Iowans Walking Assessment Logistics Kit
A SRTS Program

St. Charles, Iowa
Additional maps for
Interstate 35 Elementary School
Spring 2013

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.
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.
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.
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.
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.

No crash data for this period.
Perceived Dangerous Intersections

The map below shows intersections that parents identified in the Parent/Child online survey as being dangerous. The definition of dangerous was a judgment of the parent with no specified criteria established.
Perceived Traffic Issues

The map below shows perceived traffic issues that parents identified in the Parent/Child online survey. The location of a particular traffic issue was up to the judgment of the parent with no specified criteria established.
The map below shows potential improvements that were identified in the Parent/Child online survey.

**Potential Improvements**

No improvements identified.

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Iowa State University Extension & Outreach
Extension Community Economic Development
Contact: Chris Seeger  cjseeger@iastate.edu
Basemap: Iowa DOT
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Transportation Data

- Add bike rack
- Add crossing signal
- Add short connection
- Curb cuts needed
- Bus Stop
Perceived Infrastructure Issues

The map below shows perceived infrastructure issues that parents identified in the Parent/Child online survey. Identified locations near the school or along major walking routes should be a top priority.
Damaged Sidewalks

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

Transportation Data

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
Sidewalk Setbacks and Sidewalk Width

Using the iPhone devices, volunteers identified sidewalks that were not set back from the street as well as sidewalks not wide enough for two adults to walk side-by-side.
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.
Using the iPhone devices, volunteers identified areas that had visible painted crosswalks.
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.
Using the iPhone devices, volunteers identified intersections where the data collector did not consider there to be sufficient time to cross the street safely as well as intersections where items might make it difficult for motorists to see children or for children to see motorists.
Using the iPhone devices, volunteers identified intersections where the sidewalks did not have curb cuts connecting to the street and where the street might be too wide for a child to safely cross.
Using the iPhone devices, volunteers identified various infrastructure challenges (e.g., car blocking a sidewalk) and assets (e.g., presence of a bike rack).