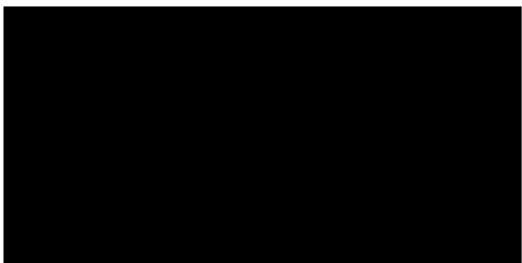




- 6 MAR 2018



Thank you for your email of 16 January 2018 to the Ministry of Education requesting the following information:

- *A copy of all recent reports, including growth predictions completed by the Ministry of Education in relation to Cambridge and Cambridge East School.*

Your request has been considered under the Official Information Act 1982 (the Act).

I apologise for the delay in responding to your request.

Residential growth in the Cambridge region has prompted the Ministry to assess the demand implications for the existing schooling network. Over the last three to five years growth in schools in this region has been addressed on an individual level. Following this a more comprehensive report addressing long-term schooling requirements across all levels was requested.

We have interpreted 'recent reports' as documents finalised since 2016 as prior to this date no documentation was completed regarding this.

The following reports were identified as within the scope of your request:

	Date	Description	Decision on release
1.	24 June 2016	Cambridge school historic and projected rolls	Released in full.
2.	August 2016	Demand analysis for Cambridge East School (1700)	Released in part. <ul style="list-style-type: none">• Some information has been withheld under section 9(2)(a) and section 9(2)(f)(iv) of the Act.

Staff surnames have been withheld under section 9(2)(a) of the act to protect the privacy of those individuals.

Information about the recommendation is currently under review and not final. As such this is being withheld under section 9(2)(f)(iv) of the Act to maintain the constitutional conventions which protect the confidentiality of advice tendered by Ministers and officials.

Please note, the Ministry now proactively publishes OIA responses on our website. As such we may publish this response on our website after five working days. Your name and contact details will be removed.

I hope that this information is helpful for you. You have the right to ask an Ombudsman to review it. You can do this by writing to info@ombudsman.parliament.nz or Office of the Ombudsman, PO Box 10152, Wellington 6143.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Katrina', written over the printed name.

Katrina Casey
Deputy Secretary
Sector Enablement and Support



Demand Analysis for

Cambridge East School (1700)

August 2016

RELEASED UNDER THE OFFICIAL INFORMATION ACT

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Purpose

The purpose of this report is to present demographic analysis relating to Cambridge East 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.

The previous full demand analysis for Cambridge East School was completed in February 2007.

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 council planning, private sector developments, 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

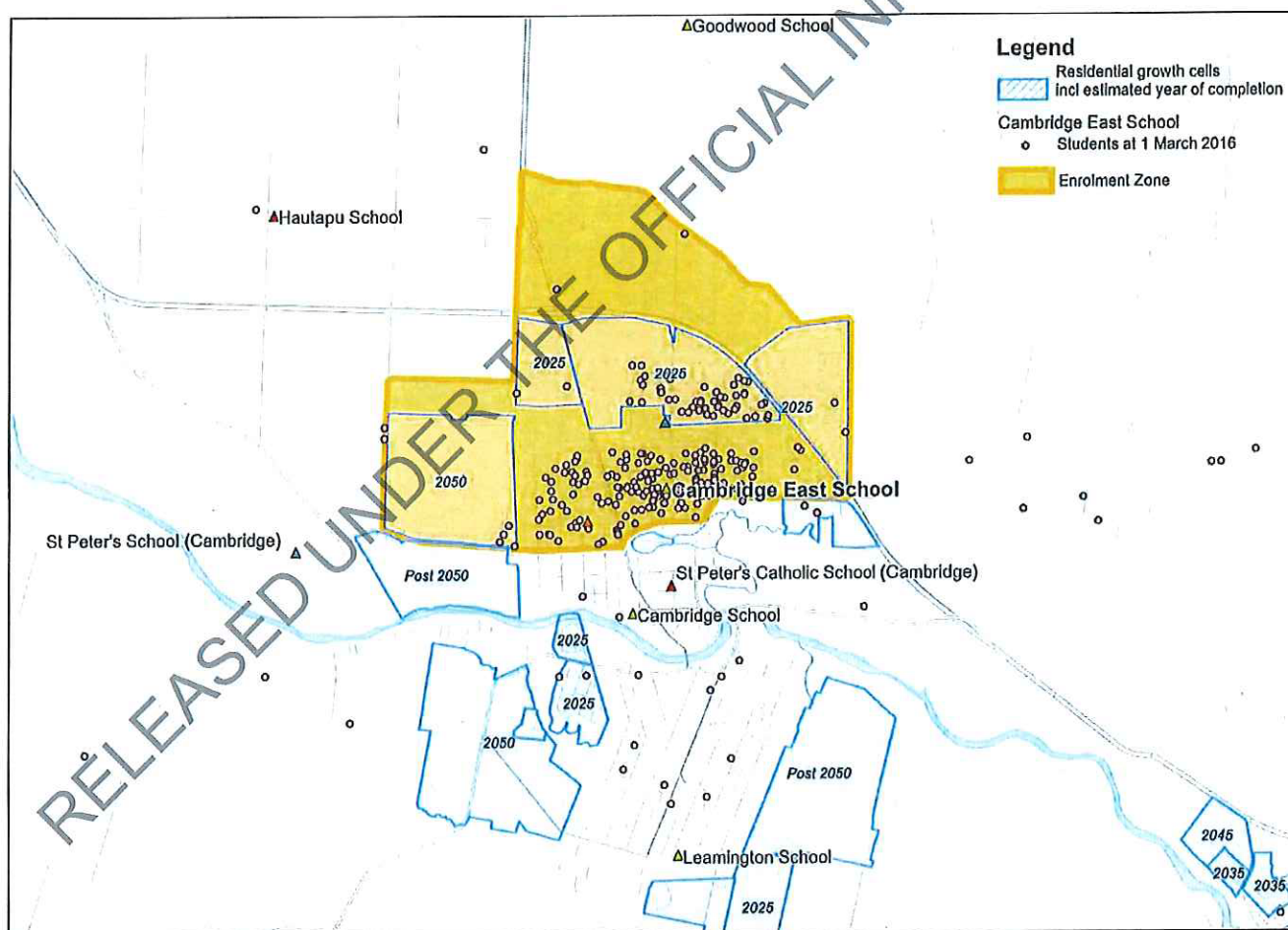
Cambridge East School is a contributing primary school in the heart of Cambridge. Cambridge is an area of significant growth in the Waikato region with the Waipa District Council reporting that they are 5 years ahead of schedule for filling the growth cells. This has seen the creation of a working group to look at ways of addressing growth across the network of schools in the area. All of the schools in the network have been visited by the local Education Infrastructure Manager to see if there are ways to better utilise existing spaces to create modern learning environments and increase capacity.

Student Distribution and Surrounding Network of Schools

Figure 1 shows the distribution of Cambridge East School students at 1 March 2016. All of the students on the roll were able to be mapped. There were 300 students (83%) living inside the school's zone at this time and 60 students living outside the zone (17%). Of the 60 students living outside the zone, 26 were coded as out of zone students (OOZ) and 34 were students who had previously lived in zone (INZN).

Figure 1 also shows the residential growth cells. These were provided by the council in May 2016, however, the council indicated that the completion dates are likely to be 5 years earlier than originally predicted if growth continues at the current rates. As can be seen, three of the growth cells expected to be completed by 2025 (or 2020 if current growth rates continue), are in the Cambridge East School zone.

Figure 1: Cambridge East School student distribution map, 1 March 2016



Share of In Zone Year 1-6 Students

Table 1 shows the schools attended by Year 1 to 6 students mapped as living in the zone of Cambridge East School at 1 March 2016. The school shares areas of its enrolment zone with Goodwood School and Cambridge School and only 198 of the 821 students shown in the table below live in an area exclusively zoned for Cambridge East School.

Cambridge East School had the largest market share with 36% of the students. Goodwood School had 24% of students and Cambridge School had 15%. The Cambridge East School share has decreased since 2014 when it was 48%. Goodwood School and Cambridge School have increased their market shares over this period from 19% and 11% in 2014.

As development continues around the township, it is likely that various schools across the network will need to reduce their out of zone roll to accommodate local growth. This may result in a change in the market share breakdown.

Table 1: Market share of students living in Enrolment Zone of Cambridge East School, 1 March 2016.

School	Number of students	Percentage
Cambridge East School	298	36%
Goodwood School	195	24%
Cambridge School	120	15%
Hautapu School	96	12%
St Peter's Catholic School (Cambridge)	44	5%
Leamington School	27	3%
Other Schools	41	5%
Total	821	100%

Table 2 shows the market share information for the catchment area used in this report. The catchment area has been defined as the Census Area Units (CAUs) of Cambridge North, Cambridge West, Swayne and Hautapu. Across the catchment area, Cambridge East School had a market share of 37%, Goodwood School had a share of 22% and Cambridge School had a share of 15%.

Table 2: Market share of students living in the catchment area of Cambridge East School, 1 March 2016.

School	Number of students	Percentage
Cambridge East School	298	37%
Goodwood School	178	22%
Cambridge School	117	15%
Hautapu School	102	13%
St Peter's Catholic School (Cambridge)	36	4%
Leamington School	24	3%
Other (23 Schools)	46	6%
Total	801	100%

School and Network Status

Table 3 gives an overview of the school and the network capacity and utilisation. At peak roll in 2015, the school had a deficit of 4 student places while the network as a whole had a surplus of 70 student places. This includes all teaching spaces (TSs) that are planned, in progress or existing.

Table 3: School and Network Utilisation Status

Summary	School's status	Network's Status
Current TSs Count	16	84
Current Capacity (approx)	379	2,034
Peak 2015 Roll	383	1,964
Surplus/ Deficit	-4	70
% Utilisation	101%	97%

Table 4 shows the historical March, July and October rolls for Cambridge East School from 2011 to 2016. On average, the roll increased by 23 students between March and October each year with only 2013 and 2014 being significantly different. In 2016, the roll increased by 23 students between March and July, suggesting that 2016 will also see above average growth.

Table 4: Historical rolls for Cambridge East School, 2011-2016

Historical Roll	2011	2012	2013	2014	2015	2016
March	320	331	329	352	354	361
July	330	339	350	348	370	384*
October	343	352	369	352	383	
Growth between March and October	23	21	40	0	29	

*provisional

Figure 2 shows the historical 1 July roll for Cambridge East School between 1996 and 2016. The graph also shows the capacity of the school over this period. The roll has been reasonably steady over this period with a gradual overall increase and small fluctuations of no more than 10% on an annual basis. Since 2011, the July roll has increased by 54 students.

Figure 2: Historical 1 July roll for Cambridge East School, 1996-2016

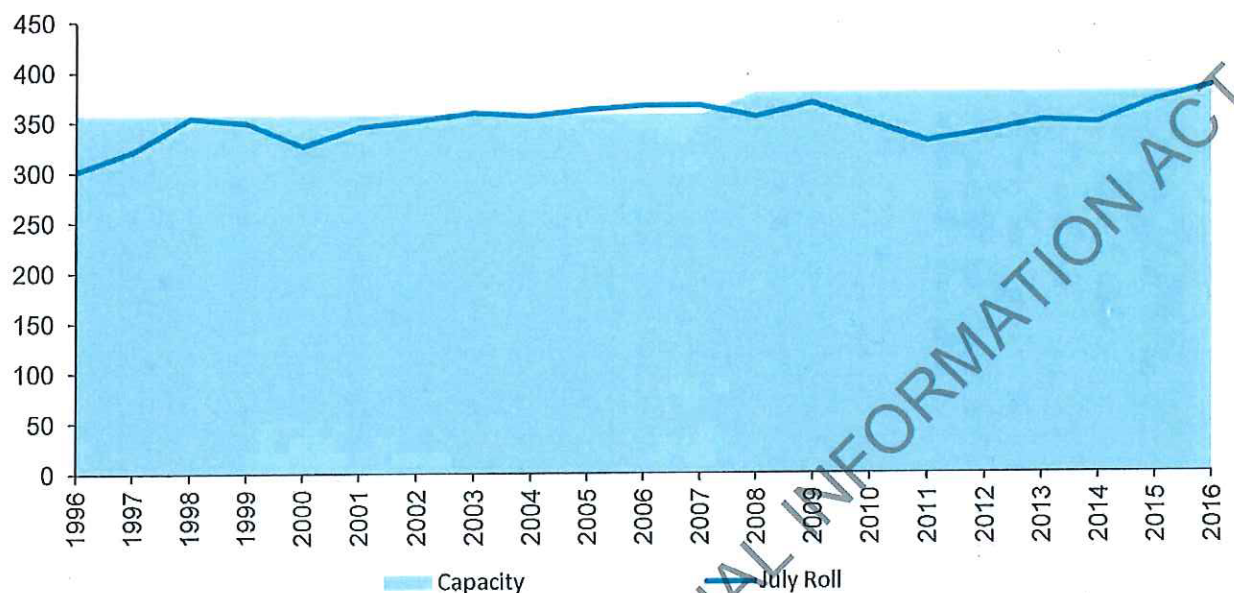


Table 5 shows the zoning status of students enrolled at Cambridge East School as at 1 March 2016. The school reported 26 out of zone (OOZ) students and 13 Not Applicable (NAPP) students. The NAPP students are likely to be a coding error as this category is for students enrolled at a school prior to an enrolment scheme being implemented. The enrolment scheme at Cambridge East School has been in place since 2005. The OOZ student component makes up about 7% of the total roll as is considered reasonable. The school has increased the number of OOZ students slightly since 2015 when it was 21 students or 6% of the total roll.

Table 5: Zoning status of students attending Cambridge East School as at 1 March 2016

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Total
In Zone	32	46	49	75	50	54	16	322
Out of Zone	4	5	6	6	2	2	1	26
Not applicable	2	4	3	2	1	1	0	13
Total	38	55	58	83	53	57	17	361

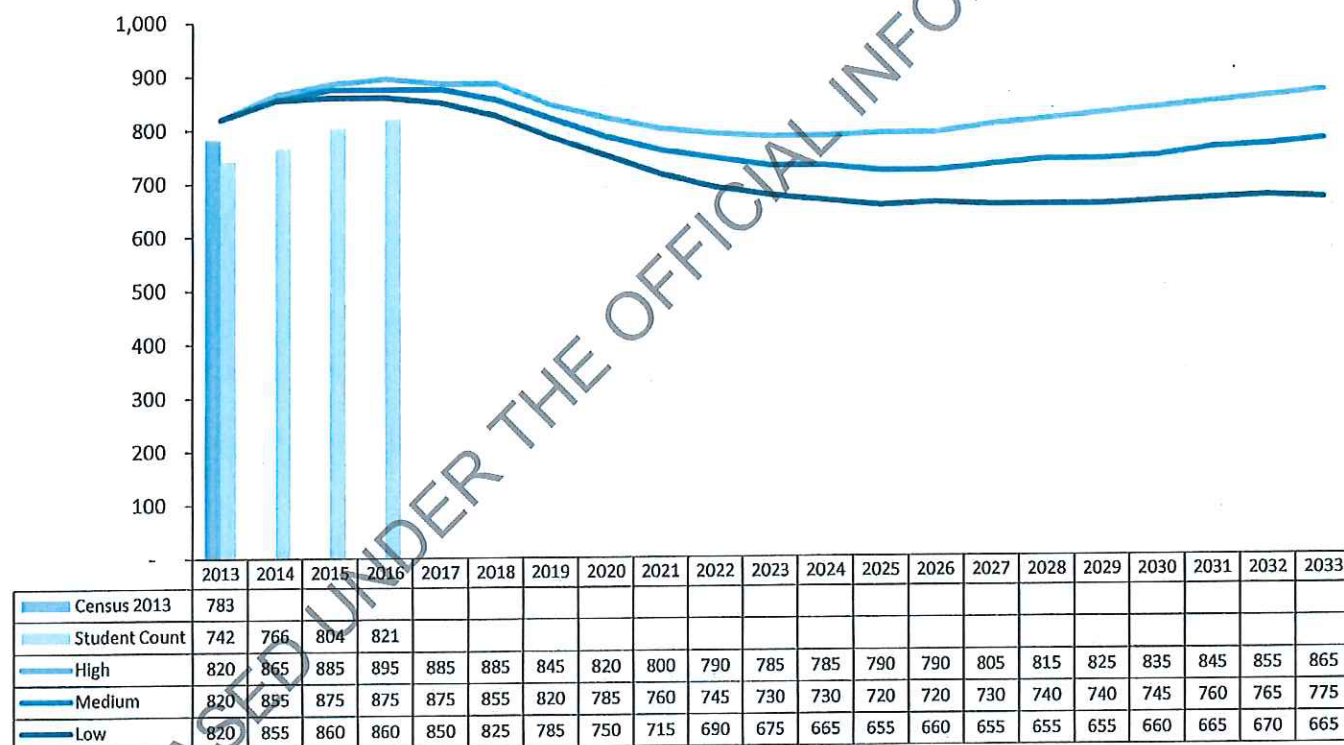
Population Projections

Figure 3 shows the StatsNZ projections for the 5 to 12 year old population in the catchment area of Cambridge East School. The Ministry's student counts are based on the number of students that could be mapped within the catchment area at 1 March each year. Historically there has been a 5 to 10% undercount in student numbers as not all students can be mapped.

The population projections suggest that the growth in the 5 to 12 year old age group has reached its peak and will level off before declining from 2017/18. These projections are currently being revised by BECA consulting as part of the Futureproof strategy. This work is being undertaken due to the unexpectedly high rates of growth seen in recent years. At present the Council is using the StatsNZ high projections as their 'best estimate'.

Anecdotal evidence suggests that the number of families in the area is increasing as older people without children move out of their family homes and families with children move in. At this stage, we do not know if the growth experienced by the schools in Cambridge is simply in line with the population projections, and the numbers will begin to plateau and then decline; or the pattern is changing.

Figure 3: Population projections for the 5-12 year old population in the catchment area of Cambridge East School



Local Authority Planning Considerations

Figure 4 shows the number of new dwelling consents issued for the catchment area between 2008 and 2015. Following the 2009 financial crisis, development slowed in the Cambridge and this is reflected in the data below. In 2014, the highest number of consents issued in a quarter was recorded with 90 consents compared to an average of 23.7 consents. Since mid 2013, the number of new dwelling consents issued has been above the average for the period, with the exception of the March 2015 quarter. In 2015, there were a total of 147 new consents issued.

Figure 4: New dwelling consents issued for the catchment area of Cambridge East School, 2008-2015

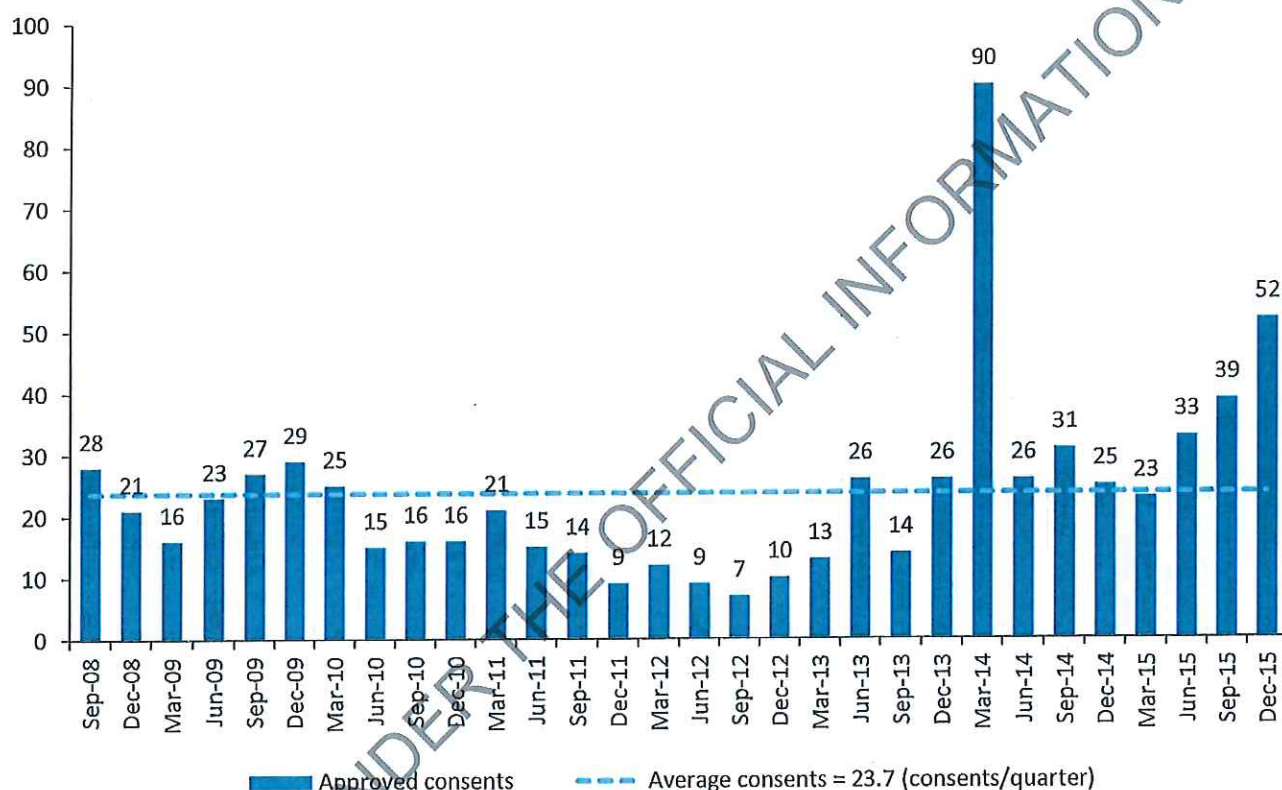
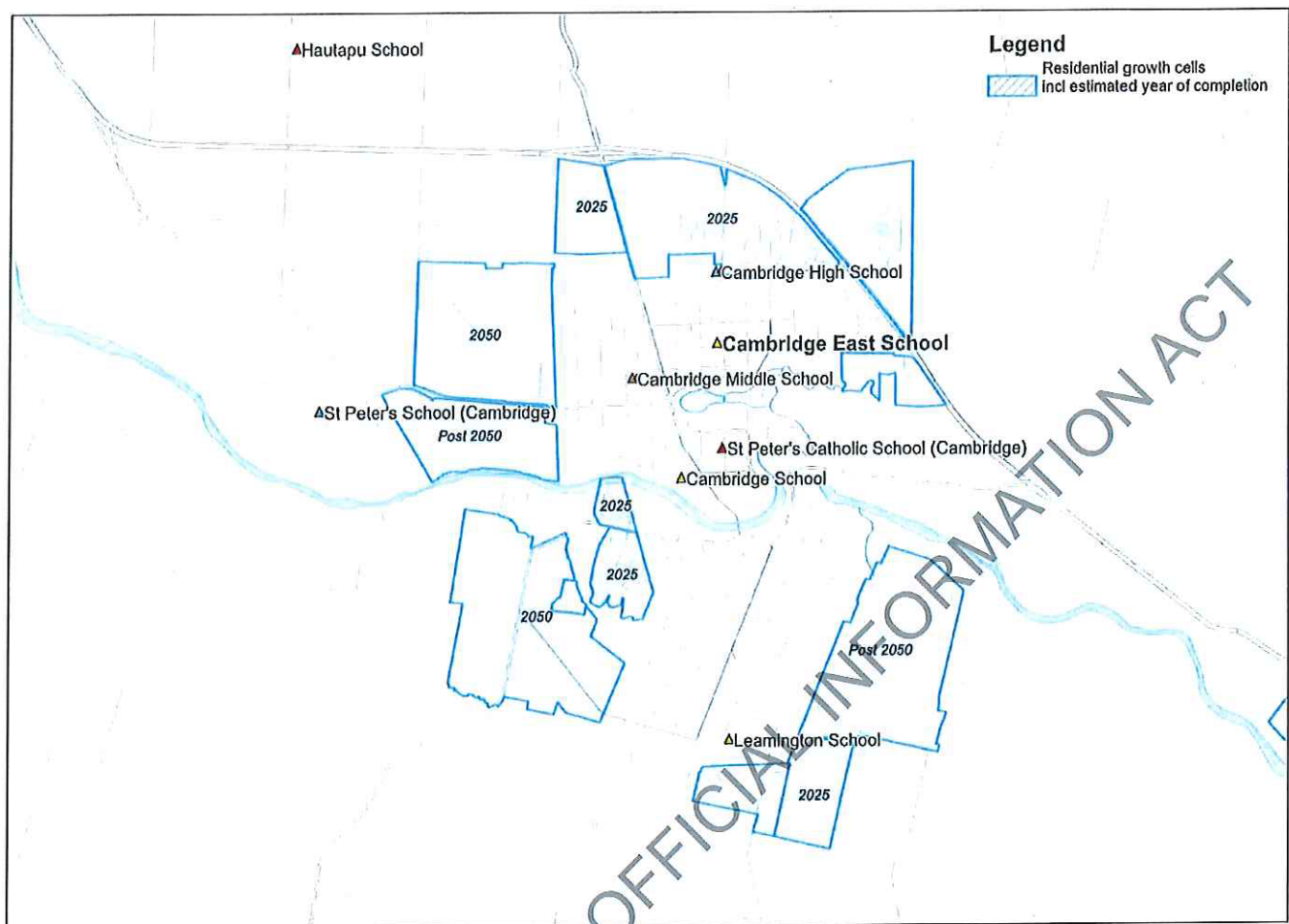


Figure 5 shows the growth cells identified for Cambridge by the Waipa District Council. At a meeting earlier in 2016, the council advised that current demand is such that they expect these areas to be completed 5 years ahead of schedule. Subsequently, the plans to open up areas identified for development in the long-term will need to be brought forward.

The Waipa District Council is planning to do a full structure plan for Cambridge in the 2016/17 financial year. This is likely to result in the dates for the growth cells in Figure 5 being updated and most likely brought forward.

In June 2016, the Council commissioned archaeological work in the north of Cambridge (the area north of Cambridge High School) as a result of pressure from developers. The major link roads in this area are also in the final stages of completion so it is reasonable to expect development will be underway in the near future.

Figure 5: Cambridge growth cells and Waipa District Council development plans



Private Developments

There are extensive private developments planned, underway and near completion in Cambridge. Within the zone of Cambridge East School, the largest development currently underway is St Kilda. This area will have a total of 300 lots and is expected to be completed in the next few years.

Additional developments are expected to begin in a number of the growth cells shown in Figure 5 within the next 12 months. The speed at which these developments are undertaken will depend on demand. In total, there are approximately 2,700 lots across all of these areas (including retirement villages). Historically, there has been a maximum of 420 dwellings built per year in Cambridge.

Future Roll Assessment

Schools Projections

Table 5 shows the projections provided by the principal of Cambridge East School. His projections show a peak October 2016 roll of 415 students and growth of 17 to 21 students per year in subsequent years. At 17 August 2016, the principal reported a roll of 403 students. This growth is above the projections provided by the principal earlier in the year and is said to be the result of new families moving into the local area. If the roll reaches the 415 students predicted (and it seems very likely it will), this will be an increase of 54 students from the March 2016 roll, significantly higher than in any other year.

Table 5: Cambridge East School principal's roll projections 2016-2019

October	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Total
Projected 2016	84	53	59	81	56	65	17	415
Projected 2017	87	65	56	61	84	59	20	432
Projected 2018	87	68	68	59	64	87	20	453

Ministry's Projections

Table 6 shows the Ministry's roll projections for the school. The projections are based on a static number of new entrants (new Year 1 students) as well as the enrolment and retention trends from the last 5 years. These projections have been adjusted to account for the provisional 1 July 2016 roll that was much higher than expected.

Roll growth from 2015 to March 2016 was 'as expected', but the growth between March and July 2016 was well above average. Further growth has occurred since July with the principal reporting a current (August 2016) roll of 403 students – an unprecedented 42 students since March 2016. Most of the growth is in the Year 1/new entrant cohort.

The projections in Table 6 show a peak roll of 410 students in 2016 with further growth in 2017 and 2018. There is a slight decline in the projections for 2019 as the large cohort of current Year 4 students will have finished school. These projections are reasonably similar to those provided by the principal.

Table 6: Historical rolls and Ministry roll projections for Cambridge East School, 2011-2019

October	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
2011	57	63	57	42	60	64	343
2012	70	49	64	60	40	69	352
2013	85	53	50	68	53	60	369
2014	66	74	53	48	61	50	352
2015	65	59	78	58	52	71	383
Projected 2016	84	56	58	84	52	76	410
Projected 2017	84	72	58	61	79	73	427
Projected 2018	84	72	75	61	57	104	453
Projected 2019	84	72	75	78	57	85	451

Table 7 shows an adjusted set of Ministry projections. These projections assume that the recent growth trends, particularly for new entrants, continue. These projections are likely to over-estimate the number of new entrants. Funding Year 7 students are included in the Year 6 projections, hence the jump from Year 5 numbers the previous year.

Table 7: Ministry adjusted roll projections for Cambridge East School, 2016-2019

October	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Projected 2016	84	56	58	84	52	76	410
Projected 2017	92	72	58	61	79	73	435
Projected 2018	101	79	75	61	57	104	477
Projected 2019	112	87	82	78	57	85	501

Teaching Space Implication

Table 8 shows the capacity generated by various teaching space counts at Cambridge East School. Capacity is calculated using the most recent peak roll (October 2015). As the proportion of students at each year level changes, or the number of students receiving special education funding changes; the capacity of a school changes, sometimes significantly. This table should therefore only be considered an indication of possible and approximate capacity.

Table 8 shows that the school will require an additional 2 to 3 teaching spaces to accommodate its in-zone roll by 2018. It seems likely that these projections will be accurate and the teaching spaces will be required.

Table 8: Capacity generated by teaching spaces and the projected roll of Cambridge East School

Teaching space count	Capacity generated	Projected roll					
		Year	Table 4 MOE projections	Table 5 MoE Adjusted projections	Table 6 Principal's projections	OOZ	Principal's projections excl OOZ
16 existing	379	2015 actual	383	383		21	362
17	402	2016	410	410	415	26	384
18	425	2017	427	435	432	26	401-409
19	447	2018	453	477	453	26	427-451
20	470						
21	493						
22	516						

Network Considerations

Table 9 and Figure 5 show the roll projections and capacity for the schools in the network. They show that the Cambridge network is well utilised with a surplus of just 70 student places in 2015 (4%). The network as a whole had 277 out of zone students (OOZ) at 1 March 2016 (14%). The network roll is expected to continue to grow over the coming years.

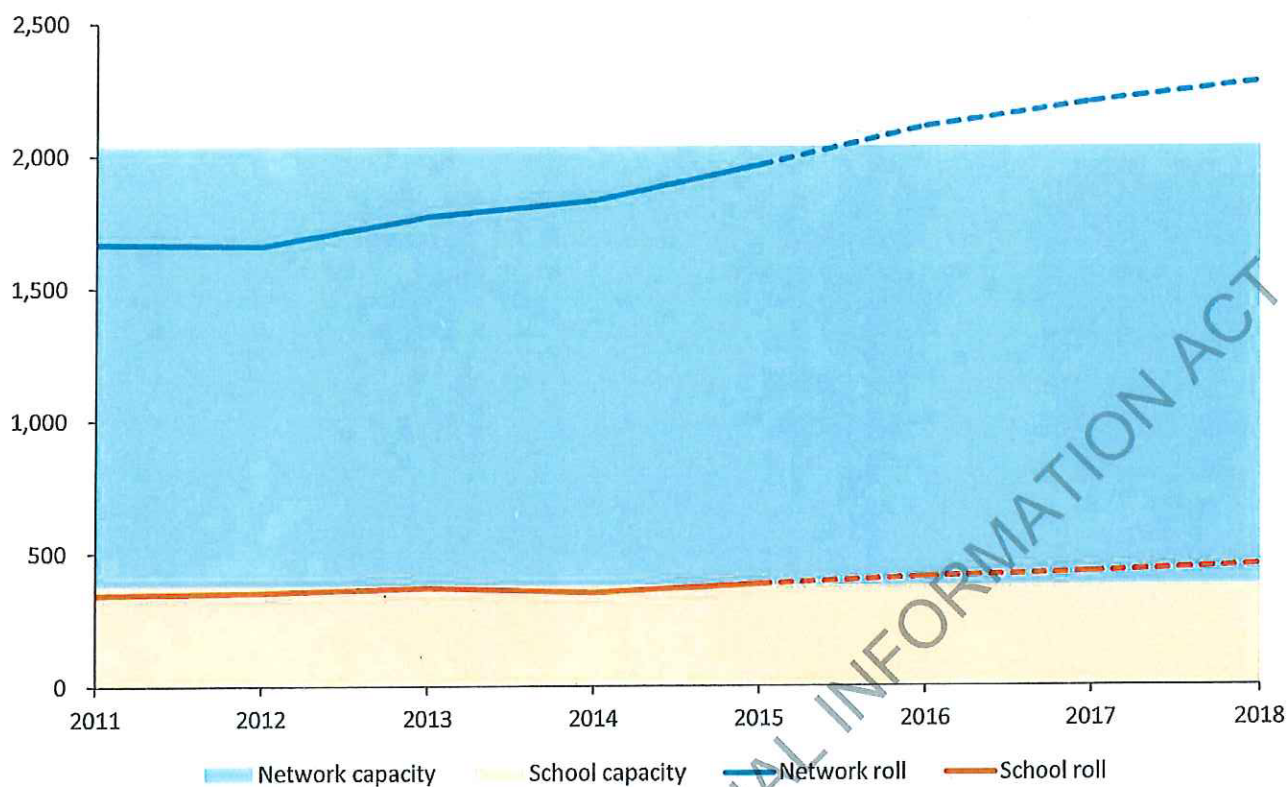
The Cambridge network has been identified as an area of growth and the Ministry is working closely with the principals to address the property needs of the network. While there are a number of OOO students in the network, market shares are likely to change as the availability of OOO places in the schools changes. This could see more rolls increasing with in-zone students who are entitled to property funding. The following points consider the network as a whole estimates the deficit of places for students living inside any of the network zones:

- Of the 1883 students attending the network schools at 1 March 2016, 1847 students could be mapped (98%).
 - 141 students lived outside of the network zones (8%) and 68 of these students were OOO students (4% of network students). There were 25 students coded as in-zone (students who lived in-zone then moved out) and 48 coded as Not Applicable (students who were enrolled at a school prior to it implementing an enrolment scheme).
 - Students were fairly evenly spread over the 6 schools, with each school (except Leamington School) having, on average, about 25 students from outside of the area. Leamington School had 15 students.
- If the network is considered as a whole, there would be an estimated 75 OOO students who live outside of the network zones.
- This would give the network a deficit of about 165 student places in 2018 once network OOO students are removed.
- If the surplus at St Peter's Catholic School was removed, 51 students in 2018, the deficit would increase to 216 students. This is the equivalent of 9 to 10 teaching spaces.
- Additional teaching spaces are likely to be required at Cambridge School and Cambridge East School.
- Goodwood School is also expected to exceed its capacity if OOO students are included, with a deficit of 3 to 4 teaching spaces.
- Hautapu School is in a similar situation with an expected deficit of about 2 teaching spaces.
- As the pressure builds on schools with a high proportion of OOO students, it is likely that they will reduce their OOO student numbers, which is likely to mean the pressure shifts back to other schools within the network.

Table 9: Peak rolls and projections for the network of schools surrounding Cambridge East School, 2011-2018

				Peak Rolls (10th October)								OOZ (Mar 2016)	surplus/ deficit
School Name	Type	TS Count	Current Capacity	2011	2012	2013	2014	2015	2016	2017	2018		
Cambridge East School	Y1-6	16	379	343	352	369	352	383	410	427	453	26	-4
Cambridge School	Y1-6	13	314	271	261	309	367	373	400	411	421	50	-59
Goodwood School	Y1-6	12	295	316	314	324	320	337	346	358	371	67	-42
Hautapu School	Y1-8	9	221	196	192	216	215	233	252	260	265	118	-12
St Peter's Catholic School (Cambridge)	Y1-8	9	250	181	178	174	165	169	182	188	199	N/A	81
Leamington School	Y1-6	25	575	361	364	379	412	469	519	555	565	16	106
Total		84	2,034	1,668	1,661	1,771	1,831	1,964	2,109	2,199	2,274	277	70
				Actual Roll				Projected Roll					

Figure 5: Network peak rolls and projections, 2011-2018



Options

Enrolment Scheme

Cambridge East School already has an enrolment scheme in place. The school manages the zone well with about 7% of students being coded as OoZ. The school's current market share of its zone suggests that there is plenty of potential for the school roll to grow from changes to its share alone. As new areas of growth increase student numbers in the zones of other schools, there will be fewer spaces for OoZ students, meaning more students could attend Cambridge East School and its market share (and roll) would increase.

The school's zone covers 821 Year 1 to 6 students, with Cambridge East School attracting 296 students (36%). Even within the area exclusively zoned for Cambridge East School, over half of the students attend other schools within the network.

In addition, there are large growth cells within the school zone that are expected to be developed in the near future. There is some concern that all of these pressures will amount to serious overcrowding at Cambridge East School. The Ministry is working with the network principal's to look at ways of addressing this growth, including consideration for changing the zones within the network.

Change of Structure

Cambridge East School is a Year 1 to 6 school and the growing roll could not be addressed by changing this. This is therefore not an option.

Teaching Space Implication

Cambridge East School will need additional teaching spaces to accommodate its roll through to 2018. It seems likely that the school will need about 3 teaching spaces to cater for its projected in-zone roll over this period.

Conclusion

The roll at Cambridge East School is expected to continue to grow. In addition to developments, both current and future, within the zone, there is also real potential for the school to increase its local market share as the whole network comes under increased pressure for student places. Cambridge East School is expected to require 2 to 3 additional teaching spaces by 2018.

The network is expected to have an ongoing deficit of student places that could equate to up to 9 teaching spaces. The entitlement to teaching space excludes OoZ students on a school roll, however, consideration also needs to be given to the flow on effects for the rest of the network. As a whole, the network has a small number of students who come from outside of the zoned area (4%).

The StatsNZ projections suggest that 2016 will see the peak of the population increases for 5 to 10 year olds in the school's catchments. These projections take future Council plans for land development and potential residential housing, however, we do not know whether the full extent or the speed of growth in Cambridge has been fully accounted for. It is therefore possible that the growth in this population will continue rather than easing as projected. BECA Consulting Ltd is currently working with the Waipa District Council and FutureProof to update their population projections. The Ministry will reassess its population projections once this information is available.

Work is currently underway with the network principals to look at ways of addressing growth in the area, including changing enrolment schemes to address issues such as overcrowding and site capacity. Any changes to enrolment schemes will take 3 to 5 years to have an impact on school rolls. Cambridge East School will need its additional teaching spaces before any real impact of zone changes or other network solutions will be realised.

s 9(2)(a) OIA

Network Analyst
Tik [REDACTED]

s 9(2)(a) OIA

Date:

06/09/16.

Senior Advisor, Sector Enablement and Support
Tracy [REDACTED]

Date:

.....

s 9(2)(f)(iv) OIA

Recommendation



Manager Education (Network)

Alison [REDACTED]

s 9(2)(a) OIA

Date:

Copies to:

Senior Advisor Network - Ashleigh [REDACTED]

Education Infrastructure Service – Sharon [REDACTED]

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