This document contains directions for determining your population growth rate. The information can then be added to your solid waste plan in Chapter 3 (the section on Current Community Population in the original template file).

Here, you will need to provide an estimate of how fast your community is growing by percent of population. For example:

Projected population in 2026: In twenty years we expect to have 780 people, with 20 part-time residents.

Note, a plan for solid waste is usually for 20 years. If you calculated an average growth rate, you can apply your growth rate to estimate what the population will be in 2026 (twenty years from now).
The growth rate is usually anywhere from 0% (no population growth) to 8%. Sometimes it can be a little negative too (losing population). One way to calculate this is to use the growth rate from the last few years.

Example of how to calculate a growth rate:
> *2003 population was about : 300 people*
> *2004 population was about : 312*
> *2005 population was about : 330*
> *2006 population was about : 340*

Then you can calculate the yearly growth rates by:
> *2003 to 2004 growth rate = (312-300) ÷300 = **0.040** = 4.0%*
> *2004 to 2005 growth rate = (330-312) ÷312 = **0.058** = 5.8%*
> *2005 to 2006 growth rate = (340-330) ÷330= **0.030** = 3.0%*

The overall growth rate you need would the average rate, or: (4.0% + 5.8% +3.0%) ÷ 3 = 4.3%

*The sum of the growth rates was divided by 3 here because there were 3 numbers. That is how **an average** is calculated.*

*Because you live there, you will likely have a better estimate of your village population than the State or Federal Government. But if you are unsure, you can use their estimates. **Here is a source for census data that you can use to get population estimates:***

http://www.commerce.state.ak.us/dca/commdb/CF_CUSTM.htm

Example in using your growth rate to calculate future populations: *You have calculated or looked up an average growth rate of 4.3%. To calculate population for Year 2007, multiply the current population of 340 by 4.3%. Round off the number so there are no decimal points. This is your additional growth rate. Add that to the current population, like this:*

Year 2007 additional people = 340 x 4.3% = 340 x 0.043 = 15.05, or 15 people (not 15.05 people).

The total Year 2007 population equals 340 people + 15 people = 355 people.

Year 2008 = 355 + 355 x 0.043 = 370 people
Year 2009 = 370 + 370 x 0.043 = 386 people
Year 2010 = 386 + 386 x 0.043 = 402 people

These calculations are easiest using Excel program or a spreadsheet. But they can also be done with a hand calculator. If you have a difficult time calculating this, just let us know and we can do this part for you. Otherwise, do the calculations and fill in the table below.

If you are unable to find accurate population numbers for your community, *you could also check out the numbers available for* **student enrollment** *over the past several years on the Alaska State Education Department website.*
http://www.educ.state.ak.us/stats/QuickFacts/ADM.pdf
When you click on this link, you can find your community or school district and use the numbers over the past several years to calculate a growth rate for your community, using the same steps above.

Instead of using calculators, you can estimate your population by meeting with several wise people *and discuss all the different factors that you think will affect your population growth. Be sure to think about people moving in and out, how many babies women might have, what development projects might bring in tourism or additional people, what subsistence will be like, how much housing there will be, whether any people from displaced villages will be moving in, etc. Many of these factors lead to more people moving out, or more people moving in. You don't need to look at each year, but try to decide at least for every 5 years, what the population will be.* ***For example:*** *We decided our population would be about* **400** *people in 5 years,* **450** *people in ten years,* **550** *people in 15 years, and about* **700** *people in 20 years. As long as you can describe why you chose those numbers, you can use problem solving through discussion* **or** *just math. Either way is okay.*