

THE UNIVERSITY OF IOWA  
DEPARTMENT OF URBAN AND REGIONAL PLANNING

# Safe Routes to School Plan

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West Union, Iowa



North Fayette Middle School

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**May 2009**

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## INTRODUCTION

### **The Safe Routes to School Program**

The United States in the last few decades has become more suburbanized and is increasingly a nation that relies on the family vehicle and not walking or biking. In 1969, 42 percent of students walked or biked to school according to a survey conducted by The Centers for Disease Control and Prevention<sup>1</sup>. However, by 2001 the number of students walking and biking to school had dramatically declined to 16 percent. National statistics provided by the Department of Energy show that the number of vehicle miles traveled (VMT) increase from 718 billion miles per year in 1969 to more than 2 trillion miles per year in 1999<sup>2</sup>. Development pattern changes as well as travel behavior changes have also increased issues such as traffic safety, traffic congestion, degraded air quality, and other health related issues. The creation of a national Safe Routes to School Program in 2000 by the United States Department of Transportation, administered through the National Highway Traffic Safety Administration, was in response to these issues and how they relate to a child's commute to and from school.

The common goal of the Safe Routes to School Program is to increase the number of children who walk and bike to school safely<sup>3</sup>. The national program uses a variety of education, encouragement, enforcement, and engineering strategies to promote safe travel to and from school<sup>4</sup>. In August 2005, federal legislation devoted \$612 million for the National Safe Routes to School Program through 2009. The state of Iowa was granted \$4.08 million for this 4 year period to implement the Iowa Safe Routes to School Program. Grant applications are received every year in Iowa to fund local Safe Routes to School projects and programs.

### **Why Safe Routes to School matters**

#### Student Health

The United States Department of Health and Human Services recommends at least 60 minutes of physical activity for children on most, preferably all days of the week<sup>5</sup>. However, many school-aged children are not getting adequate physical activity. The Centers for Disease Control and Prevention (CDC) reported that of the children ages 9 to 13 years, 62 percent do not participate in any organized physical activity and 23 percent do not engage in any free-time physical activity outside of school hours<sup>6</sup>. Consequently, childhood obesity and overweight rates are increasing all around the country. Other studies by the Centers for Disease Control and Prevention show that the percentage of children ages 6 to 11 and 12 to 19 years-old, considered to be severely overweight tripled in the last 30 years<sup>7</sup>. Many studies also suggest that obese children are at least twice as likely to become obese adults<sup>8</sup>.

### Traffic Congestion & Air Quality

Walking and biking to school can help reduce vehicle traffic and improve air quality around a school. As previously mentioned, fewer students are walking or biking to and from school today than in years past. Suburbanization as well as increased traffic volumes has convinced more parents that it is unsafe for their children to walk or bike. Therefore, they choose to drive their children to school, which consequently adds more congestion during the morning and afternoon. Estimates from multiple cities indicate that the motor vehicle traffic generated by the travel to and from school adds 20 to 30 percent more traffic volume to the roads<sup>9</sup>.

According to the Environmental Protection Agency, in many cities across the United States the motor vehicle is the single greatest polluter<sup>10</sup>. During the 1996 Summer Olympic Games in Atlanta, Georgia, single-occupancy motor vehicles were banned from the downtown area. This set the stage for an air quality study in which researchers found a decrease of more than 23 percent of morning rush-hour traffic and a 42 percent decrease in Asthma-related events for children<sup>11</sup>.

### **Safe Routes to School Implementation**

Each community faces a unique set of challenges in terms of developing a safe route to school plan. However, there are some common strategies developed by the National Center for Safe Routes to School which can make the process easier. These strategies are called the 5E's which stands for are Education, Encouragement, Enforcement, Engineering, and Evaluation.

#### Education

Education and Encouragement strategies are closely intertwined. Target audiences for a Safe Routes to School Education program include students, parents, drivers, and neighbors. Education strategies include teaching pedestrian and bicycle safety and creating awareness of the benefits of walking and biking to school. Safety education is an essential element of any safe routes to school program.

#### Encouragement

Encouragement activities are used to encourage children to walk and bike to school safely. As stated on the National Center for Safe Routes to School website, "Encouragement strategies are about having fun. They generate excitement and interest in walking and bicycling." Successful activities include: Walk to School Day events; Mileage Club; Walking School Buses and Bicycle Trains; to name a few.

#### Enforcement

The main goal of Enforcement strategies is to deter unsafe behaviors of drivers, pedestrians and bicyclists, and to encourage all road users to obey traffic laws and share the road safely. Enforcement involves a network of community members working together to promote safe walking, bicycling and driving. Students, parents, adult school crossing guards, school personnel and neighborhood watch

programs all working in conjunction with local law enforcement. Safety awareness education is an important element for successful Enforcement.

#### Engineering

The Engineering approach of a Safe Routes to School program includes the design, implementation, operation, and maintenance of traffic control devices, as well as creating safe routes by improving pathways, creating safer crossings, and slowing down traffic among other things. Engineering strategies are best used in conjunction with Education, Encouragement and Enforcement activities.

#### Evaluation

Evaluation is an important element which is incorporated into each of the other 4 E's in addition to standing alone to evaluate the entire safe routes to school program.

### **Northeast Iowa Safe Routes to School Initiative for Healthier Students Project**

Northeast Iowa Resource Conservation and Development, Inc. was awarded a regional planning grant from the Iowa DOT Safe Routes to School Program in 2008. This planning and information gathering grant provided funds to gather attitudinal, policy, and environmental information from 34 schools in 25 communities throughout 5 Northeast Iowa counties. The goal of the project was to document the attitudes and behaviors of parents and students towards walking and biking to school as well as to document the location and condition of existing sidewalk infrastructure. In addition, school policy information was gathered. Northeast Iowa Resource Conservation and Development, Inc. partnered with each school to complete the surveys as well as educate students, parents, and teachers about the benefits of walking and biking to school and how each of them can contribute to improving health and environmental conditions<sup>1</sup>.

### **West Union, Iowa**

West Union is located in Fayette County, Iowa. The total area of West Union is 2.7 square miles. The city lies at the junction of U.S. Route 18 with State Highways 56 and 150.

#### Demographic Characteristics of West Union

As of the 2000 Census, there were 2,549 people, 1,107 households, and 660 families residing in West Union. Out of the 1,107 households 28.1 percent had children under the age of 18 living with them. The

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<sup>1</sup> Northeast Iowa Resource Conservation and Development Inc. is a non-profit 501 (c) 3 located in Postville, Iowa and is dedicated to rural and economic development in the counties of Allamakee, Buchanan, Clayton, Fayette, Howard and Winneshiek of Northeast Iowa.

median age of West Union residents was 40.4 percent and 13.2 percent of the population in West Union was between the ages of 5-14.<sup>12</sup>

### **School Information**

There are two schools that are participating in the Safe Route to School program in West Union. They are West Union Elementary School and North Fayette Middle School. West Union Elementary School is a public school with 188 enrolled students from pre-kindergarten to 5<sup>th</sup> grade. North Fayette Middle School is also a public school with 263 students from 6<sup>th</sup> to 8<sup>th</sup> grade located in the center of town.

## DATA COLLECTION & ANALYSIS

### Behavioral Audits

Encouraging the students living within 2 miles from school to walk or bike is the aim of the Safe Routes to School Program. Changing people's attitude and behavior is a challenge that can be overcome with Education. It includes bicycle and pedestrian safety and awareness of social, cultural, and environmental issues. Education is geared toward the children first, then the parents. The following will analyze West Union's current situation pertaining to travel modes to and from school as well as the parent's perception on walking and biking to and from school.

The analysis of West Union parent perceptions and school travel modes was conducted through behavioral audits. These audits are twofold. First student surveys (also called Student Travel Tally) were administered by the teachers who were assigned the task of reporting the travel behavior of the students in the morning by asking the students their mode of travel to school and the travel mode from school in the afternoon before leaving. These surveys were conducted during two days in a middle of a week in each classroom. Secondly, the Parent Survey was sent home by the school (one survey per household) and the parent or guardian answered a series of questions about the travel behavior of their child as well as their opinion on walking and biking to and from school. The results obtained for North Fayette Middle School and West Union Elementary for both surveys are presented below. These results show walking and biking behavior of students and parents in a warm weather setting therefore in the winter these percentages are lower than what is shown below.

### North Fayette Middle School

#### Student Travel Tally

North Fayette Middle School has a total enrolment of 263 students from 6 to 8<sup>th</sup> grade. Based on the survey results all the students were present and responded to the survey questions. Figure 1 illustrates the travel mode of the students for morning and afternoon trips combined: 40% of the respondents take the bus, 25% use the family vehicle, 33% walk to school, 1% bike and 1% use other modes (carpool, transit or use several modes).

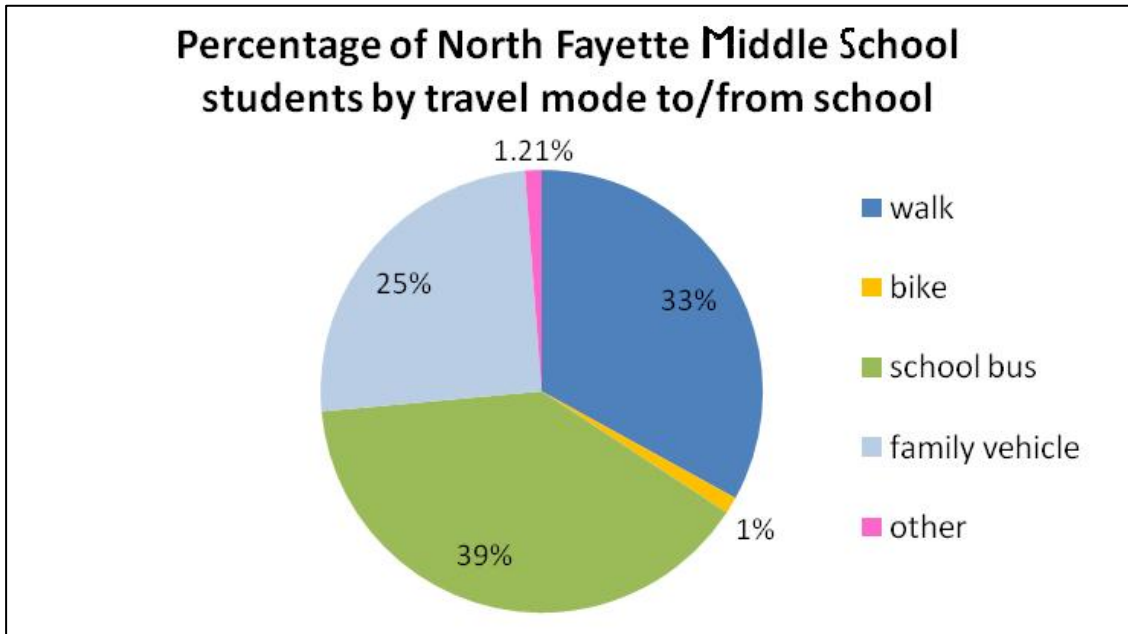


Figure 1-Percentage of North Fayette Middle School students by travel mode to /from school

Figure 2 represents the travel patterns of students in the morning and afternoon. The percentage of students walking and riding the bus increases in the afternoon while the number of students riding in a family vehicle decreases in the afternoon. The percentage of students biking remains unchanged for both morning and afternoon trips.

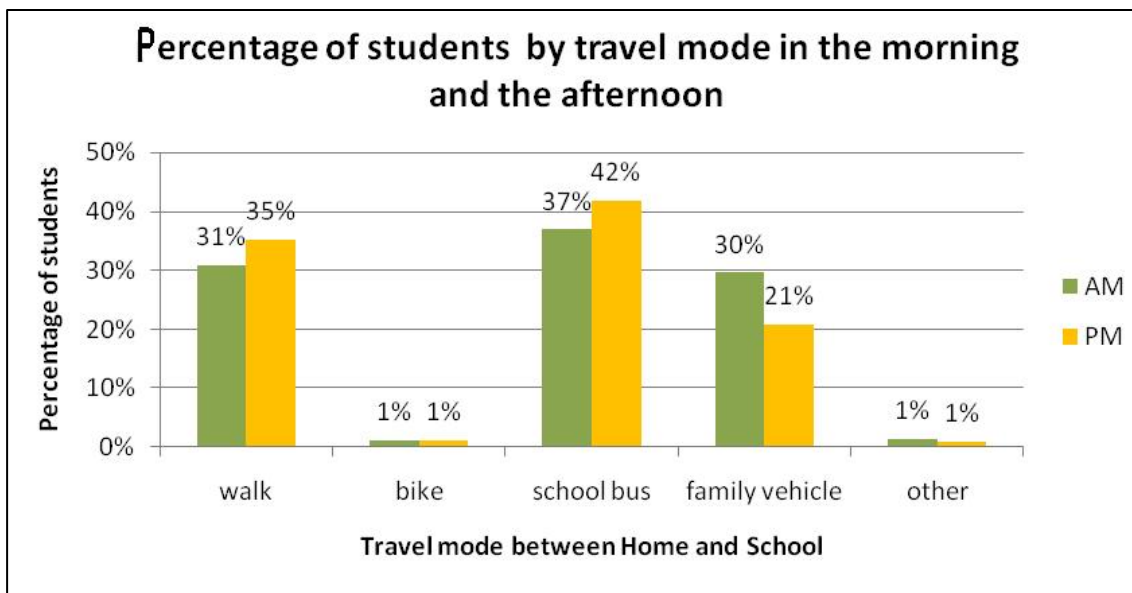
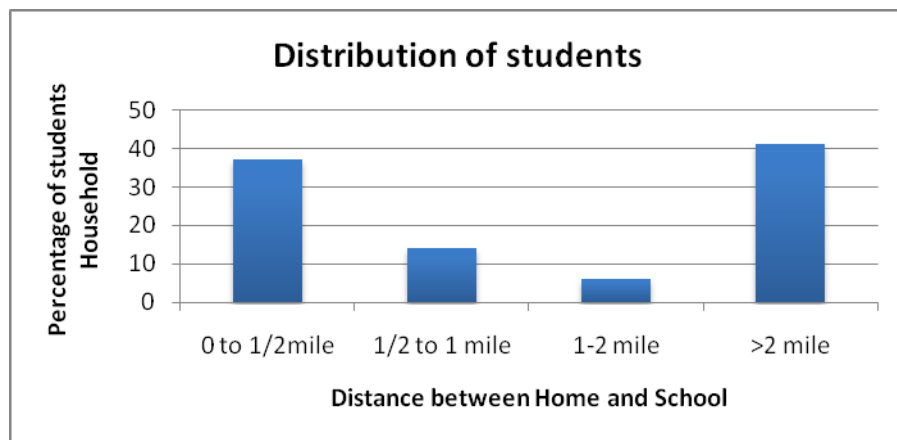


Figure 2-Travel patterns in the morning vs. afternoon



Parent Survey

As mentioned previously the Parent Survey guidelines requested that the parent or guardian complete one survey per household regardless of the number of children they had in the same school. Therefore these results represent one survey per household. The number of Parent Surveys distributed was 175, with 102 being returned and collected (a response rate of 58.28%). The surveys reported that most of the student households, about 41.4%, are located at a distance greater than 2 miles from North Fayette Middle School. The remaining student locations are as follows: 37.4% of the student households are less than ½ mile from school, 14.1% between a ½ mile and 1 mile, and 6.1% between 1 mile and 2 miles from school (Figure 3).



**Figure 3- Distribution of student households and distance from school**

For the travel mode to school, the histogram (Figure 4) shows a percentage of 23.5% (of the 98 respondents) walk to school while 39.7% take the bus, 35.7% use a family vehicle and 1% using multiple or other modes of transportation.

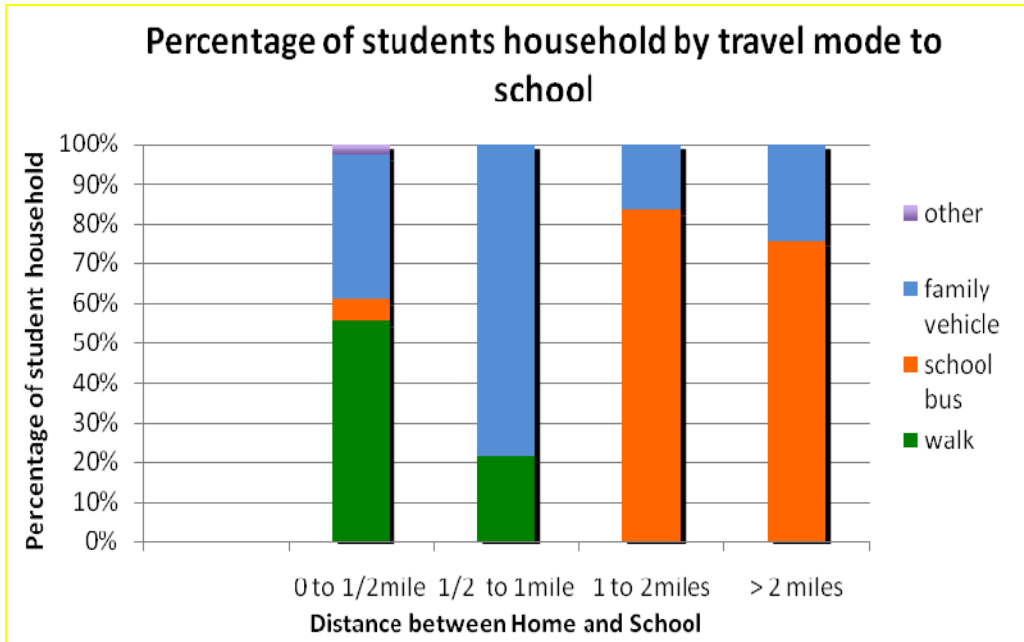


Figure 4 - Travel trend in the morning

As for the travel mode from school the histogram (Figure 5): indicates that 32% walk, 46.4% take the school bus, and 21.6% are picked up in a family vehicle.

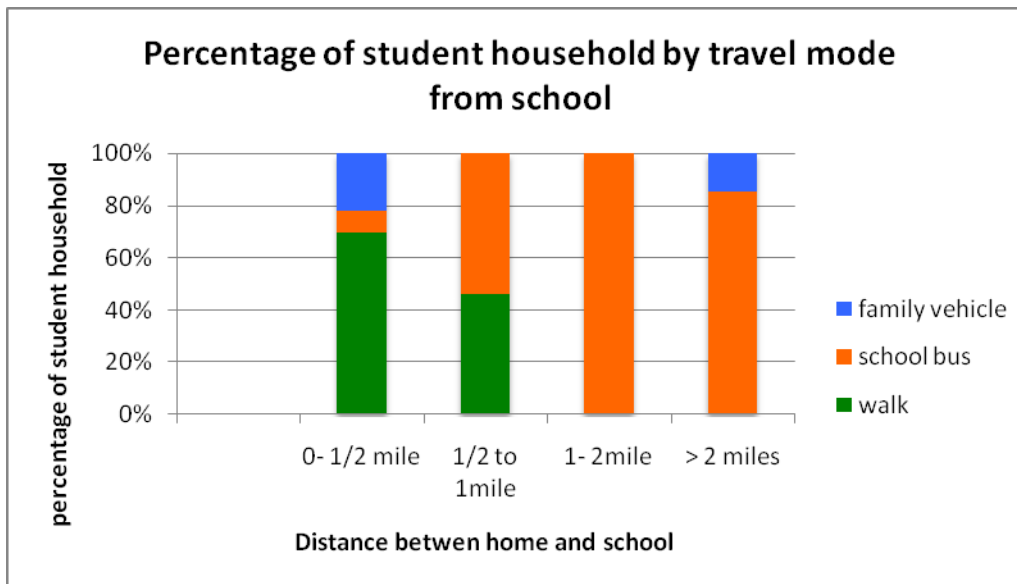


Figure 5- Travel trend in the afternoon

Furthermore other questions on the Parent Survey focused on parent's opinion on walking and biking. Parents were asked whether their child had asked permission to walk or bike to school and the results indicate that of the 18.8% of student who have asked to walk or bike to school in the last year live less than ¼ mile from the school. The survey also point out that 8.3% of the student households living within ¼ mile of the school have not asked for permission to walk or bike to and from school. Overall, a larger percentage of students have not asked to walk or bike to school (about 40.6%), mainly those living more than 2 miles from the school.

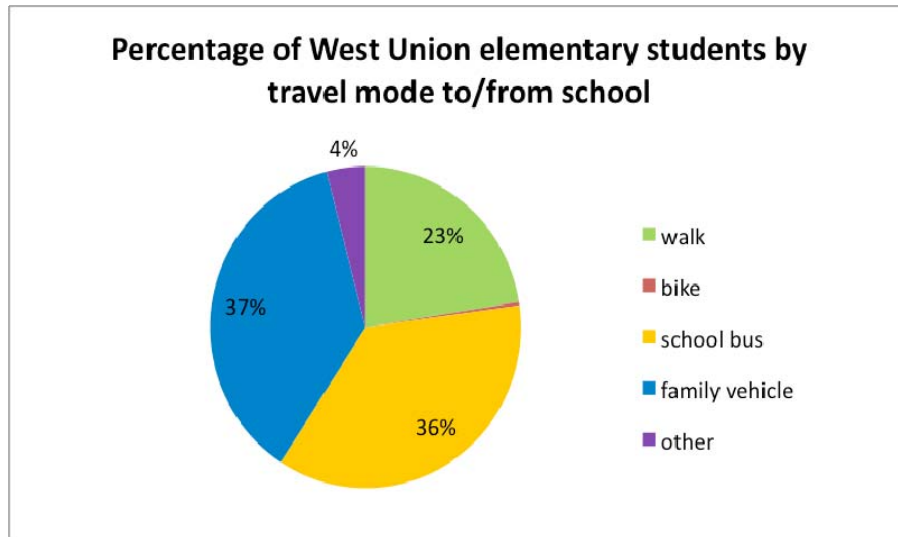
Parents were also asked at which age they would allow their child to walk or bike without an adult. The response obtained illustrates that the majority of parents would not allow their child to walk or bike to school at any grade and identified distance as the principal barrier. The parents who would allow their child to walk or bike identified that they would do so only for children older than 1<sup>st</sup> grade. Parents also stated what they perceived to be barriers for their children to walk or bike to school. The most common barriers indentified were; distance, weather, traffic along the route, safety at intersections and crossings, lack of sidewalks and pathways, and traffic volumes along the school route. Some of the less common barriers that were identified were; lack of crossing guards, violence and crime, time, and convenience of driving.

## **West Union Elementary School**

West Union Elementary School is the second of two schools in West Union. The same surveys were administered to both parents and students at West Union Elementary as were administered at North Fayette Middle School.

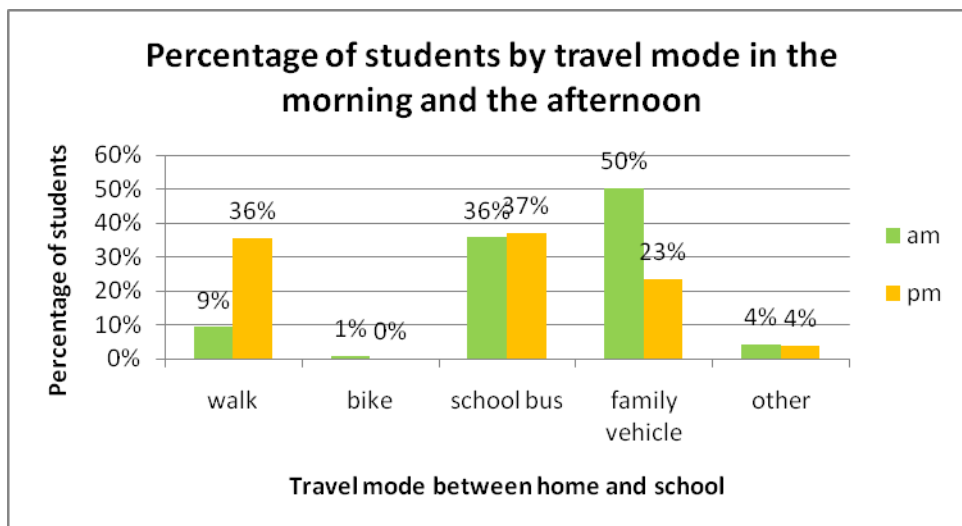
### Student Tally

West Union Elementary School has a total enrollment of 188 students from Pre-kindergarten to 5<sup>th</sup> grade. Based on the survey results all students were present and responded to the survey questions. Figure 6 illustrates the travel mode of the student for morning and afternoon trips combined: 36% of the respondents take the bus, 37% use the family vehicle, 23% walk to school, 0.3% bike and 4% use other modes (carpool, transit or use several modes).



**Figure 6- Percentage of West Union Elementary School students by travel mode to /from school**

The histogram in Figure 7 illustrates the trends in the morning and afternoon: a greater percentage of students walk in the afternoon (36% vs. 9%), the same pattern for the bus trips (36% vs. 37%), as for the family vehicle fewer students are driven in the afternoon compare to the morning trips (23% vs. 50%).

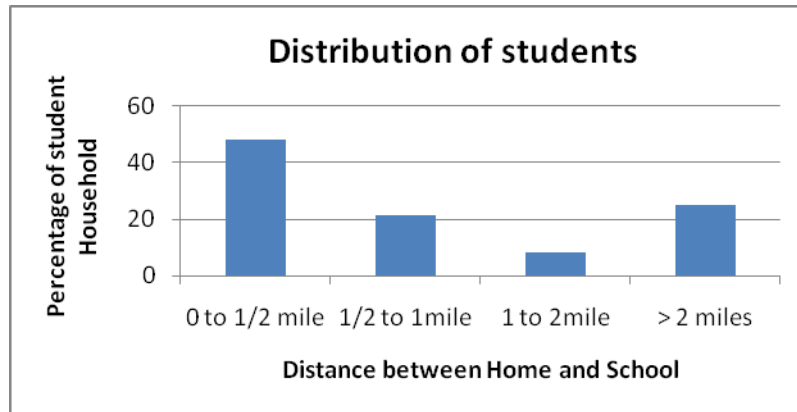


**Figure 7- Travel pattern in the morning vs. afternoon**

Parent Survey

As mentioned previously the Parent Survey guidelines requested that the parent or guardian complete one survey per household regardless of the number of children they had in the same school. Therefore these results represent one survey per household. The number of Parent Surveys distributed was 172,

with 104 being returned and collected (a response rate of 59.4%). The surveys reported that most of the student households, about 24.4%, are located at a distance greater than 2 miles from West Union Elementary School. The remaining student locations are as follows: 46.6% of the student households are less than ½ mile from school, 20.4% between a ½ mile and 1 mile, 7.8% between 1 mile and 2 miles from school (Figure 8).



**Figure 8-- Distribution of student households and distance from school**

For the travel mode to school, the histogram (Figure 9) shows that 25% (of the 101 respondents) walk to school, 1% bike while 30.6% ride the bus and 43.3% ride in a family vehicle to school.

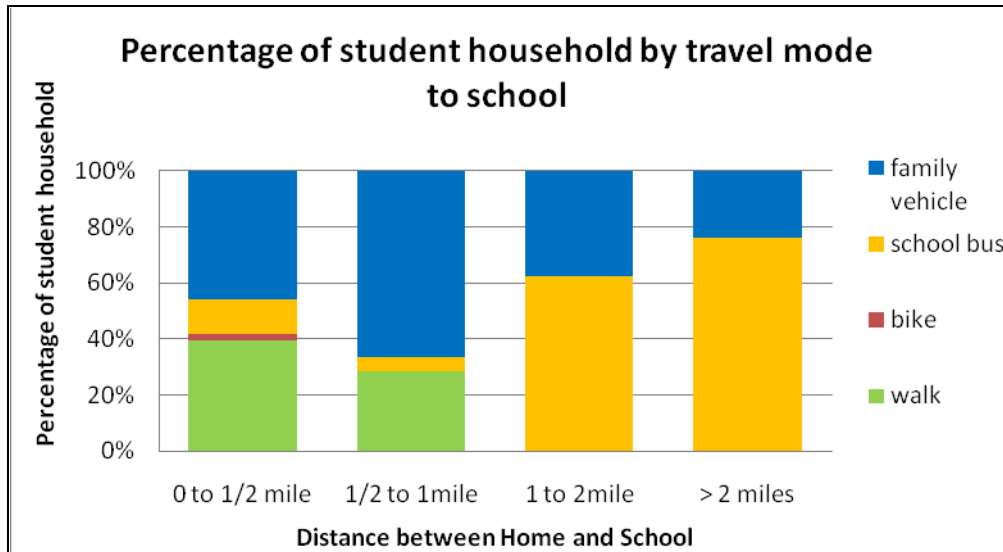


Figure 9- Travel trend in the morning

As for the travel mode from school the histogram (Figure 10): indicates that 46.2% walked, 1% bike while 38% take the school bus, and 17% ride in a family vehicle after school. However these results do not reflect the travel trend of the fall or winter period when this survey was administrated.

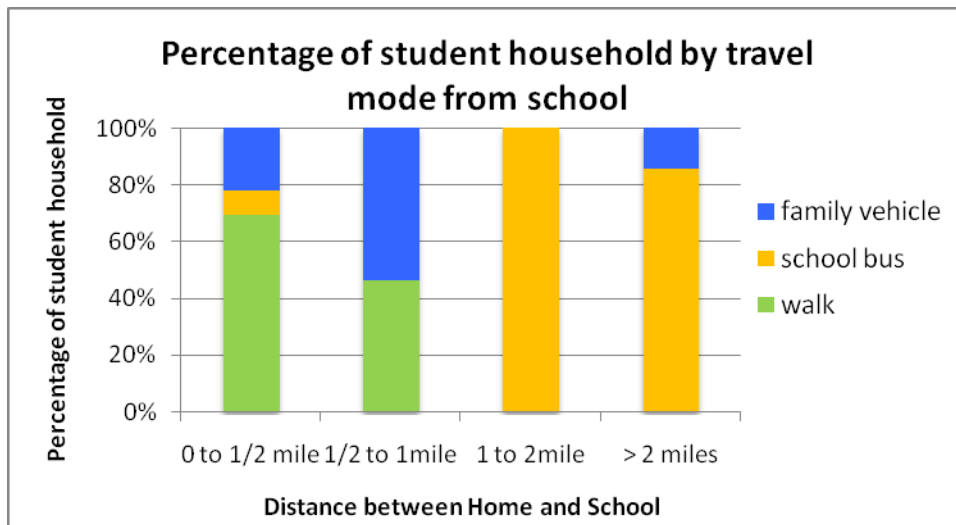


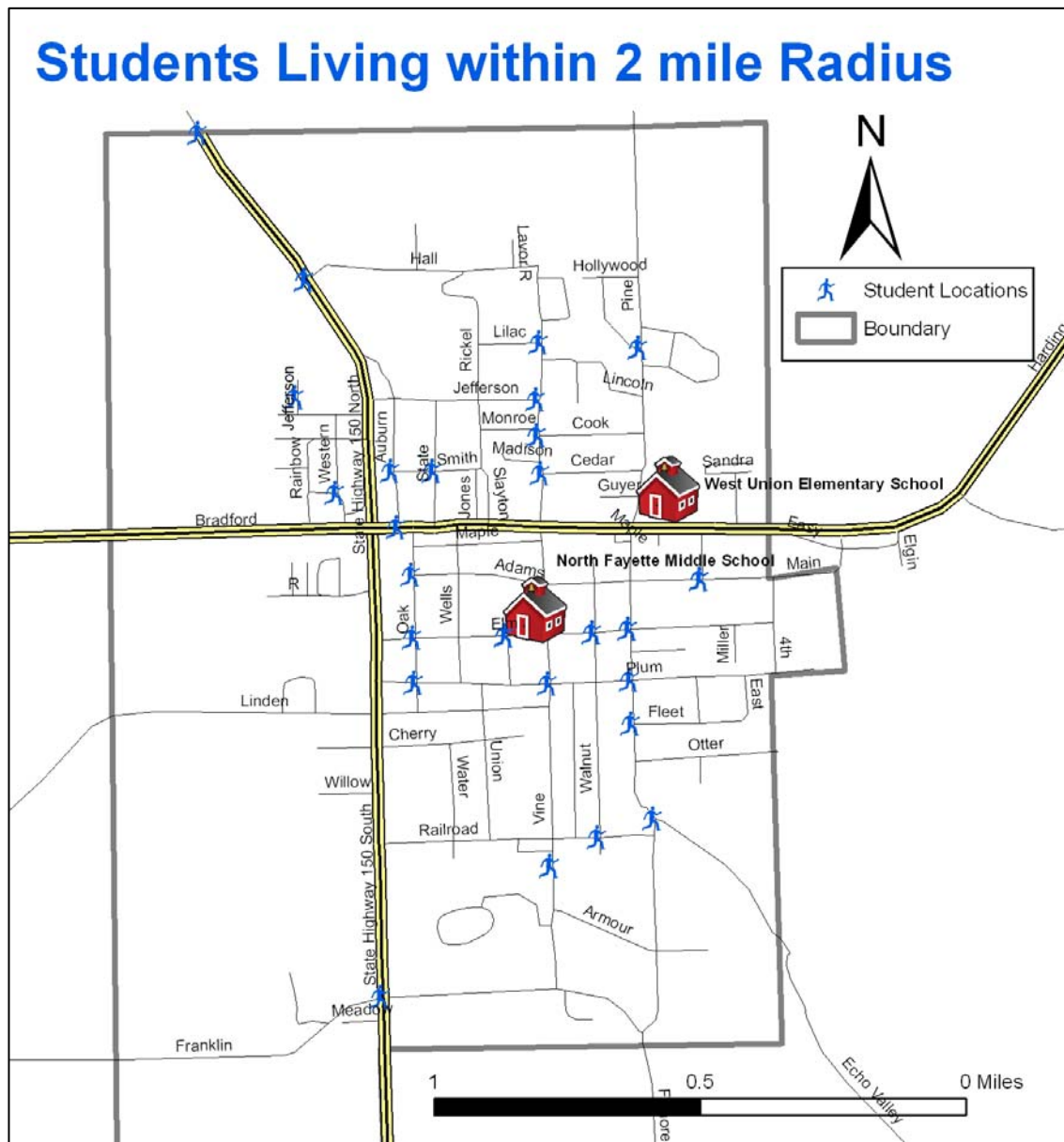
Figure 10- Travel trend in the afternoon

Furthermore other questions on the Parent Survey focused on parent's opinion on walking and biking. Parents were asked whether their child had asked for permission to walk or bike to school and the results indicate of the 21.4% of students who have asked their parents for permission to walk or bike to and from school in the last year live less than ¼ mile from the school. The surveys also pointed out that 1% of the students living within ¼ mile of the school have not asked for permission to walk or bike to and from school. Overall, a larger percentage of students have not asked to walk or bike to school (about 22.4%) for those living more than 2 miles from the school.

Parents were also asked at which age they would allow their child to walk or bike without an adult. The response obtained illustrates that the majority of parents would not allow their child to walk or bike to school at any grade and identified distance as the principal barrier. The majority of parents who would allow their child to walk or bike identified that they would do so only for children in 3<sup>rd</sup> grade while some indicated that Kindergarten would be acceptable. Parents also stated what they perceived to be barriers for their children to walk or bike to school. The most common barriers identified were; distance, weather, traffic along the route, safety at intersections and crossings, lack of sidewalks and pathways, and traffic volumes along the school route. Some of the less common barriers that were identified are; lack of crossing guards, violence and crime, time, and convenience of driving.

**Student Locations:**

Student household locations were geocoded to the nearest intersection for both schools. There was a match of about 50%. For North Fayette Middle School 48 of the 102 households were matched and for West Union Elementary School 48 of the 100 student households were matched. Map 1 shows that out of those locations successfully geocoded, almost 50% of the students lived within the 2 mile radius and were eligible for walking and biking (47 out of 96 student households).



Map 1: Student Location

### Infrastructure Audits

The second important piece of data that was collected in West Union was an infrastructure audit. Like the behavioral audits about students and parents attitudes and behaviors, the infrastructure audits provide valuable information about the current sidewalk conditions in West Union. There are two aspects to this infrastructure audit. First, public concerns and input about the conditions of the



infrastructure was gathered; and, secondly the current state of the infrastructure was inventoried by our group using Geographic Information Systems (GIS). Below are the results of the infrastructure audits.

### Public Concerns/ Input

The school officials were concerned with Highway 150 that acts as a barrier to those children walking from the west side of the town. Another dangerous intersection mentioned was between Highway 18 (Bradford Street) and Pine Street. Even though there were traffic signals the speed of traffic on Highway 18 is a concern. School buses pick up and drop off students at about 5 locations within town. This policy discourages children from walking to school. However, school officials also mentioned that weather was not a barrier preventing children from walking or biking. During the infrastructure audit, a group of children walking to a church was observed (Figure 11). This showed that children can actually walk in the winter if



Figure 11: Group of children walking in West Union

sidewalks were cleared of snow.

School officials also stated that many of the sidewalks were in poor condition due to underground repair work. The Green Streets Project was already in the process to improve the streetscape and provide alternatives for pedestrians and bikers. This project was scheduled for completion in Fall 2008<sup>2</sup>. It however seems that the project has not been able to keep pace with the visionaries.

The following is a detailed report of the group's inventory of the existing infrastructure in West Union. The infrastructure audits included sidewalks, signs, speed limits and also a traffic safety analysis.

### Infrastructure Inventory

#### **Sidewalks:**

Less than 8% of the road segments have sidewalks. The southern part of the community has a relatively high number of sidewalks, but beyond the 1 mile radius, there are almost no sidewalks (See Map 3). The conditions of all



Figure 12: An example of a good sidewalk observed in West Union

<sup>2</sup> <http://www.cdfinc.com/images/download/cut%20sheet-owa%20Green%20Streets%20Vision.pdf>

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sidewalks and the presence or absence of ramps were not clearly visible due to the presence of snow. Out of the 105 visible sidewalks, almost 67% were in good condition (Figure 12). The percentage was calculated based on the total length of the roads and the total length of the sidewalks. The remainder of the sidewalks ranged from mediocre to poor condition. Figure 13 shows a poor sidewalk. These sidewalks require maintenance. Many sidewalks in the north end of the town did not have ramps. Bicycles were not allowed on sidewalks around the courthouse as well as outside the commercial areas (Figure 14).



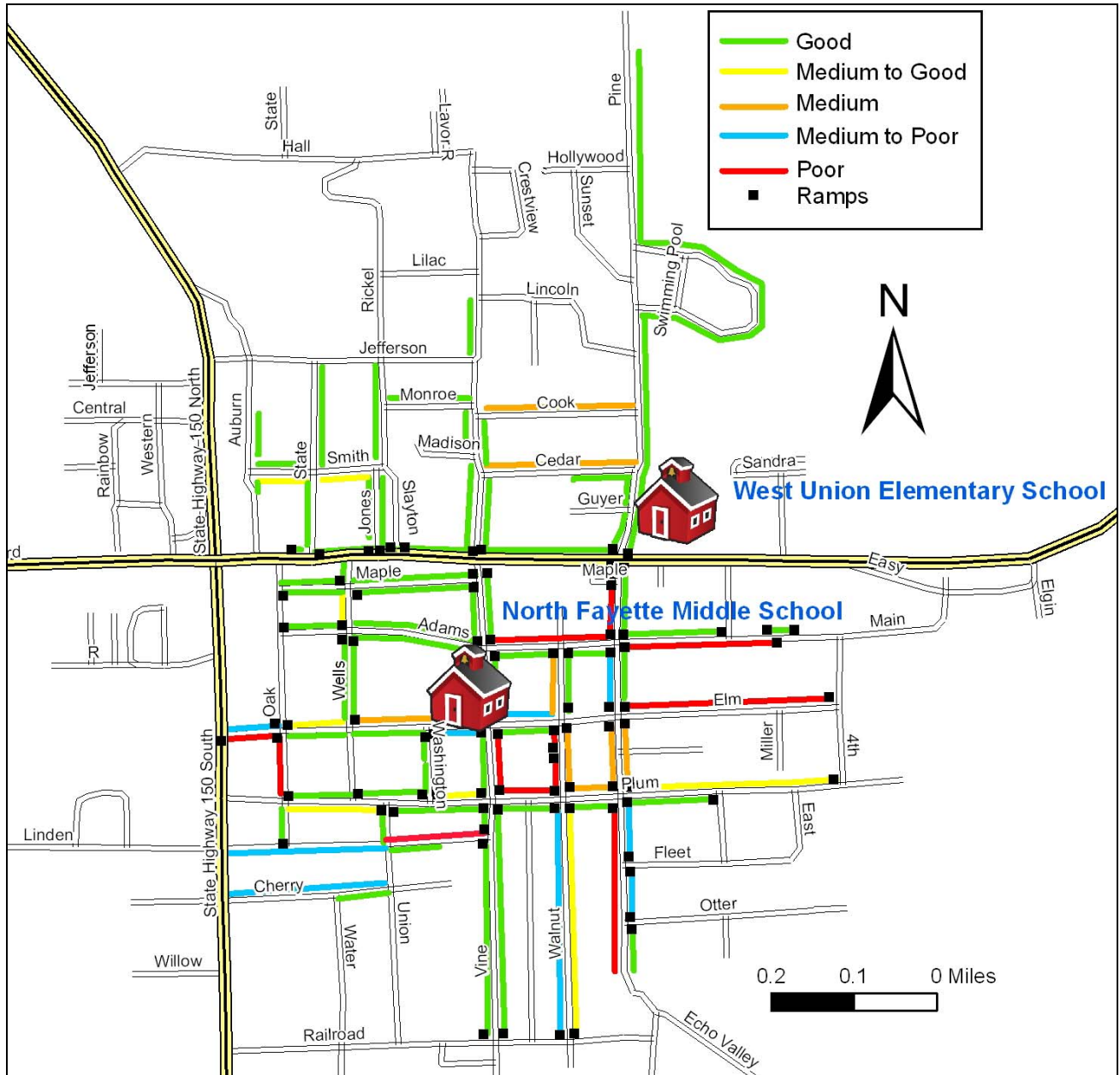
Figure 13: An example of a poor sidewalk observed in West Union



Figure 14: No bicycles allowed on sidewalks

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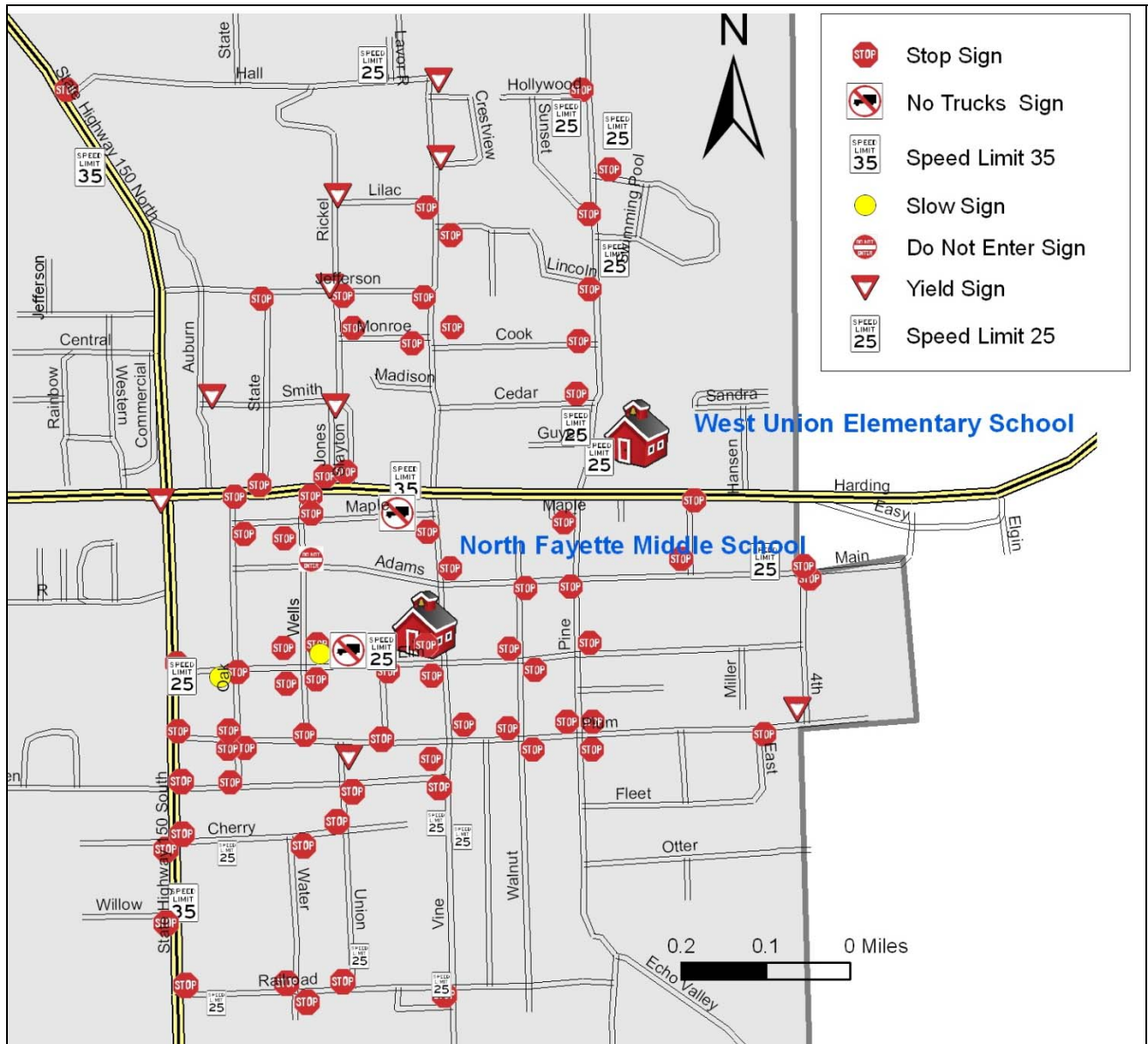
Map 3: Sidewalk Condition

# Safe Routes to School Plan

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### Speed Limit and Signs:

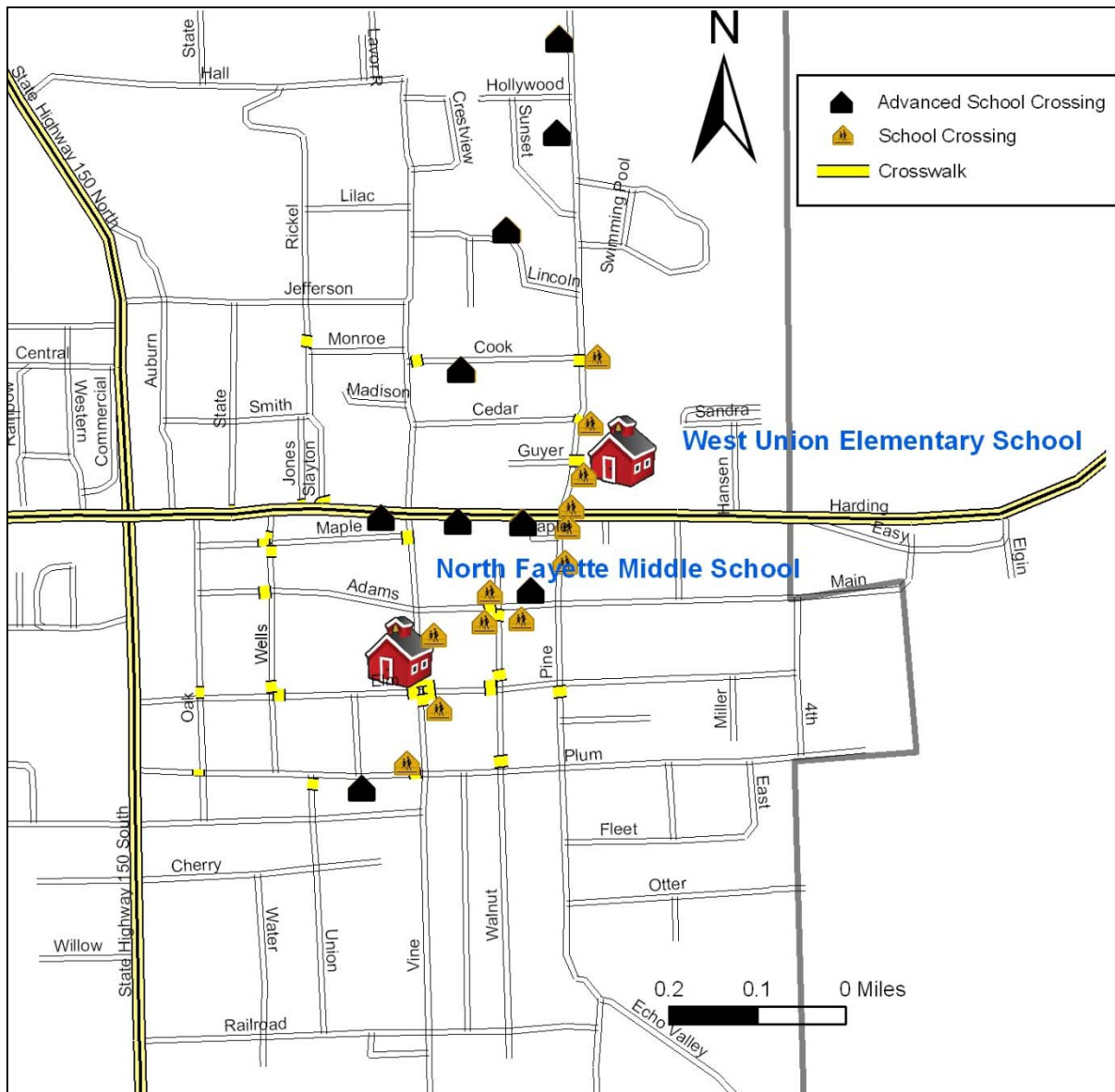
The speed limit is 25 mph on all residential streets within the community. The speed limit on Highway 150 varies from 35 mph to 25 mph while the speed limit on Highway 180 is 35 mph (Map 4). Stop signs and yield signs seem to be adequate in number. The group also observed some “Slow Down” signs, as well as “No Truck” signs within the community. An adequate number of “School Crossing” signs and “Advanced Warning” signs were observed. There were 28 crosswalks in the community that were highly visible with an adequate number in the vicinity of the schools (Map 5).



Map 4: Signs

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**Map 5: School Signs and Crosswalks**

### Traffic Safety Analysis

The following section identifies the high collision locations in West Union for the period of 2001-2008. The goal is to identify collision locations that will potentially raise safety concerns for students walking and biking to school. The evaluation procedure adopted as well as the crash data used in this report was developed by the Iowa Department of Transportation (Iowa DOT). The student location data was

generated from the Parent Surveys handed out by Northeast Iowa RC&D. The existing infrastructure data was prepared by our group.

**Evaluation Procedure**

The collision data was summarized by numbers of collisions for intersections in West Union. All 107 intersections in West Union were evaluated. Each location was ranked using the Iowa Department of Transportation Office of Traffic Safety weighted formula. The formula has three data inputs: number of collisions (25%), crash rate (25%), and severity (50%).

- a) Number of Collisions – the total number of collisions per location during 2001-2008. Based on the number of collisions each location was given a score
- b) Crash Rate – crash rates allow each intersection to be evaluated with a common denominator. Intersection crash rates are calculated using the number of collisions per million entering vehicles (MEV).

$$\text{Crash Rate} = \frac{(\# \text{ Collisions}) \times 1,000,000}{(\# \text{ Days}) \times (\text{Total Entering ADT})}$$

- c) Severity – Collisions were categorized by property damage only, minor and major personal injury, and fatality. These types of collisions were given a weight of 1, 3, 5 and 12 respectively and then totaled to give each location a severity rank.

Points were then assigned for each formula factor as shown in Table 1. Once points are assigned for the three categories, the points were entered into the Iowa DOT weighted ranking formula:

**Total Intersection Rank=**

$$25\% \times (\text{Collision Points}) + 25\% \times (\text{Crash Rate Points}) + 50\% \times (\text{Severity Points})$$

**Table 1 Intersection Evaluation Points**

Number of Collisions		Crash Rate		Collision Severity	
Collisions	Points	Rates	Points	Severity	Points
>29	15	>3.50	15	>56	15
27-28	14	3.26-3.50	14	53-56	14
25-26	13	3.01-3.25	13	49-52	13
23-24	12	2.76-3.00	12	45-48	12
21-22	11	2.51-2.75	11	41-44	11
19-20	10	2.26-2.50	10	37-40	10
17-18	9	2.01-2.25	9	33-36	9
15-16	8	1.76-2.00	8	29-32	8
13-14	7	1.51-1.75	7	25-28	7
11-12	6	1.26-1.50	6	21-24	6
9-10	5	1.01-1.25	5	17-20	5
7-8	4	0.76-1.00	4	13-16	4

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5-6	3	0.51-0.75	3	9-12	3
1-4	2	0.01-0.50	2	1-8	2
0	0	0	0	0	0

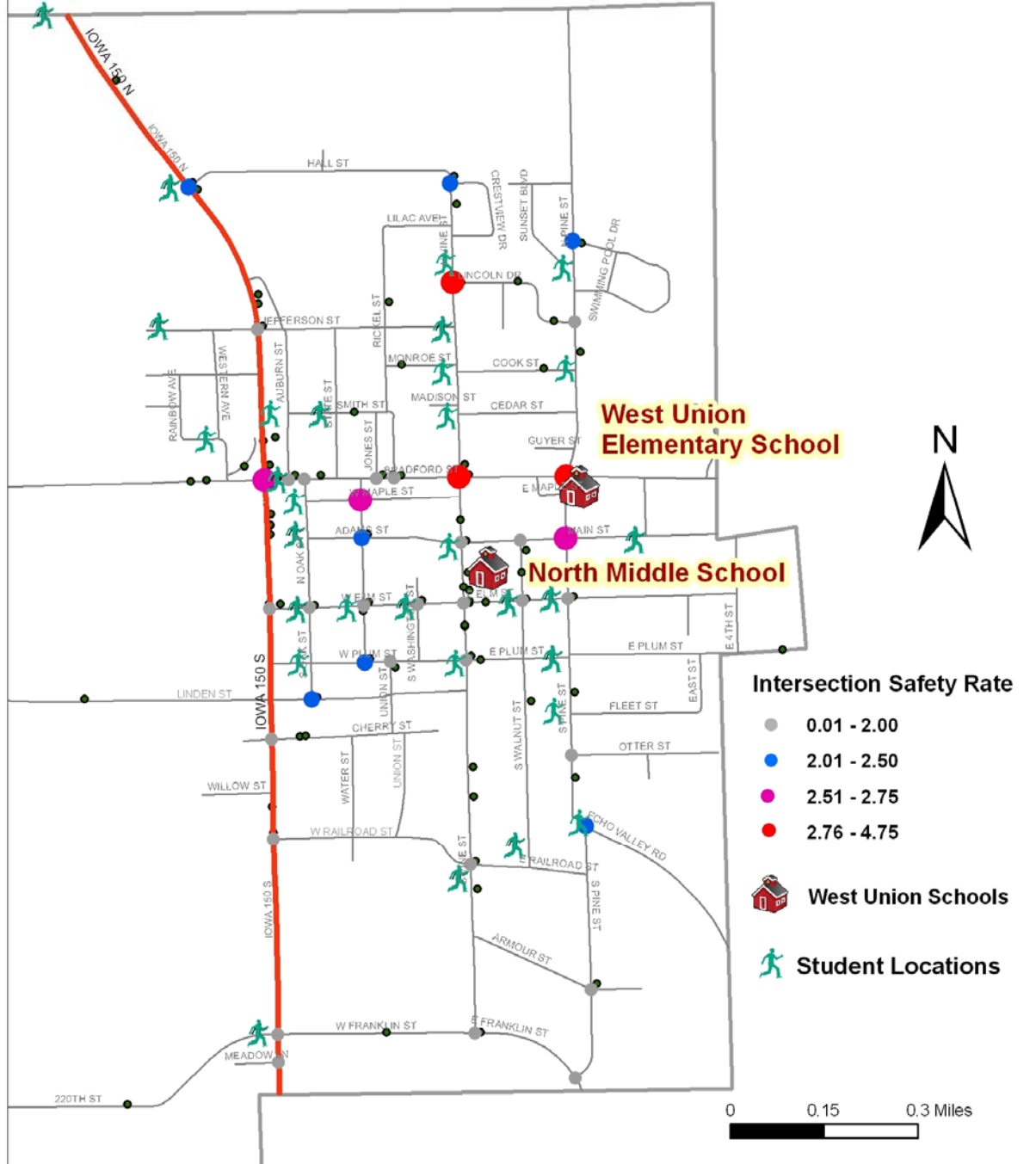
**Analysis Result in West Union**

From the year 2001 to 2008, there were 127 traffic accidents in West Union. Map 6 below shows the intersection evaluation for all 107 intersections in West Union. The higher the score, the more dangerous the intersection is. The average score in West Union is 0.83. Comparing to other more urbanized areas in Iowa, West Union is a relatively safe town in terms of traffic crashes.

However, the six intersections with higher risk identified in this analysis should not be ignored. These six intersections are shown as red dots and pink dots in the map below. From the map, it was found that four of these high-risk intersections fall within a quarter mile walking distance from both schools. Another highly dangerous intersection is at Highway 150 and Bradford Street. Based on traffic statistics published by Iowa DOT, the average daily traffic (ADT) on Highway 150 within West Union is 5065 vehicle per day (vpd), while the maximum flow may reach 5900 vpd on some of the segments. Bradford Street is another major road in West Union, the average daily traffic (ADT) on Bradford Street is 4270 vpd. The last high-risk intersection is at Vine Street and Lincoln Drive, in the northern part of the town.

Next, to focus the analysis more on the most concerning intersections, student location data were brought into the map. From Map 6, it is easy to see that most students who live within two-miles of school are clustered around the center of the town. Therefore, if the students follow the existing sidewalks to school, most will need to cross one of these intersections. If more students are encouraged to walk and bike to school along expanding sidewalk systems in the town, issues need to be addressed by the City of West Union regarding these dangerous intersections.

# Intersection Safety Evaluation West Union, 2001-2008



Map 6: Intersection Safety Evaluation, West Union, 2001-2008



## RECOMMENDATIONS

Any analysis is not complete without recommendations for needed improvements. These recommendations are based upon the behavioral audits, infrastructure audits, meetings with local officials, and a community Safe Routes to School workshop. The following recommendations follow the five E strategies used by the National Center for Safe Routes to School and previously described in the Introduction to this plan.

### Education

Education and Encouragement strategies are closely intertwined. Audiences for Safe Routes to School education include children, parents, drivers, and neighbors. The main purpose of the education strategy is to teach pedestrian and bicycle safety skills and to create awareness of the benefits and walking and biking to school. Safety Education is an essential element of any Safe Routes to School program.



Bicycle and pedestrian safety, as well as personal safety involves children, as well as their parents, the drivers near the schools and the rest of the community. In the schools of West Union bicycle and pedestrian safety needs to be included in the school's curriculum.

Several different methods can be used to reach the students:

- ✓ School Assembly
- ✓ Integrated into class room subjects (math, science, reading ,language art, geography, health) or stand alone lessons

For the parents (in this category we can include the drivers and teachers)

- ✓ PTA meetings where for example a walkability and bikability checklist can be filled also discussion about the benefits of walking and biking.
- ✓ Information sent home(educational flyers)

### Encouragement

Encouragement is one of the important strategies used in Safe Route to School program to encourage children to walk and bike to school safely. As stated on the National Center for Safe Routes to School website, "Encouragement strategies are about having fun. They generate excitement



and interest in walking and bicycling." Successful events include: Walk to School Day events; Mileage Club; Walking School Buses and Bicycle Trains; and so on.

The Parent Survey included a question asking whether the school encourages walking and biking in West Union. The response from parents at both schools was "Neutral". To overcome that perception as stated in the National Safe Route to School guidelines one of the best encouragement strategies is to make walking and biking fun which will trigger the interest of the children. Emphasizing events and competition such as:

✓ Walk to school day event(s) :

A day such as International Walk to School Day celebrated on October. This year it will be held in the US on October 8<sup>th</sup>, 2009.



This is an event where the schools of West Union can focus attention on the benefits of walking and biking. Students, teachers, the school mascot, and the West Union community as a whole including city officials and law enforcement could all celebrate this event like a fair. In fact according to the Parent Surveys more students live ½ mile or less from the school and therefore have the potential to walk and bike to school. In addition because so many students live within such a close range this event could reach the majority of students and their families and encourage them to walk and bike to school.

Different methods of outreach need to be used to involve the whole community such as:

- Informative Flyers/banners;
- Press release to reach the community in general;
- Newsletters (to promote an event or educate parents)

✓ Ongoing activities:

More than one Encouragement strategies can be used to reach the level of physical activity needed in addition to the PE classes on a weekly basis.

- Walking School Bus

Having a group of children walking to school with one or more adults following a structured route to school with meeting points along the way constitutes a Walking School Bus.



The first step to creating a Walking School Bus is to identify the adults that would volunteer to participate, then select the route such as the one proposed below, where it is easy to walk. This will encourage those living ¼ mile and even ½ mile from school to walk frequently.

- Bicycle Train  
Similar to a Walking School Bus except that the students and the adults are on bicycles.
- Competition between classes  
On a weekly basis the school can acknowledge the class with the greatest number of students who have walked or biked during this period and give them a trophy. This is one of several ways to emphasize the fun aspects of walking and biking to school. The PE teacher, for example, could lead this activity by recording the number of times a student walks or bikes to school.
- Park and walk  
Parents can park at a designated off-campus point and walk with their child to school. This has the advantage of reducing traffic congestion around the school as well as giving both the child and parent regular morning and afternoon physical activity.
- Remote Pick-Up/Drop-Off  
Having a pick-up/drop-off location no more than one mile from school would give the students about a 20-25 minute walk each way and would complement recess and Physical Education classes to reach the minimum of 60 minutes per day of physical activity recommended by the CDC.

Before implementing or exploring any of the recommendations, the schools and the community of West Union have to reach out to community members such as teachers and other trustworthy adults to volunteer to walk or bike with children, especially when they are in group crossing the highway. More Crossing guards will also be needed before and after school for both schools.

### **Enforcement**

Local law enforcement involvement is critical to a Safe Routes to School program. The police department understands local travel patterns as well as having access to crash data, which can be helpful in planning walking routes for students. (Included in this report in the Engineering section is a detailed analysis of the crash history in West Union.) Enforcement however, does not stop with the local police department. Quality community design can also support a pedestrian and bicycle friendly environment.

School transportation policies and procedures that pertain to walking, biking, busing, parking and pick-up / drop-off procedures need to be supportive of Safe Routes to School efforts. School officials need to

## Safe Routes to School Plan

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### West Union, Iowa

review the policies and procedures to determine whether they support or prevent the implementation of a safe routes to school plan. If it is determined that the policies and procedures hinder the implementation of a program then they should be revised.

This policy enables students to effectively walk and bike to school. However, as will be shown in the Engineering section of this plan, many street segments do not have sidewalks. During visits to West Union it was noticed that there was a strong police presence during the morning and afternoon school commutes. The following recommendations concerning Enforcement activities have been identified as positive contributors to a Safe Routes to School program and are applicable to West Union. These recommendations will contribute to the programs and policies that are already in place to provide a more inviting environment in West Union for walking and biking.

#### School Safety Zone

The creation of a School Safety Zone involves creating a safer environment in and around the school loading and unloading zones. School safety zones should cover the entire school campus and the surrounding blocks that have school generated traffic. Safety is increased dramatically when the hazards are identified and ultimately eliminated in school safety zones. School administrators should work with city officials to make sure that school safety zones are properly marked and rules of travel around these areas are clearly identified. Parents should be given frequent verbal and written communication on where student pick-up/drop-off is permitted.

#### Pedestrian Sting Operations

Pedestrian sting operations are a valuable tool to help drivers respect pedestrians. Pedestrian decoys are used at selected intersections and when vehicles fail to yield to pedestrians hidden police officers stop the vehicle and give the driver educational material. These operations can be used simply as warnings at first to educate drivers on the importance of yielding to pedestrians and can also garner media attention that will signify the cities dedication to protecting its pedestrians. If further enforcement is needed then citations can be issued.

#### Safety Patrols

Older students can be a valuable tool to enhance enforcement in drop-off and pick-up areas at the schools. Students can be chosen to be safety patrol officers by school administrators and be trained by an adult coordinator who oversees the program at the school. Many communities in Iowa have student safety patrol officers to help enforce drop-off and pick-up procedures.

#### Speed Trailers

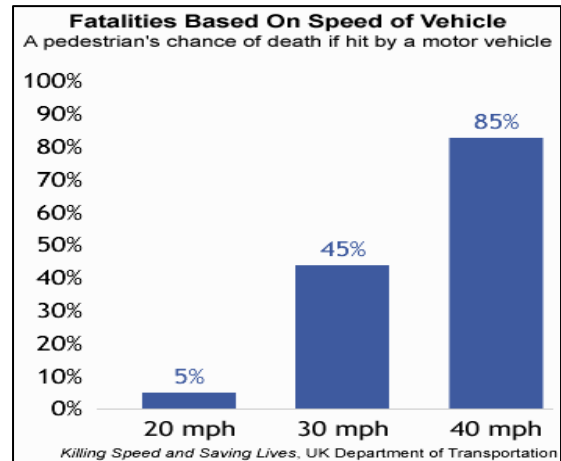
Speed trailers are a valuable device to alert drivers of their speed. These portable electronic signs can be placed near schools to encourage drivers to follow the posted speed limit. The graphic below illustrates the importance of reduced speed around schools which will provide a safer environment for walking and biking. The graphic can easily be incorporated into school newsletters and media campaigns.

## Safe Routes to School Plan

West Union, Iowa

### Neighborhood Watch and Escort Programs

In Neighborhood Watch programs residents volunteer to use their homes as “safe houses” where children can go if they feel threatened or endangered. Neighborhood Watch programs can be established with the local police department. Escort programs involve adult volunteers who accompany students on their way to and from school. Crossing guards, walking school buses, and “Corner Captains” are excellent examples of escort programs. “Corner Captains” is a program where adult volunteers station themselves at corners along a walking route. Their presence increases safety and security of students walking to and from school.



A continued police presence around the schools as well as along walking and biking routes will continue to be essential in creating a safe environment for children. The West Union police currently patrol around the schools during the morning and afternoon. Their continued presence during these times is essential in maintaining any programs that are put in place to create safe routes to school.

### **Engineering**

With the data from infrastructure audit and the initial meetings with the school officials, Engineering recommendations have been developed for the community. These recommendations have been classified on the basis of costs. The low cost solutions can be implemented immediately. Other solutions would probably take some time depending upon the funds available and the eagerness of the entire community to participate in the program:

#### Low-cost Solutions:

- As shown in Map 7, some children within 2 miles of school ride in the family vehicle or take the bus to school. Since sidewalks are in place in the south side of the community all of these children should walk to school.
- Bussing policy should be modified; one option would be to not bus children where adequate sidewalks exist within the 2 miles.
- For the north side of the community, parents can drop children at locations where sidewalks exist instead of dropping them at the schools and they can walk to school from those locations. One such example would be Vine Street and Cook Street.
- Crossing Guards should be employed along intersections such as on Vine Street and Highway 18 or on Highway 18 and Pine Street during the school hours. Children should not be allowed to cross the highway at other intersections without the crossing guards.
- The police should be vigilant in controlling the motorists speeding on the highways.
- Bikers should be allowed in sidewalks until a separate path is created for them.

## Safe Routes to School Plan

### West Union, Iowa

- Schools should have bike racks.
- Crosswalks should be painted if they are not visible. Minimum cost is \$100 per crosswalk.



**Map 7: Student Mode of Transportation within 2 miles**

#### Future Solutions:

- The existing sidewalks that are in mediocre to poor conditions should be improved so that there are no cracked, uneven or structurally damaged sidewalks (Refer to Map 3, page 18).

- Sidewalk systems should be completed within the 2 mile radius of the school. Curb ramps should be installed at all mid blocks and intersections, where pedestrian crossings are present. The 1973 Rehabilitation Act and American with Disabilities Act of 1990 mandated that the slope of a curb ramp should not exceed 8.33% and that curb ramps should be provided with textured panels for visually impaired pedestrians. The estimated cost is \$800 to \$1,500 per curb ramp.
- Along Highway 18 and 150, additional infrastructure maybe required such as pedestrian signals, a speed reduction zone and so on. Pedestrian signals may be activated only during the morning and evening hours when the school children may be crossing the highway. These options need to be discussed with the Iowa DOT, county engineer and city officials.

## **Evaluation**

Evaluation is the most important of the 5E's in the Safe Routes to School program. Evaluation is an ongoing process used to determine if the strategies identified for the community are working and also to ensure that resources are being directed towards strategies that are working. Evaluation over time is essential to the success of any Safe Routes to School Program. Below are some recommendations and action steps for the continued success and evaluation of a West Union Safe Routes to School Program.

### Safe Routes to School Committee

The first task for any community is to create a Safe Routes to School Committee. This committee is essential in implementing and evaluating a Safe Routes to School Program in West Union. A Safe Routes to School Committee should consist of neighbors, city and school staff members, and elected officials. The committee should review and evaluate this planning document and seek implementation of policies and procedures in the school and community. This committee can follow the guidelines below for program monitoring provided by the National Center for Safe Routes to School Program.<sup>13</sup>

### Program Monitoring

#### **Before the Program Begins**

This step of the program monitoring has mostly been completed by the development of this Safe Routes to School Plan for West Union. However, the Committee should help inform the community about the program as well as the findings of this report. The intention is that those who can get the program started are encouraged to do so.

#### **During the Program**

A continuous evaluation of the program should identify what is or is not working while the program is being implemented. Continual surveys should be conducted and committee meetings held to determine the progress of the program. These results should be shared with those who can make changes to the program to improve it if needed.

#### **After the Program**

The committee should meet to highlight the changes that have been made since the inception of the program. What worked in the initial period of the program implementation should be discussed as well as other programs and policies that might further the Safe Routes to School program. Behavioral and Infrastructure audits should be conducted again. These results need to be shared with those who make the decisions about whether to expand or change the program. Additional funding sources should also be pursued.



## FUNDING SOURCES

There are many possible funding sources that could aid in the development of a Safe Routes to School Program. Below is a list of possible local, state, federal, and private sources of funding.

The following is a list of potential private funding sources taken from the Safe Routes to School Toolkit, published by National Highway Traffic Safety Administration.<sup>14</sup>

### **Local**

#### Corporations and businesses:

Local Corporations and businesses can provide support for programs by donating cash, prizes, and printing services. Many businesses have “community giving programs” that can be a valuable asset to any safe routes to school program.

#### Foundations:

Many non-profit organizations throughout the country provide grants for walking and biking programs. The Foundation Center is one excellent potential funding source. Grants are available in a number of categories from transportation, health, environment, and community building. See the website [www.foundationcenter.org](http://www.foundationcenter.org) for more information.

#### Individuals:

Individuals are a valuable source for funding. Statistically individuals give more money to community programs than corporations and businesses. Local funding drives are an excellent source of funding for walking and biking activities.

#### Events:

Another great potential for funding is to hold special events. These events should use the Safe Routes to School theme by holding a marathon, a 5k run/walk, or a bicycle event. However, traditional events such as bake sales, concerts, talent shows, etc. can also attract funding.

### **Local Government**

#### Capital Improvement Projects:

Capital Improvement Projects (CIPs) are new infrastructure projects implemented using public funds and are tied to the local budget. Local government leaders identify and prioritize projects such as new roads, sidewalks, etc. CIPs may take several years to complete and may also have multi-year budgets. Local city and county planners and engineers could assist in Safe Routes to School project development and inclusion in the CIP planning process.

#### Operating Budgets:

Local operating budgets are a valuable revenue source for non-infrastructure programs and infrastructure maintenance and repair. Transportation, Police or public safety, public school, and recreation budget can provide funding for many Safe Routes to School programs such as traffic control, infrastructure investment, crossing guards, and trails. Most local operating budgets include funding for general maintenance and repair of infrastructure.

### **State and Federal Government**

#### Transportation Enhancements:

Transportation Enhancement projects are federally funded projects that expand transportation choices and enhance transportation experience through projects related to surface transportation. Pedestrian and bicycle facilities, and safety and education activities are eligible for funding through this program. A 20 percent match in funding is required by local agencies. For more information see the following website. [www.enhancements.org](http://www.enhancements.org)

#### Highway Safety Improvement Program:

The Highway Safety Improvement Program is a federally funding program that provides funding to States for projects that correct or improve a hazardous road location to address a highway safety problem. Funding may include improvements for pedestrian and bicycle safety, and installation and maintenance of signs at pedestrian and bicycle crossings and school zones. For more information, contact your local government or Council of Government.

#### Recreational Trails Program:

The Recreational Trails Program (RTP) is an assistance program of the Federal Highway Administration (FHWA). States develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses. See the follow website for more information <http://www.fhwa.dot.gov/environment/rectrails/index.htm>.

#### The Centers for Disease Control and Prevention:

The Centers for Disease Control and Prevention's (CDC) Nutrition and Physical Activity Program provides funding and assistance to schools to increase opportunities for physical activity and encouragement to walk to and from school in groups, while simultaneously advocating the creation of supportive pedestrian and bicycle environments. For more information visit [www.cdc.gov](http://www.cdc.gov)

#### The Environmental Protection Agency:

The Environmental Protection Agency (EPA) provides grants from the office of Children's Health and Protection and Environmental Education. For more information visit [www.epa.gov/ogd](http://www.epa.gov/ogd)

## MORE RESOURCES

The following is a list of resources used in the creation of this plan. These resources can be used to find out more information about state and federal programs that promote the Safe Routes to School Program.

Iowa Safe Routes to School; [www.iowadot.gov/saferoutes](http://www.iowadot.gov/saferoutes)

National Center for Safe Routes to School; [www.saferoutesinfo.org](http://www.saferoutesinfo.org)

Iowa Department of Transportation – Bicycle and Pedestrian Program; [www.iowabikes.com](http://www.iowabikes.com)

The Active Living Resource Center; [www.activelivingresources.org](http://www.activelivingresources.org)

Pedestrian and Bicycle Information Center; [www.walkinginfo.org](http://www.walkinginfo.org)

The Iowa Bicycle Coalition; [www.iowabicyclecoalition.org](http://www.iowabicyclecoalition.org)

Walk and Bike to School Day/Week; [www.walktoschool-usa.org](http://www.walktoschool-usa.org)

Centers for disease Control and Prevention (CDC); [www.cdc.gov/nccdphp/dnpa/kidswalk](http://www.cdc.gov/nccdphp/dnpa/kidswalk)

Federal Highway Administration – Safe Routes to School; [safety.fhwa.dot.gov/saferoutes](http://safety.fhwa.dot.gov/saferoutes)

Institute of Transportation Engineers (ITE) – Traffic Calming; [www.ite.org/traffic/](http://www.ite.org/traffic/)

Bikes Belong Coalition; [www.bikesbelong.org](http://www.bikesbelong.org)

Safe Kids Walk This Way; [www.usa.safekids.org/tier2\\_rl.cfm?folder\\_id=3124](http://www.usa.safekids.org/tier2_rl.cfm?folder_id=3124)

League of American Bicyclists; [www.bikeleague.org/programs/saferoutes](http://www.bikeleague.org/programs/saferoutes)

Safe Routes to School National Partnership; [www.saferoutespartnership.org](http://www.saferoutespartnership.org)

International Walk to School website; [www.iwalktoschool.org](http://www.iwalktoschool.org)

APPENDIX A

**Complete Student Survey Results**

North Fayette Middle School

**Student Travel Summary**

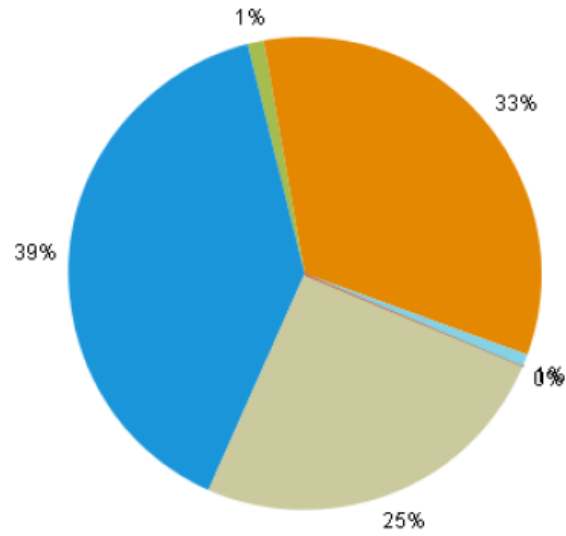
<b>Program Name:</b>	Northeast Iowa RC&D	<b>Season Collected:</b>	Winter2009
<b>School Name:</b>	North Fayette Middle School	<b>Data Type (Pre/Mid/Post):</b>	pre
		<b>Reported School Enrollment:</b>	181
		<b>Number Classrooms:</b>	9
		<b>Number of Tallies Reported:</b>	9

Safe Routes to School Plan

West Union, Iowa

Students Traveling by Each Mode (across all reported days)

■ Walk    
 ■ Bike    
 ■ School Bus    
 ■ Family Vehicle    
 ■ Carpool    
 ■ Transit    
 ■ Other



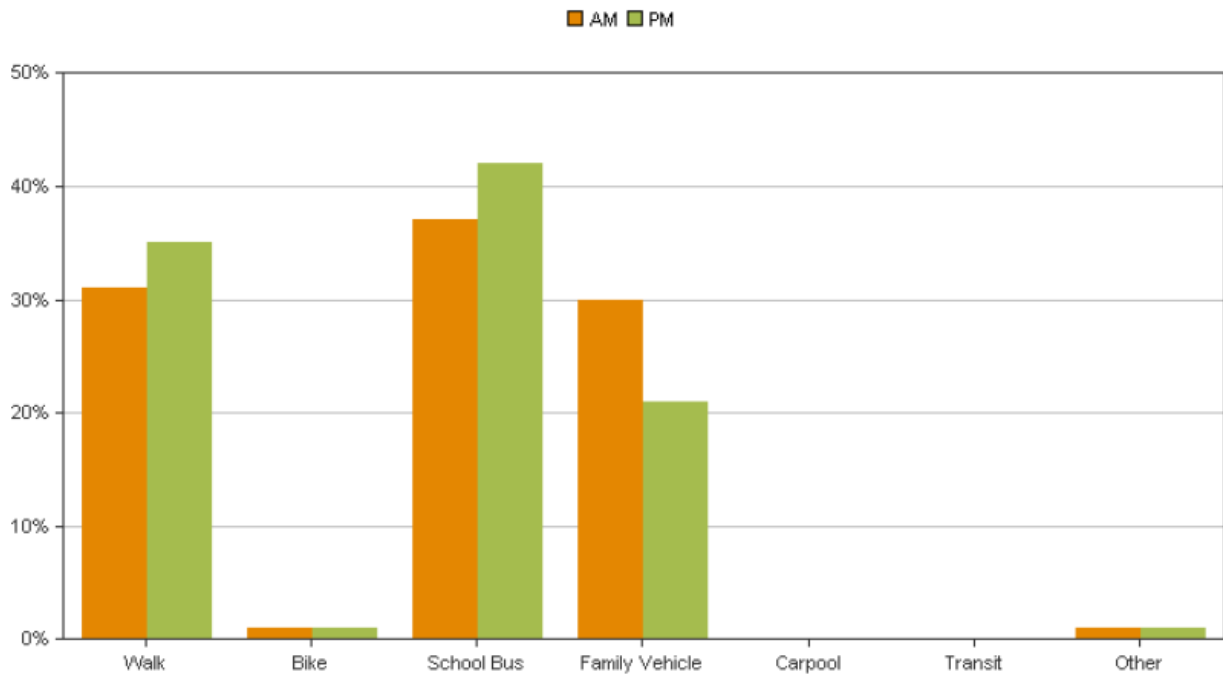
	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
<b>Average Number of Student Trips for Morning and Afternoon</b>	45.3	1.7	54.0	34.7	0.3	0.0	1.3
<b>Percent</b>	33.0%	1.2%	39.3%	25.2%	0.2%	0.0%	1.0%

Average number of students per day responding to in-class tally counts: **137.3**

Safe Routes to School Plan

West Union, Iowa

Morning to Afternoon Travel Mode Comparison



	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
<b>Morning</b>	30.8%	1.2%	36.9%	29.6%	0.5%	0.0%	1.0%
<b>Afternoon</b>	35.2%	1.2%	41.7%	20.9%	0.0%	0.0%	1.0%

Number of students by travel mode to and from school:

	Number of Students	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
<b>Tues AM</b>	147	54	2	53	35	1	0	2
<b>Tues PM</b>	148	62	2	57	25	0	0	2
<b>Wed AM</b>	137	26	1	56	54	0	0	0
<b>Wed PM</b>	139	38	1	68	32	0	0	0
<b>Thur AM</b>	128	47	2	43	33	1	0	2
<b>Thur PM</b>	125	45	2	47	29	0	0	2

Averages for classes submitting travel tallies:

	Number of Students	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
<b>Tues AM</b>	16.3	6.0	0.2	5.9	3.9	0.1	0.0	0.2
<b>Tues PM</b>	16.4	6.9	0.2	6.3	2.8	0.0	0.0	0.2

## Safe Routes to School Plan

### West Union, Iowa

<b>Wed AM</b>	15.2	2.9	0.1	6.2	6.0	0.0	0.0	0.0
<b>Wed PM</b>	15.4	4.2	0.1	7.6	3.6	0.0	0.0	0.0
<b>Thur AM</b>	14.2	5.2	0.2	4.8	3.7	0.1	0.0	0.2
<b>Thur PM</b>	13.9	5.0	0.2	5.2	3.2	0.0	0.0	0.2

### Percentages of students by travel mode to and from school:

	Number of Students	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
<b>Tues AM</b>	147	36.7%	1.4%	36.1%	23.8%	0.7%	0.0%	1.4%
<b>Tues PM</b>	148	41.9%	1.4%	38.5%	16.9%	0.0%	0.0%	1.4%
<b>Wed AM</b>	137	19.0%	0.7%	40.9%	39.4%	0.0%	0.0%	0.0%
<b>Wed PM</b>	139	27.3%	0.7%	48.9%	23.0%	0.0%	0.0%	0.0%
<b>Thur AM</b>	128	36.7%	1.6%	33.6%	25.8%	0.8%	0.0%	1.6%
<b>Thur PM</b>	125	36.0%	1.6%	37.6%	23.2%	0.0%	0.0%	1.6%

### West Union Elementary School

## Student Travel Summary

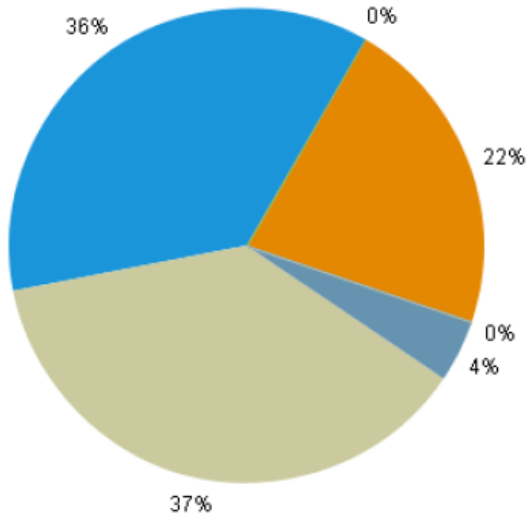
<b>Program Name:</b>	Northeast Iowa RC&D	<b>Season Collected:</b>	Winter2009
<b>School Name:</b>	West Union Elementary	<b>Data Type (Pre/Mid/Post):</b>	pre
		<b>Reported School Enrollment:</b>	172
		<b>Number Classrooms:</b>	10
		<b>Number of Tallies Reported:</b>	10

Safe Routes to School Plan

West Union, Iowa

Students Traveling by Each Mode (across all reported days)

■ Walk    
 ■ Bike    
 ■ School Bus    
 ■ Family Vehicle    
 ■ Carpool    
 ■ Transit    
 ■ Other



	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
<b>Average Number of Student Trips for Morning and Afternoon</b>	32.3	0.5	52.3	52.8	5.8	0.0	0.0
<b>Percent</b>	22.5%	0.3%	36.4%	36.7%	4.1%	0.0%	0.0%

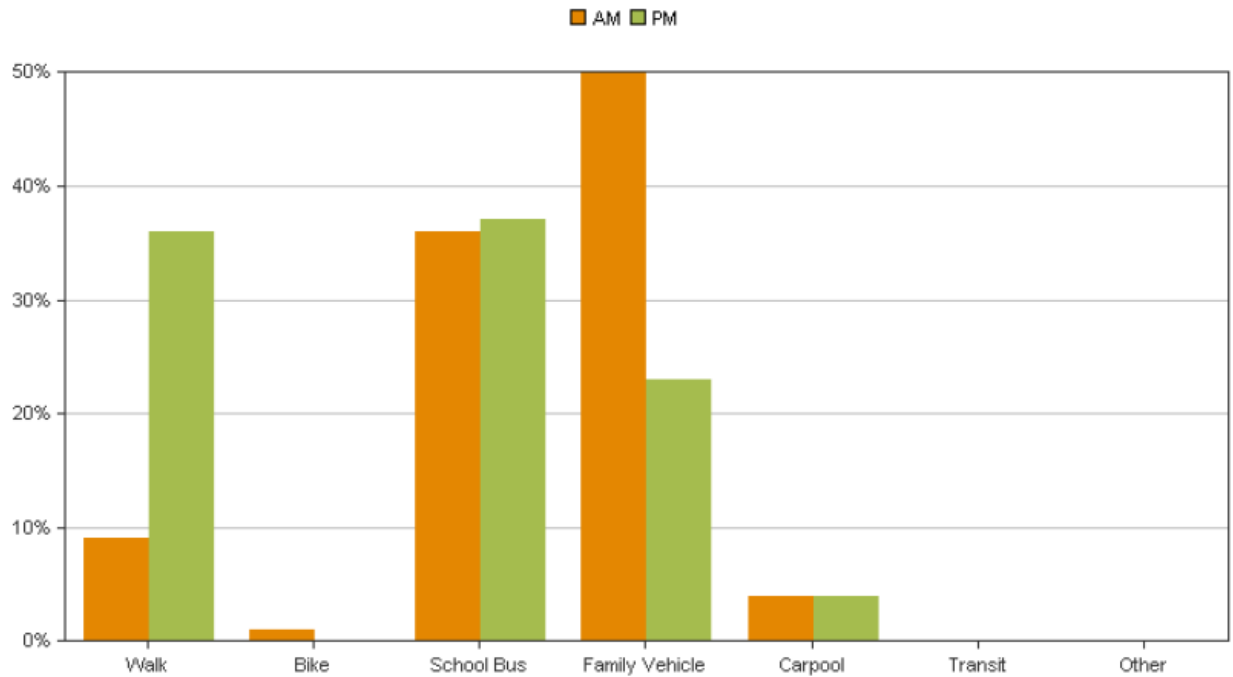
Average number of students per day responding to in-class tally counts: **143.8**



Safe Routes to School Plan

West Union, Iowa

Morning to Afternoon Travel Mode Comparison



	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
<b>Morning</b>	9.3%	0.7%	35.7%	50.1%	4.2%	0.0%	0.0%
<b>Afternoon</b>	35.6%	0.0%	37.0%	23.4%	3.9%	0.0%	0.0%

Number of students by travel mode to and from school:

	Number of Students	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
<b>Tues AM</b>	160	9	0	53	85	13	0	0
<b>Tues PM</b>	161	55	0	58	40	8	0	0
<b>Wed AM</b>	156	12	3	59	77	5	0	0
<b>Wed PM</b>	156	44	0	60	45	7	0	0
<b>Thur AM</b>	115	19	0	42	54	0	0	0
<b>Thur PM</b>	115	55	0	42	16	2	0	0

Averages for classes submitting travel tallies:

	Number of Students	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
<b>Tues AM</b>	16.0	0.9	0.0	5.3	8.5	1.3	0.0	0.0
<b>Tues PM</b>	16.1	5.5	0.0	5.8	4.0	0.8	0.0	0.0

Safe Routes to School Plan

West Union, Iowa

<b>Wed AM</b>	15.6	1.2	0.3	5.9	7.7	0.5	0.0	0.0
<b>Wed PM</b>	15.6	4.4	0.0	6.0	4.5	0.7	0.0	0.0
<b>Thur AM</b>	11.5	1.9	0.0	4.2	5.4	0.0	0.0	0.0
<b>Thur PM</b>	11.5	5.5	0.0	4.2	1.6	0.2	0.0	0.0

**Percentages of students by travel mode to and from school:**

	Number of Students	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
<b>Tues AM</b>	160	5.6%	0.0%	33.1%	53.1%	8.1%	0.0%	0.0%
<b>Tues PM</b>	161	34.2%	0.0%	36.0%	24.8%	5.0%	0.0%	0.0%
<b>Wed AM</b>	156	7.7%	1.9%	37.8%	49.4%	3.2%	0.0%	0.0%
<b>Wed PM</b>	156	28.2%	0.0%	38.5%	28.8%	4.5%	0.0%	0.0%
<b>Thur AM</b>	115	16.5%	0.0%	36.5%	47.0%	0.0%	0.0%	0.0%
<b>Thur PM</b>	115	47.8%	0.0%	36.5%	13.9%	1.7%	0.0%	0.0%

APPENDIX B:

Blank Copy of Parent Survey

**SURVEY ABOUT WALKING AND BIKING TO SCHOOL  
- FOR PARENTS -**

**Dear Parent or Caregiver,**  
 Your child's school wants to learn your thoughts about children walking and biking to school. This survey will take about 5 - 10 minutes to complete. We ask that each family complete only one survey per school your children attend. If more than one child from a school brings a survey home, please fill out the survey for the child with the next birthday from today's date.  
 After you have completed this survey, send it back to the school with your child or give it to the teacher. Your responses will be kept confidential and neither your name nor your child's name will be associated with any results. **Thank you for participating in this survey!**

School Name:

Completing this form: Please write with CAPITAL letters. Mark boxes with "X" instead of "✓".

1. What is the grade of the child who brought home this survey? (K - 8)  grade
2. Is the child who brought home this survey male or female?     MALE     FEMALE
3. How many children do you have in Kindergarten through 8<sup>th</sup> grade?  children
4. What is the street intersection nearest your home? (provide the names of two intersecting streets)

AND

5. How far does your child live from school? (choose one and mark box with X)
 

<input type="checkbox"/> a. less than 1/4 mile	<input type="checkbox"/> c. 1/2 mile up to 1 mile	<input type="checkbox"/> e. More than 2 miles
<input type="checkbox"/> b. 1/4 mile up to 1/2 mile	<input type="checkbox"/> d. 1 mile up to 2 miles	<input type="checkbox"/> f. Don't know

<p><b>6. On most days, how does your child arrive at school and leave for home after school?</b> (select one choice per column, mark box with X)</p>	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border-right: 1px solid black; padding: 5px;"> <p style="text-align: center;"><b>Arrive at school</b></p> <input type="checkbox"/> a. Walk  <input type="checkbox"/> b. Bike  <input type="checkbox"/> c. School Bus  <input type="checkbox"/> d. Family vehicle (only with children from your family)  <input type="checkbox"/> e. Carpool (riding with children from other families)  <input type="checkbox"/> f. Transit (city bus, subway, etc.)  <input type="checkbox"/> h. Other (skateboard, scooter, inline skates, etc.)                             </td> <td style="width: 50%; padding: 5px;"> <p style="text-align: center;"><b>Leave for home</b></p> <input type="checkbox"/> a. Walk  <input type="checkbox"/> b. Bike  <input type="checkbox"/> c. School Bus  <input type="checkbox"/> d. Family vehicle (only with children from your family)  <input type="checkbox"/> e. Carpool (riding with children from other families)  <input type="checkbox"/> f. Transit (city bus, subway, etc.)  <input type="checkbox"/> h. Other (skateboard, scooter, inline skates, etc.)                             </td> </tr> </table>	<p style="text-align: center;"><b>Arrive at school</b></p> <input type="checkbox"/> a. Walk <input type="checkbox"/> b. Bike <input type="checkbox"/> c. School Bus <input type="checkbox"/> d. Family vehicle (only with children from your family) <input type="checkbox"/> e. Carpool (riding with children from other families) <input type="checkbox"/> f. Transit (city bus, subway, etc.) <input type="checkbox"/> h. Other (skateboard, scooter, inline skates, etc.)	<p style="text-align: center;"><b>Leave for home</b></p> <input type="checkbox"/> a. Walk <input type="checkbox"/> b. Bike <input type="checkbox"/> c. School Bus <input type="checkbox"/> d. Family vehicle (only with children from your family) <input type="checkbox"/> e. Carpool (riding with children from other families) <input type="checkbox"/> f. Transit (city bus, subway, etc.) <input type="checkbox"/> h. Other (skateboard, scooter, inline skates, etc.)
<p style="text-align: center;"><b>Arrive at school</b></p> <input type="checkbox"/> a. Walk <input type="checkbox"/> b. Bike <input type="checkbox"/> c. School Bus <input type="checkbox"/> d. Family vehicle (only with children from your family) <input type="checkbox"/> e. Carpool (riding with children from other families) <input type="checkbox"/> f. Transit (city bus, subway, etc.) <input type="checkbox"/> h. Other (skateboard, scooter, inline skates, etc.)	<p style="text-align: center;"><b>Leave for home</b></p> <input type="checkbox"/> a. Walk <input type="checkbox"/> b. Bike <input type="checkbox"/> c. School Bus <input type="checkbox"/> d. Family vehicle (only with children from your family) <input type="checkbox"/> e. Carpool (riding with children from other families) <input type="checkbox"/> f. Transit (city bus, subway, etc.) <input type="checkbox"/> h. Other (skateboard, scooter, inline skates, etc.)		

<p><b>7. How long does it normally take your child to get to/from school?</b> (fill-in circle for one choice per column)</p>	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border-right: 1px solid black; padding: 5px;"> <p style="text-align: center;"><b>Travel time to school</b></p> <input type="checkbox"/> a. Less than 5 minutes  <input type="checkbox"/> b. 5 - 10 minutes  <input type="checkbox"/> c. 11 - 20 minutes  <input type="checkbox"/> d. More than 20 minutes  <input type="checkbox"/> e. Don't know / Not sure                             </td> <td style="width: 50%; padding: 5px;"> <p style="text-align: center;"><b>Travel time from school</b></p> <input type="checkbox"/> a. Less than 5 minutes  <input type="checkbox"/> b. 5 - 10 minutes  <input type="checkbox"/> c. 11 - 20 minutes  <input type="checkbox"/> d. More than 20 minutes  <input type="checkbox"/> e. Don't know / Not sure                             </td> </tr> </table>	<p style="text-align: center;"><b>Travel time to school</b></p> <input type="checkbox"/> a. Less than 5 minutes <input type="checkbox"/> b. 5 - 10 minutes <input type="checkbox"/> c. 11 - 20 minutes <input type="checkbox"/> d. More than 20 minutes <input type="checkbox"/> e. Don't know / Not sure	<p style="text-align: center;"><b>Travel time from school</b></p> <input type="checkbox"/> a. Less than 5 minutes <input type="checkbox"/> b. 5 - 10 minutes <input type="checkbox"/> c. 11 - 20 minutes <input type="checkbox"/> d. More than 20 minutes <input type="checkbox"/> e. Don't know / Not sure
<p style="text-align: center;"><b>Travel time to school</b></p> <input type="checkbox"/> a. Less than 5 minutes <input type="checkbox"/> b. 5 - 10 minutes <input type="checkbox"/> c. 11 - 20 minutes <input type="checkbox"/> d. More than 20 minutes <input type="checkbox"/> e. Don't know / Not sure	<p style="text-align: center;"><b>Travel time from school</b></p> <input type="checkbox"/> a. Less than 5 minutes <input type="checkbox"/> b. 5 - 10 minutes <input type="checkbox"/> c. 11 - 20 minutes <input type="checkbox"/> d. More than 20 minutes <input type="checkbox"/> e. Don't know / Not sure		

Safe Routes to School Plan

West Union, Iowa

8. Has your child asked you for permission to walk or bike to/from school in the last year? (select one)  YES  NO

9. At what grade would you allow your child to walk or bike without an adult to/from school? (select a grade between K – 8)  grade (or  I would not feel comfortable at any grade)

10. Which of the following issues affected your decision to allow, or not allow, your child to walk or bike to/from school? (select all that apply, mark with X in box)

- Distance
- Convenience of driving
- Time
- Child's before or after-school activities
- Speed of traffic along route
- Amount of traffic along route
- Adults to walk or bike with
- Sidewalks or pathways
- Safety of intersections and crossings
- Crossing guards
- Violence or crime
- Weather or climate

11. Would you probably let your child walk or bike to/from school if this problem were changed or improved? (select one choice per line)

My child already walks or bikes to/from school

- |                              |                             |                                   |
|------------------------------|-----------------------------|-----------------------------------|
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |
| <input type="checkbox"/> YES | <input type="checkbox"/> NO | <input type="checkbox"/> Not Sure |

12. In your opinion, how much does your child's school encourage or discourage walking and biking to/from school? (select one, mark with X in box)

Strongly Encourage  Encourage  Neither  Discourage  Strongly Discourage

13. How much FUN is walking or biking to/from school for your child? (select one)

Very Fun  Fun  Neutral  Boring  Very Boring

14. How HEALTHY is walking or biking to/from school for your child? (select one)

Very Healthy  Healthy  Neutral  Unhealthy  Very Unhealthy

15. What is the highest grade or year of school you completed? (select one, mark with X in box)

- |   |  |
|---|--|
| <input type="checkbox"/> Grades 1 through 8 (Elementary)        | <input type="checkbox"/> College 1 to 3 years (Some college or technical school) |
| <input type="checkbox"/> Grades 9 through 11 (Some high school) | <input type="checkbox"/> College 4 years or more (College graduate)              |
| <input type="checkbox"/> Grade 12 or GED (High school graduate) | <input type="checkbox"/> Prefer not to answer                                    |

16. Please provide any additional comments below:


Thank you for participating in this survey!

## Completed Parent Survey Results

### North Fayette Middle School

## Parent Survey Summary Report:

### Process Summary Information:

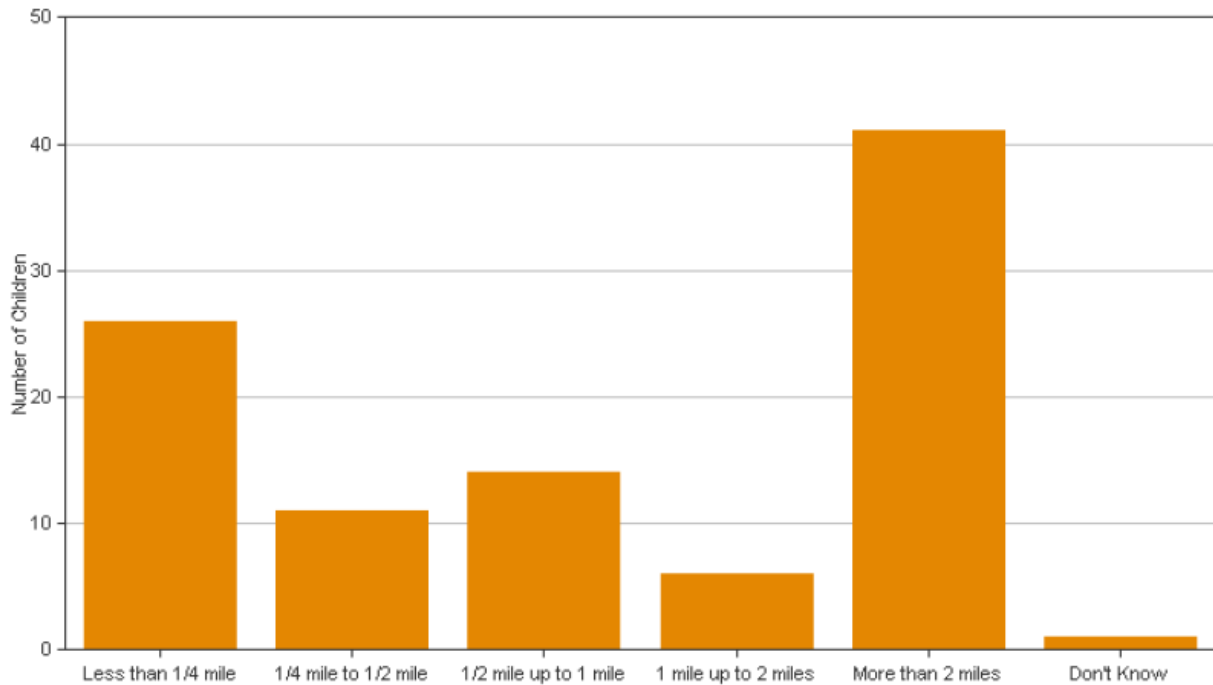
<b>Program Name:</b>	Northeast Iowa RC&D	<b>Survey Data Collected:</b>	Winter2009
<b>School Name:</b>	North Fayette Middle School	<b>Data Collection Phase:</b>	pre (pre = Before program began mid = During program; post = After program ended)
<b>Reported Enrollment:</b>	181	<b>Number of Surveys Distributed:</b>	175
<b>Date Report Generated:</b>	02/20/2009	<b>Number of Surveys in Report:</b>	102

This report provides information from parents about their perceptions and attitudes on their child walking and bicycling to school. The data used in this report were collected using the Survey about Walking and Biking to School for Parents form from the National Center for Safe Routes to School.

Safe Routes to School Plan

West Union, Iowa

Number of Children by Distance They Live From School:



Number of Children by Distance They Live From School:

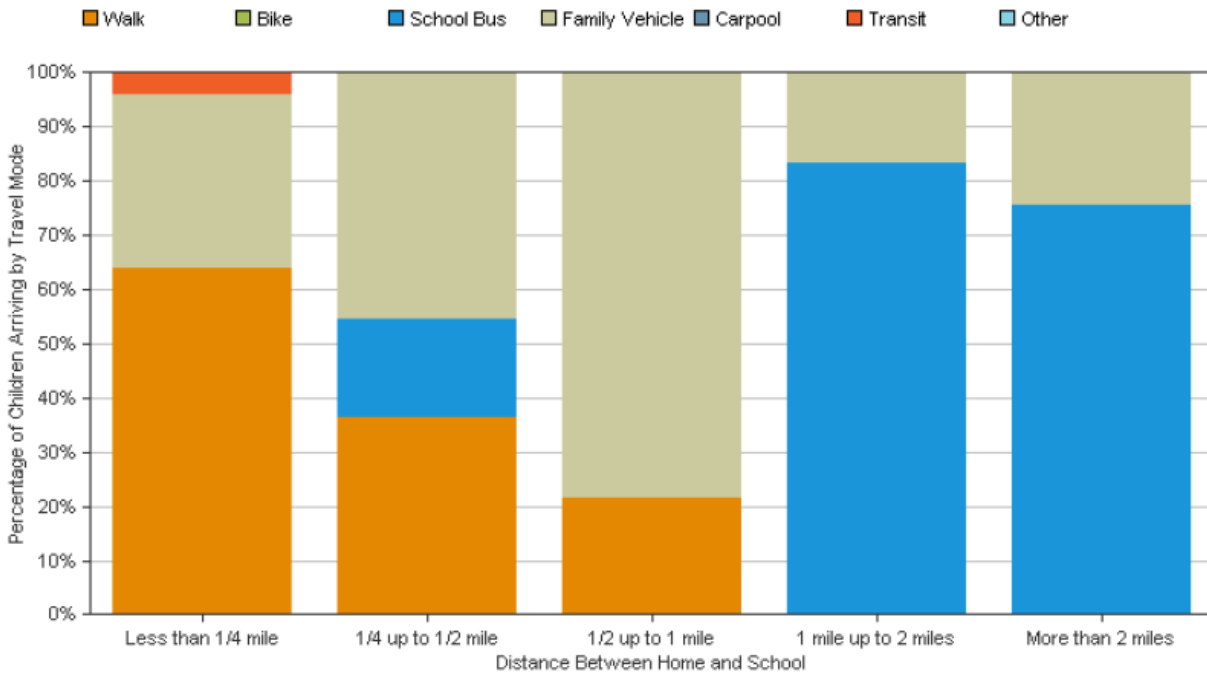
Distance from School	Number of Children
Less than 1/4 mile	26 (26.3%)
1/4 mile up to 1/2 mile	11 (11.1%)
1/2 mile up to 1 mile	14 (14.1%)
1 mile up to 2 miles	6 (6.1%)
More than 2 miles	41 (41.4%)
Don't know	1 (1.0%)
No response: 3	

(Percentages may not total 100% due to rounding.)

## Safe Routes to School Plan

West Union, Iowa

### Percentage of Children by Travel Mode to School and Distance Between Home and School:



### Number of Children by Travel Mode to School and Distance Between Home and School:

Mode	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles	Row Totals by Mode
Walk	16 (16.3%)	4 (4.1%)	3 (3.1%)	0 (0%)	0 (0%)	23 (23.5%)
Bike	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
School Bus	0 (0%)	2 (2.0%)	0 (0%)	5 (5.1%)	31 (31.6%)	39 (39.7%)
Family Vehicle	8 (8.2%)	5 (5.1%)	11 (11.2%)	1 (1.0%)	10 (10.2%)	35 (35.7%)
Carpool	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Transit	1 (1.0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (1%)
Other	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>Column Totals by Distance</b>	25 (25.5%)	11 (11.2%)	14 (14.3%)	6 (6.1%)	41 (41.8%)	

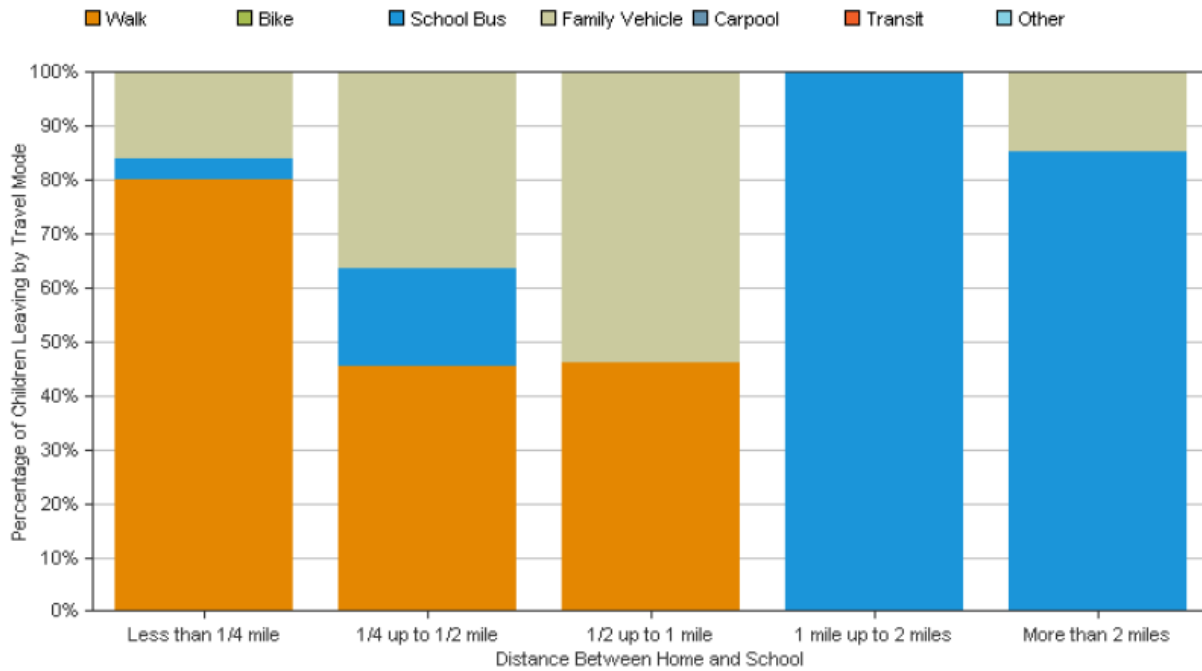
No Response: 4

(Percentages may not total 100% due to rounding.)

## Safe Routes to School Plan

West Union, Iowa

### Percentage of Children by Travel Mode from School and Distance Between Home and School:



### Number of Children by Travel Mode from School and Distance Between School and Home:

Mode	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles	Row Totals by Mode
Walk	20 (20.6%)	5 (5.2%)	6 (6.2%)	0 (0%)	0 (0%)	31 (32%)
Bike	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
School Bus	1 (1.0%)	2 (2.1%)	0 (0%)	6 (6.2%)	35 (36.1%)	45 (46.4%)
Family Vehicle	4 (4.1%)	4 (4.1%)	7 (7.2%)	0 (0%)	6 (6.2%)	21 (21.6%)
Carpool	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Transit	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Other	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>Column Totals by Distance</b>	25 (25.7%)	11 (11.4%)	13 (13.4%)	6 (6.2%)	41 (42.3%)	
<i>No Response: 5</i>						

(Percentages may not total 100% due to rounding.)



Safe Routes to School Plan

West Union, Iowa

**Number of Children by School Arrival Travel Mode and Travel Time to School:**

<b>Travel Mode</b>	<b>Less than 5 min</b>	<b>5 - 10 min</b>	<b>11 - 20 min</b>	<b>More than 20 min</b>	<b>Don't know</b>	<b>Row Totals by Mode</b>
Walk	8 (8.0%)	12 (12.0%)	3 (3.0%)	1 (1.0%)	0 (0%)	24 (24%)
Bike	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
School Bus	2 (2.0%)	6 (6.0%)	6 (6.0%)	25 (25.0%)	1 (1.0%)	40 (40%)
Family Vehicle	18 (18.0%)	9 (9.0%)	7 (7.0%)	1 (1.0%)	0 (0%)	35 (35%)
Carpool	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Transit	0 (0%)	0 (0%)	1 (1.0%)	0 (0%)	0 (0%)	1 (1%)
Other	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>Column Totals by Time</b>	28 (28%)	27 (27%)	17 (17%)	27 (27%)	1 (1%)	

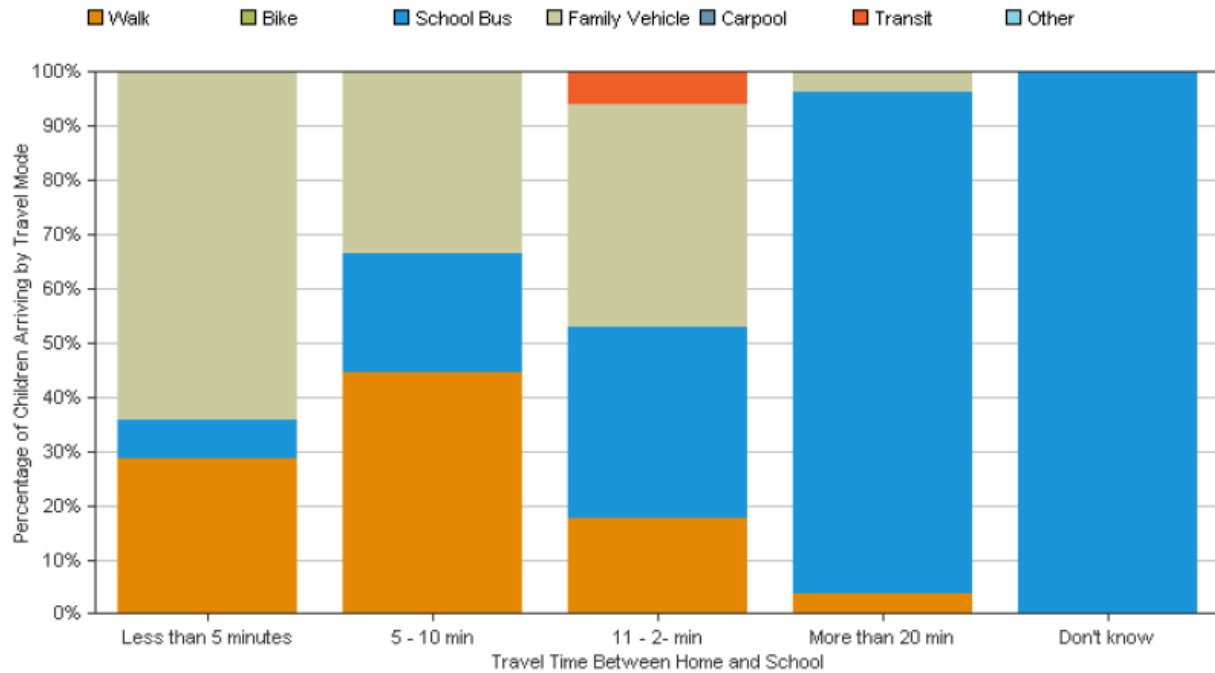
*No Response: 2*

(Percentages may not total 100% due to rounding.)

## Safe Routes to School Plan

West Union, Iowa

### Percentage of Children by Travel Time to School and School Arrival Travel Mode:



### Number of Children by School Departure Mode and Travel Time from School:

Travel Mode	Less than 5 min	5 - 10 min	11 - 20 min	More than 20 min	Don't know	Row Totals by Mode
Walk	9 (9.1%)	18 (18.2%)	5 (5.1%)	0 (0%)	0 (0%)	32 (32.4%)
Bike	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
School Bus	1 (1.0%)	1 (1.0%)	10 (10.1%)	33 (33.3%)	1 (1.0%)	46 (46.4%)
Family Vehicle	12 (12.1%)	4 (4.0%)	5 (5.1%)	0 (0%)	0 (0%)	21 (21.2%)
Carpool	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Transit	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Other	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>Column Totals by Time</b>	22 (22.2%)	23 (23.2%)	20 (20.3%)	33 (33.3%)	1 (1%)	

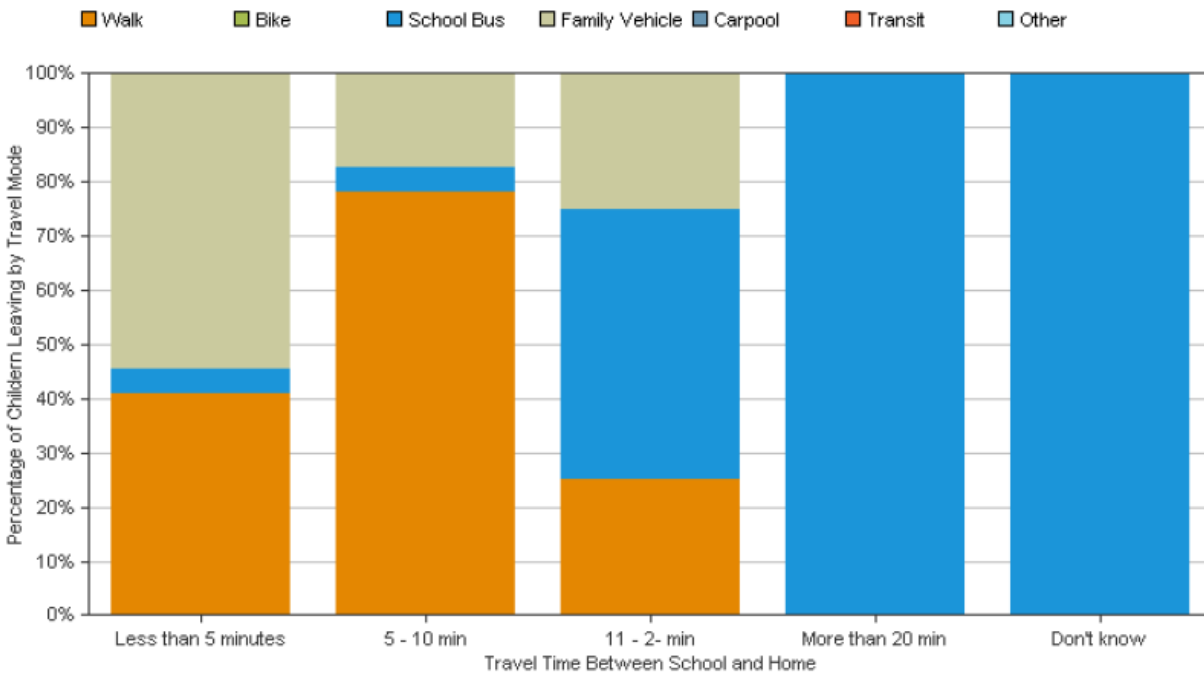
*No Response: 3*

(Percentages may not total 100% due to rounding.)

Safe Routes to School Plan

West Union, Iowa

Percentage of Children by Travel Time from School and School Departure Travel Mode:



Number of Children Who Have Asked Their Parent for Permission to Walk or Bike to/from School in the Last Year Separated by Distance They Live from School:

Distance from School	Have Asked	Have Not Asked
Less than 1/4 mile	18 (18.8%)	8 (8.3%)
1/4 mile up to 1/2 mile	6 (6.3%)	4 (4.2%)
1/2 mile up to 1 mile	11 (11.5%)	3 (3.1%)
1 mile up to 2 miles	1 (1.0%)	3 (3.1%)
More than 2 miles	2 (2.1%)	39 (40.6%)
<i>No Response: 6</i>		

(Percentages may not total 100% due to rounding.)

Safe Routes to School Plan

West Union, Iowa

**Grade When Parent Would Allow Child Walk or Bike to/from School without an Adult Separated by Distance They Live from School:**

Grade	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles
Kindergarten	0 (0%)	0 (0%)	1 (1.2%)	0 (0%)	0 (0%)
1st Grade	3 (3.7%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
2nd Grade	5 (6.2%)	1 (1.2%)	1 (1.2%)	0 (0%)	0 (0%)
3rd Grade	6 (7.4%)	2 (2.5%)	5 (6.2%)	1 (1.2%)	0 (0%)
4th Grade	5 (6.2%)	3 (3.7%)	2 (2.5%)	0 (0%)	2 (2.5%)
5th Grade	5 (6.2%)	1 (1.2%)	1 (1.2%)	0 (0%)	1 (1.2%)
6th Grade	1 (1.2%)	1 (1.2%)	2 (2.5%)	0 (0%)	2 (2.5%)
7th Grade	1 (1.2%)	0 (0%)	0 (0%)	0 (0%)	1 (1.2%)
8th Grade	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Not at any Grade	0 (0%)	1 (1.2%)	1 (1.2%)	2 (2.5%)	23 (28.4%)

*No Response: 21*

(Percentages may not total 100% due to rounding.)

**Issues which Affect Parent's Decision to Allow or Not Allow Their Child to Walk or Bike to/from School Separated by Children who Do and Do Not Already Walk or Bike To/From School:**

Issue	Child walks/bikes to school	Child does not walk/bike to school
Distance	19 (67.9%)	52 (70.3%)
Convenience of driving	2 (7.1%)	8 (10.8%)
Time	13 (46.4%)	15 (20.3%)
Before/after-school activities	11 (39.3%)	16 (21.6%)
Traffic speed along route to school	8 (28.6%)	17 (23.0%)
Traffic volume along route	8 (28.6%)	25 (33.8%)
Adults to walk/bike with	2 (7.1%)	4 (5.4%)
Sidewalks or pathways	8 (28.6%)	12 (16.2%)
Safety of intersections & crossings	12 (42.9%)	17 (23.0%)
Crossing guards	7 (25.0%)	6 (8.1%)
Violence or crime	13 (46.4%)	26 (35.1%)
Weather or climate	15 (53.6%)	27 (36.5%)
Number of Respondents Per Category	28	74

*No Response: 0*

(Percentages may not total 100% due to rounding.)

Safe Routes to School Plan

West Union, Iowa

**For Parents Whose Children Do Not Walk or Bike to/from School, Number of Parents Responding to question: Would You Probably let Your Child Walk or Bike to/from School Issues Were Changed or Improved?**

Issue	Number of parents reporting that:		
	Change Would affect decision	Change Would Not affect decision	Not Sure if change would affect decision
Distance	13 (17.6%)	31 (41.9%)	9 (12.2%)
Convenience of driving	7 (9.5%)	12 (16.2%)	5 (6.8%)
Time	9 (12.2%)	13 (17.6%)	5 (6.8%)
Before/after-school activities	10 (13.5%)	13 (17.6%)	6 (8.1%)
Traffic speed along route to school	11 (14.9%)	15 (20.3%)	5 (6.8%)
Traffic volume along route	16 (21.6%)	15 (20.3%)	6 (8.1%)
Adults to walk/bike with	8 (10.8%)	9 (12.2%)	2 (2.7%)
Sidewalks or pathways	10 (13.5%)	13 (17.6%)	6 (8.1%)
Safety of intersections & crossings	15 (20.3%)	11 (14.9%)	5 (6.8%)
Crossing guards	9 (12.2%)	8 (10.8%)	3 (4.1%)
Violence or crime	3 (4.1%)	14 (18.9%)	5 (6.8%)
Weather or climate	10 (13.5%)	17 (23.0%)	6 (8.1%)
Number of Respondents That Selected at Least 1 Issue: 74			
<i>No Response: 0</i>			

(Percentages may not total 100% due to rounding.)

Safe Routes to School Plan

West Union, Iowa

**Number of Parents Who Feel Their Child's School Encourages or Discourages Walking and Biking to/from School:**

	<b>Strongly Encourage</b>	<b>Encourage</b>	<b>Neutral</b>	<b>Discourage</b>	<b>Strongly Discourage</b>
<b>Number</b>	3 (3.4%)	14 (15.9%)	70 (79.5%)	1 (1.1%)	0 (0%)

*No Response: 14*

**Number of Parents Reporting the Level of Fun Walking and Biking to/from School is for Their Child:**

	<b>Very Fun</b>	<b>Fun</b>	<b>Neutral</b>	<b>Boring</b>	<b>Very Boring</b>
<b>Number</b>	1 (1.2%)	25 (29.8%)	46 (54.8%)	9 (10.7%)	3 (3.6%)

*No Response: 18*

**Number of Parents Reporting How Healthy Walking and Biking to/from School is for Their Child:**

	<b>Very Healthy</b>	<b>Healthy</b>	<b>Neutral</b>	<b>Unhealthy</b>	<b>Very Unhealthy</b>
<b>Number</b>	34 (39.1%)	36 (41.4%)	16 (18.4%)	0 (0%)	1 (1.2%)

*No Response: 15*

## Safe Routes to School Plan

West Union, Iowa

### Parent Comments

This table displays the comments provided by parents as part of this Parent Survey. These comments have been entered in two ways — they may have been entered by the local program, or they may have been scanned and processed by the National Center for Safe Routes to School (NCSRTS). Comments scanned and processed by NCSRTS may have not been edited for content, spelling, and other typographical errors that may have as part of the scanning and handwriting recognition process.

Comments from: North Fayette Middle School

SurveyID	Comment
1368068	"We live in the country so walking or biking doesn't work."
1368073	"I very much believe walking is great for students. the heavy back pack + extra sports equipment can hamper walking."
1368078	Parent stated that child either rides family vehicle home or the school bus.
1368085	"Rides the bus, questions 12-14 NA."
1368093	"Walking or biking not an option we live 5 miles out of town."
1368094	"Middle school should be open to students before 8 am."
1368107	"Drive and wait for bus due to weather-cold rain-no shelter."
1368112	"Cannot answer 12-14. Don't know what school thinks about walking or riding to school. We live 5 miles out of West Union, walking or biking is not an option."
1368119	"I think its confusing at the W.U Elementary (congested) my child has been left to walk from there, when I had called and said I'd pick them up."
1368141	"We live too far from the school for my child to walk or rike."
1368142	"questions 10-14 don't apply since student lives in country."
1368143	"We live in the country."
1368146	"we need a stop to park the bikes+make sure they are safe cross guards or lights. the sidewalks are in terrible shape we need more supervision - cars go very fast on south pine."
1368154	"I guess I would be more worried about colder weather than warmer if I was you."
1371452	"Bikers need training/enforcement of rulesI have come close to hitting some who dart in/out of traffic-they have."
1371453	Parent didn't complete the backside of the survey.
1371474	"We live more than 6 miles from town too far to walk or bike."
1371477	"you should worry about the kids having to seat 4 to a seat or having to stand all the way home from West Union to Hawkeye."
1371488	"The point of question is was?"
1371496	Parent note the grade level for child. "Our children ride the bus."
1371499	Parent noted that the backside of the page doesn't apply to them.
1371502	"Live in the country."
1371506	"I just don't want my 6th grader walking alone and walking with a parent is embarrassing for her."
1371509	"My child lives in the country."
1371511	"Special needs child so needs adult supervision."

West Union Elementary School

**Parent Survey Summary Report:**

**Process Summary Information:**

<b>Program Name:</b>	Northeast Iowa RC&D	<b>Survey Data Collected:</b>	Winter2009
<b>School Name:</b>	West Union Elementary	<b>Data Collection Phase:</b> (pre = Before program began mid = During program; post = After program ended)	pre
<b>Reported Enrollment:</b>	172	<b>Number of Surveys Distributed:</b>	172
<b>Date Report Generated:</b>	02/20/2009	<b>Number of Surveys in Report:</b>	104

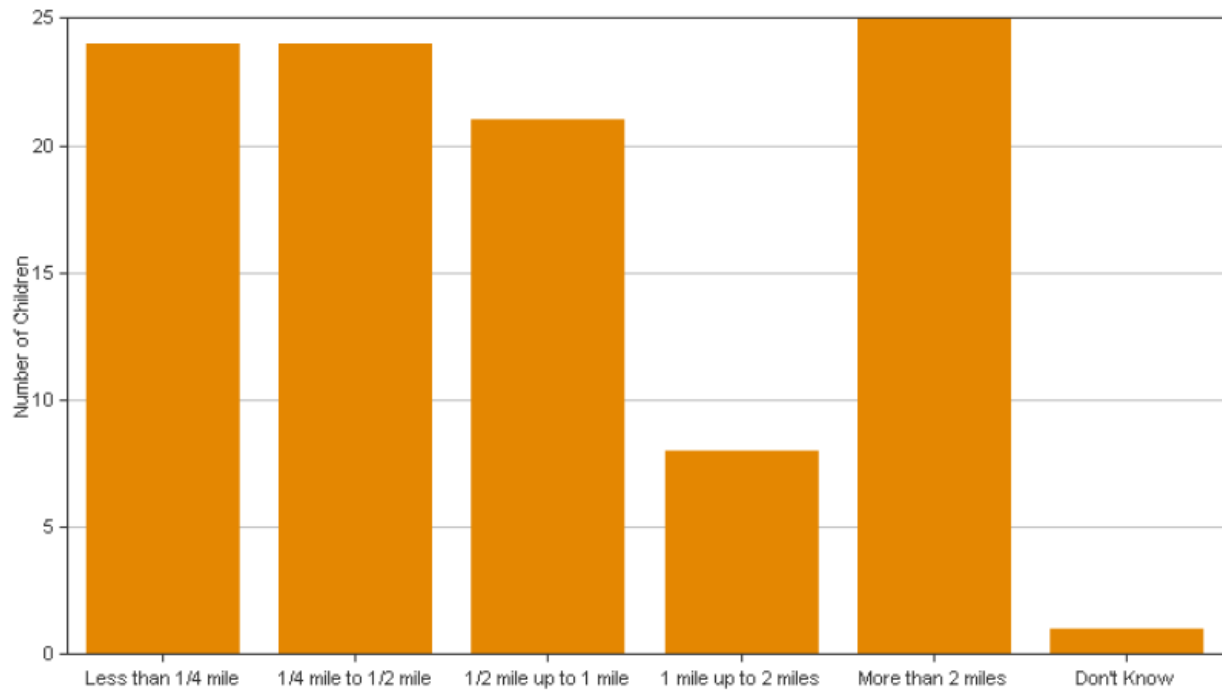
This report provides information from parents about their perceptions and attitudes on their child walking and bicycling to school. The data used in this report were collected using the Survey about Walking and Biking to School for Parents form from the National Center for Safe Routes to School.



Safe Routes to School Plan

West Union, Iowa

Number of Children by Distance They Live From School:



Number of Children by Distance They Live From School:

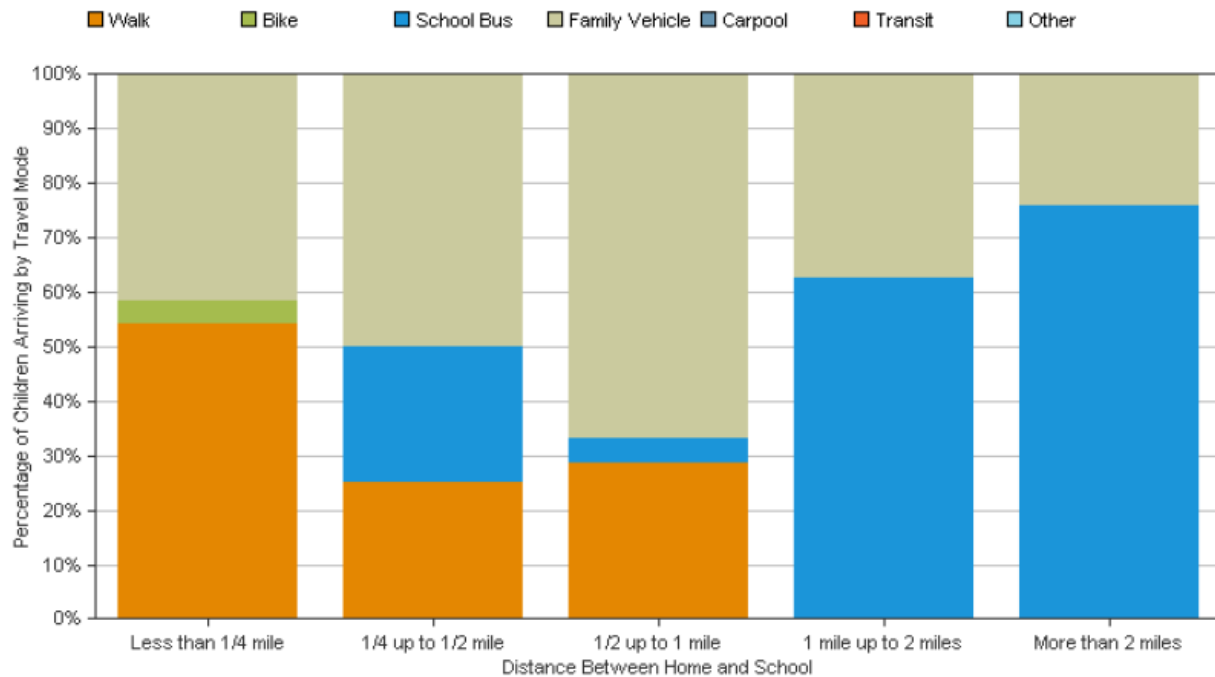
Distance from School	Number of Children
Less than 1/4 mile	24 (23.3%)
1/4 mile up to 1/2 mile	24 (23.3%)
1/2 mile up to 1 mile	21 (20.4%)
1 mile up to 2 miles	8 (7.8%)
More than 2 miles	25 (24.3%)
Don't know	1 (1.0%)
No response: 1	

(Percentages may not total 100% due to rounding.)

## Safe Routes to School Plan

West Union, Iowa

### Percentage of Children by Travel Mode to School and Distance Between Home and School:



### Number of Children by Travel Mode to School and Distance Between Home and School:

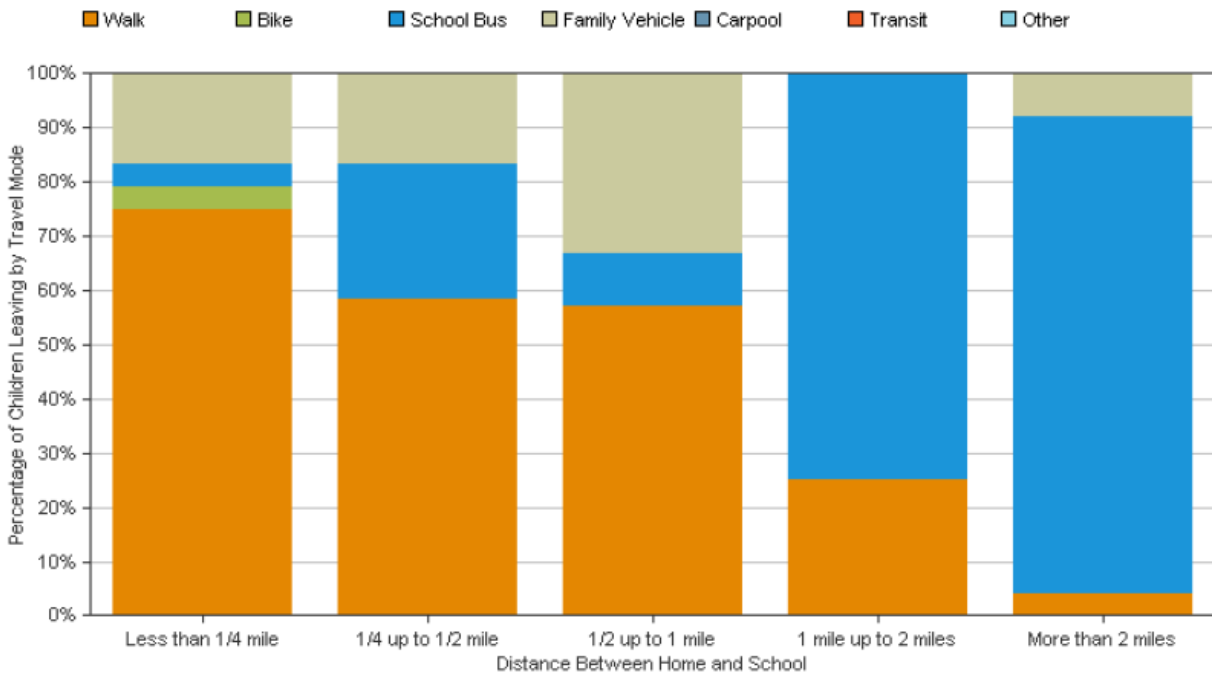
Mode	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles	Row Totals by Mode
Walk	13 (12.6%)	6 (5.8%)	6 (5.8%)	0 (0%)	0 (0%)	26 (25.2%)
Bike	1 (1.0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (1%)
School Bus	0 (0%)	6 (5.8%)	1 (1.0%)	5 (4.9%)	19 (18.4%)	31 (30.1%)
Family Vehicle	10 (9.7%)	12 (11.7%)	14 (13.6%)	3 (2.9%)	6 (5.8%)	45 (43.7%)
Carpool	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Transit	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Other	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>Column Totals by Distance</b>	24 (23.3%)	24 (23.3%)	21 (20.4%)	8 (7.8%)	25 (24.2%)	
<i>No Response: 1</i>						

(Percentages may not total 100% due to rounding.)

## Safe Routes to School Plan

West Union, Iowa

### Percentage of Children by Travel Mode from School and Distance Between Home and School:



### Number of Children by Travel Mode from School and Distance Between School and Home:

Mode	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles	Row Totals by Mode
Walk	18 (17.5%)	14 (13.6%)	12 (11.7%)	2 (1.9%)	1 (1.0%)	48 (46.7%)
Bike	1 (1.0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (1%)
School Bus	1 (1.0%)	6 (5.8%)	2 (1.9%)	6 (5.8%)	22 (21.4%)	37 (35.9%)
Family Vehicle	4 (3.9%)	4 (3.9%)	7 (6.8%)	0 (0%)	2 (1.9%)	17 (16.5%)
Carpool	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Transit	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Other	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>Column Totals by Distance</b>	24 (23.4%)	24 (23.3%)	21 (20.4%)	8 (7.7%)	25 (24.3%)	
<i>No Response: 1</i>						

(Percentages may not total 100% due to rounding.)

Safe Routes to School Plan

West Union, Iowa

**Number of Children by School Arrival Travel Mode and Travel Time to School:**

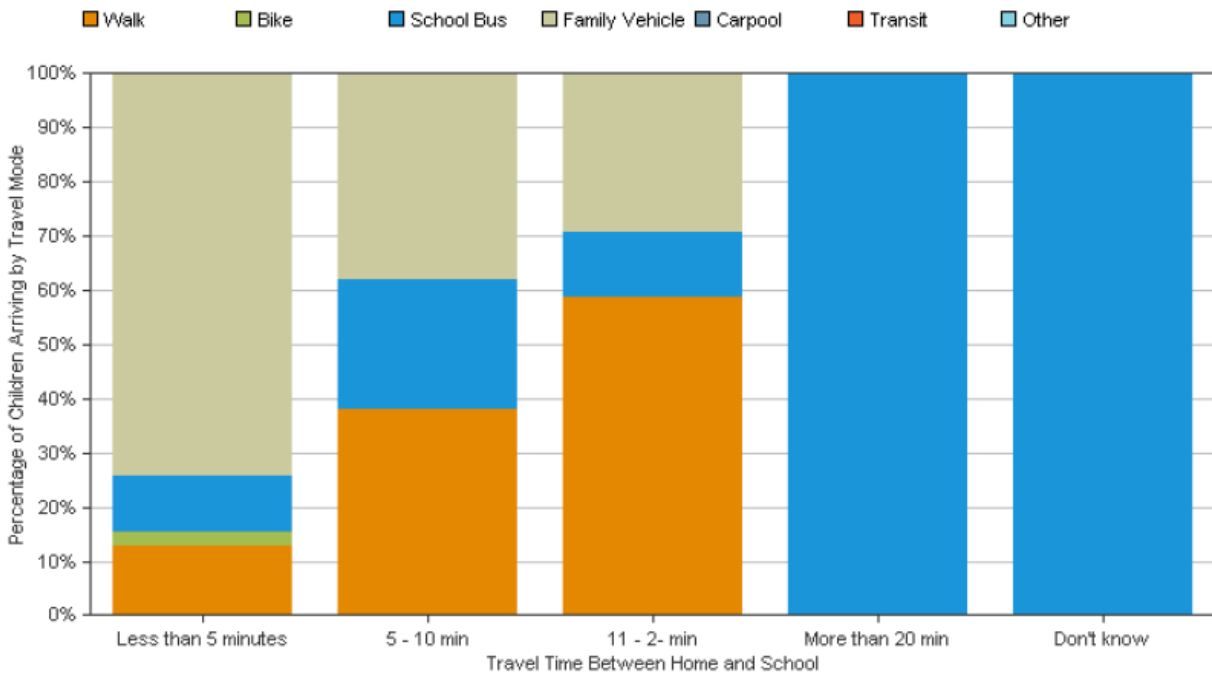
<b>Travel Mode</b>	<b>Less than 5 min</b>	<b>5 - 10 min</b>	<b>11 - 20 min</b>	<b>More than 20 min</b>	<b>Don't know</b>	<b>Row Totals by Mode</b>
Walk	5 (4.8%)	11 (10.6%)	10 (9.6%)	0 (0%)	0 (0%)	26 (25%)
Bike	1 (1.0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (1%)
School Bus	4 (3.8%)	7 (6.7%)	2 (1.9%)	17 (16.3%)	2 (1.9%)	32 (30.6%)
Family Vehicle	29 (27.9%)	11 (10.6%)	5 (4.8%)	0 (0%)	0 (0%)	45 (43.3%)
Carpool	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Transit	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Other	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>Column Totals by Time</b>	39 (37.5%)	29 (27.9%)	17 (16.3%)	17 (16.3%)	2 (1.9%)	
<i>No Response: 0</i>						

(Percentages may not total 100% due to rounding.)

## Safe Routes to School Plan

West Union, Iowa

### Percentage of Children by Travel Time to School and School Arrival Travel Mode:



### Number of Children by School Departure Mode and Travel Time from School:

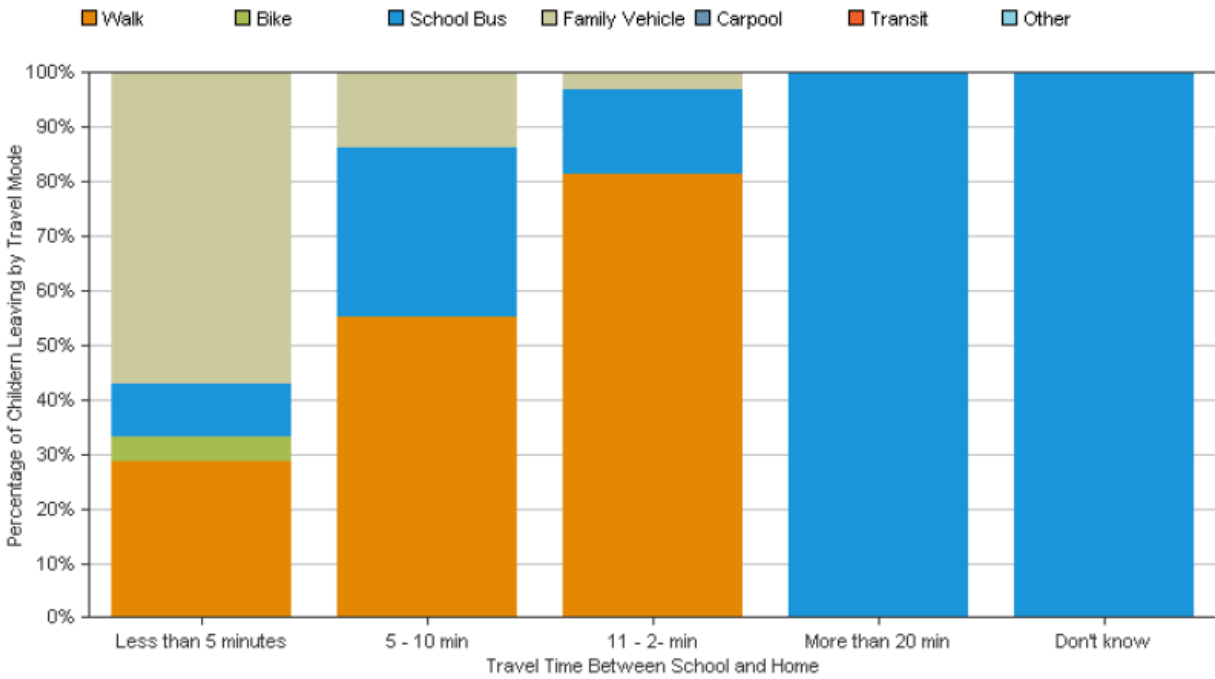
Travel Mode	Less than 5 min	5 - 10 min	11 - 20 min	More than 20 min	Don't know	Row Totals by Mode
Walk	6 (5.8%)	16 (15.4%)	26 (25.0%)	0 (0%)	0 (0%)	48 (46.2%)
Bike	1 (1.0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (1%)
School Bus	2 (1.9%)	9 (8.7%)	5 (4.8%)	21 (20.2%)	1 (1.0%)	38 (36.6%)
Family Vehicle	12 (11.5%)	4 (3.8%)	1 (1.0%)	0 (0%)	0 (0%)	17 (16.3%)
Carpool	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Transit	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Other	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>Column Totals by Time</b>	21 (20.2%)	29 (27.9%)	32 (30.8%)	21 (20.2%)	1 (1%)	
<i>No Response: 0</i>						

(Percentages may not total 100% due to rounding.)

Safe Routes to School Plan

West Union, Iowa

Percentage of Children by Travel Time from School and School Departure Travel Mode:



Number of Children Who Have Asked Their Parent for Permission to Walk or Bike to/from School in the Last Year Separated by Distance They Live from School:

Distance from School	Have Asked	Have Not Asked
Less than 1/4 mile	21 (21.4%)	1 (1.0%)
1/4 mile up to 1/2 mile	20 (20.4%)	3 (3.1%)
1/2 mile up to 1 mile	10 (10.2%)	10 (10.2%)
1 mile up to 2 miles	3 (3.1%)	4 (4.1%)
More than 2 miles	3 (3.1%)	22 (22.4%)
<i>No Response: 6</i>		

(Percentages may not total 100% due to rounding.)

Safe Routes to School Plan

West Union, Iowa

**Grade When Parent Would Allow Child Walk or Bike to/from School without an Adult Separated by Distance They Live from School:**

Grade	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles
Kindergarten	3 (3.4%)	3 (3.4%)	1 (1.1%)	0 (0%)	1 (1.1%)
1st Grade	3 (3.4%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
2nd Grade	3 (3.4%)	3 (3.4%)	1 (1.1%)	0 (0%)	0 (0%)
3rd Grade	11 (12.5%)	9 (10.2%)	7 (8.0%)	3 (3.4%)	1 (1.1%)
4th Grade	1 (1.1%)	3 (3.4%)	2 (2.3%)	0 (0%)	0 (0%)
5th Grade	0 (0%)	2 (2.3%)	1 (1.1%)	0 (0%)	3 (3.4%)
6th Grade	0 (0%)	0 (0%)	2 (2.3%)	1 (1.1%)	0 (0%)
7th Grade	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
8th Grade	0 (0%)	0 (0%)	3 (3.4%)	0 (0%)	0 (0%)
Not at any Grade	0 (0%)	2 (2.3%)	2 (2.3%)	2 (2.3%)	14 (15.9%)
<i>No Response: 16</i>					

(Percentages may not total 100% due to rounding.)

**Issues which Affect Parent's Decision to Allow or Not Allow Their Child to Walk or Bike to/from School Separated by Children who Do and Do Not Already Walk or Bike To/From School:**

Issue	Child walks/bikes to school	Child does not walk/bike to school
Distance	20 (51.3%)	36 (55.4%)
Convenience of driving	2 (5.1%)	7 (10.8%)
Time	10 (25.6%)	15 (23.1%)
Before/after-school activities	5 (12.8%)	11 (16.9%)
Traffic speed along route to school	11 (28.2%)	20 (30.8%)
Traffic volume along route	12 (30.8%)	24 (36.9%)
Adults to walk/bike with	2 (5.1%)	6 (9.2%)
Sidewalks or pathways	19 (48.7%)	17 (26.2%)
Safety of intersections & crossings	19 (48.7%)	25 (38.5%)
Crossing guards	16 (41.0%)	11 (16.9%)
Violence or crime	19 (48.7%)	25 (38.5%)
Weather or climate	20 (51.3%)	25 (38.5%)
Number of Respondents Per Category	39	65
<i>No Response: 0</i>		

(Percentages may not total 100% due to rounding.)

Safe Routes to School Plan

West Union, Iowa

**For Parents Whose Children Do Not Walk or Bike to/from School, Number of Parents Responding to question: Would You Probably let Your Child Walk or Bike to/from School Issues Were Changed or Improved?**

Issue	Number of parents reporting that:		
	Change Would affect decision	Change Would Not affect decision	Not Sure if change would affect decision
Distance	17 (26.2%)	18 (27.7%)	5 (7.7%)
Convenience of driving	4 (6.2%)	12 (18.5%)	3 (4.6%)
Time	8 (12.3%)	13 (20.0%)	4 (6.2%)
Before/after-school activities	4 (6.2%)	14 (21.5%)	5 (7.7%)
Traffic speed along route to school	10 (15.4%)	17 (26.2%)	5 (7.7%)
Traffic volume along route	13 (20.0%)	16 (24.6%)	5 (7.7%)
Adults to walk/bike with	7 (10.8%)	10 (15.4%)	4 (6.2%)
Sidewalks or pathways	9 (13.8%)	15 (23.1%)	5 (7.7%)
Safety of intersections & crossings	14 (21.5%)	14 (21.5%)	6 (9.2%)
Crossing guards	7 (10.8%)	11 (16.9%)	5 (7.7%)
Violence or crime	9 (13.8%)	10 (15.4%)	4 (6.2%)
Weather or climate	19 (29.2%)	9 (13.8%)	3 (4.6%)
Number of Respondents That Selected at Least 1 Issue: 65			
<i>No Response: 0</i>			

(Percentages may not total 100% due to rounding.)



Safe Routes to School Plan

West Union, Iowa

**Number of Parents Who Feel Their Child's School Encourages or Discourages Walking and Biking to/from School:**

	<b>Strongly Encourage</b>	<b>Encourage</b>	<b>Neutral</b>	<b>Discourage</b>	<b>Strongly Discourage</b>
<b>Number</b>	1 (1.1%)	15 (16.3%)	72 (78.3%)	3 (3.3%)	1 (1.1%)

*No Response: 12*

**Number of Parents Reporting the Level of Fun Walking and Biking to/from School is for Their Child:**

	<b>Very Fun</b>	<b>Fun</b>	<b>Neutral</b>	<b>Boring</b>	<b>Very Boring</b>
<b>Number</b>	10 (11.0%)	39 (42.9%)	38 (41.8%)	2 (2.2%)	2 (2.2%)

*No Response: 13*

**Number of Parents Reporting How Healthy Walking and Biking to/from School is for Their Child:**

	<b>Very Healthy</b>	<b>Healthy</b>	<b>Neutral</b>	<b>Unhealthy</b>	<b>Very Unhealthy</b>
<b>Number</b>	35 (38.9%)	46 (51.1%)	8 (8.9%)	0 (0%)	1 (1.1%)

*No Response: 14*

## Safe Routes to School Plan

West Union, Iowa

### Parent Comments

This table displays the comments provided by parents as part of this Parent Survey. These comments have been entered in two ways — they may have been entered by the local program, or they may have been scanned and processed by the National Center for Safe Routes to School (NCSRTS). Comments scanned and processed by NCSRTS may have not been edited for content, spelling, and other typographical errors that may have as part of the scanning and handwriting recognition process.

Comments from: West Union Elementary

SurveyID	Comment
1375543	"Getting accross Hwy 150 iin Fayette is the only concern."
1375544	"Another crossing guard needed at intersection of our streets many students walk this way."
1375545	"A bus that pick up kids in town so they can be safe."
1375556	Parent didn't fill out most of the backside of the survey."
1375566	"We allowed our child to wak home from school independently when she was able to provide us with details from her dialy activities...which is to say, when we thought she was mature enough. We have allows walked to school if the weather and other activities allow. The lack of a sidewalk in from of the bike rack at the Fayette elementary is a big concern for me... I am referring the where the parents park when waiting for the busses. the kids end up walking on top of the snow mounds in from the cars; a dangerous situation if they slide, or they walk behind the parked cars. When they walk behind the parked cars they are often distracted, and the view from a parked is often obscured by other vehicles (SUV's and Vans in particular.)"
1375568	"Question 9 - My children walk with other kids, older siblings or neighbors."
1375569	"My child crosses over to Cook St. After school there is a lot of traffic there, also high school students speed by there. I feel there should be a cross guard at this intersection especially since there is a couple of daycre providers on this street."
1375571	"I appreciate living in an area where we feel safe letting her walk /bike."
1375575	"We live too far away to walk or bike to school."
1375578	"Busy highway to cross."
1375582	"Older kids are rough with the younger ones."
1375589	"We live outside of town."
1375590	"The children walk when weather is appropriate."
1375596	"Our child was walking home but last fri he was aproached by a man who tried walking with him + asking him personal questions. needless to say he will not be walking home anymore. i have big concerns of his safety especially since people from the corretional facility can walk the same streets."
1375600	"We live in the country on a gravel road along a highway."
1375602	"A bike path would make a huge difference."
1375603	"Another crossing guard needed at intersection of our street, many students walk this way."
1375605	"If there where sidewalks all the way home it would be easier."
1375607	"Walks with younger sibling."
1375609	"It would be nice to have a bus pick up spot closer to our home."

Safe Routes to School Plan

West Union, Iowa

1375612	"I just think my child is too young to walk or bike to school from the distance we live."
1375615	Parent didn't complet backside of survey.
1375617	Parent stated that the backside doesn't apply.
1375621	"We live 6+ miles from school so this doesn't pertain to us."
1375627	"I didn't feel I can let my kids walk in cold weather."
1375632	"We live in the country. Walking is not an option."
1375633	"If there were sidewalks to the school from our house, child may be permitted to walk earlier that the 8th grade. but that is not the case here."
1375634	"We live in the country so alot of this does not apply to us."
1375638	Parent didn't complete the backside of the survey."
1375641	"Crossing guards situation is dissapointing since 6th grade moved to Jr. High."
1375649	Parent noted that child either walks or rides bike to and from school.
1375650	"Daughter lives 1/4 miles from school and has a 50 min ride after school. Intersection of Hwy 150 + Willark Street is too dangerous for her to cross. Bus route changed this year... instead of being dropped off first, she gets dropped off last, total bus ride after school is one hour + 20 minutes. Way too long."

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**Works Cited**

- 
- <sup>1</sup> United States Centers for Disease Control and Prevention
  - <sup>2</sup> United States Department of Energy; Office of Transportation Technologies
  - <sup>3</sup> United States Department of Transportation; Safe Routes to School Practice and Promise
  - <sup>4</sup> National Safe Routes to School Online Guide [www.saferoutesinfo.org](http://www.saferoutesinfo.org)
  - <sup>5</sup> United States Department of Health and Human Services and the United States Department of Agriculture Dietary Guidelines for Americans 2005
  - <sup>6</sup> United States Centers for Disease Control and Prevention
  - <sup>7</sup> Hedley A, Ogden C, Johnson C, Carroll M, Curtin L, & Flegal K. Prevalence of overweight and obesity among U.S.
  - <sup>8</sup> Serdula M, Ivery D, Coates R, Freedman D, Williamson D, Byers T. Do obese children become obese adults? A review of the literature
  - <sup>9</sup> United States Environmental Protection Agency
  - <sup>10</sup> United States Environmental Protection Agency, Office of Mobile Sources. motor vehicle Emissions
  - <sup>11</sup> Friedman M, Powell K, Hutwagner L, Graham L, Teague G Impact of Changes in Transportation and Commuting Behaviors During the 1996 Summer Olympic Games in Atlanta on Air Quality and Childhood Asthma. Journal of the American Medical Association
  - <sup>12</sup> United States Census Bureau; American Fact Finder; 2000 Census
  - <sup>13</sup> National Safe Routes to School Online Guide [www.saferoutesinfo.org](http://www.saferoutesinfo.org)
  - <sup>14</sup> National Safe Routes to School [http://www.saferoutesinfo.org/legislation\\_funding/](http://www.saferoutesinfo.org/legislation_funding/)