

Analysis of factors influencing the rolls of Avonside Girls' and Shirley Boys' High Schools

Focussing on the short to medium term

Under potential Enrolment Scheme Home Zone scenarios.

1 Purpose:

This analysis explores the current and potential demand for secondary education from within four areas in the North East of Christchurch, and will examine the likely short to medium term roll trends that will result for each of Avonside Girls' and Shirley Boys' High Schools under each scenario of potential Enrolment Scheme Home Zone configuration.

This analysis is designed as a working document, exploring the factors that will influence the roll of each school, and exploring the compounding effects of various factors.

In this analysis, a best estimate of the impacts has been made. The significant risks regarding the potential for this analysis to underestimate rolls are detailed throughout the report.

This report does not recommend any one Scenario, but instead explores the factors influencing school rolls and provides advice regarding the risk of overcrowding at each school under each Scenario.

2 Background:

The four areas are those that are of interest to the Boards of Trustees of Avonside Girls' and Shirley Boys' High Schools in the development of a new enrolment scheme home zone for each school.

The intent is to develop enrolment schemes that;

- Match each other to ensure clarity for applicants of both/any genders,
- Provide a suitable level of local demand and ensure that local students can attend the schools on the new site
- Enable the schools to continue to offer out-of-zone places (including Old Boys and Old Girls) to students outside the zone area – allowing the schools to remain providers of a specific type of education (single sex education) for students in the east of Christchurch
- Consider Implications for the wider network

A key part of an Enrolment Scheme is the Home Zone. This is the area from within which families have a right to enrol at the school.

The Enrolment Scheme may also contain details of other supporting procedures, such as "grand-parenting" provisions to allow the enrolment of the siblings of current students whose addresses become out-of-zone as a result of a zone reduction / withdrawal from an area. These addresses are considered to be "in-zone" addresses as long as the students remain at that address.

In this case, the likely impact is explored of a broadening of the usual "grand-parenting" provisions to include the current addresses of any children currently residing within the current home zone of each school. The validity of this provision is uncertain, and determining the validity is outside the scope of this report.

The Enrolment Scheme also details how any spare student spaces will be made available to students from outside the home zone area.

It is the Board's responsibility to determine how many spaces can be offered each year. This allows the schools to make full use of available capacity. By careful management of out-of-zone numbers, overcrowding can be prevented.

The priorities for selecting out of zone students are set out in the Education Act:

- First priority is given to students who have been accepted for enrolment in a special programme run by the school.
- Second priority will be given to applicants who are siblings of current students.
- Third priority will be given to applicants who are siblings of former students.
- Fourth priority will be given to applicants who are children of former students.
- Fifth priority will be given to applicants who are either children of board employees or children of board members.
- Sixth priority will be given to all other applicants.

3 Areas for Analysis

There are four areas that are of interest. These are;

- S1 MoE
 - The area comprising the bulk of the catchments of Waitakiri Primary School, Queenspark School, Parkview School, and Rawhiti School. This is the area within which the new site is located.
- Brighton
 - The area of Southshore, including the New Brighton Spit.
- Marshland
 - The area that includes the new Prestons subdivisions
- Current Zone area
 - The area covered by the current AGHS / SBHS enrolment zones. Note that these current zones do not match, so the area used for analysis is the combined area.

The four areas are shown in Appendix A.

4 Current and projected Local demand

The 2017 and 2018 values below are the counts of Year 9-13 Female and Male state school students in each area at March 2017 and March 2018. Students attending Kura, Designated Character, or Special schools have been excluded, as have International students, students attending State Integrated or Private schools, and those students with an FTE less than 0.5.

This means that the below counts underestimate the total number of local students who are eligible to attend the local state school. It is assumed, for the purposes of this analysis, that the proportion of students attending these other modes of provision will remain constant. However, there is a risk that students will be drawn away from these other modes of provision by the offering at the relocated state schools.

It should be noted that projections for the Marshland area are likely to underestimate the scale of growth in the short term. For example, local demand at July 2017 exceeded the projected March 2018 value. The second stage of Marshland School development was commenced earlier than expected and is completed, we are actively monitoring for stage three.

Projections are based on the age specific population projections for each area. Population projections were provided by Statistics New Zealand (Stats NZ) in late 2017. Projections are grounded in the March 2018 counts.

Table 1: Current and projected local male / female demand

	Female				Male			
Female	2017	2018	2020	2025	2017	2018	2020	2025
Brighton	65	68	67	76	94	102	100	113
Current ES	299	321	341	386	340	330	351	397
Marshland	58	76	87	95	60	71	82	89
S1 MoE	546	554	567	585	543	564	578	596

Note that the rate of growth in Marshland has exceeded projections in recent years, and projections including Marshland may underestimate future demand levels.

5 Potential zone Scenarios

There are seven potential zone scenarios explored below.

Table 2: Potential Zone Scenarios

Scenario ID	Areas included in Zone Scenario
A	S1 MOE
B	S1 MOE + Brighton
C	S1 MOE + Brighton + Marshland
D	S1 MOE + Brighton + Marshland + Current Zones
E	S1 MOE + Brighton + Current Zones
F	S1 MOE + Marshland + Current Zones
G	S1 MOE + Current Zones

6 Market Share Considerations:

Market Share – the proportion of local (in-zone) state school students attending a state school – is a key factor in determining the roll of a school. It is uncommon for Market Shares to exceed 90%, as a small number of students will attend other providers or a similar or different type of education.

However, it is common for around 10% of a school's in-zone students to reside outside the zone, due to these students moving house after enrolling. This can result in the in-zone roll of a school reaching the total level of local demand, even though the school's market share does not exceed 90%. It is likely that the market shares of the two schools will be between 80% and 90% once relocated to the new site.

In this analysis, it is assumed that the same proportion of students will continue to attend Private schools and State Integrated schools, although the extension of a popular school zone into an area may in fact draw students away from the Private and Integrated schools. Therefore, for this analysis, student counts and calculations of local demand exclude those students attending Private and State Integrated schools.

In this analysis, students attending some types of State education are also excluded. Students attending Kura, Designated Character, and Special Schools are also excluded from student counts and local demand calculations.

There is a Moderate risk that the expansion of the school zones may result in an increased “draw” from families currently choosing Private, State Integrated, Kura, Designated Character, and Special schooling options. If this is the case, estimates and projections of demand are likely to underestimate demand for AGHS and SBHS.

Including all Year 9-15 State, State Integrated and Private School Students in each area (excluding those with an FTE <0.5), at March 2018, there were 749 Year 9-15 female students in the S1 MOE area. Only 74% of these attend a state school.

Table 3: Total local (all schooling types) demand for Year 9-15 education in the study areas.

	Female				Male			
Female	State (non-DC, Kura, Special)	State	All: State, State Integrated, Private.	% attending a State (non DC/Kura/Special) school	State (non-DC, Kura, Special)	State	All: State, State Integrated, Private.	% attending a State (non DC/Kura/Special) school
Brighton	68	91	119	57%	102	115	142	72%
Current ES	321	403	485	66%	330	394	472	70%
Marshland	76	83	126	60%	71	77	106	67%
S1 MoE	554	602	749	74%	564	626	727	78%

The current State school “draw” from each of these areas only constitutes 57% to 78% of total local (all schooling types) demand. This represents the absolute number of students that would have the right to attend the schools, should the zone cover each of these areas.

It is a core assumption of this analysis that this proportion will remain static. However, the differences in the proportions between genders and areas indicates that there are factors that influence changes in this proportion. Schooling availability (in-zone eligibility) may be a factor.

7 Male / Female demand by zone scenario

This section explores the ratio of capacity to demand through use of a capacity to demand ratio and exploring local demand as a percentage of capacity.

Table 4a: Female / Male Student Counts and projections by zone scenario (Year 9-15 State (non-Designated Character, Kura, or Special School) students at March 2018)

ID	Area Description	Female				Male			
		2017	2018	2020	2025	2017	2018	2020	2025
A	S1 MOE	546	554	567	585	543	564	578	596
B	S1 MOE + Brighton	611	622	634	660	637	666	678	709
C	S1 MOE + Brighton + Marshland	669	698	722	756	697	737	759	798
D	S1 MOE + Brighton + Marshland + Current Zones	968	1019	1063	1142	1037	1067	1110	1195
E	S1 MOE + Brighton + Current Zones	910	943	976	1047	977	996	1029	1106
F	S1 MOE + Marshland + Current Zones	903	951	996	1067	943	965	1010	1082
G	S1 MOE + Current Zones	845	875	909	971	883	894	928	993

Note that the rate of growth in Marshland has exceeded projections in recent years, and projections including Marshland may underestimate future demand levels.

It is anticipated that the market share of the two single sex schools will be high following the relocation, due to the schools' good reputation in the community and the availability and visibility of the new facilities at the schools.

For the purposes of reducing the risk of overcrowding, it is important to consider total potential demand when drafting a new or amended enrolment scheme. This reduces the risk that the school will experience overcrowding should market share increase, resulting in a potential need for a reduction in the school's enrolment scheme home zone or an increase in capacity.

While the above estimates of demand are deemed to be the best for determining the risk of overcrowding generated by each scenario, the following roll estimates are provided, assuming that a lower market share is attained by AGHS / SBHS. The following table assumes a Market Share of 80%, plus 8% to conservatively represent the in-zone students residing outside the zone.

Table 4b: Female / Male Student projections by zone scenario assuming 80% Market Share

Scenario ID	Areas included in Zone Scenario	2025	
		Female	Male
A	S1 MOE	515	524
B	S1 MOE + Brighton	581	624

C	S1 MOE + Brighton + Marshland	665	702
D	S1 MOE + Brighton + Marshland + Current Zones	1005	1052
E	S1 MOE + Brighton + Current Zones	921	973
F	S1 MOE + Marshland + Current Zones	939	952
G	S1 MOE + Current Zones	855	874

8 Male / Female Capacity to Demand Ratios

The following table shows the capacity to demand ratios for the two schools under the Build Capacities and the above projections of local female / male student demand.

The Build Capacities for Avonside Girls' and Shirley Boys' High Schools are 1000 and 1200 respectively.

- A Capacity to Demand Ratio of 1.00 means that there is a match between the Build Capacity and the volume of local demand.
- A ratio of 0.90 means that the Build Capacity is only 90% of that required to accommodate total local demand, and there is a high risk that the in-zone roll will exceed capacity.
- A ratio of 2.00 means that the school has twice the capacity required to meet total local demand. This means that it is likely that at least 50% of spaces will be available to be offered to out-of-zone students.

For the Co-ed Secondary schools and Primary schools, a capacity to demand ratio of between 1.00 and 1.10 is optimal, to achieve a close match of capacity to local demand.

The Single Sex secondary schools in Christchurch are being considered as a separate layer of provision, offering a specific type of education to the wider Christchurch community, rather than being providers for their immediate local community. This consideration was key to the determination of build capacities significantly above the schools' in-zone rolls.

For the Single Sex Schools, a capacity to demand ratio close to 2.00 is optimal to ensure capacity is available to allow a large number of out-of-zone enrolments from the wider community in the East.

Table 5: AGHS / SBHS Capacity to demand ratios under each scenario;

ID	Area Description	Female				Male			
		2017	2018	2020	2025	2017	2018	2020	2025
A	S1 MOE	1.83	1.81	1.76	1.71	2.21	2.13	2.08	2.02
B	S1 MOE + Brighton	1.64	1.61	1.58	1.51	1.88	1.80	1.77	1.69
C	S1 MOE + Brighton + Marshland	1.49	1.43	1.39	1.32	1.72	1.63	1.58	1.50
D	S1 MOE + Brighton + Marshland + Current Zones	1.03	0.98	0.94	0.88	1.16	1.12	1.08	1.00
E	S1 MOE + Brighton + Current Zones	1.10	1.06	1.03	0.96	1.23	1.20	1.17	1.08

F	S1 MOE + Marshland + Current Zones	1.11	1.05	1.00	0.94	1.27	1.24	1.19	1.11
G	S1 MOE + Current Zones	1.18	1.14	1.10	1.03	1.36	1.34	1.29	1.21

Note that the rate of growth in Marshland has exceeded projections in recent years, and projections including Marshland may underestimate future demand levels.

9 Potential local demand as a percentage of capacity under each scenario

This section explores the likely percentage of capacity that may be required to meet local demand, and therefore the percentage of capacity that is likely to be available to out-of-zone applicants.

Table 6: AGHS / SBHS Demand as a percentage of capacity under each scenario;

ID	Area Description	Female				Male			
		2017	2018	2020	2025	2017	2018	2020	2025
A	S1 MOE	55%	55%	57%	58%	45%	47%	48%	50%
B	S1 MOE + Brighton	61%	62%	63%	66%	53%	56%	56%	59%
C	S1 MOE + Brighton + Marshland	67%	70%	72%	76%	58%	61%	63%	66%
D	S1 MOE + Brighton + Marshland + Current Zones	97%	102%	106%	114%	86%	89%	93%	100%
E	S1 MOE + Brighton + Current Zones	91%	94%	98%	105%	81%	83%	86%	92%
F	S1 MOE + Marshland + Current Zones	90%	95%	100%	107%	79%	80%	84%	90%
G	S1 MOE + Current Zones	85%	88%	91%	97%	74%	75%	77%	83%

A: Would mean approximately 46%(SBHS)-56%(AGHS) of the build capacity could be taken by in-zone students by 2020 if the schools attain a high market share (as they are expected to do). Old Boys and Old Girls students are very likely to be enrolled including communities that currently access provision from outside of zone.

B: Would mean approximately 54%(SBHS)-62%(AGHS) of the build capacity could be taken by in-zone students by 2020. Old Boys and Old Girls students are likely to be enrolled including communities that currently access provision from outside of zone.

C: Would mean approximately 62%(SBHS)-71%(AGHS) of the build capacity would be taken by in-zone students by 2020. Old Boys and Old Girls students would experience restricted access, including communities that currently access provision from outside of zone. Excludes current zone community.

D, E and F: Would mean approximately 84-92%(SBHS)-94-103%(AGHS) of the build capacity could be taken by in-zone students at 2020. Highly likely that no balloting would occur. Therefore no out of zone Old Boys and Old Girls would be enrolled, nor communities that currently access provision from outside of zone. Schools would therefore have established an enrolment scheme that was at risk of overcrowding.

Note D has local demand for Avonside Girls' High School exceeding capacity in 2020.

G: Would mean approximately 76%(SBHS)-88%(AGHS) of the build capacity could be taken by in-zone students by 2020. Likely that limited balloting would occur for AGHS at 88%. Out of zone Old Boys and Old Girls students would experience restricted access, including communities that currently access provision from outside of zone. Opportunity to consider a transition period for current residents which is likely to be required for at least 10 years and readjust enrolments over time.

Note: Under all scenarios, "grandparenting" for siblings of current students would be included. Note that "grandparenting" does not apply between schools (eg. an older student at SBHS does not mean that a younger female sibling will have the right to enrol at AGHS). A list of students to be included in the "grandparenting" provisions would be collated by the school by the end of 2018. Students who move house become ineligible for their "grandparented" space.

10 Grandparenting and other Transitional arrangements

This section aims to quantify the number of students to which grandparenting and other potential transitional agreements are likely to apply.

Note that the current AGHS and SBHS zones differ from each other. These zones are shown in Appendix B.

Standard grandparenting provisions allow for younger siblings of current students whose addresses become out-of-zone as a result of the zone change to continue to enrol as in-zone students. In effect, the current address remains an "in-zone" address while the family remains at that address. Any change of address annuls the eligibility to the grandparented space.

These grandparenting provisions allow siblings to attend the same school. As SBHS and AGHS are not a single entity, this provision would not apply to the younger sister of a SBHS student or the younger brother of an AGHS student.

An alternative transitional arrangement is being explored to determine its legality, validity and usefulness in this circumstance. This is being considered due to the extraordinary circumstances surrounding the creation of the new zones following the relocation of the schools out of their current zone area into another part of the city.

For the purposes of this analysis,

- "grandparenting" refers to the enrolment of siblings of current students from the zone withdrawal area, and
- "transitional arrangements" refers to the enrolment of the children of families that moved into the current zone area with the intention to enrol at AGHS / SBHS, but who are yet to reach Year 9.

It has been suggested that the "transitional arrangements" may include consideration of families that moved into the current enrolment schemes in the ten years prior to the announcement of the schools' relocation. Note that this arrangement has not been applied before, and the validity of this is currently being ascertained.

Both "Grandparenting" and "Transitional arrangements" would only apply to male students within the current SBHS zone, and female students within the current AGHS zone, as families that moved into an address that was within the SBHS zone but outside the AGHS zone would have had no valid expectation of being able to enrol female children as in-zone students at AGHS and similarly if they moved into the AGHS zone with male children.

10a Estimated impact of “grandparenting” provisions.

The number of enrolments under “grandparenting” is able to be estimated with some confidence. The following data relates to those boys and girls who share an address with a SBHS or AGHS student respectively.

The following chart shows the number of male Year 1-8 state school students within the current SBHS zone who have an older sibling at SBHS, and the number of female Year 1-8 state school students within the current AGHS zone who have an older sibling at AGHS.

Table 7a: Count of younger siblings of current students in current zones.

FYL	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Total
SBHS siblings	2	4	7	2	4	7	14	5	45
AGHS siblings	4	6	3	11	5	4	10	4	47
Total	6	10	10	13	9	11	24	9	92

The above chart shows that there are 92 students eligible for Grandparenting across the two schools. This excludes any younger siblings who are yet to begin primary school. The number of pre-school siblings is unknown.

Year 8 students at March 2018 will enter Year 9 at the beginning of 2019. The numbers of siblings are greatest in Year 7, indicating large numbers of grand-parented enrolments are likely in 2020. After this point the intakes differ for each school.

Year 9 enrolments will be able to remain at the school for 5 years (years 9-13).

Table 7b: Estimated “grandparented” students at each school;

	2019	2020	2021	2022	2023	2024	2025
SBHS	5	19	26	30	32	34	24
AGHS	4	14	18	23	34	33	29
Total	9	33	44	53	66	67	53

SBHS is likely to have 5 “grandparented” students in 2019, 19 in 2020, 32 in 2023, and 24 in 2025, gradually declining after this point.

AGHS is likely to have 4 “grandparented” students in 2019, 14 in 2020, 34 in 2023, and 29 in 2025, gradually declining after this point.

10b Estimated impact of “transitional arrangement” provisions.

The number of enrolments under “transitional arrangements” is more difficult to quantify.

The following is the count of Year 1-8 male state school students in the current SBHS zone and Year 1-8 female state school students in the current AGHS zone. This would theoretically include the siblings of current students who are detailed in the “Grandparenting” section above.

Table 8a: Count of Year 1-8 male / female students in the current SBHS / AGHS zones.

FYL	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Total
Boys in SBHS ES	54	97	69	64	69	61	81	45	540

Girls in AGHS ES	60	83	92	98	53	85	78	63	612
Total	114	180	161	162	122	146	159	108	1152

Of the Year 9 state students in the respective zone areas at March 2018 (including designated character, special schools and kura), 64% of boys in the SBHS and 58% of girls in the AGHS zone attended SBHS and AGHS respectively. This includes all state school types as a proportion of local Year 1-8 students will choose these types of provision at Year 9.

The Market Share is assumed to remain constant, as these families would have the same right to enrol as they do currently. In actuality, Market Share could increase following the move due to the new, modern facilities, or reduce due to an increase in travel distance.

Transitional arrangements are likely to see the following intakes of Transitional Enrolments over the coming years, based on the Year 9 market share at March 2018 and the cohorts feeding into the school each year:

Table 8b: Estimated Year 9 "transitional" enrolments each year.

	2019	2020	2021	2022	2023	2024	2025
SBHS	31	52	40	45	43	45	64
AGHS	42	46	52	34	59	58	50

The total number of students enrolled under transitional arrangements would increase each year in the short term, with only Year 9 "transitional" enrolments likely in 2019, and, in 2020, Year 9 enrolments plus the Year 10 students retained from 2019. This could result in over 200 "transitional" enrolments across year levels by 2023, increasing further in 2024 and 2025 due to large cohorts currently (in 2018) enrolled in Years 2-3.

Table 8c: Total "Transitional" enrolments, factoring in up to 5 Year levels.

	2019	2020	2021	2022	2023	2024	2025
SBHS	31	83	124	169	212	226	238
AGHS	42	88	140	174	233	249	253

Students who enrol as Year 9 enrolments under transitional arrangements in 2019 would leave school in 2024. This does not factor in secondary retention rate into Years 12 and 13, which may see a reduction in the number of Year 12-13 students who enrolled under transitional arrangements.

10c Quantifying the impact of Grandparenting and Transitional Arrangements on demand:

The following table shows the potential impact the Grandparenting and transitional arrangements may have on levels of demand at each school under each scenario.

All Scenarios include the "S1 MOE" zone area. This was proposed to the Boards of AGHS and SBHS as the Ministry's suggested zone boundary in 2017. For the purposes of this analysis, all scenarios are considered as variations from this base point.

Scenarios D, E, F, and G include the combined current zone area. Therefore, "Transitional Arrangements" and "Grandparenting" will only have an impact on Scenarios A, B, and C. "Transitional arrangements" would theoretically also include the "grandparented" students.

Table 9: Local potential demand under each scenario, including “grandparenting” and “transitional arrangements”.

						Including Grand-parenting		Including Transitional Arrangements	
						2020	2025	2020	2025
Female		2017	2018	2020	2025	2020	2025	2020	2025
A	S1 MOE	546	554	567	585	581	614	655	838
B	S1 MOE + Brighton	611	622	634	660	648	689	722	914
C	S1 MOE + Brighton + Marshland	669	698	722	756	736	785	810	1009
D	S1 MOE + Brighton + Marshland + Current Zones	968	1019	1063	1142				
E	S1 MOE + Brighton + Current Zones	910	943	976	1047				
F	S1 MOE + Marshland + Current Zones	903	951	996	1067				
G	S1 MOE + Current Zones	845	875	909	971				
Male		2017	2018	2020	2025	2020	2025	2020	2025
A	S1 MOE	543	564	578	596	597	620	661	834
B	S1 MOE + Brighton	637	666	678	709	697	733	761	947
C	S1 MOE + Brighton + Marshland	697	737	759	798	778	822	843	1036
D	S1 MOE + Brighton + Marshland + Current Zones	1037	1067	1110	1195				
E	S1 MOE + Brighton + Current Zones	977	996	1029	1106				
F	S1 MOE + Marshland + Current Zones	943	965	1010	1082				
G	S1 MOE + Current Zones	883	894	928	993				

10d Capacity remaining for out-of-zone students:

Increased local demand is directly related to a reduction in the opportunity of the schools to offer spaces to out-of-zone applicants.

Table 10: 2025 Out-of-Zone Capacity estimates:

		Female	Male

		No Grand-Parenting / Transitional	Including Grand-parenting	Including Transitional Arrangements	No Grand-Parenting / Transitional	Including Grand-parenting	Including Transitional Arrangements
A	S1 MOE	415	386	162	605	581	366
B	S1 MOE + Brighton	340	311	86	491	467	253
C	S1 MOE + Brighton + Marshland	244	215	-9	402	378	164
D	S1 MOE + Brighton + Marshland + Current Zones	-142			5		
E	S1 MOE + Brighton + Current Zones	-47			94		
F	S1 MOE + Marshland + Current Zones	-67			118		
G	S1 MOE + Current Zones	29			207		

For Avonside Girls', Scenarios D, E, and F result in a local demand at 2025 that is greater than the capacity of the school.

Scenario A (S1 MOE) results in a likely 415 spaces available across year levels at Avonside Girls' for out-of-zone enrolments if no Grandparenting or alternative transitional arrangements are permitted. This would relate to around 83 Year 9 out-of-zone places (one fifth of the total) each year. Shirley Boys' would have space for around 121 Year 9 out-of-zone places each year.

Under Scenario A, if Grandparenting is in place (as would be expected), there is likely to be space for around 386 out-of-zone enrolments at AGHS across all year levels. This would relate to around 77 Year 9 out-of-zone places (one fifth of the total) each year. Shirley Boys' would have space for around 116 Year 9 out-of-zone places each year.

Under Scenario A, if Grandparenting and Transitional Arrangements are in place, there is likely to be space for around 162 out-of-zone enrolments at AGHS across all year levels. This would relate to around 32 Year 9 out-of-zone places (one fifth of the total) each year. Shirley Boys' would have space for around 73 Year 9 out-of-zone places each year.

Under Scenario B (S1 MOE + Brighton), Grandparenting provisions would result in around 62 out-of-zone Year 9 places per year at AGHS, and 93 each year at SBHS. Addition of the Transitional Arrangements would reduce this to 17 out-of-zone Year 9 places per year at AGHS, and 51 each year at SBHS.

Under Scenario C (S1 MOE + Brighton + Marshland), Grandparenting provisions would result in around 43 out-of-zone Year 9 places per year at AGHS, and 76 each year at SBHS. Addition of the Transitional Arrangements would reduce this to 0 out-of-zone Year 9 places per year at AGHS, and 33 each year at SBHS. The inclusion of Transitional Arrangements at AGHS under Scenario C puts the school at risk of overcrowding.

11 Impact on neighbouring Schools:

To quantify the likely impact on neighbouring schools of each potential zone, the following factors must be taken into account:

- Local demand within each schools' exclusive catchment area

- Likely draw of students from each area into AGHS / SBHS.

Local demand is easy to quantify, but it is more complex to determine the draw from each area into the single sex schools. The calculation of the draw must take into account for each scenario;

- the local demand for AGHS / SBHS
- the resulting potential for out-of-zone enrolments
- the number of out-of-zone enrolments that are likely to be drawn from each co-ed schools' catchment.

This analysis has been limited to the catchments, demand and rolls of AGHS / SBHS, Mairehau High School, Haeata Community Campus, and Linwood College – the Eastern State Secondary Schools.

While Haeata Community Campus is a Year 1-15 composite school, and Linwood College is a Year 7-15 secondary school, this analysis is limited to the secondary year levels of Years 9-15. This will allow the analysis to show the likely impact of zone scenarios on the Year 9-15 rolls of each secondary school.

Currently, students across the East of Christchurch (and some from the West) are drawn to the single sex AGHS / SBHS. This has occurred as the single sex schools have had a local (in-zone) demand for secondary education that was much less than the capacity of each school. This allowed the enrolment of large numbers of out-of-zone students from across the east of Christchurch City.

All scenarios show an increase in local demand for each school, which will result in a reduction in the number of places that will be able to be offered for out-of-zone enrolments each year.

The following table shows the current (March 2018) local demand within each of the areas of the eastern secondary school network.

Table 11: Count of Year 9-13 state (non-Designated Character, Kura, Special School) students in each area of the East of Christchurch.

Area	Year 9-13 Female	Year 9-13 Male	Year 9-13 Total
Brighton	67	101	168
Current ES	321	330	651
Marshland	75	70	145
S1 MoE	553	563	1116
Haeata	264	278	542
Mairehau	212	241	453
Linwood	485	546	1031

The inclusion of the Brighton, Current ES, Marshland, and S1 MOE areas in the AGHS/SBHS zone would result in Mairehau High School having a catchment with only 453 local students.

12 Total Demand for Secondary education in Christchurch:

Capacity to be provided across the four state single sex schools in Christchurch was planned on the basis of retaining access to this mode of education provision across the city. Planning has been on the basis of maintaining the single sex market share. This resulted in the provision of 4600 spaces across the four state secondary schools.

Since the proportionality concept was discussed, changes have occurred in the network, principally the conversion of Hagley Community College from a State Secondary School to a State Designated Character Secondary School. The school has in fact been operating as a de facto Designated character school for many years, being a key provider of second chance secondary learning in Christchurch.

Excluding Hagley Community College, other Designated Character, Special Schools and Kura, the four single sex schools had a combined roll that was 32% of the total Christchurch City Secondary school roll in 2010.

At March 2018 there were 12990 Year 9-15 State (non-Designated Character, Kura, or Special School) students residing in Christchurch City. 32% of this equates to 4157 students.

The trend from the latest secondary age population projections from Statistics NZ shows that, under the Medium projection series, 32% of the total state secondary roll will exceed 4600 in 2024, before falling below 4600 again in 2027.

Under the Low variant, 32% of the total state secondary roll will never exceed 4600, and under the High variant, 32% of the total state secondary roll will permanently exceed 4600 from 2024 onwards, reaching 4800 in 2030.

13 Distribution of Current out-of-zone enrolments

The in-zone roll of each school declined slightly between 2016 and 2018.

The out-of-zone roll at each school has increased over the 2016-2018 period. The large out-of-zone rolls that now exist as a result of this behaviour are likely to place roll pressure on the schools once the enrolment zone is amended and additional students are eligible to enrol.

The below table shows the changes in the in-zone and out-of-zone rolls by funding year level from 2016 to 2018, as reported in the schools March roll returns each year.

Table 12: School rolls by Funding Year Level and Zoning Status, 2016, 2017, 2018:

		9	10	11	12	13	14	Grand Total
INZN	Avonside Girls' High School							
	M16	59	79	42	41	36		257
	M17	28	62	76	33	30		229
	M18	51	28	63	66	30		238
	Shirley Boys' High School							
	M16	38	53	50	41	34		216
	M17	37	40	51	49	33		210
	M18	45	42	36	49	37		209
OUTZ	Avonside Girls' High School							
	M16	139	132	133	120	78		602
	M17	182	133	118	121	96	1	651

M18	176	171	134	108	112		701
Shirley Boys' High School							
M16	252	220	203	202	134		1011
M17	266	250	218	185	142		1061
M18	235	258	234	195	142		1064

The out-of-zone students are drawn from across a wide area (see Appendix C).

“Out-of-zone” (OUTZ) coded students whose addresses become in-zone as a result of the zone changes will have their zoning status changed to “in-zone” (INZN). Therefore the in-zone roll will increase immediately upon the amendment of the enrolment scheme.

The following table shows the number of current Year 9-13 AGHS and SBHS out-of-zone students within each area at March 2018 - including the local areas remaining for each of Haeata Community College, Mairehau High School, and Linwood College;

Table 13: count of Year **9-13** AGHS and SBHS out-of-zone students by area

Area:	Count of students		Proportion of students	
	AGHS out-of-zone	SBHS out-of-zone	AGHS out-of-zone	SBHS out-of-zone
Brighton	38	72	5%	7%
Current ES	31	56	4%	5%
Marshland	20	44	3%	4%
S1 MoE	261	372	38%	36%
Haeata	88	99	13%	9%
Mairehau	50	105	7%	10%
Linwood	139	145	20%	14%
Remainder Chch	35	57	5%	7%
Selwyn / Waimak	33	97	4%	5%

Note that the “Current ES” area includes areas that are only within one of the current zones, as current zones do not match.

In total, there were 695 mappable out-of-zone AGHS student records, and 1047 for SBHS.

Enrolment patterns of out-of-zone students are generally similar between the two schools, with 38% of AGHS out-of-zone students and 36% of SBHS students drawn from the S1 MoE area.

The following table shows the count of AGHS / SBHS students by zoning status and Year Level at March 2018 (as reported by the school in the March Roll Returns).

Table 14: March 2018 Zoning Status by Funding Year Level and Zoning Status

	9	10	11	12	13	Grand Total
Avonside Girls' High School	227	199	197	174	142	939
INZN	51	28	63	66	30	238
OUTZ	176	171	134	108	112	701
<i>INZN %</i>	<i>22%</i>	<i>14%</i>	<i>32%</i>	<i>38%</i>	<i>21%</i>	<i>25%</i>
Shirley Boys' High School	280	300	270	244	179	1273
INZN	45	42	36	49	37	209
OUTZ	235	258	234	195	142	1064
<i>INZN %</i>	<i>16%</i>	<i>14%</i>	<i>13%</i>	<i>20%</i>	<i>21%</i>	<i>16%</i>

INZN = In-Zone enrolments, OUTZ = Out-of-zone enrolments

The current AGHS zone is larger than the current SBHS zone. This contributes to the higher current in-zone proportion of the roll at AGHS.

All current Year 9-12 enrolments will need to be accommodated at the new site, regardless of zoning status or location of residence. The shape of the final enrolment scheme will determine the number of current "out-of-zone" enrolments who become in-zone as a result of the zone amendment.

All "in-zone" enrolments retain their "in-zone" status regardless of changes to their address or changes to the zone that result in their addresses becoming out-of-zone.

The following table shows the number of current Year 9-12 AGHS and SBHS out-of-zone students within each area;

Table 15: count of Year **9-12** AGHS and SBHS out-of-zone students by area (students eligible to continue in 2019)

Area:	Count of students	
	AGHS out-of-zone	SBHS out-of-zone
Brighton	38	63
Current ES	23	47
Marshland	15	36
S1 MoE	224	330
Haeata	76	92
Mairehau	37	88
Linwood	117	127
Remainder Chch	28	44

Selwyn / Waimak	25	80
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Note that the "Current ES" area includes some areas that are only within one of the current zones, as current zones do not match.

The following table shows the number of current out-of-zone students that are likely to become In-zone under each scenario;

Table 16: count of Year **9-12** AGHS and SBHS out-of-zone students who will become in-zone as a result of the zone changes under each scenario

		AGHS	SBHS
A	S1 MOE	224	330
B	S1 MOE + Brighton	262	393
C	S1 MOE + Brighton + Marshland	277	429
D	S1 MOE + Brighton + Marshland + Current Zones	300	476
E	S1 MOE + Brighton + Current Zones	285	440
F	S1 MOE + Marshland + Current Zones	262	413
G	S1 MOE + Current Zones	247	377

Rolling the current Year 9-12 cohorts through for following years results in the following projections. These projections assume that historic retention levels within cohorts from one year to the next continue.

14 2019 Roll Projections based on current rolls

All current Year 9-12 enrolments will need to be accommodated at the new site, regardless of zoning status or location of residence. The shape of the final enrolment scheme will determine the number of current "out-of-zone" enrolments who become in-zone as a result of the zone amendment.

Rolling the current Year 9-12 cohorts through for following years results in the following projections of 2019 Year 10-13 rolls.

Table 17a: Avonside Girls' High School current enrolments and 2019 retention

weighted average Retention Rate		97%	96%	89%	86%	
Date/Funding Year Level	9	10	11	12	13	Grand Total
2018	227	199	197	174	142	939
2019	unknown	220	191	176	149	736

Table 17b: Shirley Boys' High School current enrolments and 2019 retention

weighted average Retention Rate		99%	95%	89%	76%	
Date/Funding Year Level	9	10	11	12	13	Grand Total

2018	280	300	270	244	179	1273
2019	unknown	276	286	240	185	987

These projections assume that historic retention levels within cohorts from one year to the next continue as per a four year weighted average rate, and indicate the continuing students that the schools must cater for, excluding the Year 9 enrolments and any new enrolments from areas that become in-zone as a result of the zone amendment.

Without accounting for any new enrolments at Year 9 or across higher year levels, it is likely that AGHS will have 736 continuing students in 2019, and SBHS will have 987.

Accordingly, AGHS will have capacity to accommodate up to 264 new enrolments, and SBHS will have capacity to accommodate up to 213 new enrolments.

New in-zone enrolments will occur in two distinctive ways; Year 9 enrolments and enrolments across higher year levels where the students now have a right to attend AGHS / SBHS on the basis of the zone extension. This being students who were not, but are now in zone.

The number of Year 9 in-zone enrolments can be estimated in the following manner.

The number of Year 8 students within each study is known. A portion of Year 8 students will go on to attend Private, State Integrated, Designated Character, Kura, or Special schools at Year 9.

The March 2018 State (non-Designated Character, Kura, Special School) Year student count across the eastern study areas was 82% of the total state Year 8 student count at March 2017. This varied between Males and Females, with 80% retention for females, and 92% retention for males.

Therefore the following table projects total local Year 9 State (non-Designated Character, Kura, Special School) demand as 80% and 92% of the 2018 Year 8 count for females and males respectively.

For the purposes of analysis, it is assumed that the market share for the single sex schools will be constant across all areas of the new zone. This allows the following estimates of Year 9 in-zone demand under each scenario:

Table 18a: Year 9 in-zone demand under each scenario:

		2018 All-State counts		2019 State (non-DC, Kura, Spec) demand		80% MS		90% MS	
		Female Y8	Male Y8	Female Y9	Male Y9	Female Y9 2019	Male Y9 2019	Female Y9 2019	Male Y9 2019
A	S1 MOE	168	179	135	165	108	132	122	149
B	S1 MOE + Brighton	195	199	157	184	126	147	141	165
C	S1 MOE + Brighton + Marshland	257	270	207	249	165	199	186	224
D	S1 MOE + Brighton + Marshland + Current Zones	341	346	274	319	219	255	247	287
E	S1 MOE + Brighton + Current Zones	279	275	224	254	180	203	202	228
F	S1 MOE + Marshland + Current Zones	314	326	253	301	202	241	227	271

G	S1 MOE + Current Zones	252	255	203	235	162	188	182	212
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In-zone Yr 9 intake brings roll to within 50 spaces of available Capacity
In-zone Yr 9 intake exceeds Capacity available

The following table shows the projected rolls under each scenario. Note that this does not include those students who may wish to transfer at higher Year levels.

Table 18b: Projected 2019 Rolls under each scenario, excluding impact of Year 10-13 transfers.

		80% Y9 MS		90% Y9 MS	
		AGHS	SBHS	AGHS	SBHS
A	S1 MOE	844	1119	858	1136
B	S1 MOE + Brighton	862	1134	877	1152
C	S1 MOE + Brighton + Marshland	901	1186	922	1211
D	S1 MOE + Brighton + Marshland + Current Zones	955	1242	983	1274
E	S1 MOE + Brighton + Current Zones	916	1190	938	1215
F	S1 MOE + Marshland + Current Zones	938	1228	963	1258
G	S1 MOE + Current Zones	898	1175	918	1199

In-zone Yr 9 intake brings roll to within 50 spaces of available Capacity
In-zone Yr 9 intake exceeds Capacity available

The number of Year 10-13 transfers is unknown, but the potential number of students who would be eligible is able to be estimated.

Current demand in each of the study areas is known, as is the number of SBHS / AGHS students (in-zone and out-of-zone) currently residing in each area. The remainder of demand is the potential number of students that could transfer to the schools following zone amendment.

Table 19a: Count of Year 9-12 students at March 2018 (Years 10-13 in 2019)

	Area:	Count of Y9-12 AGHS / SBHS Students		Total Demand (State non-DC, Kura, Special)		Potential transfers	
		AGHS	SBHS	Female	Male	Female / AGHS	Male / SBHS

A	S1 MOE	224	330	454	488	230	158
B	S1 MOE + Brighton	262	393	517	576	255	183
C	S1 MOE + Brighton + Marshland	277	429	573	632	296	203
D	S1 MOE + Brighton + Marshland + Current Zones	300	476	847	914	547	438
E	S1 MOE + Brighton + Current Zones	285	440	791	858	506	418
F	S1 MOE + Marshland + Current Zones	262	413	784	826	522	413
G	S1 MOE + Current Zones	247	377	728	770	481	393

While it is unknown what proportion of students eligible to transfer will choose to do so, there is a strong likelihood that a significant number of students will choose to do so.

The following projections assume that 20% of eligible students choose to transfer. There is a very real risk that the transfer rate will be much higher.

Table 19b: Projected 2019 Rolls under each scenario, including impact of Year 10-13 transfers.

		80% Y9 MS		90% Y9 MS	
		AGHS	SBHS	AGHS	SBHS
A	S1 MOE	890	1151	904	1167
B	S1 MOE + Brighton	913	1170	928	1189
C	S1 MOE + Brighton + Marshland	961	1227	981	1252
D	S1 MOE + Brighton + Marshland + Current Zones	1065	1330	1092	1362
E	S1 MOE + Brighton + Current Zones	1017	1273	1039	1299
F	S1 MOE + Marshland + Current Zones	1042	1310	1068	1340
G	S1 MOE + Current Zones	994	1254	1015	1277

In-zone Yr 9 intake brings roll to within 50 spaces of available Capacity
In-zone Yr 9 intake exceeds Capacity available

The above projection does not take into account the impact of any Grandparenting or other transitional arrangements.

The following table includes the impact of Grandparenting or other transitional arrangements.

Note that Grandparenting and Transitional arrangements do not apply to Scenarios D, E, F, and G, as each of these scenarios already include the current zone area. Therefore, for Scenarios D, E, F, and G, the roll numbers match those in the table above.

Table 19c: Projected 2019 Rolls under each scenario, including impact of Year 10-13 transfers, and Grandparenting and Transitional arrangements.

		Grandparenting				Transitional Arrangements			
		80% Y9 MS		90% Y9 MS		80% Y9 MS		90% Y9 MS	
		AGHS	SBHS	AGHS	SBHS	AGHS	SBHS	AGHS	SBHS
A	S1 MOE	894	1156	908	1172	932	1182	946	1199
B	S1 MOE + Brighton	917	1175	932	1194	955	1202	971	1220
C	S1 MOE + Brighton + Marshland	965	1232	985	1257	1003	1258	1024	1283
D	S1 MOE + Brighton + Marshland + Current Zones	1065	1330	1092	1362	1065	1330	1092	1362
E	S1 MOE + Brighton + Current Zones	1017	1273	1039	1299	1017	1273	1039	1299
F	S1 MOE + Marshland + Current Zones	1042	1310	1068	1340	1042	1310	1068	1340
G	S1 MOE + Current Zones	994	1254	1015	1277	994	1254	1015	1277

roll estimate within 50 spaces of available Capacity
roll estimate exceeds Capacity available

15 Feeder Schools – former schools of current Year 9 students

The following table shows the former school of attendance for Year 9 enrolments at AGHS and SBHS at March 2018. Note that this data only shows the immediate previous school of attendance.

The "Count" column shows the number of AGHS / SBHS Year 9 students who formerly attended the school. The "Proportion" column shows the number of students who attend AGHS / SBHS as a percentage of all Year 9 students in Christchurch who formerly attended that school. This gives an indicator of the strength of the transitions link between AGHS / SBHS and their directly contributing schools.

It should be noted that many students attending local full primary (Year 1-8) schools choose to enrol at Intermediate schools prior to entering Secondary year levels.

Table 20a: Avonside Girls' High School Year 9 Students, March 2018			Table 20b: Shirley Boys' High School Year 9 Students, March 2018		
Former Schools	Count	Proportion	Former Schools	Count	Proportion

Chisnallwood Intermediate	74	33%	Chisnallwood Intermediate	105	38%
Shirley Intermediate	22	10%	Shirley Intermediate	33	12%
South New Brighton School	13	6%	Marshland School	14	5%
Queenspark School	11	5%	South New Brighton School	14	5%
Heaton Normal Intermediate	10	4%	Queenspark School	13	5%
Sumner School	9	4%	Rāwhiti School	13	5%
Mairehau Primary School	7	3%	Casebrook Intermediate	8	3%
Rāwhiti School	7	3%	Sumner School	7	3%
Marshland School	6	3%	Heaton Normal Intermediate	6	2%
Te Waka Unua School	6	3%	Kaiapoi North School	6	2%
Christchurch East School	5	2%	Te Waka Unua School	6	2%
Lyttelton Primary School	5	2%	Heathcote Valley School	5	2%
Parkview School	5	2%	Mt Pleasant School	5	2%
Other (<5)	47		Parkview School	5	2%
Total	227		Other (<5)	40	
			Total	280	

16 Zone Size (Area) and Student Count (March 2018)

The current Zones have the following areas and counts of Year 9-15 state students at March 2018 (excluding all Private, State Integrated, Kura, Designated Character, and Special school students).

Each of the Scenarios are also included for geographic size and student count.

Table 21: Zone Size (Area) and Student Count (March 2018)

		Area (sq km)	2018	
			Female Student Count	Male Student Count
	Current AGHS Zone	10.53	277	290
	Current SBHS Zone	9.59	225	242
A	S1 MOE	14.82	554	564
B	S1 MOE + Brighton	18.45	622	666
C	S1 MOE + Brighton + Marshland	24.17*	698	737
D	S1 MOE + Brighton + Marshland + Current Zones	34.88*	1019	1067
E	S1 MOE + Brighton + Current Zones	29.16	943	996
F	S1 MOE + Marshland + Current Zones	31.25*	951	965
G	S1 MOE + Current Zones	25.53	875	894

* Excluding Bottle Lake Forest from the Marshland area for a fairer comparison.

17 Siblings – current

The following table shows the number of siblings of current students within each sub-area. Two additional areas are included; the remainder of Christchurch City and Selwyn + Waimak Districts.

Table 22a: count of younger (Year 1-8) siblings of current AGHS and SBHS students by area

	Female siblings of AGHS	Male siblings of SBHS
Brighton	14	11
Current ES	51	53
Marshland	6	5
S1 MoE	63	134
Haeata	24	39
Mairehau	19	39
Linwood	37	37
Remainder Chch	14	22
Selwyn / Waimak	6	27
Total	234	367

The following chart shows the number of siblings remaining outside the zone under each scenario.

Counts are of Female siblings of AGHS students and Male Siblings of SBHS students.

Table 22b: count of younger (Year 1-8) siblings of current AGHS and SBHS students **remaining outside** the zone under each scenario

		Female siblings of AGHS	Male Siblings of SBHS
A	S1 MOE	171	233
B	S1 MOE + Brighton	157	222
C	S1 MOE + Brighton + Marshland	151	217
D	S1 MOE + Brighton + Marshland + Current Zones	100	164
E	S1 MOE + Brighton + Current Zones	106	169
F	S1 MOE + Marshland + Current Zones	114	175
G	S1 MOE + Current Zones	120	180

The above table shows that under Scenario A, the smallest of the zone scenarios, 171 female siblings of current AGHS students would be outside the zone, and eligible for the second priority of out-of-zone applicants, should places be offered. Under Scenario A, it is likely that a significant number of places would be able to be offered.

Under Scenario D, the largest of the zone scenarios, only 100 siblings would be outside the zone, but the school would not be able to accept any out-of-zone students.

18 Limitations and assumptions

The following variables have been considered:

Proportion of the population attending State schools

This report largely focusses on measures of local demand that exclude students currently attending Kura, Designated Character, and Special State Schools, as well as excluding students attending State Integrated and Private Schools.

This report assumes that students will not change their preference of schooling type in favour of the relocated AGHS / SBHS schools.

There is a moderate risk that students living in the zone expansion areas and attending these types of provision may transfer to AGHS / SBHS once their addresses are included in the zone. Should this occur, projections will underestimate local demand and school rolls.

Confidence in Population projections:

This report utilises the latest projections available from Stats NZ for the secondary age population.

There is a moderate risk that the growth forecast, particularly for the Marshland Area, will be greater than projected. Should this occur, projections will underestimate local demand and school rolls.

Market Share

The proportion of local state school students that attend the local provider is referred to as the "Market Share". Market share is currently suppressed in the current school zones due to the damage to the current school buildings, sites, and the local area due to the Canterbury Earthquakes.

The schools have stated a belief they will not attain a high market share once relocated, but recent experience in Christchurch suggests that relocated schools have a high probability of experiencing very high market shares.

In the short term roll analyses, two potential market shares are explored, 80% and 90%. The risk of overcrowding in the short term is similar in the short term under either market share.

A Market Share close to 90% can result in an in-zone roll close to the total level of local demand, as it is common for around 10% of the in-zone roll to reside outside the zone (students who have moved out of the zone once enrolled)

Market share is unlikely to reach 90% in the first year of operation, so a market share of 80% is used in estimates of the rolls in the first year of operation.

In the medium term, it is likely that the market share will be higher, so estimates of risk in the medium term focus on total in-zone demand.

Grandparenting and Transitional arrangements

Estimates of "grandparented" students assume all eligible students will attend the school.

Transitional arrangements assume that the same proportion of eligible students will attend the schools as do currently, under the existing zones.

There is a risk that the schools operating on a new site will in fact draw a greater number of students from the current zone area. Should this occur, projections will underestimate local demand and school rolls.

Year 10-13 transfers

The analysis assumes that of the Year 10-13 students of other state schools whose addresses become in-zone, 20% will transfer to the relocated schools.

There is a high risk that more than 20% will transfer. Should this occur, projections will underestimate school rolls.

19 Risks:

As the Build Capacity is greater at SBHS than at AGHS, the risks of overcrowding and an inability to provide out-of-zone places are greatest at AGHS over the medium term.

However, the enrolment of large numbers of out-of-zone students in recent years at SBHS has put SBHS at a high risk of overcrowding in the first years of operation.

19a In the Short term (2019):

Recent enrolment behaviours have resulted in the schools carrying large numbers of out-of-zone enrolments.

All of the potential zone scenarios result in an increase in the size of (and local demand from within) the enrolment scheme home zone. Any increase in the size of the zone will result in the potential for students in the new area to transfer to SBHS / AGHS from the secondary school they are currently attending.

The following table discusses the risk of overcrowding under each of the potential zone scenarios.

Table 23a: Risk of overcrowding under Scenarios and Variants in the short term (2019)

		Avonside Girls' High School		Shirley Boys' High School	
Risks:		Overcrowding	Overcrowding (Transitional Arrangements included)	Overcrowding	Overcrowding (Transitional Arrangements included)
Scenarios:					
A	S1 MOE	Moderate	High	High	High
B	S1 MOE + Brighton	High	High	High	Very High
C	S1 MOE + Brighton + Marshland	High	Very High	Very High	Very High
D	S1 MOE + Brighton + Marshland + Current Zones	Very High	n/a	Very High	n/a
E	S1 MOE + Brighton + Current Zones	Very High	n/a	Very High	n/a

F	S1 MOE + Marshland + Current Zones	Very High	n/a	Very High	n/a
G	S1 MOE + Current Zones	Very High	n/a	Very High	n/a

Note that the rate of growth in Marshland has exceeded projections in recent years, and projections including Marshland may underestimate future demand levels.

The data relating to a projected Year 9 Market Share of 90% is used for the above Risk analysis.

Low: Capacity is >250 places more than 2019 roll estimate

Moderate: Capacity is 100-250 places more than 2019 roll estimate

High: Capacity is <100 places more than 2019 roll estimate

Very High: Capacity is less than 2019 roll estimate

19b In the Medium term (at 2025):

There is a High risk that Scenarios D, E, F, or G would result in overcrowding at Avonside Girls’ High School.

There is a High risk that inclusion of Transitional Arrangements with Scenarios B or C would result in overcrowding at Avonside Girls’ High School.

Given recent rapid rates of growth and the potential for the projections to underestimate future growth in this area, any Scenarios including Marshland (Scenarios C, D, and F) carry a High risk of overcrowding at Avonside Girls’ High School.

There is a moderate risk that the proportion of local students attending a state school may increase at the relative expense of State Integrated and Private Schools.

Table 23b: Risk of overcrowding under Scenarios and Variants in the medium term (2025)

		Avonside Girls’ High School		Shirley Boys’ High School	
Risks:		Overcrowding	Overcrowding (Transitional Arrangements included)	Overcrowding	Overcrowding (Transitional Arrangements included)
Scenarios:					
A	S1 MOE	Low	Moderate	Low	Low
B	S1 MOE + Brighton	Low	High	Low	Low
C	S1 MOE + Brighton + Marshland	Moderate	Very High	Low	Moderate
D	S1 MOE + Brighton + Marshland + Current Zones	Very High	n/a	High	n/a
E	S1 MOE + Brighton + Current Zones	Very High	n/a	High	n/a
F	S1 MOE + Marshland + Current Zones	Very High	n/a	Moderate	n/a
G	S1 MOE + Current Zones	High	n/a	Moderate	n/a

Note that the rate of growth in Marshland has exceeded projections in recent years, and projections including Marshland may underestimate future demand levels.

Low: Capacity is >250 places more than projected Local demand

Moderate: Capacity is 100-250 places more than projected Local demand

High: Capacity is <100 places more than projected Local demand

Very High: Capacity is less than projected Local demand