

What's "It" Worth?

Lesson Overview

In this lesson, students look at the cost-benefit analysis process, first with a fairly simple decision, and next with one that is a little more difficult to assess. Students identify the costs and benefits of the alternatives and make a recommendation based on their analysis.

Lesson Background

Dr. Julie Heath's [Cincinnati Enquirer](#) article, "Stadiums: Benefits, Costs and the "It" Factor" illustrates one of the common problems facing decision makers – be they individuals, business owners, voters, or investors. If you clearly know the costs and benefits of the alternatives, you can usually make a "good" decision.

The problem is that costs and benefits are sometimes hard to pin down. If it is just money – it seems easy. Is a large soft drink at McDonalds worth a dollar? How thirsty are you? How much do you enjoy a soft drink? How much time and trouble will it take to get to the McDonalds? Deciding to spend a dollar is pretty easy – unless you don't have a dollar. The other stuff, the benefits, may be a little more difficult, unless, of course, it is 100 degrees outside. Then again, it is only a dollar.

As Dr. Heath suggests, the benefit may be hard to measure and compare when they are something like "civic pride" or bragging rights – "our stadium is better than yours – nah, nah, nah, nah, nah, nah!" How much is a state-of-the-art stadium and a winning football team worth to a potential executive of Procter and Gamble?

The value of a benefit is a personal thing. Will you give up being close to the beach for \$50,000 more in income? Is the bigger house in the country worth the drive into the city on I-75? Are there people who only want to live and work in a city that has at least two professional sports teams (with updated stadiums)?

Key Vocabulary Terms

Benefit: Monetary or non-monetary gain received because of an action taken or a decision made.

Cost: An amount that must be paid or spent to buy or obtain something. The effort, loss or sacrifice necessary to achieve or obtain something.

Cost-Benefit Analysis: A process of examining the advantages (benefits) and disadvantages (costs) of each available alternative in arriving at a decision.

Opportunity Cost: The second-best alternative (or the value of that alternative) that must be given up when scarce resources are used for one purpose instead of another.

NOTE: The definitions in this lesson are cited or summarized from the Council for Economic Education's *Virtual Economics* program. They are consistent with the *National Voluntary Content Standards in Economics* and the *Ohio Academic Content Standards for Social Studies*.

Lesson Objectives

The student will:

- Identify the costs of the alternatives of a decision.
- Identify the benefits of the alternatives of a decision.
- Analyze the costs and benefits of a decision.
- Suggest a choice, based on cost-benefit analysis.

Lesson Materials

Handout/Visual 1: *Two hours of My Time*

Handout/Visual 2: *Stadiums: Benefits, Costs and the “It” Factor*

Handout/Visual 3: *Stadium Improvements*

Handout/Visual 4: *What’s “It” Worth?*

Lesson Preparation

Prepare a visual or handouts of *Handout/Visual 3: Stadium Improvements*.

Prepare copies for each student of Handout 1: *Two hours of My Time*, Handout 2: *Stadiums: Benefits, Costs and the “It” Factor*, and Handout 4: *What’s “It” Worth?*

Lesson Introduction:

Explain to the student that today’s topic is cost-benefit analysis. Ask the students to suggest the meaning of cost-benefit analysis. *[Since the term is fairly self-explanatory, this may be easy. Use the definition for the “Lesson Background” section, above.]*

Clarify that costs are sometimes in dollars (price), sometimes in time and trouble, or opportunity. See the definition of opportunity cost.

Clarify that benefits are sometimes concrete (a new car) and sometimes in values, personal satisfaction, or status.

Define cost-benefit analysis as: *A process of examining the advantages (benefits) and disadvantages (costs) of each available alternative in arriving at a decision.*

Lesson Procedures

1. Distribute copies of Handout/Visual 1: *Two hours of My Time*

Direct the students to read the short passage about Kimberly's decision about what to do between 8:00 and 10:00 pm on Monday night. She has to choose between studying math and watching her favorite TV shows.

On the handout, the students should list the benefits and the costs of each alternative - studying math or watching TV.

Use this to help the students better understand the concepts of costs and benefits. Remember, cost are monetary or non-monetary, and benefits are also monetary or non-monetary. Remind them of "opportunity cost."

2. Review again the definitions of costs and benefits. Ask the students to suggest their rationales for their recommendations for Kimberly. For which alternative did the benefits exceed the costs?

Discuss similar decisions the student typically make. Do they compare the costs and benefits?

3. Explain that now they will look at a slightly more complicated cost-benefit decision. Distribute copies of Handout 2: *Stadiums: Benefits, Costs and the "It" Factor*.

Explain that it is an article from the Cincinnati Enquirer, by Dr. Julie Heath, the Director of the Economics Center at the University of Cincinnati. The article is mostly about the current controversies over the Cincinnati Reds' Great American Ballpark and the Bengals' Paul Brown Stadium. Beyond that, it is about the value of public investments that become part of the image of the community.

Cincinnati is a major professional sports city. It is among the smaller markets that have two major professional sports teams. Ask: What does it mean to the city to have the Bengals and the Reds? Encourage a discussion about the sports teams as part of Cincinnati's image or status.

4. Referring to Dr. Heath's article, ask the students to identify the two issues related to Paul Brown Stadium and Great American Ballpark.

[The Reds are interested in improvements to Great American Ballpark in time for Major League Baseball's All-Star game in July, 2015. Great American Ballpark is owned by Hamilton County.]

[The Bengals would like a new scoreboard, triggering a clause in their lease agreement that requires Hamilton County to finance it. Paul Brown Stadium is also owned by Hamilton County]

Propose this scenario: Handout/Visual 3: Stadium Improvements: *[Cincinnati Reds Chief Operating Officer Phil Castellini comments that the improvements will "allow our community to be viewed in the best possible light when we have the honor of hosting the All-Star Game in 2015. This request is not for new funds, but for moving up previously scheduled improvements to meet the All-Star Game goal."*

The Bengals agreement with Hamilton County requires that the county upgrade to a high-definition scoreboard if at least 14 other NFL teams install HD scoreboards. 21 NFL teams have already done so.]

5. Explain to the students that the Bengals request is required as part of their contract with the county and that the Red's request is to speed-up the timeline for currently planned improvements.

Ask the students to suggest the benefits of the two requests. How will the improvements affect either the teams' ability to provide their services or the fans' desire to attend games?

Ask the students to suggest the costs of the two requests. Is it more than just the \$15 million dollars? What other services can the county provide with those dollars?

6. Ask about the other benefits of having professional sports teams playing in updated stadiums. This is what Dr. Heath calls "It." Ask: What is "It"?

Allow the students some time to identify what "It" is. Dr. Heath suggests "the allure of a city for those considering relocating here, joining other points of pride like a symphony, ballet and good public transportation." For a city, does it also include good schools, parks, clean streets, museums, safety, and other things the citizens of the city or county desire and are willing to pay for with public funds (taxes)?

Ask: Is "It" the same for everyone? Referring to the request by the Reds, is "It" important when people visit to attend a game or when people see the stadium on TV? Again, ask if the benefit is worth the cost. Are there benefits that the city, the fans or businesses don't directly receive?

Lesson Conclusion

To conclude, ask some of these questions:

- Will a better image for the city as a result of better stadiums draw more visitors?
- Will a better image for the city help Cincinnati companies recruit employees?
- Do people who do not even attend games benefit from the stadiums?
- How will it affect the city if either the Reds or Bengals move to another city?
- Will graduates of UC or Xavier leave or stay because of the city's image?
- Should public investment spending benefit privately-owned businesses?
- If we spend \$15 million upgrading the stadiums, what do we give up?

Finally, ask again: What is "It" worth?

Lesson Assessment

Distribute copies of Handout/Visual 4: What's "It" Worth. Students will write a persuasive letter to the editor arguing either for or against the funding of the improvements. In their letters, the students should use the language of cost-benefit analysis.

Handout/Visual 1:

Two hours of My Time

Hello! My name is Kimberly. I am in the 11th grade at George Washington High School. I am an "okay" student when I work at it, but sometimes I have other priorities. Here I am sitting in my last class of the day trying to figure out how I am going to do all of the things I want to do tonight. Mondays are always tough for me.

I have a big math test Tuesday morning. If I study for a few hours Monday, I can pass. Another hour or two and I can probably do much better. Mom and Dad said that if I get a "B" they will put some more money in my new car fund.

I have play practice after school every day this week. We have to be ready for the opening night next week. I've been trying out for the lead role for three years and I finally made it. I need more time! Luckily, I know my lines.

My friends and I usually spend our lunch-time on Tuesdays comparing notes about the TV shows on Monday night. They are our favorites and this week starts the new season. Who is the mother on "How I Met Your Mother"? I just can't miss "Two and a Half Men." Why can't I meet a handsome billionaire? The ten-o'clock shows are not as good, but I really have to get to sleep by eleven. School starts at 7:15 am.

Please help me decide what to do!

What are the costs of Kim's two alternatives for Monday night?

Study Math

Watch TV

What are the benefits of Kim's two alternatives for Monday night?

Study Math

Watch TV

What should she do?

Handout/Visual 2

Stadiums: Benefits, Costs and the “It” Factor

Both the Reds and the Bengals have been in the news recently concerning their stadium financing deals. The Reds are investigating the possibility of getting a stadium upgrade in time for the All-Star game in 2015. The Bengals are considering requesting a new scoreboard, triggering a clause in their lease agreement that requires the county to finance it. While some question the wisdom of the inclusion of this particular clause in the Bengals’ agreement, the fact is that it exists and therefore, must be dealt with. The larger question remains, however: Why do local and state governments agree to finance stadiums for sports franchises, which are, after all, businesses?

Stadium financing can be a contentious issue. The problem is determining whether the use of public money to build or refurbish a stadium results in sufficient benefits to offset the costs of doing so. The Bengals and Reds stadiums were a package deal, one that is estimated to have cost \$555 million in infrastructure, construction and other costs. To finance the cost, Hamilton County took on \$1 billion in debt, selling bonds (or IOUs) to investors. As with any debt, the county government has to pay interest to those who purchased the bonds. It does this, in part, with an increase in the county sales tax—the reason it is called public financing.

What about the benefits? Building (or renovating) the stadiums can create construction jobs, and having the stadiums means that fans who attend games spend money on tickets, concessions, parking, etc. Businesses surrounding the stadiums also benefit by an increase in traffic through their doors. This money ripples through the local economy as business owners, for example, can now hire more employees and spend more money on goods and services. These new employees can afford to buy more goods and services, making the original money “multiply” throughout the economy.

The problem is that some of this spending may not be new spending, but redirected spending. The money a fan may spend at a game might have been spent going to a concert or some other form of local entertainment. In addition, spending at the stadium (buying merchandise, for example) results in higher salaries for the athletes and owners, who often do not live in the area, reducing the benefit of stadiums. When a stadium is financed by an increase in the sales tax—a regressive tax that redistributes income away from low income residents—the spending power of residents is reduced, offsetting any direct benefit of stadium-related spending. Sometimes stadiums are financed by taxes on hotels or rental cars, the logic being that these would largely be levied against visitors who come to see the teams. But the taxes are also levied against people coming into town for conventions. When convention sites are being selected, a high tax on these services may decrease the number of conventions coming to town.

Clearly, trying to figure out the costs and benefits of stadium financing is a complicated issue. However, what is usually missing from analyses that try to do so is the public goods aspect of sports franchises. Sports teams generate fan loyalty, local unity, and civic pride, even among those who never step foot inside the stadiums. Sports teams generate an intangible “it” that can add to the allure of a city for those considering relocating here, joining other points of pride like a symphony, ballet and good public transportation. While economists are attempting to attach a dollar value to “it”, the analysis remains the same: are the benefits (tangible and intangible) greater than the costs?

Handout/Visual 3

Stadium Improvements

The Cincinnati Bengals request that Hamilton County install a new “state of the art” high-definition scoreboard in Paul Brown Stadium at a cost of \$10 million to the county.

The Cincinnati Reds request that Hamilton County pay \$5 million for exterior and interior repairs, improved security, and technology improvements to Great American Ball Park in time for the 2015 Major League All-Star Game.

Handout/Visual 4

What's "It" Worth?

You are a citizen of Hamilton County, Ohio. In 1996, with taxpayer approval, the county assumed over \$1 billion in debt to build two new stadiums. The debt is to be repaid by a county-wide sales tax increase. The stadiums were built and are now in use.

The Cincinnati Reds and the Cincinnati Bengals who play in the county-owned stadiums are requesting funding to make improvements to the stadiums. See Handout/Visual 3. Under their contracts, the county is required to provide some capital improvements to the stadiums. The decision boils down to whether or not the stadium improvements are worth the cost at this time.

Write a letter to the editor of the Cincinnati Enquirer briefly arguing one of these two points. Use the language of cost-benefit analysis in your letter. What is "It" worth?

- The benefits of the improvements to community are worth the investment.
- The benefits of the improvements to the community are not worth the investment.