

**Report**

**on the**

**Current and future supply and demand**

**of**

**Teachers  
in the Cook Islands**

**by**

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Demographer**

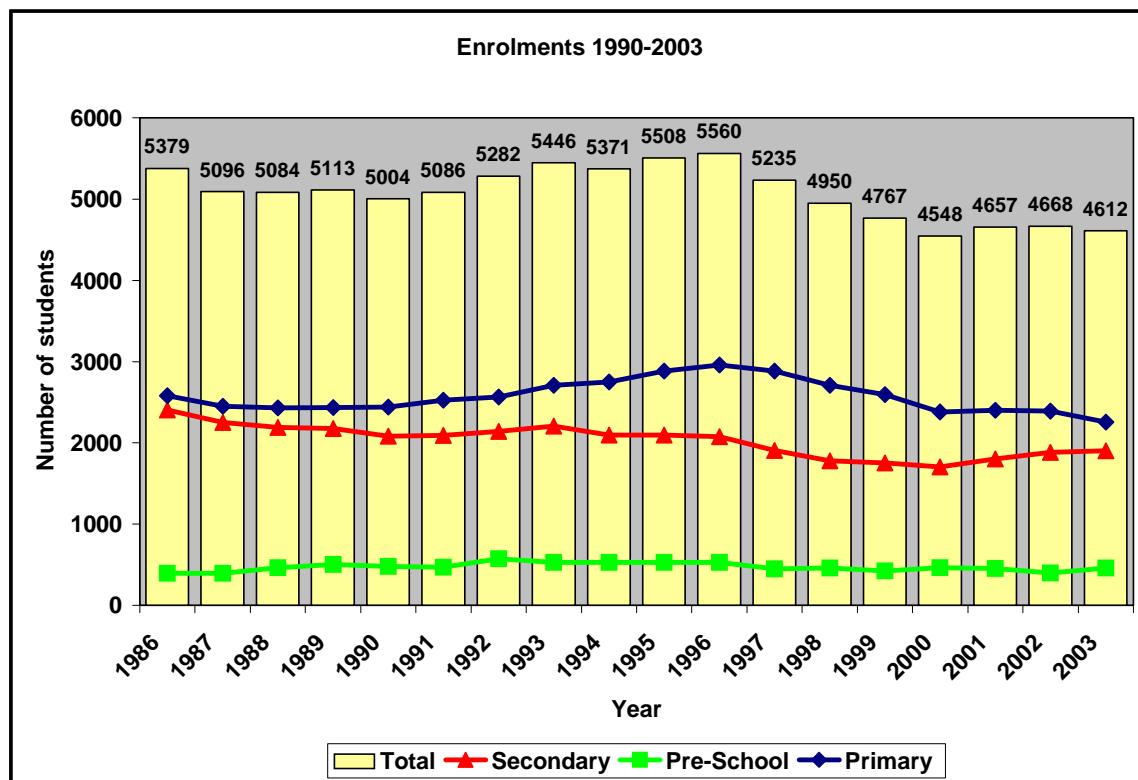
## Introduction

The purpose of this report is to provide a brief description of the current and projected supply and demand of teachers by level of education and by island. The report is based on information provided by the Ministry of Education (Education Statistics Digests 2001-2003), and results obtained from student and teacher projections as calculated in the Excel-file 'Student-Teacher projections'. This report furthermore refers to the Manual that should accompany the Excel spreadsheet, as it provides information on methods and assumptions used for the projections.

### 1. Current situation

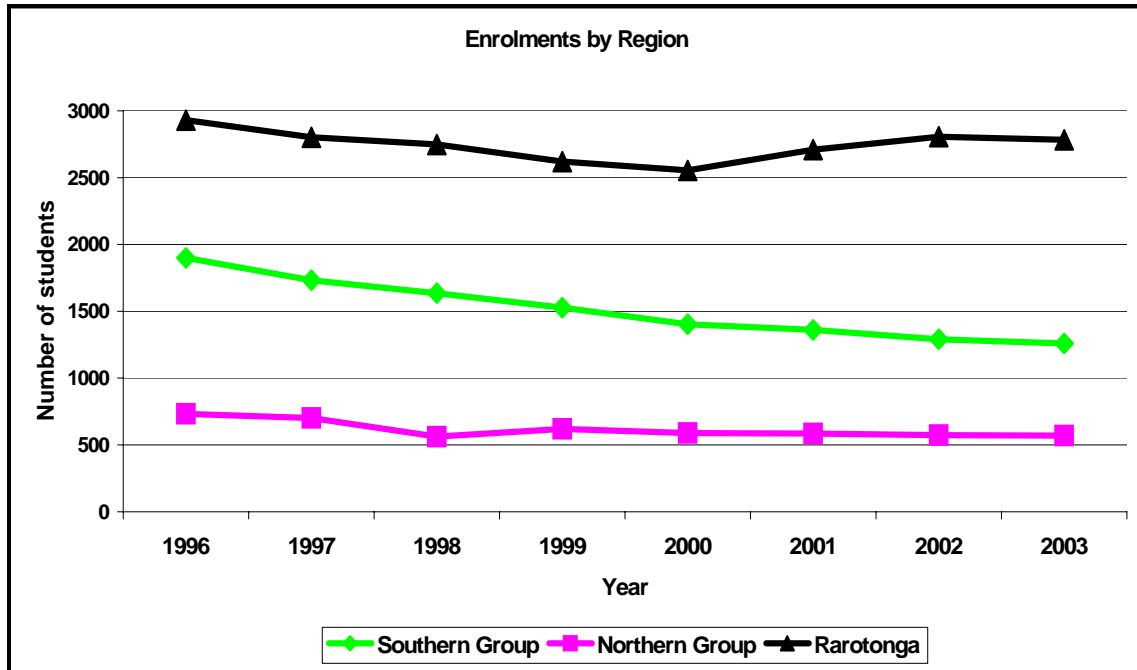
Coinciding with the general population decline of the Cook Islands since 1996, the school age population and therefore school enrollment rates have declined accordingly as shown in the records of the Ministry of Education (Figure 1). This decline is particularly evident at Primary level.

**Figure 1: School enrolments by type of school, 1990-2003**



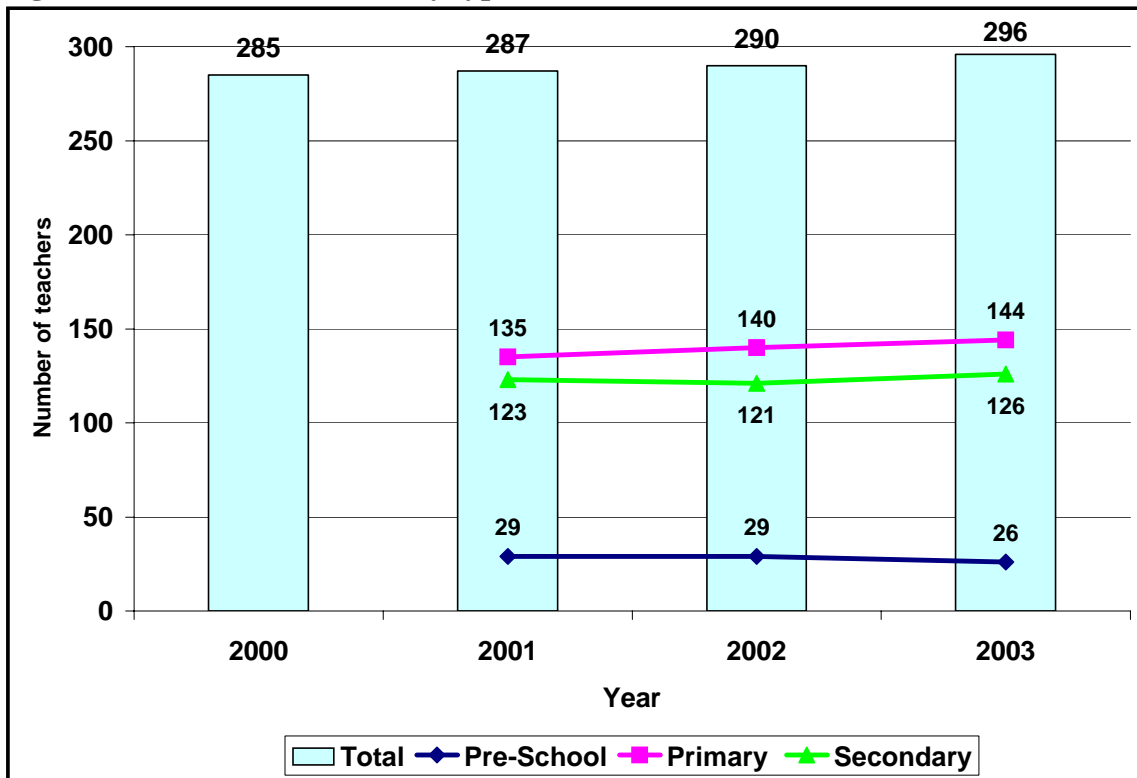
Enrolment rates by region show that the decline in enrolment rates is most pronounced in the Southern Group Islands where enrolment rates have declined by more than 30 per cent since 1996. While the Northern Group enrolment rates remain relatively stable, they increase slightly in Rarotonga since the year 2000 (Figure 2 and Appendix Table 1).

**Figure 2: School enrolments by region, 1996-2003**



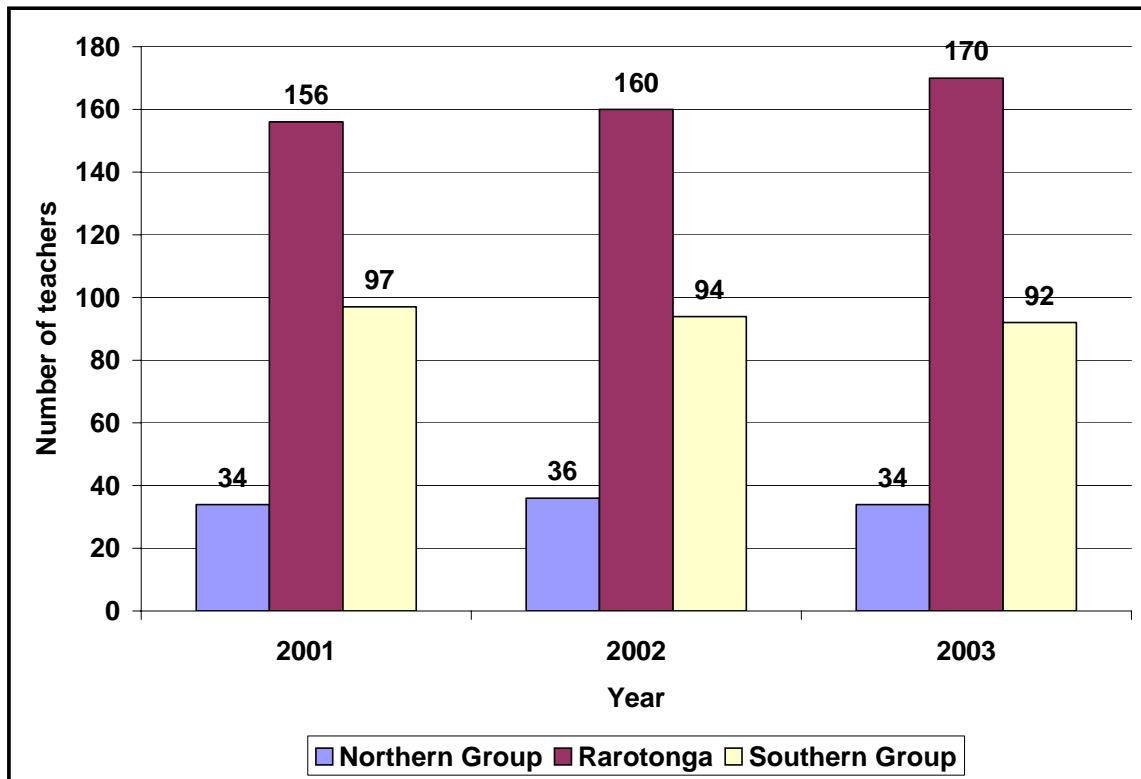
The number of teachers in recent years has increased from 285 in 2000 to 296 in 2003. While teacher numbers increased at Primary and Secondary level, they decreased slightly at Pre School level (Figure 3).

**Figure 3: Number of teachers by type of school, 2000-2003**



The number of teachers among regions shows a diverse picture (Figure 4 and Appendix Table 2). While the number of teachers increases in Rarotonga, they are stable in the Northern Group Islands, and decline in the Southern Group Islands, which coincides with the general trend in student enrolment rates as shown in Figure 2.

**Figure 4: Number of teachers by region, 2001-2003**



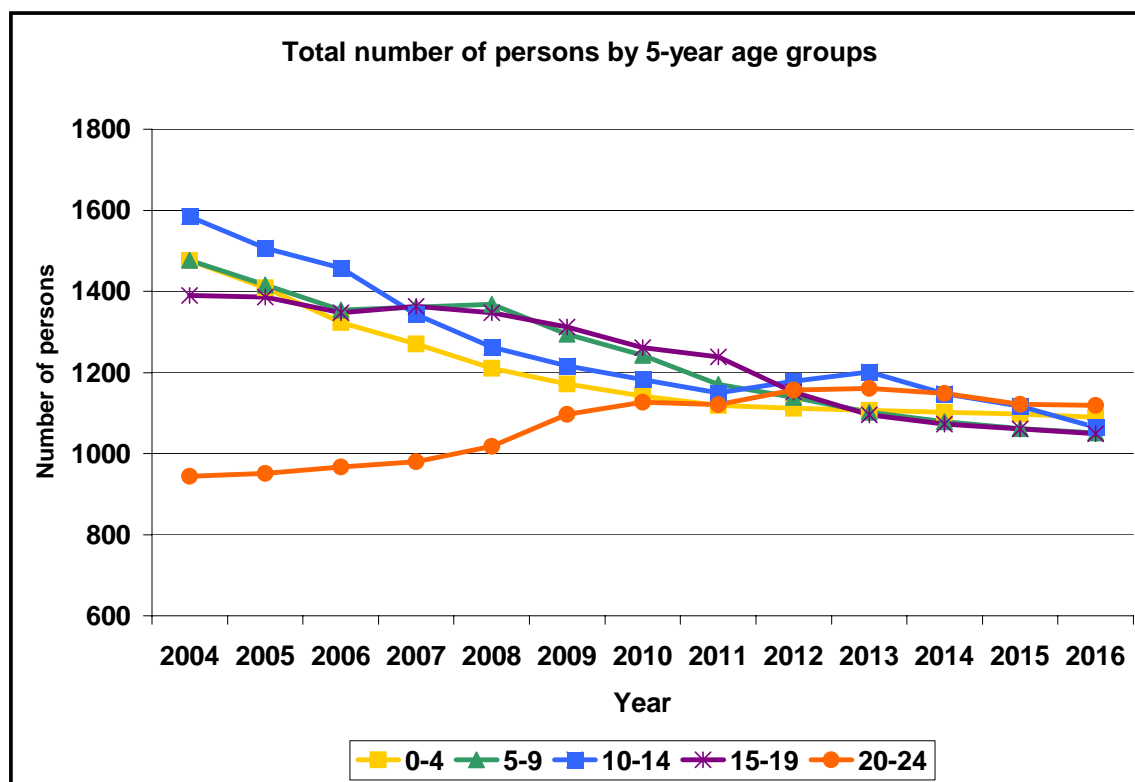
## 2. Future prospects

Although since the year 2000 enrollment rates have stabilized, it is expected that the Cook Islands population, and therefore the school age population, will further gradually decline in future, as described by the Medium Population Variant projection for the Cook Islands resident population (see *Demographic Profile of the Cook Islands*). This decrease is due to an expected further gradual decline of the birth rates, as well as continued negative migration rates. A population growth can only be expected if there would come a stop to the long-time negative net migration numbers that have characterized the Cook Islands demographics for the last 30 years or more.

The continuation of a further population decline automatically implies a decrease in the future number of young people of school age.

The Medium Population Variant shows a decrease of the number of persons (students) aged 5-9 and 10-14 years from 1,793 and 1,706 in 2001 respectively, to 1,051 and 1,065 in 2016 respectively (Figure 5). This resembles a decline by about 1,400 persons (students) or a decrease by 40 per cent.

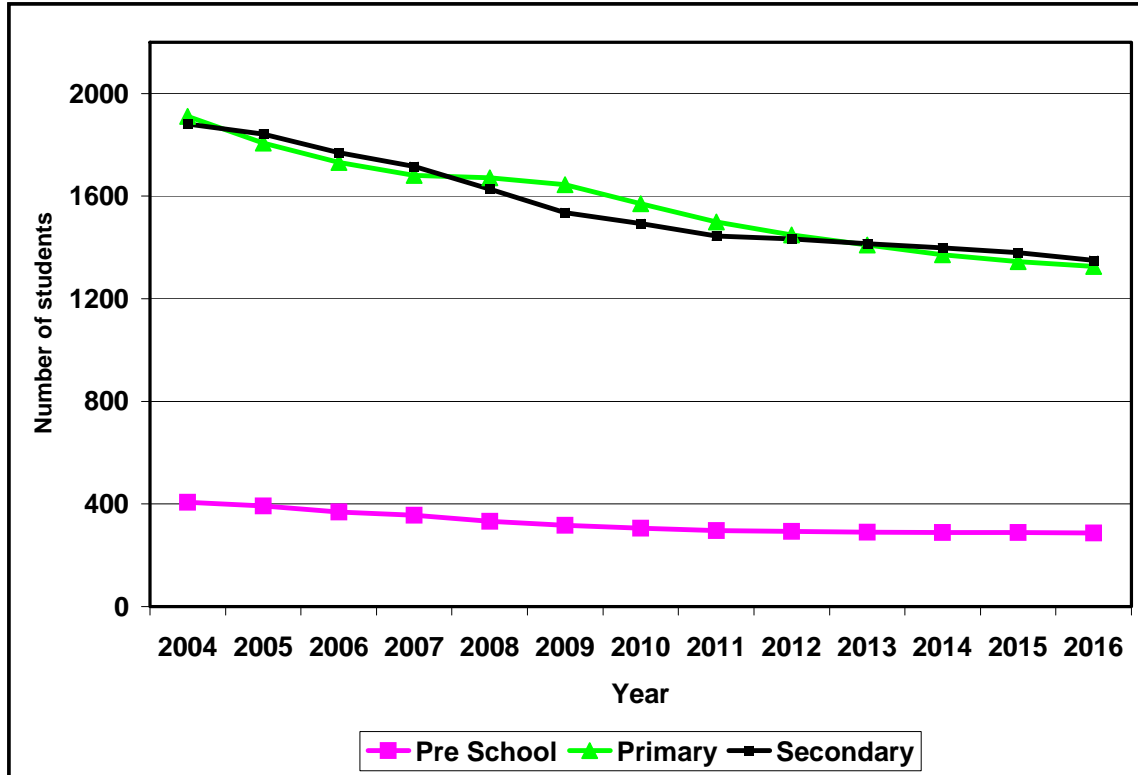
**Figure 5: Projected population size aged 0-24 years, 2004-2016**



The total number of students in the Cook Islands would decrease from 4,612 in 2003 to about 3,000 in 2016, which resembles a decrease of about 35 per cent (Figures 6 and 7).

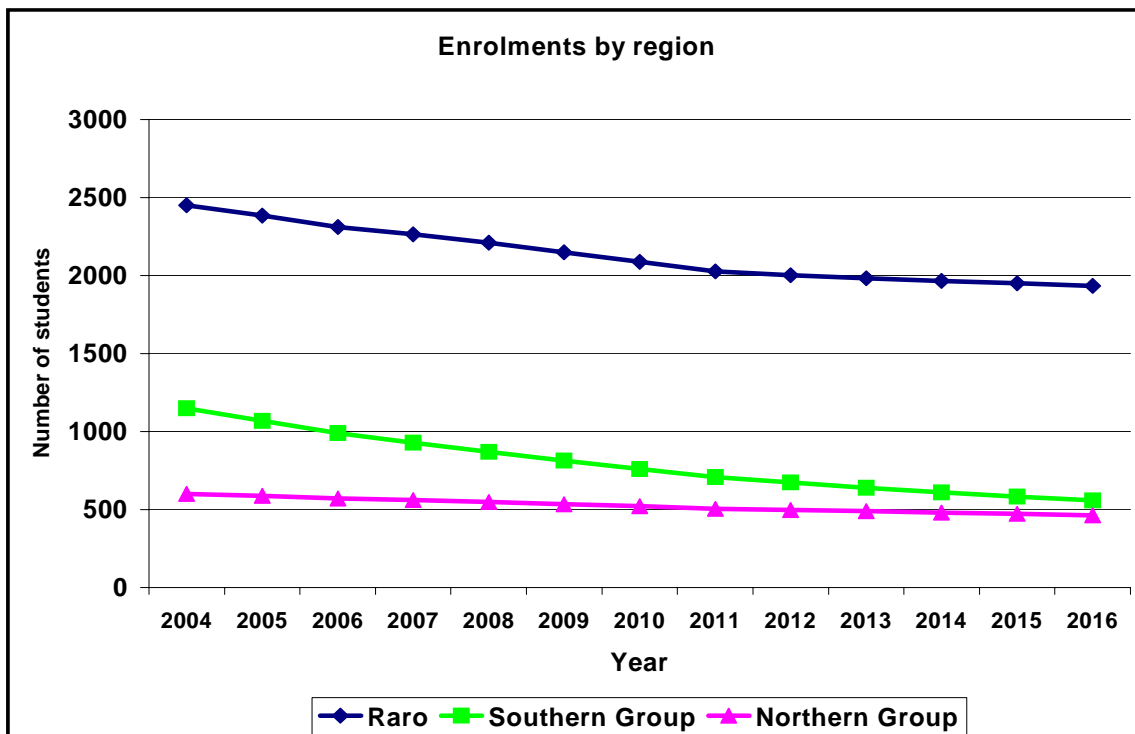
The number of students attending Pre Schools would decrease from 457 in 2003 to about 300 in 2016, the number of students in Primary Schools from 2,254 to about 1,300, and the number of students in Secondary Schools from 1,901 in 2003 to about 1,350 in 2016.

**Figure 6: Number of students by type of school, 2004-2016**



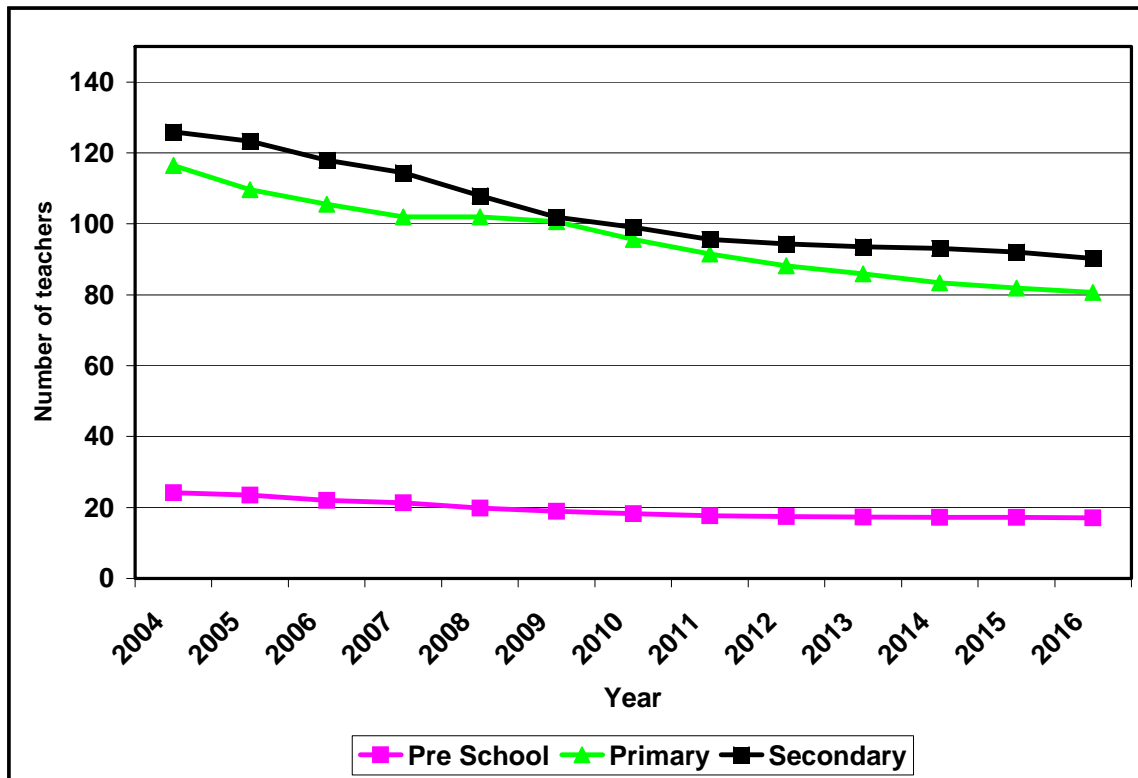
Because the general population decline may be more pronounced in the Outer Islands than in Rarotonga, the decline in the number of students and teachers in the Outer Islands would be more pronounced than in Rarotonga (Figure 7).

**Figure 7: Number of students by region, 2004-2016**



If the current Student:Teacher ratios were to continue, fewer teachers would be needed in future than today. While there were 296 teachers employed in 2003, less than 200 might be needed in 2016 (Figure 8).

**Figure 8: Number of teachers by type of school, 2004-2016**



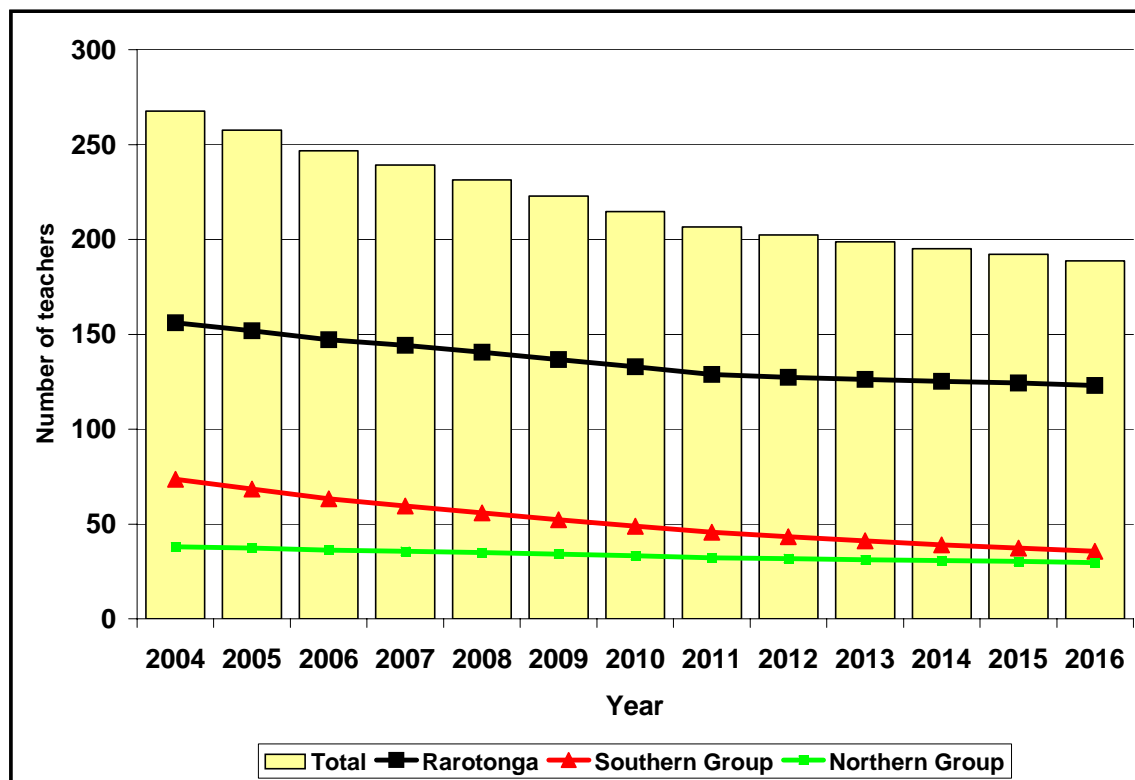
While there were 26, 144 and 126 teachers employed for Pre School, Primary and Secondary level respectively in 2003, only 16, 83 and 90 respectively, might be needed for the different levels of education in 2016.

While there were 170, 92 and 30 teachers employed in Rarotonga, the Southern and the Northern Group respectively in 2003, only 123, 36 and 30 respectively, might be needed in 2016 (Figure 9).

During the years 2000-2003, on average each year 23 teachers either resigned, retired or their contract expired. About 15 per cent of all teachers were expatriates (non-Cook Islanders), and of these expatriate teachers 20 per cent left the teacher roll annually, mainly because they often had fixed-term contracts.

In view of the number of teachers that leave the Cook Islands teachers pool annually, it is estimated that about 15-20 teachers need to be newly enrolled annually in order to meet anticipated student numbers.

**Figure 9: Number of teachers by region, 2004-2016**



## References

Excel spreadsheets ‘Student-Teacher projections’ – a tool to forecast student numbers and teacher demand and supply to the year 2016.

Cook Islands Education Statistics Digests 2001-2003, Ministry of Education, Rarotonga, Cook Islands.

Demographic Profile of the Cook Islands, Statistics Office, Ministry of Finance and Economic Management, Rarotonga, Cook Islands, and Noumea, New Caledonia: Secretariat of the Pacific Community (forthcoming).

Cook Islands Census of Population and Dwellings 2001, Main Report, Statistics Office, Ministry of Finance and Economic Management, Rarotonga, Cook Islands, (2004).



## APPENDIX

**Appendix Table 1: Enrolments by Island, 1996-2003**

<b>Island</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Aitutaki	855	763	726	710	651	642	595	560
Atiu	316	283	251	216	200	196	186	195
Mangaia	378	357	341	308	275	266	257	245
Manihiki	171	178	41	124	121	129	147	154
Mauke	249	233	239	215	202	189	177	174
Mitiaro	100	95	80	80	75	68	75	87
Nassau	29	30	42	38	37	38	26	28
Palmerston	10	3	0	12	0	9	17	23
Penrhyn	195	171	166	141	138	124	124	118
Pukapuka	268	254	251	258	264	249	219	207
Rakahanga	58	67	63	46	31	38	40	38
Rarotonga	2931	2801	2750	2619	2554	2709	2805	2783
<b>Total</b>	<b>5560</b>	<b>5235</b>	<b>4950</b>	<b>4767</b>	<b>4548</b>	<b>4657</b>	<b>4668</b>	<b>4612</b>

Source: Education Statistics Digest 2003, Ministry of Education

**Appendix Table 2: Number of teachers by Island, 2001-2003**

<b>Island</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Aitutaki	44	41	39
Atiu	13	13	13
Mangaia	19	19	19
Manihiki	10	8	9
Mauke	16	16	15
Mitiaro	5	5	6
Nassau	1	1	2
Palmerston	1	1	0
Penrhyn	6	9	7
Pukapuka	12	13	12
Rakahanga	4	4	4
Rarotonga	156	160	170
<b>Total</b>	<b>287</b>	<b>290</b>	<b>296</b>

Source: Education Statistics Digest 2003, Ministry of Education