

ASSIGNMENT 1

Stevens is located at Hoboken, New Jersey and is home to a number of students that study at Stevens. Hoboken has a population of 50,005 according to the census 2010, which is higher than the census 2000 (38,577). Hoboken has an area of 2.0 square miles (land and water). I would like you to do the following exercise and respond to the questions.

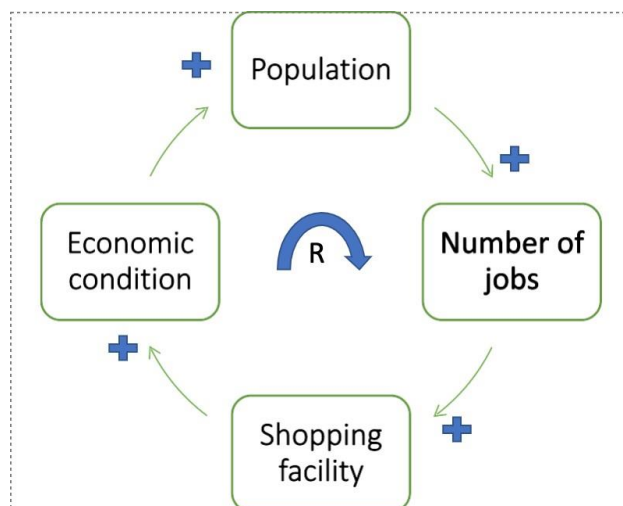
1. Brainstorm and write 8-10 variables that have been effective in population change of the city of Hoboken in the past 20 years

1. Wide variety of job opportunities.
2. Good public transportation facilities which connects important places and major cities within the city.
3. Less expensive housing for students and immigrants.
4. Popularity level of Stevens.
5. Accessibility to grocery stores, ATM's, restaurants, pharmacies like CVS, Walgreens etc.
6. Good geographical location considering factors like calm, cool climate and pleasant atmosphere.
7. Hoboken is the centre for cultural club because of the cultural activities taking place on the waterfront.
8. Nostalgic view of the skyline and New York city across the Hudson river.
9. Good facilities provided by hospitals and health care providers.
10. Private schools and universities attracting the residents of Hoboken.

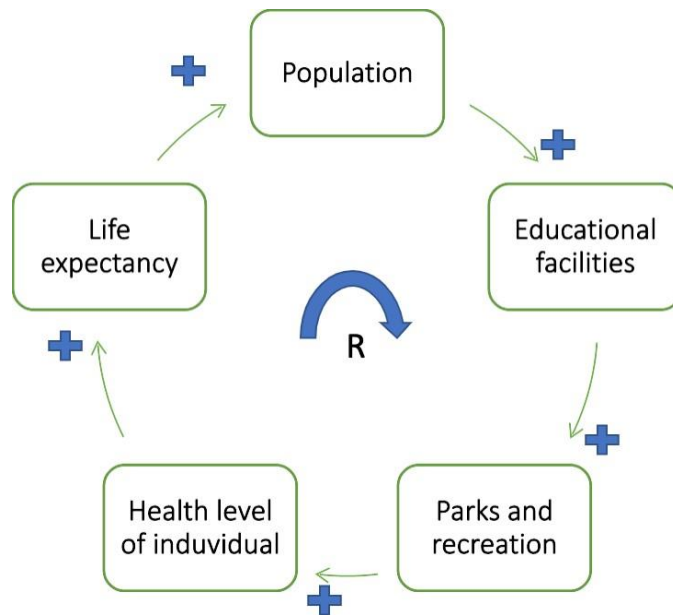
2. Draw 2 major reinforcing loops that has contributed to the population of Hoboken.

Major Reinforcing Loops

Reinforcing Loop 1:

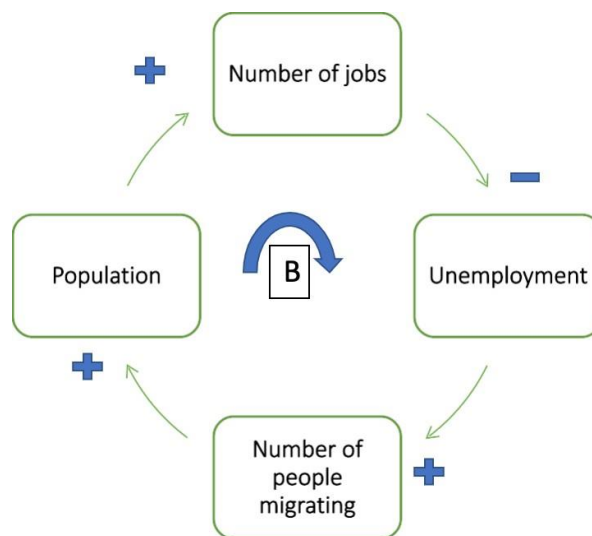


Reinforcing loop 2:

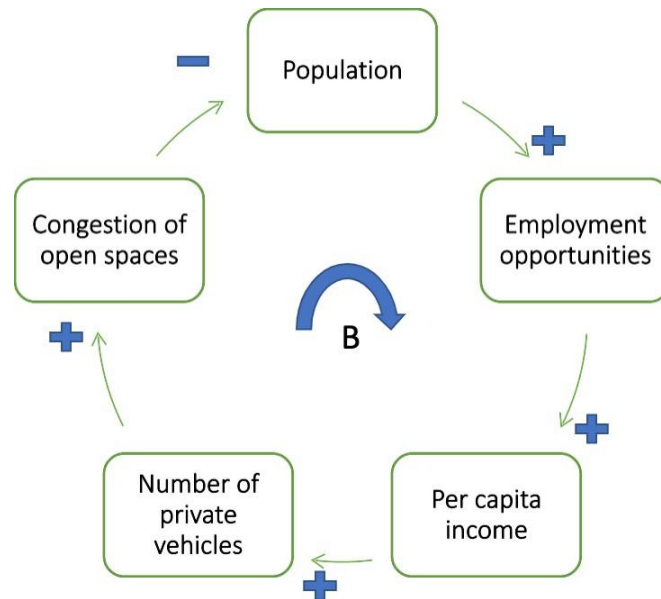


3. 2 Balancing Loops

Balancing loop 1:



Balancing loop 2:



4. The covid-19 pandemic started affecting life in NYC metropolitan area including Hoboken in March 2020. What additional variables do you think would affect Hoboken population in the long term? Do you predict an increase or decrease in population trends? explain briefly.

The COVID-19 pandemic has had a huge impact on life in the NYC metropolitan area, which had included the rich and famous Hoboken. Because of this pandemic outbreak many businesses had to be shut down which in turn led to economic loss locally. The long term effects of the pandemic on Hoboken's population will likely depend on the severity of the outbreak, the effectiveness of the containment measures, the speed and efficacy of a vaccine or other treatment. The other factors that could effect the population in the long term include the availability of affordable housing, the quality of the school system and the strength of the local job market.

The pandemic has caused a significant decrease in the population of Hoboken. After many months passed by after the outbreak, many residents have chosen to desert the city searching for safer and less crowded places to live in. Since many residents deserted the city there has been negative impact on the local economy since businesses have lost customers and workers. The pandemic has made it difficult for new residents to move to Hoboken, as many people are hesitant to live in an urban area during an outbreak. The long term effects of the pandemic on Hoboken's population will largely depend on the course of the outbreak. If the virus continues to spread unchecked, the population will continue to decline as people move away from the city. However if the outbreak is brought under control and a vaccine or treatment is developed, the population may begin to rebound.

What additional variables you think would affect Hoboken population in long term?

Other main factors that could affect Hoboken's population in the long term include availability of affordable housing, the quality of school system and the strength of the local job market. The pandemic has made it difficult for many people to afford housing in Hoboken, as rents have increased and many residents have lost their jobs. The quality of the school system is also a major factor in determining whether families choose to move to Hoboken. Finally, the strength of the local job market will play a role in attracting new residents to the city.

Do you predict an increase or decrease in population trend?

It's difficult to predict the increase or decrease of the pandemic which will in turn affect the Hoboken's population in the long term. When the outbreak is severe, and there are no measures to control it, the population decreases as people would wish to relocate to a different area. However, if the outbreak is controlled with various measures or by taking various measures with the help of vaccine or treatment quickly, the probability of population rise increases as people who would have moved out during the pandemic stay put in the same area because of its quality of life.

