Iowans Walking Assessment Logistics Kit

A SRTS Program

Castalia, Iowa

Additional maps for

Cora B. Darling Elementary

Spring 2013

i-walk

Iowans Fit for Life
ACTIVE AND EATING SMART

IDPH
Iowa Department of Public Health

IOWA STATE UNIVERSITY
Extension and Outreach

Funding provided by

Iowa Department of Transportation

SAFE ROUTES TO SCHOOL

This report contains additional maps for other communities that were not included in the primary school report.

A PDF version of this report, the school report and other supplementary materials is available at www.I-WALK.org

School Distance Buffers

Euclidean buffers (as the crow flies) are often used to determine the distance students live from a school and are illustrated in the map below. However, SRTS planning teams should be cautioned that the true distance for a child to walk along a network (street, sidewalk or trail) to the school could be a longer distance.

Network buffer maps take into account the street network and are more appropriate when determining the distance a student would travel to get to school if all streets provided adequate sidewalks and crossings.

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Basemap: Iowa DOT
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0 - 0.5 | 0.5 - 1 | 1 - 1.5 | 1.5 - 2 Miles

Bus Stop

Miles

0 0.5 1

School Sidewalk Network Connectivity

Expanding upon the network buffer in the previous map, streets with walkable sidewalks on either side were identified and included in the network analysis. The result is a map that illustrates the distance a student could travel from the school if limited to only those streets that included at least one adjacent sidewalk. The city core, which is generally an older residential area typically has sidewalks along both sides of the street and presents a robust network of walking paths. Areas of newer development typically have an irregular or absent network with little or no connectedness, making safe walking a challenge for the student.

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0 - 0.5 | 0.5 - 1 | 1 -1.5 | 1.5 - 2 Miles

Existing Sidewalks

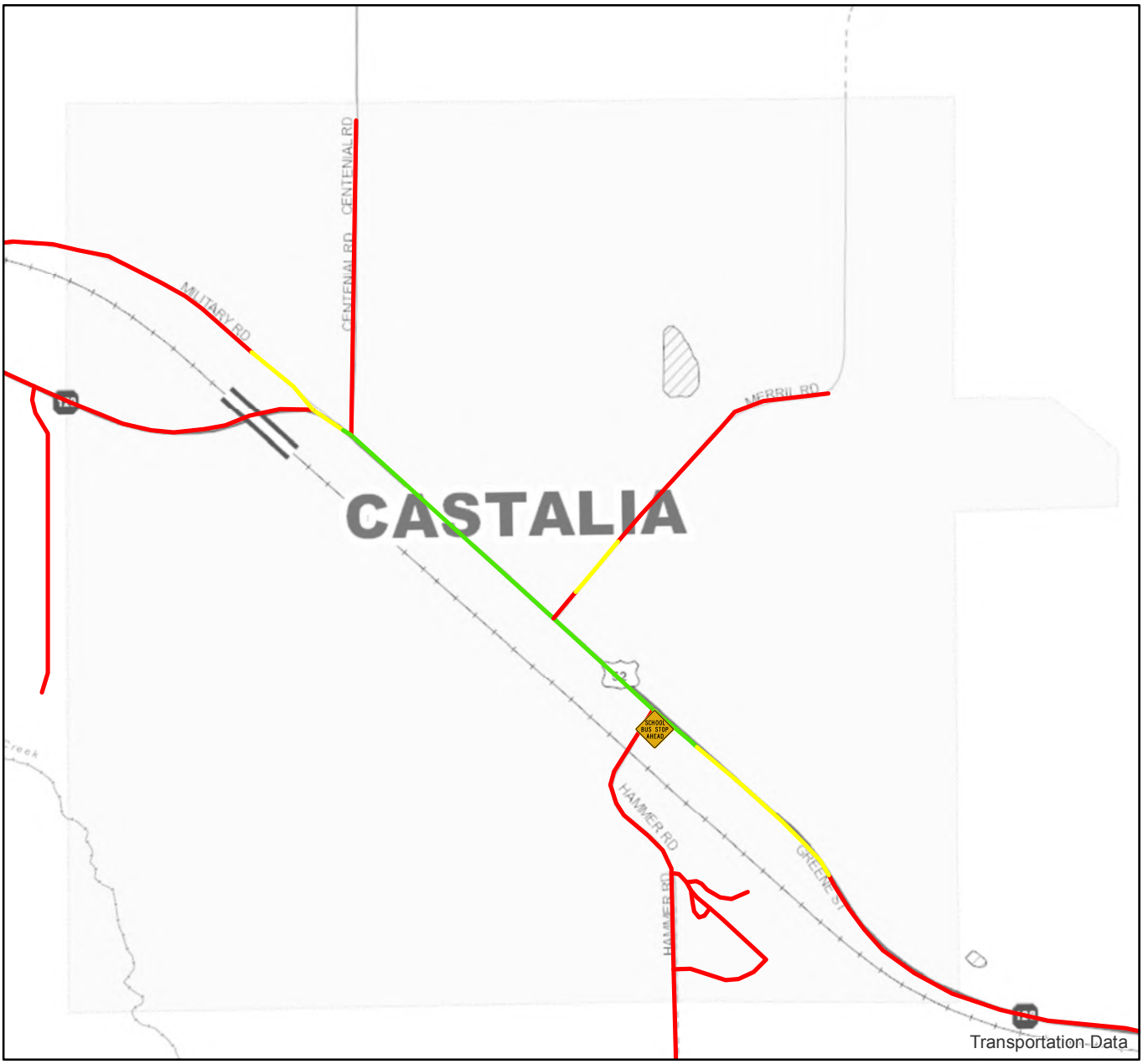
School

Miles

0 0.15 0.3 0.45

Sidewalk Availability

Using aerial photography and the data collected by the volunteers using the iPhone SRTS infrastructure tool, the map below identifies the streets that have incomplete sidewalks, sidewalks on one or both sides of streets, or with no sidewalks at all.



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Sidewalk: No 1 side 2 sides unknown

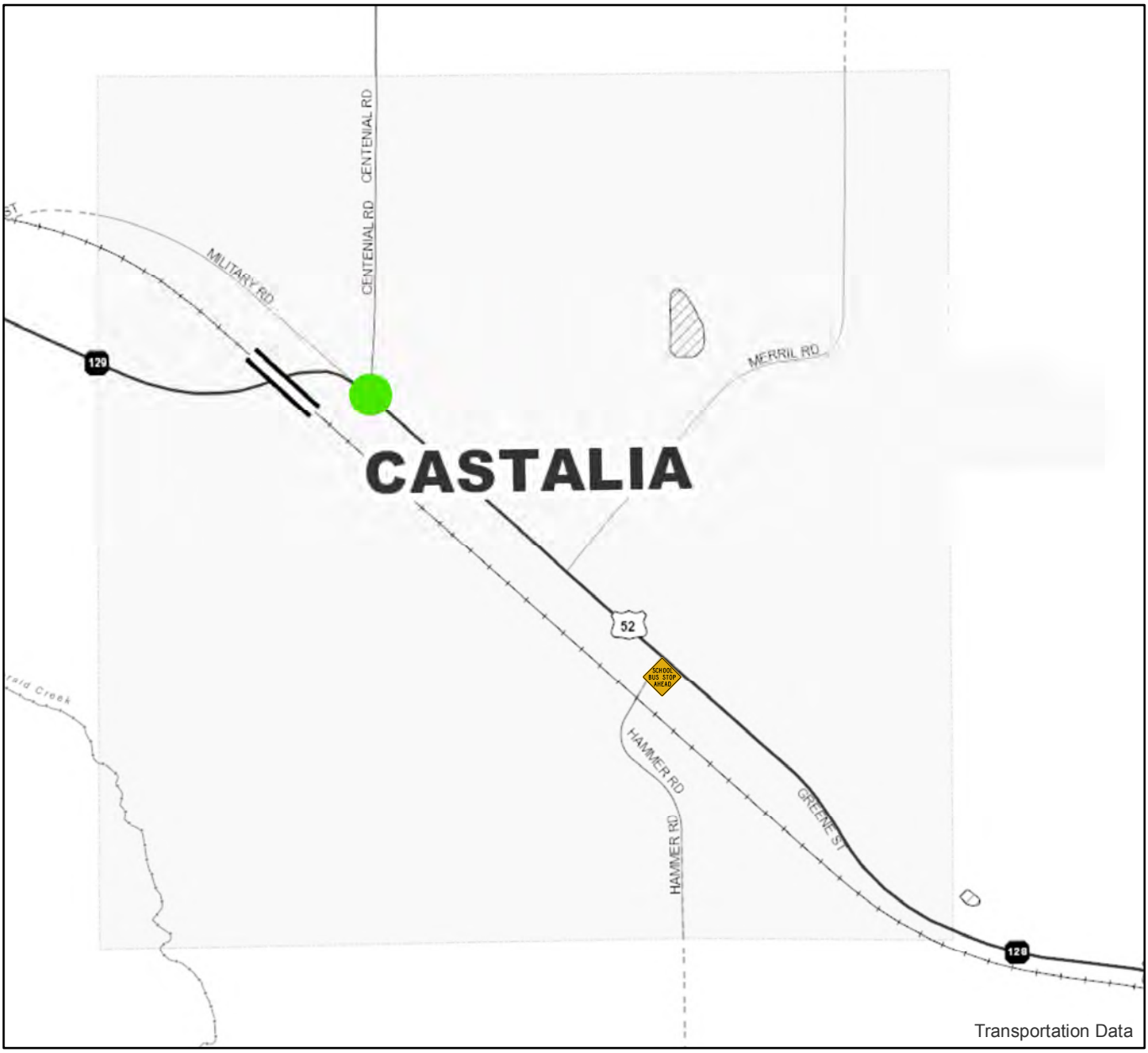
BusStops

Miles

0 0.15 0.3

Intersection Crash Summary

The map below uses Iowa Department of Transportation data from 2009 through April 2013 to identify the intersections where accidents occurred. Special consideration should be given to these intersections when identifying routes for walking programs.



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All Crashes

1 | 2 - 3 | 4 - 6 | 7 - 10 | 10+

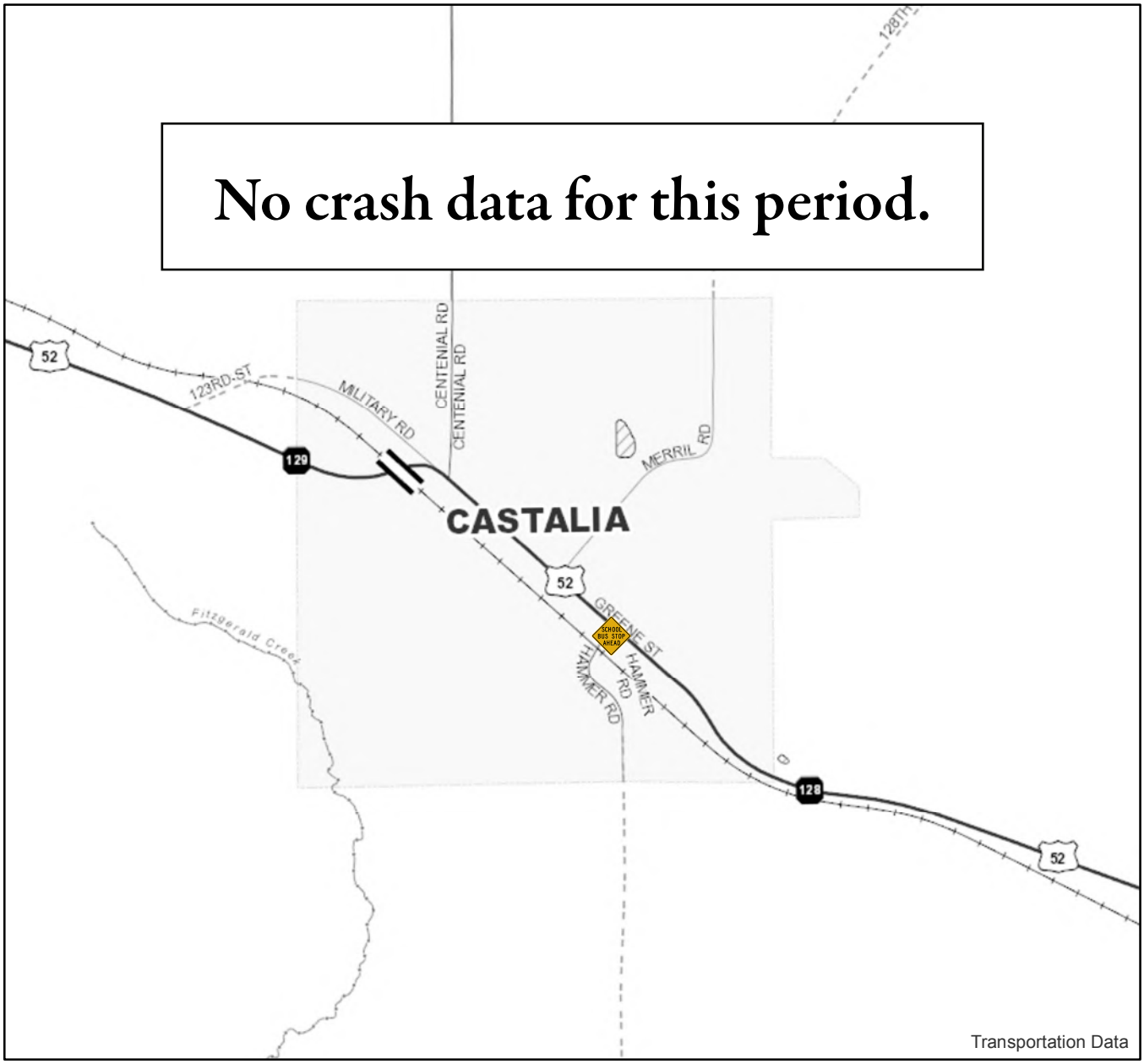
Bus Stop

Miles

0 0.15 0.3 0.45

Automobile & Pedestrian Crash Data

The map below uses Iowa Department of Transportation data from 2009 through April 2013 to identify the locations where accidents with non-motorists occurred. Special consideration should be given to these locations when identifying routes for walking programs.



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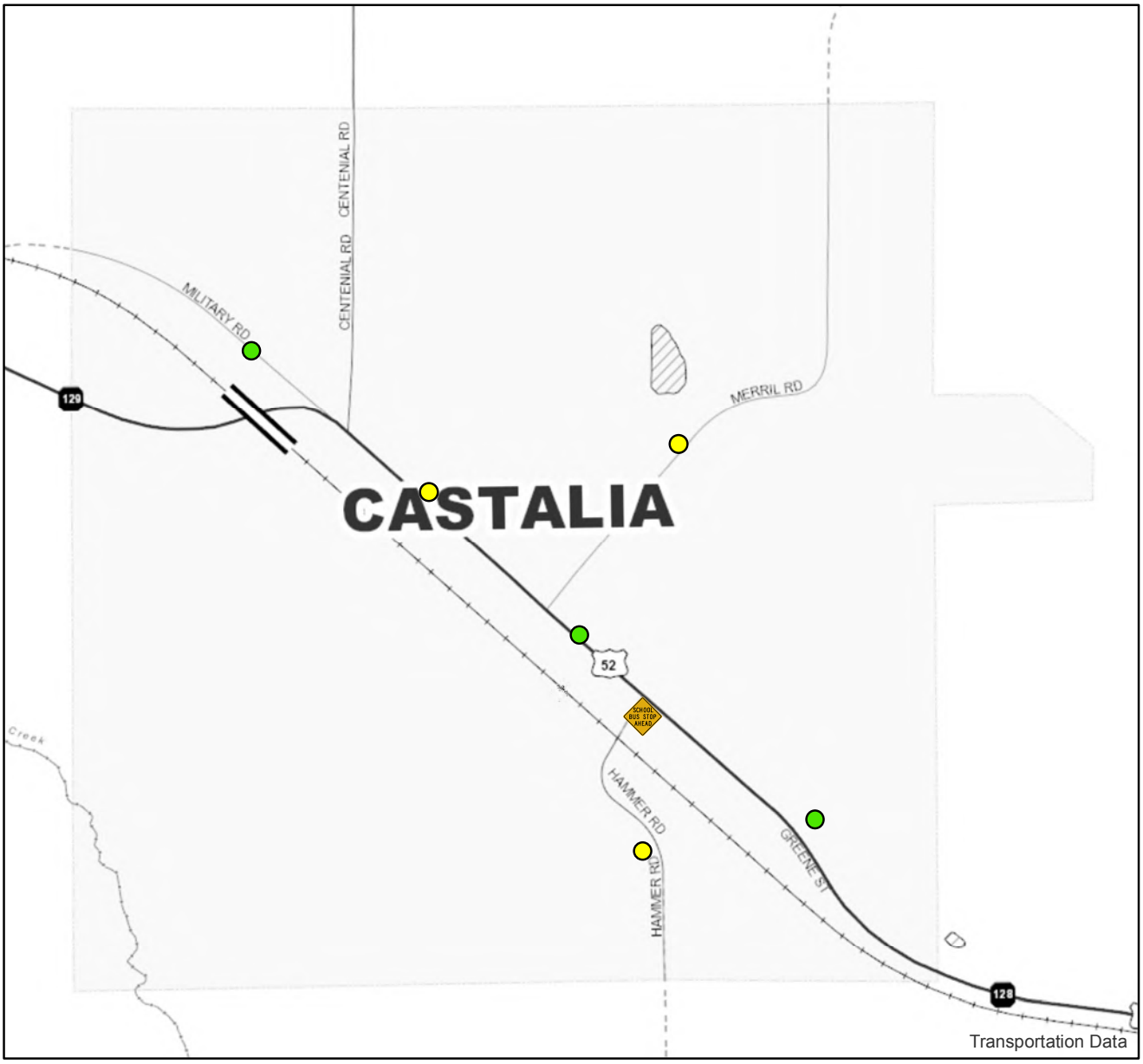
Miles
0 0.25 0.5

Bus Stop

Skater	Pedestrian	Cyclist
1	1	1
2 - 3	2 - 3	2 - 3
4 - 6	4 - 6	4 - 6
7 - 10	7 - 10	7 - 10
10+	10+	10+

Damaged Sidewalks

Areas with damaged sidewalks identified by the volunteers using the iPhone device.



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Miles

0 0.15 0.3

- Poor - is uneven or has major cracks or missing concrete throughout
- Fair - has some major cracks and uneven areas, but still able to ride a bicycle
- Good - free of major cracks and uneven area, can easily walk or bicycle
- BusStops

Street Lighting and Pleasant Routes

Volunteers evaluated at the midblock if they could see that street lighting was provided at the nearest intersection or along the street. Volunteers also identified if the particular street was pleasant to walk.

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Miles
0 0.25 0.5

BusStops
No street lighting
Route not pleasant to walk or has litter

Would Not Feel Safe Crossing the Street

Using the iPhone devices, volunteers identified areas that they thought as an adult that a student would not feel safe crossing. In addition, specific intersections were also identified as being equally unsafe for an adult to cross.

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Bus Stop

Adult Wouldn't Feel Safe

Student Wouldn't Feel Safe

Miles

0 0.15 0.3 0.45

Infrastructure Challenges and Assets

Using the iPhone devices, volunteers identified various infrastructure challenges (e.g., car blocking a sidewalk) and assets (e.g., presence of a bike rack).

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Miles

0 0.15 0.3 0.45

- Bike Rack
- Bus Stop
- Sidewalk ends
- Cracked Sidewalk
- Crossing Guard
- Scary Dogs
- Bus Stop
- Vegetation Blocking Route
- Sidewalk with Stairs
- Crosswalk not at intersection
- Cars blocking sidewalk
- Often has standing water
- Large Truck Traffic
- Other

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