

INDOT/JTRP SPR-4044: Riding the Hoosier State Train: Changes in Riders' Opinions over Time and Best Practices

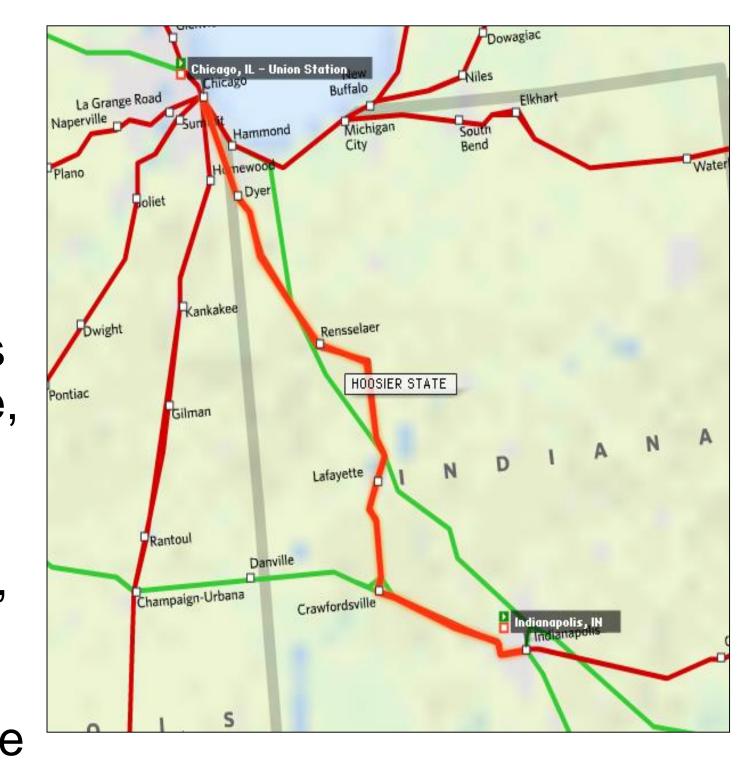


Lisa L. Losada Rojas¹, Christos Gkartzonikas², V. Dimitra Pyrialakou³, Konstantina "Nadia" Gkritza⁴

1= Ph.D. Student, Lyles School of Civil Engineering, 2= Ph.D. Candidate, Lyles School of Civil Engineering, 3=Assistant Professor, Department of Civil and Environmental Engineering, West Virginia University, 4 =Associate Professor, Lyles School of Civil Engineering and Agricultural & Biological Engineering

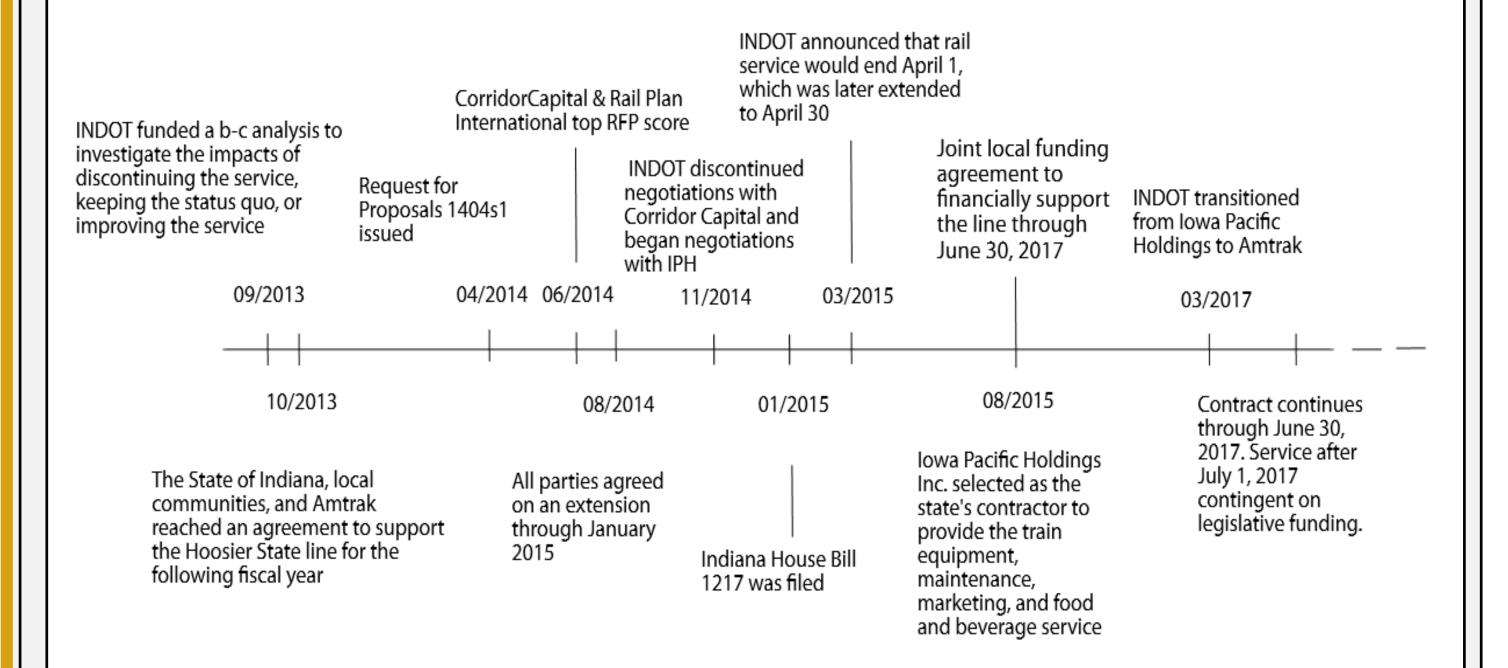
Hoosier State Line

- The Hoosier State line began operations on October 1, 1980.
- Currently operates four days/week between Indianapolis, Indiana, and Chicago, Illinois, with stops in Crawfordsville, Lafayette, Rensselaer, and Dyer.
- On the other three days of the week, the Cardinal line, which operates from New York City to Chicago, serves the area at the same times.



Amtrak, "Amtrak Route Atlas."

HST Developments during the last years



Purdue Research on HST

- In 2015, an on-board survey was conducted by Dr. Pyrialakou. [1,2] The total number of responses obtained was 403. The analysis of the survey found that 42% of people who rode the train lived in counties within a station, 31% of the respondents did not live in IN, and 27% of trips were made from counties without stations. Furthermore, it was found that 14% of the respondents did not have access to an automobile. Safety, reliability and convenience were ranked as the most important factors affecting riders' mode choice decisions.
- INDOT/JTRP SPR-4044: Evaluating opportunities to enhance the Hoosier State Train ridership through a survey of riders' opinions and an assessment of access to the line.

Survey Fall 2016

• Questions:

Trip characteristics and experience

Opinions and thoughts for the HST

Mode choice

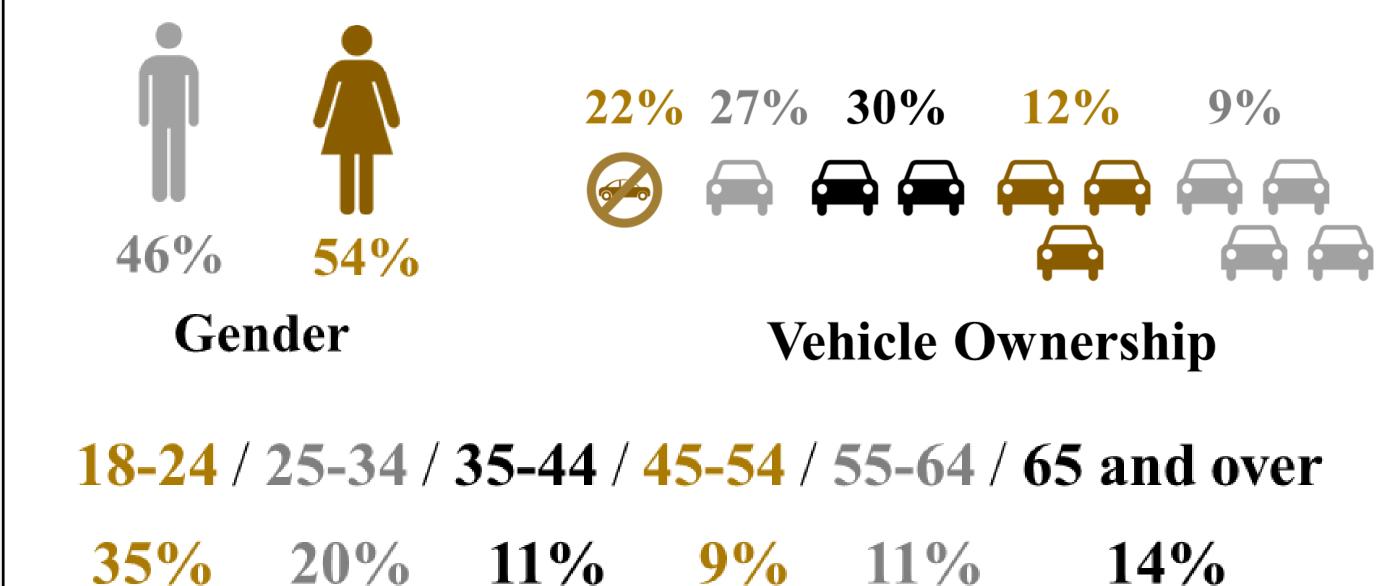
Demographics Questions

- Survey approved by Amtrak and IRB #1503015896A002.
- Total responses in 9 round trips in November: 908.
- Response rate: 85%.



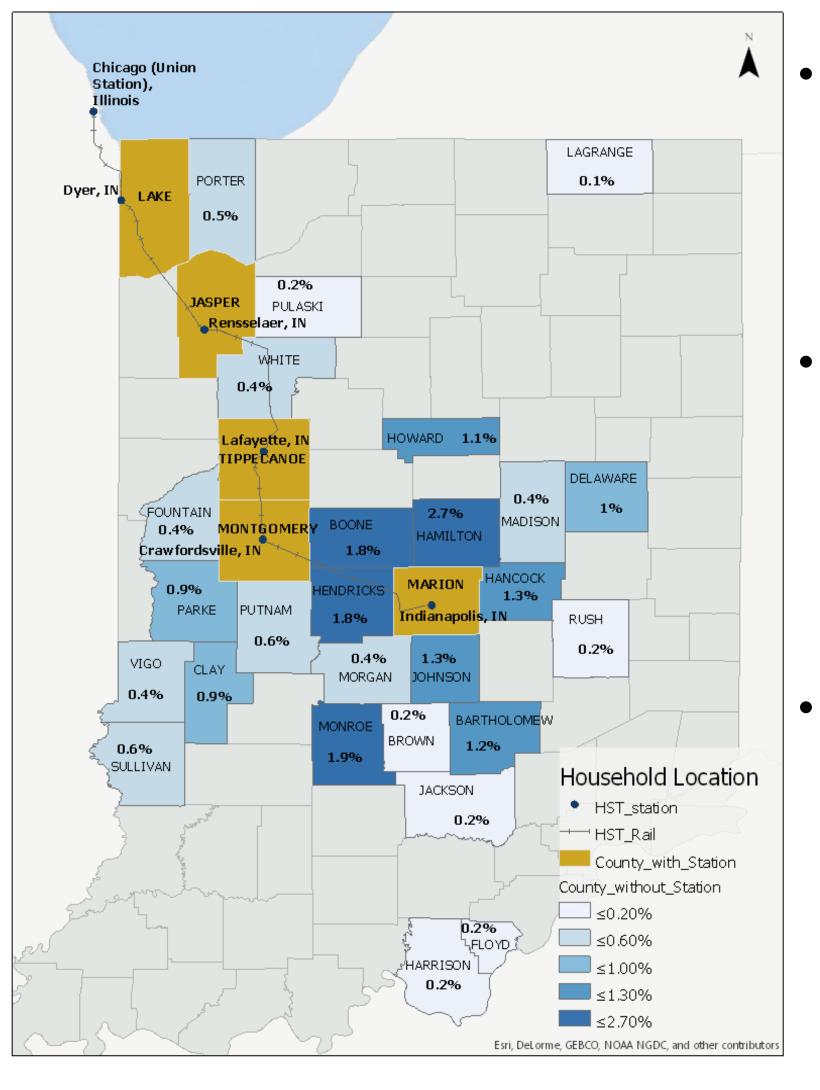
Survey Results

Who rode the train?



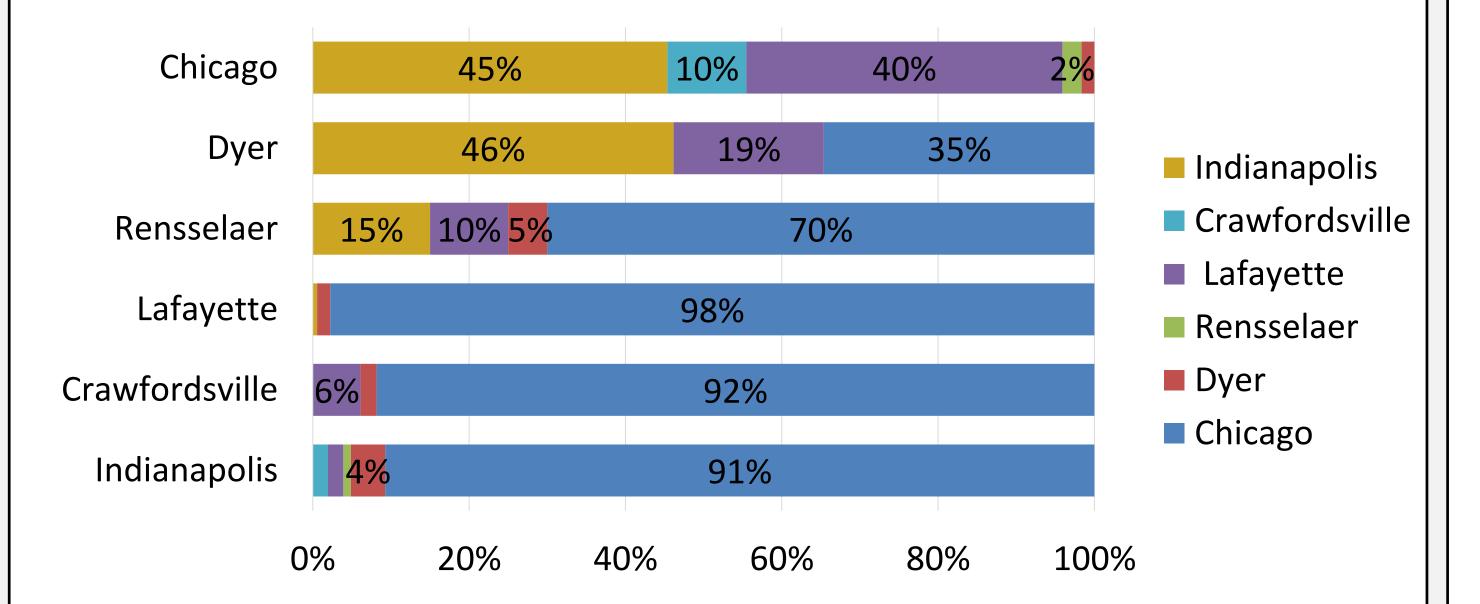
Age

Household Location by County

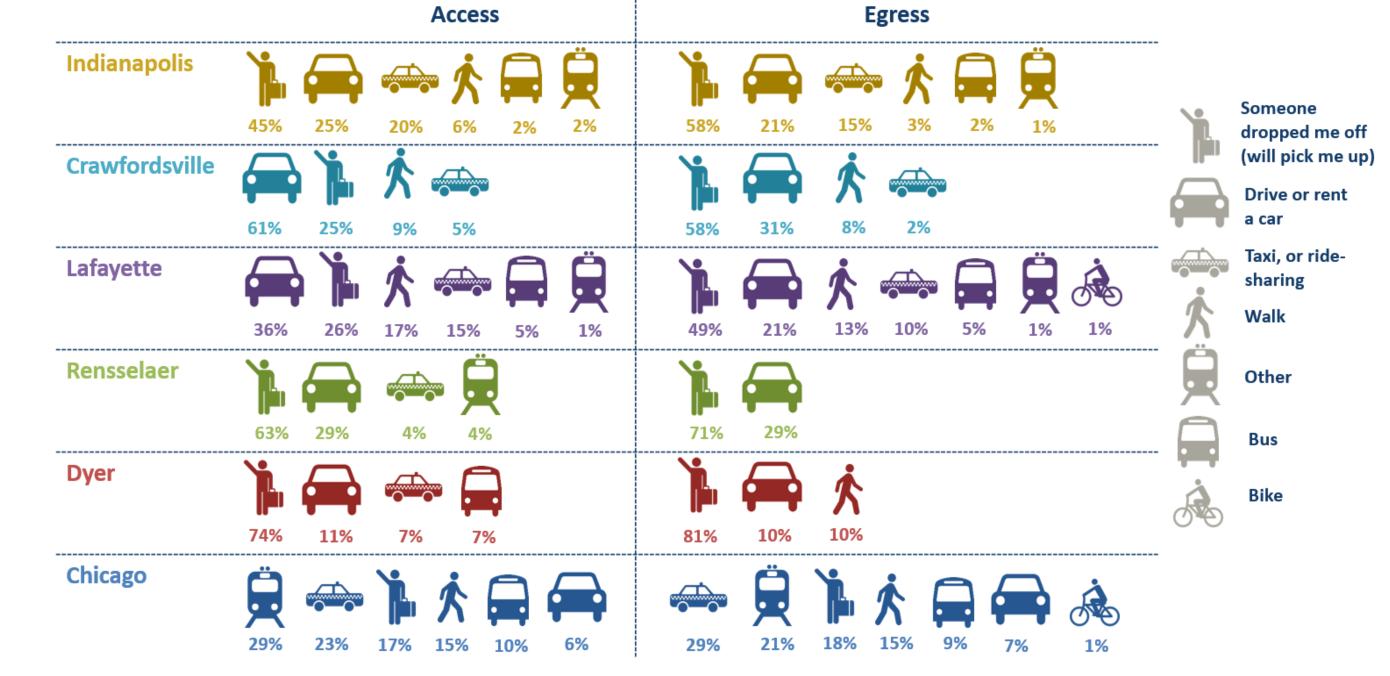


- Counties without station represented 22.9% of the total number of trips.
- Respondents who traveled from Hamilton County lived in Fishers, Carmel, Westfield and Noblesville.
- Respondents who traveled from Boone County lived in Zionsville, Whitestown, Lebanon, Thorntown and Sheridan.

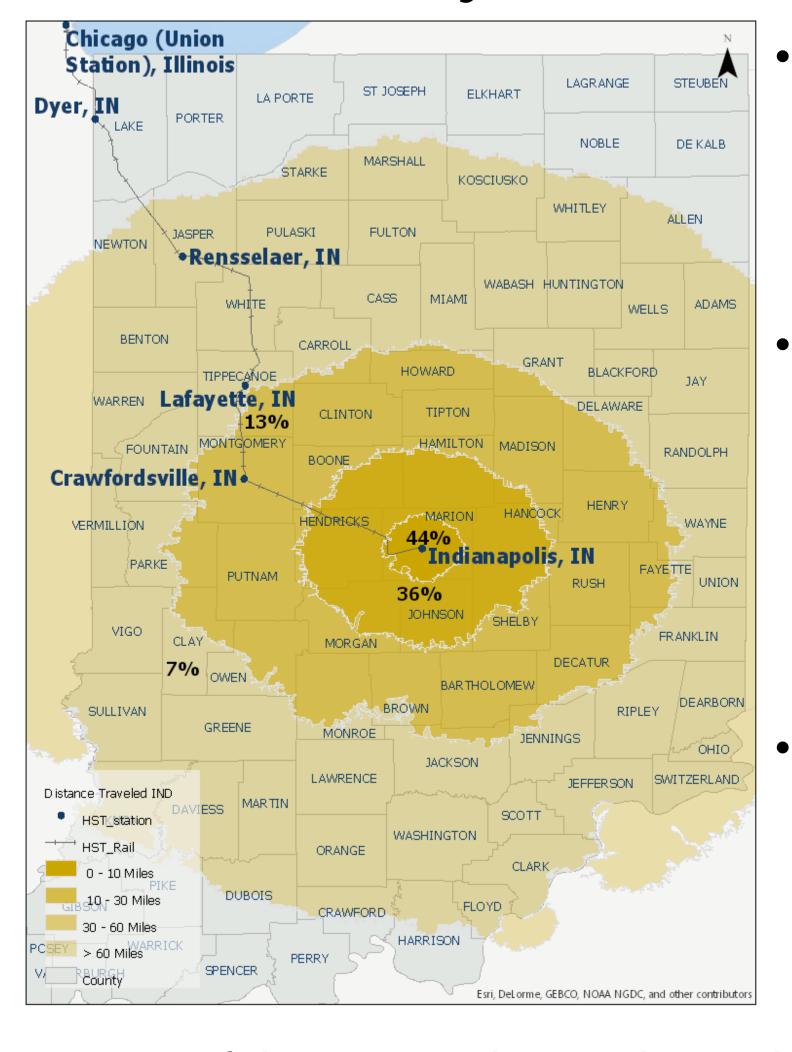
Where did riders come from and where did they go?



How did riders reach and leave the station?



How far did they travel to ride the train?



- 7% of respondents traveled more than 60 miles in order to take the train from Indy.
- 79% of the respondents that took the train from Lafayette traveled less than 10 miles; 13% of them traveled between 10-30 miles.
- 69% of who took the train from Rensselaer traveled less than 10 miles to reach the station.
- 48% of the respondents who took the train from Crawfordsville traveled less than 10 miles to reach the station.

Research Findings



Increase in single household riders in the 2016 survey compared to the 2015 survey.



HST impacts not only IN counties with station but also counties without a station.



Respondents indicated a stronger intention to ride the train in the short run and long run compared to Fall 2015.

Best Practices



Improve reliability, flexibility, and convenience to attract more riders.



Strengthen factors such as safety, comfort, and amenities.



Target promotion efforts to students.



A possible gap into the first and last mile travel options for intercity rail riders was identified through the survey results. Alternatives to fill this gap vary from micro-transit to ridesharing services.



Park-and-ride facilities could offer a significant opportunity for HST to attract riders who live in counties without stations.

Acknowledgments

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Sources

[1] Pyrialakou, Vasiliki Dimitra. Ph.D., Assessing Public Transportation Options for Intercity Travel in U.S. Rural and Small Urban Areas: A Multimodal, Multiobjective, and People-Oriented Evaluation. Purdue University, August 2016.

[2] Pyrialakou, V. D., Gkritza, K., Exploring the Opinions of Passenger Rail Riders: Evidence from the Hoosier State train. In Proceedings of the 2016 Joint Rail Conference. 2016 Joint Rail Conference, April 12-15, 2016, Columbia, SC.