

JOINT TRANSPORTATION RESEARCH PROGRAM

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Evaluating Opportunities to Enhance Hoosier State Train Ridership through a Survey of Riders' Opinions and an Assessment of Access to the Line

Introduction

Since 2013, the Hoosier State train (HST) line faced the probability of discontinuation many times. In 2015, after many unfruitful attempts and obstacles, INDOT reached an agreement with Iowa Pacific Holdings (IPH), in addition to the existing agreement with Amtrak. This formed a very unique (first of its kind in the U.S.) public-private partnership, with a shared vision to improve on-time performance, improve speed and maintain a reliable schedule, increase ridership, and provide better onboard amenities. An onboard survey was conducted in the fall of 2015, at the beginning of the new agreement with IPH, and suggested the need for a follow-up survey to explore the changes in riders' opinions and capture any changes in the ridership (particularly in population distribution in terms of age, target groups, frequency of travel, etc.).

The objectives of this project were threefold:

1. To develop a framework that can be used to monitor the changes in rider's opinions of the HST services and evaluate the effectiveness of the ongoing service improvements;
2. To utilize this to identify reasons for any changes in ridership since the beginning of the IPH agreement, assess which factors contributed the most to any changes, and evaluate the potential impact on ridership of future planned improvements of the service; and
3. To identify opportunities to enhance the HST service by evaluating intercity rail strategies and best practices on parking and first and last mile strategies.

Study Framework

An onboard survey was designed to monitor changes on riders' perceptions of the HST service and evaluate the effectiveness of ongoing improvements. The fall 2015 survey was considered as the primary source for this follow-up onboard survey, as well as feedback received from the Study

Advisory Committee (SAC) members. The follow-up survey was modified to address issues that were identified as part of the 2015 survey results. Those issues were related to origin-destination responses, perceptions about accessibility (e.g., parking availability around stations, access to the platform), the perceived ease of use and usefulness of the passenger rail service, and future usage of the service. The survey instrument was reviewed and approved by the Institutional Review Board (IRB protocol # 1503015896A002).

The questionnaire consisted of four sections. The first section included questions pertaining to trip characteristics and familiarity of respondents with the service. The second section included questions on respondents' opinions and thoughts about the HST. The third section, mode choice, included trip attributes (cost, travel time, comfort, safety, etc.). In that section, respondents were asked to indicate the level of importance of these attributes and rate them for five different modes of transportation currently available in the area. Finally, typical sociodemographic questions were added at the end of the survey instrument to examine differences in attitudes and behaviors toward passenger rail among different socioeconomic and demographic groups.

The survey data collection took place over nine days during a time span of three weeks (mid-November until early December). The target population included passengers of HST older than eighteen years who were not employees of Amtrak or IPH. Approximately 1,070 people were asked to participate; 908 completed responses were collected, which corresponds to a response rate of 85%.

Findings

The key findings of the 2016 survey, as well as a comparison between the 2015 and 2016 survey findings, are as follows:

- The distribution of respondents by gender, employment situation, and household income was similar in the 2015 and 2016 surveys.

- A significant increase in single household riders was identified in the 2016 survey.
- A higher percentage of people who did not own a vehicle was observed in 2016 compared to 2015 (35% and 14%, respectively).
- HST impacts not only Indiana counties with a station, but also counties without a station. Around 23% of respondents lived outside a county with a station, such as Hamilton, Boone, Monroe, Hendricks, and Howard.
- One out of five respondents reported that they traveled more than 30 miles to reach a station. In addition, more than half of the respondents were dropped off or drove to access the train station. A similar proportion of respondents got a ride or drove a car from the station.
- In 2016, respondents took the train from Rensselaer to Lafayette, a trend that was not observed in the 2015 survey.
- Respondents indicated a stronger intention to ride the train in the short and long run compared to the fall 2015 results.
- Of all respondents, 43% fell into the economically active age range of 25 to 54 and stated a stronger intention to travel in the near future than any other age group.
- Intercity trains were the most favorable mode for riders who traveled less than two miles to access a station.
- In 2016, reliability, safety, and ease of use were ranked as the most important attributes in mode choice decisions across all of the modes, as compared to safety, reliability, and convenience in 2015.
- Safety, amenities, and cost were the most important attributes when choosing to travel on an intercity train for the 2016 survey respondents compared to comfort, cost, and safety as reported in the 2015 survey.

Recommendations/Implementation

Recommendations based on the factors affecting the use of intercity trains include, but are not limited to:

- Passenger rail service was ranked lower based on reliability, flexibility, and convenience, which are the attributes riders rated as most important when choosing a travel mode.
- Setting higher goals and improving on-time performance could improve reliability of the service.
- Providing solutions to the first and last mile problem

could enhance flexibility (i.e., ease to reach a desired destination).

- Reconsidering the current HST schedule could enhance convenience; this would also address the first and last mile problems, mainly in the case of passengers taking the train in Indianapolis.
- Safety, comfort, and availability of onboard amenities could be promoted in a better way to retain and attract new passengers.
- For the Rensselaer station, another strategy could be promoting the train to college students to enhance ridership.

Recommendations based on the review of intercity rail strategies and best practices include, but are not limited to:

- A possible gap into the first and last mile travel options for HST rail riders was identified.
- Ridesharing and carsharing are preferred strategies for addressing the first and last mile problems in urban areas with a rail station.
- Micro-transit could be implemented to provide service to counties further from the stations.
- Improvement of existing or new park-and-ride facilities could offer a significant opportunity for the HST to attract ridership from people who live in counties without stations.
- Future research can identify and assess specific solutions on first and last mile issues around the HST stations, as well as evaluate the current partnership of Amtrak with the transportation network company, Lyft.

Recommended Citation for Report

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