

Demand Analysis

**Mt Albert School**

July 2016

RELEASED UNDER THE OFFICIAL INFORMATION ACT

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# Purpose

The purpose of this report is to present demographic analysis relating to Mt Albert School that:

- assesses growth (or decline) trends that may impact on the school or the wider schooling network,
- considers options for how the Ministry can respond to the change, and
- proposes recommendations for action.

Demographic analysis was previously completed for Mt Albert School in 2010, with the report updated in 2011. This was a period of high growth for the school, with the teaching space count increasing from 10 to 21. An enrolment scheme was not previously recommended as Mt Albert School was significantly smaller than its surrounding schools. In the first half of 2016 the school has enrolled 120 new students, with 70 of these coming from outside of the school's 1km radius (see Figure 2). An enrolment scheme may now be considered appropriate for managing the school's growth.

The report considers factors, including the school's historical roll trend and underlying population growth, to identify the reason(s) for roll growth. It will assess the need for changes to enrolment schemes or for additional property provision in the school. The report also takes into account known changes to Auckland Council planning regulations, consented private sector developments, Special Housing Areas and other development pressures.

If continuous roll growth is projected for a school, this report will also assess options for future roll management. Where appropriate, this includes:

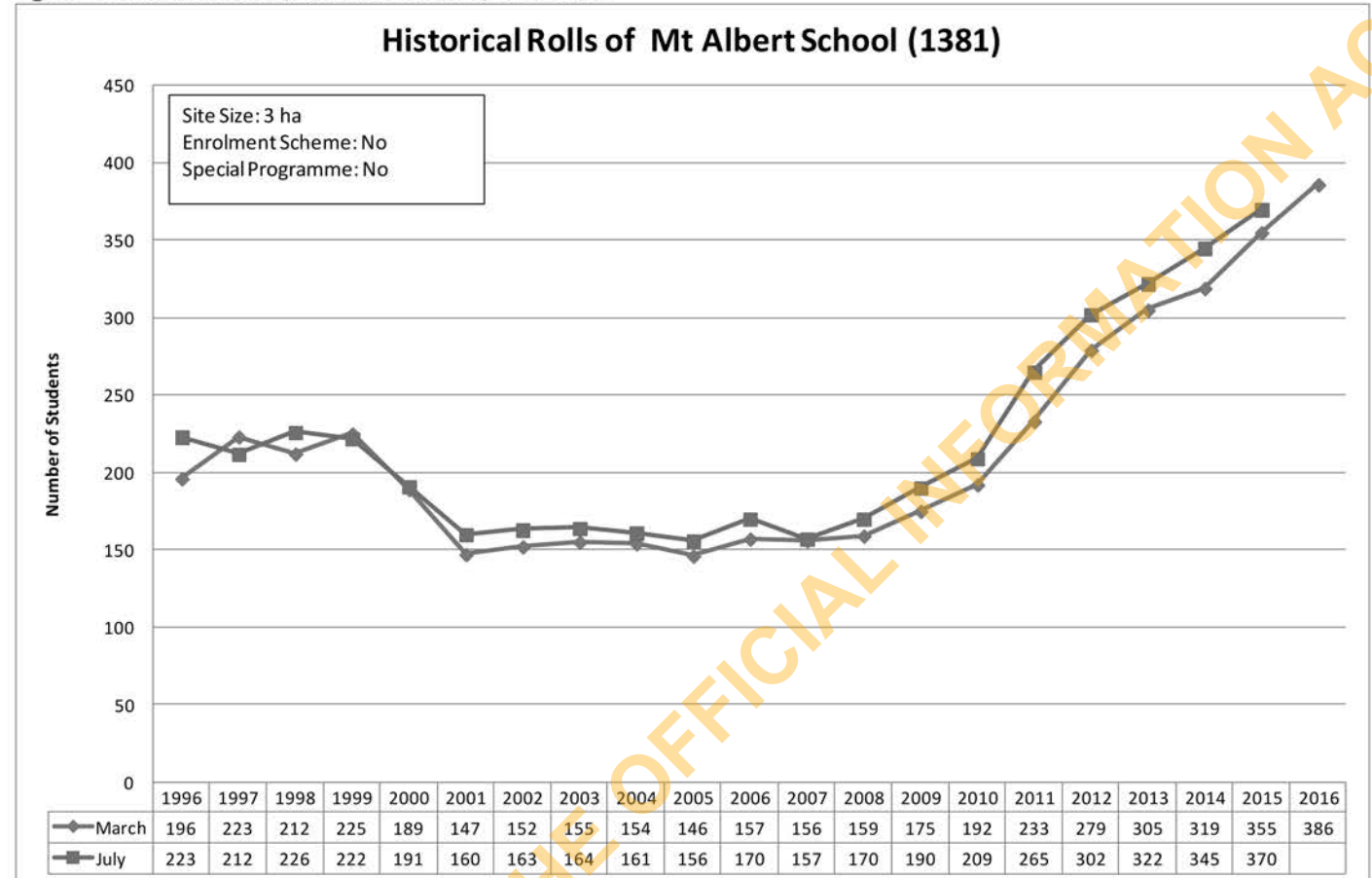
- enrolment scheme implications;
- changes to schooling structure; and,
- provision of additional teaching spaces.

# School Context

Mt Albert School is a Year 1-6 primary school located in Morningside, in central Auckland.

Figure 1 shows the long term roll trends for Mt Albert School.

Figure 1: Historical Rolls, Mt Albert School, 1996-2016

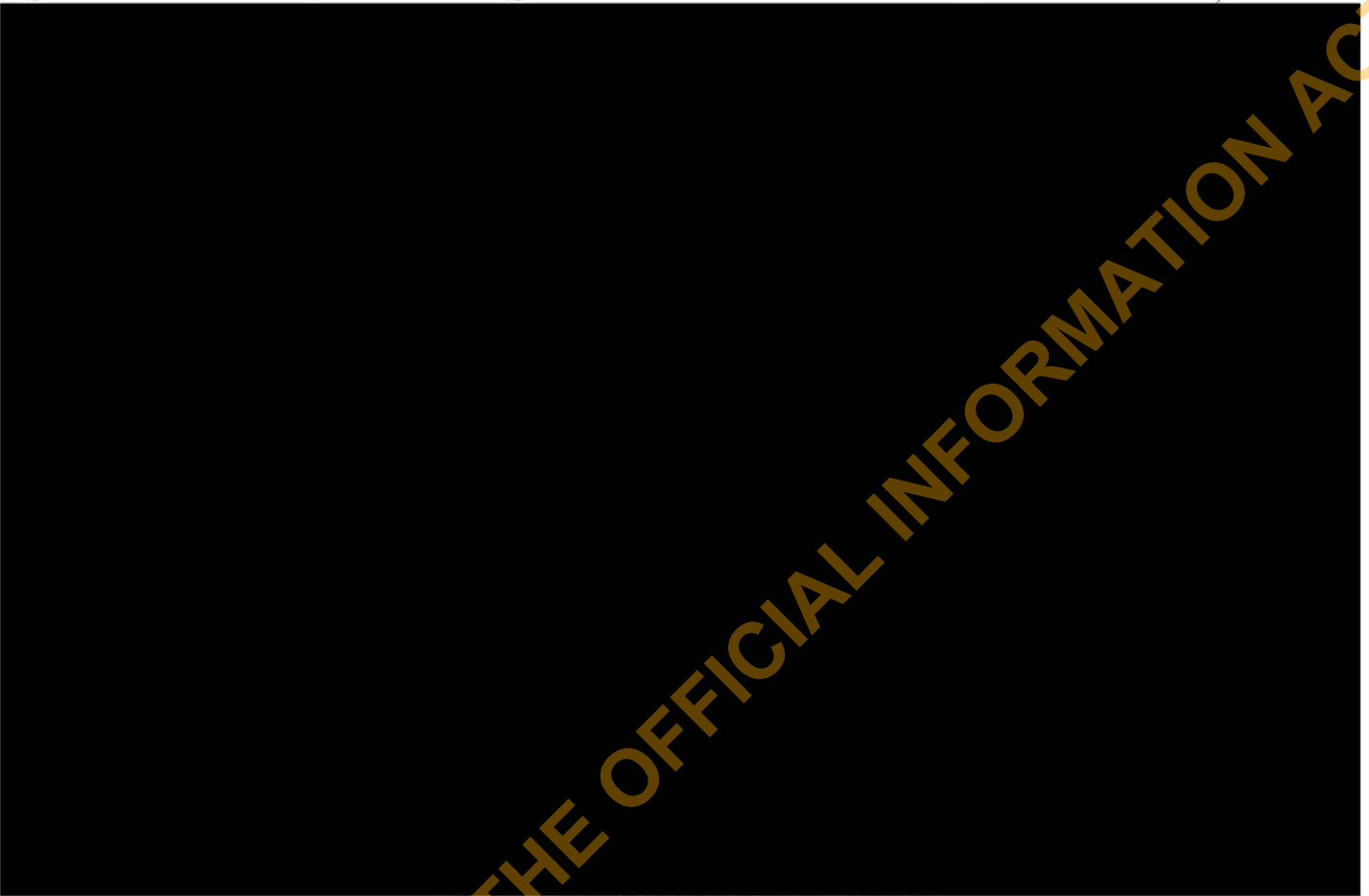


### *Student Distribution and Surrounding Network of Schools*

Figure 2 shows Mt Albert School's student distribution, as of March 2016, and the location of its surrounding network of schools. Mt Albert School does not have an enrolment scheme at this time, but the enrolment schemes of surrounding schools are shown below. The Census Area Unit (CAU) catchment area is also shown, as well as a 1km radius around the school.

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Figure 2: Student Distribution and Surrounding Network of Schools for Mt Albert School, March 2016



For the purposes of this report the network includes Edendale School, Gladstone School, and Marist School (Mt Albert).

Fewer than half of students attending Mt Albert School reside within a 1km radius of the school. Around 80% of students live within the area shown on the map.

58% of students who have enrolled so far in 2016 live outside of the 1km radius shown in Figure 2.



### Share of Students

Table 1 shows schools' share of students that reside within the CAU catchment area of Mt Albert School as of March 2016.

Table 1: Schools Attended by Students living In the CAU catchment area of Mt Albert School, March 2016

School Name	Student Count	Share of Students
Mt Albert School	116	44%
Marist School (Mt Albert)	20	8%
Newton Central School	14	5%
Other Schools (31)	111	43%
<b>Total Students</b>	<b>261</b>	<b>100%</b>

Mt Albert School enrolls 44% of students within the CAU catchment.

### Historical Share of Students

Table 2 shows Mt Albert School's share of students within the school's CAU catchment between 2014 and 2016.

Table 2: Mt Albert School's Historical Share of Students Living Within CAU Catchment, 2014- 2016

March	Mt Albert School Students	Total Students	Share of Students
2014	93	249	37%
2015	109	286	38%
2016	116	261	44%

Mt Albert School has increased both the number and the percentage of students enrolled from within the school's CAU catchment every year for the past three years.

Table 3 shows Mt Albert School's share of **Year 1 students only** within the school's CAU catchment between 2014 and 2016.

Table 3: Mt Albert School's Historical Share of Year 1 Students Living Within CAU Catchment, 2014- 2016

March	Mt Albert School Students	Total Students	Share of Students
2014	9	23	39%
2015	16	35	46%
2016	18	33	55%

Mt Albert School has increased both the number and the percentage of Year 1 students enrolled from within the school's CAU catchment every year for the past three years.

### Decile

Deciles are a measure of the socio-economic position of a school's student community relative to other schools throughout the country. A Decile 1 school is one with the lowest socio-economic position, while a Decile 10 is the highest.

Mt Albert School is a Decile 6 school.

### Ethnicity

Table 4 shows the ethnicity of students attending Mt Albert School as of March 2016.

Table 4: Mt Albert School students by ethnicity, March 2016

Ethnic Group	Student Count	Percentage
European/ Pākehā	107	28%
Māori	30	8%
Pasifika	111	29%
Asian	107	28%
MELAA <sup>1</sup> and Other	31	8%
<b>Total</b>	<b>386</b>	<b>100%</b>

The largest ethnic group attending Mt Albert School is Pasifika, followed closely by Asian and Pākehā. Only a small proportion of the roll identify as Māori.

<sup>1</sup> Middle Eastern, Latin American and African

# School and Network Status

Table 5 shows the utilisation status of Mt Albert School and its surrounding network of schools.

Table 5: School and Network Status

Summary	School's status	Network's Status
Current Teaching Space count	21	96
Current Capacity (approx)	474	2,271
Peak 2015 Roll	377	2,220
Surplus/ Deficit	97	51
% Utilisation	80%	98%

Mt Albert School was at 80% of its current capacity with an October 2015 roll of 377 students creating a surplus of 97 student spaces.

The network was at 98% of its current capacity with an October 2015 roll of 2,220 students creating a surplus of just 51 student spaces.

Table 6 shows the March, July and October rolls for Mt Albert School between 2011 and 2016.

Table 6: Historical March, July and October Roll 2011-2016

Historical Roll	2011	2012	2013	2014	2015	2016
March	233	279	305	319	355	386
July	265	302	322	348	370	430 (provisional)
October	287	322	333	346	377	
Growth between March and October	54	43	28	27	22	

Using October figures, the roll of Mt Albert School has grown every year during this time, increasing by 90 students over five years. The school's 2016 March roll is higher than 2015's peak roll.

The average increase between March and October each year is around 35 students. Between March and July 2016 the roll has increased by 44 students.

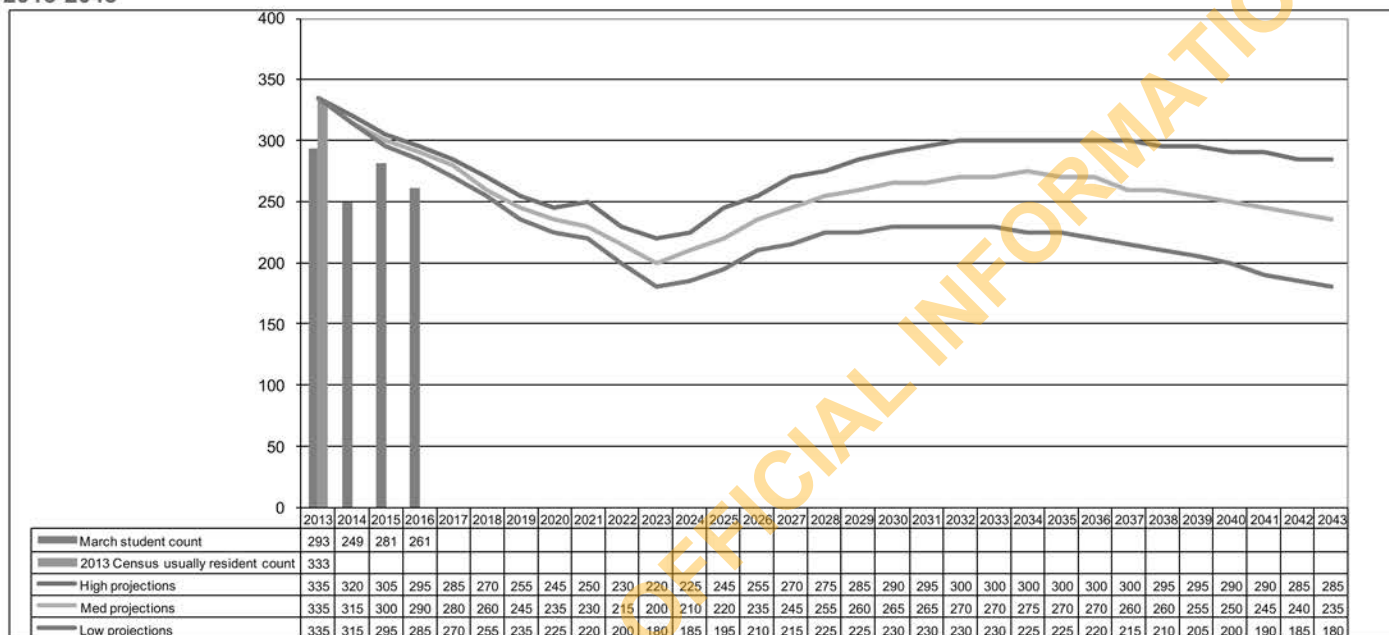


# Underlying Trends affecting the Catchment Area

## Population Projections

Figure 3 shows Statistics New Zealand (Stats NZ) projections (2013 base) for the Y1-6 (age 5-10) population residing in Mt Albert School's catchment, together with the total number of Y1-6 students geolocated in the catchment from recent Roll Returns. For the purposes of this analysis, the catchment area has been defined by the Census Area Units (CAUs) of St Lukes and St Lukes North.

Figure 3: Projected underlying population age 5-10 and reported student count in Mt Albert School's catchment, 2013-2043



March student numbers are below the medium projection but appear to be following a similar trend.

Using the medium projection scenario, the population is projected to decline steeply out to 2023, then increase out to 2035 before tapering off again. The total number of 5-10 year olds is projected to peak at 270 in 2035 although this is lower than the current count.

At this stage, these projections are considered somewhat unreliable, as they do not reflect the intensification that is projected to occur in the area once the Unitary Plan is enacted.



# Local Authority Planning Considerations

## Unitary Plan

Figure 4 shows the land use zoning for the area surrounding Mt Albert School. The dark orange colour shows that there are significant tracts that are zoned for *Terrace Housing and Apartment Buildings*. This zoning provides for the greatest density, height and scale of development out of all the residential zones. Buildings of four to six storeys are allowed, and even encouraged.

Mt Albert School is located very close to both the railway line (Morningside station) and the town centre around St Luke's Mall. Both of these factors suggest that this will be a location that experiences significant increases in density in the future.

Figure 4: Proposed Auckland Unitary Plan Zoning, 2016



### UNITARY PLAN ENVIRONMENT

- Special Purpose
- Large Lot
- Single House
- Mixed Housing Suburban
- Mixed Housing Urban
- Terrace Housing and Apartment Buildings
- Future Urban

- Green Infrastructure Corridor
- Rural and Coastal Settlement
- Neighbourhood Centre
- Local Centre
- Town Centre
- Metropolitan Centre
- City Centre
- Mixed Use

- General Business
- Business Park
- Light Industry
- Heavy Industry
- Rural Conservation
- Countryside Living
- Rural Coastal
- Mixed Rural

- Rural Production
- Public Open Space - Conservation
- Public Open Space - Informal Recreation
- Public Open Space - Sport and Active Recreation
- Public Open Space - Community
- Public Open Space - Civic Spaces
- Strategic Transport Corridor
- Road [i]

- Defence [rcp/dp]
- Ferry Terminal [rcp/dp]
- Minor Port [rcp/dp]
- Marina [rcp/dp]
- Mooring [rcp]
- General Coastal Marine [rcp]
- Water [i]
- Coastal Transition
- Hauraki Gulf Islands



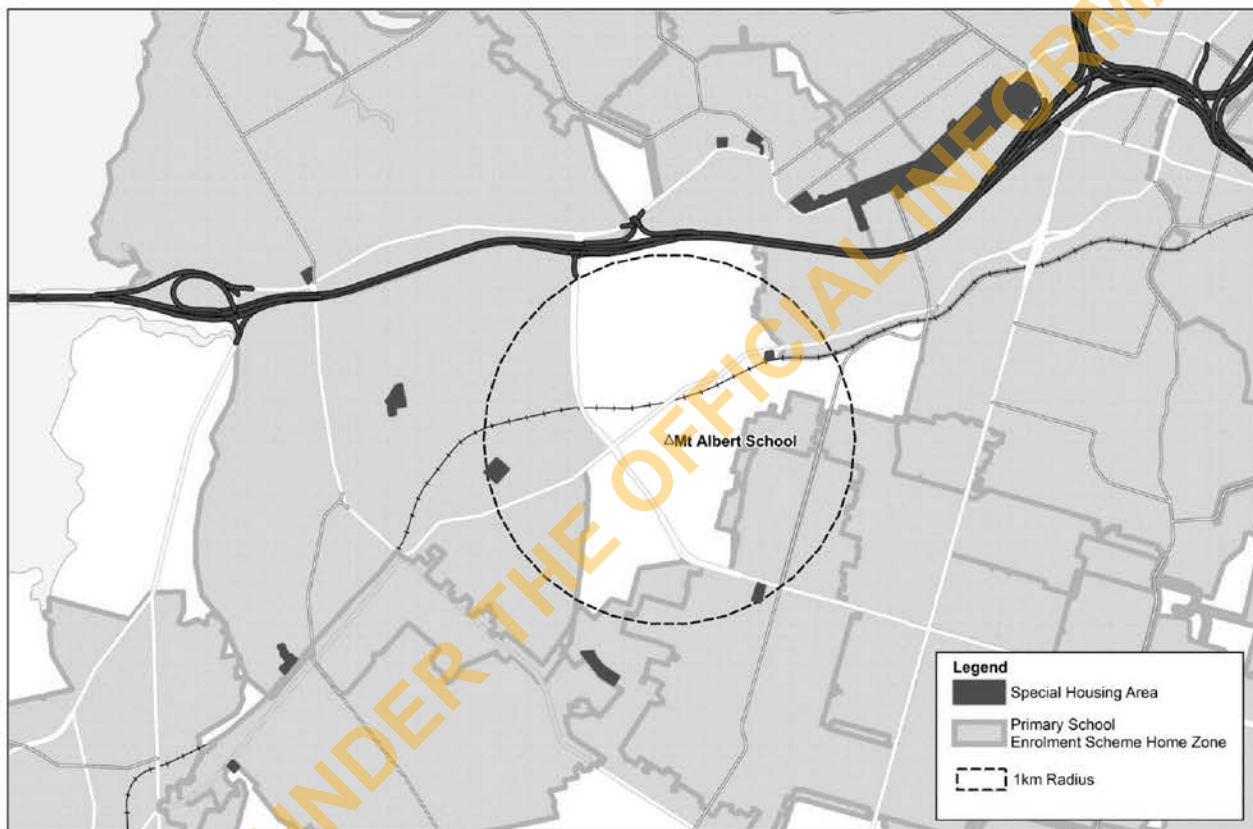
### Special Housing Areas (SHAs)

To help combat Auckland's housing crisis, Special Housing Areas (SHAs) are being identified across the city where fast-track development of affordable housing can take place.

Figure 5 shows the location of Special Housing Areas in red. This includes three within a kilometre of Mt Albert School, but only one – New North Road, 50 dwellings – within the unzoned area surrounding Mt Albert School. In total, there are 578 future dwellings which could have an impact on Mt Albert School's roll – keeping in mind that the school does not have an enrolment scheme and therefore any and all children from these areas could enrol at the school.

The three SHAs within 1km of Mt Albert School will likely generate around 37 children of primary school age over time.<sup>2</sup> A further 102 students are likely to be generated by the remainder of the SHAs shown in Figure 5. If the school's current market share of 44% is maintained, this could generate an additional 61 children over time. If the school increases its market share to 55% – which is likely to occur in the next five years – it could generate an extra 76 students.

Figure 5: Special Housing Areas



Sourced from LINZ data. Crown and Crechlow Copyright reserved. Census boundaries from Statistics New Zealand.

### Private Developments

Auckland Council has provided information regarding non-SHA consented developments within the Mt Albert School catchment area. These developments will add around 400 new dwellings. These units will likely generate approximately 100 more children of primary school age over time.

If the school's current market share of 44% is maintained, this could generate an additional 44 children over time. If the school increases its market share to 55% – which is likely to occur in the next five years – it could generate an extra 55 students.

Development of the UNITEC Campus to the west of Gladstone School will also have an impact on the network, although mostly on Gladstone School and Waterview School. Any impact on Mt Albert School will be a "flow on" effect only.

<sup>2</sup> The Ministry's usual methodology to assess the impact of a development on a primary school is to multiply a development's yield by three people per household to determine total population. 8% of the population is then assumed to be of primary school age (Year 1-6).

# Future Roll Assessment

## Roll projection based on historical retention rate – Scenario One

Table 7 shows Mt Albert School's historical peak rolls (2011-2015) and the projected roll for 2016-2021. The predicted rolls are not regarded as conclusive projections; rather, they constitute a scenario based purely on the school's historical enrolment pattern.

Table 7: Historical and Projected Roll for Mt Albert School, 2011-2021, Scenario One

October	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
2011	85	45	40	31	43	43	287
2012	88	59	49	40	36	50	322
2013	96	70	54	39	35	39	333
2014	84	72	65	47	39	39	346
2015	98	62	67	62	48	40	377
Projected 2016	110	71	61	70	65	55	432
Projected 2017	110	82	69	60	71	72	464
Projected 2018	110	82	80	68	61	79	480
Projected 2019	110	82	80	78	69	67	486
Projected 2020	110	82	80	78	79	76	505
Projected 2021	110	82	80	78	79	87	516

The roll of Mt Albert School has increased significantly over the past few years. If growth continues in the same manner, the roll will grow to 480 by 2018 and 516 by 2021.

## Property Implication

With a current capacity of 474, the projections from Scenario One show that Mt Albert School:

- has sufficient capacity to meet demand through to the end of 2018; and,
- is likely to have a future entitlement for **two** additional teaching spaces by 2020.

## Roll projection based on SHAs, known developments and increasing market share – Scenario Two

Table 8 shows historical and projected rolls for Mt Albert School between 2011 and 2021.

The projections in this scenario take account of an extra 131 students over six years that are anticipated to result from both SHAs and private developments. These have been added as follows:

- 5 additional new entrants to all years between 2016 and 2021;
- 3 additional new entrants added per year to reflect growing market share; and,
- 9 additional students spread across years 2-4 in each year.

The calculated historical retention rates for Mt Albert School for Years 2-6 have been used to incorporate these extra students.

Table 8: Historical and Projected Roll for Mt Albert School, 2011-2021

October	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
2011	85	45	40	31	43	43	287
2012	88	59	49	40	36	50	322
2013	96	70	54	39	35	39	333
2014	84	72	65	47	39	39	346
2015	98	62	67	62	48	40	377
Projected 2016	115	74	64	73	65	55	446
Projected 2017	118	89	75	66	74	72	494
Projected 2018	121	90	90	77	67	82	527
Projected 2019	124	93	91	92	78	74	552
Projected 2020	127	95	94	93	93	86	588
Projected 2021	130	98	96	96	94	102	616

These projections show the school's roll growing to 527 by 2018 and 616 by 2021. These projections include students who are enrolling from outside of the catchment, and will be out of zone enrolments if the school implements an enrolment scheme.

### Property Implication

With a current capacity of 474, the Scenario One projections show that Mt Albert School:

- will exceed current capacity by mid-2017; and,
- is likely to have a future entitlement for **six** additional teaching spaces by 2020.

### Future Roll Assessment – Summary

The school's roll has already reached – in July – the roll that was projected for October in Scenario One.

Scenario Two will be used for the remainder of the report as it is based on a number of different sources of information, and is considered more reliable than Scenario One.



# Schooling Network Considerations

Table 9 shows the historical and projected rolls of Mt Albert School and its surrounding network of schools between 2011 and 2018.

Table 9: Peak rolls for network of schools surrounding Mt Albert School, 2011-2018

				Peak Rolls									
				10th October Rolls for Primary (Y1-6 & Y1-8); 1st March Rolls for all others									
School Name	Type	TS Count	Current Capacity	2011	2012	2013	2014	2015	2016 proj	2017 proj	2018 proj	OOZ	surplus/ deficit
Mt Albert School	Y1-6	21	474	287	322	333	346	377	446	494	527	N/A	97
Edendale School	Y1-6	30	673	611	596	605	598	624	590	595	588	8	49
Gladstone School	Y1-6	34	774	817	809	902	902	927	937	953	943	3	-153
Marist School	Y1-6	11	350	290	285	284	280	292	304	308	320	N/A	58
Total		96	2,271	2,005	2,012	2,124	2,126	2,220	2,277	2,350	2,378	11	51
Schools in <i>italics</i> have enrolment schemes.												98% Utilisation	

The network roll has increased every year over the past five years, growing by a total of 215 students.

Projections suggest that the network roll will increase by a further 158 students over the next three years.

Gladstone School is operating over capacity with very little room on site and virtually no out of zone enrolments over an extended period.

Edendale School is operating close to capacity with virtually no out of zone enrolments over an extended period, but is projected to experience a drop in enrolment numbers over the next three years.

The capacity utilisation across the network is 98% which equates to a current surplus of 51 student spaces.

## Community of Learning

Investing in Educational Success (IES) is a government initiative to help raise student achievement. This initiative focuses on raising teaching quality to help lift student achievement by encouraging groups of schools to share information; set goals; develop their best teaching and leadership resources; and, support teachers and principals. These groups are referred to as Communities of Learning and will usually be made up of around ten schools/kura, have a geographic basis, and reflect the educational pathway of students.

Mt Albert School is in preliminary discussions to become part of the Mt Albert Community of Learning.

# Options

## *Enrolment Scheme*

An enrolment scheme has not previously been recommended for Mt Albert School, as the school was significantly smaller than other network schools. Now that the roll has grown - and a significant number of new and existing students live outside of the school's immediate catchment area - an enrolment scheme may help to alleviate some of the overcrowding anticipated to occur at the school,. This will also help to create room in the school for local growth, which is anticipated to be significant.

## *Teaching Space Entitlement*

Roll projections show that Mt Albert School will likely be entitled to **six** additional teaching spaces by 2021.

## *Masterplanning*

Roll growth at Gladstone School will soon become unsustainable, and any development at the UNITEC campus will have a deleterious impact on the network. Some of this impact will be accommodated by current masterplanning work being undertaken at Waterview School. Table 10 shows the school site sizes of network and neighbouring schools. Mt Albert School has by far the largest school site of the network schools, and therefore masterplanning of the Mt Albert School site should allow for a final capacity of 800 student spaces.

Table 10: Network School Site Sizes

School Name	Site Size
Mt Albert School	3.0
Edendale School	2.4
Gladstone School	2.3
Marist School	0.7
Waterview School	2.0

# Conclusion

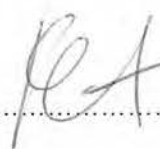
Mt Albert School is currently operating at 80% utilisation, however the school has started 2016 with a higher roll than the peak roll in 2015 due to higher than expected new entrant enrolments. Between March and July the school's roll has grown by around 44 students.

At this time the school does not operate an enrolment scheme home zone, and over half of students attend the school from outside of the immediate catchment area.

Current projections (Scenario Two) show the school's roll growing beyond its current capacity within the next 12 months.

The network as a whole is under significant stress and requires some adjustments in order to ensure that all schools can operate to their capacity.

Analyst, Planning  
(Kat Ashmead, Drafter)



Date: 2-8-16

Senior Advisor, Sector Enablement and Support  
(Emma Bourne, Reviewer)



Date: 2/8/16

Property Advisor  
(Anthea Morrell, Reviewer)



Date: 16/8/2016

Infrastructure Manager  
(John Karl, Reviewer)  
Anthea Morrell



Date: 16/8/2016

Lead Network Advisor  
(Nick Blythe, Reviewer)



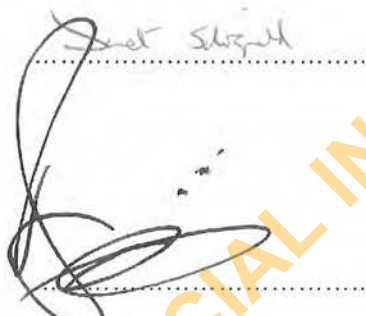
Date: 2/8/2016

# Recommendation

That Mt Albert School:

- Begin the process of implementing an enrolment scheme, with a target date of Term Two 2017; and
- Receive roll growth funding for **six additional teaching spaces**; and,
- Is masterplanned for around 800 students, with a view to alleviating overcrowding in the surrounding network of schools.

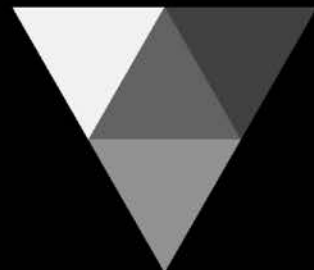
Network Manager  
(Janet Schofield, Network Authoriser)



Date: 8/08/16

Regional Property Manager  
(Brian Mitchell, Property Authoriser)

Date: 16/8/16



Lifting aspiration and raising educational  
achievement **for every New Zealander**



# New Teaching Space Template

Complete all white boxes

Version: v1.2015

All budgets in this template exclude GST

School number   
 School name   
 School type

Year for which classroom is to be provided

## Section 1: PMIS Details

Total number of **classrooms** in PMIS (excluding gym teaching spaces)   
 Classrooms approved but not yet complete (including in lieu and work in progress)   
 Actual net area in PMIS (guide entitlement page)  m<sup>2</sup>  
 Total net gym area in PMIS  m<sup>2</sup>

## Section 2: School Roll Details

	Yr 0-1	Yr 2-3	Yr 4-6	Yr 7-8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13 +	Total
<b>Total roll</b>	110	162	244							516
Out of zone roll										0
Maori immersion roll										0
Non Maori immersion roll	110	162	244	0	0	0	0	0	0	516

Total high **ORS**   
 Total very high **ORS**   
 Outside technology roll

## Section 3: Classroom Deficiency

Predicted classroom entitlement   
 Current number of classrooms   
 Number of classrooms deficient

## Section 4: Gym Deficiency

Predicted gym entitlement  
 Current gym teaching spaces  
 Gym teaching space deficiency

## Section 5: Budget Calculation

	Standard	Specialist	Gym	
Number of teaching spaces	2	0	0.0	
Area added (net m <sup>2</sup> )	156	0	0	
Gross classroom budget	\$405,600	\$0	\$0	Gross gym budget
New multistory block?	No	No		
Lift allowance	\$0	\$0		
Site works allowance	\$32,500	\$0	\$0	
<b>Subtotal</b>	<b>\$438,100</b>	<b>\$0</b>	<b>\$0</b>	

**Total Construction Budget**

Does school have an enrolment scheme?  Date last reviewed

If No - What is being done to establish an enrolment scheme?

## Section 6: Guide Entitlement

Current net area  m<sup>2</sup> Net area entitlement  m<sup>2</sup>  
 New area  m<sup>2</sup>  
 Total net area  m<sup>2</sup> Net surplus / (deficiency)  m<sup>2</sup>

# New Teaching Space Template

Complete all white boxes

Version: v1.2015

All budgets in this template exclude GST

School number   
 School name   
 School type

Year for which classroom is to be provided

## Section 1: PMIS Details

Total number of **classrooms** in PMIS (excluding gym teaching spaces)   
 Classrooms approved but not yet complete (including in lieu and work in progress)   
 Actual net area in PMIS (guide entitlement page)  m<sup>2</sup>  
 Total net gym area in PMIS  m<sup>2</sup>

## Section 2: School Roll Details

	Yr 0-1	Yr 2-3	Yr 4-6	Yr 7-8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13 +	Total
<b>Total roll</b>	130	194	292							616
Out of zone roll										0
Maori immersion roll										0
Non Maori immersion roll	130	194	292	0	0	0	0	0	0	616

Total high **ORS**   
 Total very high **ORS**   
 Outside technology roll

## Section 3: Classroom Deficiency

Predicted classroom entitlement   
 Current number of classrooms   
 Number of classrooms deficient

## Section 4: Gym Deficiency

Predicted gym entitlement  
 Current gym teaching spaces  
 Gym teaching space deficiency

## Section 5: Budget Calculation

	Standard	Specialist	Gym	
Number of teaching spaces	6	0	0.0	
Area added (net m <sup>2</sup> )	468	0	0	
Gross classroom budget	\$1,216,800	\$0	\$0	Gross gym budget
New multistory block?	No	No		
Lift allowance	\$0	\$0		
Site works allowance	\$97,500	\$0	\$0	
<b>Subtotal</b>	<b>\$1,314,300</b>	<b>\$0</b>	<b>\$0</b>	

**Total Construction Budget**

Does school have an enrolment scheme?   
 If No - What is being done to establish an enrolment scheme?

Date last reviewed

## Section 6: Guide Entitlement

Current net area  m<sup>2</sup> Net area entitlement  m<sup>2</sup>  
 New area  m<sup>2</sup>  
 Total net area  m<sup>2</sup> Net surplus / (deficiency)  m<sup>2</sup>



Report

# Managing Auckland School Aged Population Roll Growth - South of Central Business District Area Final Report

Prepared for the Ministry of Education

Prepared by Beca Ltd(Beca)

21 August 2015



## Revision History

Revision N°	Prepared By	Description	Date
1	Corinne Marti Amelia Linzey Alex Fullerton	Draft for Ministry of Education Review	30/04/2015
2	Corinne Marti	Draft for Education Sector Review	30/04/2015
3	Corinne Marti Alex Fullerton Amelia Linzey	Final Report for Ministry of Education Review	21/08/2015
4			
5			

## Document Acceptance

Action	Name	Signed	Date
Prepared by	As Above		09/09/2015
Reviewed by	Amelia Linzey		09/09/2015
Approved by	Amelia Linzey		09/09/2015
on behalf of	Beca Ltd		

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*Acknowledgement must be given to Newmarket Primary School for use of the photograph on the front cover.*

## Executive Summary

Beca Limited is providing to the Ministry of Education services and deliverables to assist the Ministry in their planning for expected roll growth of the school aged population across the South of the Auckland Central Business District school network area.

The network area extends in the north to include the enrolment areas of Newmarket Primary School and Mount Eden Normal Primary School, while the southern network area includes Our Lady of the Sacred Heart and Maungawhau Primary School. To the east, the network area includes Auckland Normal Intermediate, Kohia Terrace School and Epsom Normal School and to the west Balmoral School, Good Shepherd School and Balmoral Seventh Day Adventist School.

For the purpose of this network area report, schooling provision is discussed in two education cohorts:

- Ages 5 to 10 (Year 1 to 6); and
- Ages 11 to 12 (Year 7 to 8).

This study covers the nominal 20-year period between 2013 and 2031. The year 2031 has been selected as it corresponds to the Statistics New Zealand projections that have been used as the base information for the demographic and growth forecasts in this report. The study uses 2013 information provided by the Ministry including school roll data, planned school capacity information, and geographical roll distribution of each school.

This report is based on population projections developed by Statistics New Zealand in 2006, with modifications (discussed in the assumptions and limitations) given current growth planning in both Auckland City. It is recognised that these forecasts rely on a number of planning and infrastructure processes and a monitoring programme is also recommended to track these forecasts over time.

### Projected Growth in the South of Central Business District Area

Key population trends identified from the projections include:

- The population of the South of CBD network area is expected to increase mainly due to higher residential densities in the urban area and an increase in the size (extent) of that urban area through to 2031. Key areas of growth include:
  - Between 2016 and 2031 -Newmarket area, Grafton area
  - Between 2016 and 2031 - Newmarket area, Potentially Three Kings
  - Between 2016 and 2031 - West Balmoral/South Mount Eden area
- For a significant period of time Auckland Council has been providing capacity for growth in particular areas within the South of CBD network area. In particular, around Khyber Pass Road and Newmarket Metropolitan Centre there is zoning which provides for Terrace Housing and Apartment Buildings as well as Mixed Use. Along Mt Eden and Dominion Road there are pockets of Mixed Housing Suburban. This means that the Proposed Auckland Unitary Plan is providing for intensification of housing in these areas, in specific „hot spot“ areas. This leads to an increase in population concentrated to these growth areas.
- It is considered that the market attractiveness of this area means that the Newmarket Area and Balmoral are particularly feasible for developers in the shorter term (in other words capacity will be filled in the short to medium term).



Statistics New Zealand's population projections are based on 2006 Census data. The growth between the 2006 and 2013 Census indicates that these projections have underestimated population growth in some Census Area Units in the South of Central Business Network Area. Therefore, forecasts have added additional population in Census Area Units where underlying zoning, Auckland Council provision for growth and the Residential Capacity Report indicated that there was likely to be substantial population increases.

No review has been undertaken of the underlying demographic assumptions in Statistics New Zealand's growth projections (e.g. natural population growth and migration rates). For this reason, it is strongly recommended that a review of the forecasts is undertaken once Statistics New Zealand releases their new population projections (based on the 2013 Census). These projections are expected at the end of August 2015.

## Projected School Aged Growth in the South of Central Business District Area

- Overall, the population of school-aged residents (5 to 12 year olds) in the South of Central Business District network area is expected to increase by an average of 40-60 students per year through to 2031. That's an average increase of approximately 200-300 students every five year forecast period. In respect of the two age cohorts discussed in this network area report, this is anticipated to be:
  - 8-10 new students of an age of 11-12 year olds per year; and
  - 35-40 new students of an age of 5-10 year olds per year.
- In terms of the geographical spread, it is expected that the areas where there will be the most significant growth will be Balmoral, Newmarket and potentially Three Kings (noting the latter of these is considered highly depending on the outcome of the current Plan Change for the Three Kings quarry site).

## Existing Capacity to Provide for Growth

- The modelled projections show that the population growth across the network area will exceed school capacities at Balmoral School and Newmarket School as early as 2016.
- From 2016-2021 Auckland Normal Intermediate will be unable to accommodate projected growth unless additional capacity is added to the school site. In the long term all schools except for Mt Eden Normal and Maungawhau are likely to be unable to cope with the projected growth throughout the network area.
- However, for the purpose of modelling capacity the assignment assumption is that students attend the school they are „zoned“ to attend. It must be noted that some schools do not have capacity issues if it assumed that no parental choice is exercised and students only attend schools within their home zone.

## Management Options to Be Considered

The management options identified in this report are focussed on those options available for the provision of capacity across the school network. It is recognised that within the network, there are some issues relating to existing network or school management (e.g. the enforcement of school enrolment zones and parental choice in schooling) that are influencing the current patterns of capacity for schools across the network. These matters are noted but are not specifically discussed further.

A number of network management options have been identified by the education sector to respond to the forecast growth in the area. In summary, these options include:

- Increasing capacity of existing schools, which in some cases can accommodate future growth demand;
- Review of each schools' expectation of capacity to be able to accommodate growth;
- Review of either the structure and/or the enforcement of the enrolment scheme policy within the catchment area as current distributions could potentially be better managed;

- More analysis of the schools which Years 7-8 students in the network attend is needed to determine whether capacity issues can be mitigated by increasing the capacity of other schools outside of this network area; and
- In the long term potentially new schooling capacity, depending on the outcome of medium and short term growth responses. Careful site selection would be necessary to utilise existing capabilities in the network.

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## Appendices

### Appendix 1: Figures of School Catchment Capacity

# 1 Introduction

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Beca Limited (“**Beca**”) is providing to the Ministry of Education (the “**Ministry**”) services and deliverables to assist the Ministry in their planning for expected roll growth of the school aged population across the South of the Auckland CBD school network area (the “**network area**”).

A map detailing the 10 confirmed schools relevant to this network area is provided in Figure 1. The area extends in the north to include the enrolment areas of Newmarket Primary School and Mount Eden Normal Primary School, while the southern network area includes Our Lady of the Sacred Heart and Maungawhau Primary School. To the east, the network area includes Auckland Normal Intermediate, Kohia Terrace School and Epsom Normal School and to the west Balmoral School, Good Shepherd School and Balmoral Seventh Day Adventist School.

Collectively, the network area described above has been referred to as the “**South of CBD network area**” in this report. Further discussion on development patterns and growth trends within this wider network area is provided in Section 4 of this report.

## 1.1 Background

The Ministry is responsible for managing the network of schools within New Zealand. In the Auckland region it is estimated that there will be an additional 107,000 school aged children by 2040.

The Ministry has set out a plan to manage Auckland school age population growth by dividing the regions schools into geographic areas comprising a network of schools and preparing plans for these “**network areas**”. These plans seek to provide forecasted growth in school networks for each 5 year period until 2030 and identify viable management options to respond to this growth in each network area. The plans are based on:

- Existing data held by the Ministry of Education, including school roll and growth projections information;
- Other information sources on growth projections / development projections; and
- Options that could be considered for the management of the expected growth, based on interviews with schools in the area and information held by the Ministry of Education.

The South of CBD network area is one of nine initial networks areas that have been identified as being of high priority by the Ministry, given the current network of schools and the projected resident population growth planned.



## 2 Scope of Study

The purpose of this report is to determine the future school network needs of the “South of CBD network area”<sup>1</sup> through to 2031 to inform strategic planning for the Ministry. This includes understanding network demand and supply of capacity across the network area in order to inform the identification of demand for increased school capacity. The report is limited to assessment of, and options for, general population state schooling capacity and demand. Interviews were also undertaken with three integrated schools (Good Shepherd School, Auckland Seventh Day Adventist School and Our Lady of the Sacred Heart School). While commentary is made regarding the capacity and growth trends for integrated schools, it is acknowledged that growth and planning for these education services either includes other agencies and/or wider catchments than discussed in this network area report.

Within this report the network area is further described in respect of three aspects: geographic, cohort and timeframe. These aspects are described in the summary below.

### 2.1 Scope of Study – Geographic

The boundaries of the South of CBD network area were identified by Ministry staff with input from the Project Team. Figure 1 shows the geographical extent of the network area discussed in this report.

The area encompasses the geographic areas in Table 1 (these are defined by the Census Area Units (CAU) from Statistics New Zealand which generally accord with defined suburbs).<sup>2</sup> For reference, the table includes the 2013 Census resident population per age cohort and total population of the listed Area Units.

**Table 1 Network Area CAU's and population (2013)**

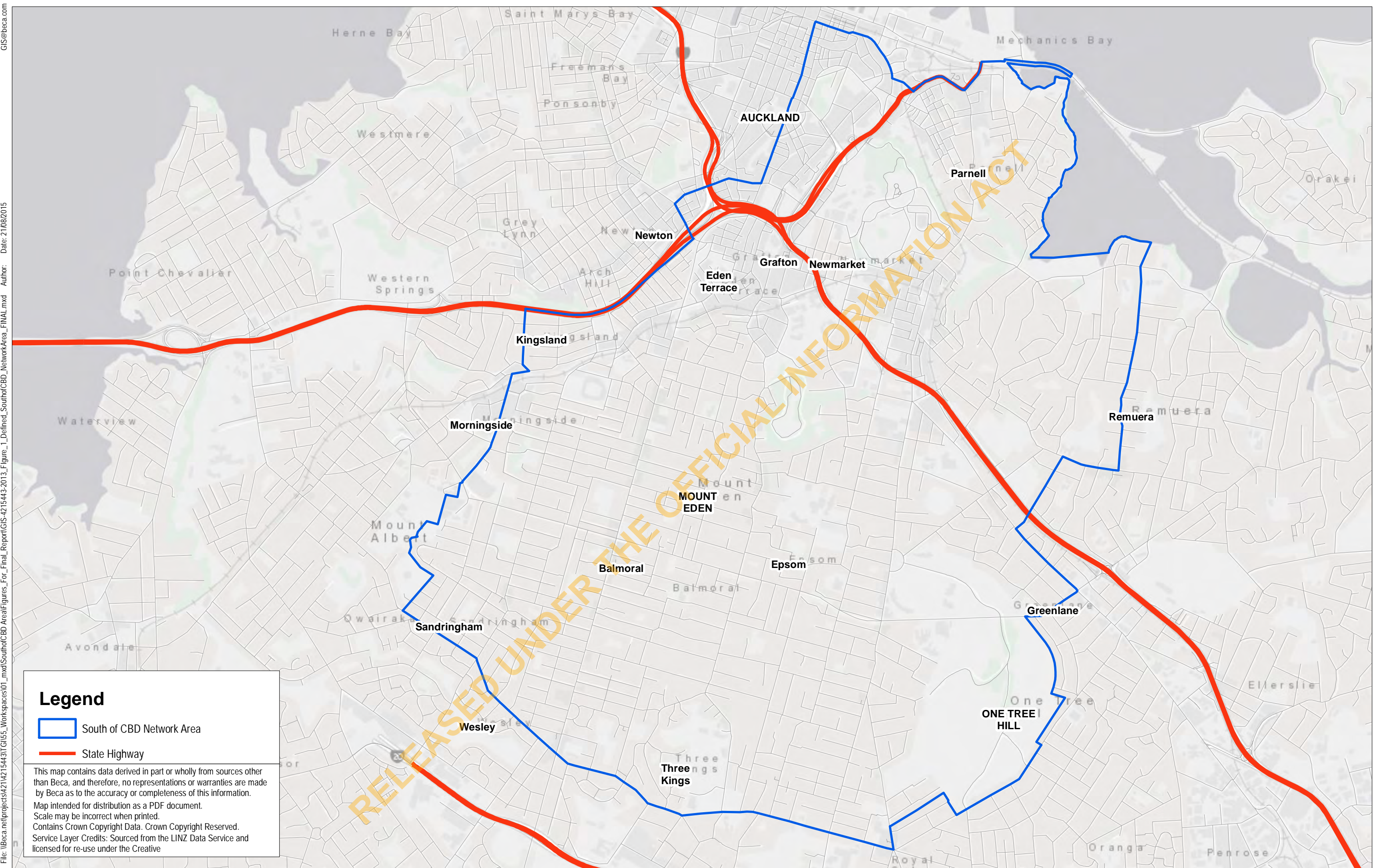
CAU	Primary School population Ages 5 – 10	Intermediate School Population Ages 11 – 12	Total school population Ages 5-12	Total population All ages
Mt Eden East	213	78	291	2670
Balmoral	525	150	675	5445
Three Kings	363	123	486	5430
Eden Terrace	60	24	84	2571
Mt Hobson	81	45	126	1380

<sup>1</sup> This area extends to the north to include Newmarket School and to the south to include Good Shepherd School, Maungawhau School and Our Lady of the Sacred Heart School. To the east the network is bounded by the motorway as shown in Figure 1 of this report.

<sup>2</sup> Based on the 2013 Census Area Unit Boundaries and it is noted that in some cases these area unit boundaries extend outside the area defined for this report. For example for the One Tree Hill CAU. Overall, the correlation of CAUs to the network area is only approximately 40% (this is discussed further in section 5.3 of this report).

CAU	Primary School population	Intermediate School Population	Total school population	Total population All ages
	Ages 5 – 10	Ages 11 – 12	Ages 5-12	
Mt St John	318	180	498	4767
Auckland Central East	78	27	105	10104
Parnell West	219	63	282	4764
Parnell East	138	57	195	2331
Mt Eden South	405	102	507	4827
Maungawhau	363	93	456	3915
Royal Oak	423	132	555	5592
Epsom North	177	135	312	3615
Waitaramoa	330	153	483	3927
Remuera West	198	78	276	3351
One Tree Hill Central	177	66	243	2667
Newton	21	3	24	1644
Newmarket	120	45	165	2961
Sandringham West	291	87	378	4845
Sandringham East	276	72	348	3273
Sandringham North	255	63	318	3204
Sherbourne	177	63	240	2772
Mt Eden North	141	39	180	3225
Grafton East	27	9	36	1071
Grafton West	27	15	42	3384
Kingsland	222	63	285	4632
Epsom South	312	141	453	3642
Epsom Central	309	144	453	3786





### Legend

South of CBD Network Area

State Highway

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## 2.2 Scope of Study – Cohorts

For the purpose of this network area report, schooling provision is discussed in two education cohorts:

- Ages 5 to 10 (Year 1 to 6); and
- Ages 11 to 12 (Year 7 to 8).

The discussion on management options, in section 6 of this report, refers to these two education age cohorts. It is recognised that the education provision of schools in this network area includes a composite of different education cohorts. These are defined using the following terminology:

- Contributing Primary School (Years 1 to 6);
- Full Primary School (Years 1 to 8); and
- Intermediate (Years 7 to 8).

## 2.3 Scope of Study - Projection Timeframe

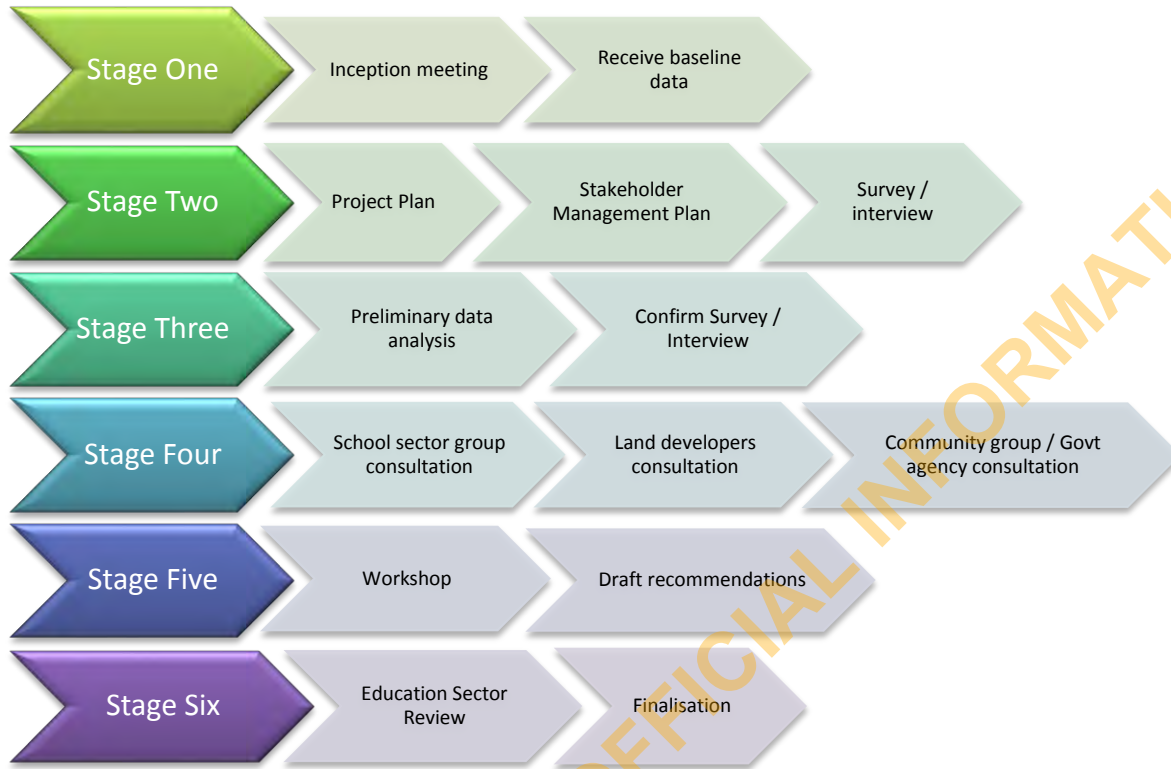
This study covers the nominal 20-year period between 2011 and 2031. The year 2031 has been selected as it corresponds to the Statistics New Zealand projections that have been used as the base information for the demographic and growth forecasts in this report.

The study uses 2013 information provided by the Ministry including school roll data, planned school capacity information, and geographical roll distribution of each school.



### 3 Methodology

Figure 2 below provides a summary of the overall methodology for the preparation of this report.



*Figure 2 Methodology Summary*

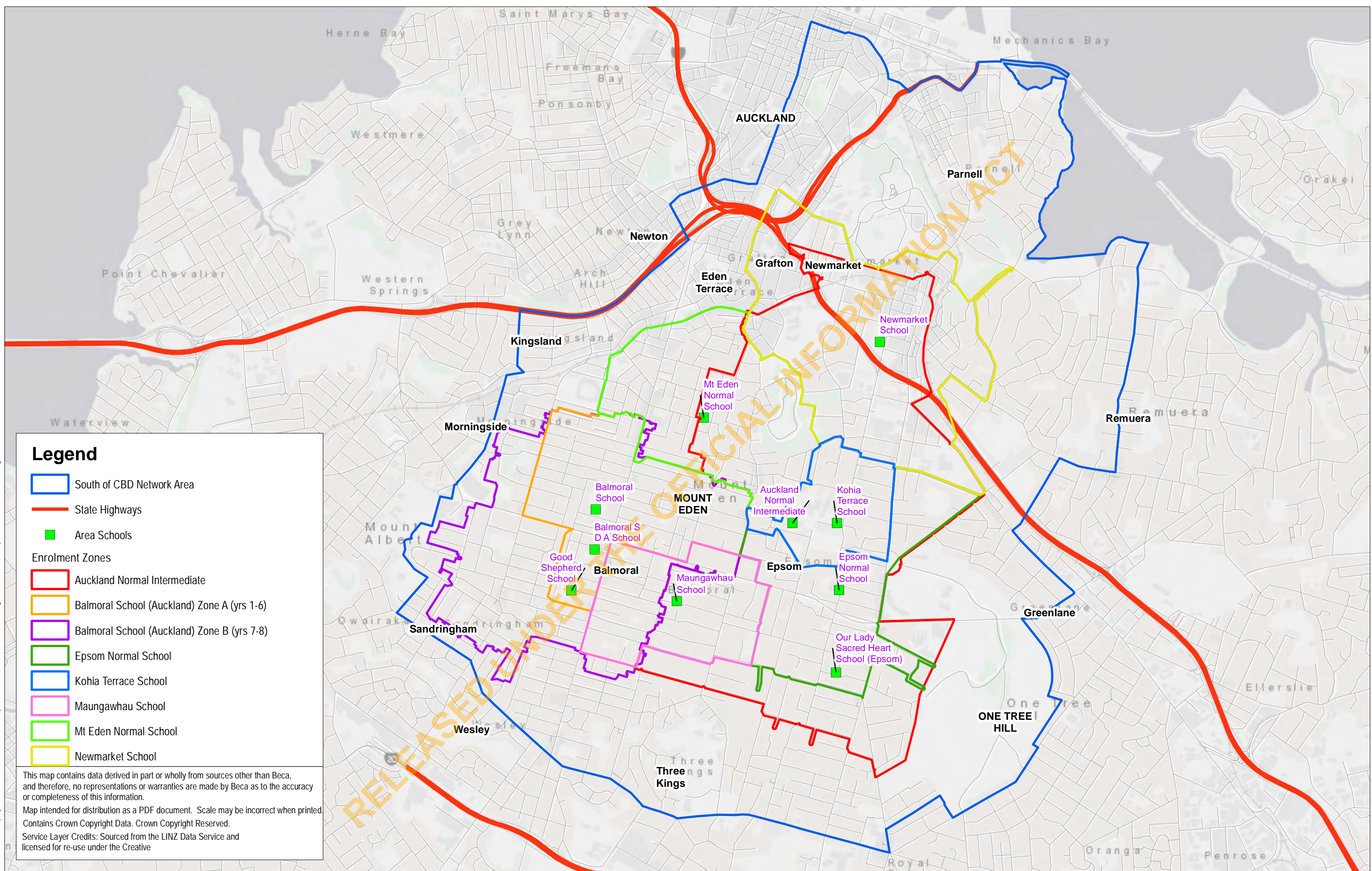
#### 3.1 Stage 1 – Inception Meeting and Baseline Data Collection

This Area report was initiated in February 2015. The inception meeting provided a review of the Ministry of Education's existing information in respect of roll trends for schools in the network area. The meeting was also used to confirm the network area boundary and the proposed project methodology.

From this meeting, the schedule of schools included in the network area was confirmed. The total number of schools identified for consultation and engagement was 10. These schools included six Primary Schools (full and contributing), one Intermediate School (Auckland Normal Intermediate) and three State Integrated Schools (Balmoral Seventh Day Adventist School, Good Shepherd School and Our Lady of the Sacred Heart School).



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### Legend

South of CBD Network Area

State Highways

Area Schools

#### Enrolment Zones

Auckland Normal Intermediate

Balmoral School (Auckland) Zone A (yrs 1-6)

Balmoral School (Auckland) Zone B (yrs 7-8)

Epsom Normal School

Kohia Terrace School

Maungawhau School

Mt Eden Normal School

Newmarket School

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Revision	Author	Verified	Approved	Date
2	SRH	AYF	AL	19/08/2015
1	R/L	Draft	Draft	13/04/2015

Title:

Figure 3  
Schools included in  
South of CBD Network Area

Client:

Ministry of Education

Project:

Auckland Roll Growth  
Consultation & Recommendations

Discipline:

GIS

Drawing No:

GIS-4215442-2014



### 3.2 Stage 2 – Project Plan

A project plan was prepared in order to provide a summary of the programme and work plan to deliver the Area report.

### 3.3 Stage 3 – Preliminary Data Analysis

This stage involved analysis of the information and data supplied by the Ministry and Auckland Council and The analysis sought to:

- Review the data provided in light of other growth projection / growth analysis information (e.g. sourced from Auckland Council, infrastructure providers); and
- Identify any data / information gaps to inform following project stages, particularly any issues evident that arise from the quantitative data that warrant further exploration in the qualitative „consultation“ data gathering phase.

The various data sources received and used in undertaking the analysis included:

- Ministry of Education school roll data and growth projections;
- Statistics New Zealand 2006 Census data and population projections;
- Statistics New Zealand 2013 early data releases;
- Auckland Transport / Auckland Council „Auckland Regional Transport“ (ART) Model; and
- Auckland Council „Capacity for Growth Study 2013“ includes the results data.

### 3.4 Stage 4 – Engagement

This stage involved:

- Interview meetings with principals and in some cases representatives of the school Boards of Trustees of the identified schools in the network area; and
- Phone interviews (including provision of some development capacity data) with development agents and government agencies (in particular the „Research, Investigation and Monitoring Unit“ (RIMU) and „Housing Projects Office“ (HPO) at Auckland Council and Auckland Transport).

This stage of the Project was led by Amelia Linzey, Corinne Marti (Beca) and Derek Devoy (Devoy Consulting Ltd) in respect of education sector interviews and Corinne Marti in respect of Council and development sector interviews / survey.

### 3.5 Stage 5 – Draft Network Area Report

On the basis of the information collected from the data review, interviews and surveys, the draft network area report was prepared. This includes:

- An overview of growth projection information (particularly in relation to potential growth in new dwellings), trends and „risks“ to timing / delivery of growth projections (e.g. infrastructure or land „zoning“ constraints or similar that could influence the rate, timing or scale of growth projects). Importantly, this section provides a summary of key assumptions (risks and limitations) of the projections used (Section 4 and specifically Section 4.2.5 in respect of assumptions and limitations);
- Mapping to graphically display growth projection information in respect of the current capacity of schools in the network area (to show areas of potential capacity short-fall for various age cohorts) (Section 5); and

- Summation of the feasible options as identified in engagement with the network of schools, including a summary of key trends, issues and constraints identified from the school engagement and reporting of opportunities / options identified from that engagement (Section 6).

### 3.6 Stage 6- Report Finalisation

The Ministry distributed the Draft Area Report for review and comments were received from the schools (Principals and Boards of Trustees) in the network area. These comments were considered and included in the final report.



## 4 Growth Forecasts

### 4.1 Introduction

This report has developed population forecasts for the South of CBD network area. It is based on the population projections developed by Statistics New Zealand in 2006, with a number of modifications (discussed in the assumptions and limitations). This section provides a summary of:

1. How the forecasts have been developed;
2. Forecast population growth for the relevant „school aged“ population;
3. Limitations and assumptions of the data used; and
4. Monitoring / review recommendations for these forecasts.

### 4.2 School-Age Population Forecasts

#### 4.2.1 Context

A national Census was not undertaken in 2011 as planned due to the Canterbury earthquakes. It was instead postponed until 2013. The result is that only a limited amount of 2013 Census data has been released at the date of this report. Therefore, the population projections primarily rely on the data available from Statistics New Zealand based on the 2006 Census. Of the 2013 Census information the „Usually Resident Population“ data by meshblock and CAU has been released. This data has been used to ascertain how the 2006-base population projections are tracking. The results indicate that the „high“ Statistics New Zealand Projections, with a few modifications, are a fairly accurate representation of the population in the network area.

Only slight modifications have been made to CAUs where the model indicated that the 2014 Usually Resident Population count was significantly more than the high projection which utilised the 2006 census data. In this circumstance, additional population has been added to the affected CAUs. The amount of additional population was determined to be the difference between the projected 2006 high population count in the CAU and the 2013 Usually Resident Population Count. This was added on top of the projected base to the affected CAUs every 5 years.

The increase in population can to some extent be attributed to some intensification in the Newmarket area as it is seen as an attractive suburb due to its close proximity to the CBD, other business districts and integral transport corridors. The Auckland Plan and Proposed Auckland Unitary Plan (PAUP) also provide for further intensification in the network area to try and minimise the amount of urban sprawl and so that existing infrastructure is fully utilised.

In the Newmarket catchment the PAUP has re-zoned around the metropolitan centre of Newmarket to allow for terrace housing, apartment buildings and mixed housing in what was previously a suburban area. Consents have already been approved for new apartment buildings on Khyber Pass Road and in other areas within the Newmarket School catchment. Whilst previously apartment living may have been less desirable for families with primary school aged children, the increase in housing prices in Auckland and the close proximity of new apartments to transport links has made apartment living a more attractive option for some young families. We note that factors such as immigration and the complete opening of the Auckland University Campus on Khyber Pass Road could result in growth exceeding the forecasts as modelled.

Moreover, suburbs such as Epsom and Mt Eden are seen as „family friendly“ suburbs that are optimal for bringing up school aged children. Half of the network area also includes the enrolment schemes of high decile high schools (Auckland Grammar and Epsom Girls Grammar) and families are tending to move into these enrolment schemes during primary school to ensure that secondary school provision is also secured. The relationship of schools to the market attractiveness of residential areas is considered particularly relevant in the context of this area report.

#### 4.2.2 Data Sources

The population forecasts used in this report have been developed based on the following sources of information:

- Resident population counts from the 2013 Census, including age cohort data provided by Statistics New Zealand;
- Population projections from Statistics New Zealand, which are based on the 2006 Census of resident population;
- Ministry of Education held data on rolls for schools in the South of CBD network area; and
- Interviews were conducted with the following organisations in both the public and private sector which included:
  - Auckland Transport Strategy and Planning Department;
  - New Zealand Transport Agency;
  - Auckland Council Housing Projects Office;
  - Auckland Council Research Investigation and Monitoring Unit;
  - Housing New Zealand Incorporated; and
  - Real Estate Agents that within the network area.
- Planned growth / capacity data held by Auckland Council, based on known development proposals relevant to the South of CBD network area<sup>3</sup> (e.g. the Auckland Housing Policy Office), which has included:
  - Capacity data from the Auckland Council, based on information held for their structure planning and long term planning processes;
  - Known development constraint information (e.g. infrastructure capacity constraints) that may impact on the timing for growth (as defined through engagement undertaken for the Project); and
  - Development proposals and information defined through engagement undertaken for the Project.
- In July 2015 the Auckland Council released further information to the Auckland Unitary Plan Independent Hearings Panel. In particular, a joint report has been prepared by experts in Auckland, outlining the Residential Capacity for Auckland utilising Auckland Council Development Capacity (ACDC) Model. This report has estimated the current enabled development feasible capacity enabled by the Proposed Auckland Unitary Plan. It also identifies areas in Auckland where site enabled dwelling capacity is

<sup>3</sup> Information from the Housing Policy Office was determined via interviews undertaken in April 2015 and is current as at that date.

“feasible” and “not feasible” on the basis of a combination of underlying zoning and market attractiveness (e.g. the profits which developers are likely to make from developing a site).

The data sources identified above were utilised to determine whether the low, medium or high population projection of the 2006 Census data should be used. Section 4.3 identifies key trends which enabled Beca to conclude that a high growth projection should be utilised.

### 4.3 Growth Trends and Constraints

As noted in Section 3, interviews and information has been obtained from the „development sector“ (including Council, real estate, developers and infrastructure providers).<sup>4</sup> This information has been used to assist in understanding planned growth, the timing (or time constraint) of growth and where possible the nature of that growth (e.g. lifestyle versus retirement versus „family“ housing developments). This information has also assisted in determining where market demand patterns are and the likely movements of demand and housing provision over the forecast period.

Upon reviewing the data sources the key trends are as follows:

- For a significant period of time Auckland Council has been providing capacity for growth in particular areas within the South of CBD network area. In particular, around Khyber Pass Road and Newmarket Metropolitan Centre there is zoning which provides for Terrace Housing and Apartment Buildings as well as Mixed Use. Along Mt Eden and Dominion Road there are pockets of Mixed Housing Suburban. This means that the Proposed Auckland Unitary Plan is providing for intensification of housing in these areas which leads to an increase in population if the market deems these places to be a worthwhile investment.
- Assessments of market attractiveness and residential capacity have been prepared by Council and others as part of the Unitary Plan hearings process. This information supports the conclusion that there is a notable proportion of the South of CBD network area that is suitable for urban intensification under the Proposed Auckland Unitary Plan, both in terms of provision of zoning and market attractiveness (suitability for development)<sup>5</sup>.
- Throughout and near to the network area there are a number of Special Housing Areas including but not limited to, Enfield Street in Mount Eden, Akepiro Street in Kingsland, on Khyber Pass Road in Newmarket (which could produce up to 61 residential units) and St Lukes Road in Mt Albert. It must be noted that not all of the Special Housing Areas have had consents granted and some do not yield a substantial number of houses. However, it does indicate that Auckland Council is signalling on-going development of these areas for residential development (all of which are in and near to the network area).
- It must also be noted that to the south of the network area in Three Kings a plan change is being sought to be able to develop housing. It is expected that if the plan change is successful the development will go ahead in 2018, although some houses may be built before them.

<sup>4</sup> Infrastructure providers include the New Zealand Transport Agency, Auckland Transport, Auckland Council and Housing New Zealand.

<sup>5</sup> In particular, see the Residential Capacity Report for Auckland : A report on the 013 Topic Urban Growth for the AUP Independent Hearing Panel: Map on Feasibility Modelling: Dwelling Typology Tested (July 2015).

- The South of the CBD has excellent transport links to the rest of the city so is a desirable place for people to live. It is also close to work for many people and they are able to drop their child off at a school within the network while on their way to work.

Considering the trends above, the following forecast methodology was utilised;

#### 4.3.1 Overview of Forecast Methodology

The projections have been developed on the following basis:

- The „high“ population projection from the 2006 census data was compared to the 2013 Usually Resident Population of each CAU within the network area. This was mapped and it was determined that there was very little difference between the projected and actual population counts for the majority of the CAU within the network area; and
- The projections have forecast on-going population growth in areas of existing demand (based on the 2006 to 2013 population change for particular CAU), where there is „capacity“ for this growth<sup>6</sup> (in other words, where zoning and land use planning has provided this capacity).

It is noted that no review has been undertaken of the underlying demographic assumptions in Statistics New Zealand's growth projections (e.g. natural population growth and migration rates).

#### 4.4 Growth Forecast Summary

In light of the above information, a „heat map“ of areas for future growth has been prepared. This map, shown in Figure 4, shows the areas of planned and expected growth (over the next 30+ years) and has been collated on the basis of Statistics New Zealand Projections Council's planning maps, known and consented development areas, and constraint data collected from infrastructure and other agencies, and the projected 2006 Census population data. The heat map exemplifies the population at 2031.

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<sup>6</sup> Capacity has been determined by confirmation with Council on planned / consented developments in the area (for growth between 2013 and 2016) and a combination of planned growth and zoning for projections from 2016 through to 2031.



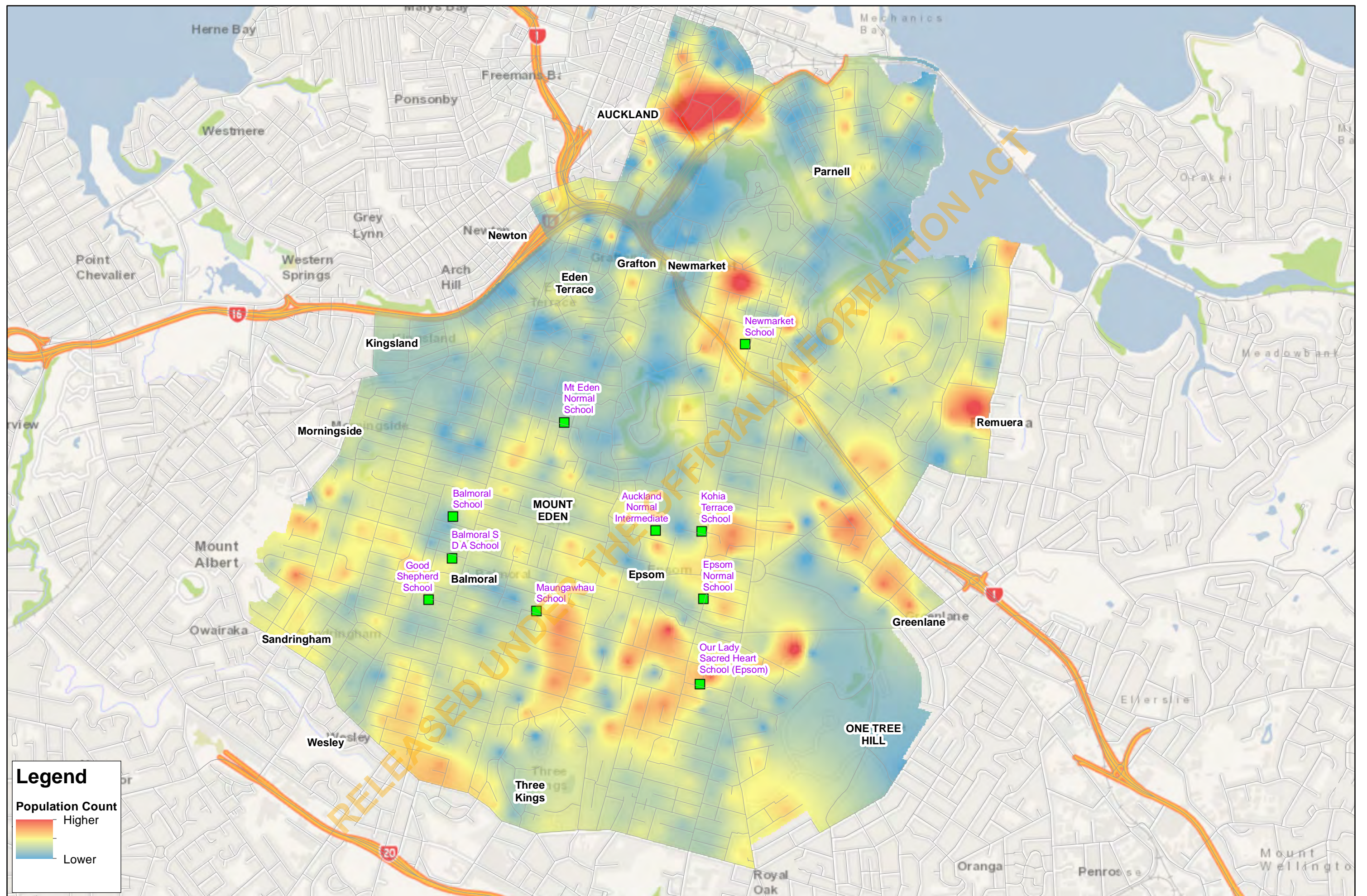


Figure 4: Projected Population Hot Spots - 2031  
South of CBD Network Area



The forecasts are developed in 5-year increments, from 2013 through to 2031 (aligning with the regular 5-year interval for Census). Figures 6 to 9 summarise the anticipated growth in population across the South of CBD network area for the relevant age cohorts for this network area; in other words ages 5 to 12 years at the Census Area Unit level.

Figure 4 represents the resident population (aged 5 to 12) as at 2031 and the relative density of the population throughout the South of CBD network. This has been completed by analysing the projected population data from the 2006 census and looking at the Proposed Auckland Unitary Plan zoning patterns to determine where the population is likely to be distributed. The greater the population density the more likely the area will be red and a „hot spot“ created. It must be noted that Three Kings Quarry Development is not shown as a „hotspot“ on figure 4. This is because the development is predicated on a private plan change which has not yet been confirmed. It would be advantageous for the Ministry to monitor this area closely because if development is confirmed it is likely to have an impact on schools in close proximity.

Figure 5 also represents the relative density of the population as at 2013 throughout the South of CBD network area at as Census Area Unit Level for the resident population aged 5-12 using 2006 Statistics NZ projections. Figures 6 through to 9 show expected changes in resident population of this age cohort (by population density) through from 2016 to 2031. Therefore, the relationship between Figure 4 and Figures 5-9 is that the same data has been utilised for Figure 4 and Figure 9 as both maps exemplify population density at 2031. The analysis in Figure 4 has been completed at mesh block level while Figure 9 is at Census Area Unit level.

Figure 10 exemplifies the difference between the 2013 Usually Resident Population count and the 2031 projected population count using 2006 data at a Census Area Unit level.

It is noted that both the resident population count and density provide a picture of the patterns of growth expected (in some cases the actual population growth may be high, but the change in density is less evident due to the size of the Census Area Unit). However, the majority of areas which are indicating high densities are also growth areas in the South of the CBD network area, namely Balmoral, Newmarket and Mount Eden. These growth patterns for the network are depicted in Figure 4.

The key trends identified from these forecasts are summarised in Table 2 below and include:

- Overall, the population of school-aged residents (5 to 12 year olds) in the South of CBD network area is expected to increase by an average of 40-60 students per year through to 2031. That's an average increase of approximately 200-300 students every five year forecast period. In respect of the two age cohorts discussed in this network area report, this is anticipated to be:
  - 8-10 new students of an age of 11-12 year olds per year; and
  - 35-40 new students of an age of 5-10 year olds per year.
- The population of the South of CBD network area is expected to increase mainly due to higher residential densities in the urban area and an increase in the size (extent) of that urban area through to 2031. Key areas of growth are identified in Figure 5 and include:
  - Between 2016 and 2031 –Newmarket area, Grafton area
  - Between 2016 and 2031 - Newmarket area, Potentially Three Kings
  - Between 2016 and 2031 - West Balmoral/South Mount Eden area

It is noted that some areas may have experienced an increase in population although may not appear as population „hotspots“ on the map as they are comparatively less dense areas of the city. Therefore, Figure 4 should be viewed in tandem with the information on Figures 6 through to 9.

**Table 2 Forecast numbers of school-aged children within the network area**

2013	2016	2021	2026	2031
4,350 <sup>7</sup>	4,750	5,050	5,300	5,450

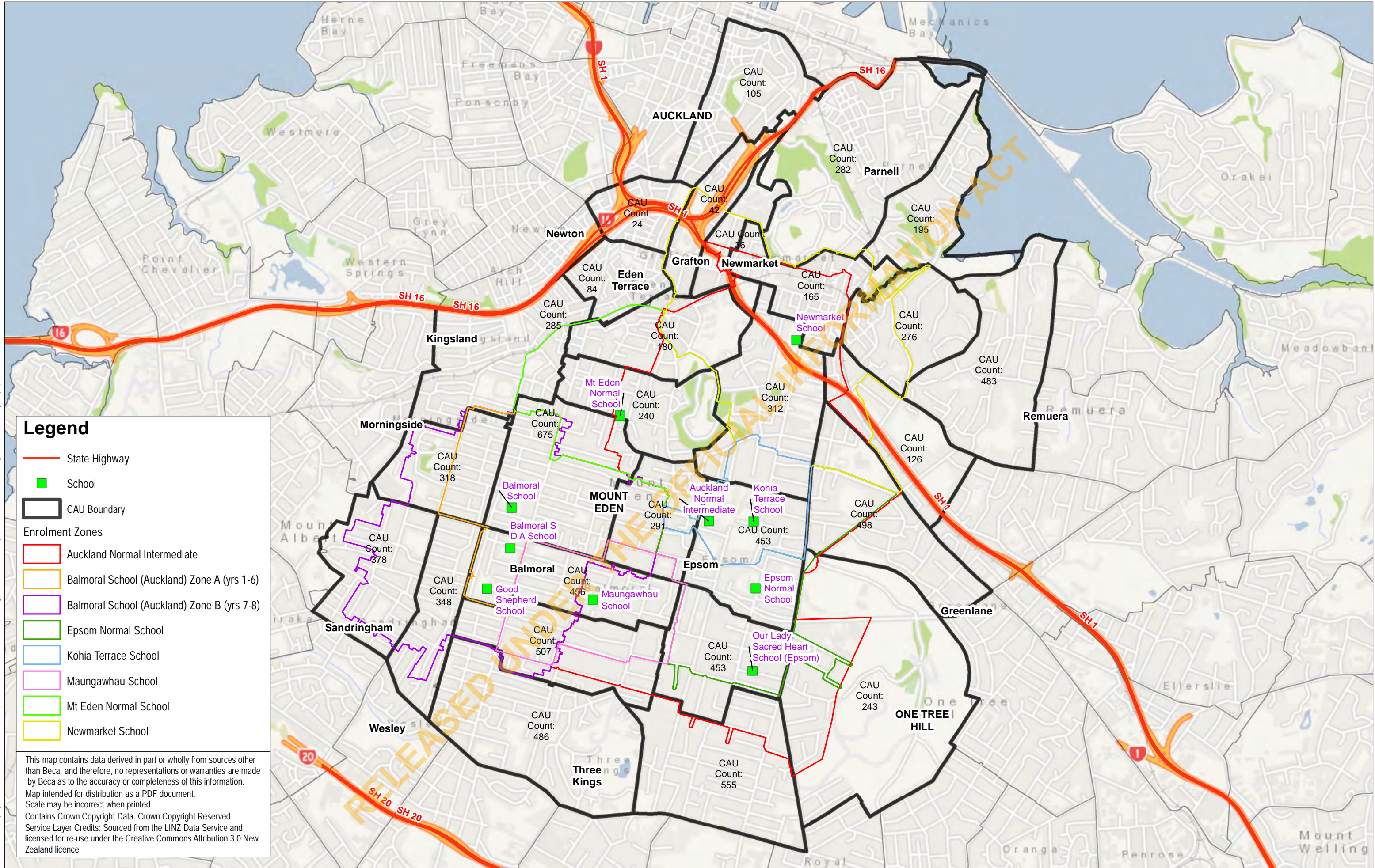
It is anticipated that the 2013 Census population projections will be made available by Statistics NZ in late 2015<sup>8</sup>. Given the assumptions and limitations of the growth forecasts (discussed below), we strongly recommend that these projections be reviewed when that updated information is made available.

<sup>7</sup> This figure is lower than the combined CAUs relevant to the network area as the network area is a smaller portion (approximately 50%) of this area.

<sup>8</sup> At the time of preparing this report, it is understood these projections would be available in August 2015.



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Revision	Author	Verified	Approved	Date
2	SRH	AVF	AL	20/08/2015
1	R/L	Draft	Draft	13/04/2015

Title:

Figure 5

School Aged Population

(5-12yo) - 2013

Client:

Ministry of Education

Project:

Auckland Roll Growth

Consultation & Recommendations

Discipline:

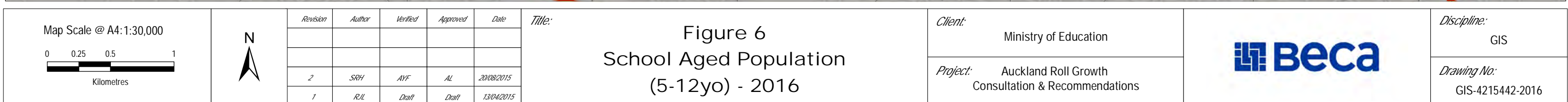
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GIS-4215442-2015

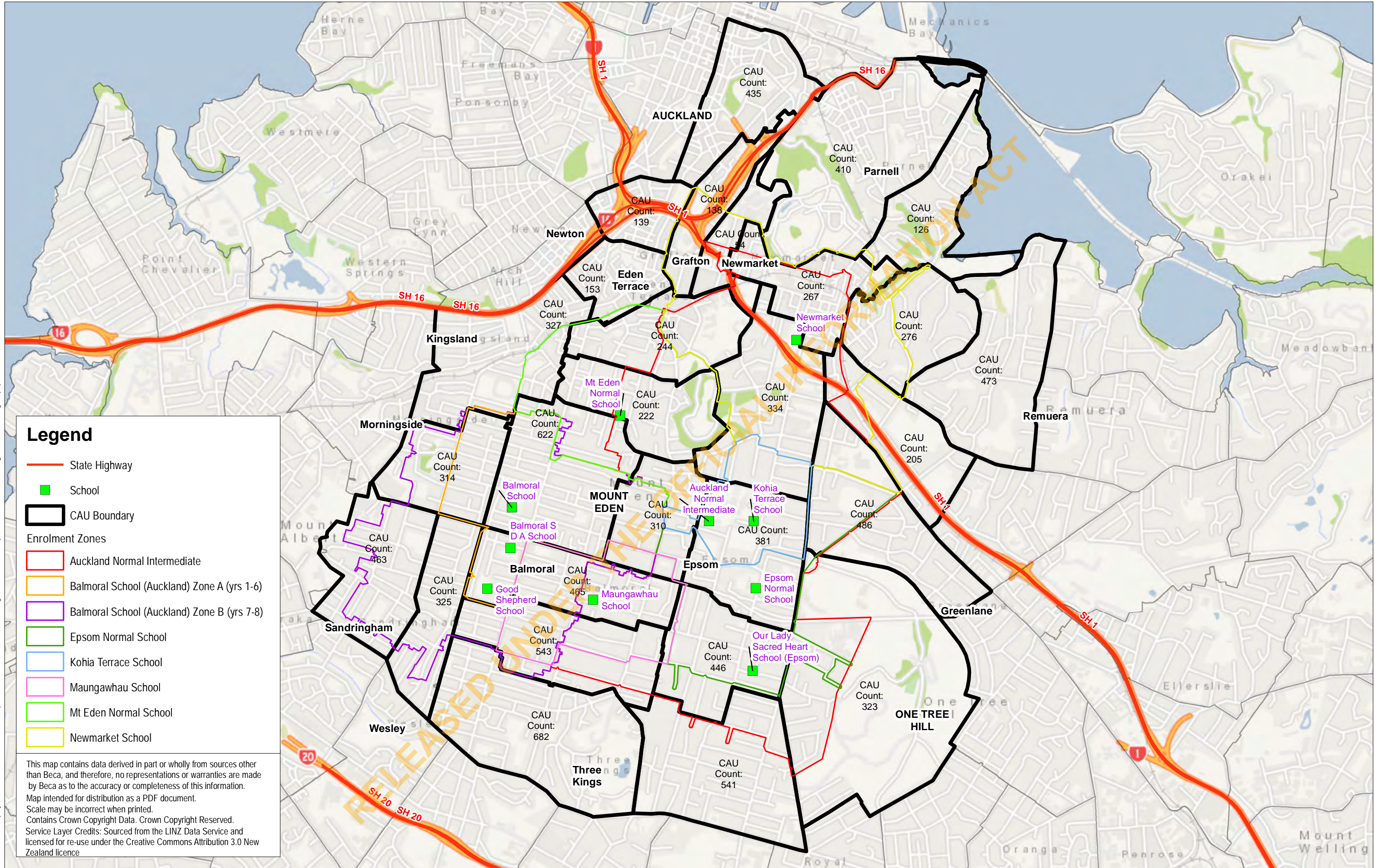
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Revision	Author	Verified	Approved	Date
2	SRH	AYF	AL	20/08/2015
1	R/L	Draft	Draft	13/04/2015

Title:Figure 7  
School Aged Population  
(5-12yo) - 2021

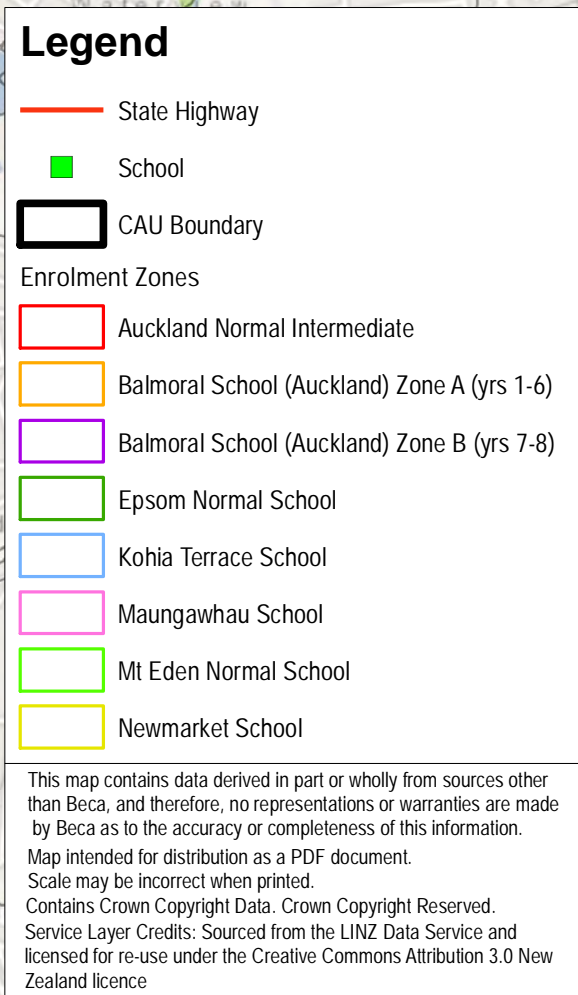
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Project:Auckland Roll Growth  
Consultation & Recommendations

Discipline:GIS

Drawing No:GIS-4215442-2017



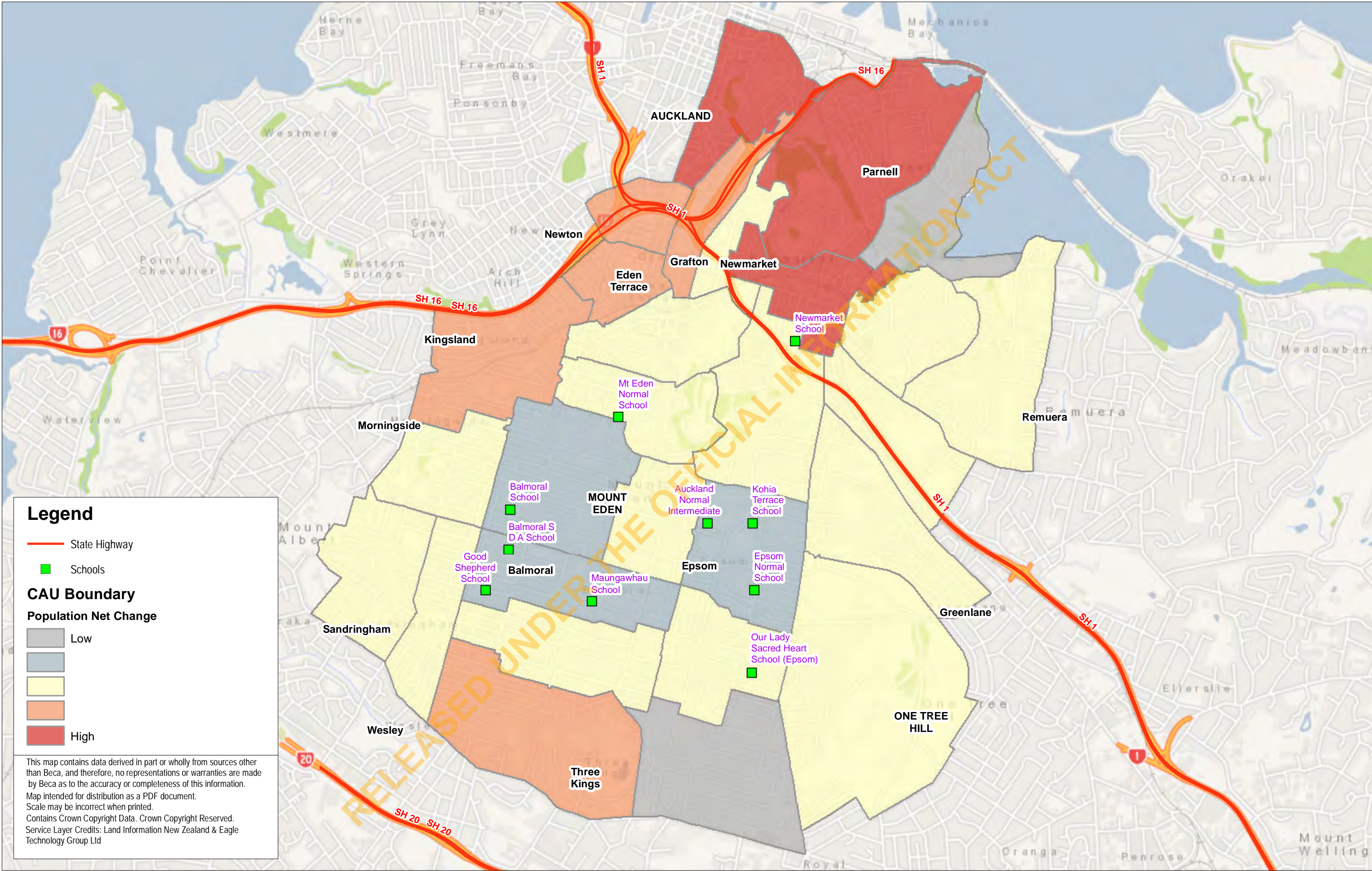








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<div>Map Scale @ A4:1:30,000</div> <div><div>00.250.51</div><div>Kilometres</div></div>	<div>N</div>	<div>Revision</div> <div>Author</div> <div>Verified</div> <div>Approved</div> <div>Date</div>	<div>Title:</div> <div>Figure 10</div> <div>School Aged Population - CAU</div> <div>Difference 2013 (Actual) vs 2031 Projected</div>	<div>Client:</div> <div>Ministry of Education</div> <div>Project:</div> <div>Auckland Roll Growth Consultation &amp; Recommendations</div>	<div>Discipline:</div> <div>GIS</div> <div>Drawing No:</div> <div>GIS-4215442-2019</div>
		<div>2</div> <div>SRH</div> <div>AVF</div> <div>AL</div> <div>20/08/2015</div>			
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## 4.5 Assumptions and Limitations of Data and Growth Forecasts and Monitoring Recommendations for these

The population growth data makes a number of assumptions, which need to be monitored. In particular, the following assumptions are noted and where relevant comment is made on options and possible monitoring to test these assumptions (in italics):

- It is assumed that the age-structure of growth will continue to be broadly consistent with that experienced between 2006 and 2013 (in other words, the proportion of the school-aged population will remain consistent with the population as at the 2013 Census).
  - *It is noted that this assumption will (at least in part) be 'tested' by Statistics New Zealand when their growth projections are available in late 2015. Further on-going monitoring of school rolls (and the wider education sector, particularly Early Childhood) will also assist in validating (or amending) this assumption.*
- It is assumed that in the Kingsland and Newmarket CAUs the high 2006 projections underestimated the population at 2013. Therefore, the difference between the projected 2013 population and actual 2013 count from the Census has been added as the base for the subsequent forecasted growth.
  - *It is noted that this assumption will (at least in part) be 'tested' by Statistics New Zealand when their growth projections are available in late 2015. Further on-going monitoring of school rolls (and the wider education sector) will also assist in validating (or amending) this assumption.*
- Auckland Normal Intermediate and a portion of Kohia Terrace and Balmoral School's provide intermediate age capacity in the network. A limitation of the model is that there are other intermediate schools close to the network area that may also be providing schooling to 10-12 year olds within the network area.

## 5 Current Network Supply and Capacity for Growth

### 5.1 Local Network of Schools

For the purposes of this study, the current network has been defined by the schools identified in Figure 3. These include all state schools (including those state-integrated schools with „catchments“ relevant to the network area), that are likely to be directly affected by population growth within the study area and/or, by virtue of their location, may be effective in accommodating growing student numbers from within the study area. There are 10 schools in the network area.

#### 5.1.1 Contributing Primary Schools

There are four contributing primary schools in the network area. The majority of students from these schools attend Auckland Normal Intermediate for Years 7 and 8, although some students who attend these primary schools attend Remuera Intermediate School and Kowhai Intermediate School which are outside the scope of the network area.

- Epsom Normal School
- Maungawhau School
- Mt Eden Normal School
- Newmarket School

#### 5.1.2 Full Primary Schools

There are two full primary schools in the network area.

- Balmoral School (there are different enrolment schemes for Years 1-6 compared to Years 7-8)
- Kohia Terrace School

#### 5.1.3 Intermediate Schools

There is one intermediate school in the network area.

- Auckland Normal Intermediate

#### 5.1.4 State-Integrated School Provision

The network area also contains three state-integrated primary schools which were part of the interview process.

- Balmoral Seventh Day Adventist School
- Good Shepherd School
- Our Lady of the Sacred Heart School

Although the insight attained from interviews with the Principals of these schools will be utilised to attain a better idea about school provision within the South of CBD network area, capacity data will not be provided for these schools as they are part of a much larger network of schools that is Auckland wide and is not limited to current geographical area. Comment from the interviews will be provided.

The network area also contains independent schools: Dilworth School, Diocesan School for Girls, ACG Parnell College and St Cuthbert's College. The „gap“ between the number of children enrolled at local

schools and the number of children resident in the network area (at the time of the 2013 Census), indicates that there are a number of students in the area attending these schools or Independent Schools elsewhere in the Region.

## 5.2 Capacity of Current Network

### 5.2.1 Capacity and Current School Rolls

At the time of undertaking this area report, there was theoretical education capacity „available“ in the current school network for Year 1-6 students. Table 4 below provides a summary of the total student capacity (based on confirmed teaching spaces) for all schools in the network area (as at 2014) compared to the 2014 October roll counts.

**Table 3 total student capacity of network area**

Age Cohort	Approximate Capacity in Network	Approximate 2014 Roll Count <sup>9</sup>	% Uptake (exceedance in red)
Years 1 to 6 inclusive	3277	3125	95%
Years 7 to 8 inclusive	1010	1077	106%
<b>Total school age capacity</b>	<b>4,287</b>	<b>4,202</b>	<b>98%</b>

Table 3 indicates the following:

- There was a small amount of available capacity at primary school level but the majority of schools were at capacity (Epsom Normal, Newmarket School and Kohia Terrace) or were approaching capacity with roll increases at the beginning of 2015 which were continuing to increase throughout the year (Balmoral School, Mt Eden Normal and Maungawhau School).
- The intermediate school capacity is being exceeded in the network with Auckland Normal Intermediate beyond capacity and Kohia Terrace and Balmoral School at capacity.

The capacity assessment has been undertaken with meshblock population growth (rather than CAU) to recognise the contribution that local patterns of population growth will have on school enrolment catchments. However, for the purpose of the network area assessment, no on-going assessment has been made to project „parental choice“ and out-of-zone enrolments at an individual school level. This is considered appropriate to assess the schooling capacity broadly across the network area and for consideration of management options (providing the Ministry with information on how the network is able to accommodate growth trends). However, it is recognised that these issues are significant at an individual school level.

<sup>9</sup> It must be noted that the 2014 Roll Count is from October.



**Table 4 Summary of in-zone and out-of-zone students (Based on 2014 Peak Roll)****-Schools with 'N/A' do not have an enrolment scheme**

School	In-zone	Out-of-zone	Percent of school roll that comes from outside of the network area <sup>10</sup>	Market Share <sup>11</sup>
Auckland Normal Intermediate	80%	20%	11%	67%
Balmoral School <sup>12</sup>	81%	19%	7%	57% (Primary) 52% (Intermediate)
Epsom Normal School	70.5%	29.5%	22%	71%
Maungawhau School	100%	0%	2%	82%
Mt Eden Normal School	100%	0%	2%	76%
Newmarket School	92%	8%	11%	54%
Kohia Terrace School	70%	30%	11%	51%
Good Shepherd School	N/A	N/A	N/A	6%
Our Lady of the Sacred Heart School	N/A	N/A	N/A	9%
Balmoral Seventh Day Adventist School	N/A	N/A	N/A	0% <sup>13</sup>

<sup>10</sup> This was calculated by determining the number of students that were from out-of-zone as well as from outside the South of CBD network area.

<sup>11</sup> This is based on Ministry of Education data which states the share of students which attend the school in the enrolment scheme home zone. For those schools who do not have enrolment schemes the share of students in the CAU catchment is used.

<sup>12</sup> Balmoral School has different enrolment schemes for Years 7-8 and Year 1-6. Out-of-zone students are only taken in Years 7-8. Therefore the percentage of in-zone and out-of-zone students in table 4 only refers to Year 7-8 students.

<sup>13</sup> This figure was too small to include and was not included in the demographic analysis provided by the Ministry.

## 5.3 Demand for State Schooling in the Study Area

### 5.3.1 The State School Market Share ("SSMS")

The State School Market Share ("SSMS") recognises that not all of the school-age population is likely to seek to attend state schools. The main reasons students do not attend state schools is that they:

- Attend independent schools (and on a New Zealand average basis, this is estimated to account for 4% of students); or
- Are home-schooled (less than 1% of the school age population).

There are also children outside the compulsory schooling age (6-16 years old) that choose not to attend school. This is accounted for in the SSMS calculations.

The SSMS has been assessed for the South of CBD network area. For the purposes of this report integrated schools are included in State Schools.

Given the comparison of current state-school enrolments in the network area with the resident population counts (2013 Census), the national averages cited above are considered to be accurate for the purposes of the South of CBD network area. For the purposes of this report Integrated Schools are included in the population projections.

Therefore, based on a combination of current Ministry national trends, roll information supplied by the Ministry and the current school roll capacity compared with resident population counts (2013 Census), it is assumed the following proportion of the school-age population represents the SSMS for the South of CBD network area:

- 96% at primary (Y1-6) level
- 96% at intermediate (Y7-8) level

These factors have been applied to the school age population projections to assess the capacity of education facilities in the network area. It is noted that no change has been assumed to the SSMS over the growth forecast periods (in other words, changing independent school provision could impact on the assessed future capacity of state schools as assessed in this report).

### 5.3.2 Assignment of Population to School „Catchments“

The population forecasts discussed in Section 4 of this report provide a summary of population growth across CAUs. As noted above, to accommodate this population forecasts have been undertaken at a meshblock level for a school's current enrolment catchment (this should remove growth outside the school enrolment scheme across the wider CAU).

It is also noted that some schools in the network area have overlapping enrolment schemes. In these cases, the „modelled catchments“ have been amended to avoid duplication (so that children are assigned only to one Primary-age and Intermediate-age school). These amendments have been based on a review of the current data for residents of children enrolled at schools in the network area and in some cases the mid-point of the overlap was used when the data exemplified that children in that area attended both schools. This approach is considered appropriate for considering available capacity and assignment across the network, but caution is needed in considering specific school capacities from this data as it does necessarily reflect the current enrolment scheme patterns.

### 5.3.3 Out of Zone and Out of Network Enrolment

It is noted that the number of students enrolled at schools within this network area is close to (or even slightly exceeds) the number of children resident in the network area (based on Statistics New Zealand counts, and allowing for the SSMS discussed above). This indicates that there is a portion of students attending schools in this network that are both out of zone and out of the network area (i.e. are coming from schools enrolment catchment areas outside this network area).

### 5.3.4 Assignment of Age Cohorts in Capacity Assessments

As discussed in section 2, this report has provided a description of demand and capacity for education services at two age cohorts (Years 1-6 and Years 7-8). It is recognised that schooling provision across the network area is a combination of full and contributing primary schools. For the purpose of assessing projected school roll capacity, it has been assumed that 75% of full primary school rolls are Year 1-6 and 25% are Year 7-8.

### 5.3.5 School Capacity

Table 6 provides a summary of existing, committed and “schools” expectation of capacity<sup>14</sup> of schools in the South of CBD network area. The assessment of „current or existing” capacity is based on information provided by the Ministry of Education. Committed capacity and the expectation that schools” have of capacity have been obtained during education sector interviews for the Project.

Committed capacity refers to capacity that is currently being built or developed on the site and will therefore be fully available by the 2016 projection year (based on interviews undertaken with schools in March 2015 and data obtained from the property section of the Ministry of Education). The “schools” expectation of capacity” („expected capacity” in the table below) has been identified in school engagement undertaken as part of this project. It reflects factors desired by schools, such as retaining school character and recognises existing infrastructure constraints as they were recorded during education sector interviews (in other words, it is indicative of the potential size that schools considered they might reasonably expand to). It is noted that no specific assessment has been undertaken of a „maximum capacity” (i.e. what is the physical size limit for the school).

<sup>14</sup> The roll that schools have indicated they can reasonably accommodate on their site with additional classrooms/infrastructure.

**Table 6: Existing (Current), Committed and Schools' Expectation of Capacity.**

School	2014 Dec Roll Count <sup>15</sup>	Current Capacity	Committed Capacity <sup>16</sup>	"School expected capacity" <sup>17</sup>	Comments made in school sector interviews (March 2015)
Auckland Normal Intermediate	740	640	640	1000	<ul style="list-style-type: none"> <li>Have capacity to grow</li> <li>Importance of maintaining an intermediate school model</li> <li>Good network of schools between them and contributing schools</li> <li>The ANI model complements Kohia Terrace and gives parents an additional choice</li> </ul>
Balmoral School	861	898	1000  650 Years 1-6  350 Years 7-8	1000	<ul style="list-style-type: none"> <li>Lots of enquiry from out-of-zone primary school siblings</li> <li>The school's expectation of capacity would be providing 12 classrooms at intermediate level</li> <li>Currently at capacity but roll could reach 890</li> <li>There are plans to rebuild most of the school to provide extra capacity. However the date for this has not been confirmed</li> <li>The school needs temporary extra staffing support to help manage the effect of current weather tightness remediation on school operations</li> </ul>

<sup>15</sup> December roll counts were obtained from the Ministry of Education in August 2015, not during school sector interviews in March 2015.

<sup>16</sup> At the time of preparing this report, the committed capacity is based on comments made during the school engagement and Ministry of Education property data. Further assessment is being undertaken with the Ministry of Education to confirm if there are any additional committed works / capacity increases planned or confirmed for these schools (as these may have been missed or overlooked in interview discussions).

<sup>17</sup> It is noted that "schools" expectation of capacity" is not necessarily the maximum capacity by school area / development potential as it includes other factors indicated by the schools



School	2014 Dec Roll Count <sup>15</sup>	Current Capacity	Committed Capacity <sup>16</sup>	"School expected capacity" <sup>17</sup>	Comments made in school sector interviews (March 2015)
Epsom Normal School	677	680	680	800	<ul style="list-style-type: none"> <li>■ The ballot for out-of-zone students is hotly contested</li> <li>■ Is not opposed to an increase in classroom/multi storey as long as green space is preserved as this is very important to the school</li> <li>■ Parents value the option of having a full primary school</li> <li>■ Even if no out-of-zone students are taken the school will be at capacity with the current population projections</li> </ul>
Good Shepherd School	248	240	240	600	<ul style="list-style-type: none"> <li>■ <i>It is noted that growth of this school and its capacity is a Ministry of Education and Proprietor responsibility and therefore limited assessment has been made of this 'management option'.</i></li> <li>■ <i>School is currently at capacity but not maximum roll, the immediate objective of the school is to understand what their potential maximum and expectation of capacity</i></li> <li>■ <i>Most of the students come from the Sandringham Area</i></li> <li>■ <i>It must also be noted that the Catholic Diocese of Auckland wishes to work with the Ministry of Education to increase the maximum roll to 600</i></li> </ul>
Maungawhau School	684	730	730	800+	<ul style="list-style-type: none"> <li>■ Very supportive and sociable community. The school acts as the hub of community</li> <li>■ Most houses in the area are remaining single lot dwellings although there are a few flats in the school's enrolment scheme</li> <li>■ A significant number of parents move into the enrolment scheme years before their children are of school age to ensure that they have a place at the school</li> <li>■ Numerous enquiries from out-of-zone parents every week</li> <li>■ Half of the home zone is in the Epsom/Grammar home zone)</li> </ul>

School	2014 Dec Roll Count <sup>15</sup>	Current Capacity	Committed Capacity <sup>16</sup>	"School expected capacity" <sup>17</sup>	Comments made in school sector interviews (March 2015)
Mt Eden Normal School	689	700	800	800	<ul style="list-style-type: none"> <li>Definitely believe that the high projection of growth is the most realistic depiction of their current enrolment scheme</li> <li>School is located in a very desirable neighbourhood for families</li> <li>Bulge of students at year 4 but this tends to happen every 4/5 years</li> <li>Is committed to keeping green space for students</li> <li>Believe that the only thing holding back further intensification/population growth in the area is the zoning</li> <li>Considering the school has a significant market share of students, any additional growth would need to be viewed with in terms of their infrastructure. For example, the school hall and staff room are already too small with the current roll.</li> <li>The school hosts students from Auckland University's Faculty of Education. The needs of the extra 10/20 adults for at least half a year should also be taken into consideration.</li> </ul>
Newmarket School	284	275	620	800	<ul style="list-style-type: none"> <li>No longer take out-of-zone students</li> <li>Master plan and planned development allows for 27 rooms which provides future capacity for c700, but the school considers that with careful site management, they can grow to 800</li> <li>No need to amend enrolment scheme</li> <li>See themselves as an inner city school so are prepared to have multi-storey complexes</li> <li>With any future roll growth building programme, maximisation of land for play area and space for students would need to be made a priority</li> <li>The Board is aware of intensification occurring and is keeping in touch with what's happening, and planning accordingly. The Board has a very pragmatic approach to site planning for growth</li> </ul>

School	2014 Dec Roll Count <sup>15</sup>	Current Capacity	Committed Capacity <sup>16</sup>	"School expected capacity" <sup>17</sup>	Comments made in school sector interviews (March 2015)
<i>Our Lady of the Sacred Heart School</i>	243	240	240	300	<ul style="list-style-type: none"> <li>■ It is noted that growth of this school and its capacity is a Ministry of Education and Proprietor responsibility and therefore limited assessment has been made of this 'management option'.</li> <li>■ Proprietor acknowledges that there will be growth in the next 10 years</li> <li>■ Have a Master Plan that will grow the school to 300 students</li> <li>■ Would like to maintain the small character of their school</li> <li>■ The school is on a very small site which limits the extent of any anticipated growth</li> </ul>
<i>Balmoral SDA School</i>	103	135	135	700	<ul style="list-style-type: none"> <li>■ It is noted that growth of this school and its capacity is a Ministry of Education and Proprietor responsibility and therefore limited assessment has been made of this 'management option'.</li> <li>■ The SDA school in Mangere wants to change to a Year 7-13 school which may affect the Balmoral roll</li> <li>■ The school is run as an inner city school where students come from all over Auckland</li> <li>■ Are undertaking development on site and are marketing the school to raise the profile</li> </ul>



School	2014 Dec Roll Count <sup>15</sup>	Current Capacity	Committed Capacity <sup>16</sup>	"School expected capacity" <sup>17</sup>	Comments made in school sector interviews (March 2015)
Kohia Terrace School	383	369	369	500	<ul style="list-style-type: none"> <li>Breakdown of school roll is that there are 55 students at intermediate level and the rest are Year 1-6</li> <li>The Board's philosophy is to run two classes at each year level</li> <li>Have a small enrolment scheme compared to other schools in the area but are generally happy with zone.</li> <li>Out-of-zone students are taken but since there is capacity in the school to accommodate these students and Kohia Terrace's home zone overlaps with other schools, they would like the Ministry to recognise these students in property funding</li> <li>Roll has been as large as 400 before but site is extremely full at that number</li> <li>The Board values choice that parents have for intermediate education and the relationship with Auckland Normal Intermediate</li> </ul>

### 5.3.6 Summary of Schooling Capacity

In the Appendix Figure 1A and 1C provide an assessment of resident population school demand against „committed“ school capacity over the projection periods 2016 through to 2031, for the two modelled age groups being Year 1-6 and Years 7-8. These are also summarised in tables 7 and 8.

#### 5.3.6.1 Year 1-6

Appendix 1A and table 7 show that the population growth across the network area will exceed current school capabilities across the network. In some catchments (Balmoral School and Newmarket School) this exceedance is as early 2016 and continues from 2016 – 2031. Therefore, the options outlined in section 6 need to be considered in light on this capacity exceedance happening imminently.

Appendix 1B exemplifies that if schools' expectation of capacity (which schools have identified in table 6) is implemented in 2031 there will be no capacity issues in the network apart from Newmarket School and Balmoral School.

#### 5.3.6.2 Year 7-8

Appendix 1C and table 8 show that the population growth across the network area will exceed school capabilities across the network from 2021 and as early as 2016 for Balmoral School.

Kohia Terrace remains at capacity from 2016-2031 but when the school's expectation of capacity of 500 is provided there will be surplus capacity within the catchment (see Appendix 1D).

Similarly, Auckland Normal Intermediate will be over capacity at 2021. However, if the school's expectation of capacity (1000 students) is implemented gradually before 2031 to keep up with population growth, the school will not face capacity issues.

In addition to the above, the results do not specifically account for parental choice in schooling. Some parents and their children choose to attend schools based on reasons other than close proximity (or „within enrolment scheme“). This is not accounted for at a network level therefore in some cases the results indicate that a school is at capacity or exceeding capacity even though they are currently well below capacity. As this is due to the reassignment of students to other schools, the results are still considered appropriate for the network level assessment.

Tables 7 and 8 below depict school catchment capacity by age cohort and are grouped by the following thresholds:

- Surplus Roll Capacity (green): more than one teaching space available
- At Roll Capacity (yellow): zero teaching spaces required
- Over Roll Capacity (orange): one more teaching space required
- Significantly Over Roll Capacity (red): two or more teaching spaces required

A school's capacity is assessed using catchment projections assessed against the school's committed capacity. It is therefore assumed that a school's committed capacity is implemented by 2016.

**Table 7 School Catchment Capacity Years 1-6**

School Catchment	2016	2021	2026	2031
<b>Balmoral School</b>	Significantly Over Capacity	Significantly Over Capacity	Significantly Over Capacity	Significantly Over Capacity
<b>Epsom Normal School</b>	Surplus Capacity	Surplus Capacity	Over Capacity	Significantly Over Capacity
<b>Maungawhau School</b>	Surplus Capacity	Surplus Capacity	Surplus Capacity	Surplus Capacity
<b>Mt Eden Normal School</b>	Surplus Capacity	Surplus Capacity	Surplus Capacity	Surplus Capacity
<b>Newmarket School</b>	Significantly Over Capacity	Significantly Over Capacity	Significantly Over Capacity	Significantly Over Capacity
<b>Kohia Terrace</b>	Surplus Capacity	Surplus Capacity	At Capacity	At Capacity

**Table 8 School Catchment Capacity Years 7-8**

School Catchment	2016	2021	2026	2031
<b>Auckland Normal Intermediate</b>	At Capacity	Over Capacity	Significantly Over Capacity	Significantly Over Capacity
<b>Balmoral School</b>	Over Capacity	Significantly Over Capacity	Significantly Over Capacity	Significantly Over Capacity
<b>Kohia Terrace</b>	At Capacity	At Capacity	At Capacity	At Capacity



## 6 Options to Address „Gaps“ in School Provision, by Age Group

This section provides a summary of possible management options identified to address „gaps“ in the school provision across the South of CBD network area. It is noted that it has been assumed that teaching spaces which have been approved through the Property Section of the Ministry of Education are added to the existing capacity of schools and this combined figure makes up the committed capacity for 2016.

Feedback and information received in the interviews with the education sector (School Principals, Board of Trustee representatives and other school representatives) has helped identify the options. It should be noted that these options are not necessarily the views of the Ministry of Education, or the schools involved.

While options for new school sites are discussed in the management options below, these are not mapped as the sites and enrolments schemes of any such sites are not yet determined/confirmed. Moreover, considering the shortage and price of land in this network area, further analysis of the feasibility of creating a new school will be necessary.

### 6.1 Year 1-6 Provision

#### Key growth and school capacity issues identified in gap analysis

Within the network area, it is anticipated that there will be a short-fall in Year 1-6 schooling capacity from 2016, particularly for the school catchments for Balmoral School and Newmarket School. These two schools do not have overlapping or touching school catchment boundaries so management options will be considered separately whilst acknowledging that options must consider the network wide approach which this study is based on.

### 6.2 Management Options Identified

#### 6.2.1 Increasing classrooms on existing sites

##### 6.2.1.1 Newmarket School

- Newmarket School faces significant on-going growth pressures despite planned capacity increases;
- An additional 11 classrooms are planned at Newmarket School in the form of a four storey block (which will be able to have additional levels built on top of it in the future). This development has been included in the 2016 committed capacity (610 students). Even with this additional capacity Newmarket School will be significantly over capacity between 2014-2016 as it is estimated that over 700 students will be within the catchment;
- Therefore the current master plan for Newmarket School (which would allow for a capacity of 800 students) needs to be implemented as early as 2016.<sup>18</sup> Even with the implementation of this Master Plan (new teaching spaces) capacity will again likely be exceeded in the catchment area by 2021 as modelling predicts that over 800 students will be within the school catchment ;

<sup>18</sup> It is noted that a capacity of 800 was obtained from school sector interviews in March 2015.

- Increasing the capacity of Newmarket School to approximately 1000 students may be an option to consider.
  - Further detailed site analysis of both the Newmarket School site area and surrounding sites will be needed for this option to even be considered, particularly because Newmarket School is concerned about keeping sufficient green space for students to play on during interval, lunchtime and physical education classes.

#### 6.2.1.2 Balmoral School

- Balmoral School faces capacity constraints in the short term;
- Capacity at Balmoral School is exceeded in 2016 and additional multi-storey classrooms need to be considered as over 700 Year 1-6 students are predicted to be within the Balmoral School catchment from 2016 to 2021. This figure is likely to increase to approximately 800 from 2026-2031.
- Site capacity at this school needs to be investigated further particularly because the site also provides for up to 12 teaching spaces for year 7 and 8 students.<sup>19</sup>

#### 6.2.1.3 Epsom Normal School

- Epsom Normal School is forecast to be over capacity in 2031. The school has identified their „expectation of capacity“ could be 800 students. It is considered that this should be implemented between 2026-2031 to ensure that the school does not go over capacity.
- The Ministry may need to consider Master Planning to manage future property requirements.

#### 6.2.1.4 Kohia Terrace School

- If Kohia Terrace School's expectation of capacity is implemented by 2031 (which is a school size to provide for 375 Year 1-6 students. by providing additional classrooms) the growth projection data suggests that there will be sufficient capacity in the catchment area (this is set out in Appendix 1B).

#### 6.2.1.5 Mount Eden Normal School

- Mount Eden Normal School will have surplus capacity through to 2031 if a capacity of 800 students is maintained along with enforcement of the current enrolment scheme. If any enrolment schemes change in the network Mount Eden Normal School's expectation of capacity will need to be reviewed.

#### 6.2.1.6 Maungawhau School

- Maungawhau School will have surplus capacity if the school's expectation capacity (of approximately 730 students) is implemented by 2016 and maintained through to 2031. Therefore it is considered that expected growth in this area can be accommodated.

### 6.2.2 Review of the enrolment schemes

A review of the current enrolment schemes is an option that could be considered with the addition of new classrooms to particular schools.

- Currently, Newmarket School has a large home zone that extends over the motorway while Mt Eden Normal School has surplus capacity.

<sup>19</sup> It is noted that information about teaching spaces was obtained in school sector interviews in March 2015.

- Similarly, significant growth is expected in the west portion of Balmoral School's enrolment scheme.
- There are two schools (Mt Eden Normal School and Maungawhau School) which have surplus capacity to potentially accommodate some of the students which Balmoral School will not be able to accommodate within the „school expectation of capacity“.

A review of the enrolment scheme would be a separate consultation process to the current network area report.

### 6.2.3 Additional primary school

Increasing classrooms on existing sites and reviewing the enrolment scheme pattern would mean that the following schools would likely have a roll at or exceeding 800 students:

- Newmarket Primary School;
- Mt Eden Normal School;
- Maungawhau School; and
- Epsom Normal School

Another option would be to add another primary school on a site in between Balmoral School and Newmarket School. This could accommodate some of the extra residential growth expected in these areas and would also mean that Mt Eden Normal School and Balmoral School may not need to get as large as 800 students.

This option would require careful site acquisition and development planning to ensure that the best possible site is attained to accommodate the predicted growth in school aged children. The catchment of this school would need to be strategic to ensure that the capacity of the current school network is still efficiently utilised.

## 6.3 Year 7-8 Provision

### 6.3.1 Key growth and school capacity issues identified in gap analysis

Within the network area, it is anticipated that there will be a shortfall in schooling capacity from 2016, and significant problems from 2021 for the provision of Year 7 and 8 schooling at Balmoral School.

### Management options identified

#### 6.3.2 Increasing classrooms on existing sites

##### 6.3.2.1 Auckland Normal Intermediate

An option to accommodate the population increase is to add additional classrooms onto the Auckland Normal Intermediate site between 2021-2026. If done, the school should not have capacity issues through the projected period (e.g. through to 2031).

##### 6.3.2.2 Balmoral School (Intermediate provision)

Balmoral School's expectation of capacity for year 7 and 8 students which will be exceeded by approximately 70 students from 2021. Additional classrooms on the Balmoral site could potentially accommodate the population projections but since the site also has year 1-6 students there could be an issue with site



capacity. Amendments to home zones could be considered to address the network of schools across this area to make efficient use of available capacity.

### 6.3.2.3 Kohia Terrace School (Intermediate provision)

Relying on the existing zoning pattern in the network area and adding classrooms on the site to reach the school's expectation of capacity by 2031 should provide enough capacity for Year 7-8 students in the Kohia Terrace School catchment (noting the potential need / opportunity to balance capacity / growth pressure at Balmoral School as discussed above).

### 6.3.3 Additional full primary school/change in zoning pattern

As stated in 6.2.3 an option to consider is a full primary school to be located between Newmarket School and Balmoral School. The option for this school to be another full primary could also accommodate some of the capacity pressure at Year 7-8 (e.g. from Balmoral School).

### 6.3.4 Implications beyond the Network Area

Kowhai Intermediate is located just outside of the network area. The predicted population and future school capacity of this school should be analysed to determine whether any of the predicted growth at Year 7 and 8 from the Balmoral School Catchment can be accommodated at this school.

If surrounding schools are full, new provision for Year 7-8 may be needed in the longer term. One consequential implication of this would be the option to decapitate some existing Primary Schools (such as Kohia Terrace) to then reduce the need for an additional Primary School. This would also create additional capacity for Year 1-6 aged students within the catchment.

## 6.4 Special Education Provision

Although a school which solely provides special education was not included in this network area Principals were asked about the number of ORS students at their school. Most schools had least one student who required ORS (On-going Resourcing Scheme) funding and no schools had more than six students who required ORS funding.

Since 1.14% of the population require some form of special education support and the South of CBD network area is predicted to have to accommodate significant population growth there are going to be increased numbers of students also needing special education provision. The Ministry is closely monitoring this area to ensure that the needs of students who require special education are provided for.

## 7 Conclusion Growth Forecast Summary – Capacity, Demand and Responses

Table 11 below provides a summary of the capacity requirements for specific schools across the network and over the forecast period. The table provides a high level summary of management options for each school and over the network as a whole, with a key indicating the type of response, depending on the time period.

To assist use of the information by both schools and the Ministry (and departments within the Ministry) the following colour coding is used for the identified options / management approaches:

<b>Key:</b>	
Catchment Management (school)	
Enrolment Catchment Responses (MoE)	
Property (MoE)	
Combination	

Table 11 Growth Forecast Summary – Capacity, Demand and Responses

Network and School	Short Term (2013 – 2016) Forecast and Response Options	Medium Term (2016 – 2021) Forecast and Response Options	Longer Term (2021 – 2031) Forecast and Response Options
<b>Overall Network Comments</b>			
Currently, there is existing education capacity (with approximately 98% of overall roll capacity utilised). Both age cohorts demonstrate a high uptake of capacity with Years 1-6 having 95% uptake of capacity and Years 1-8 exceeding capacity and having an uptake of 106%. It must also be noted that most schools within the network area are full or very close to reaching capacity.	<ul style="list-style-type: none"> <li>Overall, the model indicates that population projections exceed the schools' committed capacity for both Years 1-6 students Years 7-8 students as early as 2016 but can be accommodated within the schools „expectation of capacity“ (e.g. within additional capacity that schools consider can be accommodated on their sites).</li> <li>Options for Years 1-6 include: <ul style="list-style-type: none"> <li>Adding additional classrooms to existing schools</li> <li>Review of each school's expectation of capacity to be able to accommodate growth.</li> <li>Review of either the structure and/or the enforcement of the enrolment scheme policy within the catchment area as current distributions could potentially be better managed.</li> </ul> </li> <li>Options for Years 7-8 include: <ul style="list-style-type: none"> <li>Increase the capacity of current schools within the network.</li> <li>More analysis of the schools which Years 7-8 students in the network attend is needed to determine whether capacity issues can be mitigated by increasing the capacity of other schools outside of this network area. For example, Kowhai School is located just outside of the network area.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>The network capacity can be accommodated for Years 1-6 students if schools' expectation of capacity is implemented by 2021.</li> <li>However, within the network, the distribution of growth and the existing enrolment catchments mean that Newmarket School and Balmoral School are significantly over capacity in the medium term.</li> <li>While additional classrooms could potentially be added to these sites, this would require schools to consider capacity increases beyond their current expectations.</li> <li>In addition, the option of a review of the review of the structure enrolment scheme policies could also assist in providing capacity across the network (e.g. reallocating school enrolment catchments). This would require implementation of those enrolment catchments and it is recognised this would require engagement with school communities.</li> <li>In the Year 7-8 provision, and on the basis that schools' expectation of capacity is implemented by 2026 there should be capacity for this age cohort, with the exception of capacity at Balmoral School. Options to address this issue include review of enrolment catchments (potentially including provision to schools outside this network area).</li> </ul>	<ul style="list-style-type: none"> <li>In the long term, a new school that is a fully primary may be necessary to accommodate the lack of capacity in some areas of the network for Year 1-6 students and address the shortfall in capacity for Years 7-8 students in the Balmoral catchment.</li> <li>By demand, the school location would ideally be between the Balmoral School and Newmarket School sites.</li> <li>The options could include new Year 7-8 provision or new Full Primary School provision.</li> <li>The two options above would need to be considered in the context of Kohia Terrace (e.g. whether it would continue to provide for Year 7-8 students or would de-capitate to make more Year 1-6 capacity in the school network).</li> <li>Existing secondary school pathways with schools such as Auckland Boys Grammar and Epsom Girls Grammar have not been investigated and are not part of this particular project. However, a final option would be to establish Junior and Senior secondary schooling to accommodate the Year 7 – 8 capacity demand.</li> </ul>
<b>School Specific Comments Years 1-6</b>			
<b>Epsom Normal School</b>  Currently has an enrolment scheme and is at capacity. Out of zone students do attend the school.	<ul style="list-style-type: none"> <li>There is estimated to be sufficient capacity in enrolment limited to the enrolment catchment (however, there is likely to be school capacity pressure with high proportion of „out of zone“ children going through school years).</li> <li>Management of enrolment zone.</li> </ul>	<ul style="list-style-type: none"> <li>There is estimated to be sufficient capacity in enrolment limited to the enrolment catchment (however, there is likely to be school capacity pressure with high proportion of „out of zone“ children going through school years).</li> <li>Management of enrolment zone.</li> </ul>	<ul style="list-style-type: none"> <li>An additional 3 classrooms are required to accommodate the „in catchment demand“. These could be added to the existing site to accommodate growth in the catchment area between 2021-2026.</li> </ul>



Network and School	Short Term (2013 – 2016) Forecast and Response Options	Medium Term (2016 – 2021) Forecast and Response Options	Longer Term (2021 – 2031) Forecast and Response Options
<b>Newmarket School</b>  Currently has an enrolment scheme and is at capacity.	<ul style="list-style-type: none"> <li>Approximately an additional 4 classrooms may be needed by 2016.</li> <li>Review of the enrolment scheme home zones across the network area may enable more efficient utilisation of the network.</li> </ul>	<ul style="list-style-type: none"> <li>Additional classrooms will be needed to accommodate approximately 800 students by 2021.</li> <li>Master planning the school would be advantageous so that the school is configured to be able to accommodate this growth</li> </ul>	<ul style="list-style-type: none"> <li>Depending on the outcome from master planning the school, additional capacity within Newmarket School's catchment may need to be provided on the current school site or by surrounding schools. In the school Newmarket School Catchment there will be approximately 1000 students by 2031.</li> </ul>
<b>Balmoral School</b>  Currently at capacity and does have an enrolment scheme.	<ul style="list-style-type: none"> <li>Approximately an additional 4 classrooms may be needed by 2016.</li> <li>Review of the enrolment scheme home zones within the network area may be necessary.</li> <li>The option of expanding school capacity beyond the school's current expectation of capacity should be considered.</li> </ul>	<ul style="list-style-type: none"> <li>Approximately an additional 5 classrooms may be needed by 2021 compared to the current committed capacity and the school's expectation of capacity.</li> <li>Site capacity at this school needs to be investigated further particularly because the site also provides for up to 12 teaching spaces for year 7 and 8 students.</li> </ul>	<ul style="list-style-type: none"> <li>Site capacity at this school needs to be investigated further particularly because the site also provides for up to 12 teaching spaces for year 7 and 8 students.</li> <li>Approximately 800 students are expected to be within this catchment by 2031, so new schooling provision to alleviate some of the growth pressure may be necessary in the long term.</li> </ul>
<b>Kohia Terrace School</b>  Currently at capacity and does have an enrolment scheme	<ul style="list-style-type: none"> <li>There is estimated to be sufficient capacity in enrolment limited to enrolment catchment (however, there is likely to be school capacity pressure with high proportion of „out of zone“ children going through school years).</li> <li>Management of enrolment zone.</li> </ul>	<ul style="list-style-type: none"> <li>There is estimated to be sufficient capacity in enrolment limited to enrolment catchment (however, there is likely to be school capacity pressure with high proportion of „out of zone“ children going through school years).</li> <li>Management of enrolment zone.</li> </ul>	<ul style="list-style-type: none"> <li>There is estimated to be sufficient capacity in enrolment limited to enrolment catchment (however, there is likely to be school capacity pressure with high proportion of „out of zone“ children going through school years).</li> <li>Management of enrolment zone.</li> </ul>
<b>Mt Eden Normal School</b>  Currently has a small amount of capacity due to recent additional classrooms. Has an enrolment zone.	<ul style="list-style-type: none"> <li>Mt Eden Normal School has sufficient capacity to accommodate growth that is projected within their school catchment. However, if enrolment schemes within the network are reviewed the school's capacity to accommodate growth should be reanalysed.</li> <li>Management of enrolment zone.</li> <li>If any enrolment schemes changes are considered in the network, Mount Eden Normal School's expectation of capacity and growth pressures within the school's home zone will need to be reviewed.</li> </ul>	<ul style="list-style-type: none"> <li>Mt Eden Normal School has sufficient capacity to accommodate growth that is projected within their school catchment. However, if enrolment schemes within the network are reviewed the school's capacity to accommodate growth should be reanalysed.</li> <li>Management of enrolment zone.</li> <li>If any enrolment schemes change in the network Mount Eden Normal School's expectation of capacity and growth pressures within the school's home zone will need to be reviewed.</li> </ul>	<ul style="list-style-type: none"> <li>Management of enrolment zone.</li> <li>If any enrolment schemes change in the network Mount Eden Normal School's expectation of capacity and growth pressures within the school's home zone will need to be reviewed.</li> </ul>

Network and School	Short Term (2013 – 2016) Forecast and Response Options	Medium Term (2016 – 2021) Forecast and Response Options	Longer Term (2021 – 2031) Forecast and Response Options
<b>Maungawhau School</b>  Have an enrolment scheme and a small amount of capacity.	<ul style="list-style-type: none"> <li>Management of enrolment zone.</li> <li>If any enrolment schemes change in the network Maungawhau School's expectation of capacity and growth pressures within the school's home zone will need to be reviewed.</li> </ul>	<ul style="list-style-type: none"> <li>Management of enrolment zone.</li> <li>If any enrolment schemes change in the network Maungawhau School's expectation of capacity and growth pressures within the school's home zone will need to be reviewed.</li> </ul>	<ul style="list-style-type: none"> <li>Management of enrolment zone.</li> <li>If any enrolment schemes change in the network Maungawhau School's expectation of capacity and growth pressures within the school's home zone will need to be reviewed.</li> </ul>
<b>School Specific Comments Years 7-8</b>			
<b>Balmoral School</b>  Currently have no capacity and an enrolment scheme. The school does take out of zone students at Years 7-8.	<ul style="list-style-type: none"> <li>Approximately 1 additional classroom may be needed by 2016 to accommodate approximately 30 students within the catchment.</li> <li>Review of the enrolment scheme home zones within the network area may be necessary.</li> </ul>	<ul style="list-style-type: none"> <li>By 2021 approximately an additional 30 students will be within the catchment area.</li> <li>One option is for Balmoral School to increase its capacity beyond the schools current expectation of capacity (by approximately 50 students)</li> <li>Alternatively a review of the enrolment catchment to allocate some capacity across the network may be feasible (including to schools outside the current network).</li> </ul>	<ul style="list-style-type: none"> <li>By 2031 approximately an additional 20 further students will be within the catchment.</li> <li>One option is for Balmoral School to increase its capacity beyond the schools current expectation of capacity (by approximately 50 students)</li> <li>Alternatively a review of the enrolment catchment to allocate some capacity across the network may be feasible (including to schools outside the current network).</li> <li>Alternatively, in combination with Year 1-6 provision, new schooling in the network area may be required.</li> </ul>
<b>Auckland Normal Intermediate</b>  Currently have no capacity and an enrolment scheme. The school does take out of zone students.	<ul style="list-style-type: none"> <li>Management of enrolment zone.</li> <li>If any enrolment schemes change in the network , growth pressures within the school's home zone will need to be reviewed</li> </ul>	<ul style="list-style-type: none"> <li>Management of enrolment zone.</li> <li>One additional classroom may be required by 2021 to accommodate extra growth.</li> <li>If any enrolment schemes change in the network, growth pressures within the school's home zone will need to be reviewed.</li> </ul>	<ul style="list-style-type: none"> <li>Management of enrolment zone.</li> <li>Three additional classrooms may be required by 2031 to accommodate extra growth.</li> </ul>
<b>Kohia Terrace</b>  Currently have no capacity and an enrolment scheme. The school does take out of zone student.	<ul style="list-style-type: none"> <li>Management of enrolment zone.</li> <li>If any enrolment schemes change in the network Kohia Terrace School's expectation of capacity and growth pressures within the school's home zone will need to be reviewed.</li> </ul>	<ul style="list-style-type: none"> <li>Management of enrolment zone.</li> <li>If any enrolment schemes change in the network Kohia Terrace School's expectation of capacity and growth pressures within the school's home zone will need to be reviewed.</li> </ul>	<ul style="list-style-type: none"> <li>One additional classroom may be required by 2031 to accommodate extra growth.</li> <li>If any enrolment schemes change in the network Kohia Terrace School's expectation of capacity and growth pressures within the school's home zone will need to be reviewed.</li> </ul>

Key:	
Catchment Management (school)	
Enrolment Catchment Responses (MoE)	
Property (MoE)	
Combination	

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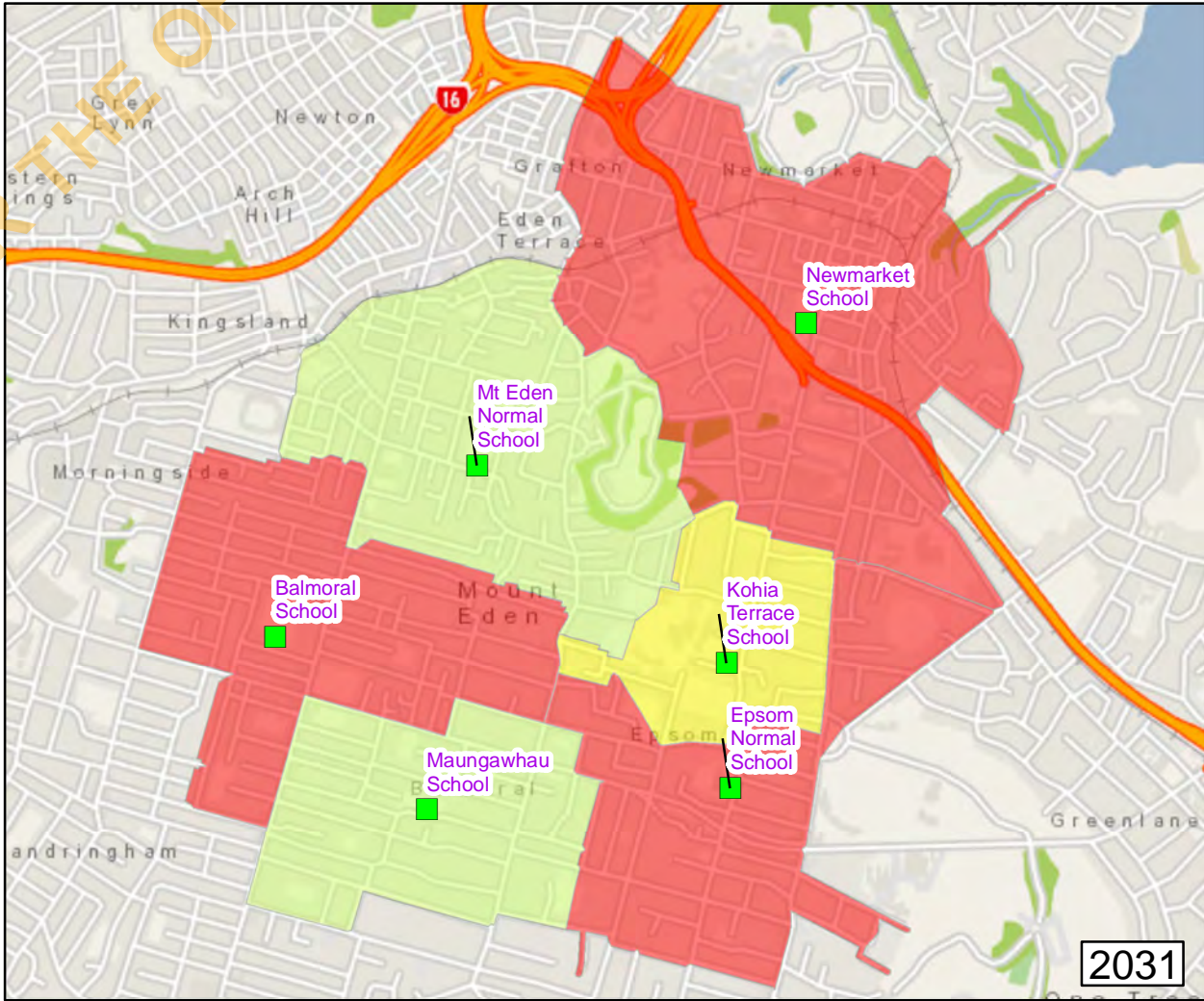
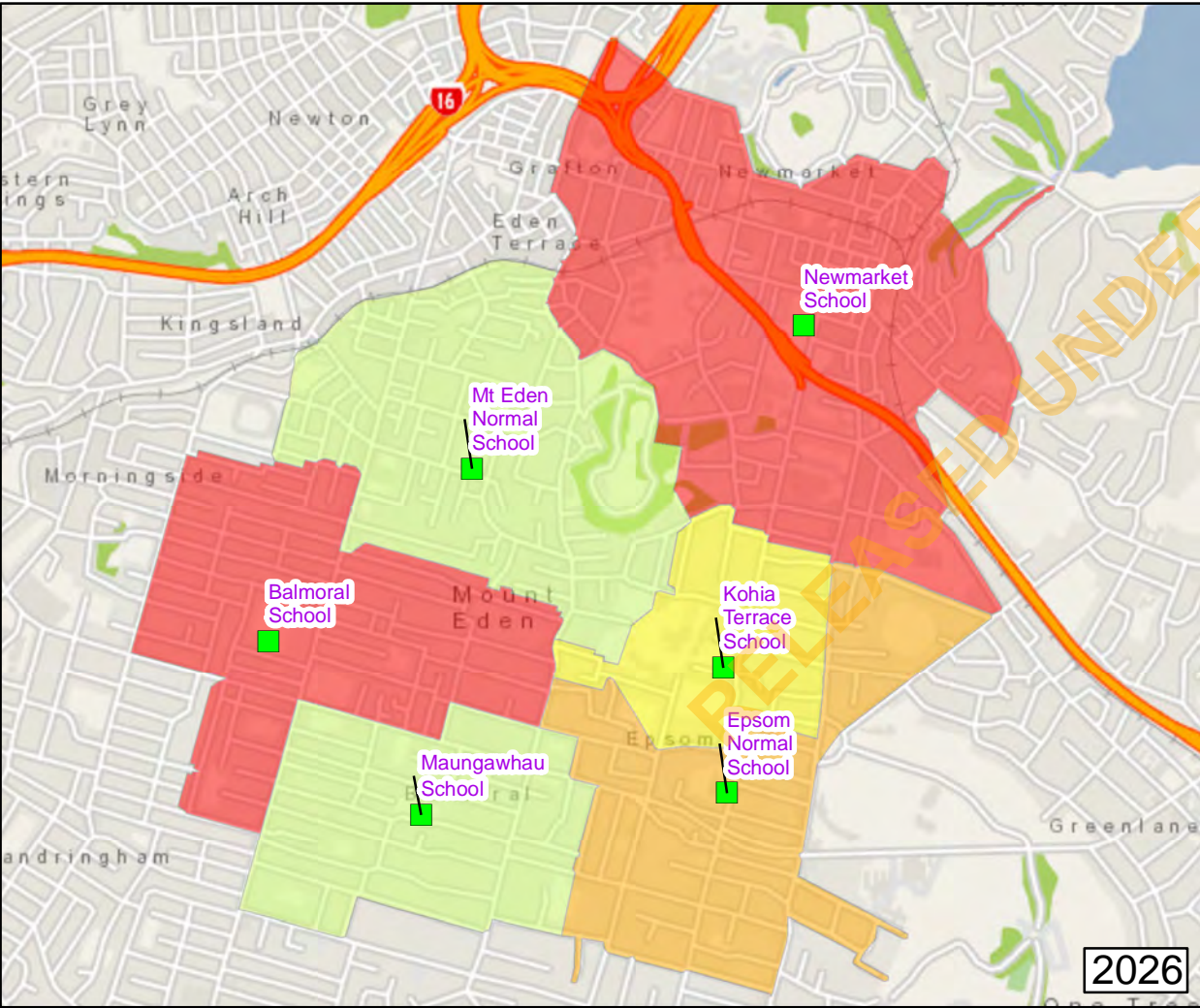
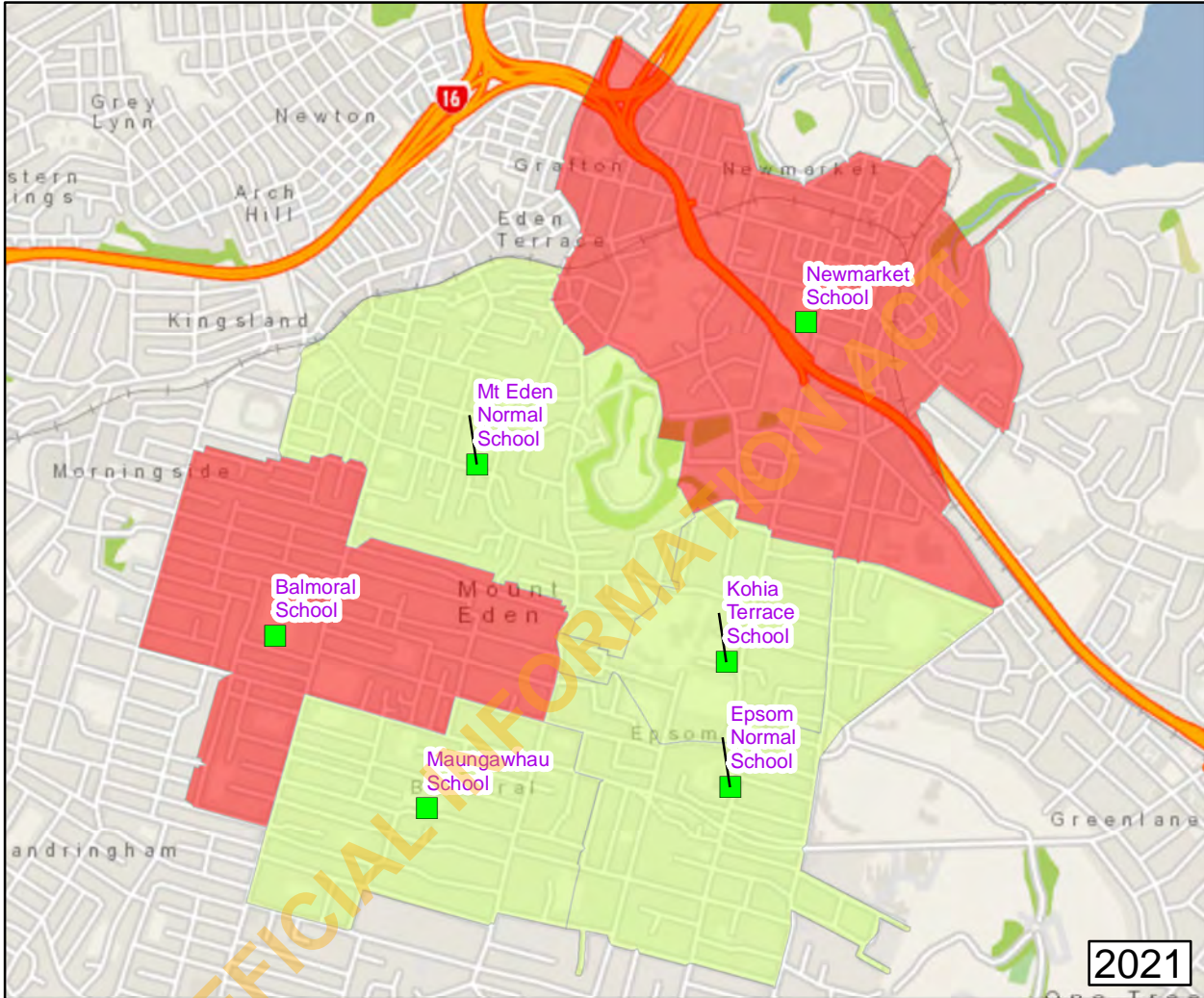
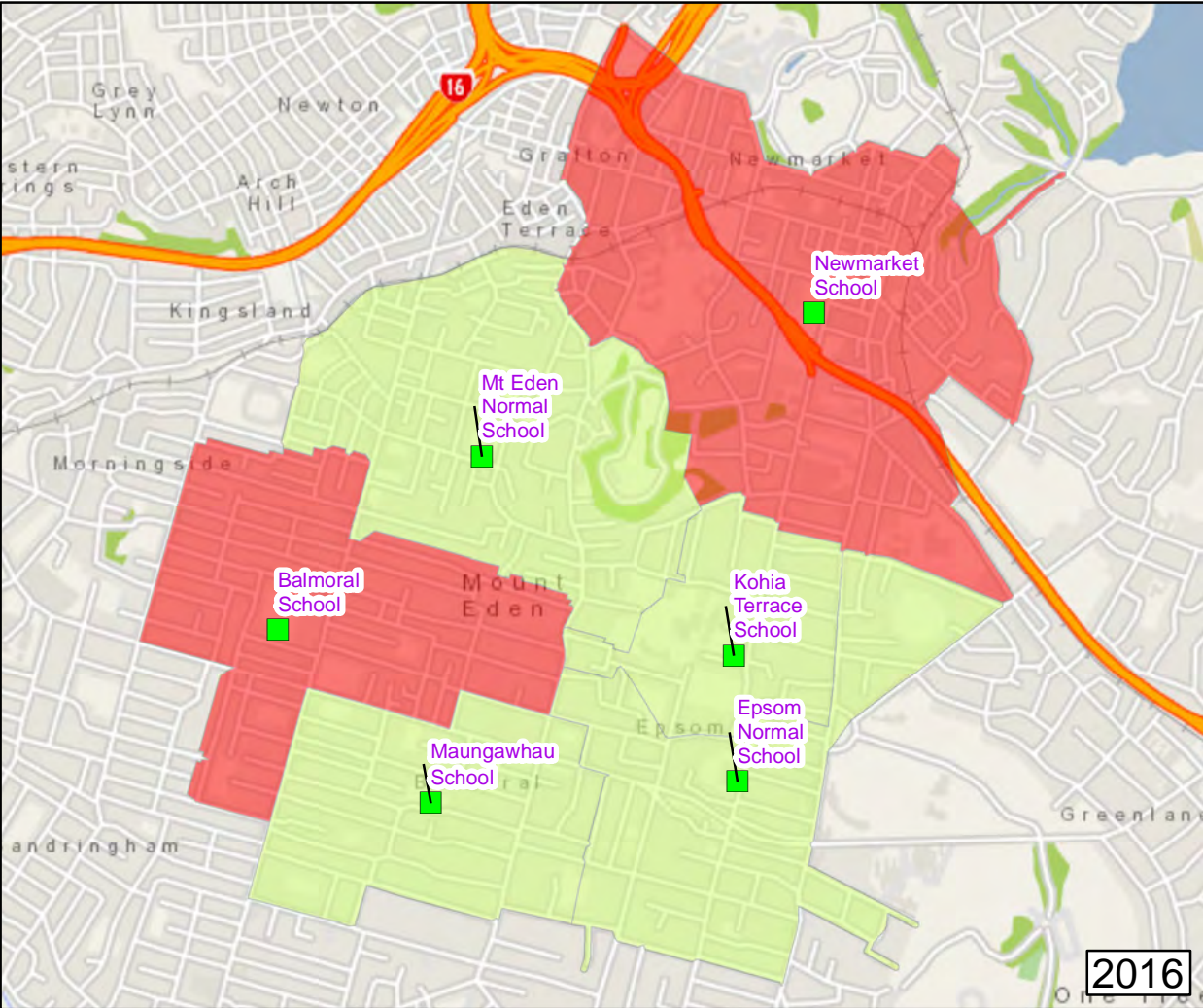


Appendix 1

Figures of School Catchment  
Capacity (1A -1D)



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# Appendix 1A School Capacity Full Primary and Contributing Years 1 to 6 (5 to 10 year olds)

**Sth of CBD Network Area - Calculated Catchment  
School Capacity -Surplus/Deficit (Comitted Capacity 2016)**

- Surplus Capacity
- At Capacity
- Over Capacity
- Significantly Over Capacity

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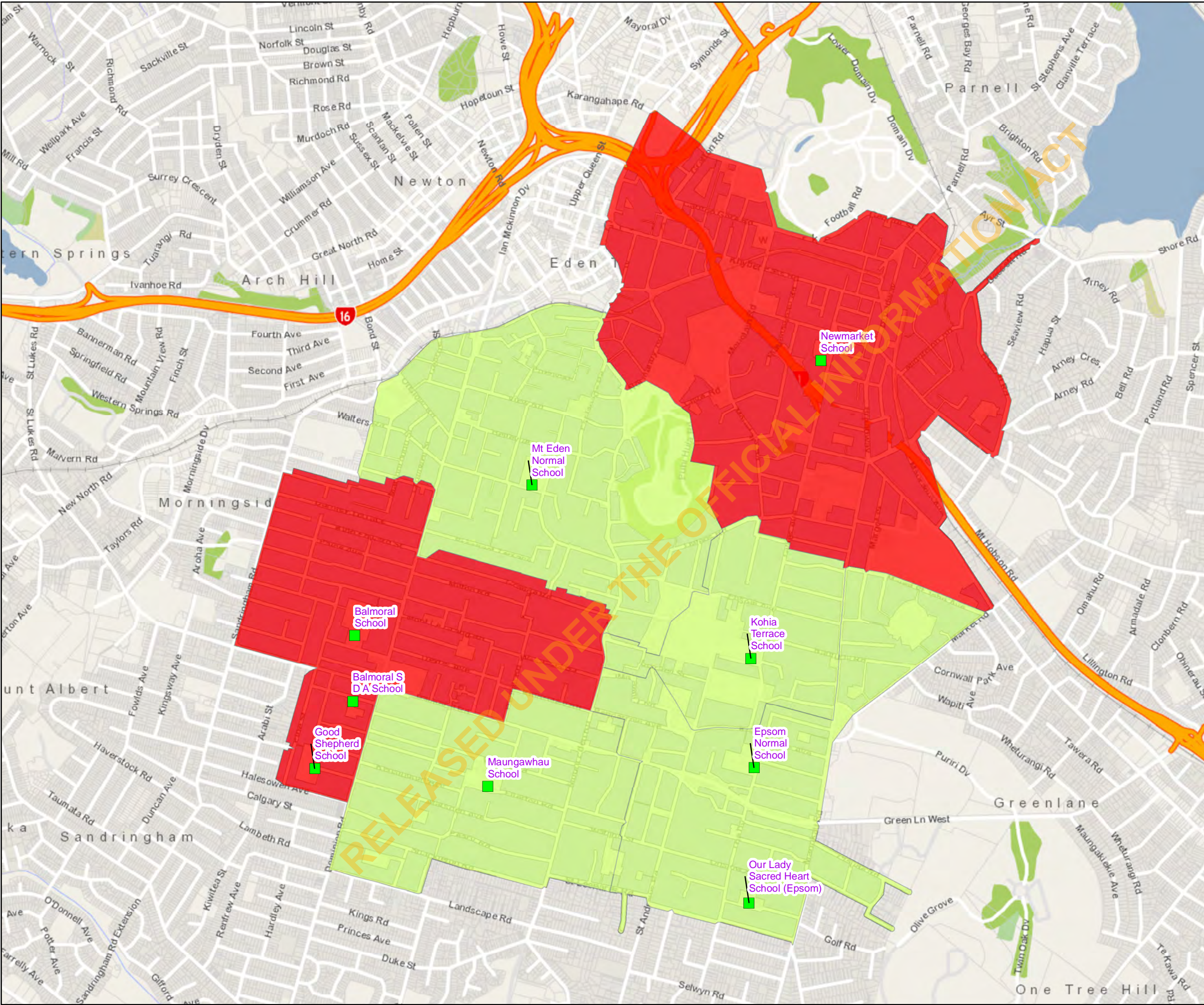
Revision	Author	Verified	Approved	Date
2	SRH	AYF	AL	21/08/2015
1	AYF	DRAFT	DRAFT	27/01/2015

Client:	Ministry of Education	Discipline:	GIS
Project:	Auckland Roll Growth Consult / Report	Drawing No:	GIS-4215443-028





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Appendix 1B  
School Capacity  
(Optimal 2031)  
Years 1 to 6 (5 to 10 year olds)

Legend

South of CBD Network Area - Calculated Catchment  
School Capacity - Surplus/Deficit (Comitted Capacity 2016)

Surplus Capacity

At Capacity

Over Capacity

Significantly Over Capacity

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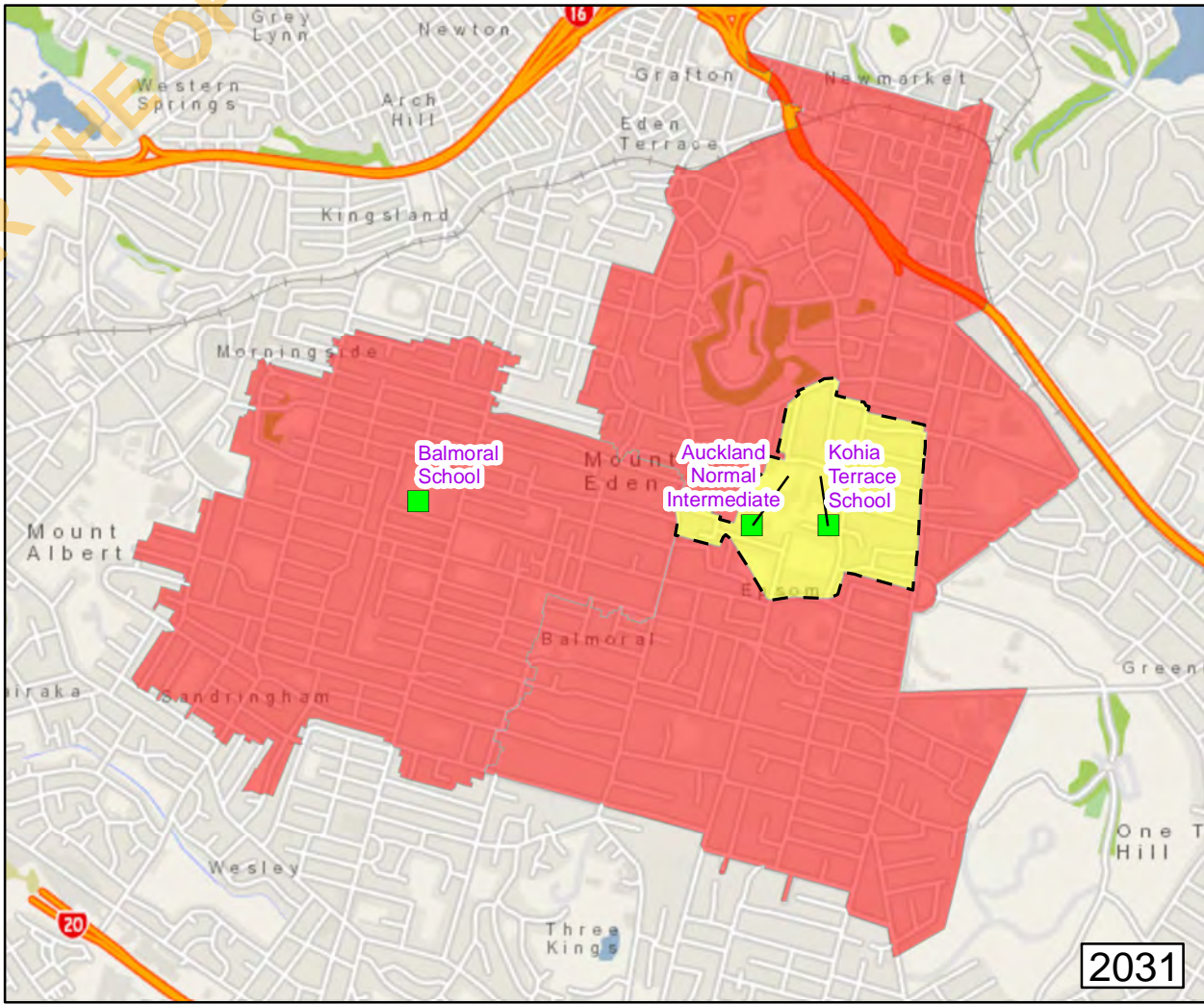
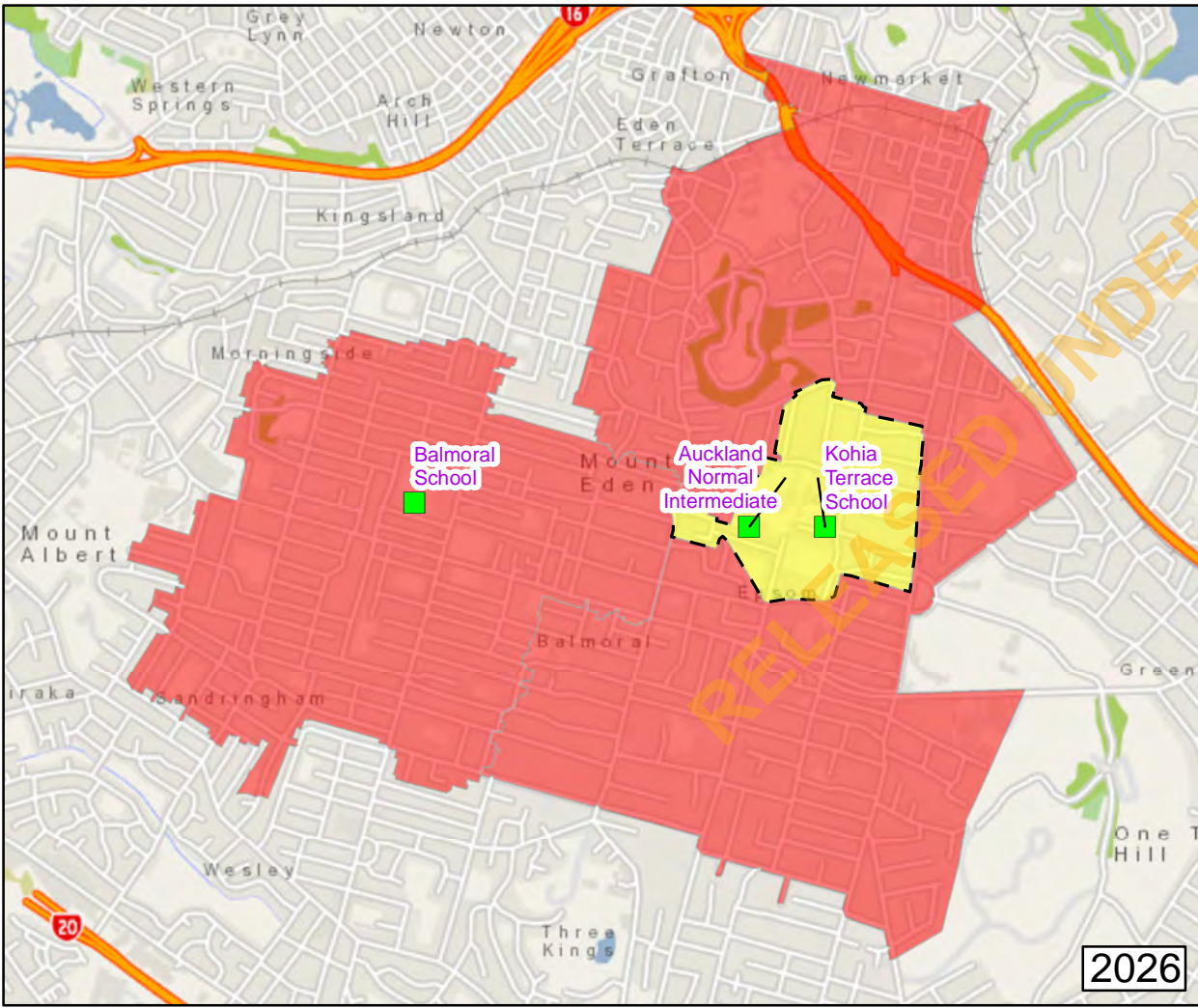
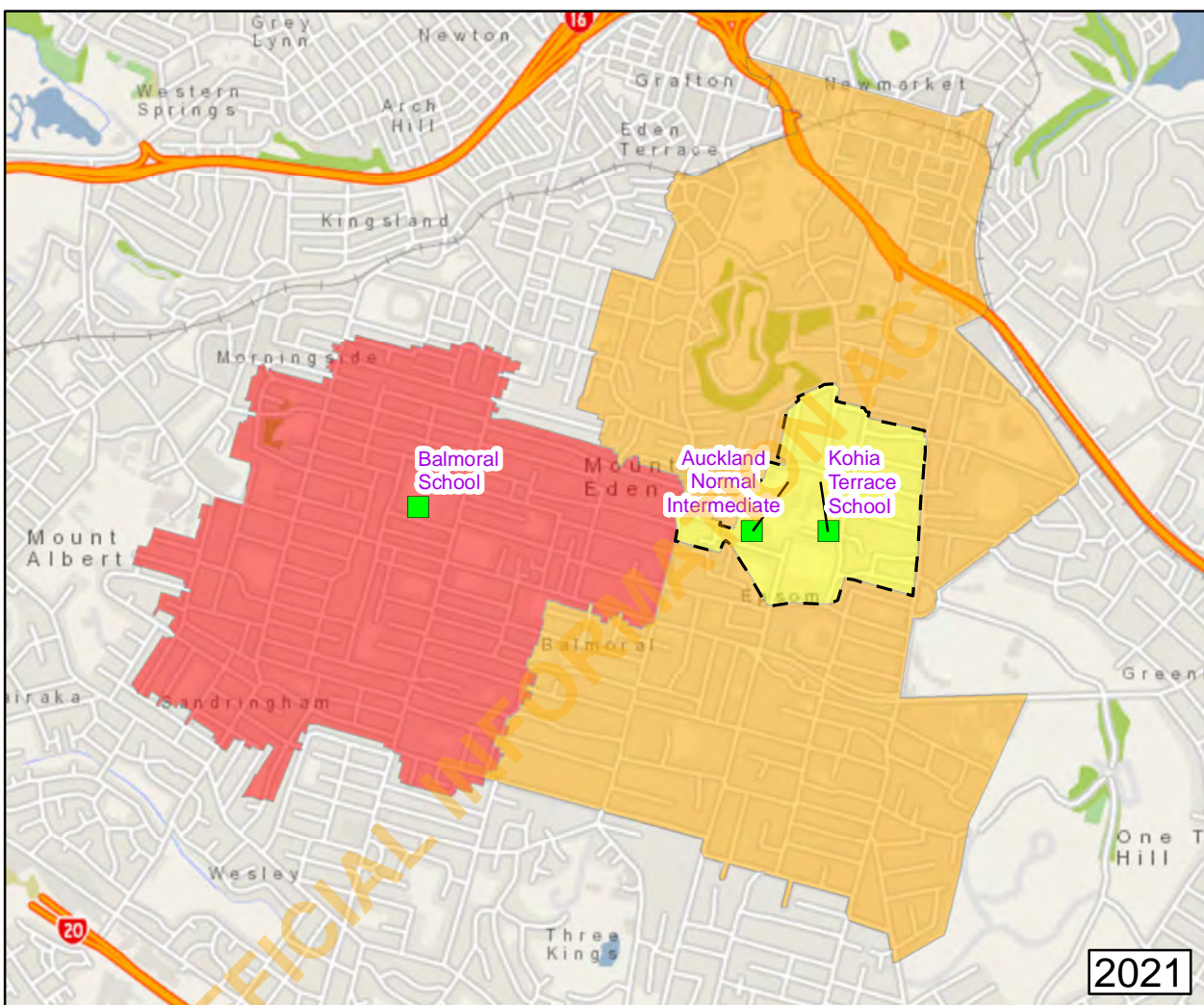
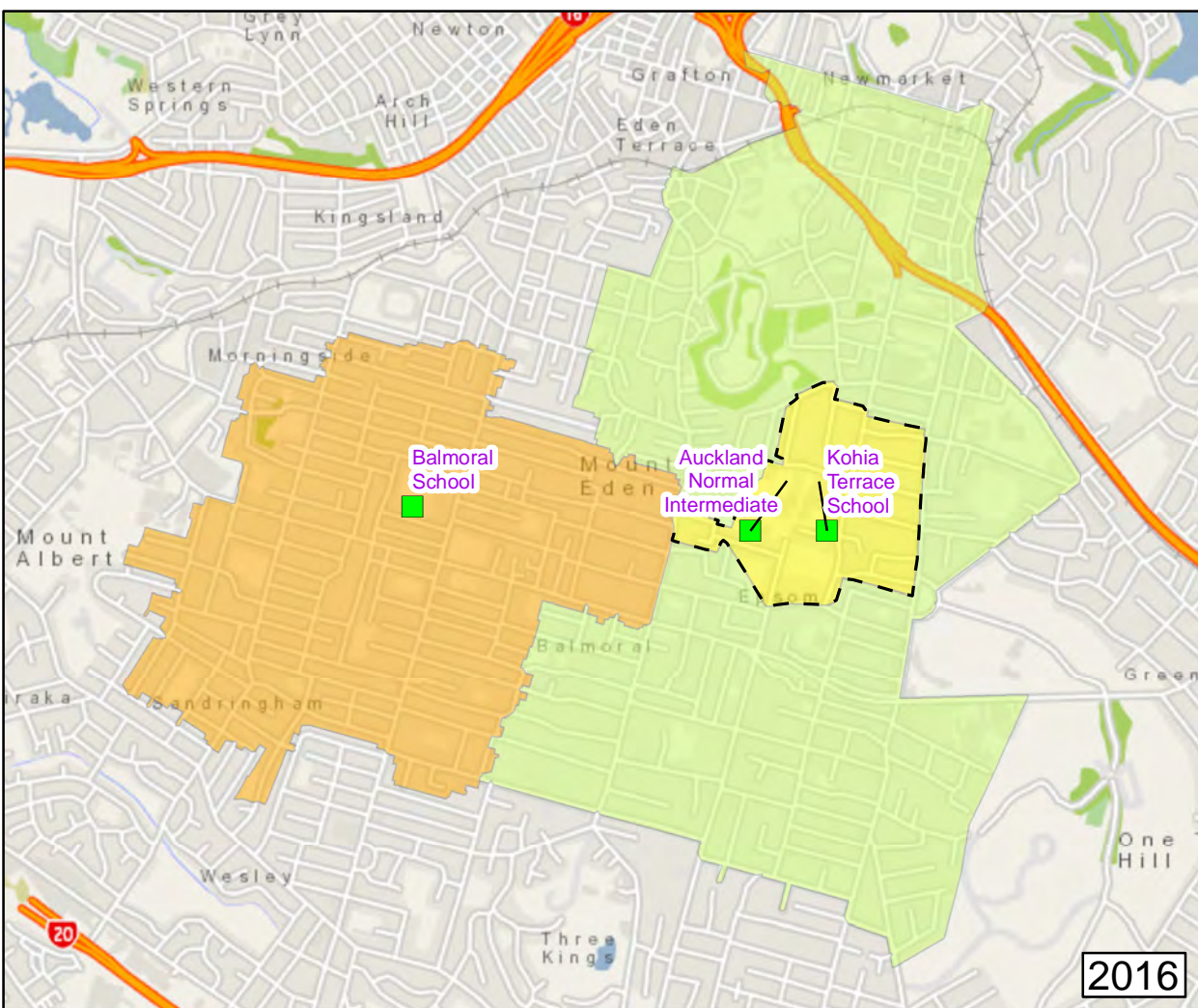
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GIS

Project:  
Auckland Roll Growth Consult / Report

Drawing No:  
GIS-4215443-029a



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### Appendix 1C

### School Capacity

### Intermediate

### Years 7 to 8 (11 to 12 year olds)

**Sth of CBD - Calculated Catchment**

**School Capacity -Surplus/Deficit (Comitted Capacity 2016)**

- Surplus Capacity
- At Capacity
- Over Capacity
- Significantly Over Capacity

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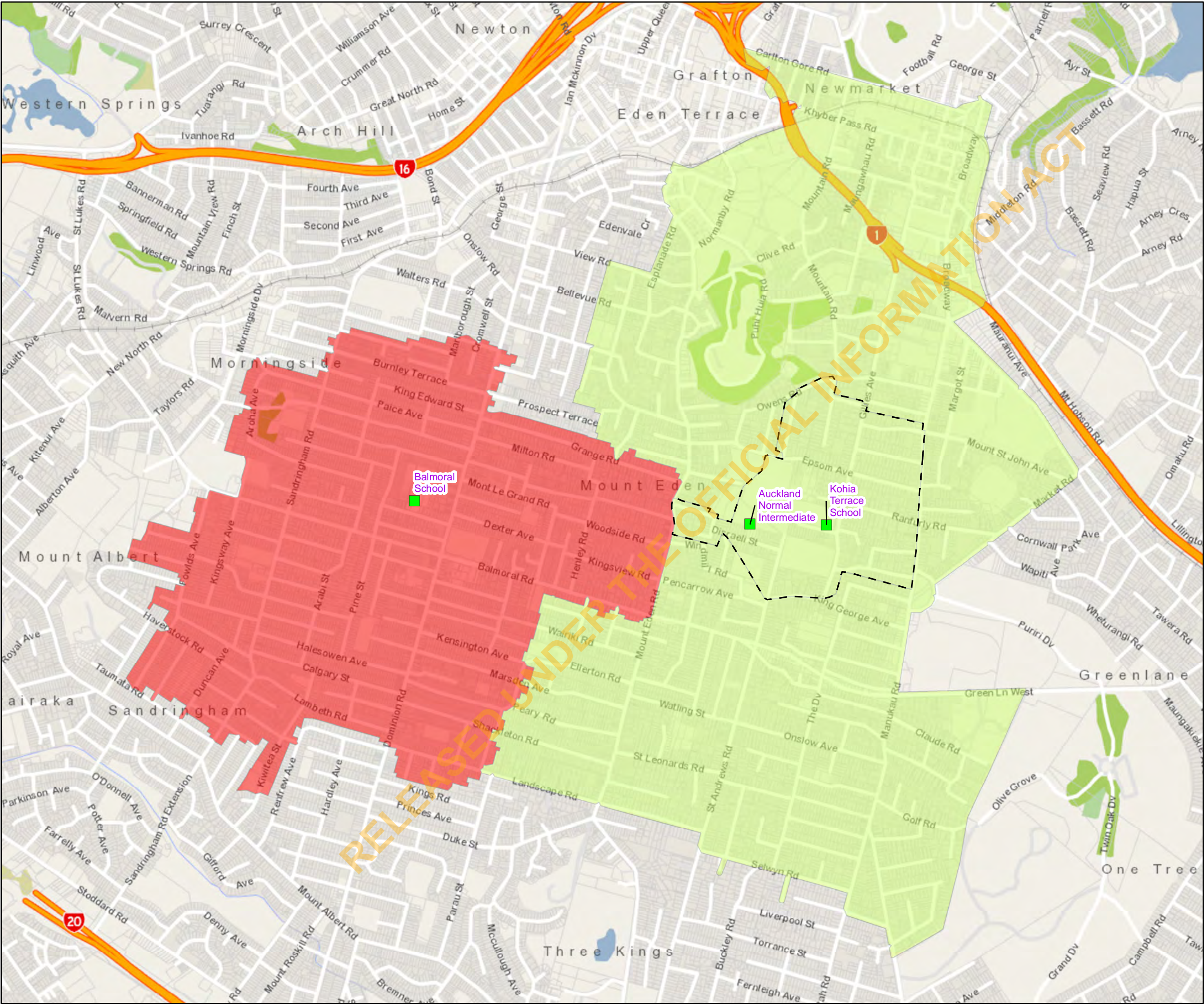
Discipline:

GIS

Drawing No:

GIS-4215443-2021





Appendix 1D  
School Capacity  
(Theoretical 2031)  
Full Primary and Intermediate  
Years 7 to 8 (10 to 12 year olds)

**Sth of CBD - Calculated Catchment**  
**School Capacity -Surplus/Deficit (Comitted Capacity 2016)**

- Surplus Capacity
- At Capacity
- Over Capacity
- Significantly Over Capacity

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Revision	Author	Verified	Approved	Date
2	SRH	AYF	AL	21/08/2015
1	AYF	DRAFT	DRAFT	20/04/2015



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