

Chapter Two: Present Conditions



“Hike it! Bike it! I like it!”

Present Conditions

This chapter discusses the present conditions of the city of Sergeant Bluff and the Sergeant Bluff-Luton Community School District. The purpose of listing the present conditions is to inventory existing measures such as policies, plans, and legislation that are currently in place and to outline traffic, crash, and transportation data to concentrate efforts on hazardous locations and how they can be improved.

Community Profile

Census Data

Sergeant Bluff is a part of the tri-state metropolitan area with a total population of 4,227 based on the 2010 Census. There are approximately 1,464 households with 97.7 percent of them occupied and 1,142 families in Sergeant Bluff. Sergeant Bluff is identified as a predominantly White community with 93.1 percent identifying themselves as White as seen in Table 2.1: Population and Race.

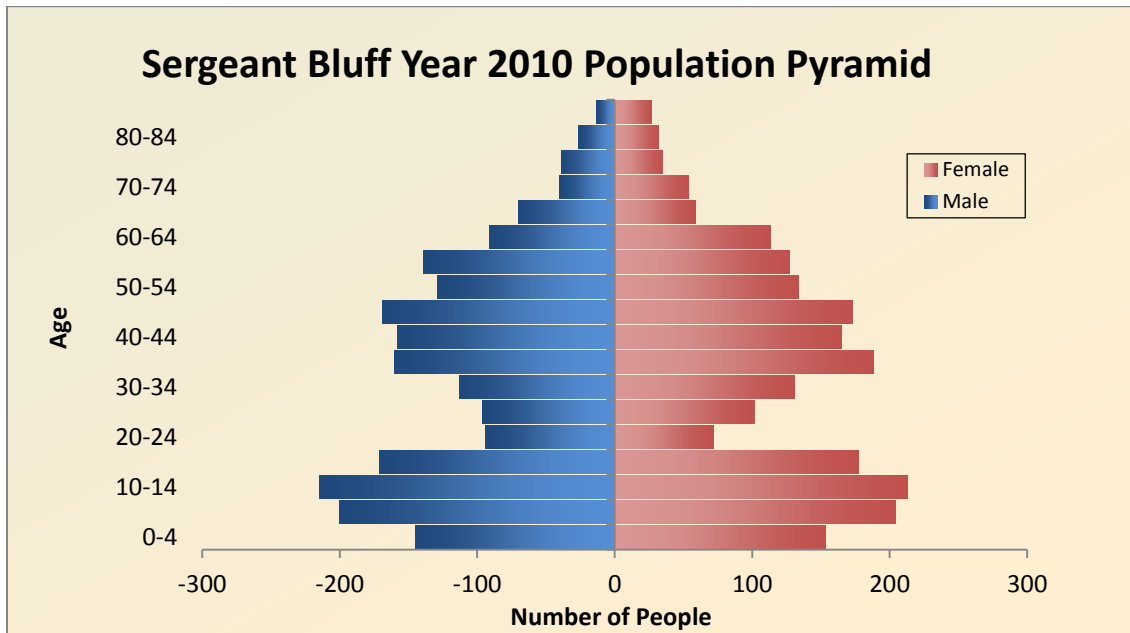
Table 2.1: Population and Race 2010 Census

Subject	Total	
	Number	Percent
POPULATION		
Total population	4,227	100.0
RACE		
One race	4,145	98.1
White	3,935	93.1
Black or African American	45	1.1
American Indian and Alaska Native	33	0.8
Asian	90	2.1
Native Hawaiian and Other Pacific Islander	0	0.0
Some Other Race	42	1.0
Two or More Races	82	1.9
HISPANIC OR LATINO AND RACE		
Hispanic or Latino (of any race)	141	3.3
Not Hispanic or Latino	4,086	96.7
One race	4,011	94.9
White	3,849	91.1
Black or African American	45	1.1
American Indian and Alaska Native	28	0.7
Asian	89	2.1
Native Hawaiian and Other Pacific Islander	0	0.0
Some Other Race	0	0.0
Two or More Races	75	1.8

Source: 2010 Census

Figure 2.1: Population Pyramid displays Sergeant Bluff’s population by age and sex. The figure shows a gap in the 20-34 age groups. The community of Sergeant Bluff is comprised of approximately 78 percent family population. This large family population might account for the smaller young adult population in Sergeant Bluff.

Figure 2.1: Population Pyramid by Age and Sex



Source: 2010 Census

Bicycle, Pedestrian and Recreational Facilities

As summarized in the Siouland Interstate Metropolitan Planning Council (SIMPCO) 2035 Long Range Transportation Plan (LRTP), the goal of the region is to encourage the continual planning and development of trails in the planning area making them safe and efficient. One of the goals outlined in the Chapter Three: Bicycle and Pedestrian of the LRTP is to: Provide for safe, efficient non-motorized access between major traffic generators (schools, major employers, commercial, public facilities, and residential areas). See Appendix A: Maps, for a map of existing, planned and proposed bicycle and pedestrian facilities in the metropolitan area.

The SIMPCO 2035 LRTP recognizes that an efficient pedestrian network is an important element of the transportation network. Multipurpose trails as discussed in the LRTP provide one element for pedestrian access as many walkers use the trails for recreational activities and to travel from one place to another. Sidewalks in the community also provide a safe and accessible pedestrian system. Having a connected, cohesive sidewalk system within the community is a key to providing a reliable transportation network. Also recommended is that the city of Sergeant Bluff improve pedestrian accessibility by implementing walkable community design standards. A walkable community is defined as an area where people can easily walk to and from home, work, school, shopping, and public transit on

a pedestrian network that is safe and accessible. Some design guidelines of a walkable community include: having sidewalks which connect to each other and to destinations; slow vehicle traffic; narrow streets; and safe intersections.

Transit

Currently, Sergeant Bluff is not served by a fixed route transit system while neighboring portions of Sioux City are served by a transit route. Sioux City Transit does run an extension of their Airport Route in Sergeant Bluff to serve Stream employees as a part of the Job Access and Reverse Commute (JARC) program. However, because this route does not approach the schools or serve neighborhoods within the school district, it is not a feasible option for children going to or from school. School buses do serve all of the Sergeant Bluff-Luton School District.

Rail

As seen in Map 2.1 (page 2-4), the Union Pacific has railroad inside the community of Sergeant Bluff that runs parallel to South Lewis Boulevard/K-45. Rail traffic occurs during the hours that students travel to and from school. The school campuses are located on the west side of the railroad tracks which present a barrier for students located in the neighborhoods east of the railroad tracks. The intersection next to the railroad tracks, South Lewis Boulevard and 1st Street, is a high traffic intersection leaving the entire area hazardous for children to utilize when walking to/from school.

Trains have stopped at or near the South Lewis Boulevard and 1st Street intersection creating a larger problem. When the train has stopped on the tracks, children have demonstrated that they will not wait for the train to start and clear the intersection. Children do not see a stopped train as a deterrent but rather climb on the train, in between rail cars to cross the railroad tracks, creating a very dangerous situation as seen in Figure 2.2. The schools bring in train safety experts every year to teach children the appropriate measures they should take when encountering a train.

Figure 2.2: Child climbing on train while walking/biking to school



Traffic Counts

Current traffic conditions are depicted in Map 2.2 (page 2-6), which illustrates the most recent Annual Average Daily Traffic (AADT) count figures (2007) for the area surrounding the Sergeant Bluff-Luton schools. The bulk of the traffic is on the primary facilities, particularly Interstate 29. Other major traffic corridors of note include 1st Street, South Lewis Boulevard, Warrior Road, and County Road K-29.

Crash Data

Table 2.2 lists the bicycle and pedestrian crashes that have occurred in the city of Sergeant Bluff from 2006-2010.

Table 2.2: Sergeant Bluff Bicycle and Pedestrian Crashes

Date of Incident	Modes Involved	Age group	Injuries/Outcome	Location
9/29/06	Vehicle vs. Bicyclist	Adult	None	C Street and 2 nd Street
5/8/07	Vehicle vs. Bicyclist	Child – 6yo	Yes – foot pain, was seen by doctor	400 block Embassy Court
3/27/08	Vehicle vs. Pedestrian	Child – 9yo	Yes – transported to Mercy	1 st Street and Port Neal Road
6/9/08	Vehicle vs. Pedestrian	Child	None	Pioneer Mall Parking Lot
10/8/09	Bicyclist	Adult	Yes	B Street and 2 nd Street
4/2/10	Bicyclist vs. Pole	Adult	None	1 st Street and D Street

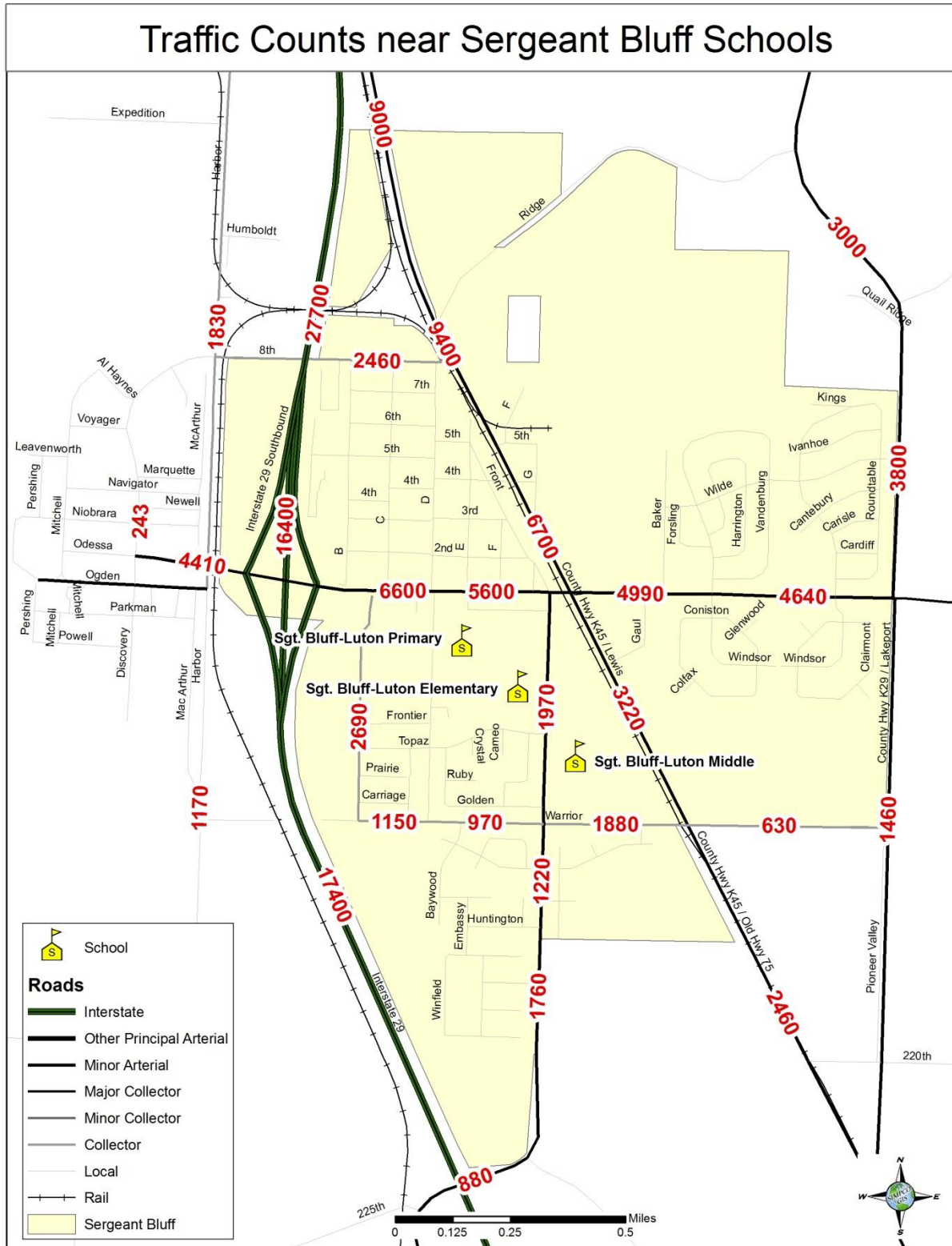
Source: Sergeant Bluff Police Department

Unlike vehicle crashes, many crashes involving bicycles and/or pedestrians may go unreported, especially if the incidents are minor and no serious injuries occur. This makes gathering a comprehensive total of these types of crashes difficult and often incomplete. A map depicting the locations of these crashes can be found in Appendix A: Maps (page A-1).

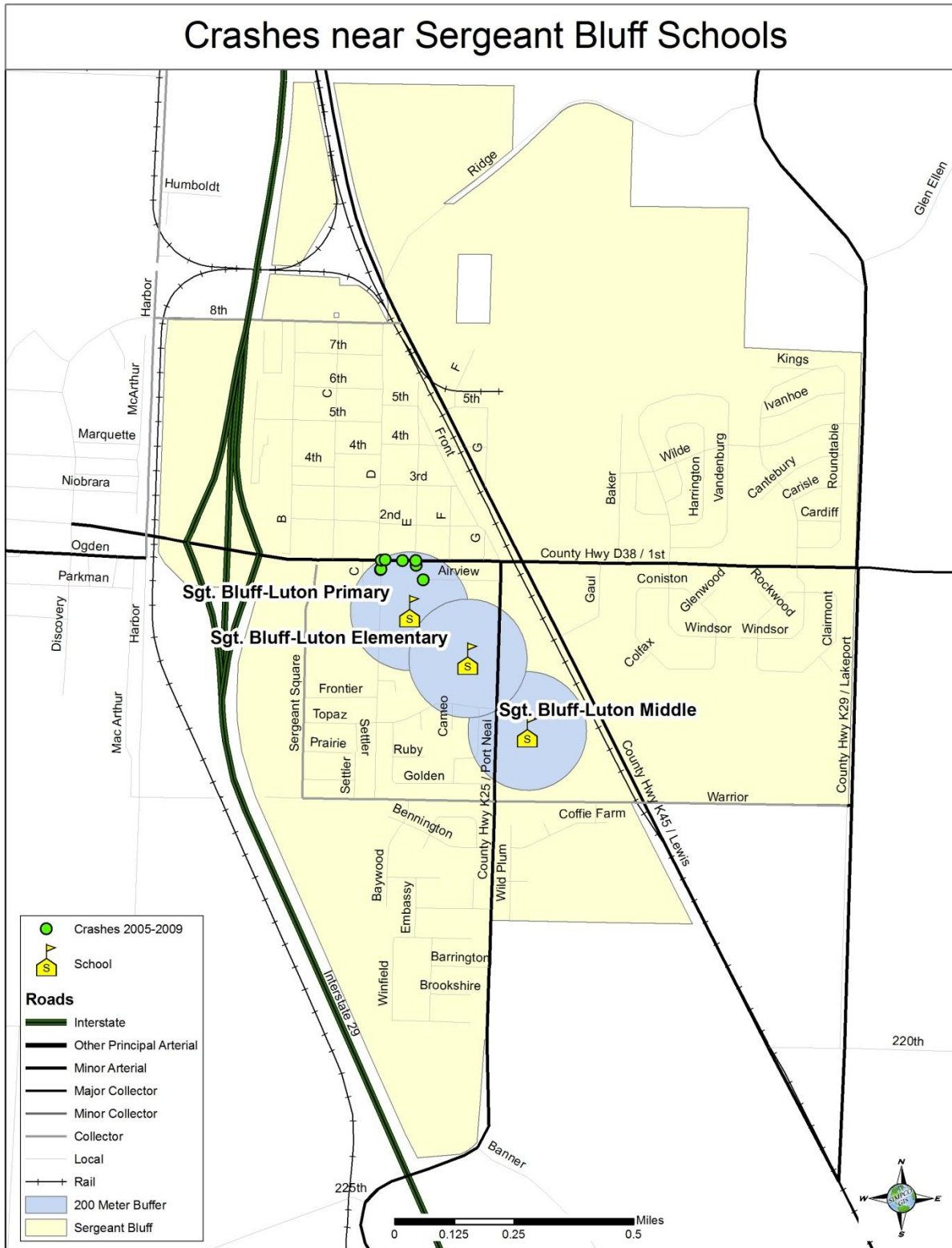
The development of the Safe Routes to School Plan provides a unique opportunity to assess crash statistics within a one block radius of the schools. While this study area can be expanded, it was important to look at the crash volume near the schools themselves to address the highest priority needs.

Map 2.3 (page 2-7) is a visual representation of crashes within a one block radius of the schools in the study. A full crash data map including missing sidewalk segments can be found in Appendix A: Maps. Generally, most crashes occur at or near intersections. In the one block radius around the schools the location with the highest number of crashes was along 1st Street, between C Street and D Street. Both Sergeant Bluff-Luton Elementary and Sergeant Bluff-Luton Middle School have not had any crashes within the crash study area in the past five years according to available data (years 2005-2009).

Map 2.2: Traffic Counts (2007)



Map 2.3: Crashes One Block Radius from Schools



Sidewalk Ordinances

The city of Sergeant Bluff Code of Ordinances, Chapter 136 provides local code requirements regarding sidewalk regulations. Chapter 136 addresses sidewalk specifications while Ordinance Number 542 modified Chapter 136.03 which discusses removal of snow, ice and accumulations for sidewalks in the community.

Sidewalk Requirements

Sergeant Bluff Code of Ordinances, Chapter 136, administers requirements for sidewalks in the community. A full detail of Sergeant Bluff's sidewalk regulations can be found in Appendix D: Sergeant Bluff Code. Section 136.02 defines a "defective sidewalk" as:

"any public sidewalk exhibiting one or more of the following characteristics:

- A. Vertical separations equal to three-fourths (3/4) inch or more.
- B. Horizontal separations equal to one-half (1/2) inch or more.
- C. Holes or depressions equal to three-fourths (3/4) inch or more and at least four (4) inches in diameter.
- D. Spalling over fifty (50) percent over a single square of the sidewalk with one or more depressions equal to one-half (1/2) inch or more.
- E. Spalling over less than fifty percent (50%) of a single square of the sidewalk with one or more depressions equal to three-fourths (3/4) inch or more.
- F. A single square of sidewalk cracked in such a manner that no part thereof has a piece greater than one square foot.
- G. A sidewalk with any part thereof missing to the full depth.
- H. A change from the design or construction grade equal to or greater than three-fourths (3/4) inch per foot."

According to Sergeant Bluff Code Chapter 136, the abutting property owners are responsible for maintenance, repairs, removing barricades, and costs for sidewalk construction ordered by the city.

Snow Removal Enforcement – Sidewalks

While Sergeant Bluff Code of Ordinances, Chapter 136.03, identified Removal of Snow, Ice and Accumulations; the city of Sergeant Bluff modified the ordinance in 2010 by repealing Section 136.03 and adopting Ordinance Number 542 in lieu thereof. A full detail of Ordinance Number 542 can be found in Appendix D: Sergeant Bluff Code. The ordinance states:

"It is the responsibility of the abutting property owners to remove snow, ice and accumulations promptly from the entire sidewalk. If a property owner does not remove snow, ice or accumulations within a reasonable time, but in no case no more than 24 hours after the snow or ice ceases to fall or accumulate, the City may do so and assess the costs against the property owner for collection in the same manner as property tax. The Council may establish a schedule for calculating costs by resolution."

Iowa Laws Pertaining to School Zones

According to Iowa Code 2003: Section 321.285 Speed Restrictions¹:

“Any person driving a motor vehicle on a highway shall drive the same at a careful and prudent speed not greater than nor less than is reasonable and proper, having due regard to the traffic, surface, and width of the highway and of any other conditions then existing, and no person shall drive any vehicle upon a highway at a speed greater than will permit the person to bring it to a stop within the assured clear distance ahead, such drive having the right to assume, however, that all persons using said highway will observe the law.”

The code goes on to state:

“that any speed in excess thereof shall be unlawful (2) Twenty-five miles per hour in any residence or school district.”

According to the Iowa DOT Traffic Manuals, School Zones’ regulatory speed limit is in effect during a specific time before and after school. A 10 mph reduction is typical for school zones with a minimum of 25 mph.

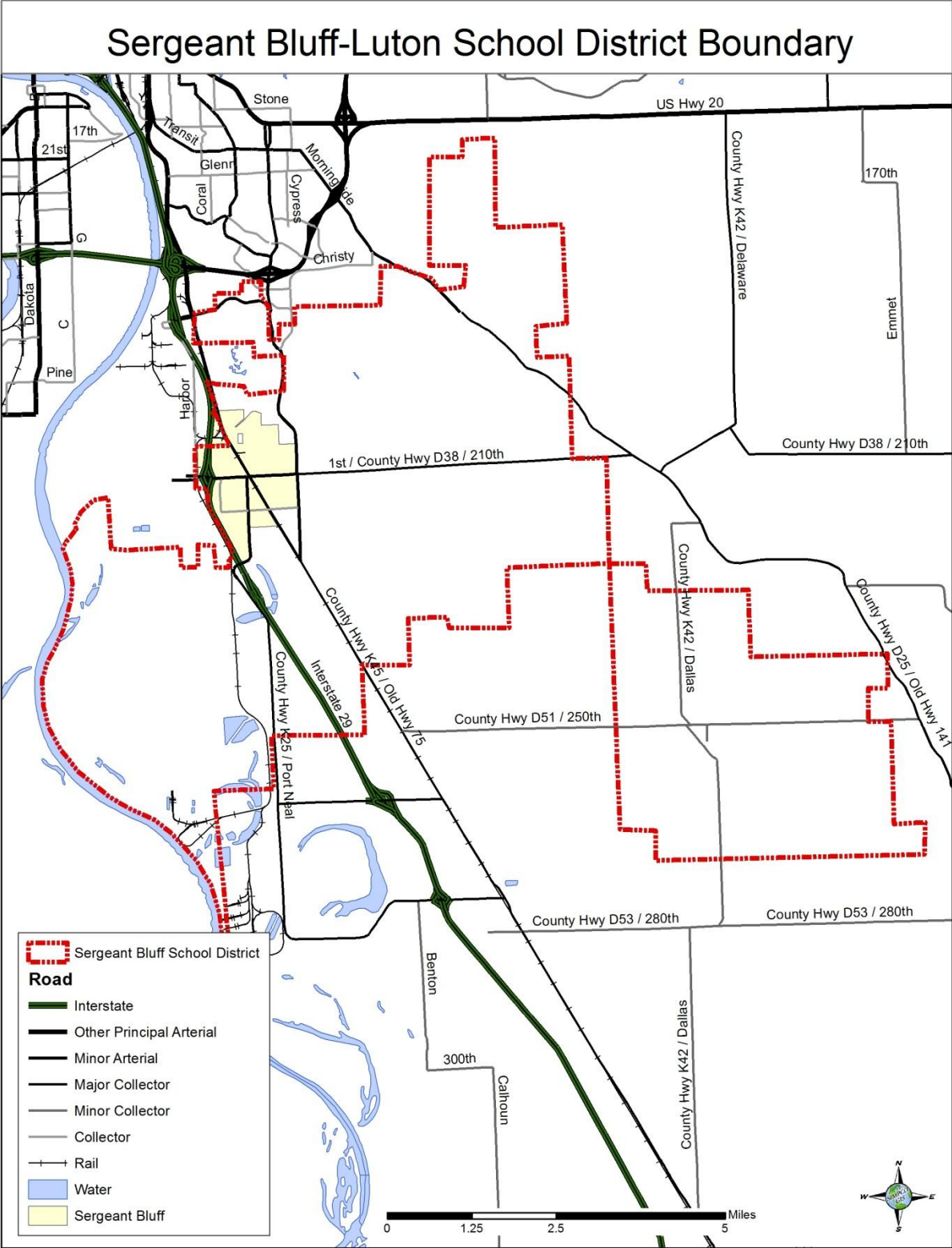
School Profile

School District Boundary

The schools observed in the Safe Routes to School Plan are Sergeant Bluff-Luton Primary, Sergeant Bluff-Luton Elementary, and Sergeant Bluff-Luton Middle School. The Sergeant Bluff-Luton Community School District Boundary lines are represented in Map 2.4 (page 2-10).

¹ Iowa Code 2003: Section 321.285 Speed Restrictions <http://www.legis.state.ia.us/IACODE/2003/321/285.html>

Map 2.4: Sergeant Bluff-Luton Community School District Boundary



Enrollment Data

In Table 2.3, the five year certified enrollment data is listed for the Sergeant Bluff-Luton Community School District in which high school (9-12) population is included. This information was obtained from the Iowa Department of Education.² As seen in Table 2.3, the total enrollment in the Sergeant Bluff-Luton Community School District has been very consistent in number of students enrolled in the past five years.

Table 2.3: Five Year Enrollment Data

School Year	Sergeant Bluff-Luton Community School District
2006-2007	1378
2007-2008	1388
2008-2009	1373
2009-2010	1377
2010-2011	1380

Source: Iowa Department of Education

Crossing Guards

There is no district-wide formal education program in place for crossing guards in the Sergeant Bluff-Luton School District. However, all crossing guards are trusted staff of the schools. School staff crossing guards can be found at 1st Street and D Street, Port Neal Road and the elementary school entrance, Port Neal Road across from the fire department, and one in the elementary school parking lot.

School Policies

While the Sergeant Bluff-Luton Community School District does not have any formal policies on walking or biking to school, the district does promote wellness with specific goals regarding nutrition education, physical activity, and other school-based activities that are designated to promote student wellness.

Transportation Policies

All students that attend school in the Sergeant Bluff-Luton School District are served by the school bus system. Because this school district is very large, this policy is very helpful for the children living far away that cannot feasibly walk or bike to school. Many families that live close to the schools and are within walking or bicycling distance also use the service but are required to pay for service. The School District has established protocols for bus behavior, but few other district-wide transportation policies.

Arrival/Dismissal Procedures

Before school begins, Preschool and Transitional Kindergarten students must be escorted into the building by a parent or guardian. After school ends, all Sergeant Bluff Primary and Elementary School students are escorted to bus and pickup lines by a staff member. Parents that are picking up their children are required to wait at the curb so that staff has face-to-face contact with the parent or guardian. Bus drivers greet children that ride the bus at dismissal and have a list of the children who should be riding the bus. No one that is not signed up to ride the bus is allowed on. Sergeant Bluff Middle School does not have a formal arrival and dismissal procedure; however students that are

² Iowa Department of Education School District Certified Enrollment
http://www.iowa.gov/educate/index.php?option=com_content&task=view&id=1348&Itemid=2410

dropped off and picked up do so in the front of the building while students using the bus use the south doors to the area in-between the Middle School and High School. Two to three staff members as well as the Principal of the Middle School are out front after school ensuring that students are navigating their way through traffic safely. All three schools dismiss students at roughly the same time creating traffic congestion for about 20 minutes near the schools.

Parent Survey

Copies of the student travel tally and the parent survey were distributed in the September 2008, when applying for Safe Routes to School funds to develop the Safe Routes to School Plan. The student travel tally was distributed to every classroom, where the teachers asked students their particular mode of travel and documented weather conditions; results were then uploaded to the Safe Routes to School National Database. A parent survey was sent home with each student for the parents to fill out and return. The parent survey was distributed both in English and in Spanish. Once a significant number of surveys had been returned, the results were again uploaded to the Safe Routes to School National Database. The student travel tally and parent surveys showed the same information regarding student travel so the Parent Survey results are used in the plan to identify the typical mode of arrival to and departure from school.

This survey was conducted as a base line of information for the document. A detailed analysis by school can be found in Appendix B: Surveys.

Based on parents' responses, 13 percent of students live less than $\frac{1}{4}$ mile from their respective school. Approximately half of respondents, 50.4 percent, stated that their child(ren) lived one mile or less from their respective school. A map depicting the distance between child's home and school by nearest intersection can be found in Appendix A: Maps (page A-3).

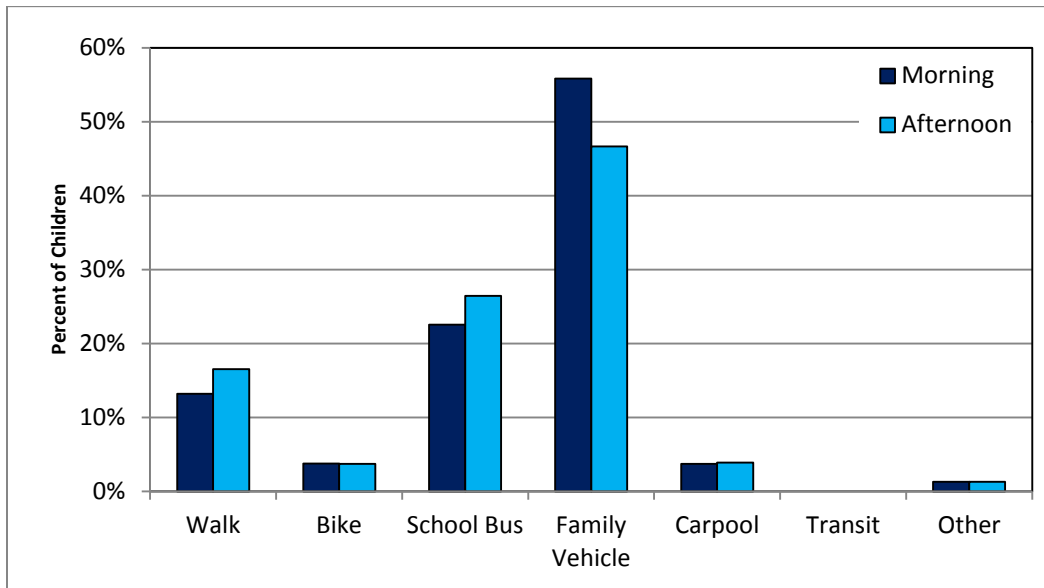
Table 2.4: Parent Estimate of Distance from Child's Home to School – All Study Area

Distance between home and school	Number of children	Percent
< 1/4 mile	65	13%
1/4 to 1/2 mile	65	13%
1/2 to 1 mile	116	24%
1 to 2 miles	92	19%
> 2 miles	150	31%

Source: 2008 Parent Survey

A majority of respondents stated that the typical mode of arrival to and departure from school was by family vehicle. The second most stated response was that their child(ren) rode the bus. Only 14.8 percent stated that their child(ren) walked to/from school and 3.8 percent of children biked to/from school. As seen in Figure 2.3, across the study area, typically more children were driven to school in the morning while fewer children were driven in the afternoon. More children were allowed to walk home from school, than to walk to school in the morning.

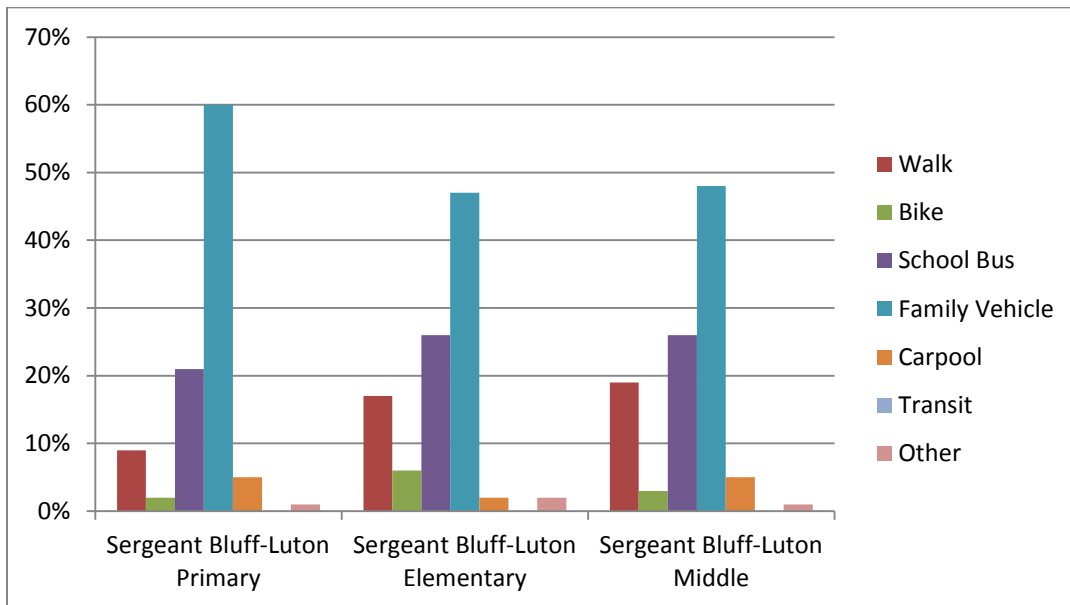
Figure 2.3: Typical Mode of Arrival to and Departure from School – All Study Area



Source: 2008 Parent Survey

Figure 2.4 shows each school individually, with all mode totals combined for both arrival and dismissal. Following the figure, Table 2.5 is a numerical representation of the information. Students' mode of travel is fairly consistent between the Sergeant Bluff-Luton schools.

Figure 2.4: Study Area of All Mode Totals Combined for both Arrival and Dismissal by School



Source: 2008 Parent Survey

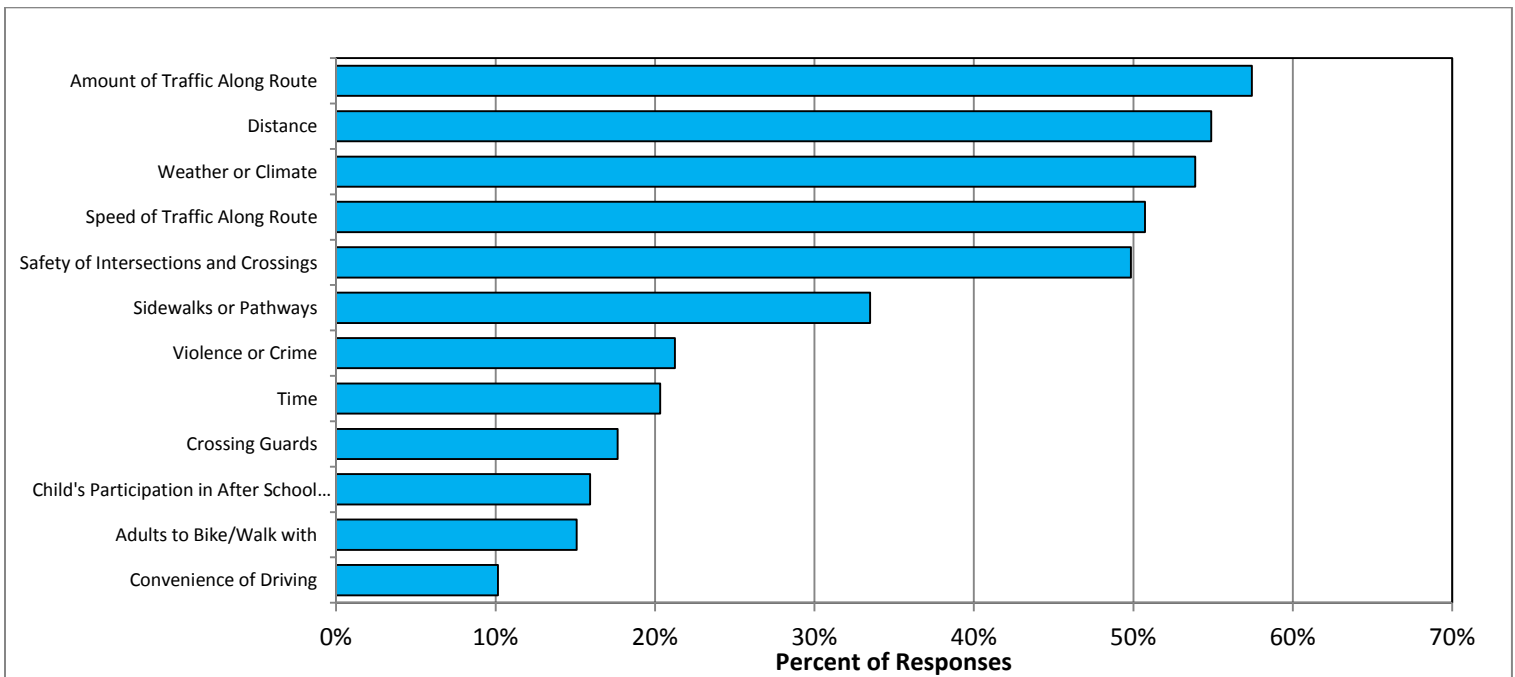
Table 2.5: Study Area of All Mode Totals Combined for both Arrival and Dismissal by School

School	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Sergeant Bluff-Luton Primary	343	9%	2%	21%	60%	5%	0%	1%
Sergeant Bluff-Luton Elementary	356	17%	6%	26%	47%	2%	0%	2%
Sergeant Bluff Middle	300	19%	3%	26%	48%	5%	0%	1%

Source: 2008 Parent Survey

Out of 407 responses from the parent survey, parents cited the following as issues that affected the decision to not allow a child to walk or bike to/from school as seen below in Figure 2.5. The top five issues throughout the entire study area, which were also identified by at least 50 percent or more of the respondents, were: amount of traffic along route; distance; weather or climate; speed of traffic along route; and safety of intersections and crossings.

Figure 2.5: Issues Reported to Affect Parents’ Decision to Not Allow Their Child(ren) to Walk or Bike to/from School – All Study Area



Source: 2008 Parent Survey

Based on the responses from parents, those parents who do not allow their child(ren) to walk or bike to school consider traffic safety a top concern.

Sergeant Bluff-Luton Primary

A total of 339 Parent Surveys were distributed with 174 surveys returned or a return rate of 51.3 percent. Of those respondents, only 14 percent said their child(ren) lived less than ¼ mile from school and 48.3 percent said their child(ren) lived one mile or less from school. The top five issues that affected parents’ decisions to let their child(ren) walk or bike to school were:

- Amount of traffic along route – 61%
- Distance – 56%
- Safety of intersections and crossings – 55%
- Speed of traffic along route – 55%
- Weather or climate – 53%

Parents responded that if the following changes were made, they would allow their child(ren) to walk or bike to school:

- Safety of intersections and crossings – 48.4%
- Amount of traffic along route – 37.6%
- Speed of traffic along route – 33%

Sergeant Bluff-Luton Elementary

A total of 333 Parent Surveys were distributed with 179 surveys returned or a return rate of 53.8 percent. Of those respondents, only 13 percent said their child(ren) lived less than ¼ mile from school and 51.4 percent said their child(ren) lived one mile or less from school. The top five issues that affected parents' decisions to let their child(ren) walk or bike to school were:

- Amount of traffic along route – 64%
- Weather or climate – 54%
- Speed of traffic along route – 52%
- Distance – 52%
- Safety of intersections and crossings – 51%

Parents responded that if the following changes were made, they would allow their child(ren) to walk or bike to school:

- Safety of intersections and crossings – 49.4%
- Speed of traffic along route – 45%
- Amount of traffic along route – 42.3%

Sergeant Bluff-Luton Middle

A total of 349 Parent Surveys were distributed with 150 returned or a return rate of 43 percent. Of those respondents, only 12 percent said their child(ren) lived less than ¼ mile from school and 46.7 percent said their child(ren) lived one mile or less from school. The top five issues that affected parents' decisions to let their child(ren) walk or bike to school were:

- Distance – 57%
- Weather or climate – 55%
- Amount of traffic along route – 44%
- Speed of traffic along route – 43%
- Safety of intersections and crossing – 41%

Parents responded that if the following changes were made, they would allow their child(ren) to walk or bike to school:

- Amount of traffic along route – 45.6%
- Speed of traffic along route – 42.4%

- Safety of intersections and crossings – 36.9%

While the Safe Routes to School program cannot change the weather/climate or the distance one lives from the school, there are opportunities to evaluate the speed and amount of traffic along the route, the safety of intersections and crossings, violence or danger threats, and the perception of distances with education, encouragement, enforcement and engineering activities.

School Site Observations

Since all three schools in the study are located near each other, one school site observation was done for all schools in the study area. The Sergeant Bluff-Luton Primary, Elementary, and Middle schools were observed during school arrival and dismissal and a site survey was done on the infrastructure surrounding the schools. Below is a synopsis of the arrival and dismissal observations. The infrastructure site observations can be found in Chapter Six: Engineering.

The following arrival and dismissal observations were done on May 11, 2010:

- The majority of students were dropped off and picked up by bus or car.
- Crosswalks are located at every school. No crossing guards were observed in the morning.
- Students were crossing Warrior Road randomly with traffic coming from both directions.
- Students were crossing Lewis Boulevard and 1st Street against the light. Stop light has a flashing “do no walk” signal.
- Students utilized sidewalks where available.
- Approximately nine buses pick-up students in the parking lot linking the Primary and Elementary schools.
- All three schools dismiss students within five to seven minutes of each other.
- Approximately 30 students were observed walking to/from school.
- Students darted in front of parked cars immediately after school dismissal
- Parents/adults picked up students in parking lots behind or adjacent to the schools and in front of schools.
- High levels of congestion occurred for at least 20 minutes after school dismissal within a one mile radius of the schools.

Present Conditions Guidance

Based on the information presented in this chapter, the demographics of Sergeant Bluff show that Sergeant Bluff is a smaller community within the larger metropolitan area. The schools are located near each other and next to higher traffic roads. The family vehicle and school bus tend to be the most common transportation mode used. Approximately half of students live within one mile of the school; however, surveys show that there are several barriers standing in the way of parents feeling comfortable with having their child(ren) walk or bike to school. Many of these issues can be addressed with the proper plans and decisions, as well as effort put in by the school community. The following chapters will discuss education, encouragement, enforcement, engineering, and evaluation methods that can help to make routes to school safer and more enjoyable for walking and biking.