

Mackay Regional Council

Planning Assumptions Report

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PIE Solutions

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PART 1 – The Mackay Growth Allocation Model

1.0 Background

Mackay Regional Council (MRC) requires credible growth projections to inform its long-term, strategic planning of trunk infrastructure and other community services. In particular, MRC requires projections of growth and development that it can use as a basis for the preparation of its local government infrastructure plan (LGIP). These projections must be prepared in accordance with the requirements of Statutory Guideline 03/14 (Local government infrastructure plans).

In 2014 Council engaged PIE Solutions to create the Mackay Growth Allocation Model (MGAM), an in-house development projections model that automates the allocation of residential dwellings and non-residential gross floor area (GFA) at the lot level to accommodate future population and employment growth for the region. Once developed, the MGAM was to be used to model and compare the impacts of different growth scenarios on future development patterns for the Mackay region.

In 2016 MRC further engaged PIE Solutions to assist in preparing updated inputs, running the MGAM and analysing the output projections for a medium growth scenario from a new base date of 2016 up to a planning horizon of 2036. This medium growth scenario was to reflect the Queensland Government Statistician's Office (QGSO) 2015 edition medium series population growth projections for the Mackay region local government area (LGA).

The outputs from the MGAM 2016 modelling exercise will inform the preparation of the MRC LGIP including:

- the projections of infrastructure demand;
- the determination of the priority infrastructure area (PIA); and
- the planning of MRC's trunk transport, sewerage, water supply, stormwater, parks and community facilities networks.

2.0 Purpose

The purpose of this report is to provide:

1. an overview of the MGAM modelling methodology;
2. details of the modelling inputs and assumptions;
3. a summary of the output projections of development and growth; and
4. an analysis of the output development and growth projections.

3.0 MGAM overview

The MGAM projects different types of residential and non-residential development for each lot (or parcel) in the Mackay LGA from a base date (2016) up to a planning horizon year (2036) in 5 year time periods coinciding with ABS census years. As shown in Figure 1 the model allocates development at the lot level (supply) up to inputted control population and employment targets (demand) for specific areas for each projection year.

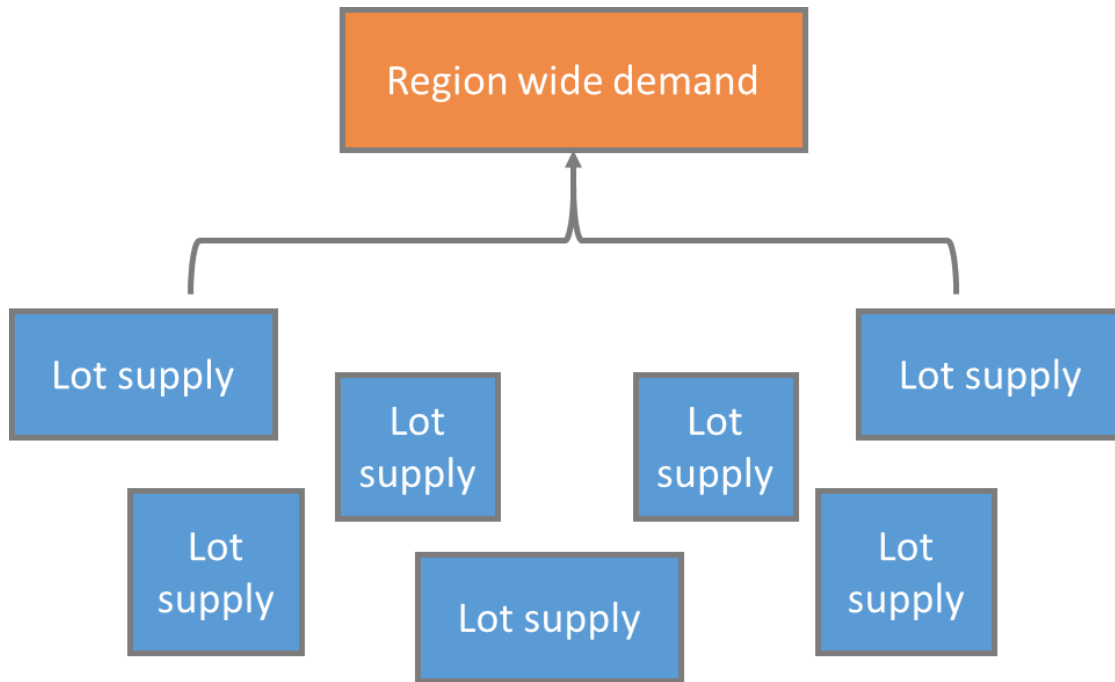


Figure 1 – Development allocation process

A broad overview of the model and its inputs and outputs is provided as Figure 2. As demonstrated by this figure the MGAM undertakes a market based simulation of future development at the lot level taking into account the unique characteristics of each lot such as the existing level of development, the ultimate development potential based on its planned density and any physical or land use constraints, development costs, current DA data and accessibility factors.

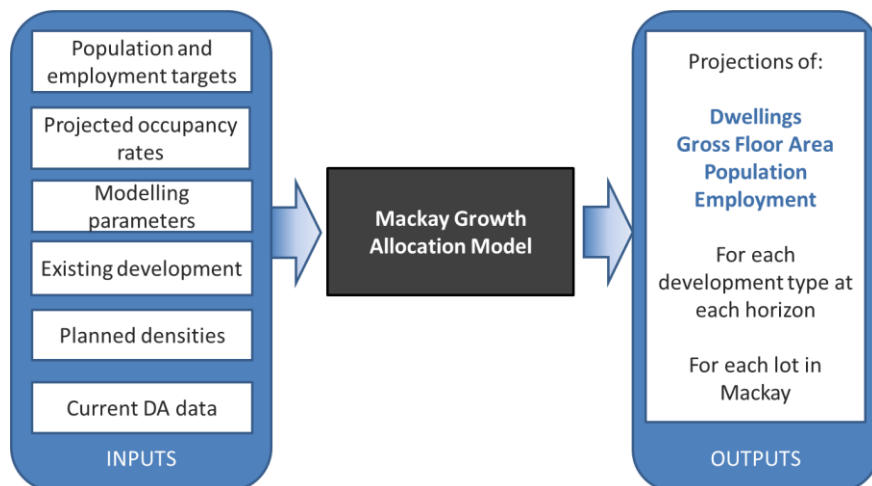


Figure 2 – MGAM overview

The MGAM outputs lot level projections of development and growth that can be aggregated¹ to any geographic area or catchment for a broad range of purposes including the planning of Council's trunk infrastructure networks.

4.0 Model assumptions

4.1 Base date and future projection years

The base date for the MGAM 2016 is the year 2016. This date was selected to coincide with the Mackay Region Planning Scheme (proposed planning scheme) base cadastre and the date that data was extracted from Council's corporate database for the preparation of modelling inputs.

The MGAM projects development for the following time periods to align with the Australian Bureau of Statistics (ABS) census years as well as the residential dwelling and population projections prepared by the Queensland Government Statistician (QGSO):

- 2016 - mid 2021
- mid 2021 - mid 2026
- mid 2026 - mid 2031
- mid 2031 - mid 2036

4.2 Development types

Development types are the categories of development that are projected at the parcel level by the model. All existing development, planned densities and development applications data is inputted to the model using these development types.

The uses under the proposed planning scheme are categorised into the model's development types based on the following criteria:

- Relationship to population and employment target categories;
- Relationship to adopted charge categories in the State planning regulatory provision (adopted charges) 2012 (SPRP) and the MRC's adopted infrastructure charges resolution;
- Differences in occupancy rates and infrastructure demand generation rates; and
- Format of data provided by MRC.

The relationship between the development types and the uses in the proposed planning scheme are provided in Table 1.

¹ Whilst the model outputs projections at the lot level, it is not recommended that they are relied upon at this level of disaggregation.

Table 1 – Relationship between development types and uses in proposed planning scheme

MGAM Development type	Use in proposed planning scheme
Attached dwelling	Dual occupancy
	Dwelling unit
	Multiple dwelling
Detached dwelling	Dwelling house
Other dwelling	Caretaker's accommodation
	Community residence
	Relocatable home park
	Retirement facility
Other bed	Detention facility
	Hostel
	Residential care facility
Short-term accommodation	Hotel (accommodation only)
	Nature based tourism (accommodation only)
	Resort complex
	Short-term accommodation
	Tourist park
Commercial	Office
	Sales office
Community	Club
	Community care centre
	Community use
	Crematorium
	Emergency services
	Function facility
	Funeral parlour
	Place of worship
Education – Child care	Child care centre
Education - School	Educational establishment (being a primary or secondary school)
Education - Tertiary	Educational establishment (being a tertiary education facility)
General/ Heavy industry	High impact industry
	Medium impact industry
	Special industry
Light industry	Air services
	Car wash
	Low impact industry
	Marine industry
	Port services
	Research and technology industry
	Transport depot
	Utility installation
	Warehouse
Health	Hospital
	Outdoor sport and recreation

MGAM Development type	Use in proposed planning scheme
Outdoor sport and recreation facility	Major sport recreation and entertainment facility
	Motor sport
	Park
Retail and service	Adult store
	Brothel
	Food and drink outlet
	Health care services
	Hotel other than short-term accommodation
	Indoor sport and recreation
	Nightclub entertainment facility
	Service industry
	Service station
	Shop
	Shopping centre
	Theatre
	Veterinary services
Retail showroom	Agricultural supplies store
	Bulk landscape supplies
	Garden centre
	Hardware and trade supplies
	Outdoor sales
	Showroom
	Wholesale nursery
Other rural (incl. transient)	Animal husbandry
	Animal keeping
	Aquaculture
	Cemetery
	Cropping
	Extractive industry
	Home based business
	Intensive animal industry
	Intensive horticulture
	Major electricity infrastructure
	Market
	Non-resident workforce accommodation
	Parking station
	Permanent plantation
	Renewable energy facility
	Roadside stall
	Rural industry
	Rural workers' accommodation
	Substation
	Telecommunications facility
	Tourist attraction
	Winery

4.3 Development (target) groups

The population and employment growth targets inputted to the model are defined for each “Development group”.

The development types have been classified into development groups as follows:

- **Residential which includes:**
 - Detached dwelling
 - Attached dwelling
 - Other dwelling
- **Service which includes:**
 - Other bed
 - Community
 - Hospital
 - Outdoor sport and recreation
- **Retail and showroom which includes:**
 - Retail and service
 - Showroom
 - Visitor accommodation
- **Industrial which includes:**
 - Light industry
 - General and heavy industry
- **Education which includes:**
 - Child care
 - School
 - Tertiary
- **Mining and other which includes:**
 - Other rural

4.4 Projection areas

The model adopts the ABS Statistical Area level 2 (SA2) as its projection areas. This enables comparison of the output projections against ABS census data and residential projections prepared by the QGSO.

The MGAM automatically generates the LGIP planning assumptions tables of existing and projected development and growth (population, employment, dwellings and GFA) by SA2 for inside the PIA and outside the PIA.

5.0 Model inputs

5.1 Existing level of development

One of the key modelling inputs is the existing development layer which contains the type and amount of development on each lot as at the base date. Council officers updated the model's existing development layer based on new development constructed between 2014 and 2016. PIE Solutions verified this new data and the GIS layer prior to inputting it to the model.

5.1.1 Residential development

Table 2 provides a high level summary of the number of existing dwellings and other beds (e.g. nursing home beds) in each SA2 area by dwelling type.

Table 2 – MGAM 2016 Residential dwellings and other beds

SA2 Name	Detached dwellings	Attached dwellings	Other dwellings	Total private dwellings	Other Bed
Andergrove - Beaconsfield	4,987	736	296	6,019	99
East Mackay	1,107	494	90	1,691	182
Eimeo - Rural View	4,268	607	0	4,875	0
Eungella Hinterland	3	0	0	3	0
Mackay	596	1,749	122	2,467	309
Mackay Harbour	10	275	0	285	0
Mount Pleasant - Glenella	3,685	275	283	4,243	114
North Mackay	2,028	777	211	3,016	63
Ooralea - Bakers Creek	1,842	234	0	2,076	4
Pioneer Valley	3,012	63	23	3,098	77
Sarina	4,713	367	17	5,097	55
Seaforth - Calen	3,912	132	10	4,054	16
Shoal Point - Bucasia	2,039	293	0	2,332	0
Slade Point	1,347	159	0	1,506	0
South Mackay	2,366	861	1	3,228	0
Walkerston - Eton	3,352	131	0	3,483	0
West Mackay	2,109	594	110	2,813	276
TOTAL	41,376	7,747	1,163	50,286	1,195

Figure 3 provides a comparison of the 2016 updated existing dwelling counts and the 2014 existing dwelling counts. This data shows that 911 dwellings and 105 other beds have been added across the Mackay region since the 2014 MGAM dwelling counts.

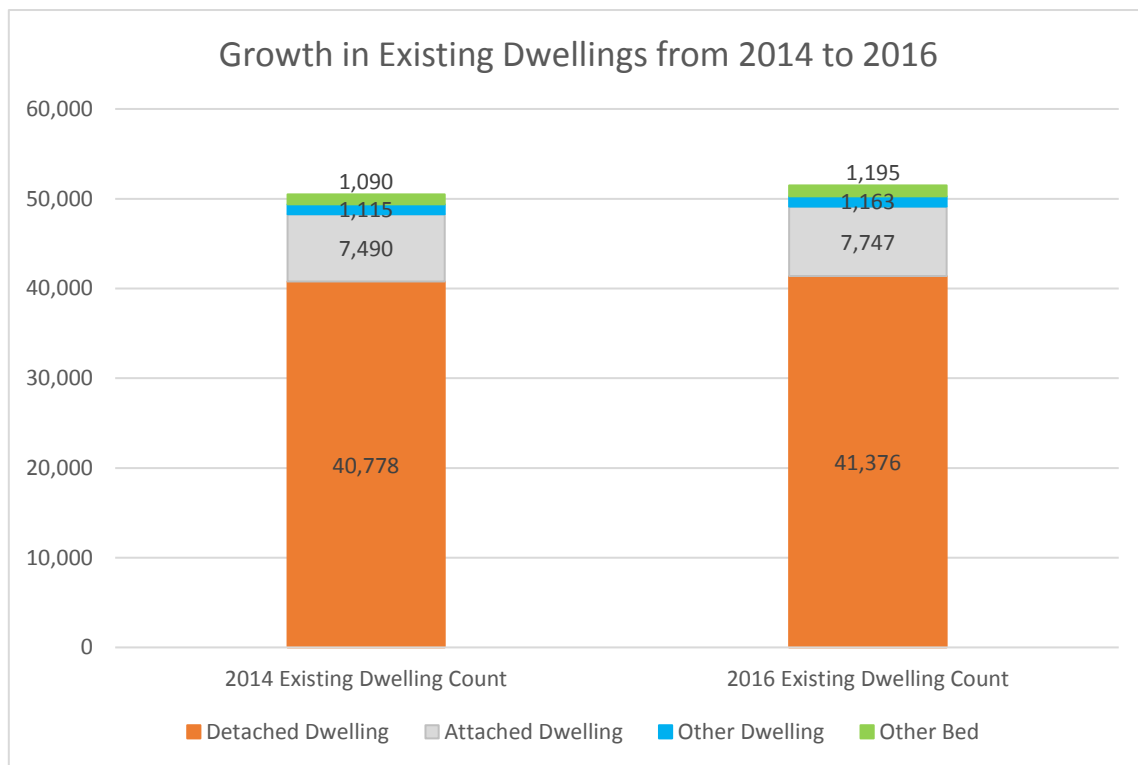


Figure 3 – Comparison of existing dwelling counts in 2014 and 2016 models

Table 17 in Attachment 1 presents the QGSO's 2015 edition projected average occupancy rates for residential dwellings in each SA2 in 2016. It should be noted that these occupancy rates are lower than the 2013 Edition occupancy rates.

Table 3 provides a summary of the existing population calculated by applying the SA2 level average occupancy rates to the existing dwellings in the MGAM 2016. The total population in private dwellings in 2016 is estimated at 122,842 with an additional 1,195 residents residing in non-private beds (e.g. nursing home beds, hostel beds). This results in a total estimated resident population (ERP) for the MGAM 2016 of 124,037.

The QGSO 2015 Edition total ERP projection for 2016 is 126,370. The MGAM 2016 population is therefore 2,333 persons lower than that projected by the QGSO. This represents less than a two per cent difference and is considered acceptable given the degree of impact changing occupancy rates can have on this estimate.

Table 3 – MGAM 2016 Existing residential population

SA2 Name	Attached dwellings	Detached dwellings	Other dwellings	Total Private Dwellings	Other Beds
Andergrove - Beaconsfield	1,200	14,512	482	16,194	99
East Mackay	785	2,911	143	3,840	182
Eimeo - Rural View	1,074	10,969	0	12,043	0
Eungella Hinterland	0	8	0	8	0
Mackay	2,676	1,395	187	4,257	309

SA2 Name	Attached dwellings	Detached dwellings	Other dwellings	Total Private Dwellings	Other Beds
Mackay Harbour	465	21	0	486	0
Mount Pleasant - Glenella	534	10,318	549	11,401	114
North Mackay	1,313	5,232	357	6,902	63
Ooralea - Bakers Creek	487	4,329	0	4,815	4
Pioneer Valley	100	7,952	36	8,088	77
Sarina	587	12,018	27	12,633	55
Seaforth - Calen	98	8,685	7	8,790	16
Shoal Point - Bucasia	437	5,628	0	6,064	0
Slade Point	272	3,718	0	3,990	0
South Mackay	1,421	6,223	2	7,645	0
Walkerston - Eton	261	9,084	0	9,345	0
West Mackay	921	5,251	171	6,343	276
TOTAL	12,629	108,252	1,961	122,842	1,195

5.1.2 Non-residential development

Table 4 summarises the MGAM's existing amount of non-residential floor space in m² GFA as at 2016. MRC officers have stated that they have a high level of confidence in the existing non-residential floor space data at the lot level - most notably in the urban areas.

Table 4 - MGAM existing non-residential floor space (m² GFA)

SA2 Name	Com- mercial	Com- munity	Ed - Child Care	Ed - School	Ed - Tertiary	General Heavy Industry	Hospital	Light Industry	Other Bed	Other Rural	Outdoor Sport and Rec	Retail and Service	Show- room	Visitor Accom.	TOTAL
Andergrove- Beaconsfield	574	5,498	4,811	30,283	0	0	0	3,830	2,971	0	0	25,476	752	21,599	95,794
East Mackay	10	396	768	6,242	0	0	0	24	5,460	0	0	750	0	4,459	18,109
Eimeo-Rural View	1,561	3,785	1,470	6,965	0	0	0	2,698	0	0	0	16,457	4,153	8,346	45,435
Eungella Hinterland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mackay	156,384	24,361	1,579	13,022	24,473	489	0	100,579	8,344	0	7,184	260,399	10,496	16,750	624,060
Mackay Harbour	5,344	3,107	0	0	0	0	0	241,903	0	49,700	0	2,753	0	94	302,901
Mount Pleasant - Glenella	9,773	7,129	1,223	17,612	0	53,305	3,673	58,557	3,686	362	352	80,561	39,327	10,333	285,893
North Mackay	6,998	16,020	1,351	29,931	0	0	4,044	30,175	1,890	25	500	34,326	2,556	15,700	143,516
Ooralea - Bakers Ck	12,062	1,812	0	1,052	15,637	248,470	0	579,905	0	776	0	36,822	14,016	7,550	918,102
Pioneer Valley	1,492	8,948	617	15,129	1	47,261	0	11,107	2,310	1,226	0	15,455	312	12,950	116,808
Sarina	3,345	18,854	1,114	14,178	0	80,426	2,088	124,925	1,650	2,284	829	28,377	5,303	18,331	301,704
Seaforth- Calen	180	6,084	0	7,420	0	4,336	0	12,611	480	5,763	322	8,415	277	32,600	78,488
Shoal Point - Bucasia	0	172	0	2,502	0	0	0	36,692	0	1,583	0	15,828	152	2,514	59,443
Slade Point	148	942	0	4,142	0	0	0	55,360	0	10	0	4,943	0	457	66,002
South Mackay	1,013	15,408	0	18,267	0	0	0	189,095	0	20	0	3,390	0	4,560	231,753
Walkerston-Eton	835	3,545	2,644	8,315	0	41,400	0	47,993	0	8,212	0	10,289	0	5,913	129,146
West Mackay	4,591	7,289	1,320	10,113	688	0	62,255	31,446	8,220	0	0	25,500	0	32,954	184,376
Total	204,310	123,350	16,897	185,173	40,799	475,687	72,060	1,526,900	35,011	69,961	9,187	569,741	77,344	195,110	3,601,530

The floor space to employee conversion rates for each development type in each SA2 were prepared by benchmarking against conversion rates used by Brisbane City Council, Logan City Council and other reputable sources and were then refined based on local knowledge of current numbers of employees on special sites in key areas such as the Mackay Harbour and City Centre.

Table 18 in Attachment 1 identifies the resultant average floor space (GFA) conversion rates used to convert non-residential GFA into employee numbers.

Table 5 presents a summary of the estimated number of employees accommodated by the existing GFA contained in the MGAM 2016. The total number of existing employees in the MGAM 2016 is approximately 49,300. This represents a total jobs to total population ratio of 39.8%.

Figure 4 compares the distribution of employees by development group in the Mackay region between MGAM 2014 and MGAM 2016. Overall there are an additional 577 employees in the updated data and the job distribution between industries has remained fairly constant.

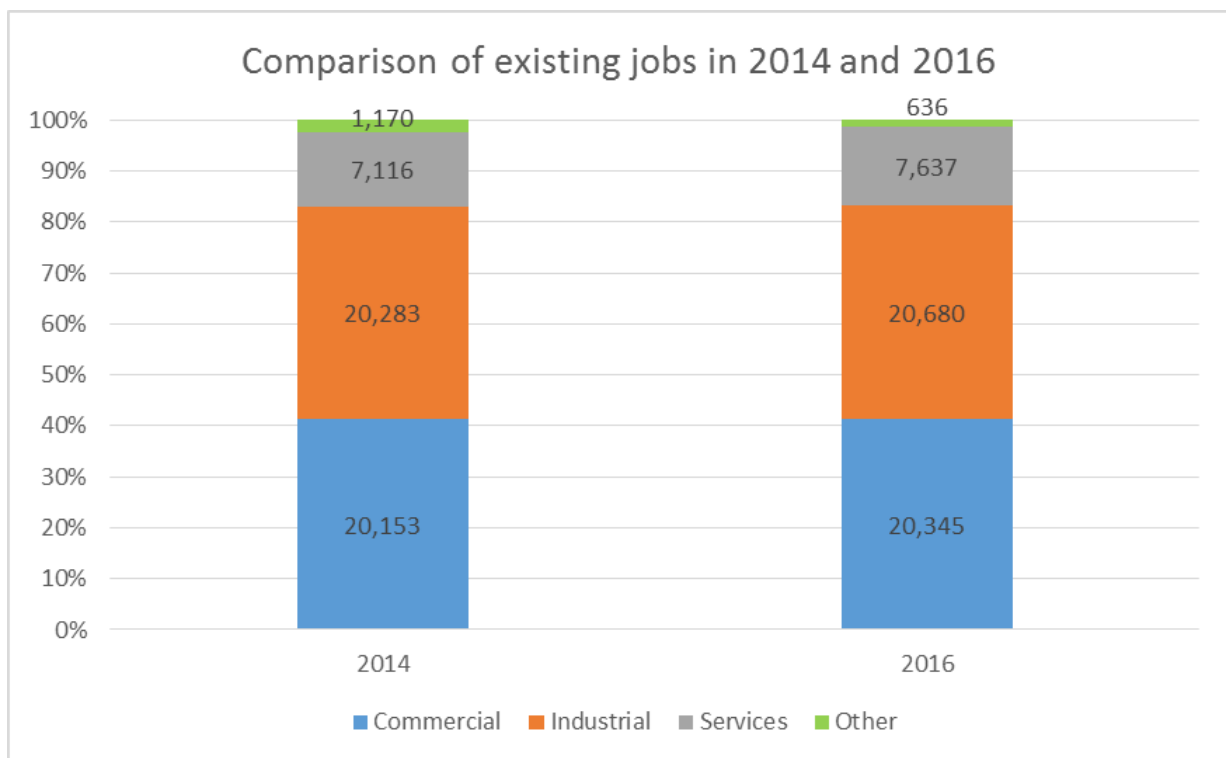


Figure 4 – Comparison of employees in MGAM 2014 and MGAM 2016

Table 5 – MGAM 2016 Existing employees

SA2 Name	Other bed	Visitor accom.	Retail and service	Show-room	Com-mercial	Light industry	General/ Heavy industry	Com-munity	Ed - Child care	Ed - school	Ed - Tertiary	Hospital	Outdoor Sport and res.	Other	Total
Andergrove - Beaconsfield	29	92	96	404	0	0	0	43	50	0	0	425	13	216	1,366
East Mackay	1	7	15	83	0	0	0	0	91	0	0	13	0	45	254
Eimeo - Rural View	78	63	29	93	0	0	0	30	0	0	0	274	69	83	720
Eungella Hinterland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mackay	5,213	406	32	174	489	6	0	1,118	139	0	72	4,340	175	168	12,330
Mackay Harbour	267	52	0	0	0	0	0	806	0	452	0	46	0	1	1,624
Mount Pleasant - Glenella	489	119	24	235	0	627	92	651	61	3	4	1,343	655	103	4,406
North Mackay	350	267	27	399	0	0	101	335	32	0	5	572	43	157	2,288
Ooralea - Bakers Creek	603	30	0	14	313	2,923	0	6,443	0	7	0	614	234	76	11,256
Pioneer Valley	75	149	12	202	0	556	0	123	39	11	0	258	5	130	1,559
Sarina	167	314	22	189	0	946	52	1,388	28	21	8	473	88	183	3,880
Seaforth - Calen	9	101	0	99	0	51	0	140	8	52	3	140	5	326	935
Shoal Point - Bucasia	0	3	0	33	0	0	0	408	0	14	0	264	3	25	750
Slade Point	7	16	0	55	0	0	0	615	0	0	0	82	0	5	780
South Mackay	51	257	0	244	0	0	0	2,101	0	0	0	57	0	46	2,754
Walkerston - Eton	42	59	53	111	0	487	0	533	0	75	0	171	0	59	1,590
West Mackay	230	121	26	135	14	0	1,038	349	137	0	0	425	0	330	2,805
TOTAL	7,609	2,056	338	2,469	816	5,596	1,283	15,084	584	636	92	9,496	1,289	1,951	49,298

Table 6 presents the 2006 and 2011 estimated number of jobs by industry classification for the Mackay Region LGA based on the Remplan data incorporating Australian Bureau of Statistics' (ABS) June 2016 Gross State Product, 2013 / 2014 National Input Output Tables and 2011 Census Place of Work Employment Data. Overall this data estimated a total growth of 5,158 jobs. Based on the Remplan data, the total jobs to total population ratio over this period has remained fairly constant at between 37% (in 2006) and 39% (in 2011). This is considered to correlate well with the MGAM 2016 existing total jobs to total population ratio of 39.8%.

Table 6 – Remplan 2011 estimated jobs

ANZSIC Industry	2006 Jobs	2011 Jobs
Retail Trade	1,944	5,234
Manufacturing	1,061	4,842
Health Care & Social Assistance	4,420	4,596
Construction	433	4,129
Transport, Postal & Warehousing	3,503	3,242
Education & Training	2,108	3,075
Accommodation & Food Services	5,179	2,940
Other Services	2,834	2,661
Professional, Scientific & Technical Services	2,587	2,519
Wholesale Trade	347	2,352
Public Administration & Safety	846	2,090
Mining	829	1,698
Agriculture, Forestry & Fishing	2,000	1,551
Administrative & Support Services	834	1,066
Rental, Hiring & Real Estate Services	1,816	977
Financial & Insurance Services	2,882	744
Electricity, Gas, Water & Waste Services	3,668	451
Information Media & Telecommunications	264	328
Arts & Recreation Services	2,057	275
Total	39,612	44,770

5.2 Future development conversion rates

The model converts future forecast development at the lot level into population and employees using the average residential occupancy rates and GFA conversion rates. These rates have been verified as part of the validation of the existing level of development and are defined for each development type, projection year and ABS Statistical Area level 2 (SA2).

Table 17 in Attachment 1 presents the QGSO's 2015 edition projected future average occupancy rates for residential dwellings in each SA2. These occupancy rates gradually decrease over the projection period. A decreasing occupancy rate results in a higher number of dwellings being required to accommodate the projected population over time.

Table 18 in Attachment 1 identifies the future average floor space (GFA) conversion rates used to convert non-residential GFA into employee numbers. The future average floor space (GFA) conversion rates were assumed to remain constant over the projection period.

5.3 Population and employment growth targets

Development at the lot level is allocated up until higher level population and employment growth targets are reached for each “target area”. The target area boundaries are determined based on available population and employment growth projections, and the level of confidence in these projections for the Mackay region.

To best reflect the expected distribution of population and employment growth in the region, MRC have chosen to adopt the following targets areas for both population and employment:

- Inside key urban areas: This includes the five key urban areas of:
 - Mackay;
 - Walkerston;
 - Sarina;
 - Marian; and
 - Mirani
- Outside key urban areas: This includes other townships, rural residential and rural areas in the Mackay Regional Council area.

The target area boundaries for inside and outside key urban areas, as well as the Priority Infrastructure Area (PIA) used in the modeling, are shown in Figure 5.

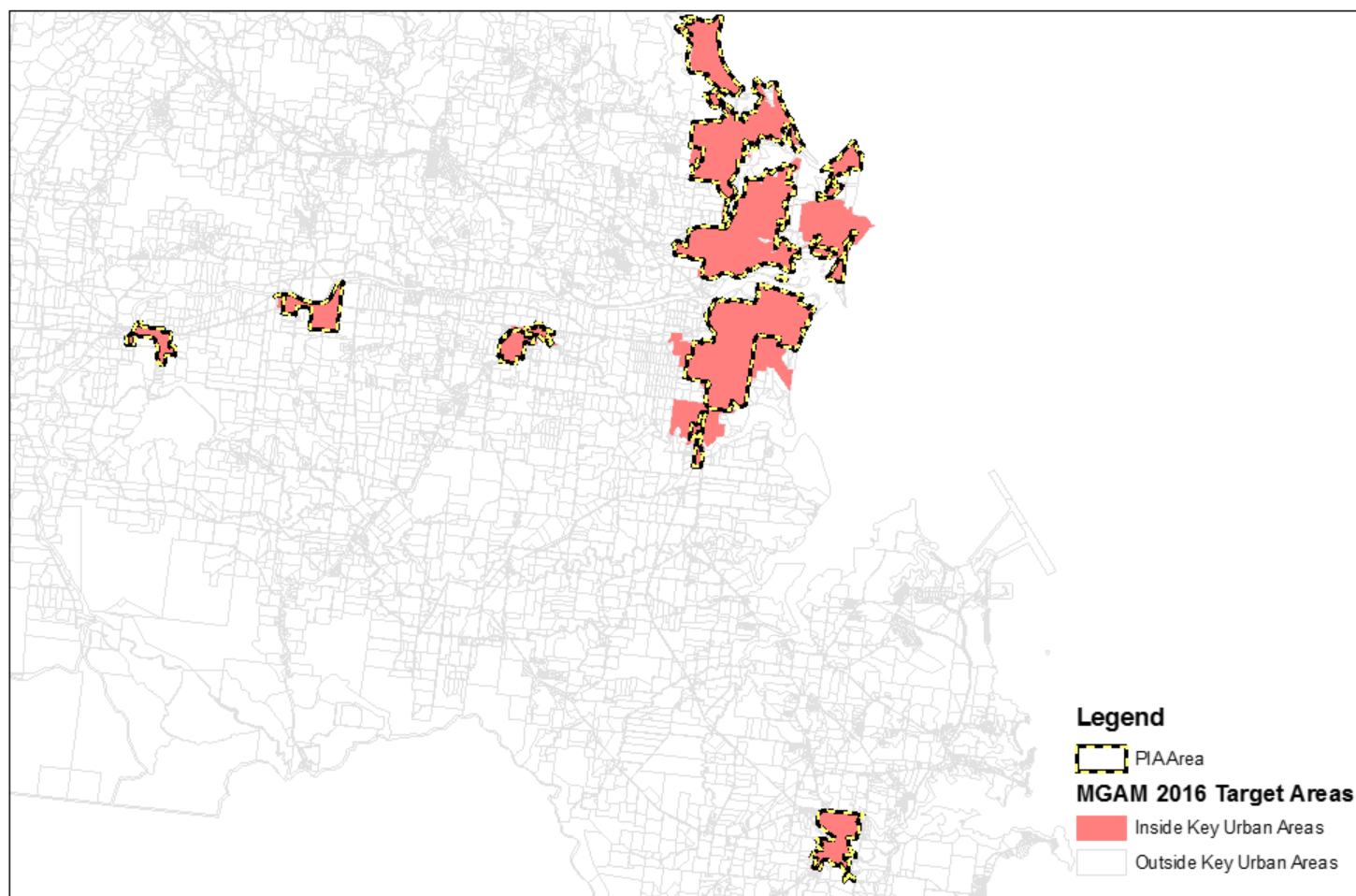


Figure 5 – Population and employment target areas

5.3.1 Population targets

Table 7 presents the population targets for the 2016 medium series model run. These targets were calculated by:

- applying the local government area (LGA) level QGSO 2015 edition medium series population growth rates to the estimated existing population as at 2016; and
- distributing 95 per cent (%) of population growth to the “Inside key urban areas” target area and five per cent (%) to the “Outside key urban areas” target area.

Table 7 – MGAM 2016 medium series growth population targets

Development group	Population target area	2021	2026	2031	2036
Residential	Inside key urban areas	102,323	112,524	123,877	135,839
Residential	Outside key urban areas	30,286	30,823	31,421	32,052
TOTAL		132,609	143,348	155,299	167,891

It should be noted that the MGAM population targets do not include residents living in long-term accommodation such as nursing and convalescent homes (other beds), or non-resident population (visitor accommodation). Future development required to accommodate these residents is estimated as part of the non-residential GFA projections based on the existing amount of GFA as well as any relevant development applications data.

Figure 6 presents a comparison of the 2016 medium series total population targets and previous 2014 low series and alternative growth scenarios total population targets out to 2036. This figure demonstrates that the 2016 medium series growth rates (the gradient of the projections) are similar to previous growth rates applied in the MGAM 2014 (QGSO 2013 Edition) low series growth scenario and lower MGAM 2014 alternative growth scenario.

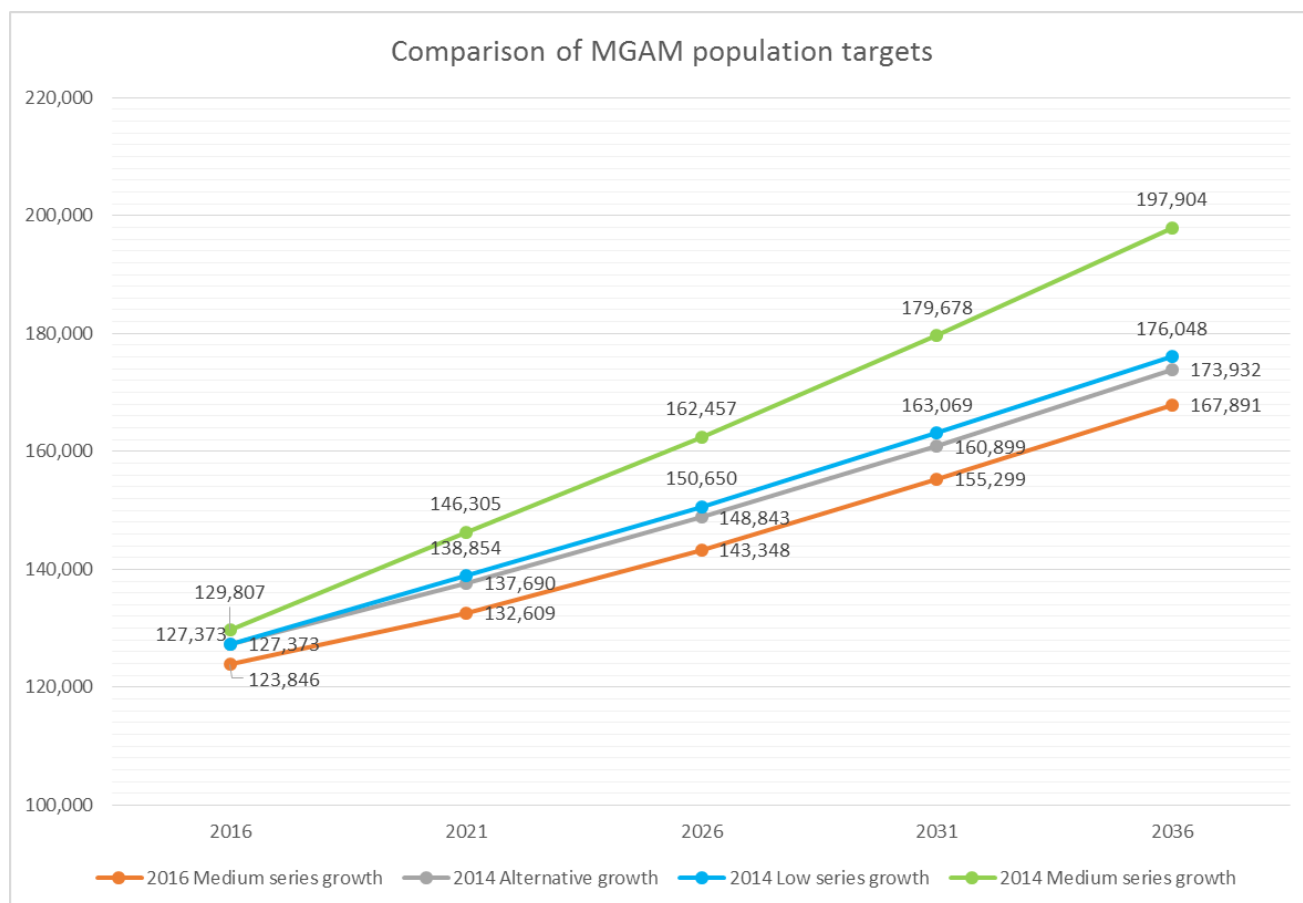


Figure 6 – Comparison of total population targets for MGAM 2016 medium series and 2014 MGAM low, medium and alternative growth scenarios

5.3.2 Employment targets

Table 8 states the MGAM 2016 employment targets by development group for each employment target area. These were calculated assuming a “status-quo” employee to population ratio of 39.8%, the job distribution by industry and apportioning 95 per cent (95%) of employment growth to “Inside key urban areas” target area and five per cent (5%) to the remaining “Outside key urban areas” target area.

Table 8 – MGAM 2016 Medium series growth employment targets

Development group	Employment target area	2021	2026	2031	2036
Professional	Inside key urban areas	8,236	8,875	9,586	10,335
Retail and Showroom	Inside key urban areas	12,618	13,676	14,853	16,093
Industrial	Inside key urban areas	18,330	20,060	21,985	24,014
Education	Inside key urban areas	3,560	3,860	4,194	4,546
Service	Inside key urban areas	4,112	4,450	4,826	5,223
Mining and Other	Inside key urban areas	525	525	525	525
Professional	Outside key urban areas	75	109	147	187
Retail and Showroom	Outside key urban areas	1,135	1,191	1,254	1,320
Industrial	Outside key urban areas	4,163	4,254	4,357	4,464

Development group	Employment target area	2021	2026	2031	2036
Education	Outside key urban areas	342	358	376	394
Service	Outside key urban areas	288	307	327	348
Mining and Other	Outside key urban areas	175	175	175	175
Professional	Total	8,311	8,984	9,733	10,522
Retail and Showroom	Total	13,753	14,867	16,107	17,413
Industrial	Total	22,493	24,314	26,342	28,478
Education	Total	3,902	4,218	4,570	4,940
Service	Total	4,400	4,757	5,153	5,571
Mining and Other	Total	700	700	700	700
TOTAL		53,559	57,840	62,605	67,624

Figure 7 provides a comparison of the total employment targets for the MGAM 2016 medium series growth scenario and the 2014 MGAM low, medium and alternative growth scenarios. This comparison demonstrates that:

- the MGAM 2016 employment targets are well below the 2014 MGAM medium growth scenario targets;
- the MGAM 2016 employment targets are slightly lower than the 2014 MGAM low and alternative growth scenario targets (e.g. 67,624 employees versus 68,558 employees at 2036); and
- the MGAM 2016 employment targets reflect a similar growth rate to these previous targets (refer to the slope of the graph).

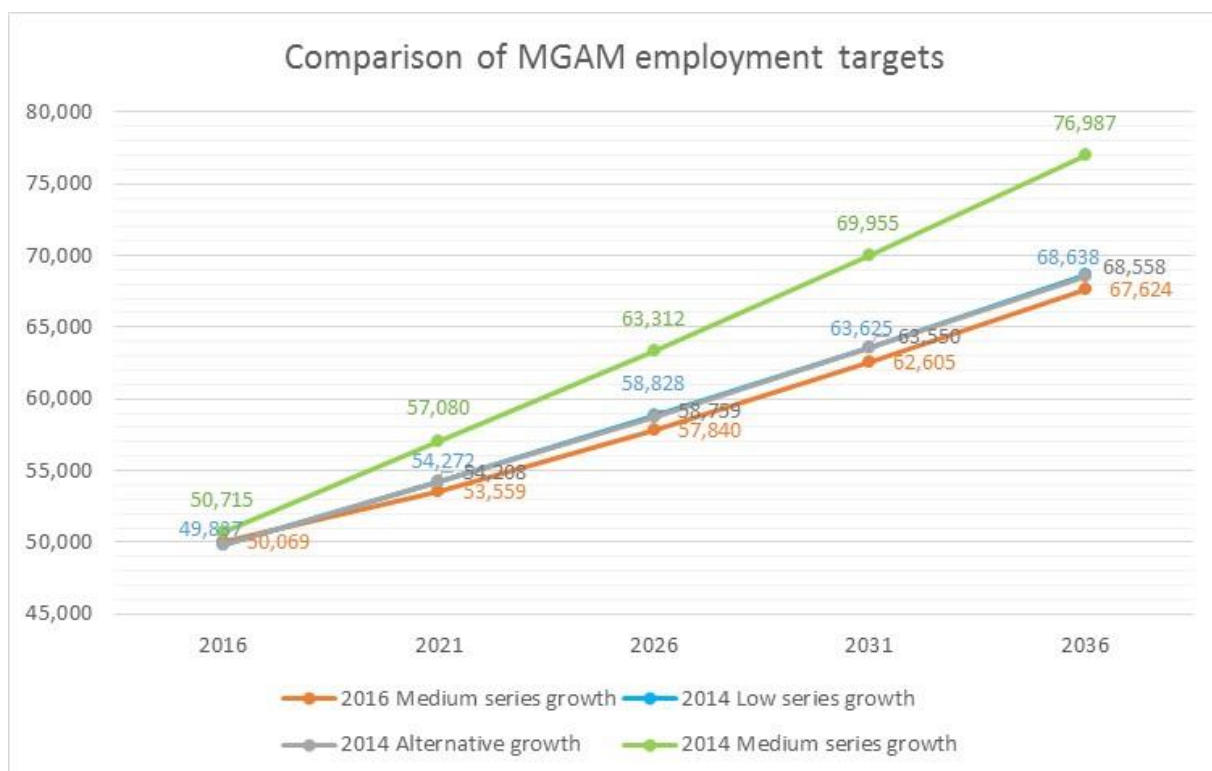


Figure 7 – Comparison of total employment targets for MGAM 2016 and 2014 low, medium and alternative growth scenarios

5.4 Ultimate development

Unless overridden by development application data, the MGAM determines the ultimate development for each land parcel by applying the **planned density** to the **developable area** of the parcel.

5.4.1 Planned density

The planned density represents the lot's likely level of development based on its zone and precinct classification under the proposed planning scheme and prevailing development trends. The planned density is expressed as a number of dwellings per developable hectare for residential development and as a plot ratio for non-residential development.

The planned density adopted for each zone and precinct was prepared in consultation with MRC staff. Each planned density was determined by first having regard to the provisions of the proposed planning scheme. In predominately residential zones, the minimum lot size provisions were a primary input for determining the number of dwellings per developable hectare. In zones where non-residential development and mixed development (combined residential and non-residential development) is likely to occur, building heights and site coverage provisions were the primary inputs for calculating the plot ratio.

In all cases, it was still necessary to determine whether the allowable density under the proposed planning scheme's provisions was realistic. Determining the realistic planned density involved consideration of existing levels of development in the relevant area, current development proposals and industry trends. For example, the proposed planning scheme might allow for eight storey developments in an area, however three storey developments might be more realistic considering current industry trends.

It is important to note that planned densities are an average density. Planned densities accept that development or redevelopment will occur on lots at higher or lower densities than the planned density, however the overall density of new development in an area is assumed to average out at the planned density. It should also be noted that if a land parcel is likely to be subdivided into four or more lots, then the MGAM reduces its ultimate development yield to take into account land required for roads, parks, stormwater and other infrastructure.

The proposed planning scheme zoning GIS layer was inputted to the MGAM. The planned density adopted for each zone and precinct identified in this layer is stated in Table 19 in Attachment 1. An adopted planned density of 12 detached dwellings per developable hectare were applied to low density residential and emerging community zones to reflect likely development yields in the region.

Maximum gross floor area (GFA) controls in centres

The proposed planning scheme sets out maximum allowable amounts of GFA in certain activity centres. Table 9 identifies the maximum GFA cap inputted to the model for each activity centre.

Table 9 – Maximum GFA controls for centres

Centre name	Centre type	Maximum GFA cap (m ² GFA)
Mackay City Centre	Principal Centre	Unlimited
Mount Pleasant	Major Centre	130,000
Rural View	Major Centre	60,000
Sarina	Major Centre	30,000
North Mackay District Centre	District	20,000
Andergrove	District	15,000
West Mackay (Fourways and Parkside)	District	15,000
Walkerston	District	15,000
Marian	District	15,000
Sarina Beach Road (Sarina)	Strategic Local	7,000
Blacks Beach	Strategic Local	5,000
Bucasia	Strategic Local	5,000
Mackay Marina	Strategic Local	5,000
Mirani	Strategic Local	5,000
Ooralea East	Strategic Local	5,000
Slade Point	Strategic Local	5,000
Black Beach Road East	Existing Local	5,000
Celeber Drive (Andergrove)	Existing Local	2,500
Evan Street (South Mackay)	Existing Local	2,500
Gasworks (Shakespeare Street, Mackay)	Existing Local	2,500
George Street (Mackay)	Existing Local	2,500
Martins Corner (Shakespeare Street, Mackay)	Existing Local	2,500
Moore Street (Mackay)	Existing Local	2,500
Pheasant Street (Slade Point)	Existing Local	2,500
Ungerer Street (North Mackay)	Existing Local	2,500

Structure plans

A structure plan layer for the Mackay City Centre Local Area Plan was inputted to the model to better reflect the likely level of development in this area under the more detailed land use provisions of the plan. Table 19 in Attachment 1 includes the detailed planned densities inputted for specific areas within the city centre local area plan.

5.4.2 Development constraints

The developable area (m²) of each parcel is calculated as follows:

$$\text{Developable area} = \text{Parcel area} - \text{Area affected by absolute constraints} - \text{Area constrained by partial constraints}$$

The following planning scheme overlays have been applied as *absolute* constraints in the model:

1. Agricultural land: Locally important agricultural area
2. Agricultural land: Agricultural land Class A and B (“priority agricultural area”) – not in Emerging Community Zones
3. Key Resource Area KRA (including buffer)
4. Port infrastructure corridors, and regional electricity infrastructure and substations (including buffer)
5. Biodiversity: Environmentally significant vegetation and wildlife habitat (within 50m)
6. Biodiversity: Waterways and wetlands (WMA within 10m)
7. 1% AEP (i.e. Q100) – only outside the Mackay urban area
8. Defined Stormtide Event (DSTE) – only outside the Mackay urban area

The planning scheme overlays stated in Table 10 have been applied as *partial* constraints in the model. The impact of the partial constraints on the development yield is also identified in Table 10.

Table 10 – Partial constraints

Planning scheme overlay	Impact on development
Landslide hazard area (slope 15-25%)	Medium impact on development=25% reduced yield
Wetlands –WMA trigger area	Low impact on development=25% reduced yield
Q100	Low impact on development=25% reduced yield
DSTE –1% AEP plus Climate Change probability	Low impact on development in the Mackay urban area=25% reduced yield
Regional infrastructure corridors other than for ports	Low impact on urban development in the Mackay urban area =25% reduced yield
Agricultural land	Low impact on development in the Mackay urban area=25% reduced yield (unlikely to occur)

5.4.3 Development applications

If available, the model overrides the ultimate development potential of a lot using actual development application and approval data. Council officers provided an updated development applications GIS layer based on current development applications, approvals and developer interest. PIE Solutions verified the changes to the underlying data and the geometry of the new GIS layer before inputting it to the model.

Table 20 in Attachment 1 summarises the development applications data used for the MGAM 2016.

5.5 Priority infrastructure area (PIA) boundary

A Local Government Infrastructure Plan must identify a Priority Infrastructure Area (PIA) for the local government area. The PIA identifies the area prioritised for the provision of trunk infrastructure to service the existing and assumed future urban development for 10 and 15 years. The Sustainable Planning Act 2009 (SPA) defines the PIA as follows:

“The PIA is an area—

- (a) used, or approved for use, for non-rural purposes; and*
- (b) serviced, or intended to be serviced, with development infrastructure networks; and*
- (c) that will accommodate at least 10 (but no more than 15) years of growth for non-rural purposes.”*

In terms of the MGAM 2016, the model only uses the priority infrastructure area (PIA) boundary for purposes of reporting and the generation of the LGIP planning assumptions tables. This ensures that any urban development planned to occur outside the PIA is still taken into account in modelling within the projection period.

The PIA boundary shown in Figure 5 has been determined by MRC taking into consideration the above definition and previous analysis of trunk infrastructure to service assumed urban development inside the PIA up to 2031.

Part 2 – MGAM 2016 medium series run results and analysis

6.0 Model run results analysis

The MGAM generates the LGIP planning assumptions tables of development and growth by SA2 and identifies growth inside and outside the PIA. These tables are provided as Table 21 to Table 24 in Attachment 1.

6.1 Residential development projections

The total projected population for MGAM 2016 is stated in Table 11 and projected dwellings in Table 12.

Table 11 – MGAM 2016 total existing and projected population

Target area	2016	2021	2026	2031	2036	Ultimate development
Inside Key Urban Areas	92,941	102,648	112,648	124,172	138,379	156,085
Outside Key Urban Areas	29,900	29,956	30,696	31,082	31,432	40,940
TOTAL	122,842	132,604	143,344	155,254	169,811	197,025

Table 12 – MGAM 2016 total existing and projected dwellings

Target area	2016	2021	2026	2031	2036	Ultimate development
Inside Key Urban Areas	38,083	42,216	46,370	51,849	59,038	68,121
Outside Key Urban Areas	12,203	12,247	12,574	12,808	13,025	16,829
TOTAL	50,286	54,463	58,944	64,657	72,063	84,950

Figure 8 compares the population projection results to the population targets inputted to the model. This comparison demonstrates that the model has successfully accommodated the required population growth in each target area (inside and outside the key urban areas) within the projection period.

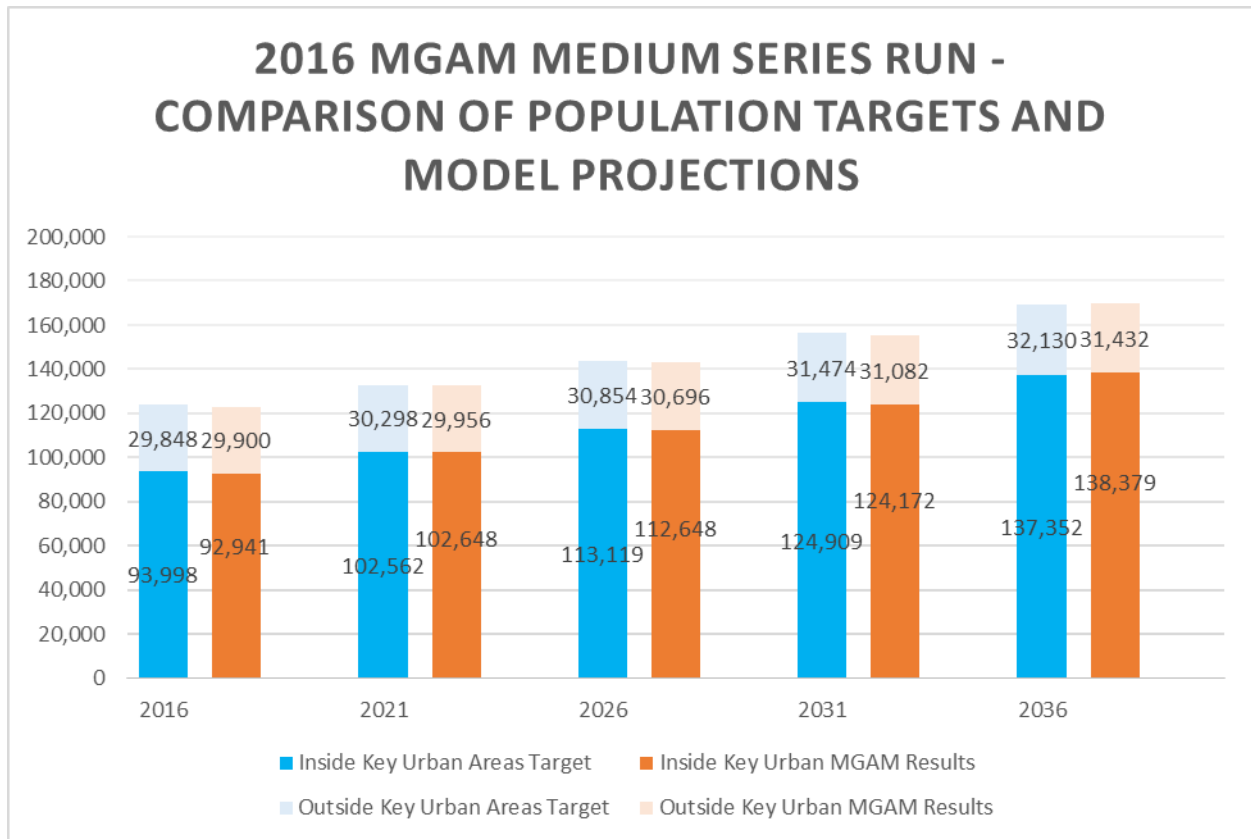


Figure 8 – MGAM 2016 – Comparison of population targets and projected population

The projected dwelling numbers to meet the population targets for Inside the Key Urban Areas and Outside the Key Urban Areas from 2016 to 2036 and at ultimate development are presented in Figure 9.

Figure 9 shows that dwelling numbers for the Mackay Region are expected to rise from 50,000 dwellings in 2016 to 72,000 in 2036. The projection shows a lower growth in dwellings over the first two periods (2016-2021 and 2021-2026) - equivalent to approximately 850 dwellings per year - which then steadily increases to a rate of 1,480 dwellings per year in the later period 2031-2036.

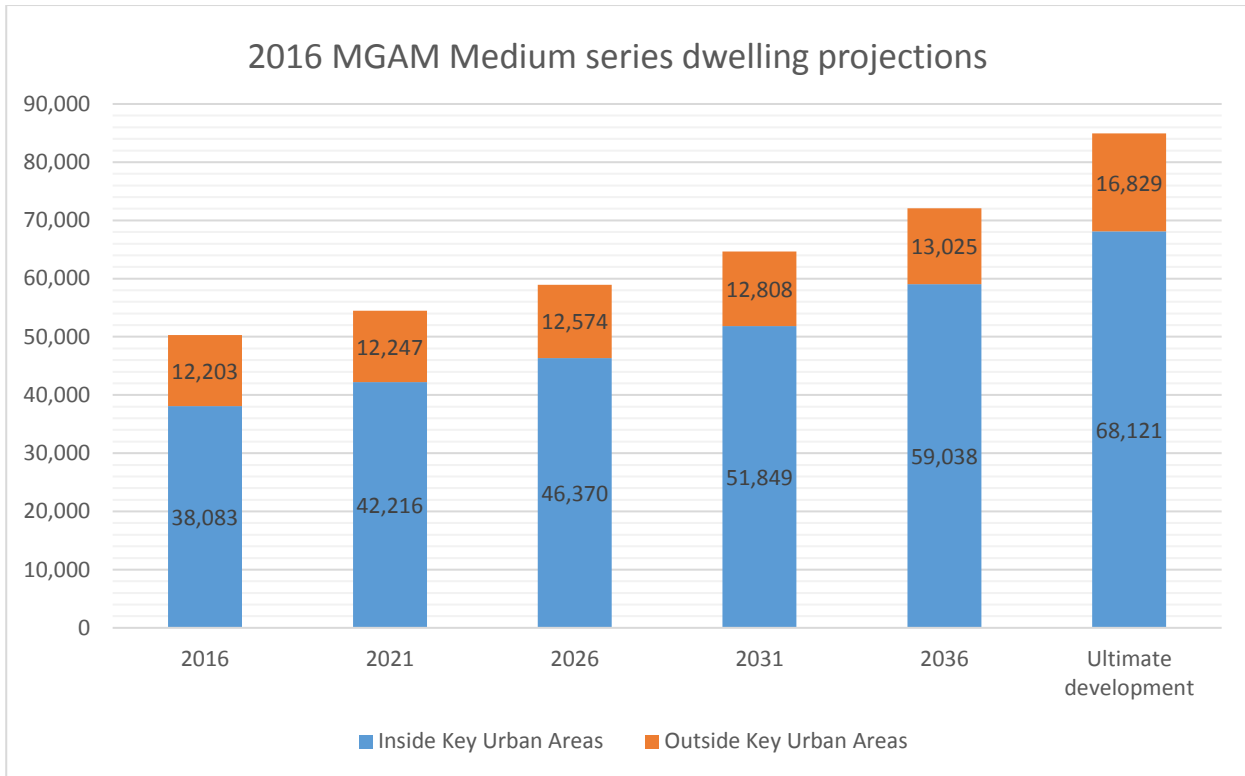


Figure 9 – MGAM 2016 existing and projected dwellings

Figure 10 shows the percentage dwelling growth inside and outside the key urban areas. This shows that dwelling growth dominates inside the 5 key urban areas in line with projected population growth.

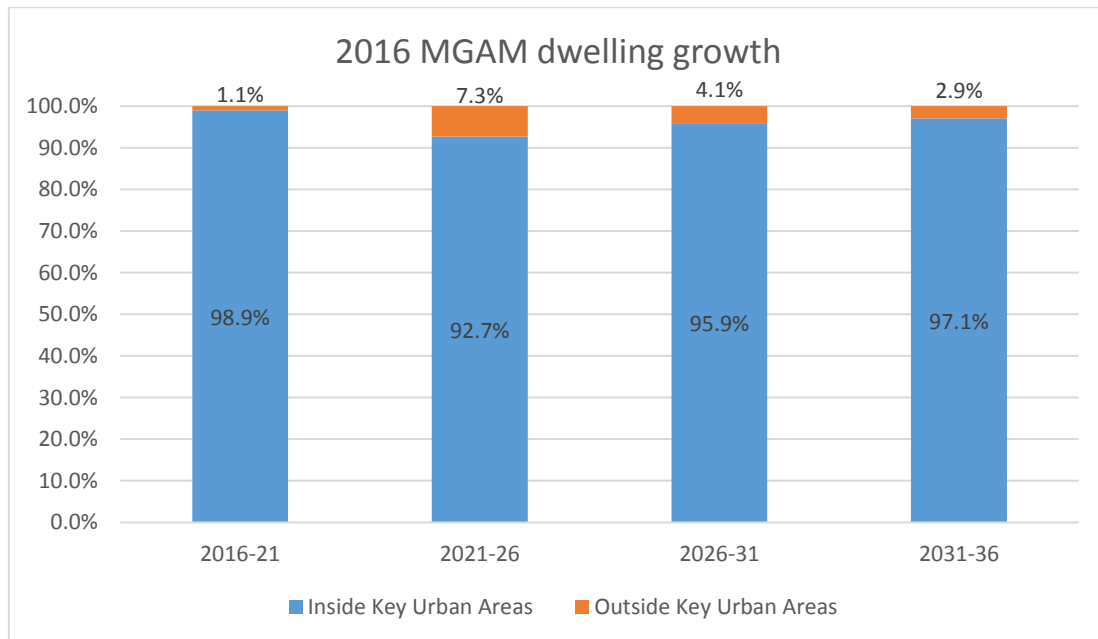


Figure 10 – MGAM 2016 projected dwelling growth

The geographic distribution of dwelling growth inside the PIA is shown in Table 13.

In the Mackay urban area, the Northern PIA (PIA area north of Pioneer River except for Slade Point and Mackay Harbour) receives between 2,500 and 3,000 dwellings in each five year period. This equates to approximately 550 annual growth in dwellings on average over the period 2016 to 2036.

Recently, the area north of the Pioneer River in the Mackay urban area has been the primary growth area in the higher growth period from 2002-2013. The MGAM 2016 results show the continued dominance of growth in this area from 2016 to 2036.

In the Mackay urban area, the Southern PIA (PIA area south of the Pioneer River) shows less aggressive dwelling growth in the projection period. Dwelling numbers are projected to grow steadily from around 100 dwellings per year (2016-2021) up to 540 dwellings per year (2031-2036).

The Walkerston PIA starts with approximately 40 dwellings growth per year for the first 5 years, and experiences slightly lower growth over the subsequent periods.

As an indication of dwelling growth in the Pioneer Valley, the Marian PIA experiences relatively strong growth in the first 5 years at 60 dwellings per year, slowing down in the next 10 years from 2021-2031 to 8 dwellings per year, and increasing to 23 dwellings per year from 2031 to 2036.

The Sarina PIA experiences slower dwelling growth for the first 10 year period at 20 dwellings per year, then increases to 107 dwellings per year between 2026 and 2031, and declines to 47 dwellings per year from 2031 to 2036.

Table 13 – MGAM 2016 dwelling growth by PIA area

PIA area	2016-21	2021-26	2026-31	2031-36
Outside PIA	264	908	1,146	1,154
Bakers Creek PIA	13	29	27	73
Cremorne	0	0	0	0
Mackay Harbour PIA	191	47	20	80
Marian PIA	323	80	0	118
Mt Basset PIA	0	0	0	0
Northern PIA	2,504	2,534	2,715	2,962
Sarina PIA	104	130	536	236
Slade Point PIA	90	6	32	19
Southern PIA	500	712	1,111	2,698
Walkerston PIA	190	35	126	66
TOTAL	4,177	4,481	5,713	7,406

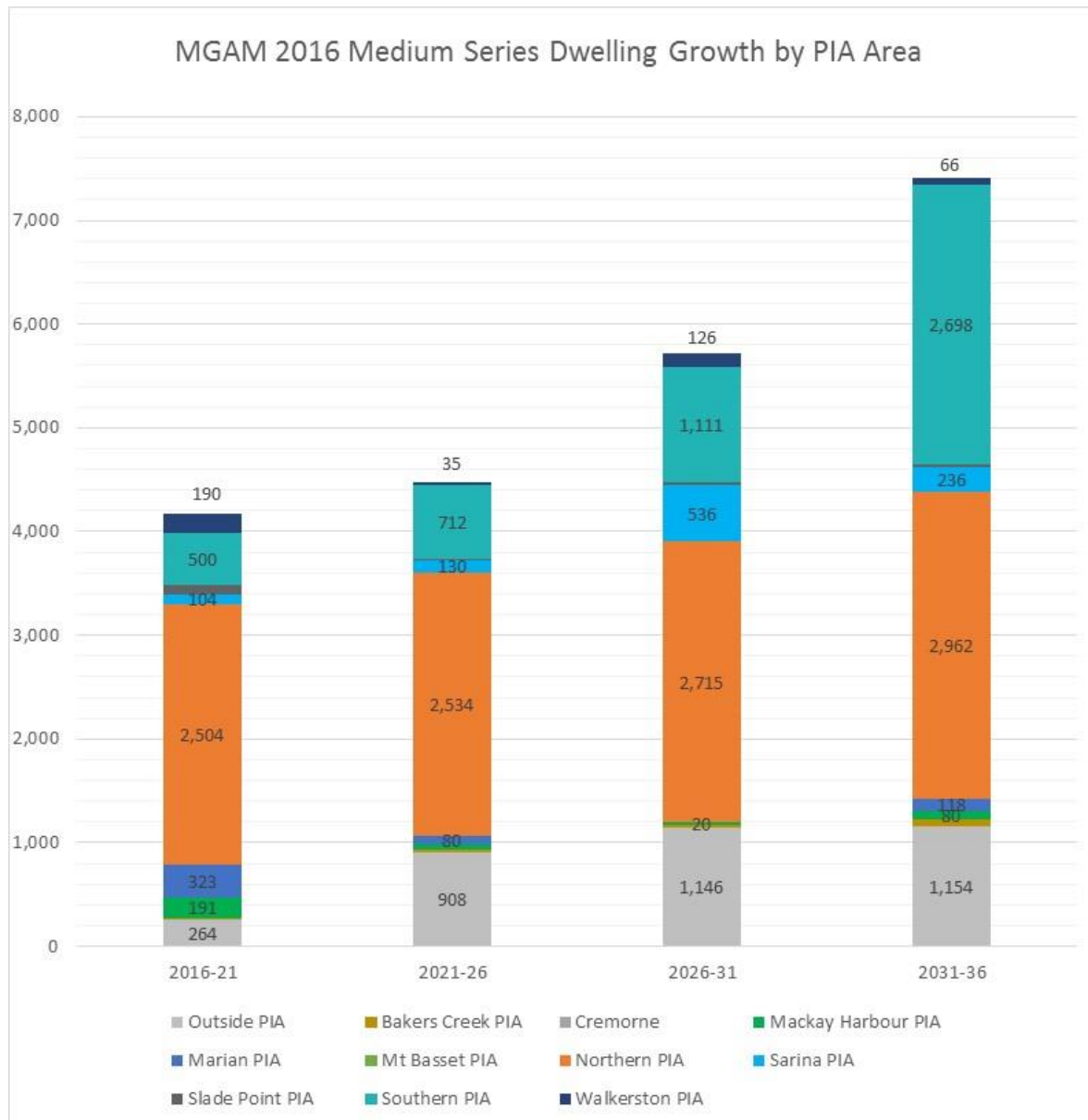


Figure 11 – MGAM 2016 dwelling growth by PIA area

Figure 11 shows the allocation of dwelling growth within the PIA area over the projection period. This shows that the majority of dwelling growth occurring in the Mackay urban area across the northern and southern PIA.

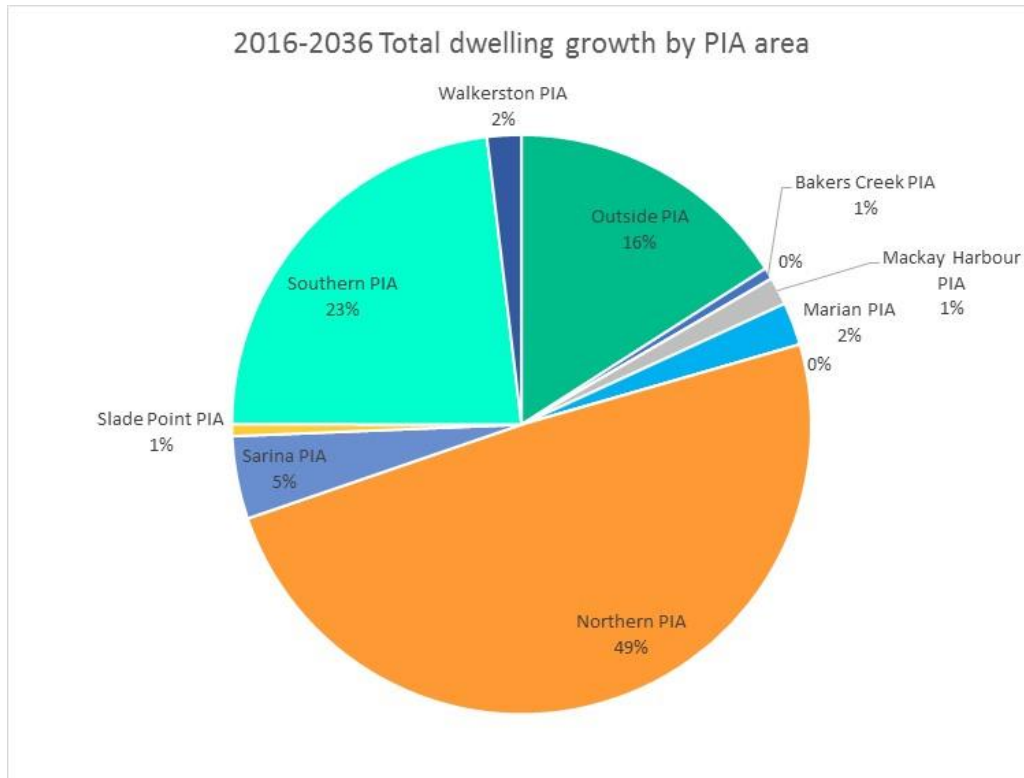


Figure 12 – MGAM 2016 total projected dwelling growth 2016 to 2036

In regards to the overall proportion of growth that is projected to occur outside the current PIA area, the model finds that an average of 16 percent of all dwelling growth will occur outside the PIA boundary (see Figure 12). This includes growth in smaller townships and on rural residential properties.

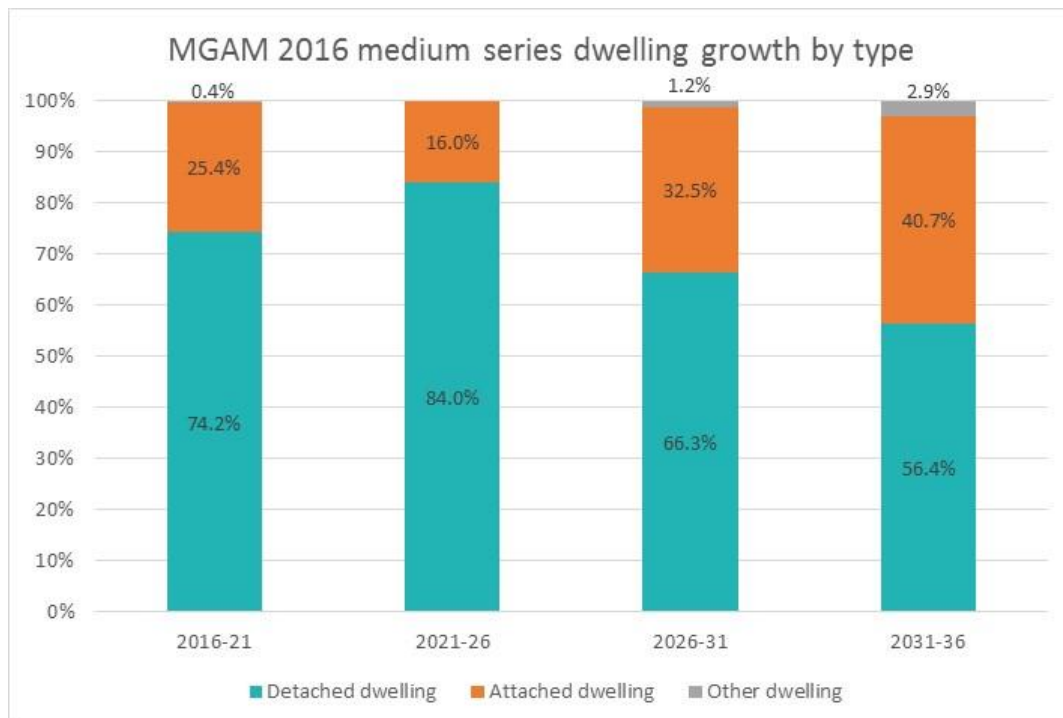


Figure 13 – MGAM 2016 dwelling growth by dwelling type

The proportion of detached and attached dwelling growth changes in each projection period as shown in Figure 13. The relatively low proportion of detached dwellings in the first 5 year period is likely to be caused by a number of attached dwelling development approvals occurring by 2021.

The proportion of detached dwellings increases between 2026 to 2031 to 84 per cent of all dwelling growth and then declines to 56 percent of all dwelling growth by 2036. The likely cause of this decrease towards the end of the projected growth scenario to 2036 is increased attached dwelling growth predominantly in the Mackay city centre.

Overall, the model does not run out of attached dwelling or detached dwelling stock under the growth scenario. This means that there is sufficient land and associated dwelling stock available to accommodate the projected population growth.

6.2 Non-residential development projections

The total employment projected in the target areas (inside and outside the key urban areas) for the MGAM 2016 medium series growth scenario is summarised in Table 14 and presented in Figure 14.

These employment projections demonstrate that the model has successfully allocated non-residential development to meet the overall employment targets within a one percent level of accuracy.

Table 14 – MGAM 2016 total existing and projected employees by target area

Target area	2016	2021	2026	2031	2036	Ultimate development
Inside Key Urban Areas	43,450	47,689	50,698	54,268	60,879	86,511
Outside Key Urban Areas	5,848	5,937	5,973	6,058	6,071	6,795
TOTAL projected employees	49,298	53,625	56,671	60,326	66,950	93,306
Total employment targets	-	53,559	57,840	62,605	67,624	-

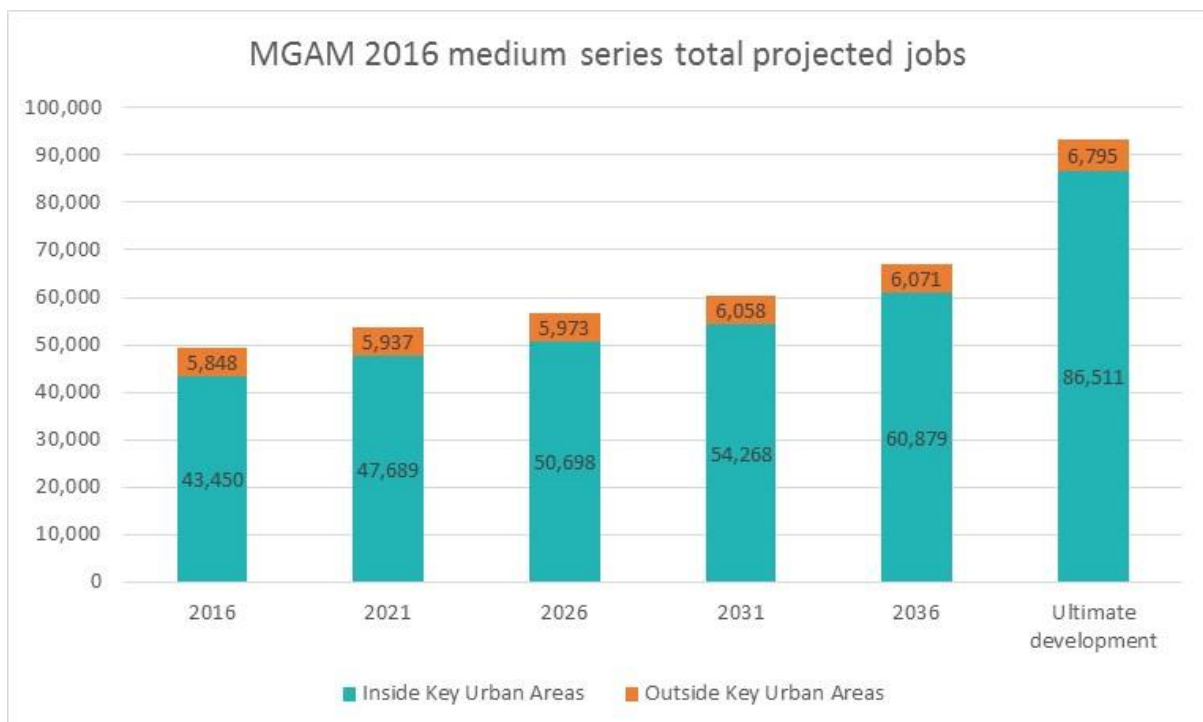


Figure 14 – MGAM 2016 total projected employees

The total projected employees by *development type* from 2016 to 2036 and at ultimate development are summarised in Table 15. The predominant employment industries are Industrial, Retail and Service and Commercial.

Table 15 – MGAM 2016 total projected employees by development type

Development type	2016	2021	2026	2031	2036	Ultimate development
Commercial	7,609	8,784	9,097	9,683	9,851	11,424
Community	2,056	2,245	2,337	2,423	2,452	2,567
Education - Child Care	338	413	460	504	519	528
Education - School	2,469	2,650	2,894	3,166	3,383	3,384
Education - Tertiary	816	839	864	901	1,037	1,037
General Heavy Industry	5,596	5,611	5,611	5,611	6,901	16,181
Hospital	1,283	1,349	1,385	1,426	1,633	1,633
Light Industry	15,084	16,082	17,386	18,760	22,875	36,223
Other Bed	584	671	904	1,194	1,356	1,454
Other Rural	636	672	672	672	672	672
Outdoor Sport and Recreation	92	135	131	132	132	144
Retail and Service	9,496	10,265	10,764	11,469	11,700	13,111
Showroom	1,289	1,905	2,178	2,334	2,421	2,685
Visitor Accommodation	1,951	2,004	1,988	2,050	2,017	2,106
Total	49,298	53,625	56,671	60,326	66,950	93,150

Figure 15 shows the composition of the employment growth by *development type* change significantly and is quite lumpy over the 20 year projection period. This “lumpiness” is reflective of commercial development patterns and is caused by the under projection of industrial employees in the middle years 2026 and 2031, which the model then rectifies in the final projection period 2031-2036.

There is an oversupply of commercial and retail and showroom employment in the first 5 year projection period from 2016 to 2021. This is due to a number of current development approvals for commercial, and retail and showroom employment. The model rectifies this oversupply by reducing growth for these development groups in the latter part of the projection period.

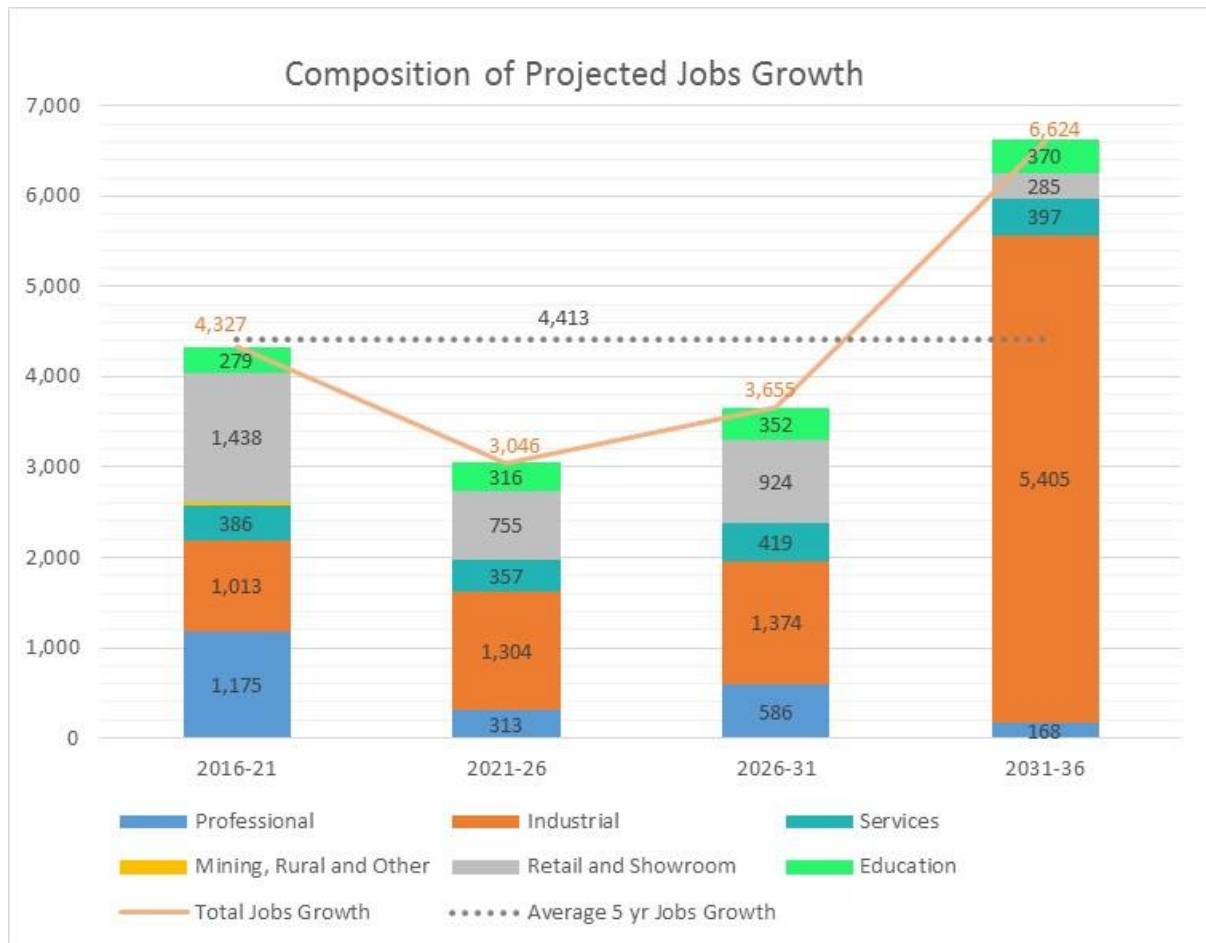


Figure 15 – MGAM 2016 composition of projected employment growth

As shown in Figure 15, an average of 4,413 additional employees is projected for each average 5 year period (or 880 employees per year) between 2016 and 2036. This employment growth comprises:

- Industrial (average 455 employees annually)
- Retail and showroom (average 170 employees annually)
- Commercial (average 112 employees annually)
- Services (average 78 employees annually)
- Education (average 66 employees annually)

Table 16 provides a summary of the projected non-residential floor space (m² GFA) for each development type.

Table 16 – MGAM 2016 existing and projected non-residential floor space (m² GFA)

Development type	Non-residential floor space (m ² GFA)					
	2016	2021	2026	2031	2036	Ultimate development
Commercial	204,310	238,036	245,879	262,466	267,011	304,935
Community	123,350	134,691	140,245	145,401	147,125	154,016
Education - Child Care	16,897	20,662	23,014	25,196	25,973	26,416
Education - School	185,173	198,744	217,063	237,436	253,754	253,789
Education - Tertiary	40,799	41,957	43,193	45,029	51,873	51,873
General Heavy Industry	475,687	476,929	476,929	476,929	586,569	1,375,370
Hospital	72,060	75,768	77,827	80,148	88,223	88,223
Light Industry	1,532,194	1,622,018	1,739,367	1,863,044	2,242,750	3,448,999
Other Bed	35,011	40,285	54,217	71,665	81,386	87,256
Other Rural	70,144	74,106	74,106	74,106	74,106	74,106
Outdoor Sport and Recreation	9,187	13,544	13,110	13,211	13,161	14,361
Retail and Service	572,249	618,413	648,319	690,641	704,511	789,189
Showroom	77,344	114,270	130,681	140,026	145,256	161,076
Visitor Accommodation	201,160	206,459	204,804	211,091	207,753	216,697
Total	3,615,565	3,875,881	4,088,754	4,336,388	4,889,450	7,046,307

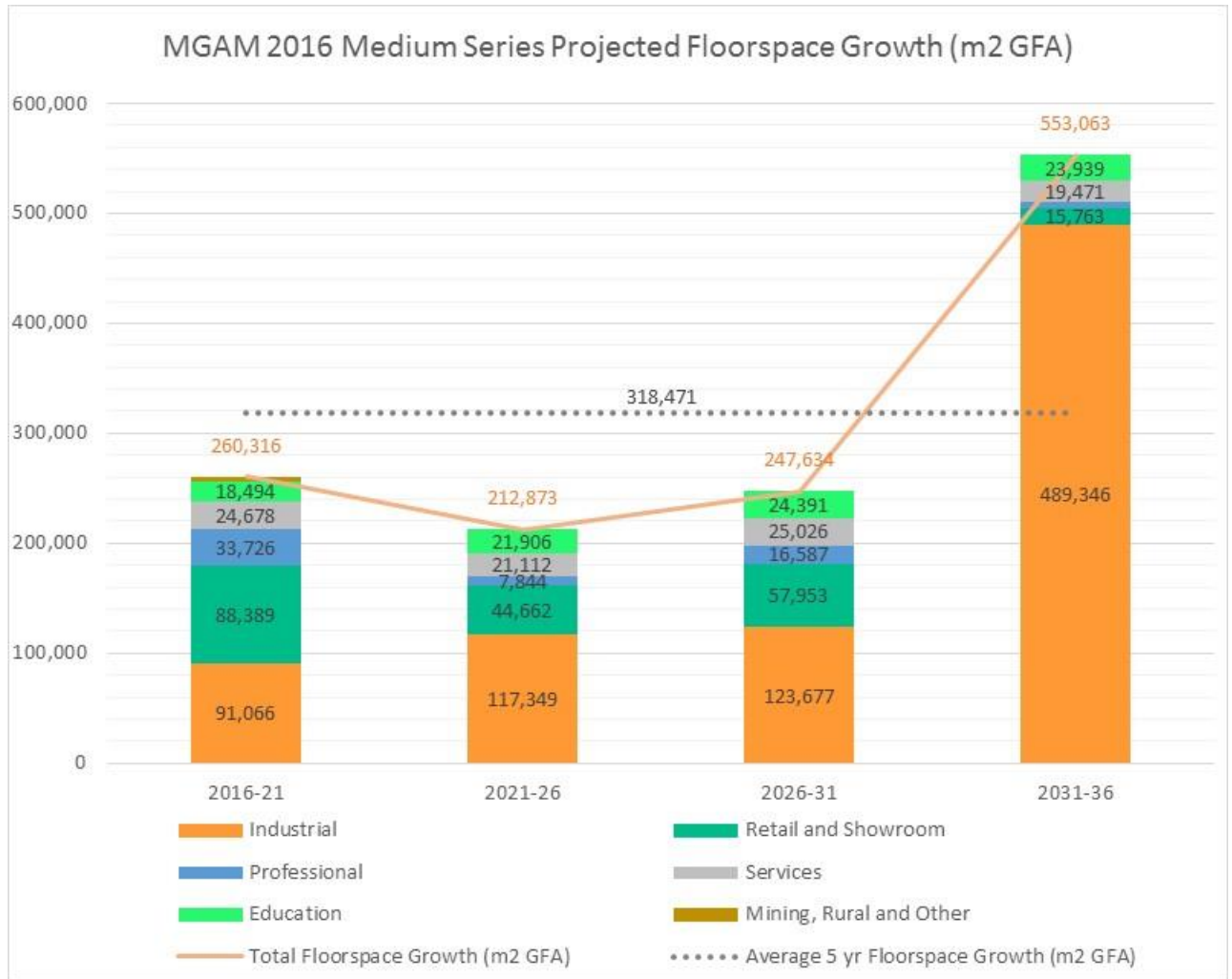


Figure 16 – MGAM 2016 projected floor space growth (m² GFA)

The projected growth in *floor space* is directly related to employment growth and shows a similar pattern of significant change by development type across the five year projection periods. Figure 16 thus shows a similar pattern to Figure 15.

Figure 17 presents the geographic distribution of *GFA growth* by PIA area. These figures demonstrate the dominance of employment south of the Pioneer River in the Mackay urban area. Over half of the total non-residential GFA growth is projected to occur in the Southern PIA in the Mackay urban area, which includes the Mackay city centre, West Mackay, Ooralea, Bakers Creek and Paget.

The Northern PIA (main urban areas north of the Pioneer River except for Slade Point and Mackay Harbour) is also projected to accommodate a substantial amount of commercial GFA growth.

The growth outside the PIA is predominantly located on sites nearby to the PIA in the southern Mackay urban area, including industrial investigation areas.

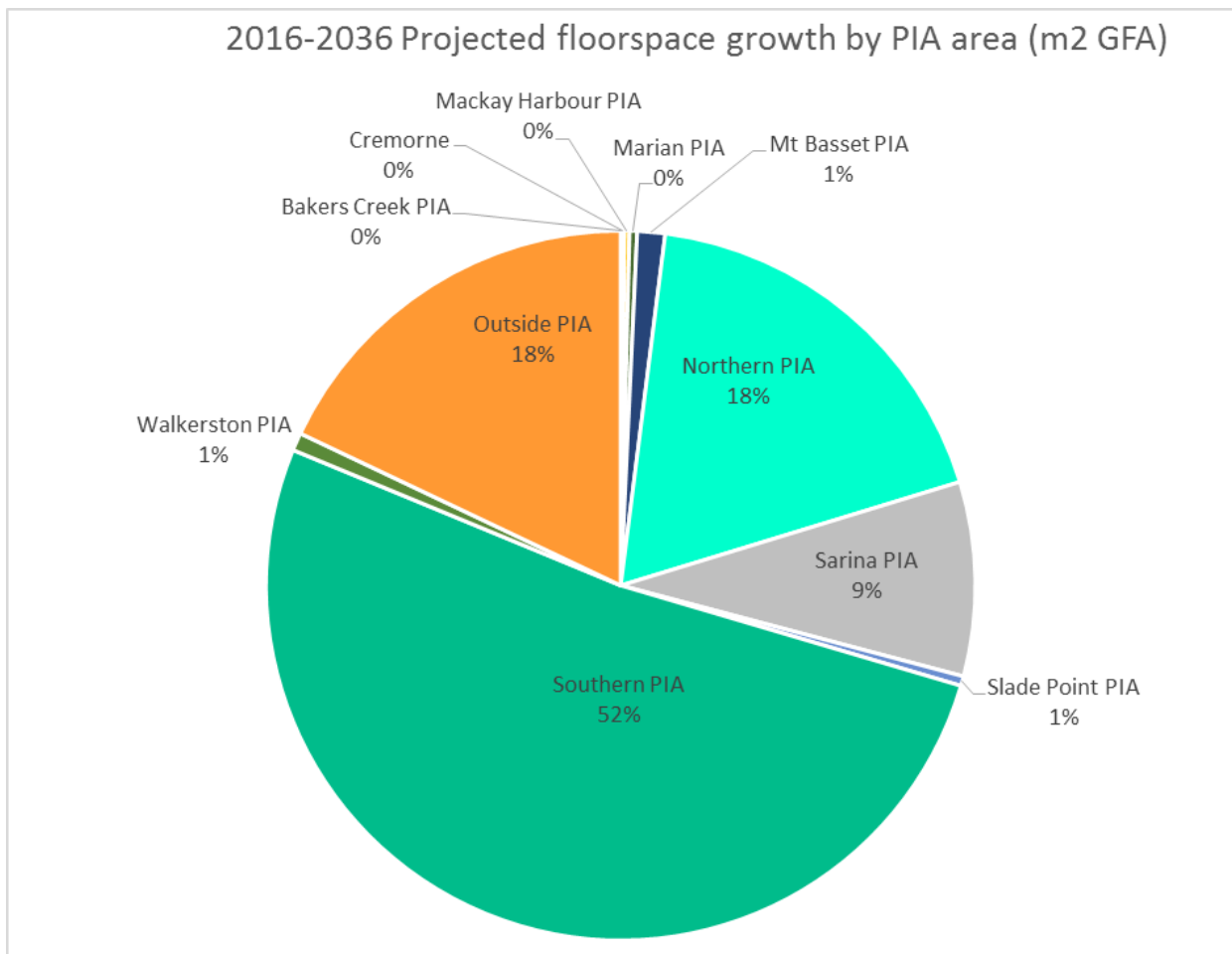


Figure 17 – MGAM 2016 projected floor space growth by PIA area (m² GFA)

6.3 Assessment of PIA capacity

The MGAM 2016 modelling results shows that the target areas (inside and outside the key urban areas) can accommodate the projected growth to 2036. The PIA, as identified, can accommodate 10-15 years of projected growth under this scenario to 2031.

Attachment 1

Table 17 – Average residential occupancy rates

Projection area (SA2)	2016		2021		2026		2031		2036	
	Detached Dwelling	Attached Other Dwelling	Detached Dwelling	Attached Other Dwelling	Detached Dwelling	Attached Other Dwelling	Detached Dwelling	Attached Other Dwelling	Detached Dwelling	Attached Other Dwelling
Andergrove - Beaconsfield	2.91	1.63	2.90	1.63	2.90	1.62	2.88	1.61	2.86	1.60
East Mackay	2.63	1.59	2.62	1.59	2.62	1.59	2.60	1.58	2.58	1.57
Eimeo - Rural View	2.57	1.77	2.56	1.77	2.56	1.76	2.54	1.75	2.52	1.74
Eungella Hinterland	2.57	1.58	2.57	1.58	2.57	1.58	2.57	1.58	2.57	1.58
Mackay	2.34	1.53	2.34	1.53	2.33	1.52	2.32	1.51	2.30	1.50
Mackay Harbour	2.09	1.69	2.09	1.69	2.08	1.69	2.07	1.68	2.06	1.67
Mount Pleasant - Glenella	2.80	1.94	2.80	1.93	2.79	1.93	2.78	1.92	2.76	1.91
North Mackay	2.58	1.69	2.57	1.69	2.57	1.69	2.55	1.68	2.54	1.67
Ooralea - Bakers Creek	2.35	2.08	2.35	2.08	2.34	2.07	2.33	2.06	2.31	2.05
Pioneer Valley	2.64	1.58	2.63	1.58	2.63	1.58	2.61	1.57	2.59	1.56
Sarina	2.55	1.60	2.55	1.60	2.54	1.60	2.52	1.59	2.51	1.58
Seaforth - Calen	2.22	0.74	2.21	0.74	2.21	0.74	2.20	0.73	2.18	0.73
Shoal Point - Bucasia	2.76	1.49	2.75	1.49	2.75	1.48	2.73	1.47	2.71	1.46
Slade Point	2.76	1.71	2.75	1.70	2.75	1.70	2.73	1.69	2.71	1.68
South Mackay	2.63	1.65	2.62	1.65	2.62	1.65	2.60	1.64	2.58	1.63
Walkerston - Eton	2.71	1.99	2.71	1.99	2.70	1.98	2.68	1.97	2.67	1.96
West Mackay	2.49	1.55	2.48	1.54	2.48	1.54	2.46	1.53	2.44	1.52

Table 18 – Average GFA conversion rates

Development type	Projection area (SA2)	2016	2021	2026	2031	2036	Ultimate development
Other Bed	All	60	60	60	60	60	60
Visitor Accommodation	All	100	100	100	100	100	100
Retail and Service	All	60	60	60	60	60	60
Showroom	All	60	60	60	60	60	60
Commercial	All except Mackay	20	20	20	20	20	20
Commercial	Mackay	30	30	30	30	30	30
Light Industry	All except Mackay Harbour	90	90	90	90	90	90
Light Industry	Mackay Harbour	300	300	300	300	300	300
General Heavy Industry	All except Mackay Harbour	85	85	85	85	85	85
General Heavy Industry	Mackay Harbour	200	200	200	200	200	200
Community	All	60	60	60	60	60	60
Education - Child Care	All	50	50	50	50	50	50
Education - School	All	75	75	75	75	75	75
Education - Tertiary	All	50	50	50	50	50	50
Hospital	All	40	40	40	40	40	40
Outdoor Sport and Recreation	All	100	100	100	100	100	100
Other Rural	All	110	110	110	110	110	110

Table 19 – Planned densities

Zone	Precinct	ZP Code	Release Year	RD ² DetDw	RD AttDw	RD OthDw	RD Tot Dw	PR ³ OthBd	PR Vis	PR Ret	PR Show	PR Coml	PR Lind	PR GHInd	PR Comy	PR EdCC	PR EdSC	PR EdTE	PR Hosp	PR OutSR	PR OthRu	PR Total
Community Facilities		CMTY		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conservation		CONS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
District Centre	ANDERGROVE	CTRDANDE		0	0	0	0	0	0	0.316	0.02	0.04	0	0	0.02	0.004	0	0	0	0	0	0.4
District Centre	MARIAN	CTRDMARI		0	0	0	0	0	0	0.32	0	0.02	0.036	0	0.02	0.004	0	0	0	0	0	0.4
District Centre	NORTH MACKAY	CTRDNORT		0	0	0	0	0	0	0.1	0.04	0.176	0.06	0	0.02	0.004	0	0	0	0	0	0.4
District Centre	WALKERSTON	CTRDWALK		0	0	0	0	0	0	0.24	0.02	0.08	0.036	0	0.02	0.004	0	0	0	0	0	0.4
District Centre	WEST MACKAY	CTRDWEST		0	0	0	0	0	0	0.25	0	0.1	0	0	0.025	0.005	0	0	0	0	0	0.38
Local Centre	Blacks Beach	CTRLBLAC		0	0	0	0	0	0	0.3	0	0.084	0	0	0.008	0.008	0	0	0	0	0	0.4
Local Centre	BUCASIA	CTRLBUCA		0	0	0	0	0	0	0.25	0	0.084	0	0	0.008	0.008	0	0	0	0	0	0.35
Local Centre	Celeber Drive	CTRLCELE		0	0	0	0	0	0	0.3	0	0.084	0	0	0.008	0.008	0	0	0	0	0	0.4
Local Centre	EBLACKS BEACH	CTRLEBLA		0	0	0	0	0	0	0.3	0	0.084	0	0	0.008	0.008	0	0	0	0	0	0.4
Local Centre	EVANS STREET	CTRLEVAN		0	0	0	0	0	0	0.3	0	0.084	0	0	0.008	0.008	0	0	0	0	0	0.4
Local Centre	FINCH STREET	CTRLFINC		0	0	0	0	0	0	0.3	0	0.084	0	0	0.008	0.008	0	0	0	0	0	0.4
Local Centre	GASWORKS	CTRLGASW		0	0	0	0	0	0	0.3	0	0.084	0	0	0.008	0.008	0	0	0	0	0	0.4
Local Centre	GEORGE STREET	CTRLGEOR		0	0	0	0	0	0	0.3	0	0.084	0	0	0.008	0.008	0	0	0	0	0	0.4
Local Centre	MARINA	CTRLMARI		0	0	0	0	0	0	0.35	0	0.084	0	0	0.008	0.008	0	0	0	0	0	0.45
Local Centre	MARTINS CORNER	CTRLMART		0	0	0	0	0	0	0.3	0	0.084	0	0	0.008	0.008	0	0	0	0	0	0.4
Local Centre	MIRANI	CTRLMIRA		0	0	0	0	0	0	0.3	0	0.084	0	0	0.008	0.008	0	0	0	0	0	0.4
Local Centre	MOORE STREET	CTRLMOOR		0	0	0	0	0	0	0.3	0	0.084	0	0	0.008	0.008	0	0	0	0	0	0.4
Local Centre	OORALEA	CTRLOORA		0	0	0	0	0	0	0.3	0	0.084	0	0	0.008	0.008	0	0	0	0	0	0.4
Local Centre	PHEASANT STREET	CTRLPHEA		0	0	0	0	0	0	0.3	0	0.084	0	0	0.008	0.008	0	0	0	0	0	0.4
Local Centre	SARINA BEACH ROAD	CTRLSARI		0	0	0	0	0	0	0.3	0	0.084	0	0	0.008	0.008	0	0	0	0	0	0.4
Local Centre	UNGERER STREET	CTRLUNGE		0	0	0	0	0	0	0.3	0	0.084	0	0	0.008	0.008	0	0	0	0	0	0.4
Major Centre	MOUNT PLEASANT	CTRMMOUN		0	0	0	0	0	0	0.4	0.036	0.04	0	0	0.02	0.004	0	0	0	0	0	0.5
Major Centre	RURAL VIEW	CTRMURURA		0	0	0	0	0	0	0.4	0.036	0.04	0	0	0.02	0.004	0	0	0	0	0	0.5
Major Centre	SARINA	CTRMSARI		0	0	0	0	0	0	0.28	0.036	0.04	0.02	0	0.02	0.004	0	0	0	0	0	0.4
Neighbourhood Centre		CTRN		0	0	0	0	0	0	0.3	0	0.056	0.028	0	0.008	0.008	0	0	0	0	0	0.4
Principal Centre		CTRP		0	0	0	0	0.025	0.105	0.63	0.525	0.735	0	0	0.105	0	0	0	0	0	0	2.125
Emerging Community		EC		12	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emerging Community	1 Alexandra Street	EC1		12	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

² RD means residential density

³ PR means plot ratio

Zone	Precinct	ZP Code	Release Year	RD ² DetDw	RD AttDw	RD OthDw	RD Tot Dw	PR ³ OthBd	PR Vis	PR Ret	PR Show	PR ComI	PR Lind	PR GHInd	PR Comy	PR EdCC	PR EdSC	PR EdTE	PR Hosp	PR OutSR	PR OthRu	PR Total
Emerging Community	2 Andergrove Lakes (residential component)	EC2		12	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emerging Community	3 Mirani	EC3		12	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emerging Community	4 Northern Beaches South	EC4		12	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emerging Community	5 Ooralea	EC5		12	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emerging Community	6 Sarina North	EC6		12	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emerging Community	7. Shoal Point-Bucasia (residential component)	EC7		12	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emerging Community	8. Walkerston	EC8		12	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
High Impact Industry	1 Sugar Mill	HI1		0	0	0	0	0	0	0	0	0	0	0.315	0	0	0	0	0	0	0	0
High Impact Industry	2 Air Quality	HI2		0	0	0	0	0	0	0	0	0	0.185	0.315	0	0	0	0	0	0	0	0.5
High Impact Industry	Brewers Rd Sarina	HIBREW		0	0	0	0	0	0	0	0	0	0	0.315	0	0	0	0	0	0	0	0.315
High Impact Industry	Harbour Road North Mackay	HIHARB		0	0	0	0	0	0	0	0	0	0.185	0.315	0	0	0	0	0	0	0	0.5
High Impact Industry	Paget, McLennan Street Ooraleigh,	HIPAGE		0	0	0	0	0	0	0	0	0	0.185	0.315	0	0	0	0	0	0	0	0.5
High Impact Industry	Sugar mill at Pleystowe	HISUGA		0	0	0	0	0	0	0	0	0	0	0.315	0	0	0	0	0	0	0	0.315
Industry Investigation	Boundary Road east precinct	II1		0	0	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0.5
Industry Investigation	Cowleys Road precinct	II2		0	0	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0.5
Industry Investigation	Glenella precinct	II3		0	0	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0.5
Industry Investigation	Marian precinct	II4		0	0	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0.5
Industry Investigation	Paget south precinct	II5		0	0	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0.5
Industry Investigation	Sarina precinct	II6		0	0	0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0.5
Low Impact Industry		INDL		0	0	0	0	0	0	0	0	0	0.6	0	0	0	0	0	0	0	0	0.6
Medium Density Residential	Low-medium density precinct	MD1		0	20	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Medium Density Residential	General medium density precinct	MD2		0	33	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Medium Density Residential	Multi-storey medium density precinct	MD3		0	50	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mixed Use zone	Amenity and convenience precinct	MX1		0	23.3333 3	0	23.3333 3	0.025	0.05	0.1	0	0	0	0	0	0	0	0	0	0	0	0.175

Zone	Precinct	ZP Code	Release Year	RD ² DetDw	RD AttDw	RD OthDw	RD Tot Dw	PR ³ OthBd	PR Vis	PR Ret	PR Show	PR ComI	PR Lind	PR GHInd	PR Comy	PR EdCC	PR EdSC	PR EdTE	PR Hosp	PR OutSR	PR OthRu	PR Total
Mixed Use zone	Fringe Commercial precinct	MX2		0	18.3333 3	0	18.3333 3	0.025	0.05	0.1	0	0.05	0	0	0	0	0	0	0	0	0	0.225
Open Space		OPSP		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
High density residential		RESH		0	133	0	133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Low Density Residential		RESL		12	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Medium Density Residential		RESM		0	33	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rural Residential		RRES		0.45	0	0	0.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rural zone	Investigation area precinct	RU1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rural zone	Investigation area precinct Ooralea	RUOORINV	2031	12	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Specialised centre zone	Showroom and hardware precinct	SC1		0	0	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0.5
Specialised centre zone	Tavern precinct	SC2		0	0	0	0	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0.3
Sport and Recreation		SPRC		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Special Purpose		SPURP		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tourism (Major)		TOUR		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Township		TWNS		7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 20 – MGAM 2016 Development applications summary

Status	Override Year	Detached Dwelling	Attached Dwelling	Other Dwelling	Commercial GFA	Community GFA	Education - Child Care GFA	Education - School GFA	Education - Tertiary GFA	General Heavy Industry GFA	Hospital GFA	Light Industry GFA	Other Bed GFA	Other Rural GFA	Outdoor Sport & Rec GFA	Retail & Service GFA	Showroom GFA	Visitor Accom. GFA	Enrolments	Hospital Beds	Other Beds	Visitor Beds
Approved DA	2021	358	187	0	3,000	2,850	22,594	0	4,097	27,010	2,660	3,156	1,222	454	0	0	4,164	4,140	99	0	100	85
	2026	2,524	397	0	10,445	0	29,221	16,291	3,764	17,194	0	2,850	550	400	0	0	0	0	16	0	159	0
	2031	1,086	829	70	10,190	0	14,527	0	17,543	62,419	0	0	0	400	0	0	0	0	24	0	393	293
	2036	573	631	125	5,580	0	3,059	14,250	208	72,751	0	0	0	0	30,273	0	0	0	0	0	186	45
	2041	2	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Undecided DA	Nil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2021	27	5	32	0	0	1,150	0	0	3,101	0	0	1,063	0	0	0	0	0	143	0	0	0
	2026	1,048	126	0	0	0	4,220	0	800	1,700	0	0	0	0	0	0	0	0	0	0	0	0
	2031	2,046	90	0	5,882	5,686	3,496	0	0	14,500	0	0	0	0	0	0	0	0	0	0	205	114
	2036	1,322	151	0	0	0	5,448	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89
	2041	407	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2046	262	125	0	0	0	2,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100
Potential / Developer interest	Nil	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2021	0	98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2026	76	77	0	0	0	6,890	0	0	26,400	0	0	0	0	0	0	0	0	0	0	0	0
	2031	512	637	90	0	0	28,794	0	0	9,000	0	0	0	0	0	0	0	0	0	0	0	0
	2036	1,054	593	0	1,500	0	14,652	0	800	10,920	0	0	0	9,060	0	9,200	0	0	400	144	50	0
	2041	368	0	0	0	0	14,200	0	0	47,845	0	0	0	900	0	0	1,200	0	0	0	0	0
	2046	2,363	0	0	0	0	25,000	0	0	0	0	3,000	0	0	0	0	0	0	0	0	0	0
	2051	84	0	0	0	0	0	0	0	46,319	0	0	0	0	0	0	0	0	0	0	0	0
Other	Nil	0	499	0	0	0	0	0	5,580	90,436	0	0	0	0	0	0	0	0	0	0	0	0
	2026	49	138	0	3,600	0	0	13,796	3,611	506	0	0	0	0	0	0	497	0	0	0	120	0
	2031	629	718	0	0	0	1,923	0	5,578	523	0	0	0	0	0	0	0	0	0	0	0	0
	2036	807	1,308	0	3,600	0	5,502	0	5,352	1,624	0	3,111	0	4,300	0	0	0	0	0	0	120	0
	2041	10	597	0	3,600	0	11,095	0	5,794	0	0	0	0	0	0	0	0	0	0	0	120	0
	2046	35	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2051	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2056	125	53	0	0	0	0	0	13,597	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		15,842	7,343	317	47,397	8,536	193,771	44,337	66,724	432,248	2,660	12,117	2,835	15,514	30,273	9,200	5,861	4,140	682	144	1,453	726

Table 21 – MGAM 2016 Existing and projected population

Projection Area	Development type	Existing and projected population					
		2016	2021	2026	2031	2036	Ultimate development
Andergrove – Beaconsfield (Inside the PIA)	Attached Dwelling	1,195	1,245	1,340	1,721	1,706	2,254
	Detached Dwelling	14,340	15,533	17,119	17,632	18,147	19,352
	Other Dwelling	482	482	480	589	850	850
	Total	16,018	17,261	18,938	19,942	20,702	22,456
East Mackay (Inside the PIA)	Attached Dwelling	785	898	1,113	1,335	1,437	1,904
	Detached Dwelling	2,904	2,940	2,979	2,957	2,973	2,973
	Other Dwelling	143	143	143	142	141	141
	Total	3,832	3,982	4,236	4,434	4,551	5,018
Eimeo - Rural View (Inside the PIA)	Attached Dwelling	1,071	1,403	1,395	1,543	1,901	2,863
	Detached Dwelling	10,763	12,911	15,565	16,894	19,049	21,006
	Other Dwelling	0	0	0	0	0	0
	Total	11,834	14,313	16,960	18,437	20,950	23,869
Mackay (Inside the PIA)	Attached Dwelling	2,676	2,936	3,369	4,609	8,198	10,858
	Detached Dwelling	1,395	1,381	1,375	1,325	1,323	1,323
	Other Dwelling	187	187	185	184	183	183
	Total	4,257	4,504	4,929	6,118	9,703	12,364
Mackay Harbour (Inside the PIA)	Attached Dwelling	465	692	692	688	683	1,036
	Detached Dwelling	21	140	237	277	338	797
	Other Dwelling	0	0	0	0	84	84
	Total	486	832	929	965	1,105	1,916
Mount Pleasant – Glenella (Inside the PIA)	Attached Dwelling	512	609	609	751	748	913
	Detached Dwelling	8,820	10,417	10,999	12,083	13,354	13,494
	Other Dwelling	549	546	546	543	541	541
	Total	9,881	11,572	12,154	13,377	14,642	14,947
North Mackay (Inside the PIA)	Attached Dwelling	1,313	1,386	1,542	1,709	1,996	3,446
	Detached Dwelling	5,219	5,335	5,358	5,316	5,379	5,379
	Other Dwelling	357	357	357	354	352	352
	Total	6,889	7,078	7,256	7,380	7,728	9,178
Ooralea - Bakers Creek (Inside the PIA)	Attached Dwelling	449	464	515	513	510	510

Projection Area	Development type	Existing and projected population					
		2016	2021	2026	2031	2036	Ultimate development
	Detached Dwelling	3,511	3,735	4,253	4,389	4,741	4,783
	Other Dwelling	0	0	0	0	0	0
	Total	3,960	4,199	4,769	4,902	5,252	5,294
Pioneer Valley (Inside the PIA)	Attached Dwelling	70	84	84	84	83	490
	Detached Dwelling	4,097	4,926	5,515	6,105	6,721	8,562
	Other Dwelling	11	11	11	11	11	11
	Total	4,178	5,021	5,610	6,199	6,815	9,063
Sarina (Inside the PIA)	Attached Dwelling	243	243	243	417	414	1,115
	Detached Dwelling	3,134	3,358	3,675	4,720	5,293	5,323
	Other Dwelling	27	53	53	52	52	52
	Total	3,404	3,654	3,971	5,189	5,759	6,490
Shoal Point – Bucasia (Inside the PIA)	Attached Dwelling	437	610	708	834	877	1,258
	Detached Dwelling	5,614	6,054	7,416	9,682	11,568	13,871
	Other Dwelling	0	0	0	0	0	0
	Total	6,050	6,665	8,124	10,517	12,445	15,129
Slade Point (Inside the PIA)	Attached Dwelling	272	389	397	449	478	490
	Detached Dwelling	3,704	3,748	3,748	3,721	3,694	3,927
	Other Dwelling	0	0	0	0	0	0
	Total	3,976	4,138	4,145	4,170	4,172	4,417
South Mackay (Inside the PIA)	Attached Dwelling	1,421	1,492	1,492	1,482	1,473	2,332
	Detached Dwelling	6,223	6,225	6,225	6,178	6,130	6,130
	Other Dwelling	2	2	2	2	2	2
	Total	7,645	7,719	7,719	7,662	7,605	8,464
Walkerston – Eton (Inside the PIA)	Attached Dwelling	241	241	240	238	237	237
	Detached Dwelling	2,946	3,460	3,541	3,853	4,015	4,710
	Other Dwelling	0	0	0	0	0	0
	Total	3,187	3,700	3,781	4,091	4,252	4,947
West Mackay (Inside the PIA)	Attached Dwelling	921	1,063	1,091	1,257	1,410	3,276
	Detached Dwelling	5,246	5,243	5,297	5,247	5,190	5,190
	Other Dwelling	171	169	169	168	167	167
	Total	6,338	6,476	6,558	6,672	6,767	8,633
Inside the PIA Total	Attached Dwelling	12,070	13,756	14,829	17,630	22,151	32,983

Projection Area	Development type	Existing and projected population					
		2016	2021	2026	2031	2036	Ultimate development
	Detached Dwelling	77,937	85,406	93,304	100,378	107,914	116,821
	Other Dwelling	1,928	1,950	1,946	2,047	2,382	2,382
	Total	91,935	101,112	110,078	120,055	132,448	152,186
Outside the PIA Total	Attached Dwelling	559	623	646	670	657	668
	Detached Dwelling	30,316	30,837	32,587	34,497	36,673	46,820
	Other Dwelling	33	33	33	32	32	32
	Total	30,907	31,492	33,266	35,199	37,363	47,520
Mackay Region	Attached Dwelling	12,629	14,379	15,475	18,300	22,809	33,651
	Detached Dwelling	108,252	116,242	125,891	134,875	144,588	163,641
	Other Dwelling	1,961	1,983	1,978	2,079	2,414	2,414
	Total	122,842	132,604	143,344	155,254	169,811	199,706

Table 22 – MGAM 2016 Existing and projected employees

Projection area (SA2)	Development type	Existing and projected employees					
		2016	2021	2026	2031	2036	Ultimate development
Andergrove – Beaconsfield (Inside the PIA)	Commercial	29	29	29	52	52	70
	Community	89	97	100	106	105	105
	Education - Child Care	96	103	114	126	130	130
	Education - School	404	439	484	534	548	548
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	0
	Hospital	0	0	0	0	0	0
	Light Industry	13	13	13	13	13	13
	Other Bed	50	52	33	34	23	23
	Other Rural	0	0	0	0	0	0
	Outdoor Sport and Recreation	0	0	0	0	0	0
	Retail and Service	233	309	367	374	443	519
	Showroom	13	13	13	16	16	16
	Visitor Accommodation	216	216	209	209	205	205
	TOTAL	1,141	1,270	1,361	1,466	1,536	1,629
East Mackay (Inside the PIA)	Commercial	1	1	0	0	0	0
	Community	7	7	7	7	7	7

Projection area (SA2)	Development type	Existing and projected employees					
		2016	2021	2026	2031	2036	Ultimate development
	Education - Child Care	15	16	18	20	21	21
	Education - School	83	89	98	108	112	112
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	0
	Hospital	0	0	0	0	0	0
	Light Industry	0	0	0	0	0	0
	Other Bed	91	96	98	101	100	100
	Other Rural	0	0	0	0	0	0
	Outdoor Sport and Recreation	0	0	0	0	0	0
	Retail and Service	10	10	22	22	22	22
	Showroom	0	0	0	0	0	0
	Visitor Accommodation	27	27	27	27	27	27
	TOTAL	234	246	271	286	290	290
Eimeo - Rural View (Inside the PIA)	Commercial	78	78	244	236	260	378
	Community	63	66	68	70	70	84
	Education - Child Care	29	32	35	38	40	40
	Education - School	93	100	110	120	216	216
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	0
	Hospital	0	0	0	0	0	0
	Light Industry	30	181	181	181	181	322
	Other Bed	0	0	0	0	0	4
	Other Rural	0	0	0	0	0	0
	Outdoor Sport and Recreation	0	0	0	0	0	0
	Retail and Service	274	274	477	566	599	928
	Showroom	69	69	104	104	190	226
	Visitor Accommodation	83	83	83	83	83	87
	TOTAL	720	884	1,302	1,400	1,639	2,286
Mackay (Inside the PIA)	Commercial	5,213	6,236	6,393	6,880	6,999	7,645
	Community	406	520	533	576	624	635
	Education - Child Care	32	36	50	56	57	57
	Education - School	174	184	199	215	187	187

Projection area (SA2)	Development type	Existing and projected employees					
		2016	2021	2026	2031	2036	Ultimate development
	Education - Tertiary	489	490	492	494	624	624
	General Heavy Industry	6	6	6	6	6	6
	Hospital	0	0	0	0	0	0
	Light Industry	1,118	1,219	1,225	1,203	1,208	1,482
	Other Bed	139	161	165	269	301	324
	Other Rural	0	0	0	0	0	0
	Outdoor Sport and Recreation	71	72	68	68	68	68
	Retail and Service	4,340	4,537	4,588	4,606	4,691	4,691
	Showroom	175	398	632	770	770	944
	Visitor Accommodation	168	197	198	204	196	262
	TOTAL	12,329	14,057	14,548	15,347	15,730	16,925
Mackay Harbour (Inside the PIA)	Commercial	263	263	263	263	262	262
	Community	36	38	39	41	40	40
	Education - Child Care	0	0	0	0	0	0
	Education - School	0	0	0	0	0	0
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	0
	Hospital	0	0	0	0	0	0
	Light Industry	23	23	23	23	68	91
	Other Bed	0	0	0	0	0	0
	Other Rural	0	0	0	0	0	0
	Outdoor Sport and Recreation	0	0	0	0	0	0
	Retail and Service	46	46	46	54	87	87
	Showroom	0	0	0	0	0	0
	Visitor Accommodation	1	1	1	1	1	1
	TOTAL	369	371	372	381	458	481
Mount Pleasant – Glenella (Inside the PIA)	Commercial	489	549	567	607	607	743
	Community	102	117	123	134	133	158
	Education - Child Care	24	50	53	58	59	59
	Education - School	224	241	265	291	302	302
	Education - Tertiary	0	0	0	0	0	0

Projection area (SA2)	Development type	Existing and projected employees					
		2016	2021	2026	2031	2036	Ultimate development
	General Heavy Industry	0	0	0	0	0	0
	Hospital	92	97	99	102	101	101
	Light Industry	441	463	756	756	877	946
	Other Bed	61	65	66	118	118	118
	Other Rural	0	0	0	0	0	0
	Outdoor Sport and Recreation	4	4	3	3	3	3
	Retail and Service	1,098	1,595	1,641	1,706	1,706	2,008
	Showroom	655	659	664	678	678	711
	Visitor Accommodation	103	103	103	160	160	163
	TOTAL	3,293	3,942	4,340	4,614	4,744	5,313
North Mackay (Inside the PIA)	Commercial	350	431	432	432	447	680
	Community	267	285	293	302	296	296
	Education - Child Care	27	29	32	35	37	37
	Education - School	399	429	471	518	537	537
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	152
	Hospital	101	106	108	111	99	99
	Light Industry	335	335	337	337	362	546
	Other Bed	32	34	191	192	191	200
	Other Rural	0	0	0	0	0	0
	Outdoor Sport and Recreation	5	5	5	6	6	6
	Retail and Service	536	539	545	545	548	567
	Showroom	43	43	43	43	44	54
	Visitor Accommodation	157	158	159	159	145	159
	TOTAL	2,251	2,394	2,617	2,679	2,712	3,333
Ooralea - Bakers Creek (Inside the PIA)	Commercial	603	613	613	613	613	613
	Community	27	28	29	30	30	31
	Education - Child Care	0	0	0	0	0	3
	Education - School	14	15	17	18	19	19
	Education - Tertiary	230	245	258	281	283	283
	General Heavy Industry	2,396	2,410	2,410	2,410	3,700	12,208

Projection area (SA2)	Development type	Existing and projected employees					
		2016	2021	2026	2031	2036	Ultimate development
	Hospital	0	0	0	0	0	0
	Light Industry	6,146	6,440	6,504	6,604	8,767	15,326
	Other Bed	0	0	60	60	120	180
	Other Rural	4	4	4	4	4	4
	Outdoor Sport and Recreation	0	0	0	0	0	0
	Retail and Service	558	544	575	590	660	660
	Showroom	227	227	227	227	227	227
	Visitor Accommodation	76	76	76	76	76	76
	TOTAL	10,280	10,603	10,774	10,914	14,500	29,630
Pioneer Valley (Inside the PIA)	Commercial	75	75	75	75	75	183
	Community	73	76	126	128	128	132
	Education - Child Care	6	6	7	8	8	11
	Education - School	150	161	177	194	202	202
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	516	516	516	516	516	516
	Hospital	0	0	0	0	0	0
	Light Industry	30	30	30	305	664	1,719
	Other Bed	35	37	38	39	39	41
	Other Rural	4	4	4	4	4	4
	Outdoor Sport and Recreation	0	0	0	0	0	0
	Retail and Service	183	202	219	219	219	331
	Showroom	0	0	0	0	0	0
	Visitor Accommodation	79	79	79	79	79	82
	TOTAL	1,150	1,186	1,270	1,567	1,933	3,220
Sarina (Inside the PIA)	Commercial	164	164	164	164	164	284
	Community	260	273	281	289	287	287
	Education - Child Care	22	24	26	29	30	30
	Education - School	122	131	144	158	164	164
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	686	686	686	686	686	686
	Hospital	52	55	56	58	288	288
	Light Industry	183	183	183	601	1,051	3,925

Projection area (SA2)	Development type	Existing and projected employees					
		2016	2021	2026	2031	2036	Ultimate development
	Other Bed	28	29	30	31	30	30
	Other Rural	1	1	1	1	1	1
	Outdoor Sport and Recreation	8	9	9	9	9	9
	Retail and Service	382	382	382	414	414	504
	Showroom	8	8	8	8	8	17
	Visitor Accommodation	103	103	103	103	103	103
	TOTAL	2,018	2,047	2,072	2,551	3,234	6,328
Shoal Point – Bucasia (Inside the PIA)	Commercial	0	0	0	0	0	53
	Community	3	3	3	3	3	55
	Education - Child Care	0	12	12	12	12	14
	Education - School	33	36	39	43	45	45
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	0
	Hospital	0	0	0	0	0	0
	Light Industry	1	1	1	1	1	1
	Other Bed	0	0	0	0	25	25
	Other Rural	14	14	14	14	14	14
	Outdoor Sport and Recreation	0	0	0	0	0	12
	Retail and Service	264	264	223	201	126	126
	Showroom	0	0	0	0	0	0
	Visitor Accommodation	25	25	25	25	25	25
	TOTAL	341	355	318	300	252	371
Slade Point (Inside the PIA)	Commercial	7	7	7	7	7	13
	Community	16	13	13	14	14	14
	Education - Child Care	0	12	12	12	12	13
	Education - School	55	59	65	72	74	74
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	0
	Hospital	0	0	0	0	0	0
	Light Industry	615	636	636	636	646	1,289
	Other Bed	0	0	0	0	0	0
	Other Rural	0	0	0	0	0	0

Projection area (SA2)	Development type	Existing and projected employees					
		2016	2021	2026	2031	2036	Ultimate development
	Outdoor Sport and Recreation	0	0	0	0	0	0
	Retail and Service	82	82	82	82	82	87
	Showroom	0	0	0	0	0	0
	Visitor Accommodation	5	5	5	5	5	5
	TOTAL	780	815	821	828	841	1,493
South Mackay (Inside the PIA)	Commercial	25	25	25	27	27	30
	Community	257	270	277	286	283	283
	Education - Child Care	0	0	0	0	0	0
	Education - School	244	262	287	316	328	328
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	0
	Hospital	0	0	0	0	0	0
	Light Industry	91	97	97	97	97	183
	Other Bed	0	0	0	0	0	0
	Other Rural	0	0	0	0	0	0
	Outdoor Sport and Recreation	0	0	0	0	0	0
	Retail and Service	57	57	57	57	57	57
	Showroom	0	0	0	0	0	0
	Visitor Accommodation	0	0	0	0	0	0
	TOTAL	674	711	744	783	793	880
Walkerston – Eton (Inside the PIA)	Commercial	8	8	8	8	8	8
	Community	51	32	33	34	34	34
	Education - Child Care	53	57	62	69	71	71
	Education - School	65	69	76	84	127	127
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	0
	Hospital	0	0	0	0	0	0
	Light Industry	9	9	9	9	9	9
	Other Bed	0	0	0	0	0	0
	Other Rural	3	3	3	3	3	3
	Outdoor Sport and Recreation	0	42	42	42	42	42

Projection area (SA2)	Development type	Existing and projected employees					
		2016	2021	2026	2031	2036	Ultimate development
	Retail and Service	101	101	101	101	101	101
	Showroom	0	0	0	0	0	0
	Visitor Accommodation	6	6	6	6	6	6
	TOTAL	294	325	338	353	399	399
West Mackay (Inside the PIA)	Commercial	230	230	201	242	252	386
	Community	121	127	122	123	118	125
	Education - Child Care	26	28	31	34	36	36
	Education - School	135	145	159	175	181	181
	Education - Tertiary	14	15	16	18	19	19
	General Heavy Industry	0	0	0	0	0	0
	Hospital	1,038	1,091	1,121	1,155	1,145	1,145
	Light Industry	349	371	371	371	371	591
	Other Bed	137	144	148	223	282	282
	Other Rural	0	0	0	0	0	0
	Outdoor Sport and Recreation	0	0	0	0	0	0
	Retail and Service	425	425	442	495	508	606
	Showroom	0	0	0	0	0	0
	Visitor Accommodation	330	330	330	330	328	328
	TOTAL	2,805	2,906	2,942	3,166	3,241	3,700
Inside PIA	Commercial	7,533	8,708	9,021	9,607	9,775	11,348
	Community	1,777	1,955	2,047	2,142	2,171	2,286
	Education - Child Care	332	407	453	497	513	522
	Education - School	2,194	2,360	2,591	2,847	3,042	3,043
	Education - Tertiary	733	750	766	793	926	926
	General Heavy Industry	3,603	3,618	3,618	3,618	4,908	13,568
	Hospital	1,283	1,349	1,385	1,426	1,633	1,633
	Light Industry	9,384	10,002	10,367	11,139	14,315	26,443
	Other Bed	572	616	829	1,067	1,229	1,327
	Other Rural	26	26	26	26	26	26
	Outdoor Sport and Recreation	88	131	127	128	128	140
	Retail and Service	8,588	9,366	9,768	10,033	10,263	11,292
	Showroom	1,190	1,417	1,691	1,846	1,934	2,197

Projection area (SA2)	Development type	Existing and projected employees					
		2016	2021	2026	2031	2036	Ultimate development
	Visitor Accommodation	1,377	1,407	1,402	1,465	1,438	1,527
	TOTAL	38,680	42,111	44,091	46,635	52,300	76,277
Outside PIA	Commercial	76	76	76	76	76	76
	Community	279	290	290	281	281	281
	Education - Child Care	6	7	7	7	7	7
	Education - School	275	290	304	319	341	341
	Education - Tertiary	83	89	98	108	112	112
	General Heavy Industry	1,993	1,993	1,993	1,993	1,993	2,613
	Hospital	0	0	0	0	0	0
	Light Industry	5,700	6,080	7,019	7,621	8,560	9,780
	Other Bed	12	55	74	127	127	127
	Other Rural	610	646	646	646	646	646
	Outdoor Sport and Recreation	4	4	4	4	4	4
	Retail and Service	907	899	996	1,436	1,437	1,820
	Showroom	99	487	487	487	487	487
	Visitor Accommodation	575	597	585	585	579	579
	TOTAL	10,618	11,514	12,580	13,691	14,650	16,873
Mackay Region	Commercial	7,609	8,784	9,097	9,683	9,851	11,424
	Community	2,056	2,245	2,337	2,423	2,452	2,567
	Education - Child Care	338	413	460	504	519	528
	Education - School	2,469	2,650	2,894	3,166	3,383	3,384
	Education - Tertiary	816	839	864	901	1,037	1,037
	General Heavy Industry	5,596	5,611	5,611	5,611	6,901	16,181
	Hospital	1,283	1,349	1,385	1,426	1,633	1,633
	Light Industry	15,084	16,082	17,386	18,760	22,875	36,223
	Other Bed	584	671	904	1,194	1,356	1,454
	Other Rural	636	672	672	672	672	672
	Outdoor Sport and Recreation	92	135	131	132	132	144
	Retail and Service	9,496	10,265	10,764	11,469	11,700	13,111
	Showroom	1,289	1,905	2,178	2,334	2,421	2,685
	Visitor Accommodation	1,951	2,004	1,988	2,050	2,017	2,106
	Grand Total	49,298	53,625	56,671	60,326	66,950	93,150

Table 23 – Existing and projected dwellings

Projection Area	Development type	Existing and projected dwellings					
		2016	2021	2026	2031	2036	Ultimate development
Andergrove – Beaconsfield (Inside the PIA)	Attached Dwelling	733	764	827	1,069	1,066	1,409
	Detached Dwelling	4,928	5,356	5,903	6,122	6,345	6,766
	Other Dwelling	296	296	296	366	531	531
	Total	5,957	6,416	7,026	7,557	7,942	8,706
East Mackay (Inside the PIA)	Attached Dwelling	494	565	700	845	915	1,213
	Detached Dwelling	1,104	1,122	1,137	1,137	1,152	1,152
	Other Dwelling	90	90	90	90	90	90
	Total	1,688	1,777	1,927	2,072	2,157	2,455
Eimeo - Rural View (Inside the PIA)	Attached Dwelling	605	792	792	881	1,092	1,646
	Detached Dwelling	4,188	5,043	6,080	6,651	7,559	8,336
	Other Dwelling	0	0	0	0	0	0
	Total	4,793	5,836	6,873	7,533	8,652	9,981
Mackay (Inside the PIA)	Attached Dwelling	1,749	1,919	2,216	3,052	5,465	7,239
	Detached Dwelling	596	590	590	571	575	575
	Other Dwelling	122	122	122	122	122	122
	Total	2,467	2,631	2,928	3,745	6,162	7,936
Mackay Harbour (Inside the PIA)	Attached Dwelling	275	409	409	409	409	620
	Detached Dwelling	10	67	114	134	164	387
	Other Dwelling	0	0	0	0	50	50
	Total	285	476	523	543	623	1,057
Mount Pleasant – Glenella (Inside the PIA)	Attached Dwelling	264	315	315	391	391	478
	Detached Dwelling	3,150	3,720	3,942	4,346	4,838	4,889
	Other Dwelling	283	283	283	283	283	283
	Total	3,697	4,319	4,541	5,021	5,513	5,650
North Mackay (Inside the PIA)	Attached Dwelling	777	820	912	1,017	1,195	2,064
	Detached Dwelling	2,023	2,076	2,085	2,085	2,118	2,118
	Other Dwelling	211	211	211	211	211	211
	Total	3,011	3,107	3,208	3,313	3,524	4,392
Ooralea - Bakers Creek (Inside the PIA)	Attached Dwelling	216	223	249	249	249	249
	Detached Dwelling	1,494	1,590	1,818	1,884	2,053	2,071

Projection Area	Development type	Existing and projected dwellings					
		2016	2021	2026	2031	2036	Ultimate development
	Other Dwelling	0	0	0	0	0	0
	Total	1,710	1,813	2,067	2,133	2,302	2,320
Pioneer Valley (Inside the PIA)	Attached Dwelling	44	53	53	53	53	314
	Detached Dwelling	1,552	1,873	2,097	2,339	2,595	3,306
	Other Dwelling	7	7	7	7	7	7
	Total	1,603	1,933	2,157	2,399	2,655	3,627
Sarina (Inside the PIA)	Attached Dwelling	152	152	152	262	262	706
	Detached Dwelling	1,229	1,317	1,447	1,873	2,109	2,121
	Other Dwelling	17	33	33	33	33	33
	Total	1,398	1,502	1,632	2,168	2,404	2,860
Shoal Point – Bucasia (Inside the PIA)	Attached Dwelling	293	410	479	568	601	861
	Detached Dwelling	2,034	2,202	2,697	3,547	4,269	5,119
	Other Dwelling	0	0	0	0	0	0
	Total	2,327	2,611	3,175	4,114	4,869	5,980
Slade Point (Inside the PIA)	Attached Dwelling	159	228	234	266	285	292
	Detached Dwelling	1,342	1,363	1,363	1,363	1,363	1,449
	Other Dwelling	0	0	0	0	0	0
	Total	1,501	1,591	1,597	1,629	1,648	1,741
South Mackay (Inside the PIA)	Attached Dwelling	861	904	904	904	904	1,431
	Detached Dwelling	2,366	2,376	2,376	2,376	2,376	2,376
	Other Dwelling	1	1	1	1	1	1
	Total	3,228	3,281	3,281	3,281	3,281	3,808
Walkerston – Eton (Inside the PIA)	Attached Dwelling	121	121	121	121	121	121
	Detached Dwelling	1,087	1,277	1,312	1,438	1,504	1,764
	Other Dwelling	0	0	0	0	0	0
	Total	1,208	1,398	1,433	1,559	1,625	1,885
West Mackay (Inside the PIA)	Attached Dwelling	594	691	709	822	928	2,155
	Detached Dwelling	2,107	2,114	2,136	2,133	2,127	2,127
	Other Dwelling	110	110	110	110	110	110
	Total	2,811	2,915	2,955	3,065	3,165	4,392
Inside the PIA Total	Attached Dwelling	7,337	8,367	9,073	10,910	13,937	20,797
	Detached Dwelling	29,210	32,085	35,096	37,998	41,146	44,556

Projection Area	Development type	Existing and projected dwellings					
		2016	2021	2026	2031	2036	Ultimate development
	Other Dwelling	1,137	1,153	1,153	1,223	1,438	1,438
	Total	37,684	41,605	45,322	50,131	56,521	66,790
Outside the PIA Total	Attached Dwelling	410	441	453	471	459	465
	Detached Dwelling	12,166	12,391	13,143	14,029	15,057	19,367
	Other Dwelling	26	26	26	26	26	26
	Total	12,602	12,858	13,622	14,526	15,542	19,859
Mackay Region	Attached Dwelling	7,747	8,808	9,526	11,381	14,396	21,262
	Detached Dwelling	41,376	44,477	48,240	52,028	56,204	63,923
	Other Dwelling	1,163	1,179	1,179	1,249	1,464	1,464
	Total	50,286	54,463	58,944	64,657	72,063	86,649

Table 24 – MGAM 2016 Existing and projected non-residential floor space (m² GFA)

Projection area (SA2)	Development type	Existing and projected non-residential floor space (m ² GFA)					
		2016	2021	2026	2031	2036	Ultimate development
Andergrove – Beaconsfield (Inside the PIA)	Commercial	574	574	574	1,049	1,049	1,395
	Community	5,323	5,828	5,980	6,389	6,310	6,310
	Education - Child Care	4,811	5,168	5,676	6,289	6,521	6,521
	Education - School	30,283	32,916	36,319	40,056	41,072	41,072
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	0
	Hospital	0	0	0	0	0	0
	Light Industry	1,196	1,196	1,196	1,196	1,196	1,196
	Other Bed	2,971	3,092	1,988	2,026	1,361	1,361
	Other Rural	0	0	0	0	0	0
	Outdoor Sport and Recreation	0	0	0	0	0	0
	Retail and Service	13,955	18,535	22,034	22,444	26,586	31,117
	Showroom	752	752	752	990	990	990
	Visitor Accommodation	21,599	21,599	20,910	20,910	20,514	20,514
	TOTAL	81,464	89,660	95,428	101,349	105,598	110,475
East Mackay (Inside the PIA)	Commercial	10	10	8	8	8	8
	Community	396	417	428	441	437	437
	Education - Child Care	768	825	906	996	1,033	1,033
	Education - School	6,242	6,705	7,364	8,098	8,398	8,398

Projection area (SA2)	Development type	Existing and projected non-residential floor space (m ² GFA)					
		2016	2021	2026	2031	2036	Ultimate development
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	0
	Hospital	0	0	0	0	0	0
	Light Industry	24	24	24	24	24	24
	Other Bed	5,460	5,743	5,900	6,077	6,025	6,025
	Other Rural	0	0	0	0	0	0
	Outdoor Sport and Recreation	0	0	0	0	0	0
	Retail and Service	614	614	1,332	1,329	1,329	1,329
	Showroom	0	0	0	0	0	0
	Visitor Accommodation	2,659	2,659	2,657	2,657	2,657	2,657
	TOTAL	16,173	16,996	18,618	19,630	19,912	19,912
Eimeo - Rural View (Inside the PIA)	Commercial	1,561	1,561	4,884	4,724	5,202	7,556
	Community	3,785	3,981	4,090	4,213	4,177	5,068
	Education - Child Care	1,470	1,579	1,734	1,907	1,978	1,978
	Education - School	6,965	7,482	8,217	9,036	16,231	16,231
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	0
	Hospital	0	0	0	0	0	0
	Light Industry	2,687	16,306	16,306	16,305	16,305	28,986
	Other Bed	0	0	0	0	0	225
	Other Rural	0	0	0	0	0	0
	Outdoor Sport and Recreation	0	0	0	0	0	0
	Retail and Service	16,457	16,457	28,643	33,982	35,935	55,689
	Showroom	4,153	4,153	6,223	6,223	11,383	13,585
	Visitor Accommodation	8,346	8,346	8,346	8,346	8,346	8,746
	TOTAL	45,424	59,865	78,443	84,736	99,557	138,063
Mackay (Inside the PIA)	Commercial	156,384	187,066	191,793	206,399	209,963	229,342
	Community	24,361	31,216	31,961	34,557	37,439	38,128
	Education - Child Care	1,579	1,803	2,520	2,780	2,856	2,856
	Education - School	13,022	13,797	14,899	16,127	14,053	14,053
	Education - Tertiary	24,473	24,523	24,595	24,675	31,188	31,188

Projection area (SA2)	Development type	Existing and projected non-residential floor space (m ² GFA)					
		2016	2021	2026	2031	2036	Ultimate development
	General Heavy Industry	489	489	489	489	489	489
	Hospital	0	0	0	0	0	0
	Light Industry	100,579	109,726	110,232	108,305	108,691	133,381
	Other Bed	8,344	9,669	9,909	16,137	18,039	19,465
	Other Rural	0	0	0	0	0	0
	Outdoor Sport and Recreation	7,114	7,206	6,760	6,818	6,801	6,801
	Retail and Service	260,399	272,202	275,298	276,378	281,430	281,430
	Showroom	10,496	23,893	37,914	46,223	46,223	56,637
	Visitor Accommodation	16,750	19,741	19,786	20,387	19,587	26,179
	TOTAL	623,990	701,331	726,157	759,275	776,759	839,950
Mackay Harbour (Inside the PIA)	Commercial	5,254	5,254	5,254	5,254	5,241	5,241
	Community	2,189	2,302	2,365	2,436	2,416	2,416
	Education - Child Care	0	0	0	0	0	0
	Education - School	0	0	0	0	0	0
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	0
	Hospital	0	0	0	0	0	0
	Light Industry	6,877	6,877	6,877	6,877	20,289	27,327
	Other Bed	0	0	0	0	0	0
	Other Rural	0	0	0	0	0	0
	Outdoor Sport and Recreation	0	0	0	0	0	0
	Retail and Service	2,753	2,753	2,753	3,223	5,223	5,223
	Showroom	0	0	0	0	0	0
	Visitor Accommodation	94	94	94	94	94	94
	TOTAL	17,167	17,280	17,343	17,884	33,263	40,301
Mount Pleasant – Glenella (Inside the PIA)	Commercial	9,773	10,988	11,335	12,147	12,147	14,866
	Community	6,097	7,020	7,369	8,010	7,953	9,466
	Education - Child Care	1,223	2,498	2,662	2,895	2,953	2,960
	Education - School	16,826	18,075	19,850	21,829	22,639	22,639
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	0

Projection area (SA2)	Development type	Existing and projected non-residential floor space (m ² GFA)					
		2016	2021	2026	2031	2036	Ultimate development
	Hospital	3,673	3,863	3,969	4,088	4,053	4,053
	Light Industry	39,649	41,673	68,063	68,063	78,971	85,111
	Other Bed	3,686	3,877	3,983	7,104	7,070	7,070
	Other Rural	0	0	0	0	0	0
	Outdoor Sport and Recreation	352	367	340	350	330	330
	Retail and Service	65,908	95,676	98,437	102,378	102,378	120,462
	Showroom	39,327	39,545	39,857	40,655	40,655	42,680
	Visitor Accommodation	10,283	10,283	10,283	15,969	15,969	16,343
	TOTAL	196,797	233,866	266,147	283,488	295,119	325,979
North Mackay (Inside the PIA)	Commercial	6,998	8,627	8,641	8,641	8,948	13,604
	Community	16,020	17,122	17,581	18,093	17,765	17,765
	Education - Child Care	1,351	1,455	1,599	1,758	1,830	1,830
	Education - School	29,931	32,152	35,311	38,831	40,272	40,272
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	12,961
	Hospital	4,044	4,230	4,333	4,450	3,963	3,963
	Light Industry	30,175	30,189	30,325	30,325	32,569	49,173
	Other Bed	1,890	2,017	11,438	11,499	11,481	11,970
	Other Rural	25	25	25	25	25	25
	Outdoor Sport and Recreation	500	526	540	556	552	552
	Retail and Service	32,131	32,317	32,704	32,704	32,879	34,000
	Showroom	2,556	2,556	2,564	2,564	2,634	3,267
	Visitor Accommodation	15,700	15,758	15,941	15,941	14,541	15,860
	TOTAL	141,321	146,975	161,002	165,388	167,459	205,242
Ooralea - Bakers Creek (Inside the PIA)	Commercial	12,062	12,262	12,262	12,262	12,262	12,262
	Community	1,620	1,704	1,750	1,803	1,788	1,854
	Education - Child Care	0	0	0	0	0	162
	Education - School	1,052	1,130	1,241	1,365	1,415	1,415
	Education - Tertiary	11,486	12,235	12,888	14,075	14,174	14,174
	General Heavy Industry	203,638	204,880	204,880	204,880	314,520	1,037,677
	Hospital	0	0	0	0	0	0
	Light Industry	553,120	579,565	585,397	594,397	789,028	1,379,328

Projection area (SA2)	Development type	Existing and projected non-residential floor space (m ² GFA)					
		2016	2021	2026	2031	2036	Ultimate development
	Other Bed	0	0	3,600	3,600	7,200	10,800
	Other Rural	434	434	434	434	434	434
	Outdoor Sport and Recreation	0	0	0	0	0	0
	Retail and Service	33,492	32,669	34,519	35,399	39,614	39,614
	Showroom	13,644	13,644	13,644	13,644	13,644	13,644
	Visitor Accommodation	7,550	7,550	7,550	7,550	7,550	7,550
	TOTAL	838,098	866,073	878,166	889,409	1,201,628	2,518,913
Pioneer Valley (Inside the PIA)	Commercial	1,492	1,492	1,492	1,492	1,492	3,662
	Community	4,359	4,585	7,560	7,701	7,660	7,920
	Education - Child Care	302	324	356	392	406	551
	Education - School	11,236	12,070	13,255	14,577	15,118	15,118
	Education - Tertiary	1	1	1	1	1	1
	General Heavy Industry	43,829	43,829	43,829	43,829	43,829	43,829
	Hospital	0	0	0	0	0	0
	Light Industry	2,676	2,676	2,676	27,481	59,796	154,693
	Other Bed	2,100	2,209	2,269	2,337	2,317	2,447
	Other Rural	472	472	472	472	472	472
	Outdoor Sport and Recreation	0	0	0	0	0	0
	Retail and Service	10,980	12,130	13,143	13,143	13,143	19,855
	Showroom	0	0	0	0	0	0
	Visitor Accommodation	7,900	7,900	7,900	7,900	7,900	8,159
	TOTAL	85,347	87,688	92,954	119,325	152,135	256,708
Sarina (Inside the PIA)	Commercial	3,271	3,271	3,271	3,271	3,271	5,682
	Community	15,583	16,390	16,838	17,343	17,197	17,197
	Education - Child Care	1,114	1,197	1,314	1,445	1,499	1,499
	Education - School	9,157	9,837	10,803	11,880	12,321	12,321
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	58,336	58,336	58,336	58,336	58,336	58,336
	Hospital	2,087	2,195	2,255	2,323	11,503	11,503
	Light Industry	16,495	16,495	16,495	54,109	94,545	353,261
	Other Bed	1,650	1,735	1,783	1,836	1,821	1,821
	Other Rural	84	84	84	84	84	84

Projection area (SA2)	Development type	Existing and projected non-residential floor space (m ² GFA)					
		2016	2021	2026	2031	2036	Ultimate development
	Outdoor Sport and Recreation	829	872	896	923	915	915
	Retail and Service	22,918	22,918	22,918	24,868	24,868	30,230
	Showroom	483	483	483	483	483	1,031
	Visitor Accommodation	10,251	10,251	10,251	10,251	10,251	10,251
	TOTAL	142,258	144,063	145,726	187,151	237,093	504,130
Shoal Point – Bucasia (Inside the PIA)	Commercial	0	0	0	0	0	1,065
	Community	172	181	186	191	190	3,273
	Education - Child Care	0	602	602	602	602	703
	Education - School	2,502	2,688	2,952	3,246	3,366	3,402
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	0
	Hospital	0	0	0	0	0	0
	Light Industry	92	92	92	92	92	92
	Other Bed	0	0	0	0	1,500	1,500
	Other Rural	1,583	1,583	1,583	1,583	1,583	1,583
	Outdoor Sport and Recreation	0	0	0	0	0	1,200
	Retail and Service	15,828	15,828	13,387	12,055	7,560	7,560
	Showroom	0	0	0	0	0	0
	Visitor Accommodation	2,514	2,514	2,514	2,514	2,514	2,514
	TOTAL	22,691	23,488	21,315	20,283	17,407	22,892
Slade Point (Inside the PIA)	Commercial	148	148	148	148	148	251
	Community	942	779	801	825	818	818
	Education - Child Care	0	620	620	620	620	644
	Education - School	4,142	4,449	4,886	5,374	5,573	5,573
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	0
	Hospital	0	0	0	0	0	0
	Light Industry	55,359	57,211	57,211	57,211	58,137	115,984
	Other Bed	0	0	0	0	0	0
	Other Rural	10	10	10	10	10	10
	Outdoor Sport and Recreation	0	0	0	0	0	0

Projection area (SA2)	Development type	Existing and projected non-residential floor space (m ² GFA)					
		2016	2021	2026	2031	2036	Ultimate development
	Retail and Service	4,943	4,942	4,942	4,942	4,942	5,193
	Showroom	0	0	0	0	0	0
	Visitor Accommodation	457	457	457	457	457	457
	TOTAL	66,001	68,617	69,075	69,586	70,705	128,930
South Mackay (Inside the PIA)	Commercial	509	509	509	550	550	591
	Community	15,408	16,206	16,649	17,152	17,008	17,008
	Education - Child Care	0	0	0	4	4	8
	Education - School	18,267	19,622	21,549	23,697	24,576	24,576
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	0
	Hospital	0	0	0	0	0	0
	Light Industry	8,232	8,740	8,740	8,740	8,740	16,447
	Other Bed	0	0	0	0	0	0
	Other Rural	20	20	20	20	20	20
	Outdoor Sport and Recreation	0	0	0	0	0	0
	Retail and Service	3,390	3,390	3,390	3,398	3,398	3,398
	Showroom	0	0	0	0	0	0
	Visitor Accommodation	0	0	0	0	0	0
	TOTAL	45,826	48,487	50,857	53,560	54,295	62,047
Walkerston – Eton (Inside the PIA)	Commercial	155	155	155	155	155	155
	Community	3,062	1,924	1,976	2,036	2,018	2,018
	Education - Child Care	2,644	2,840	3,119	3,430	3,557	3,557
	Education - School	4,842	5,201	5,712	6,282	9,516	9,516
	Education - Tertiary	0	0	0	0	0	0
	General Heavy Industry	0	0	0	0	0	0
	Hospital	0	0	0	0	0	0
	Light Industry	766	766	766	766	766	766
	Other Bed	0	0	0	0	0	0
	Other Rural	279	279	279	279	279	279
	Outdoor Sport and Recreation	0	4,164	4,164	4,164	4,164	4,164
	Retail and Service	6,032	6,032	6,032	6,032	6,032	6,032
	Showroom	0	0	0	0	0	0

Projection area (SA2)	Development type	Existing and projected non-residential floor space (m ² GFA)					
		2016	2021	2026	2031	2036	Ultimate development
	Visitor Accommodation	600	600	600	600	600	600
	TOTAL	18,380	21,961	22,804	23,743	27,087	27,087
West Mackay (Inside the PIA)	Commercial	4,591	4,591	4,026	4,838	5,046	7,727
	Community	7,289	7,622	7,296	7,354	7,104	7,492
	Education - Child Care	1,320	1,418	1,557	1,712	1,776	1,776
	Education - School	10,113	10,863	11,931	13,120	13,607	13,607
	Education - Tertiary	688	739	812	893	926	926
	General Heavy Industry	0	0	0	0	0	0
	Hospital	62,255	65,479	67,269	69,287	68,702	68,702
	Light Industry	31,446	33,431	33,431	33,431	33,431	53,229
	Other Bed	8,220	8,646	8,882	13,408	16,931	16,931
	Other Rural	0	0	0	0	0	0
	Outdoor Sport and Recreation	0	0	0	0	0	0
	Retail and Service	25,500	25,500	26,530	29,711	30,460	36,374
	Showroom	0	0	0	0	0	0
	Visitor Accommodation	32,954	32,954	32,954	32,954	32,804	32,804
	TOTAL	184,376	191,243	194,688	206,709	210,787	239,568
Inside PIA Total	Commercial	202,782	236,508	244,351	260,938	265,483	303,407
	Community	106,606	117,277	122,831	128,544	130,278	137,169
	Education - Child Care	16,582	20,329	22,665	24,830	25,635	26,078
	Education - School	164,580	176,987	194,288	213,517	228,158	228,193
	Education - Tertiary	36,648	37,498	38,296	39,644	46,288	46,288
	General Heavy Industry	306,292	307,534	307,534	307,534	417,174	1,153,291
	Hospital	72,059	75,767	77,826	80,147	88,222	88,222
	Light Industry	849,373	904,967	937,830	1,007,322	1,302,579	2,398,998
	Other Bed	34,321	36,987	49,751	64,025	73,746	79,616
	Other Rural	2,907	2,907	2,907	2,907	2,907	2,907
	Outdoor Sport and Recreation	8,795	13,135	12,700	12,811	12,762	13,962
	Retail and Service	515,300	561,964	586,063	601,986	615,776	677,508
	Showroom	71,411	85,026	101,437	110,782	116,012	131,832
	Visitor Accommodation	137,657	140,706	140,243	146,530	143,784	152,728
	TOTAL	2,525,313	2,717,592	2,838,724	3,001,516	3,468,803	5,440,199

Projection area (SA2)	Development type	Existing and projected non-residential floor space (m ² GFA)					
		2016	2021	2026	2031	2036	Ultimate development
Outside PIA Total	Commercial	1,528	1,528	1,528	1,528	1,528	1,528
	Community	16,744	17,414	17,414	16,856	16,847	16,847
	Education - Child Care	315	333	348	366	338	338
	Education - School	20,593	21,757	22,774	23,919	25,596	25,596
	Education - Tertiary	4,151	4,459	4,897	5,385	5,585	5,585
	General Heavy Industry	169,395	169,395	169,395	169,395	169,395	222,079
	Hospital	1	1	1	1	1	1
	Light Industry	677,527	711,758	796,243	850,428	934,877	1,044,707
	Other Bed	690	3,297	4,466	7,640	7,640	7,640
	Other Rural	67,054	71,016	71,016	71,016	71,016	71,016
	Outdoor Sport and Recreation	392	408	410	400	399	399
	Retail and Service	54,441	53,941	59,748	86,147	86,227	109,173
	Showroom	5,933	29,244	29,244	29,244	29,244	29,244
	Visitor Accommodation	57,453	59,703	58,511	58,511	57,919	57,919
	TOTAL	1,076,217	1,144,253	1,235,995	1,320,836	1,406,612	1,592,073
Mackay Region	Commercial	204,310	238,036	245,879	262,466	267,011	304,935
	Community	123,350	134,691	140,245	145,401	147,125	154,016
	Education - Child Care	16,897	20,662	23,014	25,196	25,973	26,416
	Education - School	185,173	198,744	217,063	237,436	253,754	253,789
	Education - Tertiary	40,799	41,957	43,193	45,029	51,873	51,873
	General Heavy Industry	475,687	476,929	476,929	476,929	586,569	1,375,370
	Hospital	72,060	75,768	77,827	80,148	88,223	88,223
	Light Industry	1,526,900	1,616,724	1,734,073	1,857,750	2,237,456	3,443,705
	Other Bed	35,011	40,285	54,217	71,665	81,386	87,256
	Other Rural	69,961	73,923	73,923	73,923	73,923	73,923
	Outdoor Sport and Recreation	9,187	13,544	13,110	13,211	13,161	14,361
	Retail and Service	569,741	615,905	645,811	688,133	702,003	786,681
	Showroom	77,344	114,270	130,681	140,026	145,256	161,076
	Visitor Accommodation	195,110	200,409	198,754	205,041	201,703	210,647
	Grand Total	3,601,530	3,861,846	4,074,719	4,322,353	4,875,415	7,032,272