Why Transit? The Case for Mass Transit in Indianapolis

An Honors Thesis (HONRS 499)

By

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May 2008

May 3, 2008
Abstract

This website presents an argument for the development of an extensive mass transit system for the Indianapolis metropolitan area. Traffic congestion and an automobile-centered culture bring the city numerous problems, including pollution, wasted time, and wasted money. A mass transit system can provide solutions to these problems and can save the region time and money, reduce pollution, improve health, create job opportunities, and generate private investment. To prove that mass transit could work in Indianapolis I provide case studies of comparable cities who have, or are considering developing, a mass transit system. I then explain what local officials are doing to bring mass transit to Indianapolis, such as the creation of the Central Indiana Regional Transit Authority and the Directions regional mass transit study.

Acknowledgments

- I want to thank Dr. Francis Parker for advising me throughout the semester on this project. His insight on the topic, assistance, and proofreading was extremely helpful throughout the process.

- I would also like to thank Ehren Bingaman, executive director of the Central Indiana Regional Transportation Authority, for his assistance during the project.
Project

The following are a few selected pages from the website. The entire website can be viewed on the CD provided in this binder. To view the website, click on the file called default.htm on the CD. Please note that due to a code that was used to create the website, some of the images used at the top of the pages may not appear when viewing the website on the CD. This issue is not a problem when viewing the website online however. The website can be viewed in its absolute entirety online at:

brhuff2.iweb.bsu.edu/website/default.htm.

* This website is best viewed in Mozilla Firefox
Now's The Time For Mass Transit

The Indianapolis region would greatly benefit from a more extensive public transportation system, and this site will explain why. Here you will find an exploration into the current problems of our automobile-centered lifestyle in Indianapolis, how a more extensive mass transportation system can fix some of these problems, and what local officials are doing to bring more transportation options to Indianapolis area residents.

Why Mass Transit?

Without the addition of a more extensive mass transit system and changes to the commuting patterns of Indianapolis area residents, current commuting trends will continue:

- An increase in automobile-related pollution
- The possibility of a return to nonattainment status on area counties
- Increased congestion on local highways, especially along I-69
- Increased costs to drivers and businesses
  - Rising costs of gasoline
  - Lost productivity due to traffic congestion
- Increased stress on local drivers

Read on for a closer examination of the transit-related problems found Indianapolis.
Why Transit? The Case For Mass Transit In Indianapolis

Congestion

Congestion brings numerous problems to Indianapolis, including:

- Wasted time
- Loss of productivity
- Loss of money
- Increased stress

Traffic congestion affects Indianapolis:

- In 2007 Indianapolis ranked 30th worst in traffic congestion out of the 85 largest cities in the country. (5)

Traffic congestion in Indianapolis can be attributed to regional growth:

- The Indiana Department of Transportation attributes increases in congestion to residential and business growth in the region, especially in Hamilton and Hendricks counties. (2)
- As growth in the Indianapolis Metropolitan Area continues, congestion on area roads and all of the problems connected with congestion are likely to increase.

Wasted Money

Highway congestion in Indianapolis has cost the regional economy millions of dollars:

- The 2007 Urban Mobility Report found that congestion from rush hour traffic cost the Indianapolis Region $478 Million (23rd in the country) in wasted fuel and productivity. (3)
- This is almost half a billion dollars in one year that could have been invested in the local economy but was wasted because of traffic congestion.

Rising energy costs make commuting very expensive:

- According to the Energy Information Administration, the cost of gasoline has risen almost 20 percent since 2006. (8)
- This increase in the cost of gasoline brings a higher financial burden on people who rely on a car to commute, leaving them less disposable income.
Indianapolis Commuting Costs

The average suburban commuter in Indianapolis can easily spend over $10,000 a year commuting to work and back.

- The following estimated annual commuting costs are based on travel from the city listed to downtown Indianapolis and back five days a week with no additional driving.
- These costs are divided into two categories: direct costs and societal costs.
- Direct Costs are costs directly passed on to drivers, including gas, maintenance, and insurance.
- Societal Costs include all other costs of automobile travel that are not directly passed on to drivers, such as costs associated with road maintenance and air pollution and are often paid through taxes.

Indianapolis area commuters, depending on residence, are spending large portions of their household income on transportation related costs.

<table>
<thead>
<tr>
<th>Home</th>
<th>Direct Costs</th>
<th>Societal Costs</th>
<th>Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anderson</td>
<td>$19,749</td>
<td>$8,790</td>
<td>$26,635</td>
</tr>
<tr>
<td>Pendleton</td>
<td>$15,678</td>
<td>$7,159</td>
<td>$21,694</td>
</tr>
<tr>
<td>Martinsville</td>
<td>$13,663</td>
<td>$6,239</td>
<td>$18,905</td>
</tr>
<tr>
<td>Shelbyville</td>
<td>$12,543</td>
<td>$5,727</td>
<td>$17,356</td>
</tr>
<tr>
<td>Westfield</td>
<td>$12,319</td>
<td>$5,625</td>
<td>$17,046</td>
</tr>
<tr>
<td>Noblesville</td>
<td>$12,095</td>
<td>$5,523</td>
<td>$16,736</td>
</tr>
<tr>
<td>Greenfield</td>
<td>$11,199</td>
<td>$5,114</td>
<td>$15,466</td>
</tr>
<tr>
<td>Carmel</td>
<td>$10,527</td>
<td>$4,807</td>
<td>$14,566</td>
</tr>
<tr>
<td>Fishers</td>
<td>$9,407</td>
<td>$4,295</td>
<td>$13,697</td>
</tr>
<tr>
<td>Zionsville</td>
<td>$8,959</td>
<td>$4,091</td>
<td>$12,997</td>
</tr>
<tr>
<td>Brownsburg</td>
<td>$8,063</td>
<td>$3,682</td>
<td>$11,745</td>
</tr>
<tr>
<td>Greenwood</td>
<td>$6,495</td>
<td>$2,966</td>
<td>$9,461</td>
</tr>
<tr>
<td>Plainfield</td>
<td>$6,271</td>
<td>$2,864</td>
<td>$9,135</td>
</tr>
</tbody>
</table>

*All calculations are based on a commuting calculator created by the Santa Cruz County Regional Transportation Commission. (9) To calculate your annual commuting cost, click here.
Current State Of Indianapolis Transit

IndyGo

- The Indianapolis Public Transportation Corporation, commonly known as IndyGo, lacks major connections to the surrounding counties and suburbs.
- Only one route travels outside of Marion County, but only on selected trips. (36)

IndyGo Commuter Express

- Through the use of federal funds for air quality improvement, IndyGo is now offering park-and-ride bus service into downtown Indianapolis.
- A one-way trip on a chartered bus costs riders $2.
- These routes are scheduled to end in three years when federal funds end, but service could be extended if there is enough demand to continue the service. (37)

Fishers

- Last October, the first IndyGo Commuter Express began operating in Fishers.
- By the end of winter the buses were at 75% capacity and rising. (38)

Carmel

- On March 17, 2008 IndyGo began its second Commuter Express route in Carmel. (38)

Greenwood

- A third route of the Commuter Express is expected, with Greenwood being the likely location. (37)

To learn more about IndyGo, click here.
Mass Transit Can Generate Private Investment

Extensive public transportation systems are a way to encourage private investment and development:

- Private investments greatly exceed the initial public investment of the transit system, and metropolitan regions can expect private investments in "spin-off" development.
  - In Dallas, an $800 million investment in the light-rail system brought the area $3.7 billion in private investment. (17)
  - In Portland, a $1.6 billion downtown streetcar system brought the city $2.4 billion in new development. (17)
  - Since implementing their new Busway system, Pittsburgh has seen 34 new development projects which are valued at $302 million. (17)

- Public investment in public transportation can generate an economic stimulus to the local economy equal to six times the amount of the original investment. (18)
- Every dollar invested in public transportation can return up to three dollars in business sales. (18)

Future Outlook

While government officials have shown an increased interest in mass transportation in the Indianapolis region over the past few years, any plans for such a system require public support to be successful. Before enough public support can be generated for such a system though, the population of the Indianapolis Metropolitan Area must be educated on the consequences of its current automobile centered lifestyle and the benefits of mass transit.

The upfront costs of these systems may seem high, but Indianapolis area residents cannot afford to be shortsighted. An investment today in mass transit will bring Indianapolis larger benefits in the future.
Artist’s Statement

Ever since an Urban Planning field trip two and a half years ago to the Pacific Northwest I have been fascinated with public transportation. During that trip I experienced Portland, Oregon’s successful mass transit system, which is regarded as one of the best in the country. As I have since educated myself about the benefits of such a system and witnessed what can happen to a major metropolitan area without a major mass transit system, I constantly wonder when my hometown of Indianapolis will have a similar system. In recent years I have also witnessed efforts to bring a mass transit system to Indianapolis, such as the Directions rapid transit study being conducted by the Indianapolis Metropolitan Planning Organization. Despite the benefits of such a system, the congestion related problems Indianapolis experiences, and local efforts to bring mass transit to my home, the people of Indianapolis do not seem to welcome mass transit as much as I would hope. The problem, in my mind, is that the people of the Indianapolis metropolitan area are simply not well informed about all of these issues. This lack of information about mass transit in Indianapolis was my primary motivation for undertaking this particular subject for my senior honors project.

During the past few years I have also witnessed the importance of the Internet in communication. Planners are now recognizing the Internet as an important tool for communicating plans and planning-related issues to the general public. The increasing importance of the Internet, along with my personal interest and experience in web design, led me to present this project as a website, instead of more traditional means. I believe that a website, such as the one I have developed, is the perfect means to communicate these issues to the greater Indianapolis area.
Throughout the project, I found it surprisingly difficult to convert the research I found into a format that would be appropriate for this website. Successful websites convey only small amounts of information on one page, as it is likely that readers will not scroll down on a page to read whatever information they can not directly see when they first access a webpage. Because of this I had to make numerous revisions in order remove all nonessential information, leaving only the most relevant information. While this process was long and tedious, I believe it left me with a stronger final product.

The other difficulty I had was to ensure all of my information related to the city of Indianapolis. In order to convince the people of Indianapolis that a mass transit system is appropriate for the city, it was absolutely essential to show how these issues affect their everyday lives. Without this information, the website would not have a strong argument for the implementation of a mass transit system in Indianapolis.

After completing this website, I am happy with the final result. I was very nervous about how the site would turn out while I was writing the content for the website. There were times when I thought I was cutting out too much information and the website would not achieve my goal of properly educating people about mass transit. There were other times when I was afraid I still had too much information and the website would appear too cluttered. After putting my text into the website however, I do believe the text I wrote for the website works just how I wanted it to: providing enough information about mass transit without overloading readers with too much information.

Upon reviewing the final product to my advisor, Dr. Francis Parker, I was proud, and a little surprised, of his reaction. Dr. Parker felt that this website is of a high enough quality that I should consider exploring ways to promote my website to the people of
Indianapolis. I have since sent my website to Ehren Bingaman, the executive director of the Central Indiana Regional Transportation Authority.

While I am proud of my final product, there are a few things I wished that I could have changed. I would have liked to have incorporated more graphics into the website. I do not see anything particularly wrong with how I developed the site, with text on each page accompanied by a picture, but I feel that a more intensive use of graphics could create more interest in the website. Due to time constraints however, I was not able to develop the graphics of the website as much as I would have liked.

After completion of this website I am proud of the final product and happy that I pursued the idea. With the growing importance of the Internet in urban planning, I feel that this project has given me valuable experience that I can apply after college in my profession. The information and knowledge that I gained from the project has only strengthened my feelings about the need for a mass transit system in Indianapolis. My hope is that this website could be used to promote the idea of mass transit in Indianapolis and hopefully convince my neighbors that such a system would benefit the Central Indiana region.
Bibliography


7 - Urban Mobility Report


Title of Honors Project: Indianapolis Mass-Transit Website

1. The Honors project should broaden your educational experience through independent work that adds to your knowledge and develops your talents. How will you project help you accomplish these objectives and add to your personal goals? Why, in short, do you want to do this particular project?

With this project, I would like to create a website that could be used to make a case for a mass transit system in Indianapolis. I have chosen to create a website because of my interest in web design (I have developed a number of websites for various student organizations) and the increasing importance of the internet in communicating planning to the public. Today, planners must be able to educate the public through new means, such as the internet, in order to gain support for their plans.

I am focusing on mass transportation in Indianapolis because of my own interests in mass transit. I am from Indianapolis, and have experienced first hand the problems that plague Indianapolis area commuters. I have also experienced the benefits of a well designed mass transportation system first hand. I know a transit system in the Indianapolis metropolitan region would benefit the area, and I would like to find a way to convince the general public of this.

I am currently participating in a Comprehensive Planning Studio that is focusing on Transit Oriented Developments and a possible commuter rail line that may run through the town of Pendleton, traveling from Muncie to Indianapolis. This studio is giving me a better understanding of the current attempts to develop and implement a mass transit system in the Indianapolis Metropolitan Area, including a new Joint Study Committee on Mass Transportation and Transportation Alternatives and the creation of the Central Indiana Regional Transportation Authority. The knowledge I am gaining in this studio has convinced me to move forward with this project.

2. Then are you signing up for HONRS 499 (or what is the proposed equivalent)?

Spring 2008

3. What will be the outcome of this project?

The outcome of this project will be a website.

4. Objective of Thesis (include target audience, purpose):
The object of this project is to make a case for mass transit in the Indianapolis area. This website will educate Indianapolis area residents on the current state of metropolitan area highways (including congestion, pollution, and economic costs), the benefits of alternative forms of transportation, and current attempts to develop a mass transit system in Indianapolis. My hope is that this website could convince Indianapolis area commuters that a mass transportation system would benefit the region.

5. **Project Description** (please be specific—approximately two paragraphs):

I will begin my project researching similar websites that cities are using to educate the public on various planning topics. At the same time I will examine the problems created by the current system of highway transportation in Indianapolis, such as congestion, commuter stress, and poor air quality. I will then examine current efforts being undertaken to develop a mass transit system in Indianapolis, including past mass transit studies by the Indianapolis MPO, the formation of the Central Indiana Regional Transportation Authority, and the Indiana Joint Study Committee on Mass Transportation and Transportation Alternatives. Following this, I will provide descriptions of the various types of mass-transit systems, such as light-rail, commuter-rail, or rapid bus transit. These descriptions will educate readers on the differences of various mass-transportation options. Finally I will examine two to three comparable cities and give short case studies on how these communities developed, implemented, and funded mass transportation. I will choose similar communities based on comparable population size (in both the center city and metropolitan statistical area), density, and geographic location (focusing on cities in the Midwest). These case studies will stress the parallels the cities shared with Indianapolis prior to implementing a mass transit system as well as the benefits, especially economic, that mass transportation has brought these cities.

I will use my research in other websites to direct how I will lay out this website, developing a website that is easy to navigate and lays out the information in a simple and rational manner.

While this website will be a hypothetical one—I do not plan on uploading it to the internet at this time—there is a possibility of working with the recently formed Central Indiana Regional Transportation Authority. Understanding what CIRTA would like in this type of website could be very beneficial in how I focus my content.

6. **State what the importance or implications of this project are.** What do you expect to learn, or what would others learn from knowing about your anticipated results?

I expect others to learn more about the consequences of the auto-dominated transportation system in the greater Indianapolis region. My hope is that this
website will generate public support for a mass transit system in Indianapolis. Without public support, a mass transit system will be nothing more than a vision.

__________________________________________
Student’s Signature Date

__________________________________________
Project Advisor’s Signature* Date Honors College Approval Date

*Your signature indicates that you have read and approved this proposal.
Huff, Bradley R

From: Edmonds, Joanne H.  
To: Huff, Bradley R  
Cc:  
Subject: RE: Senior Honors Project  
Attachments:  

Thanks, Brad—I'll attach your email to the original proposal so we have all relevant info when we review your project.

From: Huff, Bradley R  
Sent: Thursday, April 10, 2008 11:37 AM  
To: Edmonds, Joanne H.  
Cc: Parker, Francis H.  
Subject: Senior Honors Project  

Dr Edmonds,

I you will remember I spoke with you last semester about my senior honors project. The project is an informative website about mass transit in the Indianapolis region. I need to make a slight change to the project as laid out in my project proposal.

My proposal calls for case studies of similar Midwestern cities that have mass transit systems. In order to find cities more comparable to Indianapolis, I have found that cannot limit myself to Midwestern cities, and need to look throughout the country (the cities I am using are Charlotte, NC, Sacramento, CA, Jacksonville, FL, and Columbus, OH).

I will also split the cases studies up. I will look at two cities that do have a mass transit system, and two cities that are considering a transit system.

My proposal also states I will stress the economic benefits these systems have experienced. As two of these cities have not implemented these systems, and one just began last November, this data is not readily available. Instead I will provide a brief overview of these cities, including similarities to Indianapolis, basic transit system information, and funding.

If you have any questions, please feel free to contact me. Thanks.

Brad Huff
President
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