Population Projections 2010-2030

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POPULATION PROJECTIONS ARUBA 2010- 2030

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INTRODUCTION

Aruba's demographic regime is characterized by fairly constant levels of fertility and mortality, but highly erratic levels of immigration and emigration. According to the population censuses of 1991, 2000 and 2010, the total fertility rate (TFR)* hovered around replacement level throughout the whole period. In 1991, the TFR stood at 2.28 children per woman. During the intercensal period 1991 – 2000 the TFR dropped to 1.85 children per woman and in 2010 the TFR increased slightly to 2.07 children per women in the reproductive age-groups[1]. Life expectancy at birth also showed quite a constant level. In 1991, life expectancy was 71.1 years for men and 77.1 percent for women. The expectation of life dropped by about a year during the period 1991 – 2000 for both males and females. In 2000, life expectancy basically returned to its levels of 1981. According to the latest life table construction - based on population figures from the 2010 Population Census and the number of deaths registered by the Population Registry[2], the Public Health Department and the AZV (the general social health insurance) - life expectancy is 73.9 years for men and 79.8 for women. The increase in life expectancy is significant, but does not play a very significant role when making population projections.

An important aspect, why it is so difficult to set up a population projection in Aruba, is the irregular nature of international migration. In earlier work, we have shown the link between economic conditions and patterns of migrations to and from the island[3]. In small island communities, migration tends to work as a safety valve to safeguard the well-being of households, and the community as a whole. In case of an economic crisis, many inhabitants flee the harsh conditions to find employment overseas. On the other hand, migration and circulation also act as a way to feed the local economy with laborers in the case the labor market is expanding. Over the years, the influx and departure of labor migrants has closely followed the ups and downs of the Aruban economy. The fairly constant levels of mortality and fertility, the irregular age structure and very erratic patterns of migration pose a number of difficulties to use the traditional cohort –component method for producing population projections. Given the past trends of fertility and mortality one has little choice than to keep both demographic phenomena constant in the projection. Therefore, the assumptions on immigration and emigration almost completely decide the outcome of the projections. As migration levels on Aruba are so closely linked to economic performance, a projection model was set up after the 2000 Population Census in which the relationship between the Gross Domestic Product (GDP), the labor productivity, labor force requirements and net migration was incorporated. This projection model has worked adequately during the period between the 2000 and the 2010 population censuses. We will use the same model again to set up the current population projections. Hereunder we explain the methodology of this projection model[5].

METHODOGLOGY

The basic idea of the projection model is quite simple. To make the projection, we compare the necessary size of the labor force to reach a certain goal in real GDP** and labor productivity with the available human resources at time t + 5. For this comparison we take into account the natural increase of the local and foreign born population present on Aruba at time t, the labor force participation rates of local and foreign born persons, the international net migration of the local born population, and the emigration of the foreign born population who had lived on the island for some time. The difference between the necessary and the available labor force equals the number of persons to be imported from abroad. To obtain the estimated number of foreign born immigrants, one has to multiply this difference by a factor which takes account of the fact that a number of migrants bring their family, or are followed after some time by economically non-active dependents.

The projection method for each of the four five-year projection intervals involves the following steps:

- *Step 1*: We make a projection of the Aruban born population from time t to time t + 5. This projection uses a straightforward cohort-component methodology by making assumptions about future trends in fertility, mortality and migration.
- *Step2*: Using the number of persons per age group and by sex, and the age and sex specific participation rates for local born persons, we calculate the number of Aruban born men and women in the labor force at time t + 5.
- *Step 3*: Projection of the foreign born population from time t to time t + 5. This projection also uses the cohort-component method with fertility, mortality and

* The Total Fertility rate (TFR) is the average number of children that would be born per woman if all women lived to the end of their childbearing years and bore children according to the given set of age-specific fertility rates. The measure is sometimes referred to as total fertility. The Total Marital Fertility Rate and the Total Illegitimate Rate indicate the same as the TFP, but are restricted to women in the indicated marital status. The Total Fertility Rate is calculated as five times the sum of the age-specific fertility rates. The factor five has been applied as the age-specific fertility rate is an age standardized measure and refers to single year age groups.

**Real Gross Domestic Product (GDP) is the total value of all goods and services produced in a country in a calendar year corrected for inflation.

emigration data, but leaves immigration aside. As such, we calculate the number of foreign born people who were on the island at time t and who would be on the island at time t + 5 given the fertility, mortality and emigration assumptions, if no additional foreign born persons migrate to Aruba.

- *Step 4*: Using the number of persons per age group and by sex, and the age and sex specific participation rates for foreign born persons, we calculate the number of foreign born men and women in the labor force at time t + 5. Note that this figure only includes foreign born persons who were already present on Aruba at time t.
- *Step 5:* Next, we make an estimation of future labor force requirements. The labor force consists both of employed and unemployed persons. For the estimation of the employed persons at time t + x we use the relationship between the inflation-corrected (real) gross domestic product (GDP), the labor productivity (LP) and the number of employed persons (EP). The relationship between GDP and LP equals:

$$LP(t+x) = GDP(t+x)/ EP(t+x) \quad (1)$$

Consequently,

$$EP(t+x) = GDP(t+x)/ LP(t+x) \quad (2)$$

Figures from the Central Bank of Aruba give us an estimate of the real GDP for 2010, while the number of employed persons in that year time is known from the Population Census. Labor productivity could therefore be calculated easily. Next, some assumptions were made about the growth of GDP and labor productivity per five-year period for the next twenty years. On the basis of these assumptions, we can calculate the number of employed persons needed to attain these growth rates. As we need assumptions for the labor force as a whole, and not just for the number of employed persons, these have to be multiplied by a factor taking into account unemployment:

$$\text{Total Labor force } (t+x) = EP(t+x) / (1-\text{unemployment rate}(t+x)) \quad (3)$$

The number of men and women in the labor force is then estimated by applying the percentage of women in the labor force to the total labor force. This percentage has to be included per five-year projection period.

- *Step 6:* By adding the number of Aruban born and foreign born men and women (steps 2 and 4) in the labor force, we obtain the total local available labor force at time t+5. This number equals the labor force available at time t+5 if no international migrants had come to the island in the period t, t+5. If we subtract this number from the estimated required labor force (step 5), we obtain the number of male and female workers Aruba has to import between time t and t+5 to reach the proposed levels of GDP and labor productivity. To obtain the number of foreign born persons entering Aruba between time t and t + 5, we multiply the number of immigrant workers by the factor (1 + PD) where PD stands for the average number of economically non-active dependents each migrant brings to the island.
- *Step 7:* The number of male and female immigrants between times t and t + 5 is then broken down into separate age groups using the age distribution of foreign born immigrants as observed in recent years. If required this age distribution can be adjusted.
- *Step 8:* Lastly, we bring together the projection results of the Aruban born population (step 2), the foreign born population (step 4) and the foreign born immigrants (step 7) to obtain the final population by age and sex at time t + 5.
- *Step 9:* The projected population at time t + 5 is then taken as the starting population for the population projection from time t + 5 to t + 10, repeating steps 1 to 8.

For a better understanding of the projection model we incorporate a flow chart on the next page of the subsequent steps we take to make the projection.

For the purpose of making the projections, we developed an Excel program in such a way that changing a single parameter immediately shows the changes for the whole twenty-year projection period. Because the spreadsheet is easy to adapt, extra worksheets can be attached to use the output of the projections for other purposes. For instance, educational projections or labor force projections could easily be attached in a separate worksheet. The population for each of the years refers to end September, being the Census date.

Projections were made for a twenty-year period. The projection consists of four five-year progressions. Three scenarios were drawn up - low, medium and high - each based on a set of economic and demographic assumptions. Although the model was designed specifically for Aruba, taking into account the availability of demographic and economic data, it would not be very difficult to adapt it to be used in other small island countries. Some minor

adjustments would probably have to be made depending on the availability of local data.
The projection model includes a large number of parameters which can be changed in a matter of seconds to show the demographic outcome of these changes. The parameters which can be changed (either directly or indirectly) for each five-year projection segment are the following:

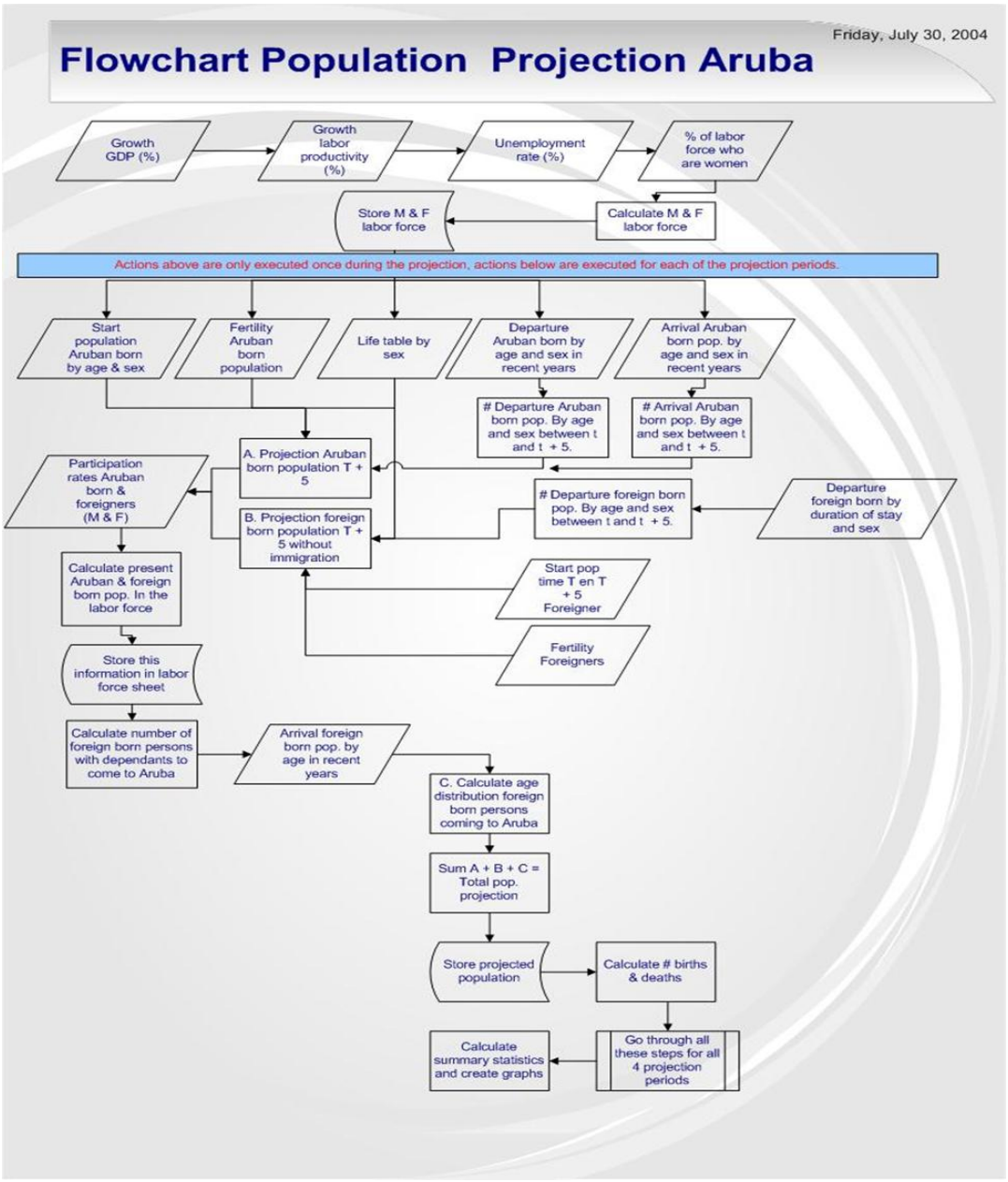
Economic parameters

a. Real GDP size
b. annual growth rate of real GDP
c. annual growth rate of labor productivity
d. unemployment rate
e. proportion of women in the labor force
f. age-specific participation rates for men and women, both local and foreign born

Demographic parameters

g. starting population by five-year age groups and sex
h. age-specific fertility rates (local and foreign born)
i. sex ratio at birth
j. survival ratios in the life table
k. age-specific emigration for local and foreign born persons
l. age-specific immigration for local born persons
m. number of dependents who come to Aruba per foreign born worker

Changing any of these parameters has an effect on the size and composition of the future population living on Aruba.



THREE PROJECTION SCENARIOS

The combination of six economic and seven demographic parameters allows for an almost infinite number of possible projections. It is one of the advantages of the model that it allows to see instantly what the effect of the change of one parameter is on the size and age-distribution of the population over the next twenty years. For instance, a policy maker could immediately detect what the effect of lowering the unemployment rate by one percent point would be on the size of the population on Aruba in the coming years. Also, one could investigate what the effect of increasing labor productivity would be on the need of foreign workers on the labor market. Rising the age of retirement would have a direct effect on the labor participation of persons 55 years and older. An increase of retirement age would thus not only have an effect on the financial situation of the retirement funds, but also influences the size and age-distribution of the people living on Aruba in the years to come. Simply changing the participation rates of persons in age category 55 – 65 years of age in our model would allow us to see the long term demographic effect of changes in retirement age.

In this report we present three scenarios: low, medium and high, referring to the ultimate population size that the combination of the parameters results in. The starting point of our projections was the Aruban born and foreign born population enumerated in the census, by sex and five-year age-group. Note that children born on Aruba to foreign-born persons are classified in the projections as Aruban born.

Because the projection model is basically linked to six economic parameters, we dedicated great care to selecting a set of plausible set of parameters. Colleagues from the Department of Economic Affairs, Trade and Industry and the Central Bank of Aruba were consulted to determine the future level of growth of real GDP, based on the economic models. One should keep in mind that population projections are no predictions about the size and age distribution of the future population, but merely scenarios of what the effect would be if certain pre-determined assumptions would happen.

Table 1 presents the economic assumptions used in each of the three scenarios. The percentage growth of real GDP was provided by the Department of Economic Affairs, Trade and Industry (DEZHI). For each of the three scenarios DEZHI anticipates a diminishing growth in the real GDP over the next twenty years. During the last ten years, no growth has been noted in the levels of labor productivity on Aruba. Therefore, with the exception of the low scenario, we held the growth of the labor productivity at zero. During the census, an unemployment rate of 10.6 percent was observed. It can be expected that in the coming years the rate of unemployment will go down. Because of the aging of the population, more and more people will leave the labor market, giving a chance to those currently without a job to take their place. However, we did not let unemployment drop below 5 percent. As was noted, even during times when the economy was booming friction unemployment was relatively high on Aruba. During the 1990's, when Aruba's economy was growing rapidly, the unemployment rate still remained between 6 and 7 percent.

Table 1. Assumptions population projection 2010 - 2030

	2010 -2015	2015-2020	2020-2025	2025-2030
	Low scenario			
Growth real GDP (%)	1.26	1.19	1.12	1.06
Growth labor productivity (%)	0.5	1	1	1
Unemployment (%)	7	5	5	5
Percentage of women in the labor force	49.8	49.8	49.8	49.8
	Mid scenario			
Growth real GDP (%)	2.13	1.93	1.76	1.61
Growth labor productivity (%)	0	0	0	0
Unemployment (%)	7	6	5	5
Percentage of women in the labor force	49.8	49.8	49.8	49.8
	High scenario			
Growth real GDP (%)	3.01	2.62	2.31	2.07
Growth labor productivity (%)	0	0	0	0
Unemployment (%)	7	6	5	5
Percentage of women in the labor force	49.8	49.8	49.8	49.8

Table 2. Labor force participation by type of place of birth, age and sex

Age	Local born		Foreign born	
	Male	Female	Male	Female
15-19	16.9	12.5	20.1	15.3
20-24	71.9	61.9	74.1	60.3
25-29	88.9	86.8	89.8	80.2
30-34	93.9	91.6	93.8	80.4
35-39	92.2	91.6	95.6	83.8
40-44	91.9	89.0	95.7	86.2
45-49	88.9	86.4	95.1	83.9
50-54	85.3	78.3	91.5	82.4
55-59	78.6	63.0	87.7	72.3
60-64	39.1	27.7	68.3	49.2
65-69	23.6	11.9	39.1	25.5
70-74	13.7	4.6	23.4	9.3
75-79	5.4	1.2	10.2	3.6
80-84	1.8	0.2	3.3	1.1
85-89	1.1	0.6	2.5	1.3
90-94	0.0	0.0	0.0	0.0
95+	0.0	0.0	0.0	0.0
NR	0.0	0.0	0.0	0.0
Total	64.8	55.6	79.6	67.1

Source: Population Census Aruba 2010.

Labor force participation rates by sex, age and place of birth (local/foreign) are taken from the 2010 Population Census. Participation of women in the labor market is quite high on Aruba. The proportion of women currently in the labor force stands at 49.8 percent, indicating that almost an equal number of women than men are active on the labor market. Compared to 2000, participation rates for women have further increased. As participation of both men and women is already very high we have assumed that in the coming two decades they will no longer increase. Therefore, for all three scenarios the level was kept at the same level.

The starting population for our projections was taken from the 2010 Population Census. Table 3 presents the population living on Aruba at the end of September 2010 by age, sex and place of birth. The figures show that more than a third of all people living on Aruba was not born on the island.

Table 3. Population by place of birth, age and sex 2010

	Local born		Foreigner	
Age	Male	Female	Male	Female
0-4	3,126	3,034	203	150
5-9	3,168	3,048	432	396
10-14	3,221	3,055	581	646
15-19	2,790	2,573	987	955
20-24	1,735	1,558	993	998
25-29	1,608	1,712	946	1,214
30-34	1,612	1,687	1,292	1,814
35-39	1,740	1,749	1,770	2,213
40-44	1,877	1,882	1,953	2,554
45-49	2,495	2,523	1,861	2,369
50-54	2,566	2,624	1,314	1,905
55-59	2,256	2,266	943	1,430
60-64	1,719	1,869	628	917
65-69	1,348	1,467	372	552
70-74	952	1,249	290	441
75-79	603	856	208	307
80-84	228	420	183	263
85-89	91	176	80	150
90-94	30	87	26	74
95+	4	23	10	37
NR	0	0	0	0
Total	33,169	33,858	15,073	19,385

Source: Populationand Housing Census 2010

In the introduction we mentioned already that levels of fertility and mortality have remained fairly constant since the 1980's. Therefore we assume that the levels of fertility and mortality will remain the same during the next 20 years. In a projection we use the survival rates from the 2010 life table[2] to calculate the number of persons x, x + 5 in 5 years, for those currently aged x- 5, x. The survival rate is the probability to survive between two groups of completed years.

In 1991, the Total Fertility Rate (TFR) stood at 2.28 children per woman, compared to 2.04 children in 2000. Currently, the TFR is again a little higher and stands at 2.07 children per woman. Little difference exists between local and foreign born women with

Table 4. Fertility schedule for local and foreign born women, 2010.

	Age specific fertility Aruban women	Age specific fertility Foreign born women	Age specific fertility All women
14	0.0000	0.0087	0.0018
15-19	0.0459	0.0340	0.0427
20-24	0.1278	0.0937	0.1145
25-29	0.1069	0.1230	0.1136
30-34	0.0842	0.0959	0.0902
35-39	0.0349	0.0463	0.0413
40-44	0.0096	0.0112	0.0105
45-49	0.0000	0.0005	0.0003
TFR	2.05	2.02	2.07
Mean age	27.05	28.37	27.55

Source: Populationand Housing Census 2010; Population Registry

respect to the number of children they give birth to. However, on average local born women have their children at a somewhat younger age. The mean age of the fertility schedule is 27.05 years for local born women and 28.37 years for foreign born women. In the projection the age-specific fertility rates* are applied to the number of women in the corresponding age group to calculate the number of babies they give birth to during the projection interval. Number of births or calculated separately for local and foreign born women.

For each five-year projection period, the absolute number of foreign born emigrants was calculated as follows. First, a frequency distribution was drawn up of arrivals of foreign born migrants according to year of arrival. Next, the distribution of duration of stay in Aruba was applied to the arrivals per year. Unfortunately, no data are available for the duration of stay of foreign born migrants. In 2000, these data were retrieved from the 2003 Aruba Migration and Integration Survey (AMIS)[5]. Since then, no statistical information was gathered about the duration of stay of migrants on Aruba. Therefore, in this projection we will use the same distribution of duration of stay as we did in the 2003 population projections[4]. By doing so, we assume that the duration of stay of foreign born migrants has not changed significantly during the last seven years. The figures of duration of stay refer to the years 1999 – 2001. The relative distribution of duration of stay of foreign born migrants is depicted in graph 1. In the AMIS study, we found that each migrant brought on average .33 dependents to the island. These dependents either accompanied the migrant to Aruba or followed after some time. No recent information on the mean number of dependents is available. Therefore, in the projection we assumed that the mean number of dependents per migrant has remained constant.

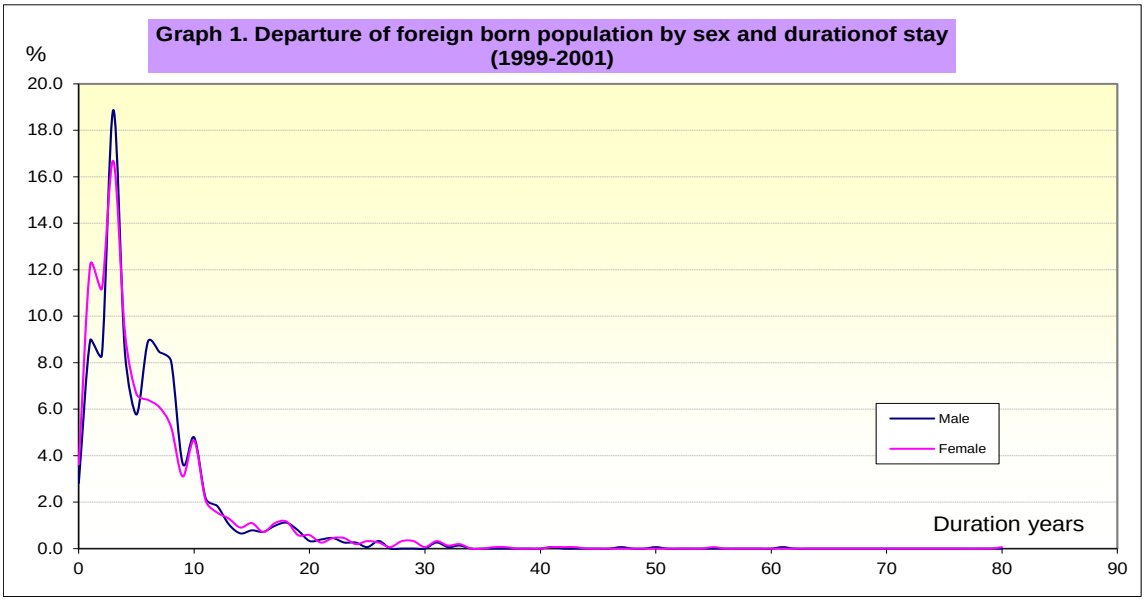
For the migration of persons born on Aruba, the age-specific migration rates for local born persons arriving and leaving the island were calculated. Table 5 shows these age-specific migration rates. The table clearly shows that emigration among local born persons is highest in the age segment 15 – 30 years of age and immigration is highest in the segment 20 – 35 years of age. These are typically the age categories when young people leave the island to pursue an education abroad. Many of them come back to the island after finishing their studies. The age-specific migration rates were applied to the initial starting population to calculate the net migration by age and sex of those persons who were born on the island. For each of the three scenarios these migration rates were kept constant throughout the twenty-year projection period.

Table 5. Age-specific migration rates Aruban born population by sex.

	Emigration		Immigration	
	Male	Female	Male	Female
0-4	0.075	0.075	0.022	0.021
5-9	0.049	0.050	0.031	0.027
10-14	0.048	0.048	0.026	0.030
15-19	0.148	0.214	0.049	0.053
20-24	0.337	0.366	0.145	0.207
25-29	0.151	0.126	0.190	0.210
30-34	0.084	0.074	0.127	0.100
35-39	0.071	0.073	0.072	0.053
40-44	0.064	0.046	0.055	0.040
45-49	0.047	0.051	0.041	0.040
50-54	0.032	0.037	0.032	0.029
55-59	0.024	0.024	0.024	0.028
60-64	0.022	0.022	0.030	0.023
65-69	0.016	0.013	0.019	0.016
70-74	0.008	0.007	0.015	0.012
75-79	0.002	0.006	0.007	0.004
80-84	0.004	0.014	0.004	0.005
85-89	0.011	0.011	0.011	0.017
90-94	0.000	0.012	0.033	0.012

Source: Populationand Housing Census 2010; Population Registry

Graph 1. Departure of foreign born population by sex and durationof stay (1999-2001)



* Age-specific fertility rates are computed dividing the number of births to women in a particular age group by the number of women in that age group.

RESULTS POPULATION PROJECTION 2010-2030

A. MEDIUM PROJECTION SCENARIO

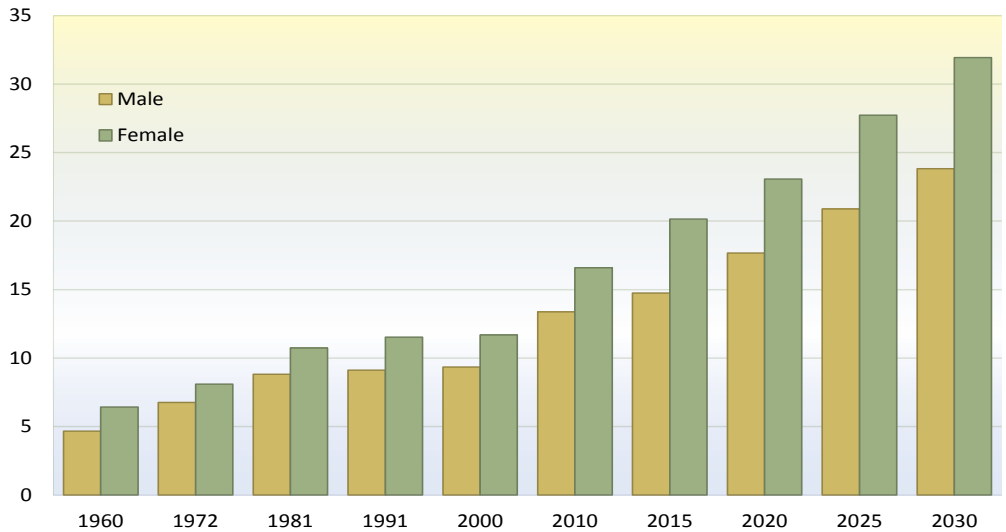
In the medium scenario we assume an annual growth in real GDP of 1.26, 1.19, 1.12 and 1.06 percent in each of the five-year projection periods between 2010 and 2030, coupled with a zero growth in labor productivity and an unemployment rate of respectively 7, 6, 5 and 5 percent in each projection period. Table A.1 shows that the assumptions used in the medium scenario will result in some dramatic demographic changes, in the next twenty years.

First, if reality would follow the medium scenario, it would lead to a rapid growth of the total population in the next twenty years. The 2010 population census found 101, 484 persons living on the island. If the demographic development will follow the assumptions made in the medium scenario, the island will count 153,386 persons in the year 2030. This implies a growth of a little more than 50 percent in the next two decades. Between the censuses of 2000 and 2010 an annual growth of 1.1 percent was observed. The medium projection would imply an average annual growth of about 2 percent. This is almost double the current level. The growth of the population will be indirectly caused by the rapid aging of the population living on Aruba. Graph 2 shows the percentage of persons 65 and over, per 100 persons in the age group 15 – 64 years during the period 1960 - 2030. Percentages up to 2010 are the observed values and after 2010, percentages are taken from the projection. In 2010, for 100 men present in the age group 15 – 64, there were 13.4 percent of men in the age-groups above 65 present. For women this percentage was 16.6. In 2030, these percentages will have increased respectively to 23.3 and 31.5 percent. Aruba's pension scheme is a transversal system, which means that the active population pays for the pension of the retired population. Drastic changes in the ratio between the population 15-49 years and those above 65 years, as we observe in this scenario, may have some serious consequences for the viability of the pension system.

The aging of the population implicates that a large number of workers will leave the labor force. The labor market is also diminished by foreign workers who leave the island after spending some time on the island, by Aruban born persons who decide to try their luck abroad and by persons who die before reaching retirement age. Because of the assumed growth in GDP, it is foreseen that the labor force will further expand. Our figures show that the influx of locally available young people into the labor market will not be adequate to fill all positions left empty by those who retire. Large groups of foreign workers will have to be imported to fill all those vacant positions. Indicative of this trend is graph A.6. that shows the rapid decrease of the number of youngsters (< 15 years) per 100 persons 65 years of age and older. To look at the effect of aging on population growth, we ran a projection in which we kept both the growth of GDP and the growth of labor productivity equal to 0. The other the assumptions were kept equal to the medium projection. The results of this test show that, if Aruba's GDP and labor productivity would remain at the 2010 level, its population would still grow. In 2030, 114,989 people would be living on the island.

The aging of the population is most dramatic among the population born on Aruba (see population pyramids in Graph A.13). During the next twenty years it is expected that the Aruban population 60 years and over will more than double, from 1,122

Graph 2. Persons 65+ per 100 persons 15 - 64 years: 1960 - 2030



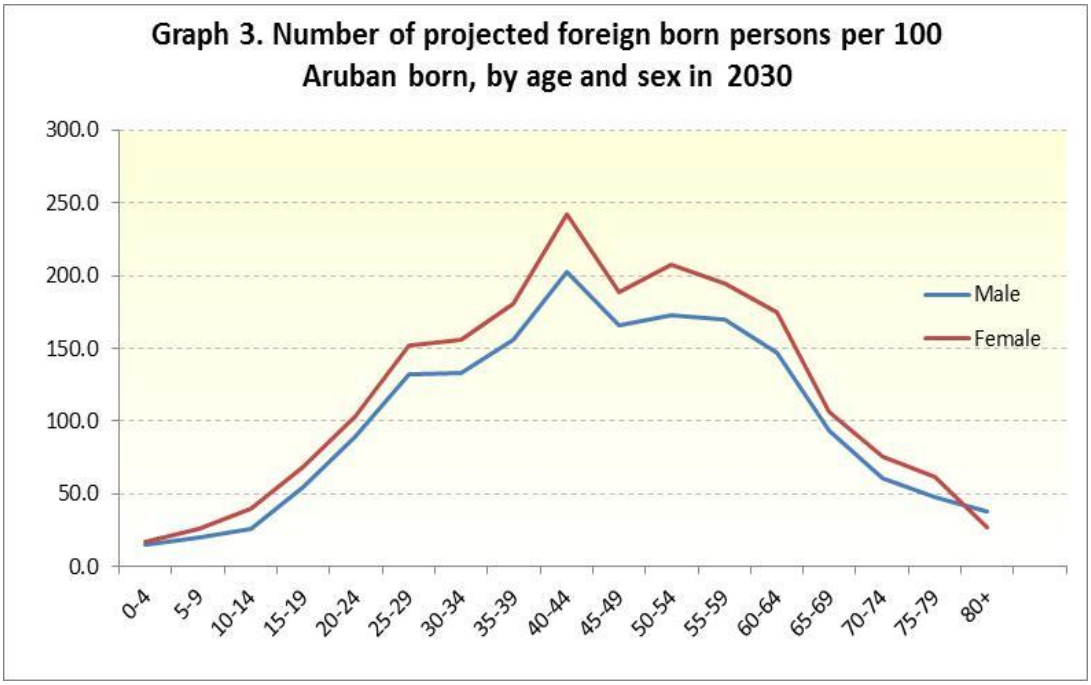
elderly Aruban born persons in 2010 to 20,124 in 2030. The percentage of Aruban born persons above age 65 will increase from 11.2 percent to 21.8. Especially the growth of the very old (75 years and older) will be dramatic. In the 2010 population census, 2,519 Aruban born persons 75 and older were enumerated. In 2030, more than 3.3 times more Aruban persons 75 and older would be living on the island (8,337). Also the percentage of young (< 15 years) persons in the population will increase during the next two decades. In 2010, 27.8 percent of Aruban born persons were under the age of 15. In 2030, the medium scenario shows that this will have increased to 29.6 percent. Keep in mind that many of the Aruban born youth, are born to foreign born parents. The rise in the relative portion of the young and the old Aruban born population consequently leads to a reduction in the percentage of Aruban born persons in the active age-groups (15 – 64 years). During the period 2010 – 2030 this age-segment of the population born on Aruba will actually decrease from 40,840 to 39,009. The relative share of this population segment of the Aruban born population will drop from 60.9 to 49.2 percent.

Since the Status Aparte in 1985, migration has significantly changed the demographic landscape on Aruba. In 1991, 23.9 percent of all persons living on Aruba were born abroad. In 2000, this percentage increased to 33.9, but in the last ten years the proportion of foreign born persons in the total population has remained the same (currently 34.0 percent). The medium projection shows that the current status quo will come to an end and that the proportion of foreign born persons will increase significantly for all age-groups. In 2030, almost half of all persons living on the island will be life-time migrants (48.3 percent). Moreover, foreign born persons will completely dominate the active age-groups. Graph 3 depicts the number of projected foreign born persons in 2030 per 100 Aruban born persons by age and sex. In the 2010 population, there were more foreign born than local born persons between the ages 35 and 45. In 2030, in each five year age-group between 25 and 70 more foreign born persons will be present than Aruban born. Note that the difference between the number of Arubans and foreign born persons will be quite considerable in some of these age-groups. For women, between ages 25 and 65 for each 5 year age-group, foreign born women outnumber Aruban born women by more than 50 percent. In the age-group 40 – 44 years 2.5 times more foreign women than Aruban women are present. In this age-group the number of foreign born men is double that of Aruban born men.

Because of the growing population in the reproductive age-groups, the number of births will continue to rise. It is projected that 6,238 children will be born in the period 2010 – 2015. In the 5year period 2025 - 2030, this number will be considerably higher: 9,209 children. Because of the overall population growth, combined with a rapid aging of the population, the number of deaths in the time period 2025 – 2030 will be more than double than in 2010 – 2015. Because more people will have moved into age-groups that experience higher probabilities of dying, the death rate will increase from 4.9 per thousand in 2010 – 2015 to 7.6 in 2025 – 2030 (see table A.10).

The results of the medium scenario projection are shown in the tables and graphs on the following pages.

Graph 3. Number of projected foreign born persons per 100 Aruban born, by age and sex in 2030



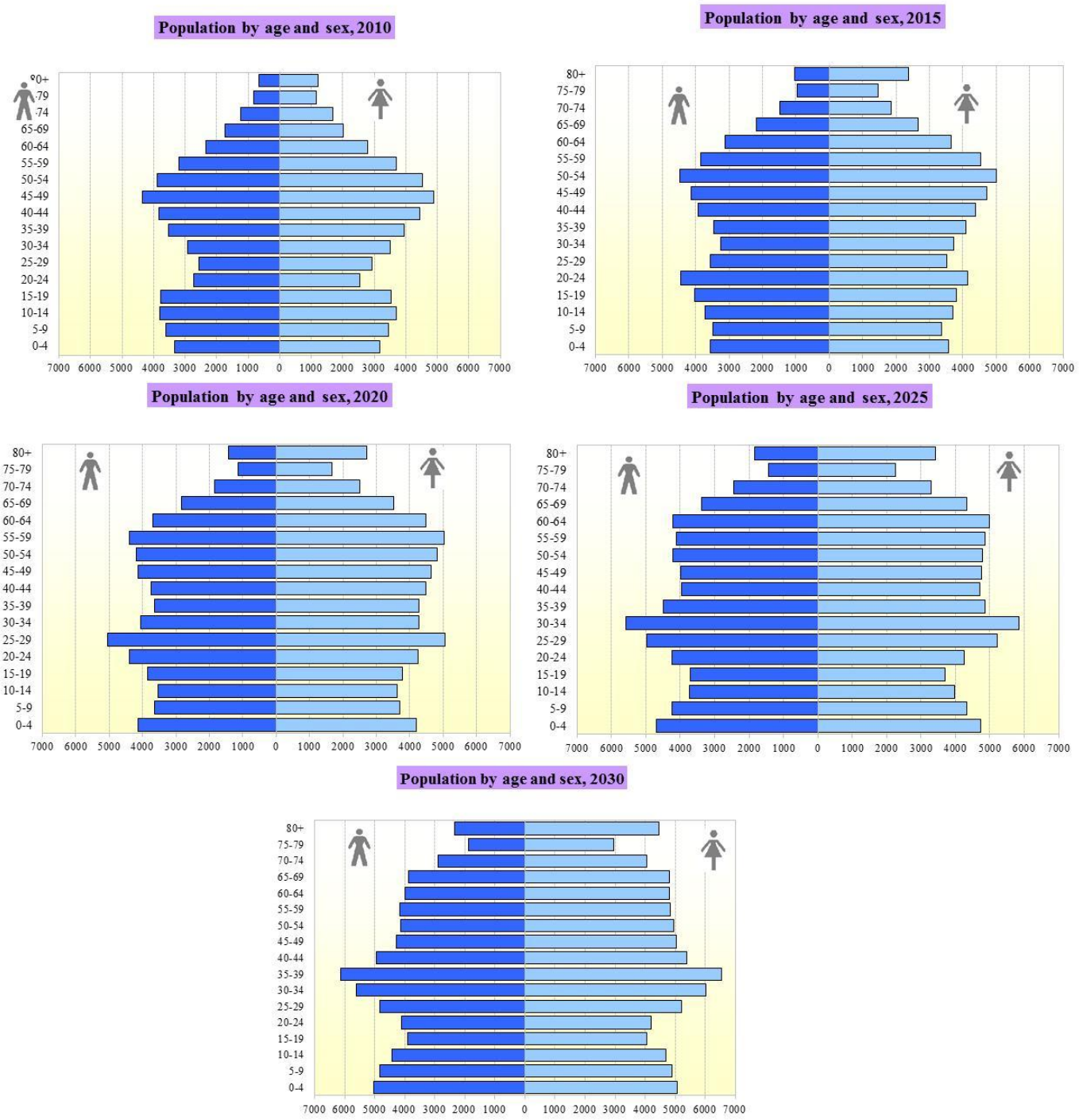
A. Tables and graphs for the medium projection scenario; Aruba 2003-2023.

Table A.1. Total population by age and sex, 2010 - 2030

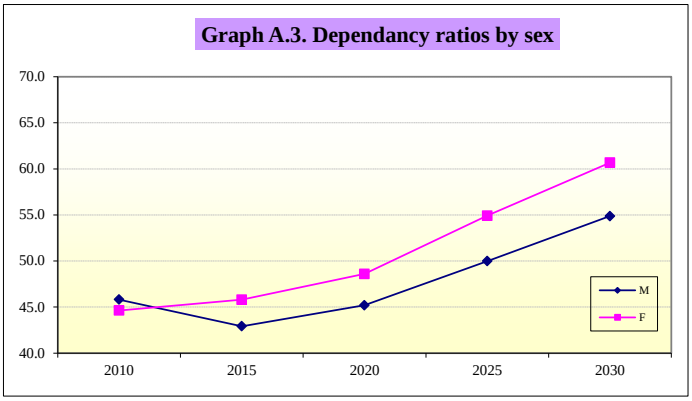
Age	2010			2015			2020			2025			2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
0-4	3,329	3,184	6,513	3,567	3,563	7,131	4,143	4,200	8,343	4,688	4,731	9,419	5,043	5,074	10,117
5-9	3,600	3,444	7,044	3,478	3,374	6,852	3,632	3,694	7,326	4,246	4,344	8,590	4,840	4,901	9,741
10-14	3,802	3,702	7,504	3,729	3,718	7,447	3,539	3,628	7,167	3,722	3,971	7,694	4,417	4,700	9,117
15-19	3,777	3,527	7,304	4,041	3,796	7,837	3,842	3,774	7,616	3,696	3,712	7,408	3,903	4,059	7,962
20-24	2,728	2,556	5,284	4,458	4,136	8,595	4,384	4,253	8,636	4,230	4,258	8,488	4,101	4,199	8,301
25-29	2,554	2,926	5,481	3,565	3,515	7,081	5,044	5,060	10,103	4,981	5,206	10,187	4,838	5,202	10,039
30-34	2,904	3,501	6,405	3,241	3,722	6,963	4,056	4,279	8,335	5,584	5,851	11,435	5,602	6,036	11,637
35-39	3,510	3,962	7,472	3,466	4,089	7,555	3,635	4,281	7,916	4,497	4,872	9,368	6,122	6,534	12,657
40-44	3,830	4,436	8,266	3,931	4,372	8,303	3,754	4,480	8,234	3,965	4,700	8,665	4,938	5,380	10,318
45-49	4,356	4,892	9,248	4,124	4,713	8,837	4,129	4,640	8,768	3,988	4,767	8,756	4,293	5,046	9,340
50-54	3,880	4,529	8,409	4,477	5,016	9,493	4,189	4,833	9,022	4,216	4,779	8,995	4,128	4,958	9,086
55-59	3,199	3,696	6,895	3,846	4,540	8,387	4,386	5,040	9,425	4,120	4,860	8,980	4,157	4,838	8,995
60-64	2,347	2,786	5,133	3,113	3,644	6,758	3,698	4,493	8,192	4,217	4,977	9,194	3,983	4,811	8,794
65-69	1,720	2,019	3,739	2,168	2,671	4,839	2,845	3,518	6,363	3,379	4,329	7,708	3,864	4,811	8,675
70-74	1,243	1,690	2,932	1,480	1,854	3,334	1,855	2,502	4,357	2,431	3,290	5,720	2,888	4,062	6,950
75-79	811	1,164	1,974	957	1,471	2,428	1,138	1,679	2,817	1,429	2,257	3,686	1,869	2,964	4,833
80+	653	1,230	1,882	1,040	2,376	3,416	1,429	2,715	4,144	1,846	3,430	5,276	2,354	4,470	6,825
Total	48,242	53,243	101,484	54,684	60,572	115,256	59,698	67,067	126,765	65,234	74,335	139,569	71,340	82,046	153,386
Median age	37.3	39.8	38.6	36.8	40.4	38.8	36.7	40.4	38.7	36.6	40.2	38.5	37.4	40.3	38.9
Mean age	35.9	38.3	37.2	36.8	39.6	38.3	37.6	40.1	39.0	38.1	40.7	39.5	38.4	41.2	39.9
Under 15	10,731	10,330	21,061	10,775	10,655	21,430	11,314	11,521	22,836	12,656	13,046	25,702	14,301	14,674	28,975
15-49	23,660	25,801	49,460	26,826	28,344	55,171	28,843	30,766	59,609	30,941	33,367	64,308	33,797	36,457	70,254
50-59	7,079	8,225	15,304	8,323	9,556	17,880	8,575	9,873	18,447	8,336	9,639	17,975	8,285	9,796	18,081
60+	6,772	8,887	15,660	8,759	12,017	20,776	10,966	14,907	25,873	13,301	18,283	31,584	14,957	21,119	36,076
75+	1,463	2,393	3,857	1,997	3,847	5,845	2,567	4,394	6,962	3,275	5,687	8,962	4,223	7,435	11,658
Dependancy ratio	45.8	44.6	45.2	42.9	45.8	44.4	45.2	48.6	47.0	50.0	54.9	52.6	54.9	60.7	57.9
% under 15	22.2	19.4	20.8	19.7	17.6	18.6	19.0	17.2	18.0	19.4	17.5	18.4	20.0	17.9	18.9
65+ per 100 pers.	9.2	11.5	10.4	10.3	13.8	12.2	12.2	15.5	13.9	13.9	17.9	16.0	15.4	19.9	17.8
<15 per 100 pers 65+	242.5	169.3	200.1	190.9	127.3	152.9	155.7	110.6	129.1	139.3	98.0	114.8	130.3	90.0	106.2

Source: CBS-Aruba, 2010

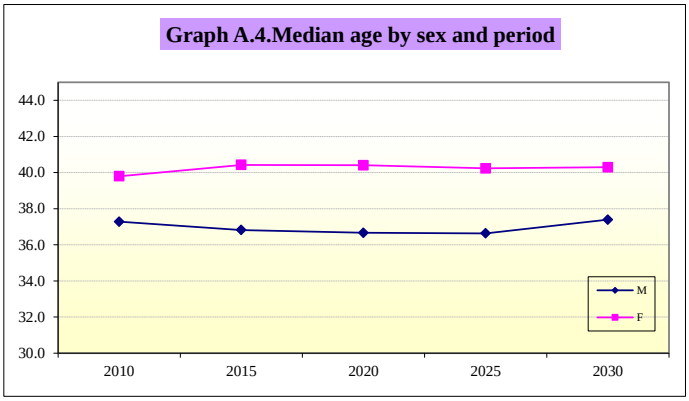
Graph A.1. Population Pyramids 2010-2030.



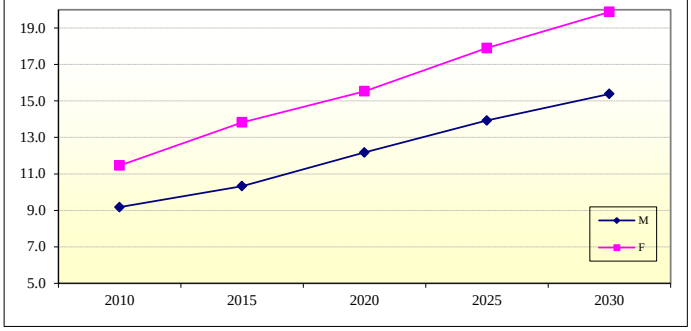
Graph A.3. Dependancy ratios by sex



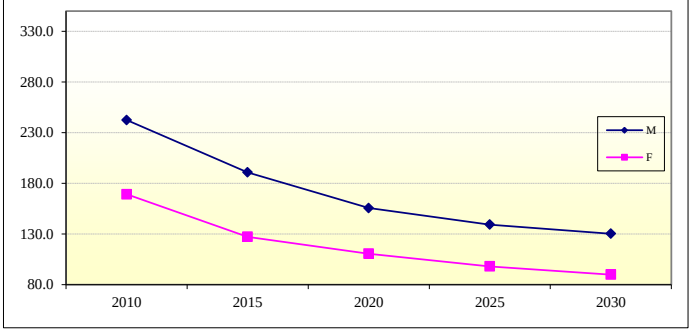
Graph A.4.Median age by sex and period



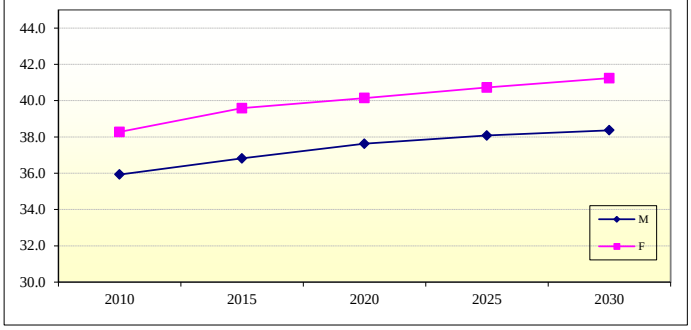
Graph A.5. Percentage of persons 65+ by sex



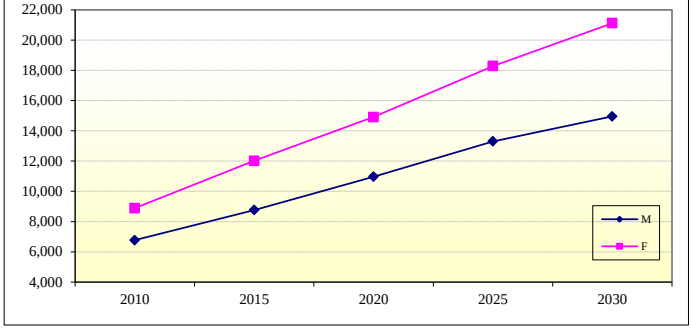
Graph A.6.Persons <15y. old per 100 persons 65+ by sex



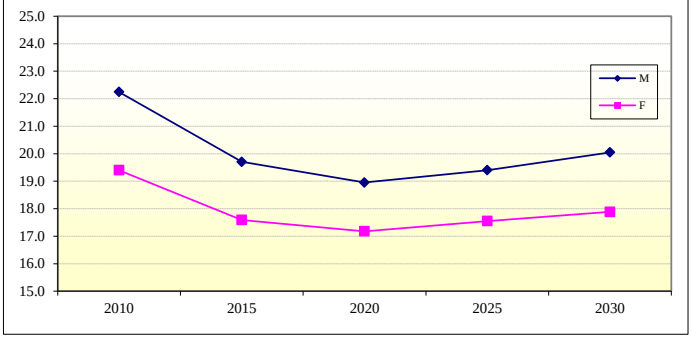
Graph A.7. Mean age by sex and period



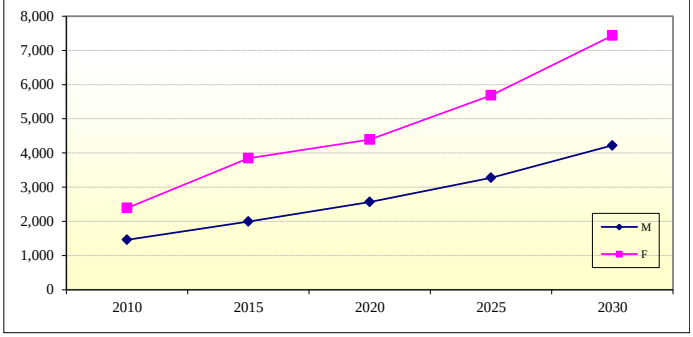
Graph A.8. Number of persons 60+ by sex

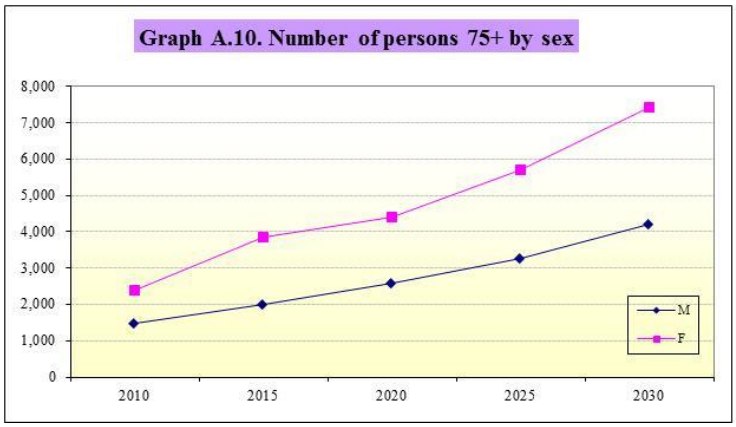


Graph A.9. Percentage of persons -15y. by sex



Graph A.10. Number of persons 75+ by sex





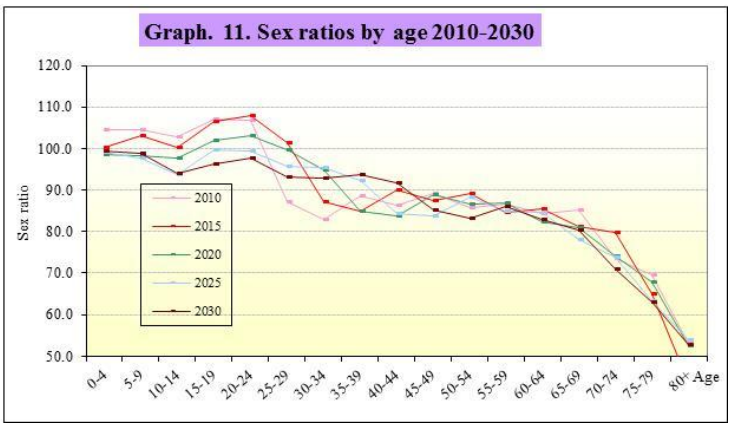


Table A. 2. Sex ratios per 100 by age, 2010 - 2030

Age	2010	2015	2020	2025	2030
0-4	104.6	100.1	98.6	99.1	99.4
5-9	104.5	103.1	98.3	97.8	98.8
10-14	102.7	100.3	97.6	93.7	94.0
15-19	107.1	106.4	101.8	99.6	96.2
20-24	106.8	107.8	103.1	99.3	97.7
25-29	87.3	101.4	99.7	95.7	93.0
30-34	82.9	87.1	94.8	95.4	92.8
35-39	88.6	84.8	84.9	92.3	93.7
40-44	86.3	89.9	83.8	84.4	91.8
45-49	89.0	87.5	89.0	83.7	85.1
50-54	85.7	89.3	86.7	88.2	83.3
55-59	86.5	84.7	87.0	84.8	85.9
60-64	84.2	85.4	82.3	84.7	82.8
65-69	85.2	81.2	80.9	78.1	80.3
70-74	73.5	79.8	74.2	73.9	71.1
75-79	69.7	65.0	67.8	63.3	63.0
80+	53.1	43.8	52.6	53.8	52.7
Total	90.6	90.3	89.0	87.8	87.0

Sex ratio = number of males per 100 females

Source: CBS-Aruba, 2010

Table 3. Growth of Population 2010-2030

	2010 -2015			2015-2020			2020-2025			2025-2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
% growth 5 y.	13.4	13.8	13.6	9.2	10.7	10.0	10.7	12.9	11.8	10.8	12.3	11.6
% yearly growth	2.5	2.6	2.5	1.8	2.0	1.9	2.0	2.4	2.2	2.0	2.3	2.2
Doubling time	27.6	26.9	27.2	39.5	34.0	36.4	34.2	28.6	31.0	33.8	29.8	31.6

Source: CBS-Aruba, 2010

Table 4. Total relative age distribution of population by age and sex, 2010 - 2030

Age	2010			2015			2020			2025			2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
0-4	6.90	5.98	6.42	6.52	5.88	6.19	6.94	6.26	6.58	7.19	6.36	6.75	7.07	6.18	6.60
5-9	7.46	6.47	6.94	6.36	5.57	5.95	6.08	5.51	5.78	6.51	5.84	6.15	6.78	5.97	6.35
10-14	7.88	6.95	7.39	6.82	6.14	6.46	5.93	5.41	5.65	5.71	5.34	5.51	6.19	5.73	5.94
15-19	7.83	6.62	7.20	7.39	6.27	6.80	6.44	5.63	6.01	5.67	4.99	5.31	5.47	4.95	5.19
20-24	5.66	4.80	5.21	8.15	6.83	7.46	7.34	6.34	6.81	6.48	5.73	6.08	5.75	5.12	5.41
25-29	5.29	5.50	5.40	6.52	5.80	6.14	8.45	7.54	7.97	7.64	7.00	7.30	6.78	6.34	6.55
30-34	6.02	6.58	6.31	5.93	6.14	6.04	6.79	6.38	6.57	8.56	7.87	8.19	7.85	7.36	7.59
35-39	7.28	7.44	7.36	6.34	6.75	6.56	6.09	6.38	6.24	6.89	6.55	6.71	8.58	7.96	8.25
40-44	7.94	8.33	8.14	7.19	7.22	7.20	6.29	6.68	6.50	6.08	6.32	6.21	6.92	6.56	6.73
45-49	9.03	9.19	9.11	7.54	7.78	7.67	6.92	6.92	6.92	6.11	6.41	6.27	6.02	6.15	6.09
50-54	8.04	8.51	8.29	8.19	8.28	8.24	7.02	7.21	7.12	6.46	6.43	6.44	5.79	6.04	5.92
55-59	6.63	6.94	6.79	7.03	7.50	7.28	7.35	7.51	7.44	6.32	6.54	6.43	5.83	5.90	5.86
60-64	4.86	5.23	5.06	5.69	6.02	5.86	6.20	6.70	6.46	6.46	6.70	6.59	5.58	5.86	5.73
65-69	3.57	3.79	3.68	3.97	4.41	4.20	4.77	5.25	5.02	5.18	5.82	5.52	5.42	5.86	5.66
70-74	2.58	3.17	2.89	2.71	3.06	2.89	3.11	3.73	3.44	3.73	4.43	4.10	4.05	4.95	4.53
75-79	1.68	2.19	1.95	1.75	2.43	2.11	1.91	2.50	2.22	2.19	3.04	2.64	2.62	3.61	3.15
80+	1.35	2.31	1.85	1.90	3.92	2.96	2.39	4.05	3.27	2.83	4.61	3.78	3.30	5.45	4.45
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: CBS-Aruba, 2010

Graph A.12. Yearly Growth of population, 2010-2030

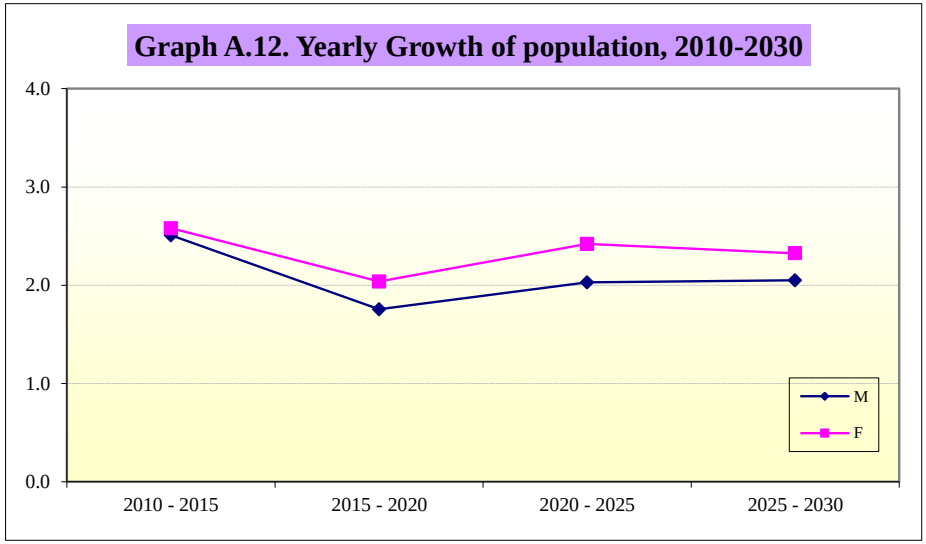


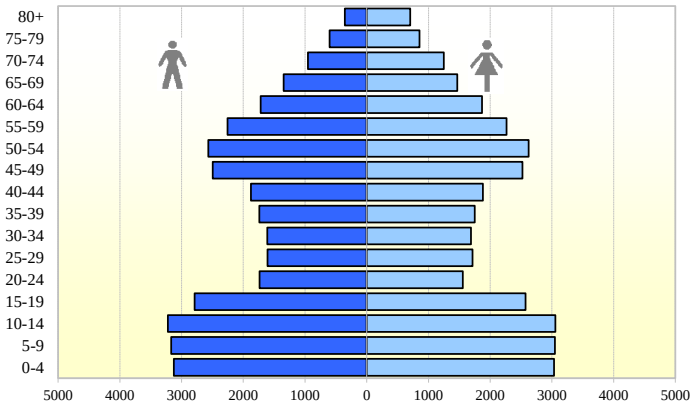
Table A.5. . Aruban born population by age and sex, 2010-2030.

Age	2010			2015			2020			2025			2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
0-4	3,126	3,034	6,159	2,954	2,933	5,887	3,646	3,583	7,229	4,163	4,082	8,245	4,396	4,331	8,727
5-9	3,168	3,048	6,216	3,012	2,911	5,922	2,846	2,769	5,615	3,544	3,414	6,957	4,023	3,880	7,903
10-14	3,221	3,055	6,276	3,101	2,984	6,085	2,948	2,843	5,791	2,785	2,705	5,490	3,495	3,369	6,864
15-19	2,790	2,573	5,363	3,049	2,823	5,872	2,914	2,731	5,646	2,769	2,599	5,368	2,521	2,404	4,925
20-24	1,735	1,558	3,292	2,526	2,320	4,846	2,669	2,450	5,120	2,514	2,338	4,852	2,162	2,064	4,226
25-29	1,608	1,712	3,321	1,598	1,491	3,089	2,383	2,260	4,643	2,465	2,362	4,827	2,081	2,066	4,147
30-34	1,612	1,687	3,299	1,660	1,802	3,462	1,652	1,588	3,240	2,429	2,344	4,773	2,405	2,355	4,760
35-39	1,740	1,749	3,489	1,633	1,684	3,317	1,679	1,803	3,482	1,671	1,590	3,261	2,395	2,331	4,726
40-44	1,877	1,882	3,759	1,711	1,711	3,422	1,605	1,653	3,259	1,651	1,772	3,423	1,634	1,570	3,204
45-49	2,495	2,523	5,018	1,831	1,845	3,676	1,672	1,681	3,354	1,570	1,626	3,195	1,613	1,746	3,359
50-54	2,566	2,624	5,190	2,424	2,472	4,896	1,777	1,806	3,584	1,625	1,650	3,275	1,512	1,611	3,122
55-59	2,256	2,266	4,522	2,467	2,561	5,028	2,331	2,441	4,772	1,709	1,783	3,492	1,540	1,639	3,179
60-64	1,719	1,869	3,588	2,133	2,185	4,318	2,335	2,510	4,845	2,208	2,393	4,601	1,612	1,750	3,362
65-69	1,348	1,467	2,814	1,555	1,769	3,324	1,929	2,106	4,035	2,113	2,419	4,532	2,002	2,327	4,329
70-74	952	1,249	2,201	1,146	1,349	2,495	1,322	1,677	2,999	1,640	1,997	3,636	1,795	2,312	4,107
75-79	603	856	1,459	736	1,086	1,821	885	1,238	2,123	1,021	1,539	2,560	1,262	1,838	3,100
80+	354	706	1,060	673	1,512	2,185	1,003	2,134	3,137	1,352	2,757	4,108	1,703	3,524	5,227
Total	33,169	33,858	67,026	34,209	35,437	69,646	35,596	37,276	72,872	37,227	39,369	76,596	38,149	41,116	79,265
Median age	32.9	35.7	34.4	32.6	36.4	34.5	31.2	36.1	33.7	30.8	34.7	32.7	30.8	35.2	33.0
Mean age	34.0	35.9	35.0	35.1	37.6	36.3	35.4	38.3	36.9	35.0	38.5	36.8	34.6	38.6	36.7
Under 15	9,515	9,137	18,652	9,067	8,828	17,895	9,439	9,196	18,635	10,491	10,200	20,692	11,914	11,580	23,494
15-49	13,857	13,684	27,541	14,008	13,676	27,683	14,574	14,168	28,742	15,068	14,631	29,700	14,810	14,535	29,345
50-59	4,822	4,890	9,712	4,892	5,033	9,924	4,108	4,247	8,356	3,334	3,433	6,767	3,051	3,250	6,302
60+	4,975	6,147	11,122	6,242	7,901	14,143	7,474	9,665	17,139	8,333	11,104	19,437	8,373	11,751	20,124
75+	957	1,562	2,519	1,409	2,597	4,006	1,888	3,372	5,260	2,373	4,295	6,668	2,965	5,362	8,327
Dependancy ratio	62.6	65.6	64.1	62.6	69.6	66.1	69.4	78.1	73.7	80.6	92.4	86.5	95.9	110.5	103.2
% under 15	28.7	27.0	27.8	26.5	24.9	25.7	26.5	24.7	25.6	28.2	25.9	27.0	31.2	28.2	29.6
65+ per 100 pers.	9.8	12.6	11.2	12.0	16.1	14.1	14.4	19.2	16.9	16.5	22.1	19.4	17.7	24.3	21.1
<15 per 100 pers 65+	292.1	213.6	247.6	220.7	154.4	182.1	183.7	128.5	151.6	171.3	117.1	139.5	176.2	115.8	140.2

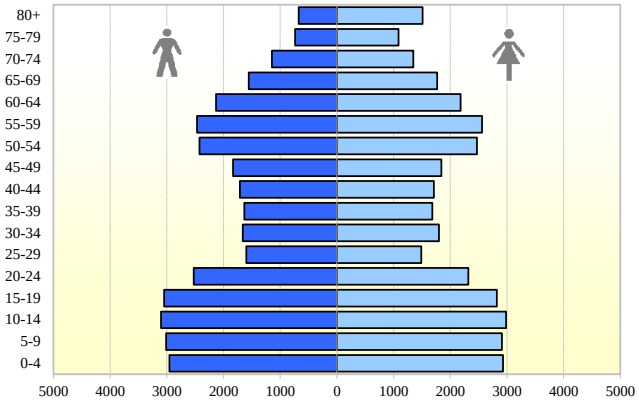
Source: CBS-Aruba, 2010

Graph A.13. Population pyramids of Aruban born population, 2010-2030.

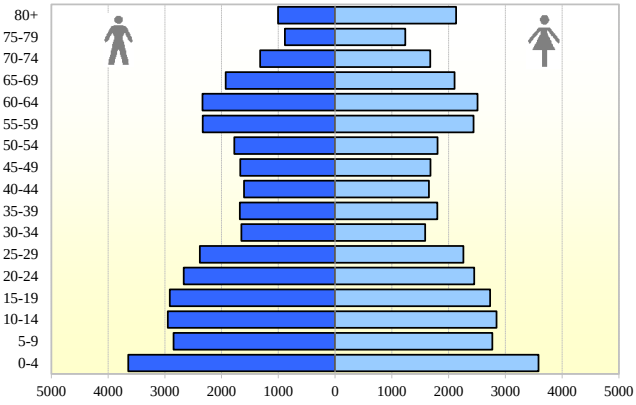
Aruban Population by age and sex, 2010



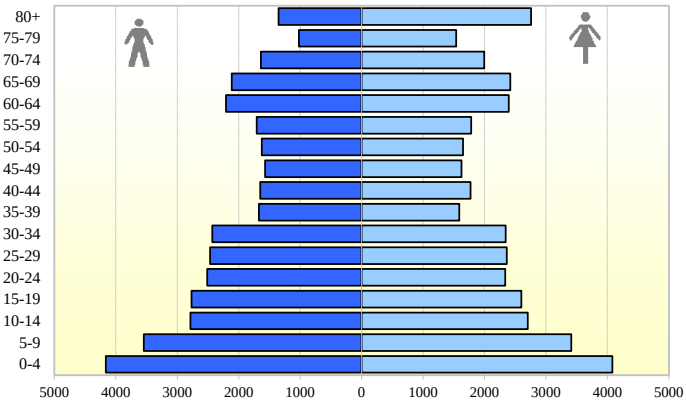
Aruban Population by age and sex, 2015



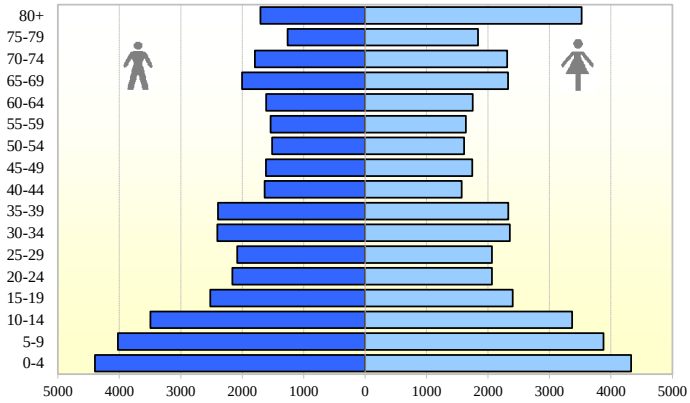
Aruban Population by age and sex, 2020



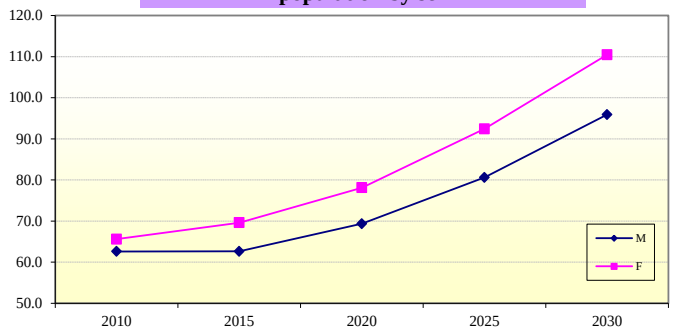
Aruban Population by age and sex, 2025



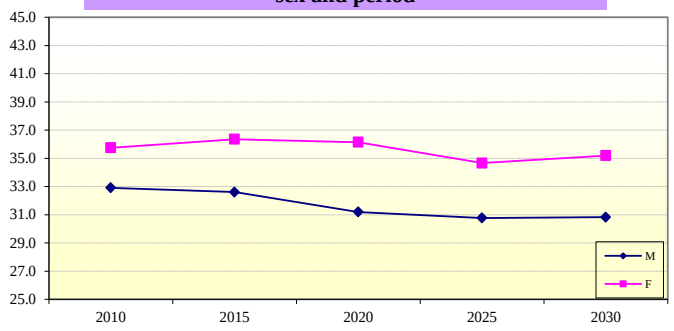
Aruban Population by age and sex, 2030



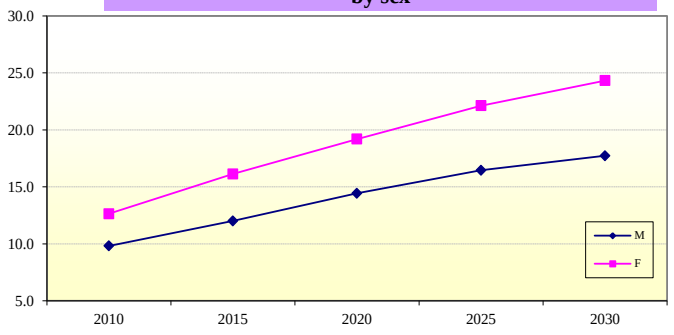
Graph A.14. Dependancy ratios Aruban born population by sex



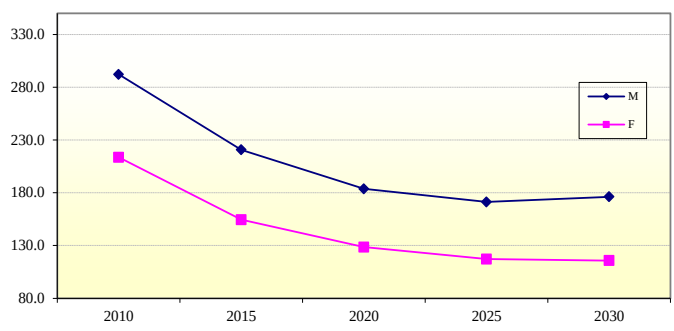
Graph A. 15. Median age Aruban born population by sex and period



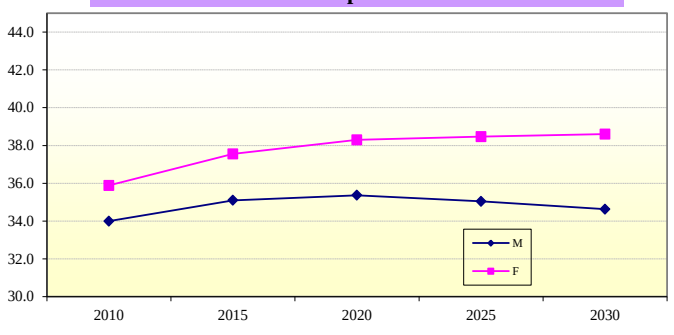
Graph A.16. Percentage of Aruban born population 65+ by sex



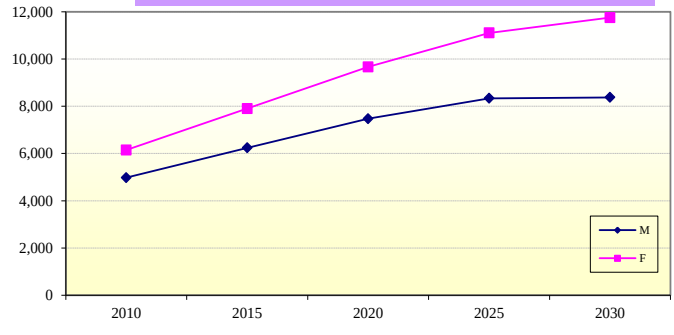
Graph A.17. Aruban born population <15y. old per 100 persons 65+ by sex



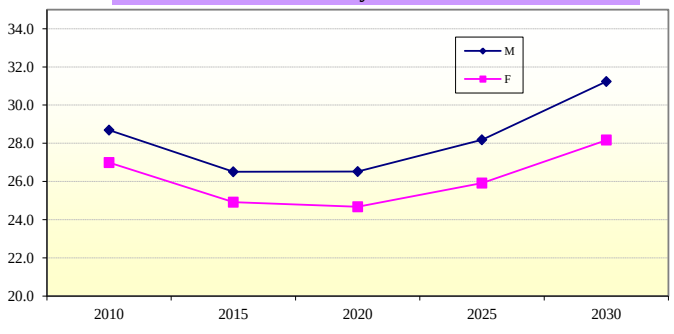
Graph A.18. Mean age Aruban born population by sex and period



Graph A.19. Number of Aruban born persons 60+ by sex



Graph A.20. Percentage of Aruban born persons -15y. by sex



Graph A.21.Number of Aruban born persons 75+ y. by sex

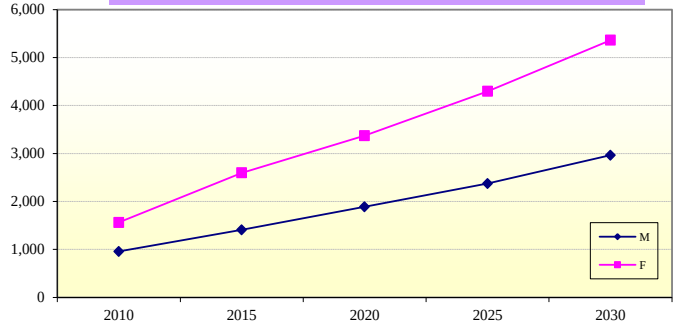


Table 6. Relative distribution Aruban born population by age and sex, 2010-2030.

Age	2010			2015			2020			2025			2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
0-4	9.4	9.0	9.2	8.6	8.3	8.5	10.2	9.6	9.9	11.2	10.4	10.8	11.5	10.5	11.0
5-9	9.6	9.0	9.3	8.8	8.2	8.5	8.0	7.4	7.7	9.5	8.7	9.1	10.5	9.4	10.0
10-14	9.7	9.0	9.4	9.1	8.4	8.7	8.3	7.6	7.9	7.5	6.9	7.2	9.2	8.2	8.7
15-19	8.4	7.6	8.0	8.9	8.0	8.4	8.2	7.3	7.7	7.4	6.6	7.0	6.6	5.8	6.2
20-24	5.2	4.6	4.9	7.4	6.5	7.0	7.5	6.6	7.0	6.8	5.9	6.3	5.7	5.0	5.3
25-29	4.8	5.1	5.0	4.7	4.2	4.4	6.7	6.1	6.4	6.6	6.0	6.3	5.5	5.0	5.2
30-34	4.9	5.0	4.9	4.9	5.1	5.0	4.6	4.3	4.4	6.5	6.0	6.2	6.3	5.7	6.0
35-39	5.2	5.2	5.2	4.8	4.8	4.8	4.7	4.8	4.8	4.5	4.0	4.3	6.3	5.7	6.0
40-44	5.7	5.6	5.6	5.0	4.8	4.9	4.5	4.4	4.5	4.4	4.5	4.5	4.3	3.8	4.0
45-49	7.5	7.5	7.5	5.4	5.2	5.3	4.7	4.5	4.6	4.2	4.1	4.2	4.2	4.2	4.2
50-54	7.7	7.7	7.7	7.1	7.0	7.0	5.0	4.8	4.9	4.4	4.2	4.3	4.0	3.9	3.9
55-59	6.8	6.7	6.7	7.2	7.2	7.2	6.5	6.5	6.5	4.6	4.5	4.6	4.0	4.0	4.0
60-64	5.2	5.5	5.4	6.2	6.2	6.2	6.6	6.7	6.6	5.9	6.1	6.0	4.2	4.3	4.2
65-69	4.1	4.3	4.2	4.5	5.0	4.8	5.4	5.6	5.5	5.7	6.1	5.9	5.2	5.7	5.5
70-74	2.9	3.7	3.3	3.3	3.8	3.6	3.7	4.5	4.1	4.4	5.1	4.7	4.7	5.6	5.2
75-79	1.8	2.5	2.2	2.2	3.1	2.6	2.5	3.3	2.9	2.7	3.9	3.3	3.3	4.5	3.9
80+	1.1	2.1	1.6	2.0	4.3	3.1	2.8	5.7	4.3	3.6	7.0	5.4	4.5	8.6	6.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

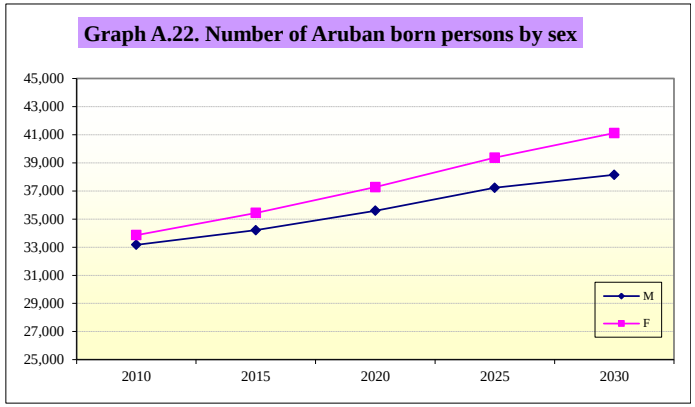
Source: CBS-Aruba, 2010

Table 7. Growth of Aruban Population 2010-2030

	2010 -2015			2015-2020			2020-2025			2025-2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
% growth 5 y.	3.1	4.7	3.9	4.1	5.2	4.6	4.6	5.6	5.1	2.5	4.4	3.5
% yearly growth	0.6	0.9	0.8	0.8	1.0	0.9	0.9	1.1	1.0	0.5	0.9	0.7
Doubling time	112.2	76.0	90.4	87.2	68.5	76.5	77.3	63.4	69.5	141.7	79.8	101.2

Source: CBS-Aruba, 2010

Graph A.22. Number of Aruban born persons by sex



Graph A.23. Yearly Growth of Aruban population by sex, 2010-2030

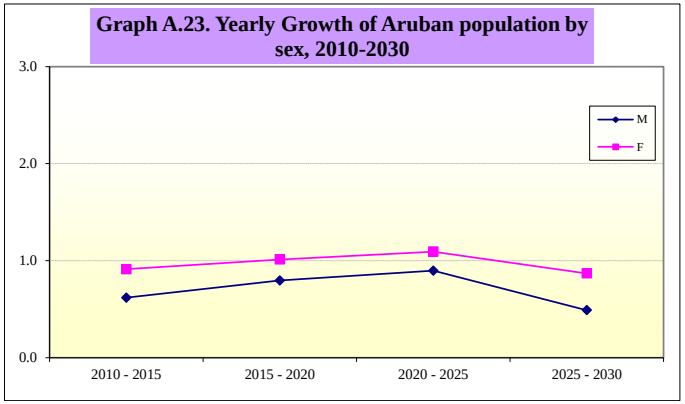


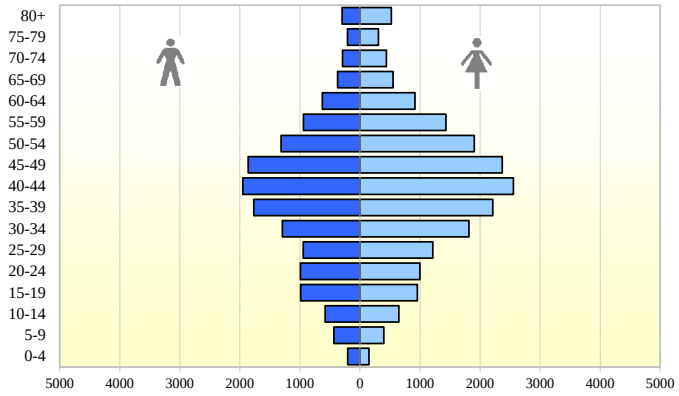
Table 8. Foreign born population by age and sex, 2010-2030.

Age	2010			2015			2020			2025			2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
0-4	203	150	354	614	630	1,244	497	617	1,113	525	649	1,174	647	743	1,390
5-9	432	396	828	467	463	930	787	924	1,711	703	930	1,633	817	1,021	1,838
10-14	581	646	1,227	628	734	1,362	591	784	1,376	938	1,266	2,204	922	1,331	2,253
15-19	987	955	1,942	992	973	1,965	928	1,043	1,971	927	1,113	2,040	1,383	1,655	3,038
20-24	993	998	1,991	1,932	1,817	3,749	1,715	1,802	3,517	1,716	1,920	3,636	1,940	2,135	4,075
25-29	946	1,214	2,160	1,968	2,025	3,992	2,661	2,800	5,460	2,516	2,844	5,360	2,757	3,136	5,893
30-34	1,292	1,814	3,106	1,581	1,920	3,501	2,404	2,691	5,095	3,155	3,507	6,662	3,197	3,681	6,878
35-39	1,770	2,213	3,983	1,833	2,405	4,238	1,956	2,478	4,434	2,826	3,281	6,107	3,727	4,204	7,931
40-44	1,953	2,554	4,507	2,220	2,662	4,881	2,149	2,827	4,976	2,314	2,928	5,242	3,304	3,810	7,114
45-49	1,861	2,369	4,230	2,293	2,868	5,161	2,457	2,958	5,415	2,419	3,142	5,560	2,680	3,301	5,981
50-54	1,314	1,905	3,219	2,053	2,544	4,597	2,411	3,027	5,438	2,591	3,129	5,719	2,616	3,347	5,963
55-59	943	1,430	2,373	1,379	1,979	3,358	2,055	2,598	4,653	2,411	3,078	5,489	2,617	3,198	5,816
60-64	628	917	1,545	980	1,459	2,439	1,363	1,983	3,347	2,009	2,584	4,594	2,372	3,061	5,432
65-69	372	552	924	614	902	1,516	916	1,413	2,328	1,266	1,910	3,176	1,862	2,484	4,346
70-74	290	441	731	334	505	839	533	825	1,358	791	1,293	2,084	1,093	1,750	2,842
75-79	208	307	515	221	385	607	254	441	694	408	719	1,126	607	1,126	1,733
80+	299	524	823	367	864	1,232	426	581	1,007	494	673	1,168	651	946	1,597
Total	15,073	19,385	34,458	20,475	25,135	45,610	24,102	29,791	53,894	28,007	34,966	62,973	33,191	40,929	74,120
Median age	41	43	42	40.5	43.0	43.6	41.2	43.1	42.3	41.5	43.4	42.5	41.8	43.4	42.6
Mean age	40.2	42.4	41.5	39.7	42.4	41.2	41.0	42.4	41.8	42.1	43.3	42.7	42.7	43.9	43.3
Under 15	1,216	1,193	2,409	1,708	1,827	3,535	1,875	2,325	4,200	2,165	2,845	5,010	2,386	3,095	5,481
15-49	9,803	12,117	21,919	12,818	14,669	27,487	14,269	16,598	30,867	15,872	18,736	34,608	18,987	21,921	40,909
50-59	2,257	3,335	5,592	3,432	4,524	7,955	4,466	5,625	10,092	5,002	6,206	11,208	5,234	6,545	11,779
60+	1,797	2,741	4,538	2,516	4,116	6,633	3,492	5,243	8,735	4,968	7,179	12,147	6,584	9,367	15,951
75+	507	831	1,338	589	1,250	1,839	680	1,022	1,702	902	1,392	2,294	1,258	2,073	3,331
Dependancy ratio	18.8	18.4	18.6	18.8	21.7	20.4	19.9	23.1	21.6	22.4	27.0	24.9	24.8	29.8	27.5
% under 15	8.1	6.2	7.0	8.3	7.3	7.8	7.8	7.8	7.8	7.7	8.1	8.0	7.2	7.6	7.4
65+ per 100 pers.	7.8	9.4	8.7	7.5	10.6	9.2	8.8	10.9	10.0	10.6	13.1	12.0	12.7	15.4	14.2
<15 per 100 pers 65+	104.1	65.4	80.5	111.2	68.8	84.3	88.1	71.3	78.0	73.2	61.9	66.3	56.6	49.1	52.1

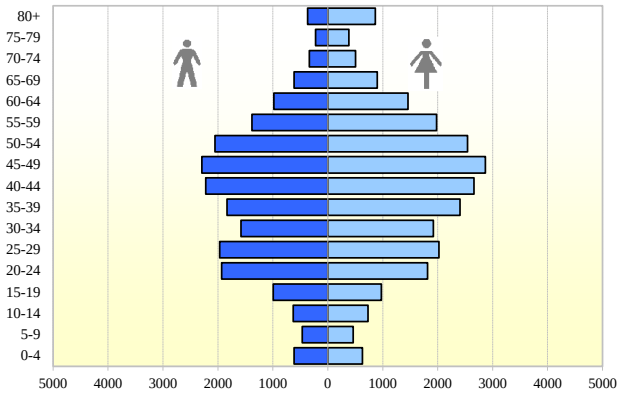
Source: CBS-Aruba, 2010

Graph A.24. Population pyramids of foreign born population, 2010-2030.

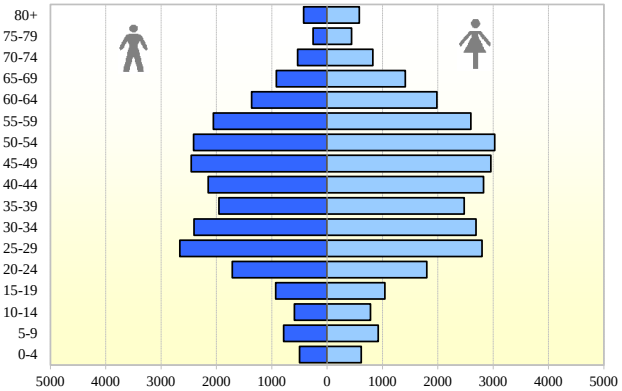
Aruban Population by age and sex, 2010



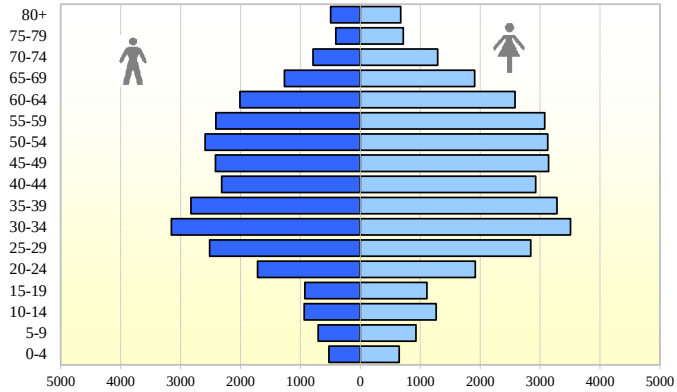
Foreign Population by age and sex, 2015



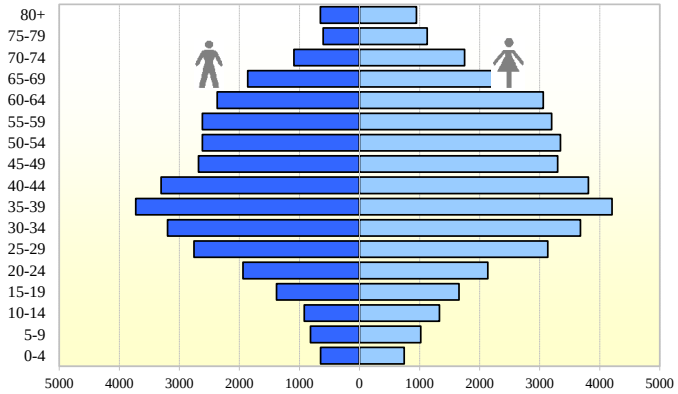
Foreign Population by age and sex, 2020



Foreign Population by age and sex, 2025

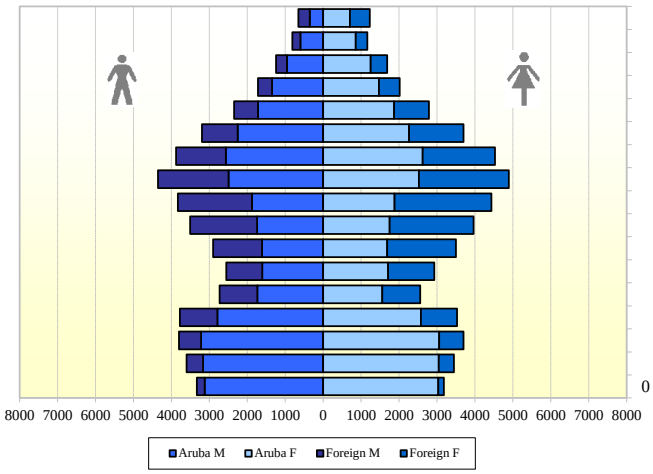


Foreign Population by age and sex, 2030

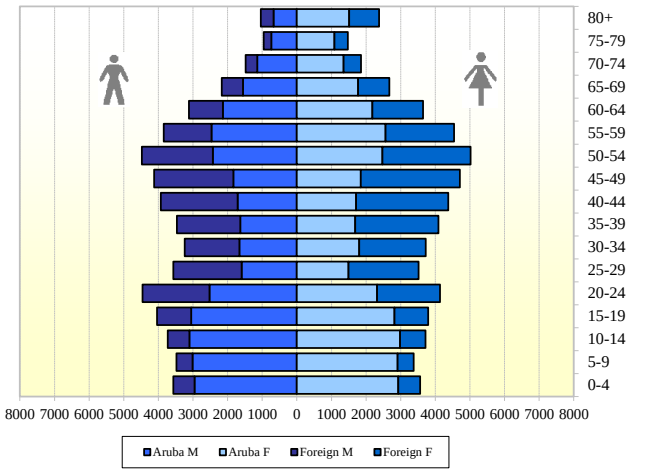


Graph A.25. Population pyramids of Aruban born and foreign born population, 2010 – 2030.

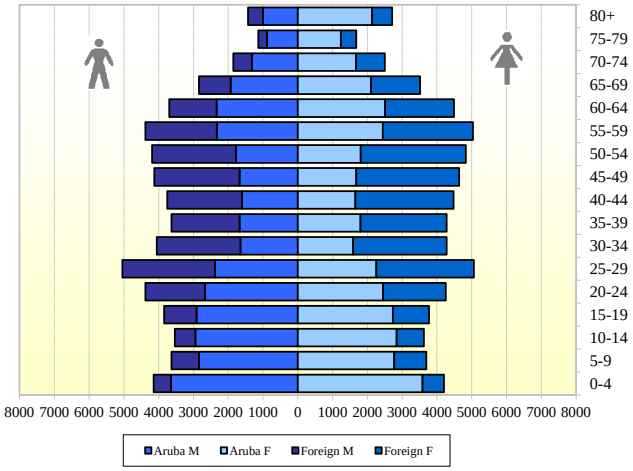
Aruban and foreign born population by age and sex, 2010



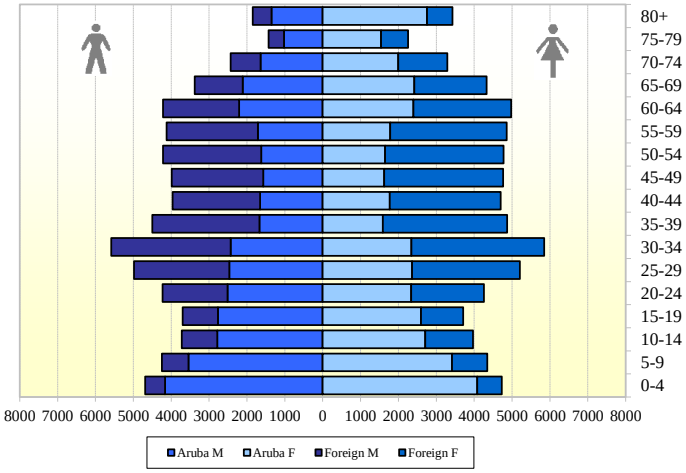
Aruban and foreign born population by age and sex, 2015



Aruban and foreign born population by age and sex, 2020



Aruban and foreign born population by age and sex, 2025



Aruban and foreign born population by age and sex, 2030

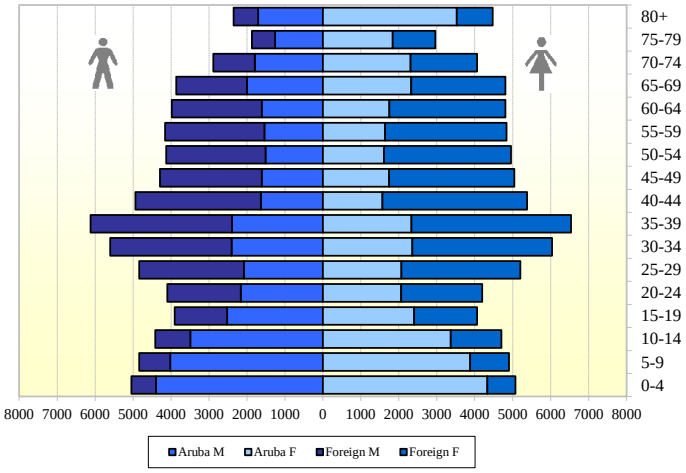
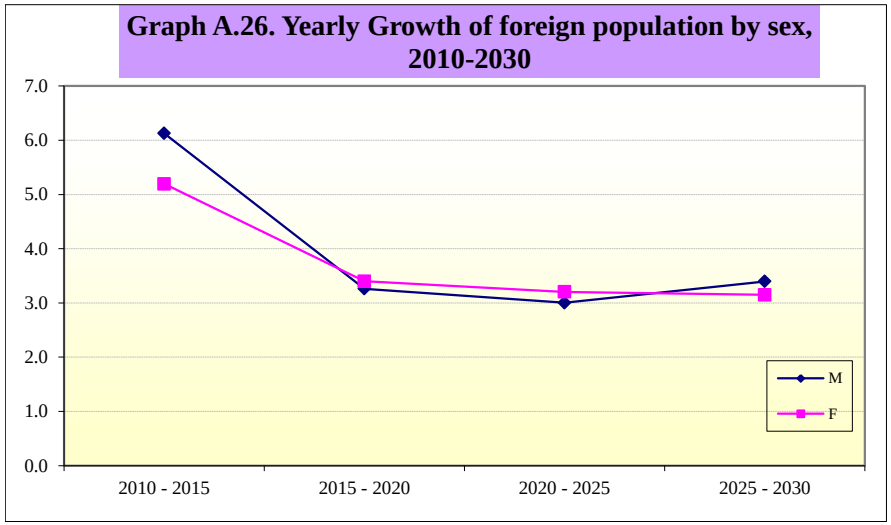


Table A.9. Growth of Foreign Population 2010-2030

	2010 -2015			2015-2020			2020-2025			2025-2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
% growth 5 y.	35.8	29.7	32.4	17.7	18.5	18.2	16.2	17.4	16.8	18.5	17.1	17.7
% yearly growth	6.1	5.2	5.6	3.3	3.4	3.3	3.0	3.2	3.1	3.4	3.1	3.3
Doubling time	11.3	13.3	12.4	21.3	20.4	20.8	23.1	21.6	22.3	20.4	22.0	21.3

Source: CBS-Aruba, 2010

Graph A.26. Yearly Growth of foreign population by sex, 2010-2030



Graph A.27. Birth rates and death rates 2010-2030

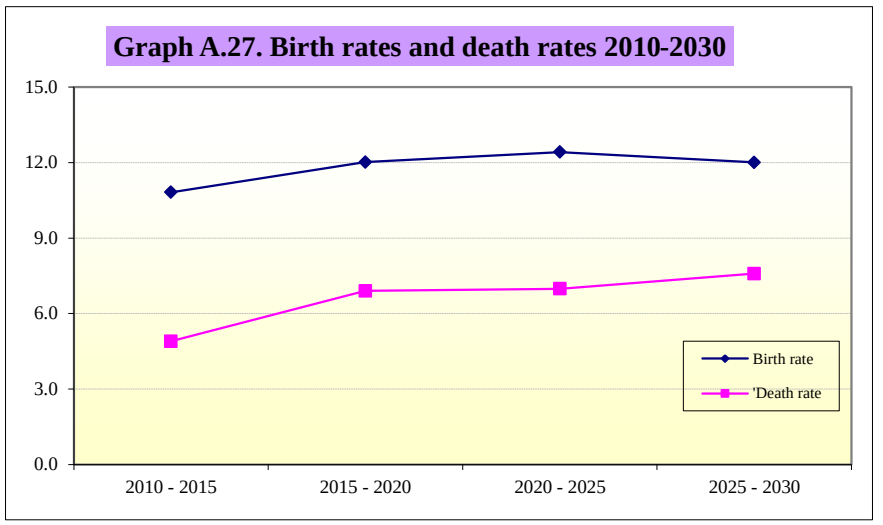


Table 10. Births and deaths in the population 2010-2030

	10 - 15	15 - 20	20 - 25	25 -30
Total Births	6,238	7,620	8,668	9,209
Total Deaths	2,825	4,375	4,873	5,821
Birth rate (per 1000)	10.8	12.0	12.4	12.0
Death rate (per 1000)	4.9	6.9	7.0	7.6
Natural increase (per 1000)	5.9	5.1	5.4	4.4

Source: CBS-Aruba, 2010

B. Low Projection Scenario

The yearly growth rates of the real GDP in the low scenario, in the four consecutive 5 year periods were respectively set at 1.26, 1.19, 1.12 and 1.06 percent (see table 1 on page 8). Again, these growth rates were provided by the Department of Economic Affairs, Trade and Industry. These rates were taken somewhat lower than those in the mid-scenario. In addition to lower growth of GDP, it was assumed that labor productivity will increase by .5 percent per year in the first five year period and by 1 percent in the three next consecutive five year periods. Unemployment would drop from a yearly rate of 7 percent during the period 2010 – 2015 to a level of 5 percent during the period 2015 – 2030. The somewhat faster drop in unemployment would reduce the need to import foreign workers, because vacancies on the labor market would be filled by the local unemployed, rather than by foreign laborers. Again, we did not let unemployment drop below 5 percent because even during the time Aruba's economy was booming, unemployment did not drop below five percent. As natural determinants of demographic change (mortality and fertility) did not change consistently during the last decades, we assume that during the next 20 years they will remain at their current level.

Although the assumptions used in the low scenario do not seem to be much different from those in the medium scenario, the results are quite different. First, if Aruba would follow the economic course outlined in the low scenario the population in 2030 would be 120,257 persons against 153,386 in the medium scenario. Second, as far less (younger) migrants would be needed to fill the gaps in the labor market on Aruba, the age structure would change considerably (see the population pyramids in graph B.1.). For instance, in the low scenario in 2030, 17.8 percent of the population would be below age 15 and 21.9 percent above age 65. In the medium scenario, these percentages were respectively 18.9 and 17.8. The dependency ratio in the low scenario would be significantly higher, 66.0, against 57.9 in the medium scenario. Third, the low scenario results in a much lower proportion of foreign born persons (37.4 percent) compared to the medium projection (48.3 percent).

The low scenario results in a population that would be more than 33,000 persons smaller than the population in the medium scenario. However, the population of persons above sixty would only be less than 2,000 bigger: 34,322 persons in the low scenario, against 36,076 in the medium scenario. Moreover, the very old population (75+) would be almost the same in both scenarios. The low scenario would only have about 200 less person of very old age than the medium scenario. The median age with the low scenario would also be significantly higher than in the medium scenario 42.1 years, against 38.9. More than 1 in four people in the population would be older than 60, according to the low scenario.

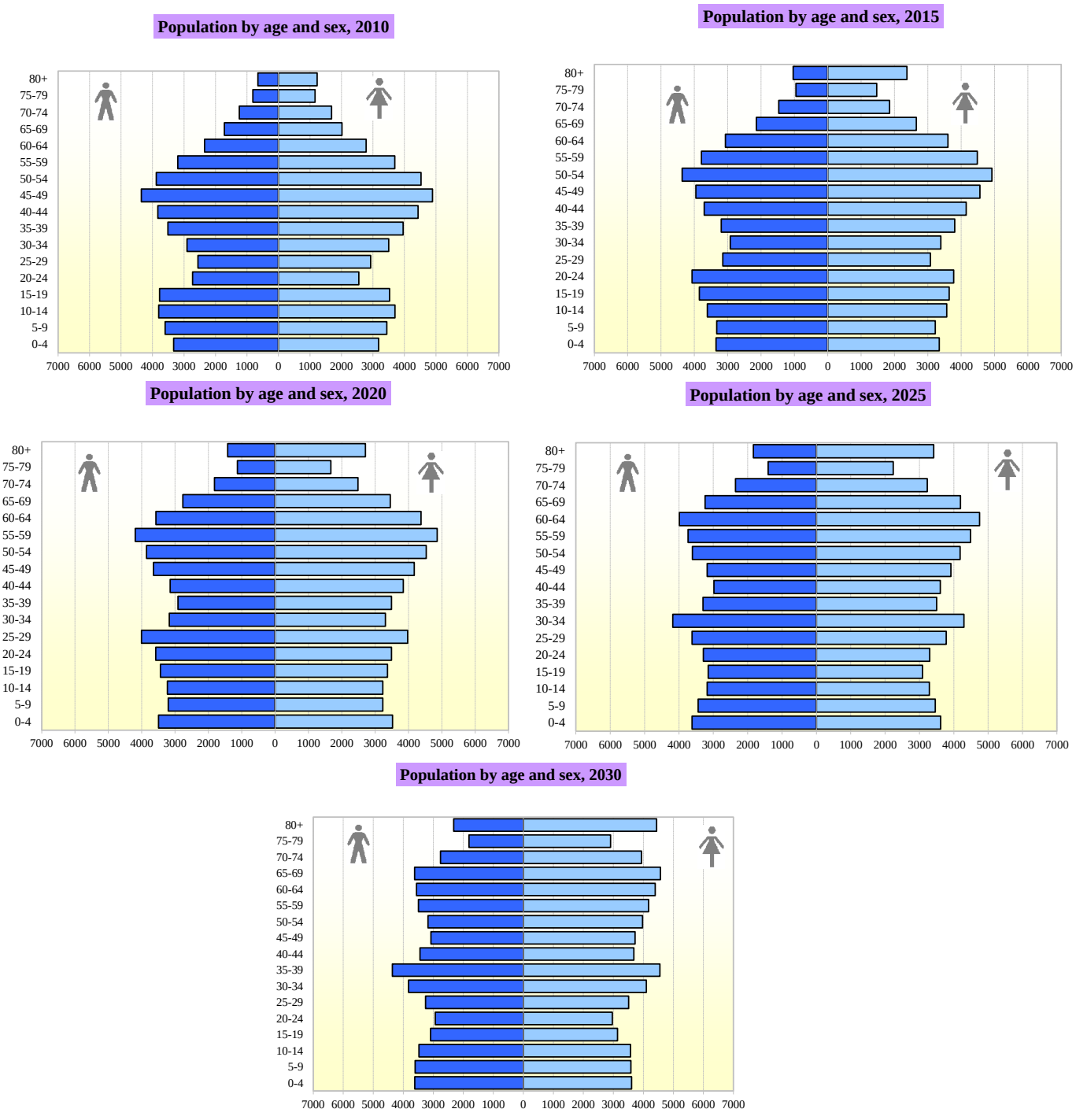
In the following pages we present the tables and graphs of the low scenario projection.

Table B.1. Total population by age and sex, 2010 - 2030

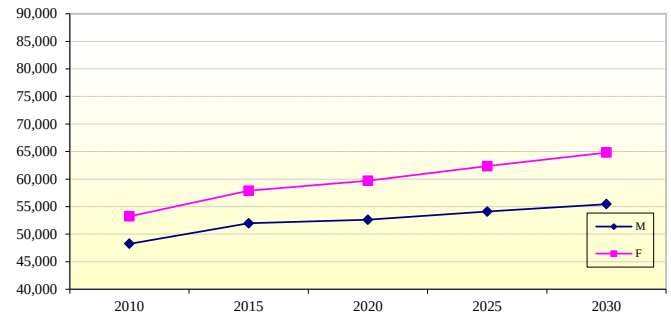
Age	2010			2015			2020			2025			2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
0-4	3,329	3,184	6,513	3,351	3,341	6,692	3,494	3,518	7,012	3,621	3,618	7,238	3,618	3,605	7,223
5-9	3,600	3,444	7,044	3,331	3,223	6,554	3,206	3,231	6,437	3,442	3,458	6,900	3,606	3,583	7,190
10-14	3,802	3,702	7,504	3,614	3,565	7,179	3,230	3,228	6,457	3,179	3,286	6,465	3,479	3,571	7,051
15-19	3,777	3,527	7,304	3,852	3,638	7,490	3,440	3,368	6,808	3,149	3,093	6,242	3,088	3,136	6,224
20-24	2,728	2,556	5,284	4,067	3,776	7,844	3,579	3,491	7,069	3,288	3,297	6,585	2,936	2,964	5,901
25-29	2,554	2,926	5,481	3,150	3,078	6,228	4,006	3,972	7,978	3,621	3,780	7,401	3,260	3,505	6,765
30-34	2,904	3,501	6,405	2,923	3,388	6,311	3,173	3,304	6,477	4,181	4,295	8,476	3,825	4,098	7,923
35-39	3,510	3,962	7,472	3,193	3,804	6,997	2,915	3,491	6,406	3,300	3,503	6,803	4,365	4,550	8,915
40-44	3,830	4,436	8,266	3,705	4,151	7,857	3,147	3,842	6,989	2,981	3,606	6,586	3,443	3,684	7,126
45-49	4,356	4,892	9,248	3,954	4,561	8,515	3,649	4,173	7,822	3,176	3,915	7,091	3,079	3,720	6,799
50-54	3,880	4,529	8,409	4,369	4,922	9,291	3,858	4,532	8,390	3,610	4,185	7,795	3,179	3,969	7,148
55-59	3,199	3,696	6,895	3,788	4,486	8,274	4,196	4,859	9,056	3,735	4,488	8,223	3,498	4,173	7,670
60-64	2,347	2,786	5,133	3,068	3,604	6,672	3,577	4,376	7,953	3,985	4,748	8,734	3,559	4,392	7,951
65-69	1,720	2,019	3,739	2,144	2,653	4,797	2,768	3,452	6,220	3,241	4,194	7,436	3,623	4,568	8,191
70-74	1,243	1,690	2,932	1,471	1,851	3,322	1,821	2,482	4,303	2,354	3,228	5,583	2,758	3,939	6,697
75-79	811	1,164	1,974	955	1,468	2,423	1,129	1,672	2,802	1,403	2,238	3,641	1,811	2,909	4,720
80+	653	1,230	1,882	1,038	2,372	3,410	1,422	2,706	4,128	1,832	3,416	5,247	2,323	4,441	6,763
Total	48,242	53,243	101,484	51,973	57,883	109,856	52,610	59,698	112,308	54,097	62,351	116,447	55,449	64,808	120,257
Median age	37.0	39.8	38.6	37.7	41.4	39.7	38.7	42.9	41.1	38.9	43.9	41.6	39.5	44.6	42.1
Mean age	35.9	38.3	37.2	37.2	40.1	38.7	38.7	41.5	40.2	39.6	42.8	41.3	40.3	43.9	42.3
Under 15	10,731	10,330	21,061	10,296	10,129	20,425	9,930	9,976	19,906	10,242	10,362	20,604	10,704	10,760	21,463
15-49	23,660	25,801	49,460	24,845	26,397	51,242	23,909	25,641	49,550	23,695	25,490	49,185	23,996	25,657	49,653
50-59	7,079	8,225	15,304	8,157	9,407	17,565	8,054	9,391	17,445	7,345	8,674	16,018	6,676	8,142	14,818
60+	6,772	8,887	15,660	8,675	11,949	20,624	10,717	14,689	25,406	12,815	17,825	30,640	14,073	20,249	34,322
75+	1,463	2,393	3,857	1,992	3,840	5,833	2,551	4,379	6,930	3,234	5,653	8,888	4,133	7,350	11,483
Dependancy ratio	45.8	44.6	45.2	44.1	46.9	45.5	48.0	51.5	49.8	54.5	60.2	57.5	62.0	69.7	66.0
% under 15	22.2	19.4	20.8	19.8	17.5	18.6	18.9	16.7	17.7	18.9	16.6	17.7	19.3	16.6	17.8
65+ per 100 pers.	9.2	11.5	10.4	10.8	14.4	12.7	13.6	17.3	15.5	16.3	21.0	18.8	19.0	24.5	21.9
<15 per 100 pers 65+	242.5	169.3	200.1	183.6	121.4	146.4	139.1	96.7	114.1	116.0	79.2	94.1	101.8	67.9	81.4

Source: CBS-Aruba, 2010

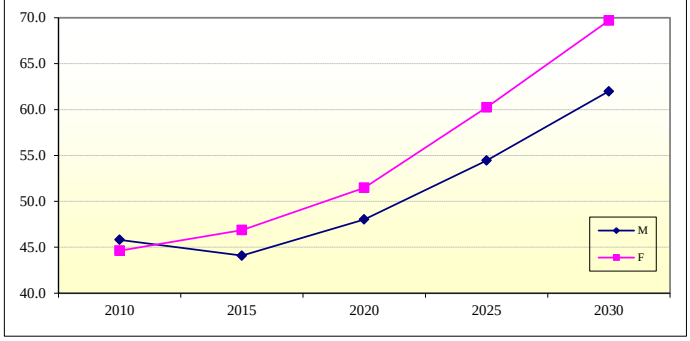
Graph B.1. Population Pyramids 2010-**2030.**



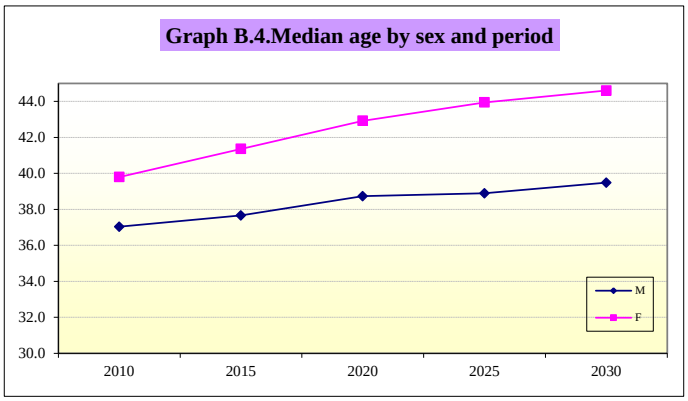
Graph B.2. Number of persons by sex



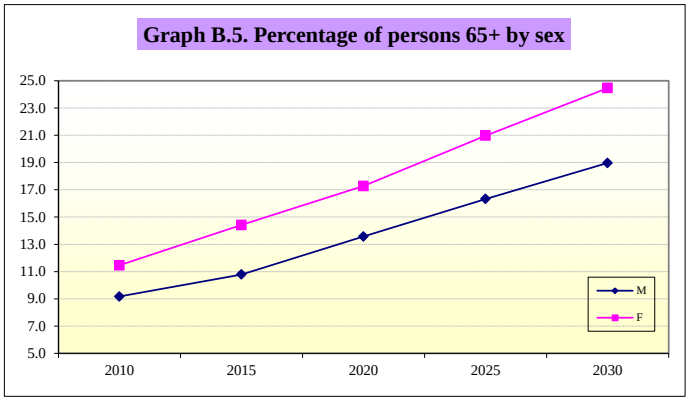
Graph B.3. Dependancy ratios by sex



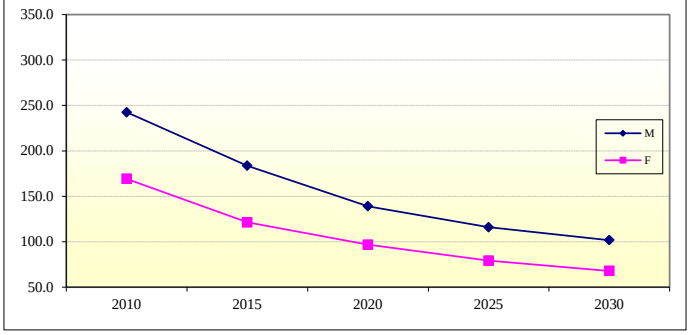
Graph B.4.Median age by sex and period



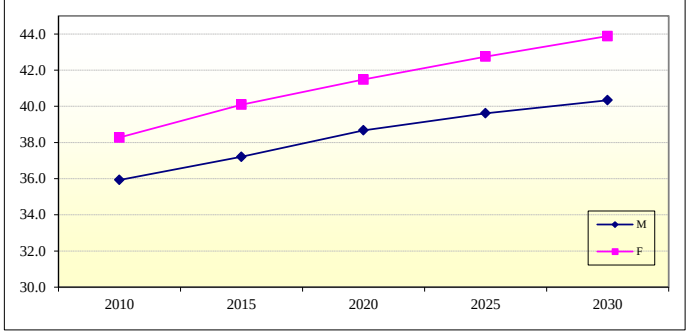
Graph B.5. Percentage of persons 65+ by sex



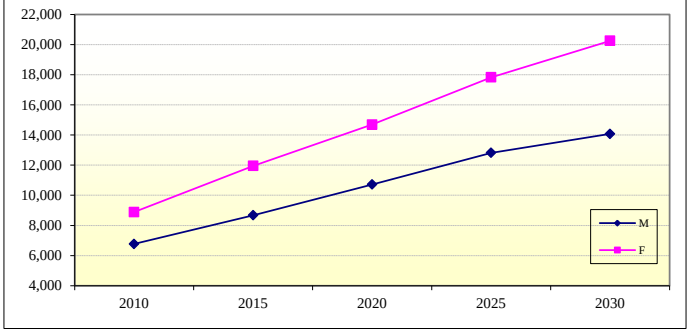
Graph B.6.Persons <15y. old per 100 persons 65+ by sex



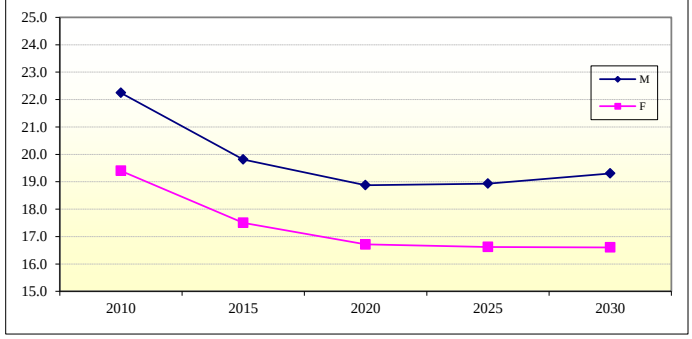
Graph B.7. Mean age by sex and period



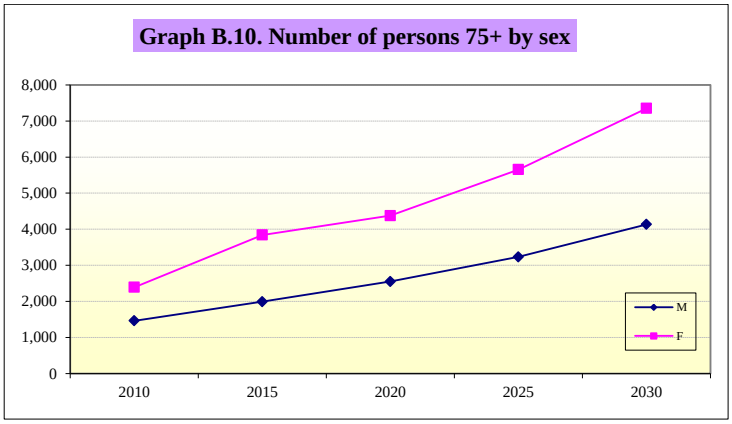
Graph B.8. Number of persons 60+ by sex



Graph B.9. Percentage of persons -15y. by sex



Graph B.10. Number of persons 75+ by sex



Graph.B.11. Sex ratios by age 2010-2030

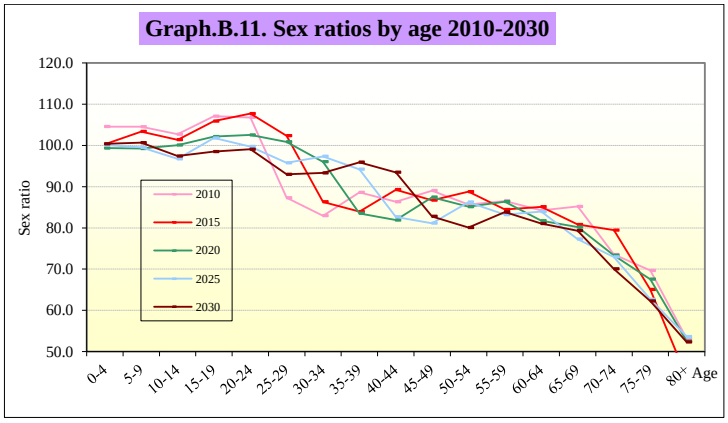


Table B. 2. Sex ratios per 100 by age, 2010 - 2030

Age	2010	2015	2020	2025	2030
0-4	104.6	100.3	99.3	100.1	100.4
5-9	104.5	103.4	99.2	99.5	100.6
10-14	102.7	101.4	100.1	96.7	97.4
15-19	107.1	105.9	102.1	101.8	98.5
20-24	106.8	107.7	102.5	99.7	99.1
25-29	87.3	102.3	100.9	95.8	93.0
30-34	82.9	86.3	96.0	97.3	93.3
35-39	88.6	83.9	83.5	94.2	95.9
40-44	86.3	89.3	81.9	82.7	93.5
45-49	89.0	86.7	87.4	81.1	82.8
50-54	85.7	88.8	85.1	86.3	80.1
55-59	86.5	84.5	86.4	83.2	83.8
60-64	84.2	85.1	81.7	83.9	81.0
65-69	85.2	80.8	80.2	77.3	79.3
70-74	73.5	79.4	73.4	72.9	70.0
75-79	69.7	65.0	67.5	62.7	62.2
80+	53.1	43.7	52.5	53.6	52.3
Total	90.6	89.8	88.1	86.8	85.6

Sex ratio = number of males per 100 females

Source: CBS-Aruba, 2010

Table B. 3. Growth of Population 2010-2030

	2010 -2015			2015-2020			2020-2025			2025-2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
% growth 5 y.	7.7	8.7	8.2	1.2	3.1	2.2	4.3	6.6	5.5	4.1	6.1	5.2
% yearly growth	0.6	0.9	0.8	0.2	0.6	0.4	0.8	1.3	1.1	0.8	1.2	1.0
Doubling time	111.8	75.4	89.2	284.7	112.3	157.0	82.1	54.4	64.6	86.4	58.3	68.7

Source: CBS-Aruba, 2010

Table B.4. Total relative age distribution of population by age and sex, 2010 - 2030

Age	2010			2015			2020			2025			2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
0-4	6.90	5.98	6.42	6.45	5.77	6.09	6.64	5.89	6.24	6.69	5.80	6.22	6.53	5.56	6.01
5-9	7.46	6.47	6.94	6.41	5.57	5.97	6.09	5.41	5.73	6.36	5.55	5.93	6.50	5.53	5.98
10-14	7.88	6.95	7.39	6.95	6.16	6.53	6.14	5.41	5.75	5.88	5.27	5.55	6.27	5.51	5.86
15-19	7.83	6.62	7.20	7.41	6.29	6.82	6.54	5.64	6.06	5.82	4.96	5.36	5.57	4.84	5.18
20-24	5.66	4.80	5.21	7.83	6.52	7.14	6.80	5.85	6.29	6.08	5.29	5.66	5.30	4.57	4.91
25-29	5.29	5.50	5.40	6.06	5.32	5.67	7.62	6.65	7.10	6.69	6.06	6.36	5.88	5.41	5.63
30-34	6.02	6.58	6.31	5.62	5.85	5.74	6.03	5.54	5.77	7.73	6.89	7.28	6.90	6.32	6.59
35-39	7.28	7.44	7.36	6.14	6.57	6.37	5.54	5.85	5.70	6.10	5.62	5.84	7.87	7.02	7.41
40-44	7.94	8.33	8.14	7.13	7.17	7.15	5.98	6.44	6.22	5.51	5.78	5.66	6.21	5.68	5.93
45-49	9.03	9.19	9.11	7.61	7.88	7.75	6.94	6.99	6.96	5.87	6.28	6.09	5.55	5.74	5.65
50-54	8.04	8.51	8.29	8.41	8.50	8.46	7.33	7.59	7.47	6.67	6.71	6.69	5.73	6.12	5.94
55-59	6.63	6.94	6.79	7.29	7.75	7.53	7.98	8.14	8.06	6.90	7.20	7.06	6.31	6.44	6.38
60-64	4.86	5.23	5.06	5.90	6.23	6.07	6.80	7.33	7.08	7.37	7.62	7.50	6.42	6.78	6.61
65-69	3.57	3.79	3.68	4.12	4.58	4.37	5.26	5.78	5.54	5.99	6.73	6.39	6.53	7.05	6.81
70-74	2.58	3.17	2.89	2.83	3.20	3.02	3.46	4.16	3.83	4.35	5.18	4.79	4.97	6.08	5.57
75-79	1.68	2.19	1.95	1.84	2.54	2.21	2.15	2.80	2.49	2.59	3.59	3.13	3.27	4.49	3.92
80+	1.35	2.31	1.85	2.00	4.10	3.10	2.70	4.53	3.68	3.39	5.48	4.51	4.19	6.85	5.62
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: CBS-Aruba, 2010

Graph B.12. Yearly Growth of population, 2010-2030

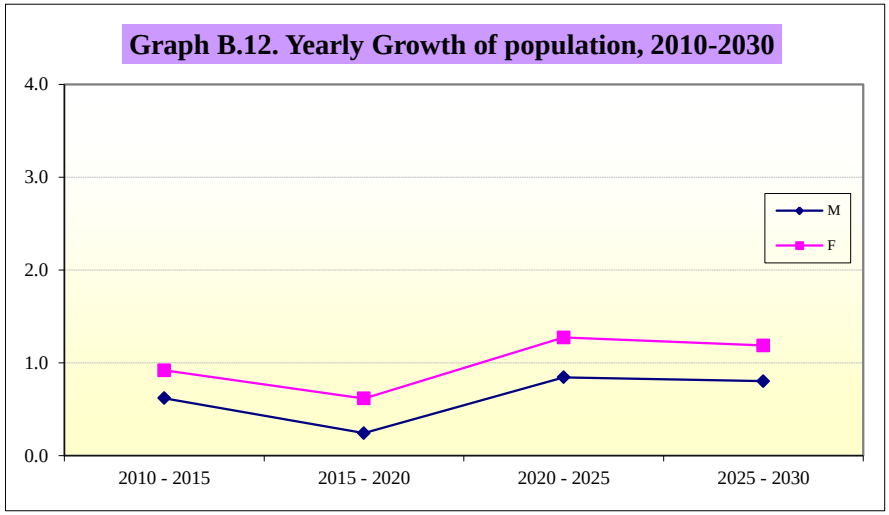


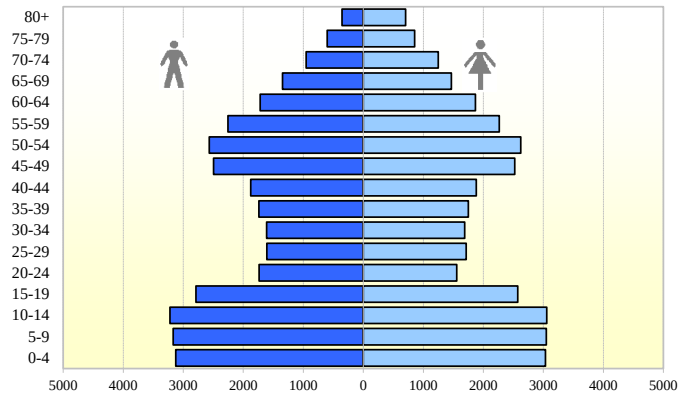
Table B.5. Aruban born population by age and sex, 2010-2030.

Age	2010			2015			2020			2025			2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
0-4	3,126	3,034	6,159	2,954	2,933	5,887	3,360	3,297	6,657	3,441	3,359	6,800	3,366	3,304	6,670
5-9	3,168	3,048	6,216	3,012	2,911	5,922	2,846	2,769	5,615	3,257	3,133	6,390	3,312	3,181	6,493
10-14	3,221	3,055	6,276	3,101	2,984	6,085	2,948	2,843	5,791	2,785	2,705	5,490	3,209	3,089	6,298
15-19	2,790	2,573	5,363	3,049	2,823	5,872	2,914	2,731	5,646	2,769	2,599	5,368	2,521	2,404	4,925
20-24	1,735	1,558	3,292	2,526	2,320	4,846	2,669	2,450	5,120	2,514	2,338	4,852	2,162	2,064	4,226
25-29	1,608	1,712	3,321	1,598	1,491	3,089	2,383	2,260	4,643	2,465	2,362	4,827	2,081	2,066	4,147
30-34	1,612	1,687	3,299	1,660	1,802	3,462	1,652	1,588	3,240	2,429	2,344	4,773	2,405	2,355	4,760
35-39	1,740	1,749	3,489	1,633	1,684	3,317	1,679	1,803	3,482	1,671	1,590	3,261	2,395	2,331	4,726
40-44	1,877	1,882	3,759	1,711	1,711	3,422	1,605	1,653	3,259	1,651	1,772	3,423	1,634	1,570	3,204
45-49	2,495	2,523	5,018	1,831	1,845	3,676	1,672	1,681	3,354	1,570	1,626	3,195	1,613	1,746	3,359
50-54	2,566	2,624	5,190	2,424	2,472	4,896	1,777	1,806	3,584	1,625	1,650	3,275	1,512	1,611	3,122
55-59	2,256	2,266	4,522	2,467	2,561	5,028	2,331	2,441	4,772	1,709	1,783	3,492	1,540	1,639	3,179
60-64	1,719	1,869	3,588	2,133	2,185	4,318	2,335	2,510	4,845	2,208	2,393	4,601	1,612	1,750	3,362
65-69	1,348	1,467	2,814	1,555	1,769	3,324	1,929	2,106	4,035	2,113	2,419	4,532	2,002	2,327	4,329
70-74	952	1,249	2,201	1,146	1,349	2,495	1,322	1,677	2,999	1,640	1,997	3,636	1,795	2,312	4,107
75-79	603	856	1,459	736	1,086	1,821	885	1,238	2,123	1,021	1,539	2,560	1,262	1,838	3,100
80+	354	706	1,060	673	1,512	2,185	1,003	2,134	3,137	1,352	2,757	4,108	1,703	3,524	5,227
Total	33,169	33,858	67,026	34,209	35,437	69,646	35,310	36,990	72,300	36,218	38,366	74,584	36,122	39,110	75,232
Median age	32.9	35.7	34.4	32.6	36.4	34.5	31.6	36.5	34.1	31.8	36.1	33.7	32.9	37.3	35.1
Mean age	34.0	35.9	35.0	35.1	37.6	36.3	35.6	38.6	37.1	35.9	39.4	37.7	36.3	40.3	38.4
Under 15	9,515	9,137	18,652	9,067	8,828	17,895	9,153	8,910	18,063	9,483	9,197	18,680	9,887	9,574	19,460
15-49	13,857	13,684	27,541	14,008	13,676	27,683	14,574	14,168	28,742	15,068	14,631	29,700	14,810	14,535	29,345
50-59	4,822	4,890	9,712	4,892	5,033	9,924	4,108	4,247	8,356	3,334	3,433	6,767	3,051	3,250	6,302
60+	4,975	6,147	11,122	6,242	7,901	14,143	7,474	9,665	17,139	8,333	11,104	19,437	8,373	11,751	20,124
75+	957	1,562	2,519	1,409	2,597	4,006	1,888	3,372	5,260	2,373	4,295	6,668	2,965	5,362	8,327
Dependancy ratio	62.6	65.6	64.1	62.6	69.6	66.1	68.0	76.8	72.4	75.7	87.5	81.6	85.5	100.2	92.9
% under 15	28.7	27.0	27.8	26.5	24.9	25.7	25.9	24.1	25.0	26.2	24.0	25.0	27.4	24.5	25.9
65+ per 100 pers.	9.8	12.6	11.2	12.0	16.1	14.1	14.6	19.3	17.0	16.9	22.7	19.9	18.7	25.6	22.3
<15 per 100 pers 65+	292.1	213.6	247.6	220.7	154.4	182.1	178.1	124.5	146.9	154.8	105.6	125.9	146.2	95.7	116.1

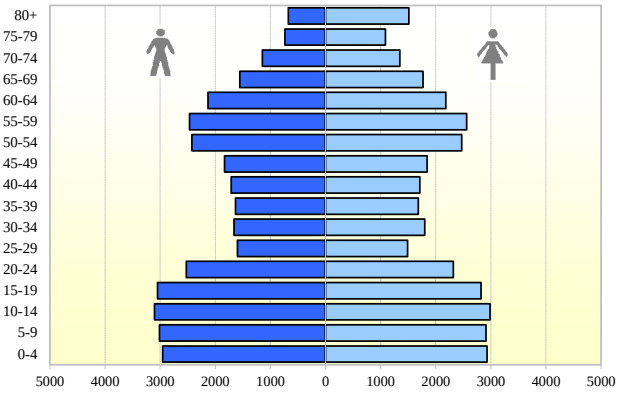
Source: CBS-Aruba, 2010

Graph B.13. Population pyramids of Aruban born population, 2010 – 2030.

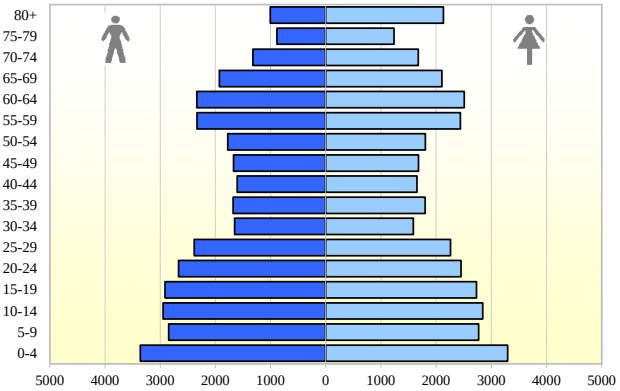
Aruban Population by age and sex, 2010



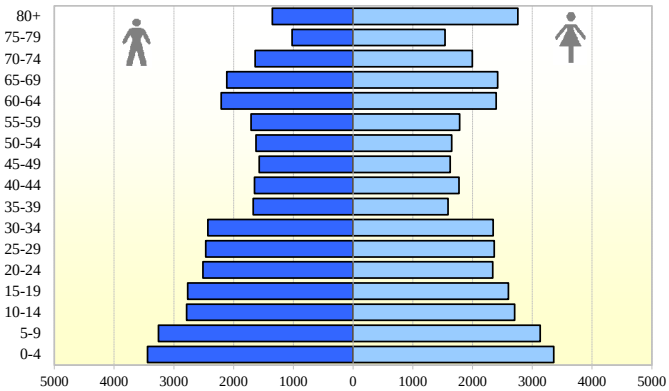
Aruban Population by age and sex, 2015



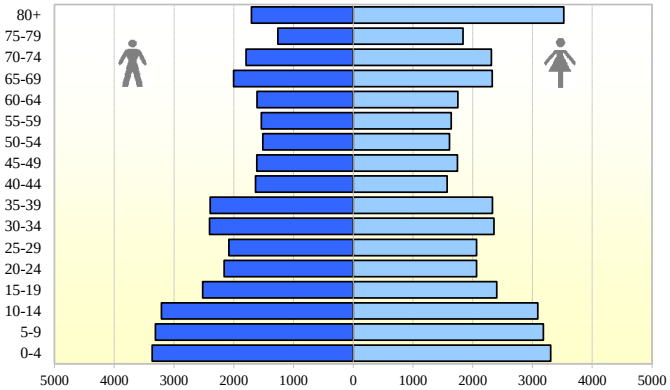
Aruban Population by age and sex, 2020



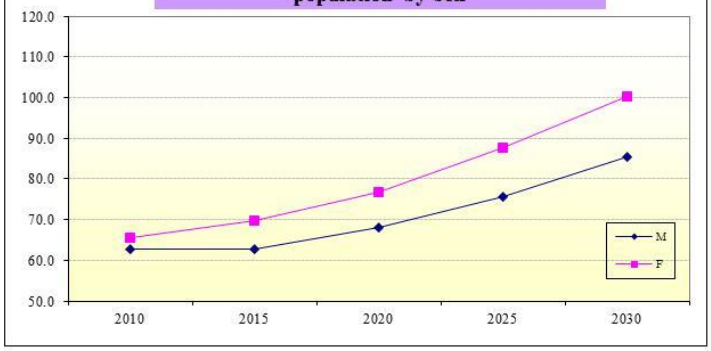
Aruban Population by age and sex, 2025



Aruban Population by age and sex, 2030

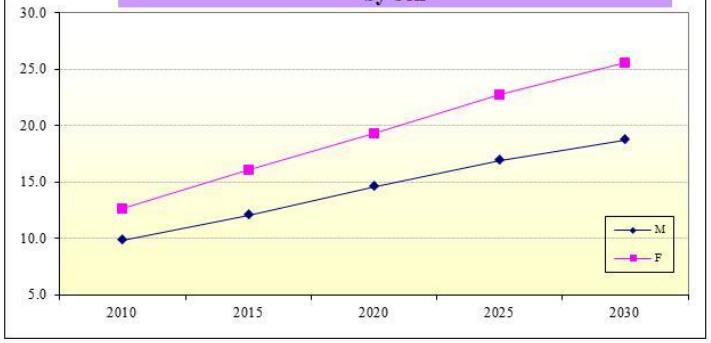


Graph B.14. Dependancy ratios Aruban born population by sex

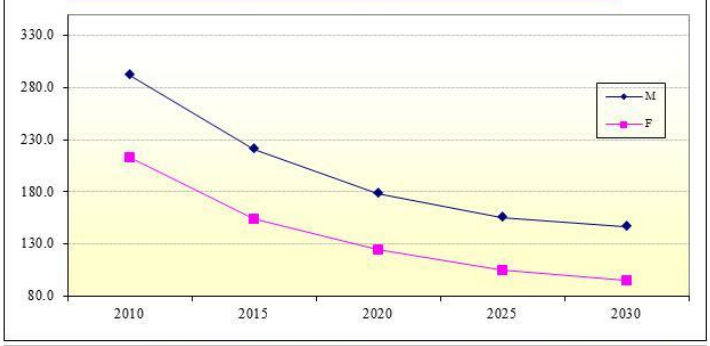


Graph B. 15. Median age Aruban born population by sex and period

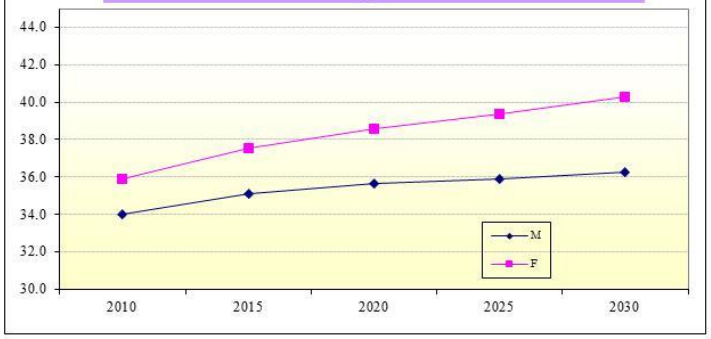
Graph B.16. Percentage of Aruban born population 65+ by sex



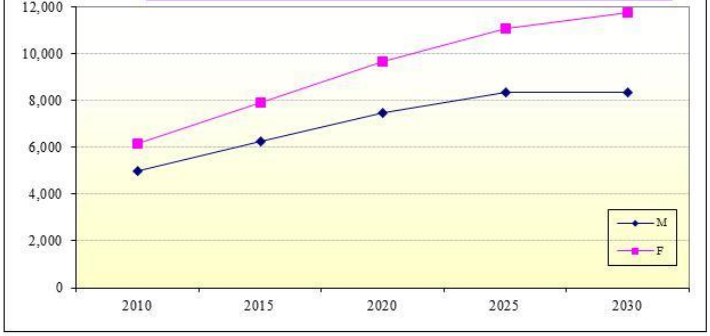
Graph B.17. Aruban born population <15y. old per 100 persons 65+ by sex



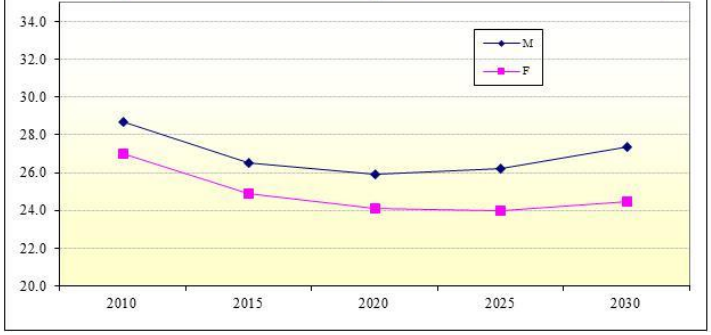
Graph B.18. Mean age Aruban born population by sex and period



Graph B.19. Number of Aruban born persons 60+ by sex



Graph B.20. Percentage of Aruban born persons -15y. by sex



Graph B.21.Number of Aruban born persons 75+ y. by sex

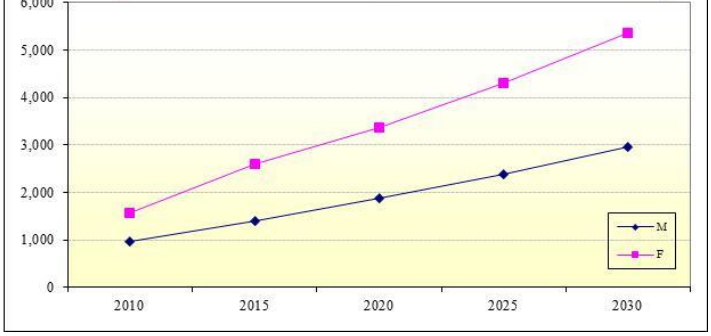


Table B.6. Relative distribution Aruban born population by age and sex, 2010-2030.

Age	2010			2015			2020			2025			2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
0-4	9.4	9.0	9.2	8.6	8.3	8.5	9.5	8.9	9.2	9.5	8.8	9.1	9.3	8.4	8.9
5-9	9.6	9.0	9.3	8.8	8.2	8.5	8.1	7.5	7.8	9.0	8.2	8.6	9.2	8.1	8.6
10-14	9.7	9.0	9.4	9.1	8.4	8.7	8.3	7.7	8.0	7.7	7.1	7.4	8.9	7.9	8.4
15-19	8.4	7.6	8.0	8.9	8.0	8.4	8.3	7.4	7.8	7.6	6.8	7.2	7.0	6.1	6.5
20-24	5.2	4.6	4.9	7.4	6.5	7.0	7.6	6.6	7.1	6.9	6.1	6.5	6.0	5.3	5.6
25-29	4.8	5.1	5.0	4.7	4.2	4.4	6.7	6.1	6.4	6.8	6.2	6.5	5.8	5.3	5.5
30-34	4.9	5.0	4.9	4.9	5.1	5.0	4.7	4.3	4.5	6.7	6.1	6.4	6.7	6.0	6.3
35-39	5.2	5.2	5.2	4.8	4.8	4.8	4.8	4.9	4.8	4.6	4.1	4.4	6.6	6.0	6.3
40-44	5.7	5.6	5.6	5.0	4.8	4.9	4.5	4.5	4.5	4.6	4.6	4.6	4.5	4.0	4.3
45-49	7.5	7.5	7.5	5.4	5.2	5.3	4.7	4.5	4.6	4.3	4.2	4.3	4.5	4.5	4.5
50-54	7.7	7.7	7.7	7.1	7.0	7.0	5.0	4.9	5.0	4.5	4.3	4.4	4.2	4.1	4.2
55-59	6.8	6.7	6.7	7.2	7.2	7.2	6.6	6.6	6.6	4.7	4.6	4.7	4.3	4.2	4.2
60-64	5.2	5.5	5.4	6.2	6.2	6.2	6.6	6.8	6.7	6.1	6.2	6.2	4.5	4.5	4.5
65-69	4.1	4.3	4.2	4.5	5.0	4.8	5.5	5.7	5.6	5.8	6.3	6.1	5.5	5.9	5.8
70-74	2.9	3.7	3.3	3.3	3.8	3.6	3.7	4.5	4.1	4.5	5.2	4.9	5.0	5.9	5.5
75-79	1.8	2.5	2.2	2.2	3.1	2.6	2.5	3.3	2.9	2.8	4.0	3.4	3.5	4.7	4.1
80+	1.1	2.1	1.6	2.0	4.3	3.1	2.8	5.8	4.3	3.7	7.2	5.5	4.7	9.0	6.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

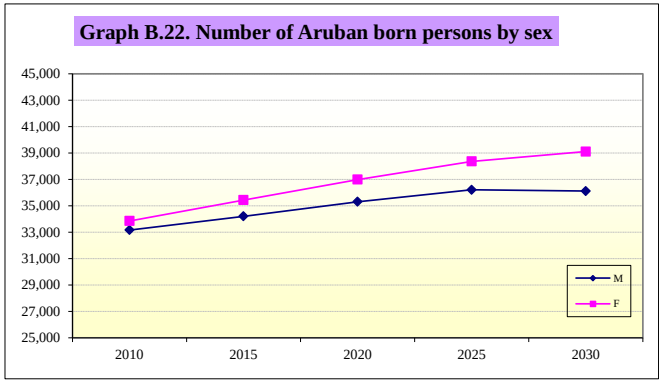
Source: CBS-Aruba, 2010

Table B. 7. Growth of Aruban Population 2010-2030

	2010 -2015			2015-2020			2020-2025			2025-2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
% growth 5 y.	3.1	4.7	3.9	3.2	4.4	3.8	2.6	3.7	3.2	-0.3	1.9	0.9
% yearly growth	0.6	0.9	0.8	0.6	0.9	0.7	0.5	0.7	0.6	-0.1	0.4	0.2
Doubling time	112.2	76.0	90.4	109.4	80.8	92.7	136.4	94.9	111.4	-	180.3	400.6

Source: CBS-Aruba, 2010

Graph B.22. Number of Aruban born persons by sex



Graph B.23. Yearly Growth of Aruban population by sex, 2010-2030

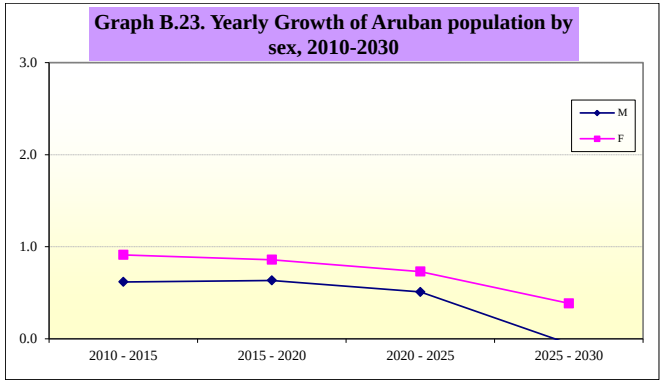


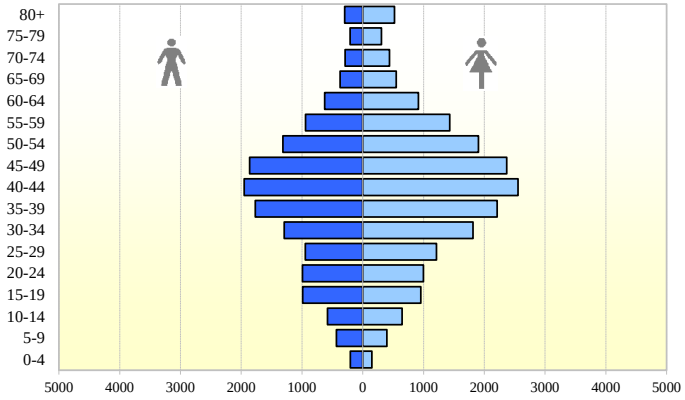
Table B. 8. Foreign born population by age and sex, 2010-2030.

Age	2010			2015			2020			2025			2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
0-4	203	150	354	397	408	805	134	220	355	180	258	439	252	301	553
5-9	432	396	828	320	312	632	360	461	822	184	326	510	295	403	697
10-14	581	646	1,227	513	581	1,094	282	384	666	394	581	975	270	483	753
15-19	987	955	1,942	803	815	1,618	526	637	1,163	380	495	875	568	732	1,300
20-24	993	998	1,991	1,541	1,457	2,998	910	1,040	1,950	774	959	1,733	775	900	1,675
25-29	946	1,214	2,160	1,552	1,587	3,140	1,623	1,712	3,335	1,156	1,418	2,574	1,179	1,440	2,619
30-34	1,292	1,814	3,106	1,263	1,586	2,849	1,521	1,717	3,238	1,752	1,951	3,703	1,420	1,743	3,163
35-39	1,770	2,213	3,983	1,560	2,120	3,680	1,237	1,687	2,924	1,629	1,913	3,542	1,970	2,219	4,189
40-44	1,953	2,554	4,507	1,994	2,441	4,435	1,541	2,189	3,730	1,330	1,833	3,163	1,809	2,114	3,922
45-49	1,861	2,369	4,230	2,123	2,716	4,839	1,976	2,492	4,468	1,607	2,289	3,896	1,466	1,974	3,440
50-54	1,314	1,905	3,219	1,945	2,450	4,395	2,081	2,726	4,806	1,985	2,535	4,520	1,667	2,358	4,026
55-59	943	1,430	2,373	1,321	1,925	3,246	1,865	2,418	4,283	2,026	2,706	4,731	1,958	2,533	4,491
60-64	628	917	1,545	934	1,419	2,354	1,242	1,867	3,109	1,778	2,355	4,133	1,948	2,642	4,590
65-69	372	552	924	589	884	1,473	839	1,346	2,185	1,128	1,775	2,904	1,621	2,242	3,862
70-74	290	441	731	325	502	827	499	805	1,304	715	1,232	1,946	963	1,626	2,590
75-79	208	307	515	219	382	601	245	434	679	381	699	1,081	549	1,071	1,620
80+	299	524	823	364	861	1,225	419	572	991	480	659	1,139	619	917	1,536
Total	15,073	19,385	34,458	17,764	22,446	40,210	17,300	22,708	40,008	17,878	23,985	41,863	19,327	25,697	45,025
Median age	41	43	42	42.3	44.8	43.9	46.3	47.6	47.0	48.6	49.9	49.4	48.8	51.1	50.3
Mean age	40.2	42.4	41.5	41.3	44.1	42.9	44.9	46.2	45.6	47.1	48.2	47.7	48.0	49.4	48.8
Under 15	1,216	1,193	2,409	1,229	1,301	2,531	777	1,066	1,843	759	1,165	1,924	817	1,186	2,003
15-49	9,803	12,117	21,919	10,837	12,722	23,559	9,334	11,473	20,808	8,627	10,859	19,486	9,186	11,122	20,307
50-59	2,257	3,335	5,592	3,266	4,375	7,640	3,946	5,144	9,090	4,011	5,241	9,251	3,625	4,892	8,516
60+	1,797	2,741	4,538	2,432	4,048	6,481	3,243	5,025	8,267	4,482	6,720	11,202	5,700	8,498	14,198
75+	507	831	1,338	584	1,243	1,827	663	1,006	1,670	861	1,358	2,220	1,168	1,987	3,156
Dependancy ratio	18.8	18.4	18.6	18.1	21.2	19.8	19.1	22.9	21.2	24.0	30.0	27.4	31.0	37.7	34.7
% under 15	8.1	6.2	7.0	6.9	5.8	6.3	4.5	4.7	4.6	4.2	4.9	4.6	4.2	4.6	4.4
65+ per 100 pers.	7.8	9.4	8.7	8.4	11.7	10.3	11.6	13.9	12.9	15.1	18.2	16.9	19.4	22.8	21.3
<15 per 100 pers 65+	104.1	65.4	80.5	82.1	49.5	61.3	38.8	33.8	35.7	28.1	26.7	27.2	21.8	20.3	20.8

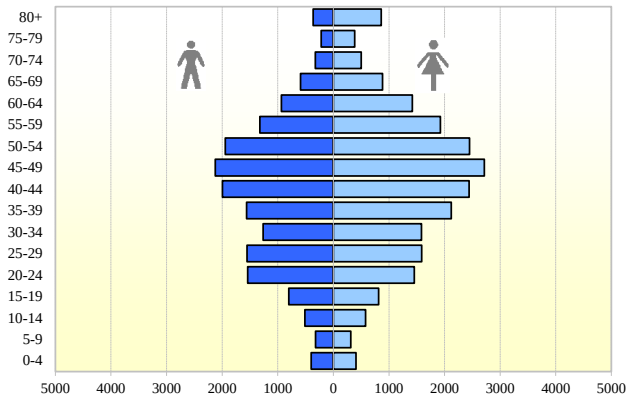
Source: CBS-Aruba, 2010

Graph B.24. Population pyramids of Aruban and foreign born population, 2010 – 2030.

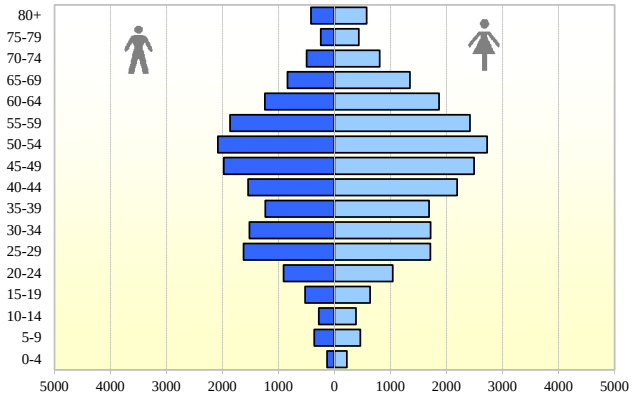
Aruban Population by age and sex, 2010



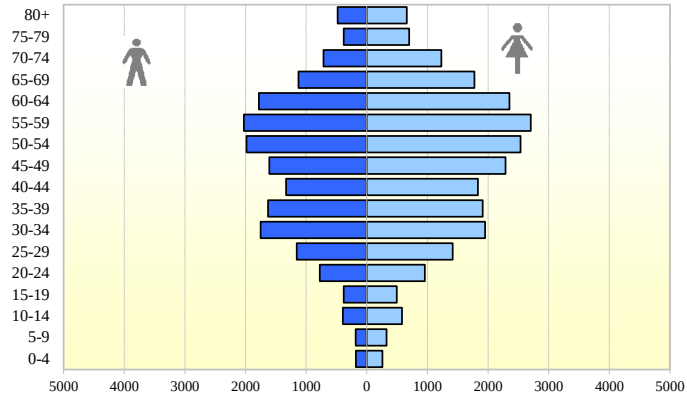
Foreign Population by age and sex, 2015



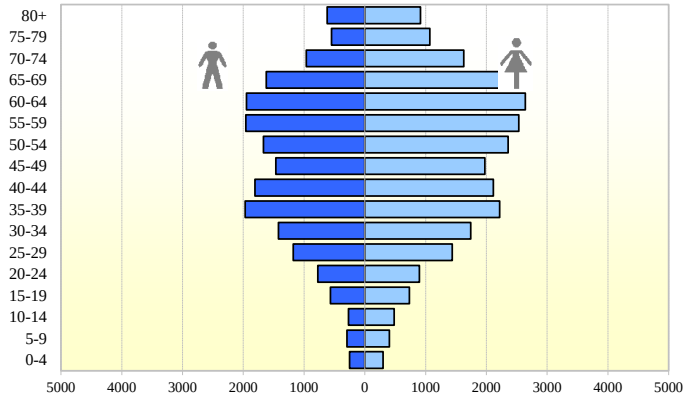
Foreign Population by age and sex, 2020



Foreign Population by age and sex, 2025

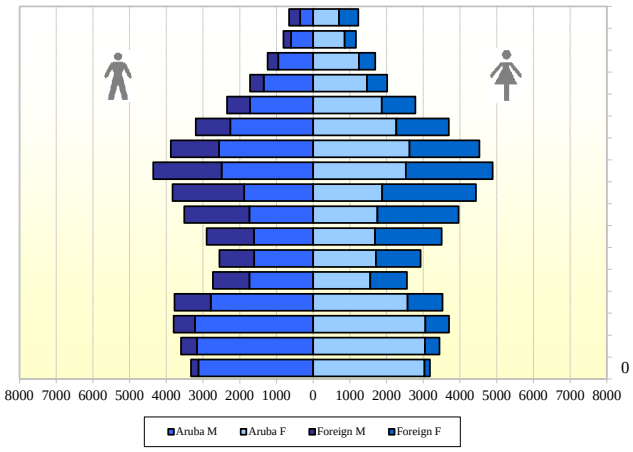


Foreign Population by age and sex, 2030

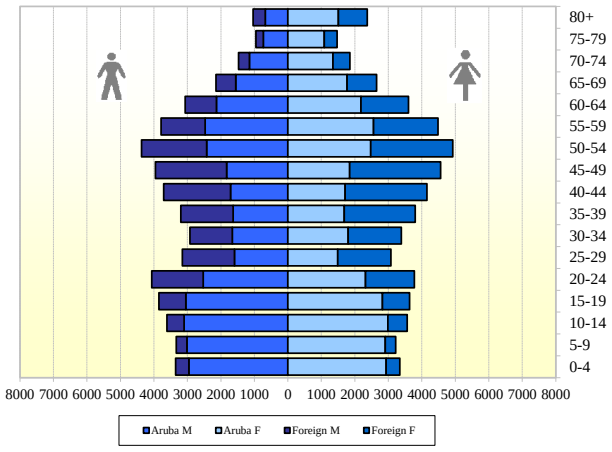


Graph B.25. Population pyramids of Aruban and foreign born population, 2010 – 2030.

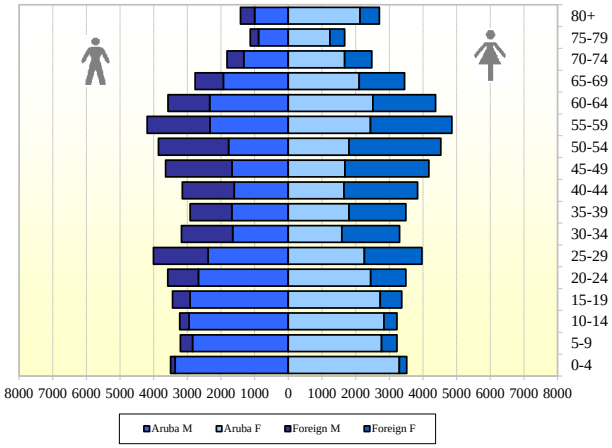
Aruban and foreign born population by age and sex, 2010



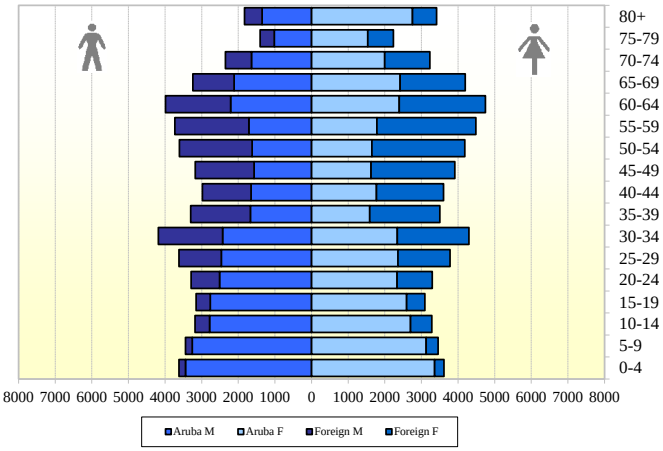
Aruban and foreign born population by age and sex, 2015



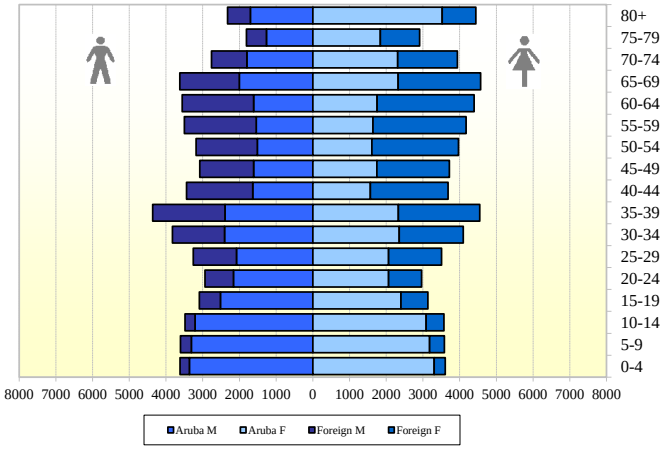
Aruban and foreign born population by age and sex, 2020



Aruban and foreign born population by age and sex, 2025



Aruban and foreign born population by age and sex, 2030



C. HIGH PROJECTION SCENARIO

The only difference between the high projection scenario and the medium scenario is the higher growth in real GDP. The levels of growth in labor productivity were kept at zero and unemployment was respectively 7, 6, 5 and 5 percent in the next 4 five year periods (Table 1 on page 8). Figures on growth of real GDP, as provided by the Department of Economic Affairs, Trade and Industry are as follows: 3.01 percent in the period 2010 – 2015, 2.62 percent in the period 2015 – 2020, 2.31 percent in the period 2020 – 2025 and 2.07 percent in the period 2025 – 2030.

Applying these economic assumptions to the projection model, results in a total projected population of 170,191 in 2030: of whom 81,450 would be Aruban born and 88,741 would be foreign born. In the high projection scenario, the number of foreign born persons would be considerably higher than the number of Aruban born. During the period 2010 – 2030, the number of foreign born persons on Aruba would grow by a factor of 2.58. The series of population pyramids of the foreign born population (Graphs C. 24) show the impressive growth of the foreign born population. Graphs C.25 present stacked population pyramids, with the Aruban born and foreign born population. Especially in the active age-groups, Aruban born persons would become a minority. For instance in the age group 30 – 34 years, the number of Aruban born persons would be 4,760 while 8,695 foreign born persons would be present. The total number of persons in the age segment 20 – 60 years would be 66,677 foreign born persons against 34,084 Aruban born persons.

As more women than men migrate to Aruba the sex ratio and life expectancy for women would be higher than for men, the overall sex ratio (i.e. the number of men per 100 women) in the high scenario would only be 87.4. As more persons of relatively young age come to the island for work, the aging of the population would progress more slowly. In the high projection scenario 16.3 percent of persons would be older than 65, against 17.8 percent in the medium scenario and 21.9 in the low scenario.

Yearly growth of the population would remain well below 1 percent during the first 5 year of the projection period. During this time, many of the persons, who are currently unemployed, would be assimilated in the working population. However, at a certain moment the combination of high demand for labor, in combination with a lower inflow of local born youngsters into the labor market would lead to a high import of labor and consequently to higher population growth rates. From 2015 until 2030, growth rates would be above 2.5 percent, which implies a doubling time of the population of less than 30 years.

Note that the growth of the very old population would be significant: in the 2010 population census a total of 3,857 persons above age 75 were counted. In the high projection scenario, this number would grow to 11,755 by 2030. Such a rapid growth of the number of very old persons would put serious pressure on the existing health system and the elderly care. Note that in each of the three scenarios, the number of persons above age 75 was well above 11 thousand.

Again, we present the tables and graphs of this scenario in the next pages.

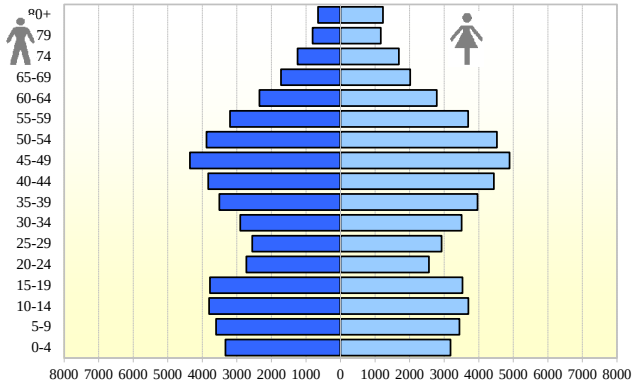
Table C.1. Total population by age and sex, 2010 - 2030

Age	2010			2015			2020			2025			2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
0-4	3,329	3,184	6,513	3,712	3,712	7,424	4,502	4,579	9,081	5,245	5,310	10,555	5,757	5,809	11,566
5-9	3,600	3,444	7,044	3,577	3,474	7,051	3,866	3,951	7,818	4,684	4,823	9,507	5,468	5,568	11,036
10-14	3,802	3,702	7,504	3,807	3,820	7,627	3,706	3,842	7,548	4,016	4,339	8,355	4,913	5,290	10,203
15-19	3,777	3,527	7,304	4,167	3,902	8,069	4,046	3,990	8,036	3,983	4,036	8,019	4,318	4,535	8,853
20-24	2,728	2,556	5,284	4,720	4,377	9,097	4,787	4,638	9,424	4,707	4,753	9,460	4,668	4,805	9,473
25-29	2,554	2,926	5,481	3,843	3,808	7,651	5,593	5,636	11,229	5,665	5,923	11,588	5,602	6,031	11,633
30-34	2,904	3,501	6,405	3,454	3,945	7,399	4,536	4,815	9,351	6,318	6,661	12,979	6,471	6,984	13,454
35-39	3,510	3,962	7,472	3,649	4,280	7,928	4,021	4,711	8,733	5,135	5,604	10,739	7,014	7,537	14,550
40-44	3,830	4,436	8,266	4,082	4,520	8,602	4,083	4,830	8,913	4,486	5,281	9,767	5,709	6,259	11,968
45-49	4,356	4,892	9,248	4,238	4,814	9,052	4,391	4,899	9,290	4,420	5,224	9,644	4,916	5,732	10,648
50-54	3,880	4,529	8,409	4,550	5,079	9,629	4,373	5,002	9,375	4,541	5,102	9,643	4,619	5,475	10,095
55-59	3,199	3,696	6,895	3,885	4,577	8,462	4,492	5,141	9,634	4,331	5,064	9,395	4,504	5,192	9,696
60-64	2,347	2,786	5,133	3,143	3,671	6,815	3,764	4,557	8,322	4,344	5,103	9,447	4,209	5,034	9,243
65-69	1,720	2,019	3,739	2,185	2,683	4,868	2,888	3,556	6,444	3,452	4,402	7,854	3,993	4,941	8,934
70-74	1,243	1,690	2,932	1,486	1,856	3,342	1,875	2,514	4,389	2,472	3,325	5,797	2,955	4,128	7,084
75-79	811	1,164	1,974	959	1,473	2,432	1,144	1,682	2,826	1,444	2,269	3,713	1,900	2,996	4,896
80+	653	1,230	1,882	1,042	2,378	3,421	1,433	2,720	4,153	1,854	3,437	5,291	2,372	4,487	6,859
Total	48,242	53,243	101,484	56,497	62,371	118,868	63,499	71,064	134,563	71,098	80,656	151,754	79,388	90,803	170,191
Median age	37.3	39.8	38.6	36.3	39.8	38.2	35.9	39.3	37.7	35.9	39.0	37.5	36.8	39.2	38.1
Mean age	35.9	38.3	37.2	36.6	39.3	38.0	37.2	39.5	38.4	37.5	39.9	38.8	37.7	40.3	39.1
Under 15	10,731	10,330	21,061	11,096	11,006	22,102	12,074	12,373	24,447	13,945	14,472	28,417	16,138	16,667	32,805
15-49	23,660	25,801	49,460	28,152	29,646	57,798	31,457	33,519	64,976	34,714	37,483	72,197	38,698	41,882	80,580
50-59	7,079	8,225	15,304	8,434	9,656	18,090	8,865	10,143	19,008	8,872	10,166	19,038	9,124	10,667	19,791
60+	6,772	8,887	15,660	8,815	12,062	20,877	11,103	15,030	26,133	13,567	18,535	32,102	15,429	21,587	37,016
75+	1,463	2,393	3,857	2,001	3,852	5,853	2,576	4,402	6,979	3,298	5,706	9,004	4,272	7,483	11,755
Dependancy ratio	45.8	44.6	45.2	42.2	45.1	43.7	44.0	47.4	45.8	48.3	52.9	50.7	52.6	57.7	55.3
% under 15	22.2	19.4	20.8	19.6	17.6	18.6	19.0	17.4	18.2	19.6	17.9	18.7	20.3	18.4	19.3
65+ per 100 pers.	9.2	11.5	10.4	10.0	13.5	11.8	11.6	14.7	13.2	13.0	16.7	14.9	14.1	18.2	16.3
<15 per 100 pers 65+	242.5	169.3	200.1	195.6	131.2	157.2	164.5	118.1	137.3	151.2	107.7	125.4	143.8	100.7	118.1

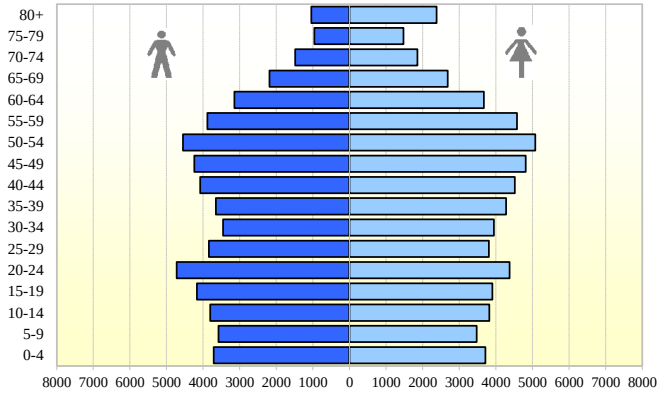
Source: CBS-Aruba, 2010

Graph C.1. Population Pyramids 2010 – 2030.

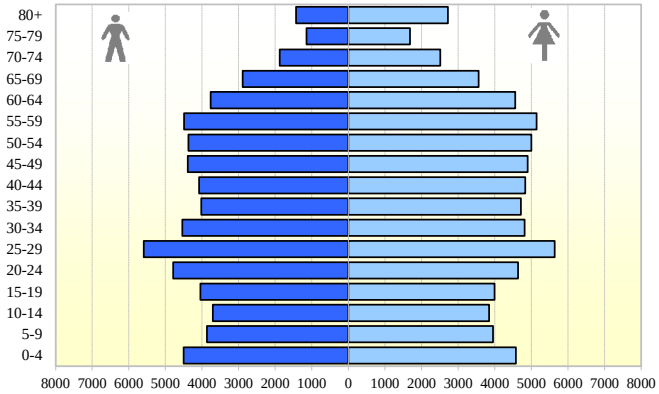
Population by age and sex, 2010



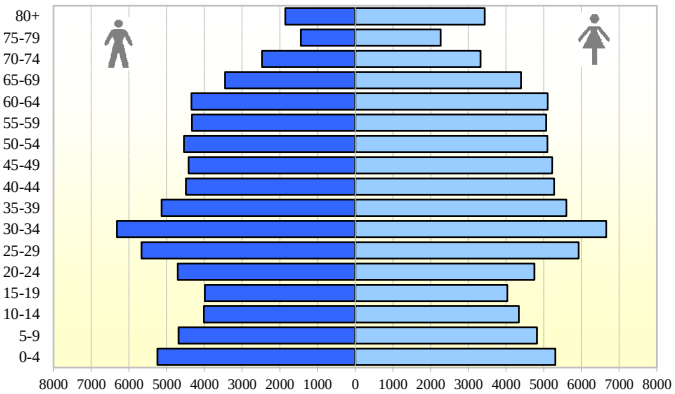
Population by age and sex, 2015



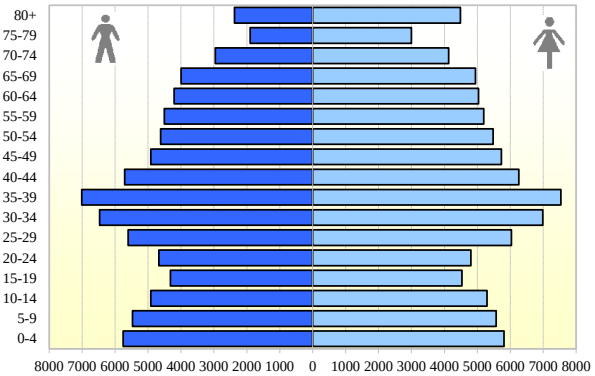
Population by age and sex, 2020



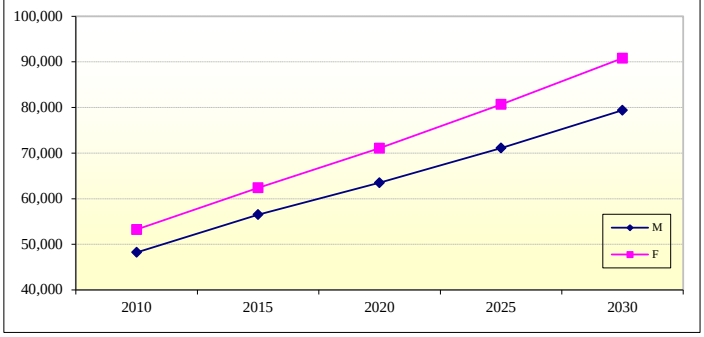
Population by age and sex, 2025



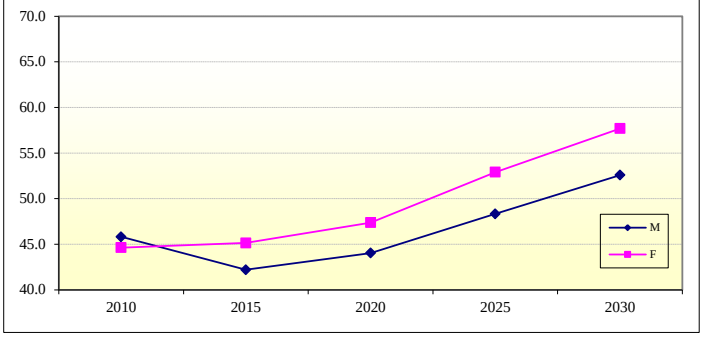
Population by age and sex, 2030



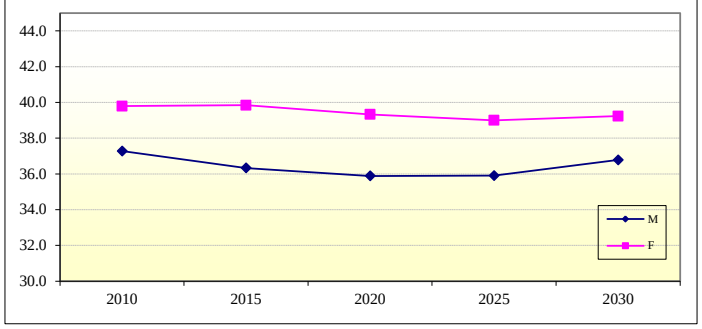
Graph C.2. Number of persons by sex



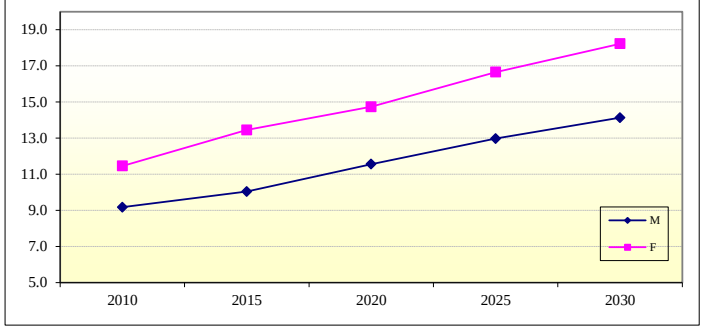
Graph C.3. Dependancy ratios by sex



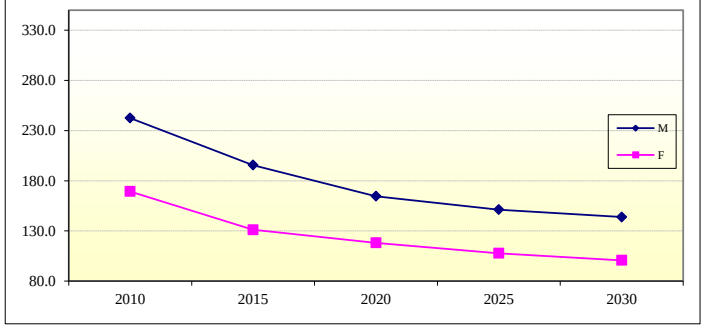
Graph C.4.Median age by sex and period



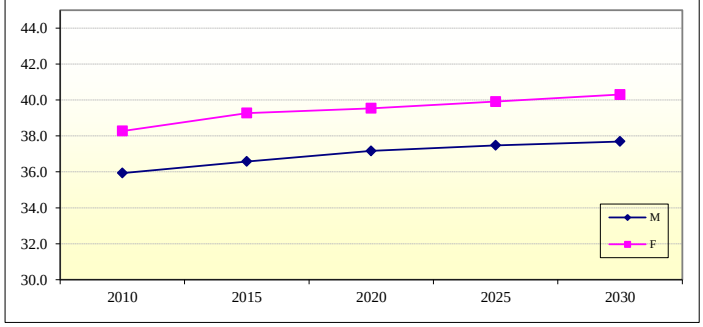
Graph C.5. Percentage of persons 65+ by sex



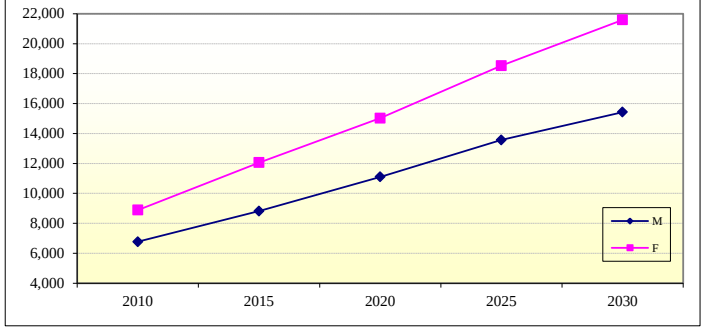
Graph C.6.Persons <15y. old per 100 persons 65+ by sex



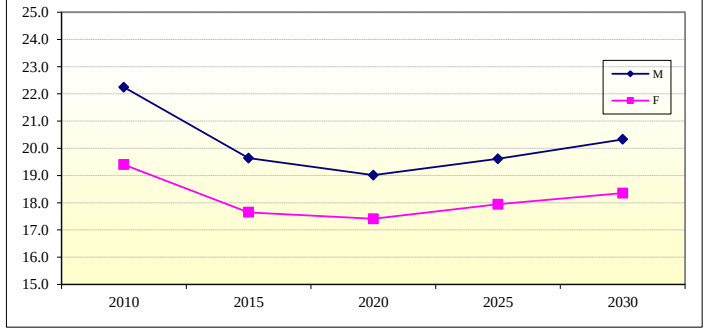
Graph C.7. Mean age by sex and period



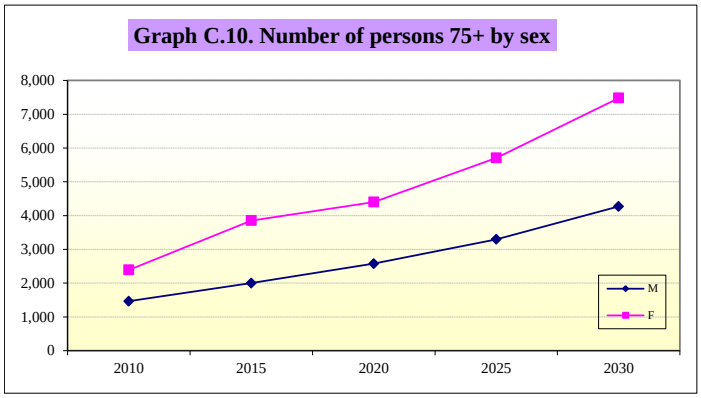
Graph C.8. Number of persons 60+ by sex



Graph C.9. Percentage of persons -15y. by sex



Graph C.10. Number of persons 75+ by sex



Graph. C.11. Sex ratios by age 2010-2030

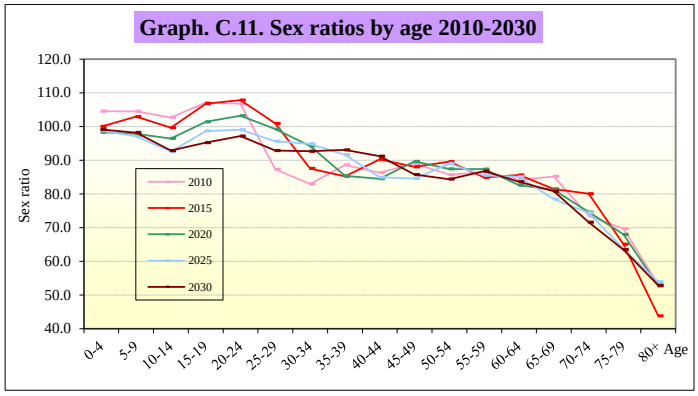


Table C. 2. Sex ratios per 100 by age, 2010 - 2030

Age	2010	2015	2020	2025	2030
0-4	104.6	100.0	98.3	98.8	99.1
5-9	104.5	102.9	97.8	97.1	98.2
10-14	102.7	99.7	96.5	92.5	92.9
15-19	107.1	106.8	101.4	98.7	95.2
20-24	106.8	107.8	103.2	99.0	97.2
25-29	87.3	100.9	99.2	95.6	92.9
30-34	82.9	87.5	94.2	94.9	92.7
35-39	88.6	85.2	85.4	91.6	93.1
40-44	86.3	90.3	84.5	84.9	91.2
45-49	89.0	88.0	89.6	84.6	85.8
50-54	85.7	89.6	87.4	89.0	84.4
55-59	86.5	84.9	87.4	85.5	86.8
60-64	84.2	85.6	82.6	85.1	83.6
65-69	85.2	81.4	81.2	78.4	80.8
70-74	73.5	80.0	74.6	74.4	71.6
75-79	69.7	65.1	68.0	63.6	63.4
80+	53.1	43.8	52.7	53.9	52.9
Total	90.6	90.6	89.4	88.1	87.4

Sex ratio = number of males per 100 females

Source: CBS-Aruba, 2010

Table C.3. Growth of Population 2010-2030

	2010 -2015			2015-2020			2020-2025			2025-2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
% growth 5 y.	17.1	17.1	17.1	12.4	13.9	13.2	13.3	15.5	14.4	13.0	14.4	13.8
% yearly growth	0.6	0.9	0.8	2.3	2.6	2.5	2.5	2.9	2.7	2.4	2.7	2.6
Doubling time	111.8	75.4	89.2	29.7	26.6	27.9	27.7	24.1	25.7	28.3	25.7	26.9

Source: CBS-Aruba, 2010

Table C.4. Total relative age distribution of population by age and sex, 2010 - 2030

Age	2010			2015			2020			2025			2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
0-4	6.90	5.98	6.42	6.57	5.95	6.25	7.09	6.44	6.75	7.38	6.58	6.96	7.25	6.40	6.80
5-9	7.46	6.47	6.94	6.33	5.57	5.93	6.09	5.56	5.81	6.59	5.98	6.26	6.89	6.13	6.48
10-14	7.88	6.95	7.39	6.74	6.12	6.42	5.84	5.41	5.61	5.65	5.38	5.51	6.19	5.83	5.99
15-19	7.83	6.62	7.20	7.38	6.26	6.79	6.37	5.62	5.97	5.60	5.00	5.28	5.44	4.99	5.20
20-24	5.66	4.80	5.21	8.35	7.02	7.65	7.54	6.53	7.00	6.62	5.89	6.23	5.88	5.29	5.57
25-29	5.29	5.50	5.40	6.80	6.10	6.44	8.81	7.93	8.34	7.97	7.34	7.64	7.06	6.64	6.84
30-34	6.02	6.58	6.31	6.11	6.33	6.22	7.14	6.78	6.95	8.89	8.26	8.55	8.15	7.69	7.91
35-39	7.28	7.44	7.36	6.46	6.86	6.67	6.33	6.63	6.49	7.22	6.95	7.08	8.83	8.30	8.55
40-44	7.94	8.33	8.14	7.22	7.25	7.24	6.43	6.80	6.62	6.31	6.55	6.44	7.19	6.89	7.03
45-49	9.03	9.19	9.11	7.50	7.72	7.61	6.92	6.89	6.90	6.22	6.48	6.36	6.19	6.31	6.26
50-54	8.04	8.51	8.29	8.05	8.14	8.10	6.89	7.04	6.97	6.39	6.33	6.35	5.82	6.03	5.93
55-59	6.63	6.94	6.79	6.88	7.34	7.12	7.07	7.23	7.16	6.09	6.28	6.19	5.67	5.72	5.70
60-64	4.86	5.23	5.06	5.56	5.89	5.73	5.93	6.41	6.18	6.11	6.33	6.23	5.30	5.54	5.43
65-69	3.57	3.79	3.68	3.87	4.30	4.10	4.55	5.00	4.79	4.86	5.46	5.18	5.03	5.44	5.25
70-74	2.58	3.17	2.89	2.63	2.98	2.81	2.95	3.54	3.26	3.48	4.12	3.82	3.72	4.55	4.16
75-79	1.68	2.19	1.95	1.70	2.36	2.05	1.80	2.37	2.10	2.03	2.81	2.45	2.39	3.30	2.88
80+	1.35	2.31	1.85	1.84	3.81	2.88	2.26	3.83	3.09	2.61	4.26	3.49	2.99	4.94	4.03
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: CBS-Aruba, 2010

Graph C.12. Yearly Growth of population, 2010-2030

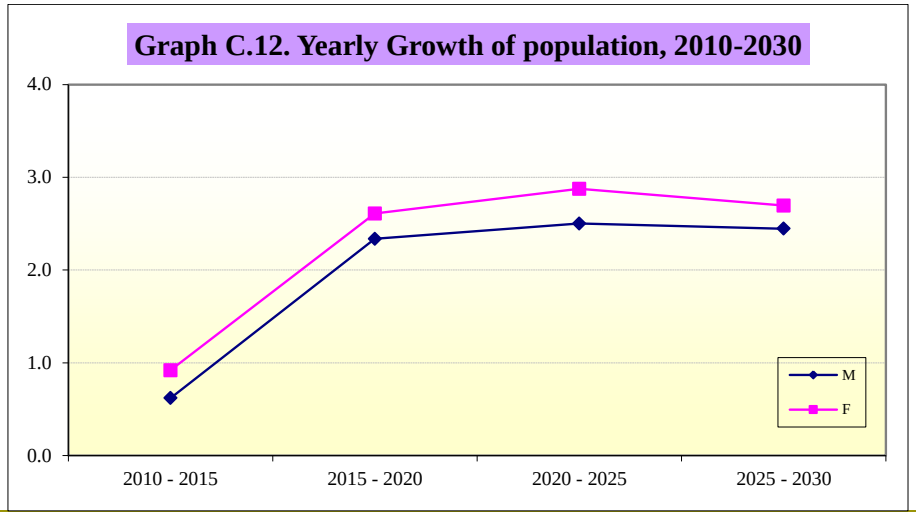


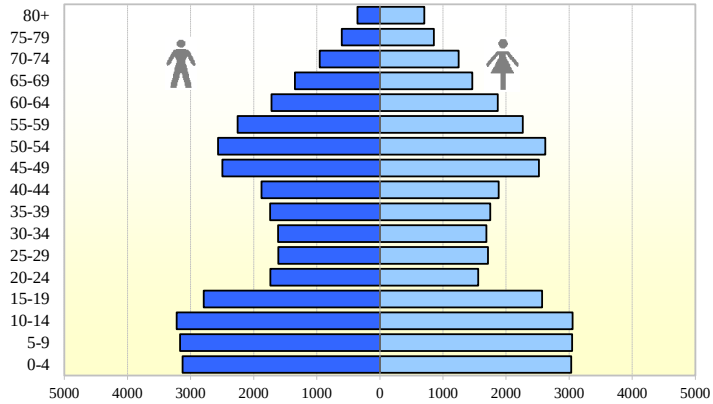
Table C.5. . Aruban born population by age and sex, 2010-2030.

Age	2010			2015			2020			2025			2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
0-4	3,126	3,034	6,159	2,954	2,933	5,887	3,838	3,774	7,612	4,546	4,464	9,010	4,928	4,861	9,789
5-9	3,168	3,048	6,216	3,012	2,911	5,922	2,846	2,769	5,615	3,735	3,601	7,336	4,399	4,248	8,647
10-14	3,221	3,055	6,276	3,101	2,984	6,085	2,948	2,843	5,791	2,785	2,705	5,490	3,686	3,556	7,243
15-19	2,790	2,573	5,363	3,049	2,823	5,872	2,914	2,731	5,646	2,769	2,599	5,368	2,521	2,404	4,925
20-24	1,735	1,558	3,292	2,526	2,320	4,846	2,669	2,450	5,120	2,514	2,338	4,852	2,162	2,064	4,226
25-29	1,608	1,712	3,321	1,598	1,491	3,089	2,383	2,260	4,643	2,465	2,362	4,827	2,081	2,066	4,147
30-34	1,612	1,687	3,299	1,660	1,802	3,462	1,652	1,588	3,240	2,429	2,344	4,773	2,405	2,355	4,760
35-39	1,740	1,749	3,489	1,633	1,684	3,317	1,679	1,803	3,482	1,671	1,590	3,261	2,395	2,331	4,726
40-44	1,877	1,882	3,759	1,711	1,711	3,422	1,605	1,653	3,259	1,651	1,772	3,423	1,634	1,570	3,204
45-49	2,495	2,523	5,018	1,831	1,845	3,676	1,672	1,681	3,354	1,570	1,626	3,195	1,613	1,746	3,359
50-54	2,566	2,624	5,190	2,424	2,472	4,896	1,777	1,806	3,584	1,625	1,650	3,275	1,512	1,611	3,122
55-59	2,256	2,266	4,522	2,467	2,561	5,028	2,331	2,441	4,772	1,709	1,783	3,492	1,540	1,639	3,179
60-64	1,719	1,869	3,588	2,133	2,185	4,318	2,335	2,510	4,845	2,208	2,393	4,601	1,612	1,750	3,362
65-69	1,348	1,467	2,814	1,555	1,769	3,324	1,929	2,106	4,035	2,113	2,419	4,532	2,002	2,327	4,329
70-74	952	1,249	2,201	1,146	1,349	2,495	1,322	1,677	2,999	1,640	1,997	3,636	1,795	2,312	4,107
75-79	603	856	1,459	736	1,086	1,821	885	1,238	2,123	1,021	1,539	2,560	1,262	1,838	3,100
80+	354	706	1,060	673	1,512	2,185	1,003	2,134	3,137	1,352	2,757	4,108	1,703	3,524	5,227
Total	33,169	33,858	67,026	34,209	35,437	69,646	35,787	37,467	73,255	37,802	39,939	77,740	39,248	42,202	81,450
Median age	32.9	35.7	34.4	32.6	36.4	34.5	30.9	35.9	33.4	30.2	34.1	32.1	29.6	34.0	31.8
Mean age	34.0	35.9	35.0	35.1	37.6	36.3	35.2	38.1	36.7	34.6	38.0	36.3	33.8	37.8	35.9
Under 15	9,515	9,137	18,652	9,067	8,828	17,895	9,631	9,387	19,018	11,066	10,770	21,836	13,013	12,666	25,679
15-49	13,857	13,684	27,541	14,008	13,676	27,683	14,574	14,168	28,742	15,068	14,631	29,700	14,810	14,535	29,345
50-59	4,822	4,890	9,712	4,892	5,033	9,924	4,108	4,247	8,356	3,334	3,433	6,767	3,051	3,250	6,302
60+	4,975	6,147	11,122	6,242	7,901	14,143	7,474	9,665	17,139	8,333	11,104	19,437	8,373	11,751	20,124
75+	957	1,562	2,519	1,409	2,597	4,006	1,888	3,372	5,260	2,373	4,295	6,668	2,965	5,362	8,327
Dependancy ratio	62.6	65.6	64.1	62.6	69.6	66.1	70.3	79.1	74.7	83.4	95.2	89.3	101.6	116.0	108.8
% under 15	28.7	27.0	27.8	26.5	24.9	25.7	26.9	25.1	26.0	29.3	27.0	28.1	33.2	30.0	31.5
65+ per 100 pers.	9.8	12.6	11.2	12.0	16.1	14.1	14.4	19.1	16.8	16.2	21.8	19.1	17.2	23.7	20.6
<15 per 100 pers 65+	292.1	213.6	247.6	220.7	154.4	182.1	187.4	131.2	154.7	180.6	123.6	147.2	192.5	126.6	153.2

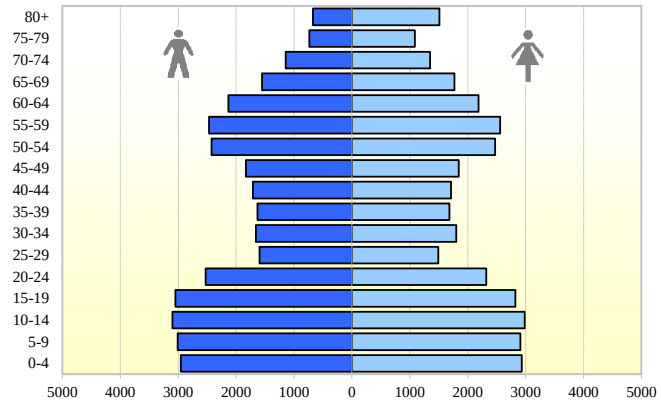
Source: CBS-Aruba, 2010

Graph C.13. Population pyramids for Aruban born population, 2003-2023.

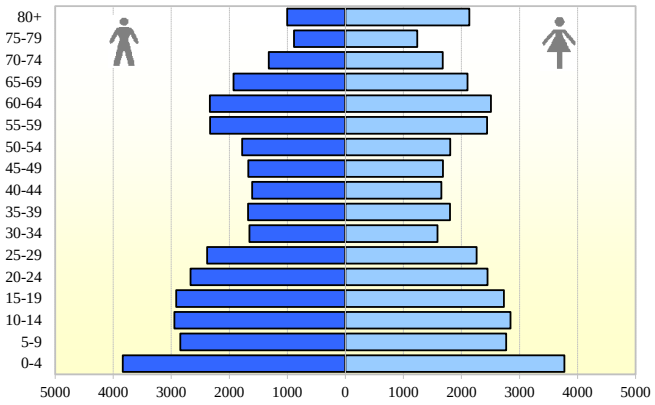
Aruban Population by age and sex, 2010



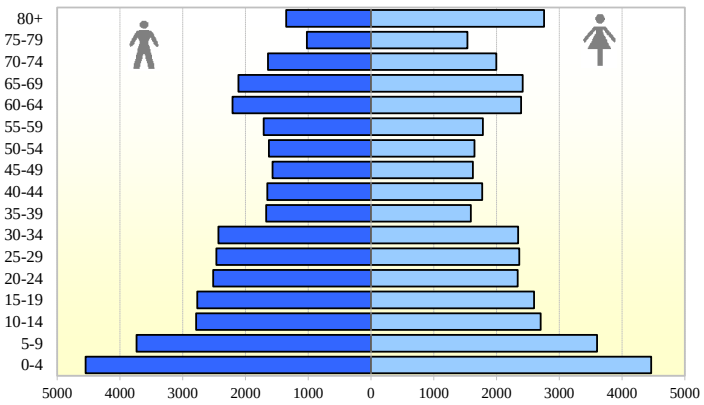
Aruban Population by age and sex, 2015



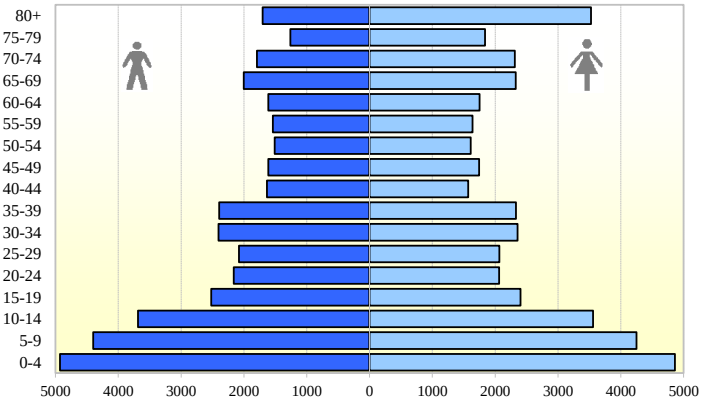
Aruban Population by age and sex, 2020



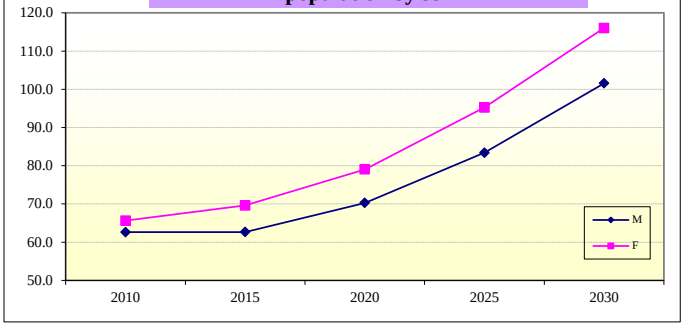
Aruban Population by age and sex, 2025



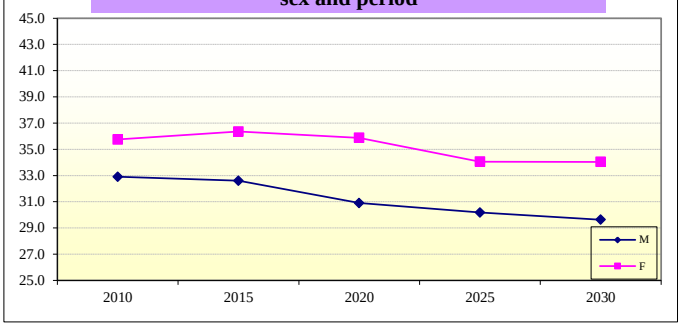
Aruban Population by age and sex, 2030



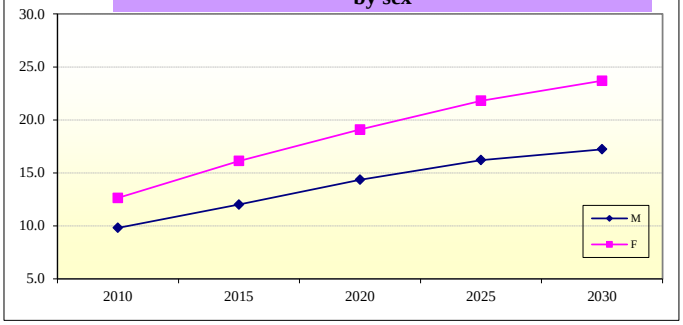
Graph C.14. Dependancy ratios born Aruban population by sex



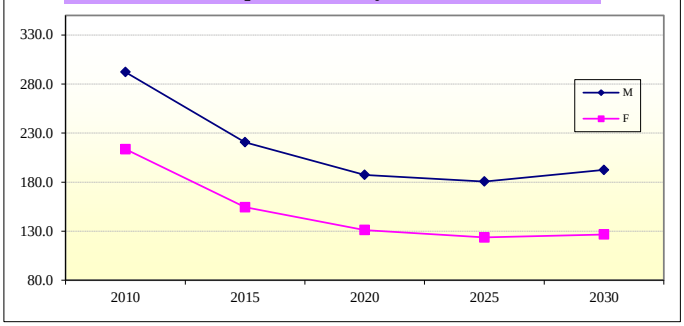
Graph C. 15. Median age Aruban born population by sex and period



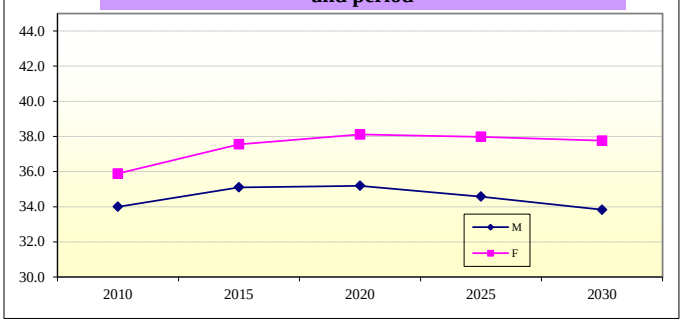
Graph C.16. Percentage of born Aruban population 65+ by sex



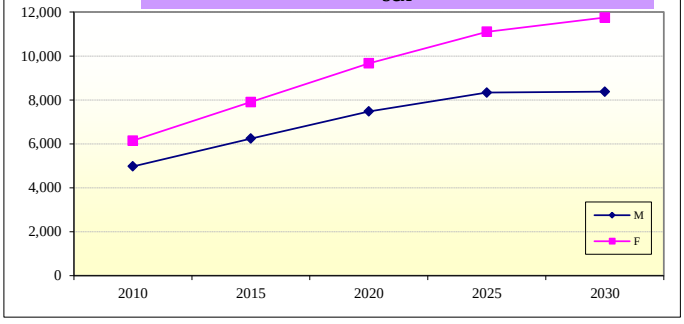
Graph C.17. Aruban born population <15y. old per 100 persons 65+ by sex



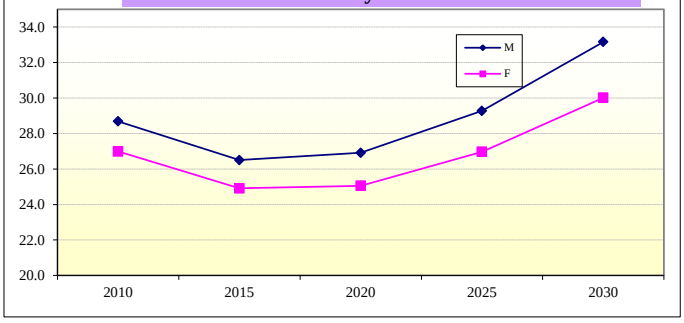
Graph C.18. Mean age Aruban born population by sex and period



Graph C.19. Number of Aruban born persons 60+ by sex



Graph C.20. Percentage of Aruban born persons -15y. by sex



Graph C.21.Number of Aruban born persons 75+ y. by sex

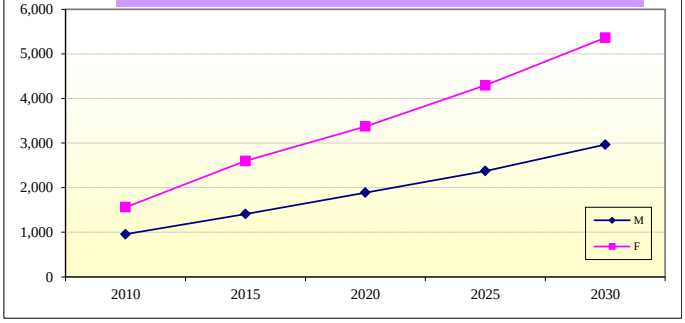


Table C.6. Relative distribution Aruban born population by age and sex, 2010-2030.

Age	2010			2015			2020			2025			2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
0-4	9.4	9.0	9.2	8.6	8.3	8.5	10.7	10.1	10.4	12.0	11.2	11.6	12.6	11.5	12.0
5-9	9.6	9.0	9.3	8.8	8.2	8.5	8.0	7.4	7.7	9.9	9.0	9.4	11.2	10.1	10.6
10-14	9.7	9.0	9.4	9.1	8.4	8.7	8.2	7.6	7.9	7.4	6.8	7.1	9.4	8.4	8.9
15-19	8.4	7.6	8.0	8.9	8.0	8.4	8.1	7.3	7.7	7.3	6.5	6.9	6.4	5.7	6.0
20-24	5.2	4.6	4.9	7.4	6.5	7.0	7.5	6.5	7.0	6.7	5.9	6.2	5.5	4.9	5.2
25-29	4.8	5.1	5.0	4.7	4.2	4.4	6.7	6.0	6.3	6.5	5.9	6.2	5.3	4.9	5.1
30-34	4.9	5.0	4.9	4.9	5.1	5.0	4.6	4.2	4.4	6.4	5.9	6.1	6.1	5.6	5.8
35-39	5.2	5.2	5.2	4.8	4.8	4.8	4.7	4.8	4.8	4.4	4.0	4.2	6.1	5.5	5.8
40-44	5.7	5.6	5.6	5.0	4.8	4.9	4.5	4.4	4.4	4.4	4.4	4.4	4.2	3.7	3.9
45-49	7.5	7.5	7.5	5.4	5.2	5.3	4.7	4.5	4.6	4.2	4.1	4.1	4.1	4.1	4.1
50-54	7.7	7.7	7.7	7.1	7.0	7.0	5.0	4.8	4.9	4.3	4.1	4.2	3.9	3.8	3.8
55-59	6.8	6.7	6.7	7.2	7.2	7.2	6.5	6.5	6.5	4.5	4.5	4.5	3.9	3.9	3.9
60-64	5.2	5.5	5.4	6.2	6.2	6.2	6.5	6.7	6.6	5.8	6.0	5.9	4.1	4.1	4.1
65-69	4.1	4.3	4.2	4.5	5.0	4.8	5.4	5.6	5.5	5.6	6.1	5.8	5.1	5.5	5.3
70-74	2.9	3.7	3.3	3.3	3.8	3.6	3.7	4.5	4.1	4.3	5.0	4.7	4.6	5.5	5.0
75-79	1.8	2.5	2.2	2.2	3.1	2.6	2.5	3.3	2.9	2.7	3.9	3.3	3.2	4.4	3.8
80+	1.1	2.1	1.6	2.0	4.3	3.1	2.8	5.7	4.3	3.6	6.9	5.3	4.3	8.4	6.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

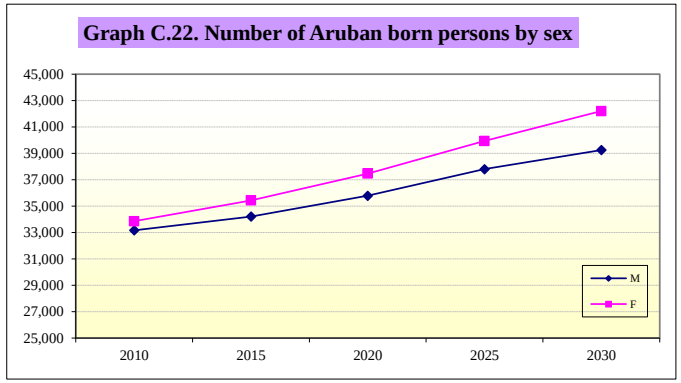
Source: CBS-Aruba, 2010

Table C.7. Growth of Aruban Population 2010-2030

	2010 -2015			2015-2020			2020-2025			2025-2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total
% growth 5 y.	3.1	4.7	3.9	4.6	5.7	5.2	5.6	6.6	6.1	3.8	5.7	4.8
% yearly growth	0.6	0.9	0.8	0.9	1.1	1.0	1.1	1.3	1.2	0.8	1.1	0.9
Doubling time	112.2	76.0	90.4	76.8	62.2	68.6	63.3	54.3	58.3	92.3	62.9	74.3

Source: CBS-Aruba, 2010

Graph C.22. Number of Aruban born persons by sex



Graph C.23. Yearly Growth of Aruban population by sex, 2010-2030

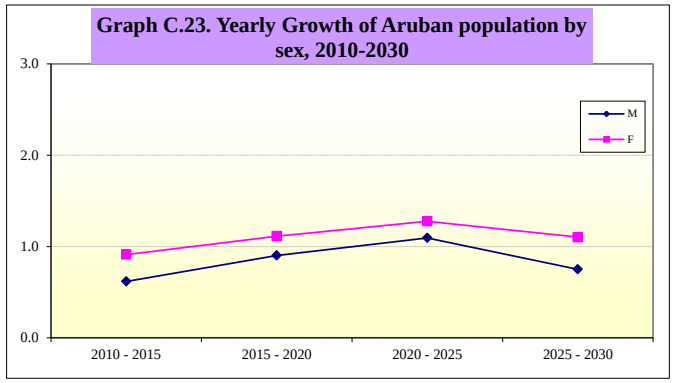


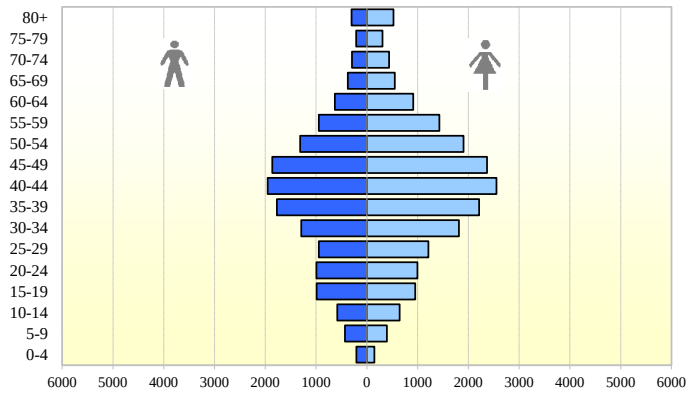
Table C.8. Foreign born population by age and sex, 2010-2030.

Age	2010			2015			2020			2025			2030		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
0-4	203	150	354	758	779	1,537	664	805	1,469	699	846	1,545	829	948	1,776
5-9	432	396	828	565	564	1,129	1,021	1,182	2,203	949	1,222	2,171	1,070	1,320	2,389
10-14	581	646	1,227	705	836	1,541	758	999	1,757	1,231	1,634	2,865	1,227	1,733	2,960
15-19	987	955	1,942	1,118	1,079	2,197	1,132	1,259	2,391	1,214	1,437	2,651	1,798	2,131	3,928
20-24	993	998	1,991	2,194	2,058	4,251	2,118	2,187	4,305	2,193	2,415	4,608	2,507	2,740	5,247
25-29	946	1,214	2,160	2,246	2,317	4,562	3,210	3,376	6,586	3,200	3,561	6,762	3,521	3,965	7,487
30-34	1,292	1,814	3,106	1,793	2,144	3,937	2,885	3,227	6,111	3,889	4,317	8,206	4,066	4,629	8,695
35-39	1,770	2,213	3,983	2,016	2,595	4,611	2,343	2,908	5,251	3,464	4,014	7,478	4,619	5,206	9,825
40-44	1,953	2,554	4,507	2,371	2,809	5,180	2,477	3,177	5,654	2,835	3,509	6,343	4,075	4,689	8,764
45-49	1,861	2,369	4,230	2,407	2,969	5,376	2,719	3,217	5,936	2,850	3,599	6,449	3,303	3,987	7,289
50-54	1,314	1,905	3,219	2,125	2,607	4,732	2,595	3,196	5,791	2,916	3,451	6,367	3,108	3,865	6,972
55-59	943	1,430	2,373	1,417	2,016	3,434	2,161	2,700	4,861	2,622	3,282	5,903	2,964	3,552	6,516
60-64	628	917	1,545	1,010	1,486	2,496	1,429	2,048	3,477	2,137	2,710	4,847	2,597	3,284	5,882
65-69	372	552	924	630	914	1,544	958	1,451	2,409	1,339	1,983	3,322	1,991	2,615	4,605
70-74	290	441	731	340	507	847	553	837	1,390	833	1,328	2,161	1,160	1,816	2,977
75-79	208	307	515	223	387	610	259	444	703	423	730	1,153	639	1,158	1,796
80+	299	524	823	369	867	1,236	430	586	1,016	502	681	1,183	669	963	1,631
Total	15,073	19,385	34,458	22,288	26,934	49,222	27,712	33,597	61,309	33,296	40,718	74,014	40,140	48,600	88,741
Median age	41	43	42	39.4	42.0	43.5	39.4	41.3	40.5	39.7	41.3	40.6	40.5	41.7	41.2
Mean age	40.2	42.4	41.5	38.8	41.5	40.3	39.7	41.1	40.5	40.8	41.8	41.3	41.5	42.5	42.0
Under 15	1,216	1,193	2,409	2,029	2,178	4,207	2,443	2,985	5,429	2,879	3,702	6,581	3,125	4,001	7,126
15-49	9,803	12,117	21,919	14,144	15,971	30,114	16,883	19,351	36,234	19,646	22,851	42,497	23,888	27,347	51,235
50-59	2,257	3,335	5,592	3,543	4,623	8,166	4,756	5,896	10,653	5,538	6,733	12,271	6,072	7,417	13,489
60+	1,797	2,741	4,538	2,573	4,161	6,734	3,629	5,365	8,994	5,233	7,431	12,665	7,056	9,836	16,891
75+	507	831	1,338	592	1,254	1,847	689	1,030	1,719	925	1,411	2,336	1,307	2,121	3,428
Dependancy ratio	18.8	18.4	18.6	19.2	22.0	20.7	20.1	23.1	21.7	21.9	26.1	24.2	23.3	27.7	25.7
% under 15	8.1	6.2	7.0	9.1	8.1	8.5	8.8	8.9	8.9	8.6	9.1	8.9	7.8	8.2	8.0
65+ per 100 pers.	7.8	9.4	8.7	7.0	9.9	8.6	7.9	9.9	9.0	9.3	11.6	10.6	11.1	13.5	12.4
<15 per 100 pers 65+	104.1	65.4	80.5	129.8	81.4	99.3	111.0	90.0	98.4	93.0	78.4	84.2	70.1	61.1	64.7

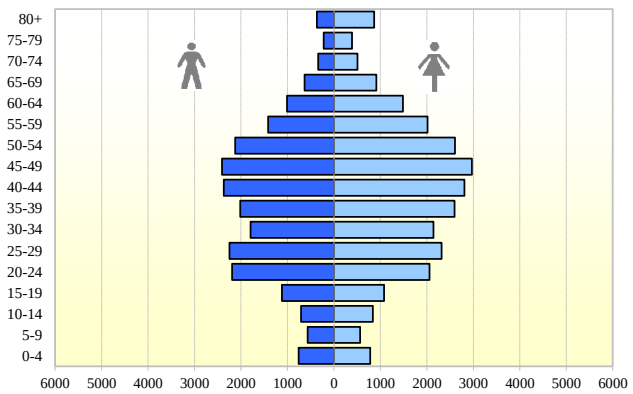
Source: CBS-Aruba, 2010

Graph C.24. Population pyramids of Aruban and foreign born population, 2010 – 2030.

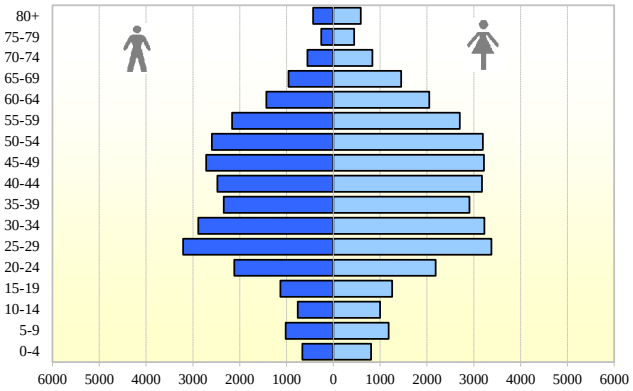
Aruban Population by age and sex, 2010



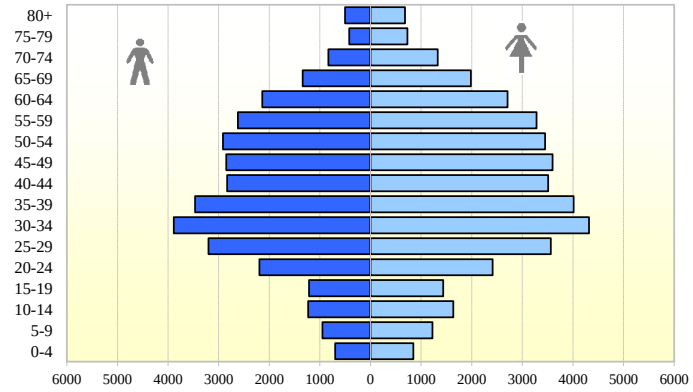
Foreign Population by age and sex, 2015



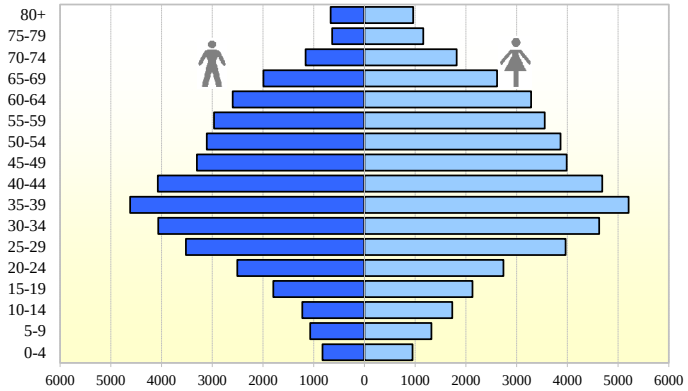
Foreign Population by age and sex, 2020



Foreign Population by age and sex, 2025

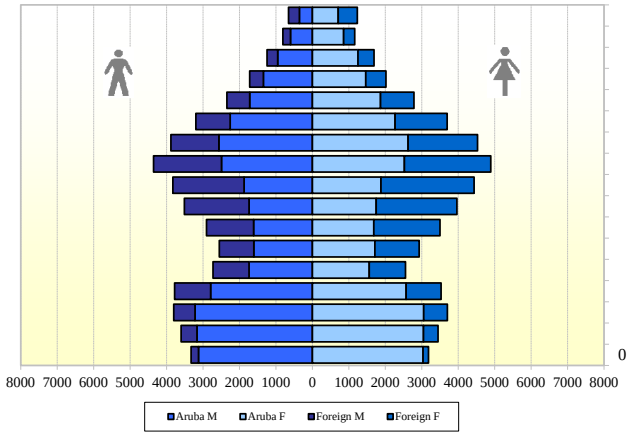


Foreign Population by age and sex, 2030

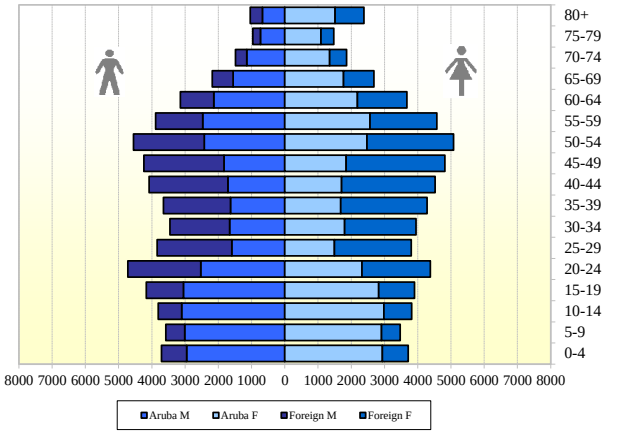


Graph C.25. Population pyramids of Aruban and foreign born population, 2010 – 2030.

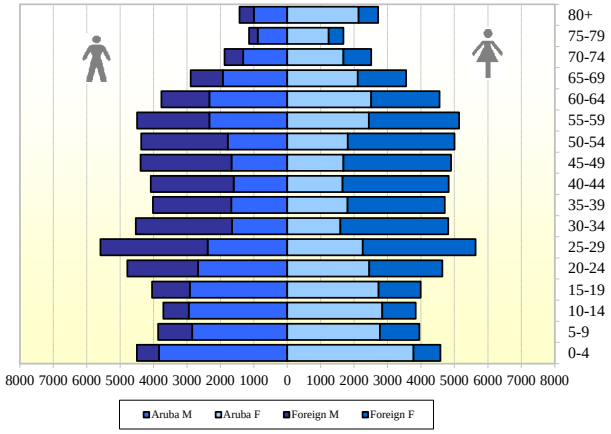
Aruban and foreign born population by age and sex, 2010



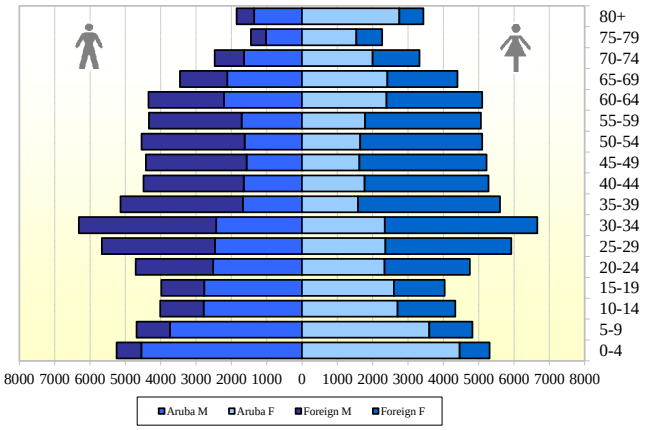
Aruban and foreign born population by age and sex, 2015



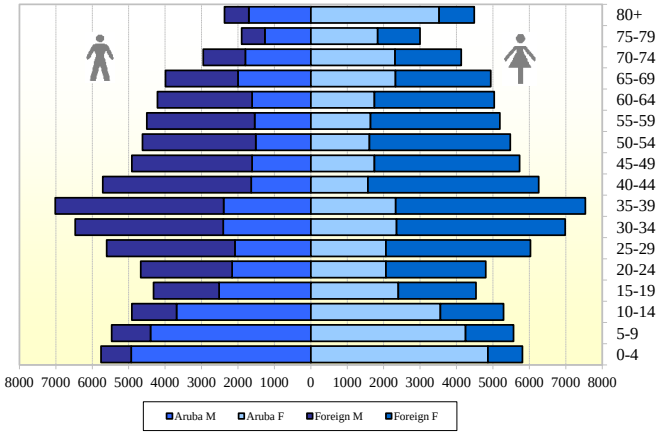
Aruban and foreign born population by age and sex, 2020



Aruban and foreign born population by age and sex, 2025



Aruban and foreign born population by age and sex, 2030



CONCLUSION

In this report we have presented three scenarios to explore the future size and composition of the population living on Aruba. Population dynamics in Aruba largely depend on the variations in the number of migrants coming to Aruba each year, and far less on the changes in fertility and mortality. The only way to make reasonable estimates of the future flow of migrants is to connect these numbers to the performance of the local economy. Therefore, we use a projection model which is based on the relationship between the yearly growth of the economy and the requirements of the labor market. This model was developed after the 2000 population census and since then used at the CBS-Aruba.

Our projections show two important trends, which will determine the demographic landscape of Aruba in the next twenty years. First, the aging of the population will play a growing role in the economic and social development of Aruba. The 2010 population census showed a rapid aging of the population. Compared to the 2000 census, the population above 65 years of age in 2010 had increased by 45.2 percent. During the 1990's the growth of the 65-plus population was only 3 percent. During the period 2000 – 2010, the number of persons above 75 years also increased rapidly. Currently, 3,857 persons are older than 75 years. This is 64.3 percent higher compared to the 2000 population census. Each of the three scenarios showed that the aging of the population will continue at a quick pace during the next twenty years. For instance, we have indicated that in all three scenarios the number of persons above age 75 will be above 11,000. There is no doubt that the aging of the population will have some serious consequence for Aruban society in the next twenty years. More and more people will be using services that are geared towards the elderly. The number of persons with chronic illnesses will grow rapidly, as the prevalence of many of these diseases (e.g. diabetes) is very high among the elderly. This will put extra pressure on the health system. Also, pension schemes will have to deal with more and more persons who reach retirement age.

Second, our projections show that a growth of the economy would need more and more laborers who are not available on the local labor market. Because of the aging of the population, coupled with consistent low levels of fertility, an insufficient number of local laborers will be available to fill all positions created by a growing economy. A moderate to rapid growth of real GDP will lead to a high demand of laborers and consequently high levels of immigration. The high scenario, with consistent levels of growth of real GDP between 2 and 3 percent would result in a population size of more than 170,000 persons in 2030, where more foreign born persons than Aruban born persons would be living on the island. In this scenario, the labor force would be dominated by foreign workers.

Currently, with the worldwide financial crisis and the significant changes taking place in the Aruban economy there is a need to repeat these population projections on a yearly basis. It is anticipated that a yearly update of the population projections will be made.

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