Assessing Sustainable School Transportation Methods at Stevenson Elementary in Grandview Heights

Sustainable College of Food, Agricultural, And Environmental Sciences

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INTRODUCTION

This project aimed to better understand school transportation habits and provide recommendations that make walking and biking safer in Grandview Heights. The current school transportation system creates pressing logistical and safety issues that impact how children get to school. Our team utilized parent engagement, on-site visits, past city initiatives & research, and key informant interviews. The research conducted provides Sustainable Grandview with useful insight on school transportation habits and suggests actions towards a safer, more sustainable community.

Research Objectives

Research Current Infrastructure

Conduct Key Informant Interviews

Administer Survey

INFRASTRUCTURE RESEARCH

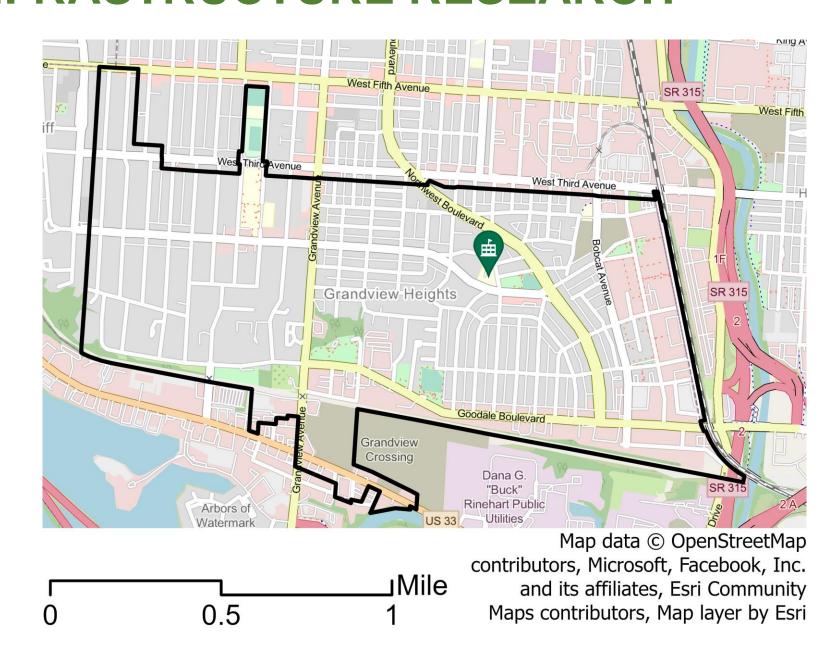


Figure 1. Location of Stevenson Elementary School in Grandview Heights, Ohio

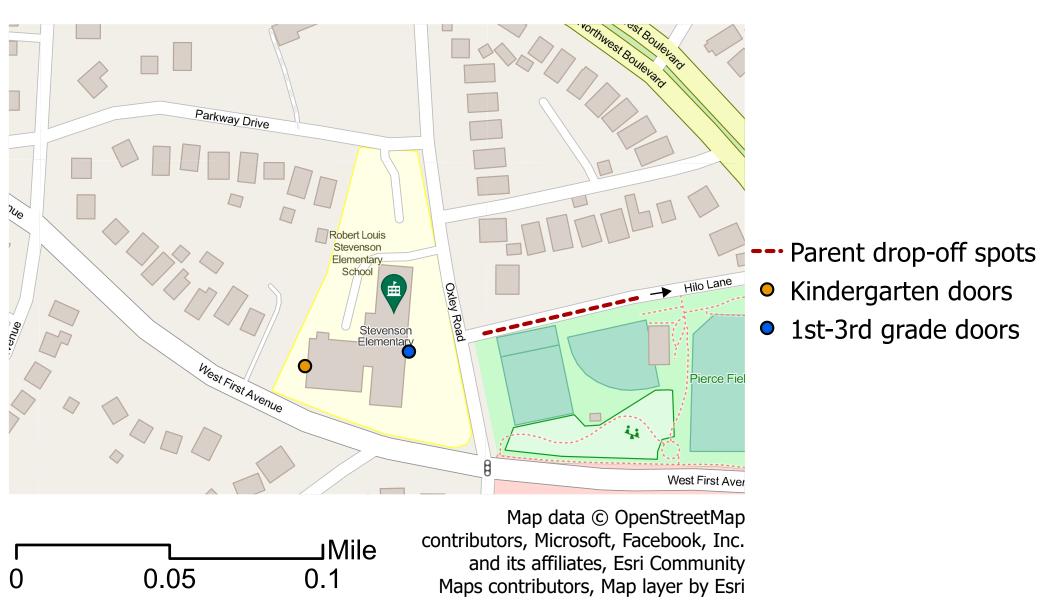


Figure 2. Stevenson Elementary School and surrounding streets

Walking

- Good signage and blinking lights at intersections around school
- Crossing guard present at student drop-off starting at 7:45am
- Visible changes from 2011 Safe Routes to School Engineering Study

Biking

- Limited bike friendly signage markings
- 2016 Draft Bikeway
 Pilot Plan
 recommended
 creation of bicycle
 boulevards, but none
 have been created
- No bike racks on school campus

KEY INFORMANT INTERVIEWS

Barrington Elementary, Upper Arlington Contact: Kelli Wilcox, Elementary School Teacher

- Estimated that most students walk or bike
- Use an incentive program to reward kids for walking or biking
- No extra infrastructure outside of sidewalks

Bexley Elementary Schools

Contact: John Eikenberry, Business Manager

- Estimated majority of kids walk to school with parents or walking groups organized by parents
- Utilize education programs like Safety Town to educate kids on safe walking and biking skills
- Key infrastructure elements include high visibility crosswalks, flashing lights, and no turns at critical crosswalks

Stevenson Elementary

Contact: Lisa Sullivan, Principal

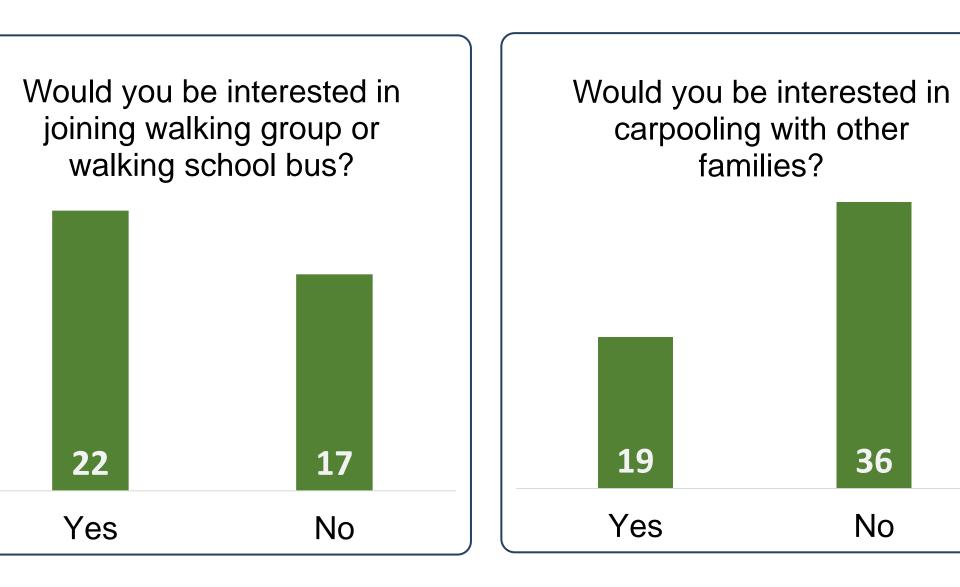
- Parent led walking club that participates in Walking Wednesdays and utilizes punch card as incentive to participate
- No current educational programs but plan on partnering with Roll in spring to provide bike safety and education to students

SURVEY RESULTS

- 17 question Qualtrics survey with 78 responses
- Includes demographic, behavioral, and attitudinal question types
- Distributed by Lisa Sullivan through parent communication and Jeremy Brooks via Grandview Heights K-3 PTO Facebook group

Method	To School	From School
Walk	38	40
Walking group	10	3
Bike/scooter	5	1
Golf cart	1	0
Driven alone	34	37
Carpool	11	14

Figure 3. Reported weekly transportation habits in reasonable weather



Parents responded that the biggest barriers to joining a walking group were that:

1. They live too far to

walk

2. It takes too long to walk

Parents responded that the biggest barriers to carpooling were that it is:

- 1. Too challenging to organize
- 2. Doesn't fit into family's schedule

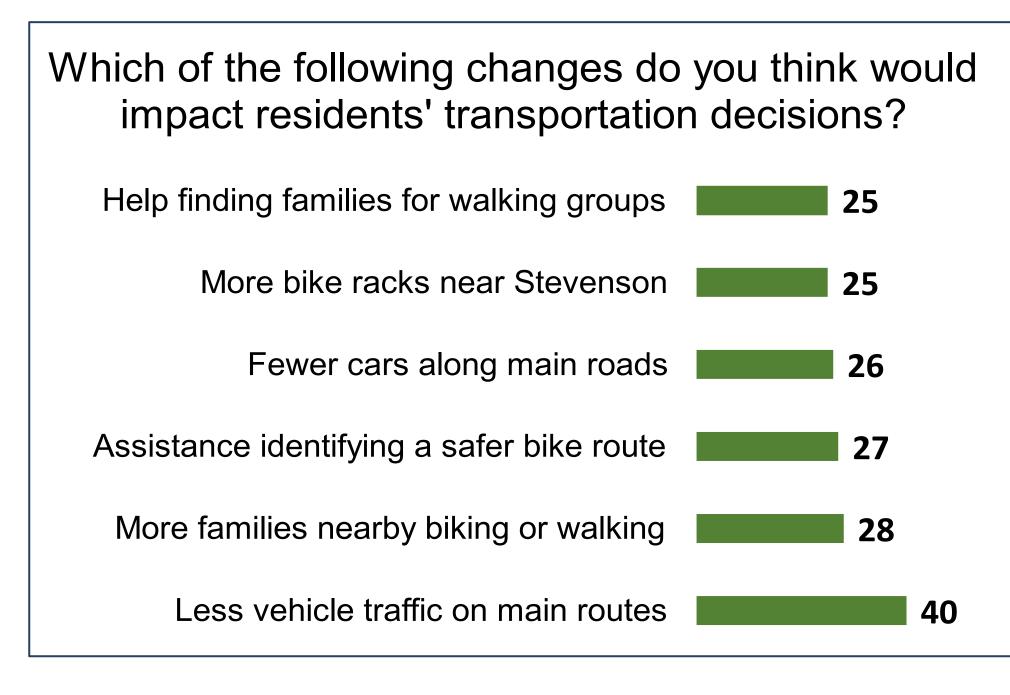
Parents reported that
distance, time, and safety
were the biggest factors influencing their
school transportation method

500/0

Of parents responded that it is important more kids walk or bike to school

460/0

Of parents said it was important because it is healthier for them and the community



RECOMMENDATIONS

Expand Walking Wednesday group

We recommend the school collaborates with the parents of the parents of this walking group to increase the number of kids participating. This would increase the opportunities children have to walk to school.

Implement traffic pattern changes

Oxley Road and Parkway Drive could be designated as one-ways during school hours. This would create better traffic patterns and reduce congestion.

Install a bike rack in front of the school

A bike rack placed near the front of the school and visible to drivers would identify the school as a place where bikers are present. Students seeing friends and classmates park their bikes near the school may foster a biking culture at Stevenson.

Create a Bike Bus initiative

A Bike Bus allows students to safety ride with adults and visibility stand out form nearby cars and traffic. This would create a safe form of bike transportation.

CONCLUSION

Due to the existing safety concerns and age demographics of Stevenson Elementary, our group found that there is more parent interest in walking rather than biking. In order to address safety issues and create a more sustainable system of school transportation, Stevenson Elementary should utilize a combination of new initiatives and infrastructure changes. These initiatives would make alternative modes of transportation safer for the children of Grandview Heights. To view full survey results, scan the QR code: