

**MAROOCHY SHIRE COUNCIL PLANNING SCHEME  
POLICY NO. DC2  
PROVISION OF BIKEWAYS AND BICYCLE FACILITIES**

**DC 2.1 INTRODUCTION**

- (1) Cycling -
- a) Maintains the health of the community;
  - b) Reduces reliance on private motor vehicle use;
  - c) Provides the community with alternative access to a diverse range of facilities;
  - d) Provides an alternative transport choice;
  - e) Contributes to the available recreational/tourism opportunities; and
  - f) Increases/improves accessibility to key destinations.
- (2) It is for these reasons that Council is committed to ensure that the bikeway network is a safe and convenient network for the different type of cyclists (ie recreational cyclists, tourist cyclists, commuter cyclists, school cyclists, and general cyclists), thus further encouraging bicycle use.
- (3) As part of the review of the Maroochy Shire Bikeways Plan, the following criteria was established to guide the development of the Trunk Bikeways Network -
- a) Provide a continuous cycle route running adjacent to the coast from Mooloolaba to Peregrine Beach with access into the Sunshine Plaza (Coastal Route);
  - b) Link Montville to Mapleton Forest (Blackall Range Route);
  - c) Provide a circuit from Mooloolaba to Sunshine Coast University (University Circuit);
  - d) Capitalise on popularity of coastal precincts and Blackall Range to provide a unique recreation experience for residents and tourists;
  - e) Facilitate trips between local activity nodes/key centres on-route;
  - f) Link Shires' key urban centres to each other; and
  - g) Provide a continuous (ie complete) and connecting network linking –
    - i. All major activity centres;
    - ii. Educational facilities (University, TAFE's and schools);
    - iii. Major recreational focal points, in particular beaches, public swimming pools and skate parks;
    - iv. Major sport venues; and
    - v. Public libraries.
- (5) This Planning Scheme Policy is the mechanism to partially fund, via developer contributions, the construction of the Trunk Bikeways Network.
- (6) The scope of bikeways infrastructure for which funding is obtained via this planning scheme policy is limited to the trunk bikeways network.

**NOTE DC 2.1A INTERNAL BIKEWAYS INFRASTRUCTURE**

- 1) The 'internal' bikeways infrastructure (eg. dual use footpaths/bikeways or bicycle parking facilities) is the responsibility of the Developer and will be applied as a condition in any development approval.
- 2) Where 'internal' bikeways infrastructure is required (eg. on collector or trunk collector roads) it is to be provided generally in accordance with the guidelines outlined in Appendix 1.

- 3) Bicycle parking facilities (conveniently located and easy to find) are to be incorporated into development likely to attract or generate significant numbers of bicycle trips (eg. swimming pools, office buildings, community or educational facilities etc.) in accordance with schedule 4 to the Code for Parking (refer to Volume 4 of this Planning Scheme).
- 4) For the purpose of clarity it is recorded that the Council is not responsible for the construction or the cost of any part of internal bikeways/pathways or bicycle facilities
- 5) Infrastructure contributions payable by a Developer pursuant to this Planning Scheme Policy are additional to the 'internal' infrastructure that the Developer is required to provide as part of a development.
- 6) It is acknowledged that bikeways infrastructure may also be used by pedestrians.

- (7) The provisions in this planning scheme policy relate to the Infrastructure Contributions for the trunk bikeways network as follows -
  - a) The existing bikeways infrastructure (see section DC 2.2);
  - b) The details of future bikeways infrastructure to be provided and funded by the contribution (see section DC 2.3);
  - c) The desired standard of service for bikeways infrastructure (see section DC 2.4);
  - d) The estimated establishment cost of future bikeways infrastructure (see section DC 2.5);
  - e) The estimated establishment cost of the bikeways infrastructure to be funded by the contribution (see section DC 2.6); and
  - f) Infrastructure contributions and calculations (see section DC 2.7 and Schedule DC2).

## **DC 2.2 EXISTING BIKEWAYS INFRASTRUCTURE**

- (1) The existing bikeways infrastructure, to meet future demand, has generally been limited to new route signage, safety lighting, road/bikeway widening or upgrading the bikeway surface.

### **NOTE DC 2.2A**

- 1) Further details in relation to existing bikeways infrastructure, in particular those bikeways that are to be upgraded to meet future demand, can be found in the "Maroochy Shire Bikeways Plan Review", January 2003.
- 2) Except for the future improvements to the existing bikeways network, the bikeways infrastructure contribution does not include a charge for the cost of the existing infrastructure.

## **DC 2.3 FUTURE TRUNK BIKEWAYS INFRASTRUCTURE**

- (1) The future bikeways infrastructure to be provided for Shirewide, District or Local bikeways is shown on Figures 1-3 (refer Appendix 2).

### **NOTE DC 2.3A**

- 1) Further details in relation to future bikeways infrastructure can be found in the 'Maroochy Shire Bikeways Plan Review', January 2003.

**DC 2.4 DESIRED STANDARD OF SERVICE FOR BIKEWAYS TRUNK INFRASTRUCTURE**

- (1) The desired standard of service for trunk bikeways infrastructure is detailed in the Maroochy Shire Bikeways Plan Review, the Austroads Guide to Traffic Engineering Practice, Part 14 – Bicycles, the Manual of Uniform Traffic Control Devices, Part 9 – Bicycle Facilities and for bikeways on State Controlled Roads the relevant Main Roads Department Road Design manuals.

**NOTE DC 2.4A**

- 1) It is acknowledged that in some cases, due to local circumstances, the desired standard of service may not be met.
- 2) In these situations, bikeways infrastructure aims to meet the standards to the greatest degree practicable.

- (2) If there are any inconsistencies between the standards outlined in the Maroochy Shire Bikeways Plan Review, the Austroads Guide to Traffic Engineering Practice – Part 14 – Bicycles and the Manual of Uniform Traffic Control Devices, Part 9 – Bicycle Facilities then the Maroochy Shire Bikeways Plan Review is to take precedence, unless on State Controlled Roads where the relevant Main Roads Department Road Design Manual is to be used.
- (3) For end of trip facilities, the desired standard of service is for the specified locations, as outlined in the Maroochy Shire Bikeways Plan Review (Explanatory Paper), March 2003.

**DC 2.5 ESTIMATED COST OF BIKEWAYS TRUNK INFRASTRUCTURE**

- (1) The estimated establishment costs for Shirewide, District and Local bikeways infrastructure is outlined in Table DC 2.5.

**TABLE DC 2.5 BIKEWAYS TRUNK INFRASTRUCTURE COSTS (\$)**

LEVEL OF WORKS	TOTAL
SHIREWIDE	\$7,059,137
DISTRICT	\$2,463,825
LOCAL	\$4,444,756
<b>TOTAL</b>	<b>\$13,967,718</b>

**NOTE DC 2.5A**

- 1) Further details in relation to the estimated establishment costs for each level of bikeways infrastructure for the various planning areas can be found in the 'Maroochy Shire Bikeways Plan Review', January 2003.

**DC 2.6 PROPORTION OF BIKEWAYS TRUNK INFRASTRUCTURE ESTABLISHMENT COSTS TO BE FUNDED BY INFRASTRUCTURE CONTRIBUTIONS**

- (1) The proportion of trunk bikeways infrastructure costs attributable to infrastructure contributions is outlined in Table DC 2.6.

**TABLE DC2.6 PROPORTION OF BIKEWAYS ESTABLISHMENT COSTS SUBJECT TO INFRASTRUCTURE CONTRIBUTIONS (\$)**

<b>LEVEL OF WORKS</b>	<b>COSTS NOT SUBJECT TO INFRASTRUCTURE CONTRIBUTIONS</b>	<b>COSTS SUBJECT TO INFRASTRUCTURE CONTRIBUTIONS</b>
SHIREWIDE	\$4,858,608	\$2,200,530
DISTRICT	\$1,595,730	\$868,094
LOCAL	\$2,579,040	\$1,865,716
<b>TOTAL</b>	<b>\$9,033,378</b>	<b>\$4,934,340</b>

**DC2.7 INFRASTRUCTURE CONTRIBUTIONS AND CALCULATIONS**

- (1) Those areas of the Shire and the type of development applications subject to bikeway infrastructure contributions together with the method of calculating the contribution is outlined in Schedule DC 2.

**SCHEDULE DC 2: BIKEWAYS INFRASTRUCTURE CONTRIBUTIONS SCHEDULE****AREAS WHERE INFRASTRUCTURE CONTRIBUTIONS APPLY**

- 1) For the purpose of determining infrastructure contributions towards Bikeways Infrastructure, bikeways have been categorised as Shirewide, District, Shared Local and Separate Local.
- 2) All areas of the Shire are subject to a Shirewide infrastructure contribution, which is that part of the Bikeways Infrastructure Contribution used to provide Shirewide bikeways and end of trip facilities.
- 3) Those areas of the Shire that are to be provided with District bikeways are to be subject to a District infrastructure contribution.
- 4) Those areas of the Shire that are to be provided with 'Shared Local' bikeways are to be subject to a Shared Local Planning Area infrastructure contribution ('Shared Local' bikeways includes those works where it can be reasonably assumed will be used by the population of one or more planning areas but the works are not of such significance to be classified as 'District' works).
- 5) Those areas of the Shire that are to be provided with 'Separate Local' bikeways are to be subject to a Separate Local Planning Area infrastructure contribution ('Separate Local' bikeways includes those works where it can be reasonably assumed will be used by the population of only one planning area but the works are not of such significance to be classified as 'Shared Local' works).
- 6) Those areas of the Shire subject to the various categories of bikeways infrastructure contributions (i.e. Shirewide, District or Local bikeways) are outlined in Table 1 and the boundaries of the Planning Areas and the various precinct classes within each Planning Area are shown on the Planning Area Maps found in Volume 3 of this Planning Scheme.

**TABLE 1 AREAS SUBJECT TO BIKEWAYS INFRASTRUCTURE CONTRIBUTIONS**

PLANNING AREA	INFRASTRUCTURE CATEGORY			
	SHIREWIDE	DISTRICT	SHARED LOCAL	SEPARATE LOCAL
ALEX HEADLAND/COTTON TREE (7)	✓	✓	✓	
BLACKALL RANGE (19)	✓			✓
BLI BLI (13)	✓	✓		✓
BUDERIM (6)	✓	✓	✓	✓
CENTRAL HINTERLAND (27)	✓			
COOLUM BEACH (11)	✓	✓		✓
EUDLO CREEK VALLEY (21)	✓			✓
EUMUNDI (17)	✓	✓		✓
KENILWORTH (18)	✓			
KULUIN/KUNDA PARK (8)	✓	✓	✓	
MAROOCHY RIVER PLAINS (23)	✓			
MAROOCHYDORE (1)	✓	✓	✓	
MOOLOOLABA (4)	✓	✓	✓	
MOUNTAIN CREEK (5)	✓	✓	✓	✓
MOUNTAIN CREEK VALLEY (20)	✓			
MT COOLUM (10)	✓	✓		
NAMBOUR (2)	✓	✓		✓
NORTH SHORE (9)	✓	✓		✓
NORTHERN COASTAL PLAINS (25)	✓			
PALMWOODS (14)	✓	✓		✓
PETRIE/PAYNTERS CREEK PLAINS (22)	✓			
SIPPY DOWNS (3)	✓	✓	✓	✓
SOUTH PEREGIAN (12)	✓	✓		
WOOMBYE (15)	✓	✓		✓
YANDINA (16)	✓	✓		✓
YANDINA CREEK VALLEY (24)	✓			

**APPLICATION OF CONTRIBUTION**

- 7) Bikeways Infrastructure Contributions apply to every development application that involves-
- Reconfiguring a lot; or
  - A material change of use.

**DETERMINATION OF BIKEWAYS INFRASTRUCTURE UNIT RATES**

- 8) The Bikeways Infrastructure Unit Rates for the purposes of calculating Bikeways Infrastructure Contributions is to be determined for each planning area in respect of each category of bikeways infrastructure set out in Table 1.
- 9) The Bikeways Infrastructure Unit rate has been calculated as follows—

$$\text{Rate} = A + B + C$$

Where

- A is the Shirewide rate determined by the relevant Shirewide establishment costs ÷ population for the Shire;
- B is the District rate determined by the relevant establishment costs for each applicable District ÷ population for each applicable District;
- C is the Local rate (both shared and separate) determined by the relevant establishment costs for each applicable Planning Area ÷ population for each applicable Planning Area.

- 10) The bikeways infrastructure unit rates for the various planning areas, based on the calculation in paragraph (9), are contained in Table 3.

### **DETERMINATION AND CALCULATION OF BIKEWAYS INFRASTRUCTURE CONTRIBUTIONS**

- 11) The bikeways infrastructure contribution for any proposed development is to be calculated as follows –

$$[(A - B) - C] \times D \times E$$

Where

- A (being proposed demand) is -
  - i. For reconfiguring a lot the bikeways demand factor for the Land or lots (excluding any Dedicated Lots) included in the development application determined using the rates outlined in Table 2(a) or Table 2(b).
  - ii. For a material change of use the bikeways demand factor for the use or Land calculated using the rates outlined in Table 2(a) or Table 2(b).
- B (being existing use demand entitlements) is –
  - i. For vacant land, the bikeways demand factor allowed for a single detached house (1cu) or where previous infrastructure contributions have been paid to Council the demand on which the previous contributions were based<sup>1</sup>.
  - ii. Otherwise, the existing use demand entitlement<sup>2</sup>.
- C Is any applicable infrastructure credit for the land (granted as a result of providing advanced funding for the construction of truck infrastructure or contributing trunk infrastructure) as outlined in the Register of Infrastructure Contributions and Credits.
- D Is the applicable bikeways unit rate as outlined in Table 3 for the Planning Area in which the land is situated.
- E Is the applicable Bikeways Infrastructure unit charge at the date of payment (refer to Section 3.5 Infrastructure Unit Charges in Planning Scheme Policy DCA - Administration for details of the bikeways unit charge currently in force).

#### **NOTE 1 SCHEDULE DC 2 UNIT CHARGES**

- 1) For convenience, the infrastructure unit charge for bikeways infrastructure is contained in the Local Government's Scale of Fees and Charges.

<sup>1</sup> The onus is upon the applicant to provide evidence of any previous infrastructure contributions paid to Council.

<sup>2</sup> Refer to Division 10 – Glossary of Terms in Planning Scheme Policy DCA – Administration for an explanation of the term "existing use demand entitlement".

**NOTE 2 SCHEDULE DC 2**

**EXAMPLES**

- (1) (a) It is proposed to reconfigure 3 hectares of land at Coolum Beach on the boundaries of Precincts 4 and 9 into :
- (A): 1 lot (8000m<sup>2</sup>) for future unspecified shops;
  - (B): 1 lot (5000m<sup>2</sup>) for future house sites (unspecified number of lots)and
  - (C): 19 residential lots on 1.7 hectares comprising 15 traditional house lots and 4 courtyard lots.
- (b) No previous bikeway contributions were paid nor is the land subject to infrastructure credits.
- (c) The bikeway infrastructure demand for the proposed development using the rates outlined in Table 2(a) is as follows—

<p><b>A</b> 8000m<sup>2</sup></p> <p>As there is no actual proposal for the lot use the land area method to determine the demand factor</p>	<p><b>B</b> 5000 m<sup>2</sup></p> <p>As there is no actual proposal for the lot use the land area method to determine the demand factor</p>	<p><b>C</b> 1.7 ha</p> <p>As there is a proposal for the land use both the land area and the number of lots method to determine the demand factor and choose whichever method has the greatest demand factor (i.e. cu)</p>
$\frac{75 \text{ cu/ha} \times 8000\text{m}^2}{10000\text{m}^2} = 60 \text{ cu}$	$\frac{10 \text{ cu/ha} \times 5000\text{m}^2}{10000\text{m}^2} = 5 \text{ cu}$	$10 \text{ cu/ha} \times 1.7 \text{ ha} = 17 \text{ cu} \quad \times$ <p>OR</p> $15 \text{ trad. lots} \times 1 \text{ cu} = 15 \text{ cu}$ $4 \text{ c'yard lots} \times 1 \text{ cu} = 4 \text{ cu}$ $= 19 \text{ cu} \quad \checkmark$

- (d) The bikeway demand for the development (A) = 84 cu
- (e) As the land is not subject to infrastructure credits nor the subject of previous bikeways contributions the existing demand is that allowed for a single detached house (refer to 'B' in the calculation formula).
- (f) The demand for a single detached house is 1cu (refer to 'B' in the calculation formula).

$$B = 1 \text{ cu}$$

- (g) The increase in demand is A – B = 83 cu

- (h) The infrastructure contribution is -

$$83 \times 52.08 \quad (\text{from Table 3 - Planning Area Coolum Beach})$$

$$4,322.64 \times \$1.0762 \quad (\text{Infrastructure Unit Charge})$$

$$= \$4,652.03$$

- (2) (a) It is proposed to extend by 500m<sup>2</sup> an existing 1000m<sup>2</sup> shop at Kuluin / Kunda Park (i.e. GFA increase only – no requirements for additional parking, landscaping, etc).
- (b) The shop is on land (3000m<sup>2</sup>) within the ‘Local Centre’ Precinct.
- (c) No previous bikeway contributions were paid nor is the land subject to infrastructure credits.
- (d) The bikeway infrastructure demand for the proposed development using the rates outlined in Table 2(a) is as follows-

Use both the land area and GFA method to determine the demand factor and choose whichever method has the highest demand factor (i.e. cu)

$$\frac{75 \text{ cu / ha} \times 3000\text{m}^2}{10000\text{m}^2}$$

$$= 22.5 \text{ cu} \quad \checkmark$$

OR

$$\frac{1500\text{m}^2 \times 1.50 \text{ cu}}{100\text{m}^2}$$

$$= 22.5 \text{ cu} \quad \checkmark$$

- (e) The bikeway demand for the development (A) = 22.5 cu
- (f) The existing bikeway infrastructure demand for the shop is as follows-
- $$\frac{1000\text{m}^2}{100\text{m}^2} \times 1.50 \text{ cu} \quad B= 15 \text{ cu}$$

(To ascertain the demand factor for an existing use only the GFA method is used).

- (g) The increase in infrastructure demand is A – B which equals 7.5 cu
- (h) The infrastructure contribution is-
- $$7.5 \times 56.46 \quad (\text{from Table 3 - Planning Area Kuluin/Kunda Park})$$
- $$423.45 \times \$1.0762 \quad (\text{Infrastructure Unit Charge})$$

$$= \$455.72$$



- (3) (a) In this example assume the same parameters as example (2) except that the land area is 5000m<sup>2</sup>.  
 (b) The bikeway infrastructure demand for the proposed development using the rates outlined in Table 2(a) is as follows -

Use both the land area and GFA method to determine the demand factor and choose whichever method has the greatest demand factor (i.e. cu)

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$$\frac{75 \text{ cu / ha} \times 5000\text{m}^2}{10000\text{m}^2}$$

= 37.5 cu      ✓

OR

$$\frac{1500\text{m}^2}{100\text{m}^2} \times 1.50 \text{ cu}$$

= 22.5 cu      ✗

- (c) The bikeway demand for the development (A) = 37.5 cu.  
 (d) The existing bikeway infrastructure demand is 15 cu (refer example 2).  
 (e) The increase in infrastructure demand is A–B which equals 22.5cu.  
 (f) The infrastructure contribution is –

$$22.5 \times 56.46 \quad (\text{from Table 3 – Planning Area Kuluin/Kunda Park})$$

$$1270.35 \times \$1.0762 \quad (\text{Infrastructure Unit Charge})$$

$$= \$1367.15$$

- (g) In this example an infrastructure credit of 15 cu would accrue to the land.

- (4) (a) In this example assume the same parameters as outlined in example (2) except that previous contributions of \$ 200 were paid for the existing centre.  
 (b) The bikeway demand for the development (A) = 22.5 cu (refer example 2).  
 (c) The existing cu demand is to be equal to the cu on which the previous payment was determined. It was ascertained that the \$200 previous payment was determined using 20 cu. The 20 cu becomes the existing use demand factor.  
 (d) The increase in infrastructure demand is A-B which equals 2.5 cu.  
 (e) The infrastructure contribution is –

$$22.5 \times 56.46 \quad (\text{from Table 3 – Planning Area Kuluin/Kunda Park})$$

$$141.15 \times \$1.0762 \quad (\text{Infrastructure Unit Charge})$$

$$= \$151.91$$

- (5) (a) It is proposed to change (by demolition) an existing fabrication industry (2000m<sup>2</sup> GFA) to 2500m<sup>2</sup> shops at Kunda Park.
- (b) The land is 8000m<sup>2</sup> within the 'Local Centre' Precinct.
- (c) No previous bikeway contributions were paid nor is the land subject to infrastructure credits.
- (d) The bikeway infrastructure demand for the proposed development using the rates outlined in Table 2(a) is as follows-

Use both the land area and GFA method to determine the demand factor and choose whichever method has the greatest demand factor (i.e. cu)

$$\frac{75 \text{ cu / ha} \times 8000\text{m}^2}{10000\text{m}^2}$$

$$= 60 \text{ cu} \quad \checkmark$$

OR

$$\frac{2500\text{m}^2}{100\text{m}^2} \times 1.50 \text{ cu}$$

$$= 37.5 \text{ cu} \quad \times$$

- (e) The bikeway demand for the development (A) = 60 cu.
- (f) The existing bikeway infrastructure demand for the fabrication industry is as follows –

$$\frac{2000 \text{ m}^2}{100 \text{ m}^2} \times 0.40 \text{ cu}^* \quad B = 8 \text{ cu}$$

(To ascertain the demand factor for an existing use only the GFA method is used). \* Because the fabricating industry is an inconsistent use in the Local Centre Precinct, the bikeway demand factor has been determined using the Precinct that most closely aligns with the existing use – in this example the Core Industry Precinct which as a GFA demand factor of 0.40 cu / 100 m<sup>2</sup> GFA (refer Table 2(a)).

- (g) The increase in infrastructure demand is A – B which equals 53 cu.
  - (h) The infrastructure contribution is –
    - 52 x 56.46 (from Table 3 – Planning Area Kuluin/Kunda Park)
    - 2,935.92 x \$1.0762 (Infrastructure Unit Charge)
- = \$3,159.64

- (6) (a) It is proposed to change (by demolition) existing shops (2000m<sup>2</sup> GFA) to 120 dwelling units and 1000m<sup>2</sup> shops at Maroochydore.  
 (b) The land is 8000m<sup>2</sup> within the 'Multi-Storey Residential' Precinct.  
 (c) No previous bikeway contributions were paid nor in the land subject to infrastructure credits  
 (d) The bikeway infrastructure demand for the proposed development using the rates outlined in Table 2 (a) is as follows –

Use both the land area and GFA method to determine the demand factor and choose whichever method has the highest demand factor (i.e. cu)

$$\frac{297.98 \text{ cu} \times 8000\text{m}^2}{10000 \text{ m}^2} = 238.38 \text{ cu} \quad \times$$

OR

$$120 \text{ units} \times 3.17\text{cu} / \text{du} = 380.4 \text{ cu}$$

$$\frac{1000 \text{ m}^2}{100 \text{ m}^2} \times 2.745\text{cu} = 27.45 \text{ cu}$$

$$= 407.85 \text{ cu} \quad \checkmark$$

- (e) The bikeway demand for the development (A) = 407.85 cu  
 (f) The existing bikeway infrastructure demand for the shops is as follows –

$$\frac{2000\text{m}^2}{100\text{m}^2} \times 2.745 \text{ cu} \quad B = 54.9 \text{ cu}$$

(To ascertain the demand factor for an existing use only the GFA method is used).  
 \*Because shops are a consistent use in the Multi-Storey Residential precinct, the bikeway demand factor can be determined using the GFA figure for the Multi-Storey Residential precinct (i.e. 2.745cu/ 100 m<sup>2</sup> GFA)

- (g) The increase in infrastructure contribution is A – B which equals 352.95.  
 (h) The infrastructure contributions is -  
     352.95 x 56.46 (from Table 3 – Planning Area Maroochydore)  
     19,927.56 x \$1.0762 (Infrastructure Unit Charge)  
 = \$21,446.04

**Notes:**

- cu = Chargeable Unit  
 du = Dwelling Unit  
 GFA = Gross Floor Area  
 ha = Hectare

**Bikeway Demand Factor Rates**

- 12) The bikeway demand factor rates for the various precinct classes within each Planning Area outlined in Volume 3 of this Planning Scheme is shown in Table 2 (a) or Table 2 (b).
- 13) Where a Table has more than one calculation method for determining the bikeway demand factor rate, the method producing the highest demand factor rate is to be used as the bikeway demand factor.
- 14) Where a use is proposed within a precinct and that use or use type is not consistent with the bikeway demand factor assumed for the precinct (eg. retirement village development within the neighbourhood residential precinct), the bikeway demand factor for the use is to be based on the dwelling unit or GFA method for the precinct outlined in the following tables that most closely align with the proposed development (provided that as a minimum the bikeway demand factor for the land is not to be below the per hectare (ha) population capacity rate as outlined for the relevant precinct).

**Table 2 (a): Bikeway Demand Factor Rates for General Precincts**

PRECINCT	BIKEWAYS DEMAND FACTOR*
Business and Industry	27cu/ha or 0.60cu/100m <sup>2</sup> GFA
Core Industry	18cu/ha or 0.40cu/100m <sup>2</sup> GFA
General Rural Lands	N/A
Hillslope Residential	0.75cu/du or 3.75cu/ha or 1.50cu/100m <sup>2</sup> GFA
Local Centre	75cu/ha or 1.50cu/100m <sup>2</sup> GFA or 1.62cu/du
Master Planned Community**	To determine demand factor rates, use the precinct or precincts from this table that most closely align with the proposed development.
Mixed Housing**	1.78cu/du or 53.4cu/ha or 1.62cu/100m <sup>2</sup> GFA
Multi-storey Residential	3.17cu/du or 297.98 cu/ha or 2.745cu/100m <sup>2</sup> GFA
Neighbourhood Residential	1cu/du or 10cu/ha or 1.50/100m <sup>2</sup> GFA
Special Purpose	To determine demand factor rates, use the precinct or precincts from this table that most closely align with the proposed development
Sustainable Cane Lands	N/A
Sustainable Horticultural Lands	N/A
Sustainable Pastoral Lands	N/A
Sustainable Rural Residential	0.10cu/du or 0.30cu/ha
Town Centre Core**	1.83cu/du or 2.745 cu/100m <sup>2</sup> GFA or 274.5cu/ha
Town Centre Frame	1.62cu/du or 1.62cu /100m <sup>2</sup> GFA or 162cu/ha
Village Centre	1.62cu/du or 1.62 cu /100m <sup>2</sup> GFA or 162cu/ha
Water Resource Catchment Area	N/A

\*The bikeway demand factor is to be based on the highest chargeable unit rate.

\*\*Demand Factor variations exist for some Specific Precincts – Refer to Table 2(b) Bikeway Demand Factor Rates for Specific Precincts

**Notes:**

cu = Chargeable Unit

du = Dwelling Unit

ha = Hectare

GFA = Gross Floor Area

**TABLE 2(b): Bikeway Demand Factor Rates for Specific Precincts**

Code	Planning Area	Index	Precinct	Bikeways Demand Factor*
1	Maroochydore	1	Town Centre Core	2.34cu/du or 468cu/ha or 4.68cu/100m <sup>2</sup> GFA
1	Maroochydore	2	Town Centre Core	2.34cu/du or 468cu/ha or 4.68cu/100m <sup>2</sup> GFA
1	Maroochydore	3	Town Centre Core	2.34cu/du or 468cu/ha or 4.68cu/100m <sup>2</sup> GFA
1	Maroochydore	4	Town Centre Core	2.34cu/du or 468cu/ha or 4.68cu/100m <sup>2</sup> GFA
1	Maroochydore	9	Master Planned Community	1cu/du or 34cu/ha or 1.50cu/100m <sup>2</sup> GFA
1	Maroochydore	10	Master Planned Community	1cu/du or 34cu/ha or 1.50cu/100m <sup>2</sup> GFA
1	Maroochydore	11	Master Planned Community	1cu/du or 34cu/ha or 1.50cu/100m <sup>2</sup> GFA
1	Maroochydore	13	Mixed Housing	1.78cu/du or 74.76cu/ha or 1.62cu/100m <sup>2</sup> GFA
1	Maroochydore	15	Master Planned Community	1cu/du or 28cu/ha or 1.50cu/100m <sup>2</sup> GFA
1	Maroochydore	17	Mixed Housing	1.78cu/du or 67.64cu/ha or 1.62cu/100m <sup>2</sup> GFA
1	Maroochydore	20	Mixed Housing	1.78cu/du or 67.64cu/ha or 1.62cu/100m <sup>2</sup> GFA
1	Maroochydore	23	Mixed Housing	1.78cu/du or 60.52cu/ha or 1.62cu/100m <sup>2</sup> GFA
1	Maroochydore	25	Mixed Housing	1.78cu/du or 74.76cu/ha or 1.62cu/100m <sup>2</sup> GFA
1	Maroochydore	27	Mixed Housing	1.78cu/du or 67.64cu/ha or 1.62cu/100m <sup>2</sup> GFA
2	Nambour	3	Mixed Housing	1.78cu/du or 44.50cu/ha or 1.62cu/100m <sup>2</sup> GFA
2	Nambour	4	Mixed Housing	1.78cu/du or 44.50cu/ha or 1.62cu/100m <sup>2</sup> GFA
2	Nambour	28	Master Planned Community	1cu/du or 11cu/ha or 1.50cu/100m <sup>2</sup> GFA
3	Sippy Downs	4	Master Planned Community	1cu/du or 12.5cu/ha or 1.50cu/100m <sup>2</sup> GFA
3	Sippy Downs	5	Master Planned Community	1cu/du or 12.5cu/ha or 1.50cu/100m <sup>2</sup> GFA
3	Sippy Downs	8	Master Planned Community	1cu/du or 12.5cu/ha
3	Sippy Downs	11	Master Planned Community	1cu/du or 12.5cu/ha or 1.50cu/100m <sup>2</sup> GFA
4	Mooloolaba	1	Town Centre Core	2.34cu/du or 468cu/ha or 4.68cu/100m <sup>2</sup> GFA
4	Mooloolaba	7	Mixed Housing	1.78cu/du or 74.76cu/ha or 1.62cu/100m <sup>2</sup> GFA
4	Mooloolaba	8	Mixed Housing	1.78cu/du or 74.76cu/ha or 1.62cu/100m <sup>2</sup> GFA
4	Mooloolaba	13	Mixed Housing	1.78cu/du or 78.32cu/ha or 1.62cu/100m <sup>2</sup> GFA
6	Buderim	2	Mixed Housing	1.78cu/du or 48.06cu/ha or 1.62cu/100m <sup>2</sup> GFA

Code	Planning Area	Index	Precinct	Bikeways Demand Factor*
7	Alexandra Headland/Cotton Tree	5	Mixed Housing	1.78cu/du or 67.64 cu/ha or 1.62cu/100m <sup>2</sup> GFA
7	Alexandra Headland/Cotton Tree	8	Mixed Housing	1.78cu/du or 78.32cu/ha or 1.62cu/100m <sup>2</sup> GFA
7	Alexandra Headland/Cotton Tree	10	Mixed Housing	1.78cu/du or 67.64 cu/ha or 1.62cu/100m <sup>2</sup> GFA
7	Alexandra Headland/Cotton Tree	11	Mixed Housing	1.78cu/du or 74.76cu/ha or 1.62cu/100m <sup>2</sup> GFA
8	Kuluin/Kunda Park	4	Mixed Housing	1.78cu/du or 39.16cu/ha or 1.62cu/100m <sup>2</sup> GFA
9	North Shore	13	Mixed Housing	1.78cu/du or 39.16cu/ha or 1.62cu/100m <sup>2</sup> GFA
9	North Shore	16	Master Planned Community	1cu/du or 59cu/ha or 1.50cu/100m <sup>2</sup> GFA
10	Mt. Coolum	2	Mixed Housing	1.78cu/du or 78.32cu/ha or 1.62cu/100m <sup>2</sup> GFA
10	Mt. Coolum	8	Master Planned Community	1cu/du or 31cu/ha or 1.50cu/100m <sup>2</sup> GFA
10	Mt. Coolum	9	Master Planned Community	1cu/du or 11cu/ha or 1.50cu/100m <sup>2</sup> GFA
11	Coolum Beach	3	Mixed Housing	1.78cu/du or 112.14cu/ha or 1.62cu/100m <sup>2</sup> GFA

\* The bikeway demand factor is to be based on the highest chargeable unit rate.

**Schedule of Infrastructure Unit Rates**

- 15) The Bikeway infrastructure unit rates for the Planning Areas or precincts outlined in Volume 3 of this Planning Scheme are shown in Table 3.

**Table 3: Bikeway Infrastructure Unit Rates**

PA No.	Planning Area	Total	Shirewide	District	Shared Local	Separate Local
7	Alex Heads/Cotton Tree	64.45	42.04	13.62	8.79	0.00
19	Blackall Range	49.31	42.04	0.00	0.00	7.28
13	Bli Bli	104.63	42.04	14.92	0.00	47.68
6	Buderim	78.32	42.04	13.62	21.74	0.92
27	Central Hinterland	42.04	42.04	0.00	0.00	0.00
11	Coolum Beach	52.08	42.04	7.67	0.00	2.38
21	Eudlo Creek Valley	104.62	42.04	0.00	0.00	62.58
17	Eumundi	84.33	42.04	24.74	0.00	17.55
18	Kenilworth	42.04	42.04	0.00	0.00	0.00
8	Kuluin/Kunda Park	56.46	42.04	13.62	0.80	0.00
23	Maroochy River Plains	42.04	42.04	0.00	0.00	0.00
1	Maroochydore	56.46	42.04	13.62	0.80	0.00
30	Mary River Valley	0.00	0.00	0.00	0.00	0.00
4	Mooloolaba	64.45	42.04	13.62	8.79	0.00
5	Mountain Creek	187.95	42.04	13.62	22.41	109.88
20	Mountain Creek Valley	42.04	42.04	0.00	0.00	0.00
10	Mt Coolum	49.71	42.04	7.67	0.00	0.00
2	Nambour	161.43	42.04	24.74	0.00	94.66
9	North Shore	60.32	42.04	14.92	0.00	3.37
25	Northern Coastal Plains	42.04	42.04	0.00	0.00	0.00
26	Northern Hinterland	0.00	0.00	0.00	0.00	0.00
29	Obi Obi Creek Valley	0.00	0.00	0.00	0.00	0.00
14	Palmwoods	112.28	42.04	24.74	0.00	45.50
22	Petrie/Paynters Creek Plains	42.04	42.04	0.00	0.00	0.00
3	Sippy Downs	76.58	42.04	13.62	0.67	20.25
12	South Peregian	49.71	42.04	7.67	0.00	0.00
28	Southern Hinterland	0.00	0.00	0.00	0.00	0.00
15	Woombye	225.18	42.04	24.74	155.21	3.19
16	Yandina	90.32	42.04	24.74	0.00	23.54
24	Yandina Creek Valley	42.04	42.04	0.00	0.00	0.00

## APPENDIX 1

### GUIDELINES FOR INTERNAL BIKEWAYS INFRASTRUCTURE

#### 1.0 General

- Safe, convenient and legible bikeways are to be provided and should comprise on-road and off-road bikeways responding to:
  - Expected vehicular traffic volumes and composition;
  - Linkages between destinations such as schools, local parks and other community facilities; and
  - Safety, security and convenience for users.
- Establish the bikeways, ensuring:
  - Good local connectivity – being able to access as many places as possible by bicycle;
  - Permeability – being able to move between streets, along shared paths and laneways;
  - Legibility – being able to easily ‘read’ the bikeways and know where you are going.
- Provide multiple opportunities for pleasant, safe and relatively direct cyclist movement through the subdivision and to the Trunk Bikeway Network.
- Ensure that safety and security are considered in the layout of the bikeways (eg. Lighting of bikeways through parkland, line marking and signage on on-road bikeways).

#### 2.0 Connectivity of the Network

- Establish connections into and out of the site, linking the internal bikeways to adjoining internal bikeways and the Trunk Bikeways Network.
- Ensure provision for future bikeway connection with adjoining land parcels.
- Provide as many cycle linkages as possible and ensure any road linkages have strong bikeway components.
- Ensure that the most direct bikeway connections to local business and community centres are provided.
- Culs-de-sac should be located in through-street reservations, providing through access for cyclists (and pedestrians).
- Directional signage should be provided to ensure bikeway route legibility.

#### 3.0 Integration of Bikeways into the Street Network / On-Road Bikeways

- Ensure the street network is designed to accommodate cyclists.
- Traffic signal control, rather than roundabouts is encouraged on major roads to improve the safety of cyclist crossing opportunities.
- Where appropriate, ensure that on-road cycle lanes are marked on all sub-arterial, trunk collector and collector roads.
- The needs of cyclists is to be provided for in the design and construction of infrastructure works such as bridges/culverts, traffic management devices, stormwater drainage infrastructure, streetscape improvements or the like.

#### 4.0 Off-Road Bikeways

- Establish recreational shared paths through open space / parkland that link with the internal bikeways and Trunk Bikeway Network.
- On busy streets close to schools, shared off-road bikeways (cyclist/pedestrian) are to be provided.



**APPENDIX 2: DC2 FIGURES 1-3 BIKEWAYS INFRASTRUCTURE NETWORK**