

Licking County Area Transportation Study

Policy Proposal Executive Summary

- *The 03:00 AM Deer*

Problem Statement

We aimed to use the data collected by the Licking County Area Transportation Study (LCATS) to provide a policy proposal to improve the local transportation system. Improvements could include better roads, sidewalks, crosswalks, signage, or any kind of project that benefits the Granville community.

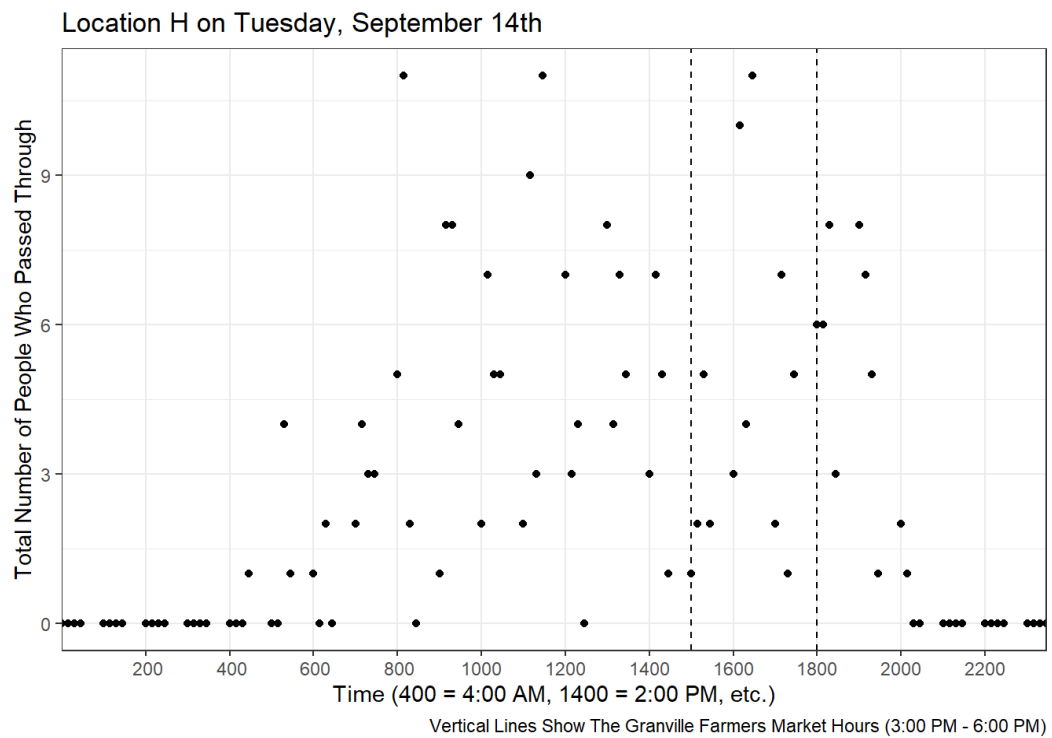
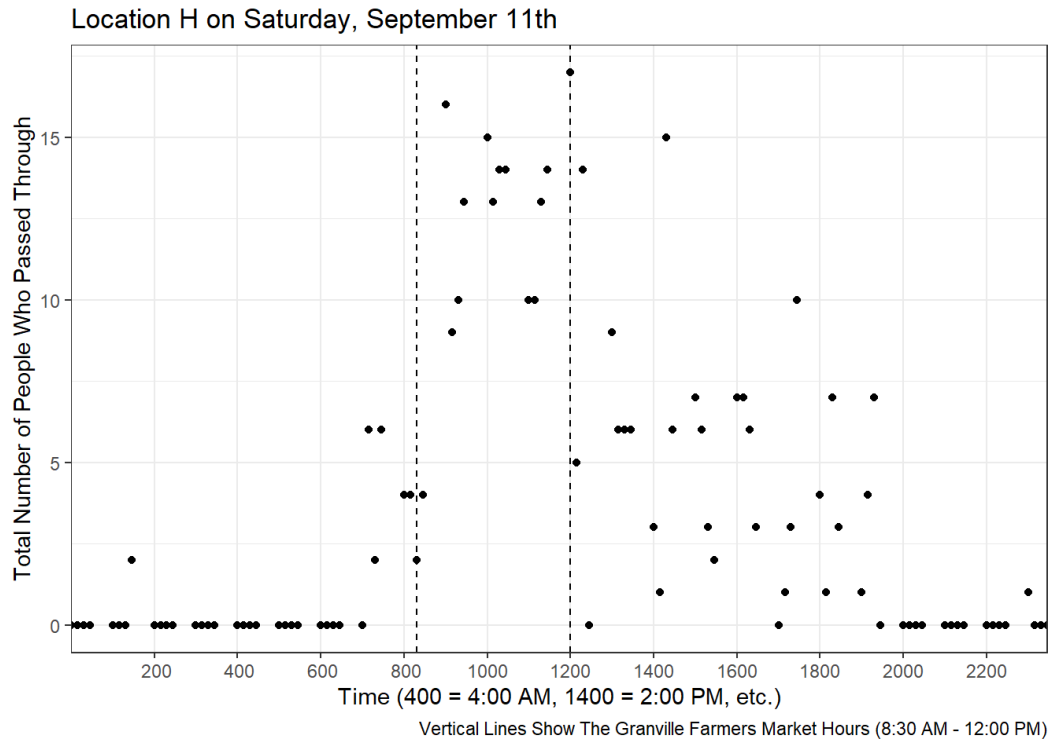
Approach

Our approach prioritized the LCATS' mission of "ensure the transportation system in Licking County supports and encourages appropriate economic development and social activities." We looked to see which locations had relatively high pedestrian traffic, and were in close proximity to some piece of the Granville economy. With these criteria in mind, we identified location H, at the intersection of Route 661 and the T. J. Evans bike trail, as the ideal location to focus on, with its close proximity to the Granville Farmers Market's location, and the River Road shops. Location H also showed high traffic rates, averaging over 250 people passing through the point daily. By identifying one specific data collection point to focus on, we were able to provide a more thorough policy suggestion, rather than trying to create a broad suggestion for all of the provided locations at once.

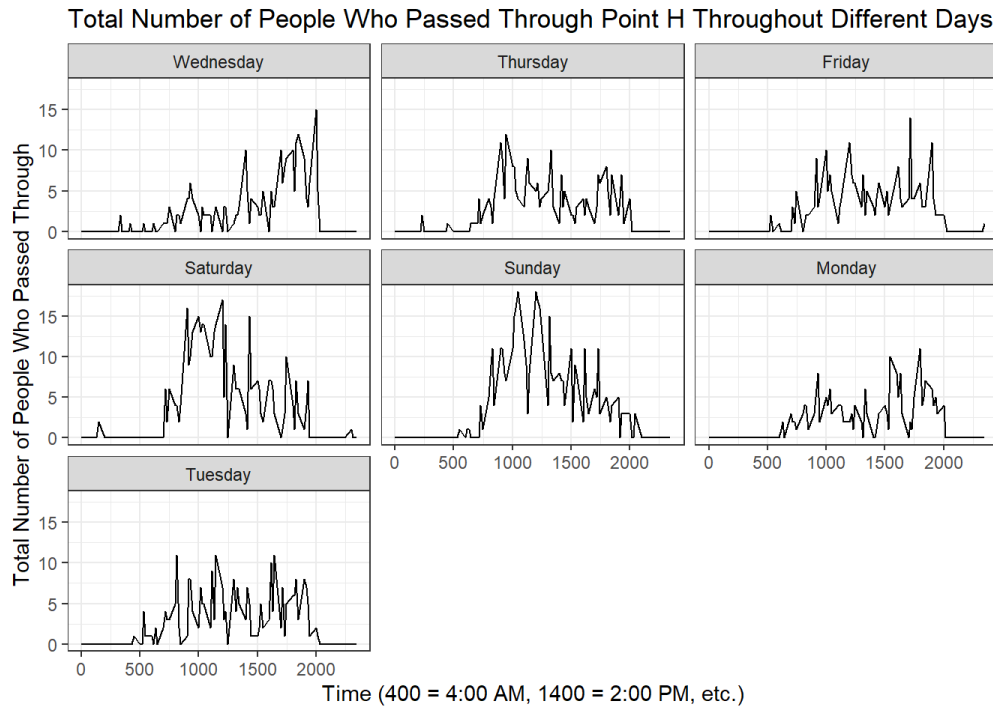
We went to location H to gain a better understanding of pedestrian usage by surveying the physical layout of the area and asking a few business owners what potential transportation improvements they could see benefiting the River Road area. Our analysis process included comparing peak traffic times at location H on Saturday and Tuesday to the operating hours of Granville Farmers Market during the summer. We also conducted two statistical tests: one to see if the higher traffic at location H on Sunday than Saturday was statistically significant, and one to see if the number of people who passed through location H on Tuesday was statistically different from the mean traffic for location H on other weekdays.

Finding

Our dot plots showing the number of people who passed through location H at different times on Saturday and Tuesday can be seen below. As shown, the peak traffic at point H on Saturday closely coincides with the Farmers Market hours, when it is held at Raccoon Valley Park. The hours on Tuesday are not as clear, and it is hard to tell if peak traffic on point H on this day aligns with the Farmers Market hours. Extended data collection in this area could help identify if this is the case.



Line graphs showing the rates of pedestrian and biker traffic through point H throughout the days of the week can be seen below.



We conducted a statistical test to see if Tuesday's highest number of people passing through location H was significantly different compared to other weekdays, and another test to see if the higher pedestrian traffic on Sundays than Saturdays was significantly different. Neither test definitively showed that there was a statistically significant difference between the dates being compared (both p-values > 0.45). Further data collection at point H could lead to a more definitive answer, which in turn could be used to set more ideal times and dates to hold the Granville Farmers Market (i.e., if traffic at point H on Sunday is significantly higher than on Saturday, it could be worth looking into holding the market on Sundays).

Suggestions

There are a few things that could be done to support the Granville Farmers Market, knowing that location H traffic is at its highest during the market's hours. More bike parking in the Ross' Granville Market parking lot would improve biker accessibility to the Granville Farmers' Market on Tuesdays during the summer, especially for those coming from the T.J. Evans trail. The Saturday farmers market at Raccoon Valley park could be supported by adding a sidewalk along River Road, which would also help the shops on River Road affected by the lack of walking and biking accessibility. If a sidewalk on River Road to Raccoon Valley Park is outside of the available budget, simple signage at the intersection of the T.J. Evans trail and Route 661 displaying the Granville Farmers Market's hours and location would undoubtedly be beneficial to business. Directions to those Farmers Market locations and the River Road shops would be yet another positive addition. Overall, improved signage at location H for the market and a sidewalk to improve accessibility to Raccoon Valley Park would meet the LCATS goal of creating a transportation system that supports the local economy.