Prospective Return on Investment of the Northside Achievement Zone

Executive Summary

This prospective return on investment (ROI) study quantifies the costs and benefits of implementing NAZ solutions with Brandon, a typical child living in the Northside Achievement Zone. Brandon and his family will be enrolled in NAZ for five years (not necessarily consecutively) and will participate in some of NAZ’s most popular programs. According to the NAZ model, even if Brandon is falling behind his peers early on, Brandon and his parents will participate in intensive solutions to ensure that he becomes proficient in age-appropriate reading and math. Once proficient, Brandon and his family can take charge of Brandon’s success on their own, knowing that NAZ is ready to lend a helping hand if Brandon starts to fall behind.

With NAZ support behind him, Brandon graduates from high school and is much more likely to enroll in college, well-prepared for success. In adulthood, Brandon’s wages are higher and he is less likely to commit crimes, smoke, use drugs, suffer from depression, or use public assistance, resulting in significant savings to society. These are just a few of the benefits Brandon can expect from his participation in NAZ solutions. This ROI study adds up these benefits of Brandon’s involvement in NAZ and compares them to the costs of NAZ implementation to estimate the net benefits and social return on investment of NAZ.

Though the term “ROI” is used throughout the report, this approach is best described as a social return on investment (SROI) study. SROI studies differ from traditional business-related ROI calculations in that they include costs and benefits of outcomes that are not typically associated with a dollar value—for example, the value of years of life lost due to smoking. These studies are common in the social sciences. We rely on peer-reviewed economic articles to determine the costs and benefits of our expected outcomes, using conservative estimates whenever possible.

The study finds a projected return to society of $6.12 for every $1.00 invested in NAZ.
How benefits are counted

The cost-benefit model contains three steps:

1. **Establish the potential impact of NAZ’s solutions** on a set of outcomes using impacts demonstrated by similar programs working with similar populations elsewhere.

2. **Estimate the monetary value** of the improved outcomes. For example, to calculate the impact of early childhood education (ECE) on any symptom of depression, we use the following calculation:

   \[
   \text{Impact} = \frac{\text{Likelihood of depression} \times \text{Impact of ECE on depression rate (step 1)} \times \text{Health care costs of depression}}{(1 + \text{Discount Rate}) \times (\text{Age of impact} - \text{Age at participation})}
   \]

3. **Compute the net benefits** by comparing the monetary benefits (step 2) to the cost of the intervention.

All of the key assumptions in this report err on the conservative side. The results presented in this report can therefore be considered a lower bound for the true net benefits and return on investment of NAZ. A few examples of this conservative approach are described below, and many others are listed in the “Considerations and comments” section of the report.

What is counted in the ROI:

- **The full costs of implementation** of the entire NAZ ecosystem (including NAZ partners’ costs of implementing solutions with NAZ families).

- Only **partial benefits of participation**: increased earnings from greater educational attainment, reduced depression and tobacco/drug use, fewer felony arrests, lower need for special education and grade repetition, reduced reliance on public assistance, increased tax revenues, and fewer child abuse/neglect cases.

- Partial **benefits of only selected NAZ programs**: early childhood education, K-12 solutions like expanded learning and mentoring, and parent and family solutions like Family Academy and career/finance navigation.
What is not counted in the ROI:

- Benefits of many other NAZ programs could not be quantified due to data limitations. These include, for example:
  - North4, an intensive violence prevention program
  - Housing stabilization support
  - Whole-school effectiveness (with anchor schools)
  - Prenatal services and support

- Many other benefits of participation. Even in the programs we do include, we only have data to compute specific benefits. Some of the potential benefits not included in the ROI are:
  - Other health benefits (e.g. improved nutrition and health status due to higher incomes, increased access to and use of prenatal and preventative health care)
  - Savings to the justice system from reductions in non-felony and non-drug-related crime
  - Various benefits of improved housing stability
  - Social/emotional benefits of improved parent-child relationships, strengthened community, and a more optimistic outlook for the futures of Northside children

- Benefits of participation in multiple programs simultaneously or synergies between programs. For any given outcome, only one program’s impact is counted per participant.

As NAZ gathers more data related to anticipated benefits and their demonstrated results build more evidence for the strategies not included in the report, the ROI will be updated to more fully represent the true return on investment in NAZ.
Key findings

- The social return on investment in NAZ is $6.12 for every dollar invested, with a net benefit to society of $167,467 per participant. The return on taxpayer investment is $2.74 for every dollar invested.

- Society gains $200,178 in benefits for the average NAZ participant, but spends only $32,711 to implement NAZ solutions with that participant. These benefits result from:
  - Increased net earnings as a result of increased educational attainment, career counseling, and increased productivity ($147,794)
  - Improved health outcomes ($28,281)
  - Increased tax revenues ($15,943)
  - Other public savings due to lower crime rates, reduced need for special education, and fewer public assistance and child welfare cases ($8,160)

- The total social gains from NAZ total more than $16.7 million in net benefits for every 100 participants served.

- Society would fully recover the costs of 15 years of NAZ implementation if about 1,450 scholars achieve their expected benefits. (Enrollment projections are still in development, but NAZ expects to serve at least 7,000 scholars during this period.)

- To put it another way, if a given participant graduates from high school, society will have received full payback on the cost of his or her time as a NAZ scholar.