**Modeling Activity - Bruce Family: Accumulated Wealth?**

Question: What was the **economic impact** on the Bruce family as a result of the land seizure and corresponding business closure?

**Part 1: Pick your focus**

**Which aspect of economic impact on the Bruce family is your group going to model? Impact caused by…** (highlight yours)

* loss of income/profits
* loss of property
* lost opportunity for improvements to expand business
* lost opportunity to invest profits in other areas (e.g., stock market, CDs, etc)

**What are your initial thoughts about the information you will need and how you will arrive at a dollar figure?** Record your group’s ideas here. Call over one of us for us to discuss.

**Part 2: Generate your First-Draft, Initial, Beginning, Tentative, but Still-Thoughtful-and-Defensible Model**

What was the **economic impact** on the Bruce family as a result of the land seizure and corresponding business closure?

Using the thinking you did in Part 1 come up with a defensible (present-day) amount for the economic impact on the Bruce family.

You may have to estimate other information not given, or ballpark a value to work with.

You may use any tools -- spreadsheets, calculators, etc.

Keep track of your thinking, and think about how you can share your work.

**Your report out: Using some visual (standing whiteboards can be used), please share:**

* What aspect of economic impact did you try to model?
* What information did you use to create your model?
* What uncertainty do you have in your model?
* What was the value you came up with?
* What would be your next steps to refine your model?

Clicking on your focus will take you to the **What We Know** information.

* [Income and profits](#o10h1w7qoufr)
* [loss of property](#ncaqzehqzxty)
* lost [opportunity for improvements to expand business](#nib7n54ydtu6)
* lost [opportunity to invest profits in other areas](#sk5p0lw47a2a) (e.g., stock market, CDs, etc)

**What we know information** - dates and dollars (and converted to today’s dollars [using this inflation calculator](https://www.usinflationcalculator.com/)

**Their Income and Profits**

|  |  |  |
| --- | --- | --- |
| **Facts/events** | **Dollars** | **Additional Notes** |
| 1912 -1924  Ran what seemed to be a prosperous business | We couldn’t locate their income, profits or expenses.  Average wages for running such properties  Ave wage 1920 was $3730 ($46,400) |  |
| 1924 - both lots seized  Unlike others whose land is taken, their business is essentially taken as well. |  |  |
|  |  |  |
| 1927 - compensated by city | $14,500 ($236,430) |  |

Dates and dollars (and converted to today’s dollars [using this inflation calculator](https://www.usinflationcalculator.com/)

**Their Property-** (picture from Landsearch.com)



|  |  |  |
| --- | --- | --- |
| **Facts/events** | **Dollars** | **Additional Notes** |
| 1912 bought 1st lot | $1225 ($35,106) |  |
| Bought a 2nd lot | (we couldn’t locate the price they paid) |  |
| 1924 - both lots seized |  |  |
|  |  |  |
| 1927 - compensated by city | $14,500 ($236,430) |  |
| 2022 - |  |  |

Dates and dollars (and converted to today’s dollars [using this inflation calculator](https://www.usinflationcalculator.com/)

**Opportunities for Improvements and to Expand Business**

This aspect is more open. We do not know what they would have done after 1924 when the business was taken.

Decide on some improvement or expansion you expect the Bruce Family would have done, and then explore the impact. (For example, maybe they would have bought a third plot, or maybe they would have built a house, or inn, or wedding venue. They did have a dance hall already.)

Use dates and dollars- converted to today’s dollars [using this inflation calculator](https://www.usinflationcalculator.com/)

|  |  |  |
| --- | --- | --- |
| **Improvement or Expansion** | **Cost of Improvement or Expansion** | **Benefit (monetary) of Improvement or Expansion** |
|  |  |  |
|  |  |  |

Be sure to keep track of your decisions, sources, and estimates.

**Lost Opportunities to Invest $ in Other Areas**

This aspect is more open. We do not know what they would have done after 1924 when the business was taken. However, they may have had extra profits and decided to invest them in the stock market, buying bonds, lending to others in the Black community (charging a small interest rate), or buying other property or land elsewhere (not for their business). You may make some reasonable assumptions and see the impact. The basic idea here is that the rich can get richer, or money makes money.

Dates and dollars (and converted to today’s dollars [using this inflation calculator](https://www.usinflationcalculator.com/)

**Stock market:** On average, the **stock market** returns 10.5% on your investment every year. (From investopedia.com)

The [average annualized return](https://www.investopedia.com/terms/a/aar.asp) since its inception in 1926 through Dec. 31, 2021, is **10.49%**.The average annualized return since adopting 500 stocks into the index in 1957 through Dec. 31, 2021, is **10.67%**.

**Money in the Bank.** Money in savings accounts, CDs and Bonds earn compound interest. Suggestion: Use 4.5% for the average annual interest rate (historical). Note that, because this rate accounts for inflation, you do not need to convert your initial or final number to 2022 dollars These numbers have fluctuated significantly over time (from 1.0% - 13.2%) Here are [rates](https://www2.census.gov/library/publications/2004/compendia/statab/123ed/hist/hs-39.pdf).

**Other.** Decide what other investment they may have engaged and figure it out!

