

## Attachment F



### Assessment of Arrowtown Special Housing Areas: Queenstown Lakes District Council

15 May 2015



## Background

This analysis has been prepared by the Ministry of Education in response to a request from Queenstown Lakes District Council (QLDC). QLDC are considering four special housing areas (SHAs) in the vicinity of Arrowtown and have requested information about the likely impact of these proposed SHAs on the schooling network.

QLDC have provided GIS tables of the SHAs and the estimated yield of households. This is summarised in Table 1.

**Table 1: SHA household yields**

SHA name	Location	Estimated no. of households
Ayrburn Farm	341-343 Arrowtown Lake Hayes Rd	150
Brackens Ridge	Centennial Ave	70
Malaghans/Manse Rd	Malaghans/Manse Rd	40
McDonnell Rd	McDonnell Rd	20

The Ministry of Education is aware of nine other expressions of interest (as shown on the QLDC website). At this point in time the Ministry has not been requested to provide comment on these areas. Any impact of these SHAs on the schooling network is not considered in this assessment.

The Ministry assessment does not include the impact of future changes to residential zones within Arrowtown which may lead to an increase in density of housing and possible increase in demand for schooling at Arrowtown School.

## Data and Assumptions

This analysis by necessity has relied on a number of assumptions regarding the likely number of school age children resulting from the SHAs. These are summarised in Table 2.

**Table 2: Assumptions and data sources**

Description	Assumption	Data source
Total population yields from SHAs	2.4 people per household (p/h) 3.3 people per household (p/h) It is assumed that the total population yield from SHAs would be within this range	Census 2013 usually resident population and dwelling count for the Lake Hayes South and Wakatipu Census Area Units (CAUs)– Lake Hayes South CAU had 3.3 p/h; the Arrowtown Census Area Unit (CAU) had 2.4 p/h
School age cohorts from SHAs	13% of the total population will be aged 5-12 years	Customised school age cohort projections prepared by Statistics NZ for the Ministry (CAU based 2009 inter-censal projections)  The projected school age cohort in 2015 was 13% of the total projected population in the Arrowtown CAU.
Market share – the proportion of all Year 1-8 students attending state and state integrated schools that live in the Arrowtown enrolment scheme and attend Arrowtown School	93% market share	July 2014 roll return data (geocoded)
Timing of SHA development	SHAs will be fully developed by 2019 (assumes approval in 2015; development commences in 2016 and takes three years)	QLDC
Arrowtown School roll projections	Based on the 2014 October roll; uses cumulative projected change for the Arrowtown and Lake Hayes CAUs 5-12 age cohort plus 5% of the projected change for the Wakatipu Basin CAU under the high variant <sup>1</sup>	Customised school age cohort projections prepared by Statistics NZ for the Ministry (CAU based 2009 inter-censal projections)

<sup>1</sup> A comparison of July 2014 student address data within the Arrowtown and Lake Hayes CAUs (2009) against the 2014 projection suggests the school age population is currently tracking at the high variant projection.

## Current Schooling Network

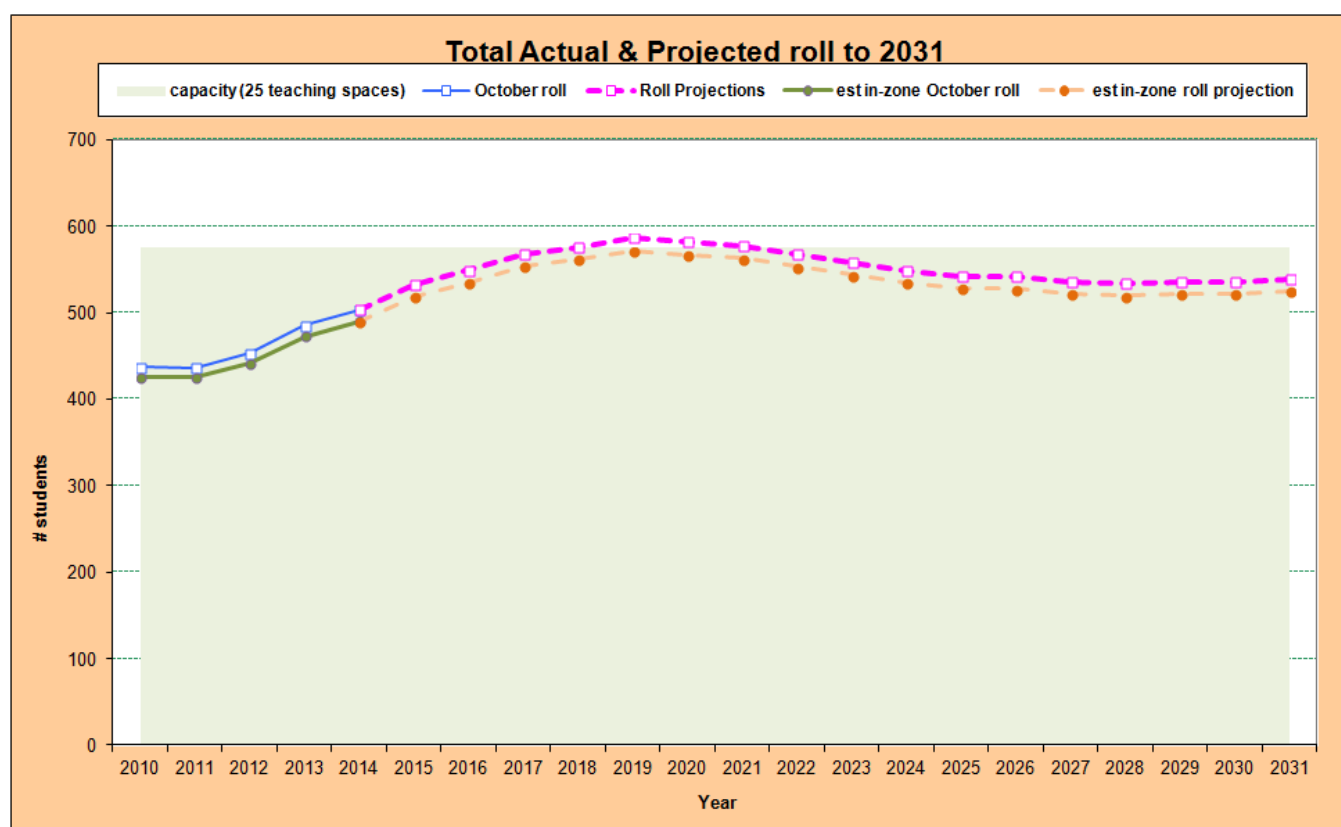
Arrowtown School is located within the Arrowtown CAU, at 9 Chalmers Place, on a 2.69 hectare site. Figure 1 shows the actual October rolls from 2010 to 2014, and the projected total and in-zone<sup>2</sup> roll to 2031.

Arrowtown School implemented an enrolment scheme in 2002 to manage roll growth at the school. The enrolment scheme has the effect of prioritising enrolments from within the enrolment scheme home zone.

The roll of Arrowtown School has grown steadily since 2010, reaching 503 students at October 2014. The school has a proposed master plan which will provide for 25 teaching spaces which equates to 575 student spaces (capacity). The March 2015 roll was 486, 19 students more than at March 2014. This suggests that the October 2015 roll will be 520-530 students, consistent with the projected roll shown in Figure 1.

The Principal of Arrowtown School has advised that the known pre-enrolments for 2015 will bring the October roll to around 560 students. This would suggest that the current projections maybe significantly under projecting the school roll.

**Figure 1: Arrowtown School: Projected rolls**



The Arrowtown School roll is projected to continue to grow through to 2019/2020, after which it is projected to begin a gradual decline. Based on the current projections, the planned capacity of 575

<sup>2</sup> There were 12 out-of-zone enrolments reported in the July 2014 roll return. This was approximately 2.5% of the total roll (485 students). The projections in Figure 1 assume this will remain constant.

students will be required to meet the current demand. The demand resulting from the SHAs will be additional to the above projections.

The closest neighbour to Arrowtown School is the newly established Shotover Primary School, which opened in January 2015.

### Estimated Number of Year 1-8 students from SHAs

Analysis of the GIS data shows that all four SHAs are located within the enrolment scheme home zone of Arrowtown School (Map 1). Applying the assumptions stated above, the following yield of Year 1-8 students is estimated (Table 3).

**Table 3: Estimated Year 1-8 students from SHAs**

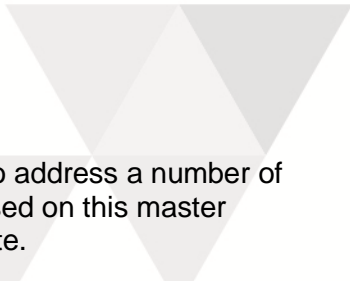
SHA name	Estimated no. of households	p/h	est. total popn	13% age 5-12 (total)	Yr 1-8 students attending Arrowtown School	Est. Teaching space required
Ayrburn Farm	150	2.4	366	48	45	2 to 3 TS
		3.3	496	65	61	
Brackens Ridge	70	2.4	171	22	21	1 to 2 TS
		3.3	232	31	28	
Malaghans/Manse Rd	40	2.4	98	13	12	1 TS
		3.3	132	17	16	
McDonnell Rd	20	2.4	49	6	6	0 TS
		3.3	66	9	8	

Table 3 shows the estimated number of students that would be expected to attend Arrowtown School using two different assumptions about the people per household. Across all four SHAs the total additional demand is estimated to range between 84 and 113 students.

Assuming a ratio of 23 students per teaching space, additional 84-113 students would require 4-5 teaching spaces at Arrowtown School.

### Impact of SHAs on the Schooling Network

Analysis of the GIS data shows that all four SHAs are located within the enrolment scheme home zone of Arrowtown School (Map 1). The proximity of the SHAs to Arrowtown School means that it is not considered appropriate for the enrolment scheme home zone boundary to be adjusted to exclude any of the SHAs.



Arrowtown School has prepared a master plan outlining a four year programme to address a number of school property issues such as weather tightness and the layout of buildings. Based on this master plan, it is estimated that a further six teaching spaces could be provided on the site.

All four SHAs are expected to generate additional demand for schooling at Arrowtown School. This is estimated to increase the projected roll from 586 to between 670 and 699 students in 2019. This additional demand would require an additional 4-5 teaching spaces. Due to the limited building platforms on the school site this additional school property may need to be delivered as a 6 teaching spaces at an estimated budget of \$2M. Under this scenario existing buildings may need to be re-configured. The additional cost of this is estimated at a further \$2M.

The provision of these additional teaching spaces may encroach on sports fields and play areas.

If the smaller SHAs were approved then the impact on the property cost implications would be less as fewer additional teaching spaces would be required.

## Risks

The current projections are based on 2006 census data, updated in 2009. While the high variant projection has been used, there is a risk that these projections under project the future school age population expected in the Arrowtown enrolment scheme home zone. Consequently, the ability to expand the school could be required to meet the demand from the current Arrowtown community.

Future changes to residential zoning within Arrowtown could place further pressure on Arrowtown School.

## Conclusion

The Ministry considers that the current and projected building platforms at on the Arrowtown School site will be required to accommodate growth from within the existing Arrowtown community.

If all four SHAs were approved the roll of Arrowtown School could approach 700 students and would require an additional 4-5 teaching spaces. This would be provided as a 6 teaching space block with an estimated cost of up to \$4M. Additional capital funding would need to be sought from Government to fund this cost.

Provision of six teaching spaces would use up all available building platforms and the school would be considered to have reach its site limit. This increased demand would place the school at risk of overcrowding in the future should demand exceed capacity as no further expansion could be achieved on site without significant remodelling of existing buildings.

Should the Arrowtown School roll exceed the site capacity then a new school may be required. This would require an additional \$15-20M, assuming a suitable site could be acquired within Arrowtown.

The Ministry suggests that SHAs in other parts of the Wakatipu Basin would have a lesser impact on the schooling network.

Map 1 – Arrowtown School's Enrolment Scheme and the location of the proposed SHAs

