................10
   7.3 Average trip length .............................................................................10
   7.4 Work weeks .......................................................................................10
   7.5 Walk Score® .......................................................................................10
   7.6 Emissions intensity .............................................................................11
8. Determining points from the Transport Calculator ......................................12
9. Claiming improvements from the reference case ........................................13
   9.1 Design and As Built Rating Requirements ..........................................13
      9.1.1 Mode share changes .................................................................13
      9.1.2 Trip length changes ..................................................................14
      9.1.3 Avoided trips changes .............................................................14
      9.1.4 Work weeks changes ...............................................................14
      9.1.5 Emissions intensity changes .....................................................14
9.2 Documentation Requirements ...................................................................14
Appendix A: Project Examples ....................................................................1
1 INTRODUCTION

The Green Building Council of Australia (GBCA) and AECOM have developed a Sustainable Transport Calculator (‘the Calculator’) that may be used to validate the Performance Pathway for Green Star credit Sustainable Transport. Projects can demonstrate a reduction in carbon emissions from transport by comparing their design to a reference building.

Points awarded in the Sustainable Transport credit can be awarded using the performance pathway or a prescriptive pathway (see Figure 1). The Calculator determines the number of points awarded out of the 10 available for the Performance Pathway of the Sustainable Transport credit. This Calculator Guide (‘the Guide’) should be used in conjunction with the Calculator.

The Calculator determines the number of points awarded based on the proposed emissions reduction, active mode encouragement, vehicle kilometres travelled reduction, and walkable location.

A Travel Plan must be developed to ensure that all aspects of transport for regular occupants have been considered and addressed as part of this pathway. Points are then awarded, based on a holistic approach to reducing the impacts from transport, where the proposed building performance is improved when compared to a Reference Building.

Points are awarded by completing the Sustainability Impacts from Transport Calculator with the predicted transport mode split as defined in the Travel Plan.

Compliance with the Sustainable Transport Performance Pathway requires a project to demonstrate the carbon emissions from transport generated from typical operations. This value is then compared to carbon emissions from transport for a comparable building of a similar type in a similar location (the ‘reference building’).

Points are rewarded according to the reductions determined by the calculator. The credit provides carbon emissions reductions as a result of transport design initiatives, such as removal of a car parking space, provision of cyclist facilities or carpooling initiatives.
2 GLOSSARY OF TERMS

- Building population: Refers to the population of permanent staff within a facility. e.g. office staff or teachers within an education facility. The Transport category aims to capture the emissions attributed to the facility being rated, and therefore, does not take into account visitor or students populations
- Mode Share: The proportion of commuting trips that take place by a given mode of transport (e.g. bus, car, bicycle)
- VKT: Vehicle Kilometres Travelled
- ABS: Australian Bureau of Statistics
- SA2: Statistical Area Level 2, a Census geographical unit representing a population of 3,000 to 25,000 people
- MTWP: Method of Travel to Work (a Census statistic)
- Walk Score®: A measure of pedestrian accessibility to amenities (e.g. supermarkets, restaurants etc.) that is publicly available for every address in Australia from the following web address: <http://www.walkscore.com/>

3 PERFORMANCE PATH - SUSTAINABLE TRANSPORT CREDIT DEVELOPMENT

A Sustainable Transport Calculator has been developed that assigns a total of 10 points, divided into the below criteria (see Table 1):

Criterion 1. Emissions reduction (5 points)

Criterion 1 relates to a reduction in transport emissions directly related to commuting trips to and from the site. Criterion 1 is calculated from commuting trips mode share, average trip length and the proportion of trips that may be avoided (e.g. by working from home). Criterion 1 considers reduction in greenhouse gas emissions which contribute to climate change.

Criterion 2. Active mode encouragement (1 points)

Criterion 2 relates to an increase in the mode share of walk and bicycle commuting trips, referred to collectively as “active modes”. Criterion 2 considers encouragement of transport modes that promote health and fitness to commuters as well as having financial benefits and reducing the societal cost of healthcare.

- > 50% increase in the use of active modes of transport = 1 point

Criterion 3. Vehicle kilometres travelled reduction (1 points)

Criterion 3 relates to a reduction in vehicle kilometres travelled (VKT) for commuting trips, which may be affected by either or both of a reduction in average trip length or a reduction in the mode share of car trips. Criterion 3 considers lessening car dependence which, in addition to reducing greenhouse gas emissions, also reduces local pollution, crashes, and improves social equality as well as having potential financial benefits to commuters.

- >10% decrease in VKT = 1 point
Criterion 4. Walkable location (3 points)

Criterion 4 relates to a site that is located in a “walkable” location. Criterion 4 is not related to commuting trips but instead considers that motorised trips may be avoided by allowing employees to accomplish errands on foot (e.g. during a lunch break).

- Walk Score® of 71 - 80 = 1 point
- Walk Score® of 81 - 90 = 2 points
- Walk Score® of 91 - 100 = 3 points

Table 1: Criterion points guide

<table>
<thead>
<tr>
<th>Points</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criterion 1. Emissions reduction</td>
<td>5-15%</td>
<td>15-25%</td>
<td>25-35%</td>
<td>35-45%</td>
<td>&gt;45%</td>
</tr>
<tr>
<td>Criterion 2. Active mode encouragement</td>
<td>&gt; 50%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criterion 3. VKT reduction</td>
<td>&gt; 10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criterion 4. Walkable location (Walk Score®)</td>
<td>71 - 80</td>
<td>81 - 90</td>
<td>91 - 100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total 10 points

4 HOW THE CALCULATOR WORKS

The calculator works by comparing a reference building from the area to the building that is being assessed for Criteria 1 (emissions reduction), 2 (active mode encouragement) and 3 (VKT reduction). The reference building characteristics are automatically calculated within the spreadsheet tool. Points are assigned by comparing the performance of the building that is being assessed with a reference case. For information on how the reference case is generated, see Section 7.

Criterion 4 (walkable location) considers the walkability of the location of the building being assessed. Points are assigned to Criterion 4 using data from the Walk Score® website, separate from the points for Criteria 1, 2 and 3.

5 WHERE TO FIND THE CALCULATOR AND HOW TO ENTER DATA

The calculator may be found at the following web address: http://www.gbca.org.au/green-star/green-star-design-as-built/the-rating-tool/

Step 1: Enter the address of the building to be assessed. The address must be entered in the following format:

<Street Number>, <Street Name>, <Street Type>, <Suburb>, <State Code (e.g. NSW)>, <Postcode>

Step 2: Enter the building type. There is a drop down box with a list of possible types. These are listed below:

- Office
Step 3: Press the Find/Reset button. This is used to populate the reference data for the address and building type entered, and may also be used at any time to reset the assessment to its starting point. The SA2\(^1\) and State fields are automatically determined from the address. If these are incorrectly calculated, please adjust the address until the SA2 and state correctly represent the building’s location (see Step 1 above).

Steps 1-3 are shown in Figure 2.

![Building Address](179 Elizabeth St Sydney NSW 2000)

![Building Type](Office)

![Find/Reset](FIND/RESET)

**Figure 2: Steps 1-3: Enter the building address, building type, and press the Find/Reset button**

Step 4: The mode share percentages, avoided trips, average trip length and work weeks per annum are automatically populated based on the building type and location. Adjust any of those values by using the grey spinboxes on the right of the blue cells shown in Figure 3. The other fields, including total emissions, total VKT and percentage of trips using active modes are automatically calculated.

Refer to Section 9 for guidance on how to justify changes in mode share.

\(^1\) SA2 maps can be found at the following website on the “downloads” tab:
Step 4: Adjust mode share, avoided trips, average trip length and work weeks data for the building being assessed

Step 5: The emissions intensity of each transport mode is automatically calculated. The Train and Tram emissions intensities are based on the emissions intensity of the local electricity grid and therefore vary by state. The blue cells containing the emissions intensity of car drivers and motorbikes can be modified. Note that car emissions intensity is per VKT and is applied to the driver only, not to passengers. The interface is shown in Figure 4.

Refer to Section 9 for guidance on how to justify improvements in vehicle emissions intensities.

Figure 3: Step 4: Adjust mode share, avoided trips, average trip length and work weeks data for the building being assessed

Figure 4: Step 5: the emissions intensity of each mode is used to calculate transport emissions
6 TRAVEL PLAN

The Travel Plan must be completed at a stage early enough in the design phase to ensure that the recommendations can be considered in the project. The project team must report how the recommendations of the Travel Plan have been included in the project.

The Travel Plan must be prepared by a suitably qualified Transport Professional.

The Travel Plan must include the items listed below:

**Site-specific transport assessment**

The assessment must be carried out before the development approval and reviewed at the final design stage (prior to or during construction). The assessment must consider:

- The local environment for pedestrians and cyclists;
- Public transport links serving the site;
- Facilities for cyclists; and
- Car parking provisions (with a view to minimising the use of private cars).

**Design features for alternative transport**

This section must be based on the site-specific transport assessment and, as a minimum, provide recommendations on the following issues:

- Provision of priority parking spaces for car share schemes;
- Provision of a dedicated path for pedestrians and cyclists from the site entrance to the major building entrance and bicycle parking facilities (where appropriate);
- Provision of dedicated cycle storage facilities and cycle lanes on-site, and adjoining lanes off-site where applicable;
- Improvements to bus services (where appropriate), e.g. altering bus routes or offering discounts;
- Restricting and/or charging (metering) for car parking; and
- Considerations in the location and design of all alternative transport design features to encourage maximum utilisation of these facilities

**Operational opportunities for alternative transport**

This section must include a plan of measures that encourage travel options with low environmental impact during building operation and, as a minimum, address the following:

- Reduction in single occupancy car journeys to and from the facility. e.g. car sharing;
- Promotion of walking;
- Promotion of cycling;
- Promotion of public transport;
- Deliveries and contractor vehicles;
- Visitors’ transport; and
- Set targets for the mode share for building users’ transport to and from the building. The targets must be based on design and operational initiatives recommended by the plan.
7 DETERMINING THE REFERENCE CASE

This Section describes how the reference case emissions, VKT and active mode benchmarks are determined.

7.1 Mode share

Mode share data is determined using SA2 level data from the ABS 2011 Census Method of Travel to Work (MTWP) data. The reference building is a building which has the average mode share characteristics of places of employment within the SA2 area with its centroid closest to the location of the building being assessed.

7.2 Avoided trips

Avoided trips refer to the propensity of employees to work from home or otherwise not take a commuting trip during a work week. Avoided trips are not differentiated by SA2 due to the large fluctuations and the difficulty of separating working from home data in the Census between employees who work from home occasionally compared to self-employed persons who work from home the majority of the time. The standard value for avoided trips is 2% which is the 2011 Census value for working from home for all of Australia.

7.3 Average trip length

Average trip length for the reference building is determined using the same data as described above. Using transport network analysis along the public road network combined with the number of employees who travel to a given SA2 from every other SA2, it is possible to determine the average trip length for employees who commute to the SA2 of interest. This work was undertaken by AECOM and applied to the tool.

7.4 Work weeks

Work weeks refers to the number of normal working weeks per annum for employees of the reference building. This is assumed to be 48 weeks (assuming 4 weeks of annual leave). Healthcare workers are assumed to work 47 weeks per annum and Education workers assumed to work 40 weeks per annum. This is separate from avoided trips (see Section 7.2) which only refers to additional avoided trips.

7.5 Walk Score®

The publicly available “Walk Score®” website (http://www.walkscore.com) is used to determine the walkability of the building’s location. Unlike Criteria 1, 2 and 3, Criterion 4 is not calculated by comparison with a reference building. Walk Score® is available for every address in Australia and is automatically calculated within the spreadsheet tool. The Walk Score® is updated directly from the Walk Score® website and therefore always represents the most recently available data.
7.6 Emissions intensity

Emissions intensity is estimated using a report prepared by SKM MMA in 2011 for the former Department of Energy Efficiency and Climate Change\(^2\). For ferry and bus, supplementary data is used from the United Kingdom Government 2012 greenhouse gas conversion factors for company reporting from the Department for Environment, Food and Rural Affairs (DEFRA)\(^3\). Finally, the Australian National Greenhouse Factors (July 2013) are used to represent the emissions intensity of electricity used to power trains and trams.

Table 2: Emissions intensity values

<table>
<thead>
<tr>
<th>Mode</th>
<th>GJ per km</th>
<th>g CO(_2)-e per GJ</th>
<th>g CO(_2)-e per km</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car Driver</td>
<td>0.00370(^A)</td>
<td>69,600(^C)</td>
<td>257.5(^D)</td>
</tr>
<tr>
<td>Motorcycle Driver</td>
<td>0.00150(^A)</td>
<td>69,600(^C)</td>
<td>104.4(^D)</td>
</tr>
<tr>
<td>Bus Passenger</td>
<td>0.01130(^A)</td>
<td>69,600(^C)</td>
<td>123.8(^E)</td>
</tr>
<tr>
<td>Tram Passenger</td>
<td>0.00052(^B)</td>
<td>Varies with each state(^E)</td>
<td>Calculated from the two cells to the left of this one(^B)</td>
</tr>
<tr>
<td>Train Passenger</td>
<td>0.00048(^B)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ferry Passenger</td>
<td>-</td>
<td>19.3(^F)</td>
<td></td>
</tr>
</tbody>
</table>

Source: SKM MMA Report

\(^A\): Shown as MJ / vehicle kilometre (2008) in Table 6-4 of the SKM MMA report.

\(^B\): Shown as MJ / passenger kilometre (2006) in Table 6-7 of the SKM MMA report. Values are urban, heavy rail (Train) and urban, light rail (Tram).

\(^C\): Shown as kg CO\(_2\)-e per GJ of energy in Table 3-3 of the SKM MMA report for Gasoline (other than for use in an aircraft).

\(^D\): Calculated from the two cells to the left of this one. These values are per VKT – the calculation assigns all of the vehicle emissions to the driver and none to the passengers.

\(^E\): This value varies according to the emissions intensity of the local electricity grid. See Table 3 for values.

\(^F\): Calculated from the two cells to the left of this one. Bus occupancy of 6.36 (calculated as an average across a day) was assumed, in order to produce a similar result to the table in Annex 6, DEFRA 2012 (Local bus, not London). Ferry was set to the same value as Annex 6, DEFRA 2012 (foot passengers).

Table 3: Emissions intensity of grid

<table>
<thead>
<tr>
<th>State</th>
<th>kg CO(_2)-e per GJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Capital Territory</td>
<td>293</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>213</td>
</tr>
</tbody>
</table>


New South Wales 293
Queensland 265
South Australia 202
Tasmania 61
Victoria 368
Western Australia 234

Source: National Greenhouse Accounts (NGA) factors, July 2013

8 DETERMINING POINTS FROM THE TRANSPORT CALCULATOR

Points are awarded according to Table 4. Emissions reduction points (up to five) are awarded for reducing commuting transport emissions relative to the reference case. The active mode encouragement points are awarded for increasing active mode share by more than 50%. The VKT reduction points are awarded for reducing VKT by more than 10% relative to the reference case. Up to three points are awarded for walkable location, with a minimum score of 70 out of 100 required to receive any points.

Table 4: Point assignment

<table>
<thead>
<tr>
<th>Points</th>
<th>criterion</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 points</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Criterion 1. Emissions reduction

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Points</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emissions reduction</td>
<td>5-15%</td>
<td>15-25%</td>
<td>25-35%</td>
<td>35-45%</td>
<td>&gt;45%</td>
<td></td>
</tr>
<tr>
<td>Active mode encouragement</td>
<td>&gt; 50%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VKT reduction</td>
<td>&gt; 10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walkable location (Walk Score®)</td>
<td>71 - 80</td>
<td>81 - 90</td>
<td>91 - 100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Points are automatically calculated from the inputs and are displayed in a table in the format demonstrated in Figure 5.
9 CLAIMING IMPROVEMENTS FROM THE REFERENCE CASE

This Section outlines the documentation required to claim improvements against the reference case.

For both Design and As Built ratings, the justifications must be included in a site-specific Travel Plan developed early in the design phase (i.e. Schematic Design phase). The Travel Plan must include a site-specific transport assessment, and the recommendations of the Plan should be included in the design and operation of the building. Refer to the Sustainable Transport credit for specific requirements of the Travel Plan.

9.1 Design and As Built Rating Requirements

9.1.1 Mode share changes

Making changes to mode share automatically adjusts other mode shares proportionally to their existing mode share to ensure that all modes sum to one hundred.

For projects targeting a Design rating, the following justifications are required:

**Walk:** Demonstrate that the claimed percentage of building users live (or in the case of a residential building, work) within walking distance of the building. The definition of walking distance depends on the building type. For example, students at a tertiary institution may have a higher tolerance for walking distance compared with office staff. Students at a primary school are likely to have the lowest tolerance for walking distance. It is the responsibility of the project team to justify the definition of walking distance appropriate to the project.

The project team must also justify the assumption that building users live nearby. For example, education or healthcare institutions with associated student or staff accommodation may be able to justify this. The project team is encouraged to submit a Credit Interpretation Request to provide justification of their assumptions.

**Cycle:** Demonstrate that cycle facilities in accordance with the Sustainable Transport credit criteria are available for the claimed proportion of the building users. Cyclist facilities must be addressed in the Travel Plan as outlined in the Performance Pathway of the Sustainable Transport credit. The facilities provided must meet the requirements for security, weather protection, privacy, provision of showers and lockers etc. as outlined in the Sustainable Transport Prescripyive Pathway Active Transport Facilities credit. The number of cyclist facilities is not required to match the Prescriptive Pathway Alternative Transport credit criteria.
Car (Driver, Passenger): Demonstrate that car parking is only available for the claimed proportion of car drivers and parking is not freely and readily available near the site for employees to use. An incentive scheme for carpooling or to give up a parking space may also be claimed with documentation of how the scheme works and a justification for the proportion of reduced car trips claimed.

Public Transport (Train, Tram, Bus, and Ferry): Demonstrate that a scheme has been developed for incentivising public transport use. The claimed increase must be proportional to the incentive scheme.

9.1.2 Trip length changes
Evidence must be produced that the workforce for this building commutes shorter distances than the reference case. For example, education or healthcare institutions with associated student or staff accommodation may be able to justify this. This could also apply to a primary or secondary school with a zoning policy for enrolments. The project team is encouraged to submit a Credit Interpretation Request to provide justification of their assumptions.

9.1.3 Avoided trips changes
An incentive scheme must be demonstrated or evidence of past rates of working from home must be produced to justifying increasing the avoided trips percentage for the company or workers/residents in the building. This does not apply to populations such as students, who would not typically receive incentives for working from home.

9.1.4 Work weeks changes
Evidence must be produced of a company policy with a higher than standard allowance for annual leave (i.e. greater than four weeks per annum)

9.1.5 Emissions intensity changes
Evidence must be produced of a company provided green fleet including vehicle specifications demonstrating the grams of CO2-e per VKT. The vehicles must be available for staff travel between home and work. A fleet made available solely for staff transport during working hours cannot meet the requirements of this credit, as the credit covers only travel between home and the building.

9.2 Documentation Requirements
Refer to the Submission Guidelines for Documentation Requirements for Design Review and As Built submissions.
APPENDIX A: PROJECT EXAMPLES

Example #1

This example is for an office building in a regional town in Victoria. The building’s employees are offered small financial incentives for participating in a carpooling program and a larger incentive for cycling to work. Cycling facilities are sufficient to accommodate 5.3% of the building’s employees, and are designed to meet the requirements of the Sustainable Transport credit. This evidence allows the building to claim higher rates of car passenger and bicycle mode share relative to the reference case. Other mode shares are automatically adjusted downwards by the Transport Calculator proportionally to maintain a total mode share of 100%.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Reference</th>
<th>Current</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Train</td>
<td>0.5%</td>
<td>0.5%</td>
<td>Mode Share %</td>
</tr>
<tr>
<td>Bus</td>
<td>1.2%</td>
<td>1.1%</td>
<td>Mode Share %</td>
</tr>
<tr>
<td>Ferry</td>
<td>0.0%</td>
<td>0.0%</td>
<td>Mode Share %</td>
</tr>
<tr>
<td>Tram</td>
<td>0.1%</td>
<td>0.1%</td>
<td>Mode Share %</td>
</tr>
<tr>
<td>Car Driver</td>
<td>83.4%</td>
<td>77.5%</td>
<td>Mode Share %</td>
</tr>
<tr>
<td>Car Passenger</td>
<td>7.4%</td>
<td>10.0%</td>
<td>Mode Share %</td>
</tr>
<tr>
<td>Motorbike</td>
<td>0.7%</td>
<td>0.6%</td>
<td>Mode Share %</td>
</tr>
<tr>
<td>Bicycle</td>
<td>1.4%</td>
<td>5.3%</td>
<td>Mode Share %</td>
</tr>
<tr>
<td>Walk</td>
<td>5.2%</td>
<td>4.9%</td>
<td>Mode Share %</td>
</tr>
<tr>
<td>Avoided trips</td>
<td>2.0%</td>
<td>2.0%</td>
<td>%</td>
</tr>
<tr>
<td>Ave Trip Length</td>
<td>10.5</td>
<td>10.5</td>
<td>km</td>
</tr>
<tr>
<td>Work weeks</td>
<td>48</td>
<td>48</td>
<td>weeks / annum</td>
</tr>
<tr>
<td>trips per annum</td>
<td>470</td>
<td>470</td>
<td>trips / annum</td>
</tr>
<tr>
<td>Emissions per trip</td>
<td>2296</td>
<td>1659</td>
<td>g CO₂e / trip</td>
</tr>
<tr>
<td>Total emissions</td>
<td>1.08</td>
<td>0.78</td>
<td>tonnes / person / annum</td>
</tr>
<tr>
<td>Total vkt</td>
<td>4129</td>
<td>3833</td>
<td>vkt / person / annum</td>
</tr>
<tr>
<td>Active modes</td>
<td>6.6%</td>
<td>10.2%</td>
<td>Mode Share % for Active Modes</td>
</tr>
</tbody>
</table>
In addition, the company that occupies the building supplies company cars that are low emissions and is able to verify that with documentation. As such, they are able to claim lower emissions intensity for those who drive to work.

This building is able to claim six out of 10 points.
Example #2

This example is an industrial site in suburban Sydney. The building occupier offers subsidised train passes to employees. The site also has excellent cycle facilities and offers small financial incentives for employees that cycle to work. Due to staff accommodation managed by the company, the occupier is also able to demonstrate that their employees are more likely to live locally than the reference case. The project is therefore able to claim shorter trip lengths.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Reference</th>
<th>Current</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Train</td>
<td>19.3%</td>
<td>24.3%</td>
<td>Mode Share %</td>
</tr>
<tr>
<td>Bus</td>
<td>8.3%</td>
<td>7.6%</td>
<td>Mode Share %</td>
</tr>
<tr>
<td>Ferry</td>
<td>0.0%</td>
<td>0.0%</td>
<td>Mode Share %</td>
</tr>
<tr>
<td>Tram</td>
<td>0.0%</td>
<td>0.0%</td>
<td>Mode Share %</td>
</tr>
<tr>
<td>Car Driver</td>
<td>60.2%</td>
<td>55.3%</td>
<td>Mode Share %</td>
</tr>
<tr>
<td>Car Passenger</td>
<td>6.3%</td>
<td>5.8%</td>
<td>Mode Share %</td>
</tr>
<tr>
<td>Motorbike</td>
<td>0.6%</td>
<td>0.6%</td>
<td>Mode Share %</td>
</tr>
<tr>
<td>Bicycle</td>
<td>0.6%</td>
<td>2.1%</td>
<td>Mode Share % Altered</td>
</tr>
<tr>
<td>Walk</td>
<td>4.7%</td>
<td>4.3%</td>
<td>Mode Share %</td>
</tr>
<tr>
<td>Avoided trips</td>
<td>2.0%</td>
<td>2.0%</td>
<td>%</td>
</tr>
<tr>
<td>Ave Trip Length</td>
<td>19.4</td>
<td>17.4</td>
<td>km</td>
</tr>
<tr>
<td>Work weeks</td>
<td>48</td>
<td>48</td>
<td>weeks / annum</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Reference</th>
<th>Current</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>trips per annum</td>
<td>470</td>
<td>470</td>
<td>trips / annum</td>
</tr>
<tr>
<td>Emissions per trip</td>
<td>3755</td>
<td>3256</td>
<td>g CO₂-eq / trip</td>
</tr>
<tr>
<td>Total emissions</td>
<td>1.77</td>
<td>1.53</td>
<td>tonnes / person / annum</td>
</tr>
<tr>
<td>Total vkt</td>
<td>5488</td>
<td>4523</td>
<td>vkt / person / annum</td>
</tr>
<tr>
<td>Active modes</td>
<td>5.3%</td>
<td>6.4%</td>
<td>Mode Share % for Active Modes</td>
</tr>
</tbody>
</table>
The occupier is not able to demonstrate that their employees drive lower emissions cars than the reference case, so no change in emissions intensity is claimed.

The site is located in a highly walkable location, so three points are achieved for Criterion 4. Overall, the building is able to claim five out of ten points.