

Sequoyah Elementary

Active Transportation Analysis



Amanda Yamaguchi
2015-2016

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The University of Oklahoma Graduate College

Sequoyah Elementary: Active Transportation Analysis

A Professional Project
Submitted to the Graduate Faculty
in partial fulfillment of the requirements for the degree of
Master of Science in Architectural Urban Studies

by

Amanda Yamaguchi
Tulsa, Oklahoma
2016

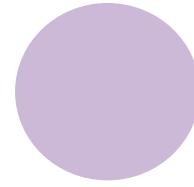
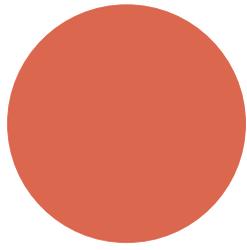
A Professional Project approved for the
College of Architecture
Urban Design Studio

by

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Mary Williams Ph.D.

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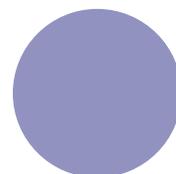
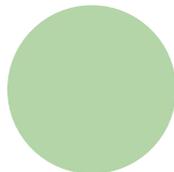
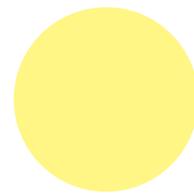
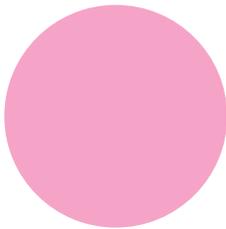
Acknowledgements

My sincerest thanks go to my advisor Professor Shawn Schaefer. Without his thoughtful encouragement and supervision, this project would not have taken shape.

Thank you to Paulina Baeza for her assistance in everything from translating documents to helping brainstorm ideas. Her unwavering friendship and support made even the most stressful moments more enjoyable.

My thanks also go out to the teachers and administrators at Sequoyah Elementary School who kindly participated in this research by giving their time and providing me with access to their wonderful students.

Last but certainly not least; I extend my deepest thanks to Taka, Avery, Masako and Neil Yamaguchi for enduring this journey with me. Thank you Taka for your continued love and support. I couldn't have done this without you. To my wonderful children, you were the inspiration for this project and I loved getting your ideas and perspectives. Your input made this project fun in so many ways.



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Project Summary

The Sequoyah Elementary: Active Transportation Analysis looks at the enrollment area of Sequoyah Elementary School, in the Tulsa Public Schools system, to identify reasons school children do not walk to school. The AmeriCorps's City Year program has invested time and effort into the school's walking school bus program with limited participation from students. This project will attempt to discover physical and mental barriers of parents who do not allow children to walk to school.

Upon completion of the analysis, recommendations to the school, city, neighborhood and other parties will be made to create interventions to help increase walkability within the area. The findings of this study may be applicable to other schools within the Tulsa area.

This project is a professional project in partial fulfillment of the masters degree at the University of Oklahoma Urban Design Studio. The University of Oklahoma's Institutional Review Board and Sequoyah Elementary School in the Tulsa Public School System have given approval for the project.

Why Sequoyah?

Sequoyah was suggested by the "All About Kids" coordinator from the Tulsa Health Department as a possible candidate for this study. The existing, yet largely unused, Walking School Bus program made it apparent that Sequoyah is interested in getting students walking. The small, compact enrollment area makes this area ideal for implementing new approaches to promote active transportation.



Sequoyah Elementary
724 N Birmingham Ave
Tulsa, OK 74110

Project Goals

- Identify reasons parents do not allow children to walk to school
- Identify how many students are actually walking to school
- Create recommendations for school and community to promote walking
- Increase the number of children walking to school by promoting the Walking School Bus program
- Identify possible interventions that may increase the walkability of the area

Background Information

Key points discovered by the National Center for Safe Routes to School's report on "How Children Get To School: School Travel Patterns From 1969 To 2009" (National Center for Safe Routes to School 2011) .

-Although walking increased among students who attended low-, medium- and high-income schools, walking increased especially among students who attended low-income schools (defined as enrolling 75% of students who were eligible to receive free or reduced price meals).

-In 1969, 48 % of K-8th grade students usually walked or bicycled to school. By 2009, only 13 % of K-8th grade students usually walked or bicycled to school.

-Among parents who drove their children to school, approximately 40% returned home immediately after dropping their children at school.

How children travel to school has changed dramatically from 40 years ago. The National Center for Safe Routes to School conducted a study of transportation trends from 1969 to 2009. The results show a significant rise in the number of kindergarten through eighth grade students driven to school. This is coupled with a decline in walking and bicycling to school.

Another SRTS study looked at more recent data from 2007 to 2012. These results showed walking to and from school increased significantly between 2007 and 2012. 12.4% to 15.7% in the morning; and from 15.8% to 19.7% in the afternoon. These results are encouraging but are still much lower than those seen in 1969. The distance a child lives from school plays a large role in how they get to school. Children who live closer are more likely to walk than those who live further away(National Center for Safe Routes to School 2011).

Where we locate schools, or how they are sited, influences the travel patterns of students and parents and the development of the community. Schools were originally designed as centers of the community and were built in places that encouraged more students to walk and bike. Over the past 50 years, unfortunately, state and local policies have changed to favor more distant, less walkable schools.

Throughout the years, school-siting policy has shifted away from the community-based school to larger and more remote locations. These policies are intended to decrease the cost of running the school by consolidating many smaller buildings into one(Weinhold, B. 2011). While this works with respect to finances, schools are becoming mega structures that do not benefit their community and may not even be located near the students they serve (McDonald, Noreen C. 2010). Fortunately, the concept of community schools has become a centerpiece for education reform.

The National Center for Community Schools defines a community school as:

“A community school is both a place and a set of partnerships between the school and other community resources. Its integrated focus on academics, services, supports and opportunities leads to improved student learning, stronger families and healthier communities. Schools become centers of the community, open to everyone, all day, every day, evenings and weekends (National Center for Community Schools).”

Community schools support students and the community by providing services such as academic and cultural enrichment programming, family support, early childhood programs, physical, dental and mental health services, social services and more. Increased emphasis on community health and the shift back towards the community schools model will hopefully allow for more opportunities to expand walking and biking programs for school children.



-In 1969, 89 percent of K-8th grade students who lived within one mile of school usually walked or bicycled to school. By 2009, only 35 percent of K-8th grade students who lived within a mile of school usually walked or bicycled to school even once a week.

-In 2009, more students arrived at school by personal vehicle than depart by that mode. The majority of these school departure trips shifted to riding the school bus or walking.

-Between 2007 and 2012, the percentage of parents who stated that their child's school supported walking and bicycling between home and school increased from 24.9 to 33 %.

Area Profile

The Sequoyah Elementary School enrollment area is home to approximately 4,746 residents. According to the United States Census Bureau, Caucasians represent 50% of the population, 9% are African American and 9% are Native American. The census does not designate Hispanic as a race so people who identify as Hispanic may fall into the categories of “Other”, 25%, or “2 or more races”, 7% (<http://www.census.gov/2010census/popmap/>)

The area is about one square mile and extends from I-244 North to the BNSF rail track and from Lewis Avenue West to Oswego Avenue, a few blocks West of Harvard Avenue. Images of the enrollment area can be seen in the geospatial analysis section of this report.

Sequoyah Elementary School provides classes for students from Pre-K through 6th grade. There are approximately 1,430 children in the area under the age of 18. About 643 are elementary school age, between 4 and 12 years old.

The area includes many uses such as single and multi-family housing, commercial property and industrial property. Within the boundaries there is one elementary school (Sequoyah), the Tulsa School of Arts and Sciences, Archer Park, and Las Americas Super Mercado. There are three churches, Tulsa Nueva Esperanza, Crosstown Church of Christ and Sequoyah Hills Baptist Church.



Archer Park:
Archer Street &
Delaware Place



Archer Park:
Playground



Las Americas
Super Mercado:
Lewis & Admiral



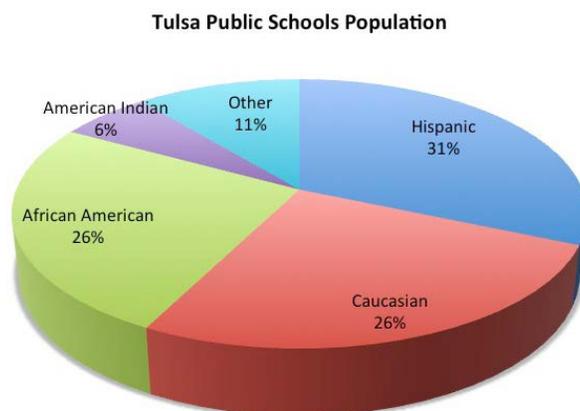
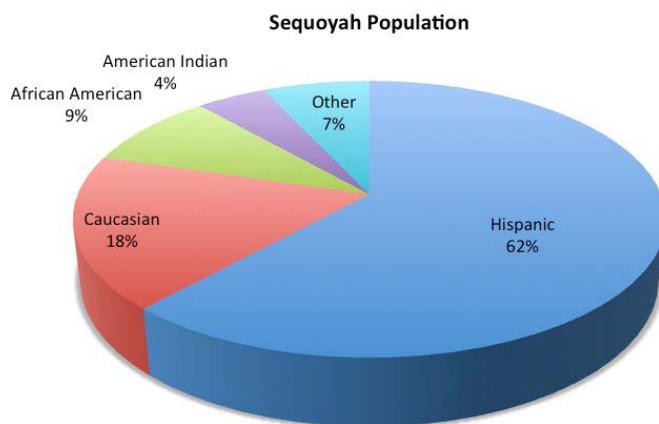
Sequoyah Elementary School: Front Entrance

School Profile

2015 Student Enrollment

- Total Enrollment: 597
- 15.3:1 Student Teacher Ratio
- 39% English Language Learners
- 10% Individual Education Programs (Special Education)
- 93% Attendance Rate
- 89% Qualify for Free/Reduced Lunch

The Sequoyah student population has a much higher percentage of Hispanic students as compared to the Tulsa Public Schools as a whole. It also has a lower percentage of African American and Caucasian students.



Source: Tulsa Public Schools. 2015. "Sequoyah Elementary School Profile" and "Tulsa Public School- District Summary"



Sequoyah Elementary School: Front Entrance Walk



Sequoyah Elementary School: Playground



Sequoyah Elementary School: Track & Soccer Field

Methodology

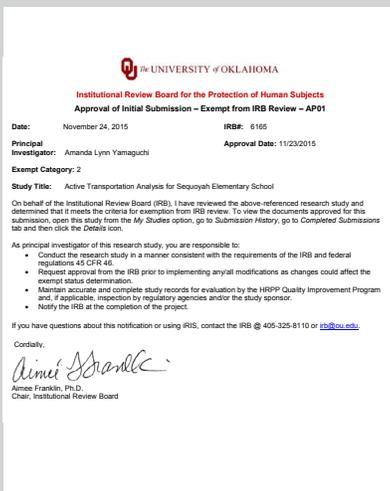
The area within the enrollment boundary was included in the study. Data was be collected using four separate methods. Multiple methods were used to collect different types of information and to cross check key data points. Methods include:

- Geospatial Analysis
- Informal Discussion with Parents and Teachers
- Parent Surveys
- In-Class Tally counts

Geospatial analysis of the enrollment area was done to uncover trends in population density, zoning, existing infrastructure, distribution of school age children and Hispanic population. Mapping exercises helped to visualize data and provide insight into the patterns of the area.

Informal discussions with parents and students at the school's monthly parent night allowed for more discussion on barriers identified from the survey. Issues discovered throughout the course of this study were brought to the attention of parents during these events. Parents also brought forward ideas and issues they experience in the neighborhood and with the school. These meetings were also an opportunity to promote walking and to give out information to students and parents about walking safety.

Approval from the University of Oklahoma's Institutional Review Board was required to conduct parent surveys and the in-class tally counts. The application detailed specifics on what would be included in the surveys, who would be completing it, how it would be distributed and any potential risks to participants (see full document in Appendix A). Due to the high percentage of Hispanic students, it was necessary to provide all survey and instruction documents in English and Spanish. Documents were translated by Paulina Baeza, a graduate student at the OU Urban Design Studio.



IRB Approval Letter
(See full document in
Appendix B)

The process of submitting the application and getting approval took longer than originally expected. Issues that arose included concerns of the possibility of parent survey results being seen by teachers and students. This was easily mitigated by having the surveys returned to school in sealed envelopes.

Another concern was whether or not teachers should be considered researchers since they were collecting data from students during the in-class tally counts. It was decided that the information being collected was very basic and presented no danger to the teachers or students. Asking all teachers to complete the required IRB training to be considered researchers would have essentially ended the possibility to conducting this portion of the research. The IRB reviewer allowed teachers to collect data without being considered researchers. Approval for this research was given in November 23, 2015 (See approval letter in Appendix B).

Parent surveys sent home with children gave parents a chance to provide information on how children are currently getting to and from school, what factors affect their decision to allow or not allow children to walk to school, and their perceptions on the appropriateness of allowing children to walk.

The parent survey used was a modified version of the Safe Routes to School survey found online. The questions were slightly adjusted to better fit the needs of this study and the Sequoyah Elementary population. Links to the Safe Routes to School initiative website can be found at <http://saferoutesinfo.org> and in the reference section of this document.

Short, in-class tally counts were taken by teachers to tally the number of students walking home, being picked up by car or carpool. These surveys were done for a total of three days, November 30th through December 2nd. The data collected helped to validate the data collected in the parent surveys. This survey was also found on the website of the Safe Routes to School initiative.

Parent Survey About Walking and Biking to School

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 year unless your child attends 2 or more than one school from a school brings a survey home. Please fill out the survey for the child with the most difficulty from today's date. After you have completed the 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!

• CAPITAL LETTERS ONLY - BLUE OR BLACK INK ONLY

School Name: _____

1. What is the grade of the child who brought home this survey? Grade (K,K.1,2,3,4,5) 6 7 8 9 10 11 12

2. Is the child who brought home this survey male or female? Male Female

3. How many children do you have in Kindergarten through 8th grade? _____

4. What is the street intersection nearest your home? (Check the column of the intersection closest to your home.) _____

5. How far does your child live from school? Less than 1/4 mile 1/4 mile up to 1 mile More than 2 miles 1/4 mile up to 1/2 mile 1/2 mile up to 1 mile Don't know

6. On most days, how does your child arrive and leave for school? (Check one choice per column, mark box with X)

Arrive at school	Leave from school
<input type="checkbox"/> Walk	<input type="checkbox"/> Walk
<input type="checkbox"/> Bike	<input type="checkbox"/> Bike
<input type="checkbox"/> School Bus	<input type="checkbox"/> School Bus
<input type="checkbox"/> Family vehicle (only children in your family)	<input type="checkbox"/> Family vehicle (only children in your family)
<input type="checkbox"/> Carpool (Children from other families)	<input type="checkbox"/> Carpool (Children from other families)
<input type="checkbox"/> Transit (City bus, subway, etc.)	<input type="checkbox"/> Transit (City bus, subway, etc.)
<input type="checkbox"/> Other (skateboard, scooter, inline skates, etc.)	<input type="checkbox"/> Other (skateboard, scooter, inline skates, etc.)

7. How long does it normally take your child to get to/from school? (Check one choice per column, mark box with X)

Travel time to school	Travel time from school
<input type="checkbox"/> Less than 5 minutes	<input type="checkbox"/> Less than 5 minutes
<input type="checkbox"/> 5 - 10 minutes	<input type="checkbox"/> 5 - 10 minutes
<input type="checkbox"/> 11 - 20 minutes	<input type="checkbox"/> 11 - 20 minutes
<input type="checkbox"/> More than 20 minutes	<input type="checkbox"/> More than 20 minutes
<input type="checkbox"/> Don't know / Not sure	<input type="checkbox"/> Don't know / Not sure

Parent Survey (See full document in Appendix C)

Safe Routes to School Students Arrival and Departure Tally Sheet

• CAPITAL LETTERS ONLY - BLUE OR BLACK INK ONLY

School Name: _____ Teacher's First Name: _____ Teacher's Last Name: _____

Monday's Date when count was taken: _____ Number of Students Enrolled in Class: _____

Fill in the number conditions and number of students in each class.

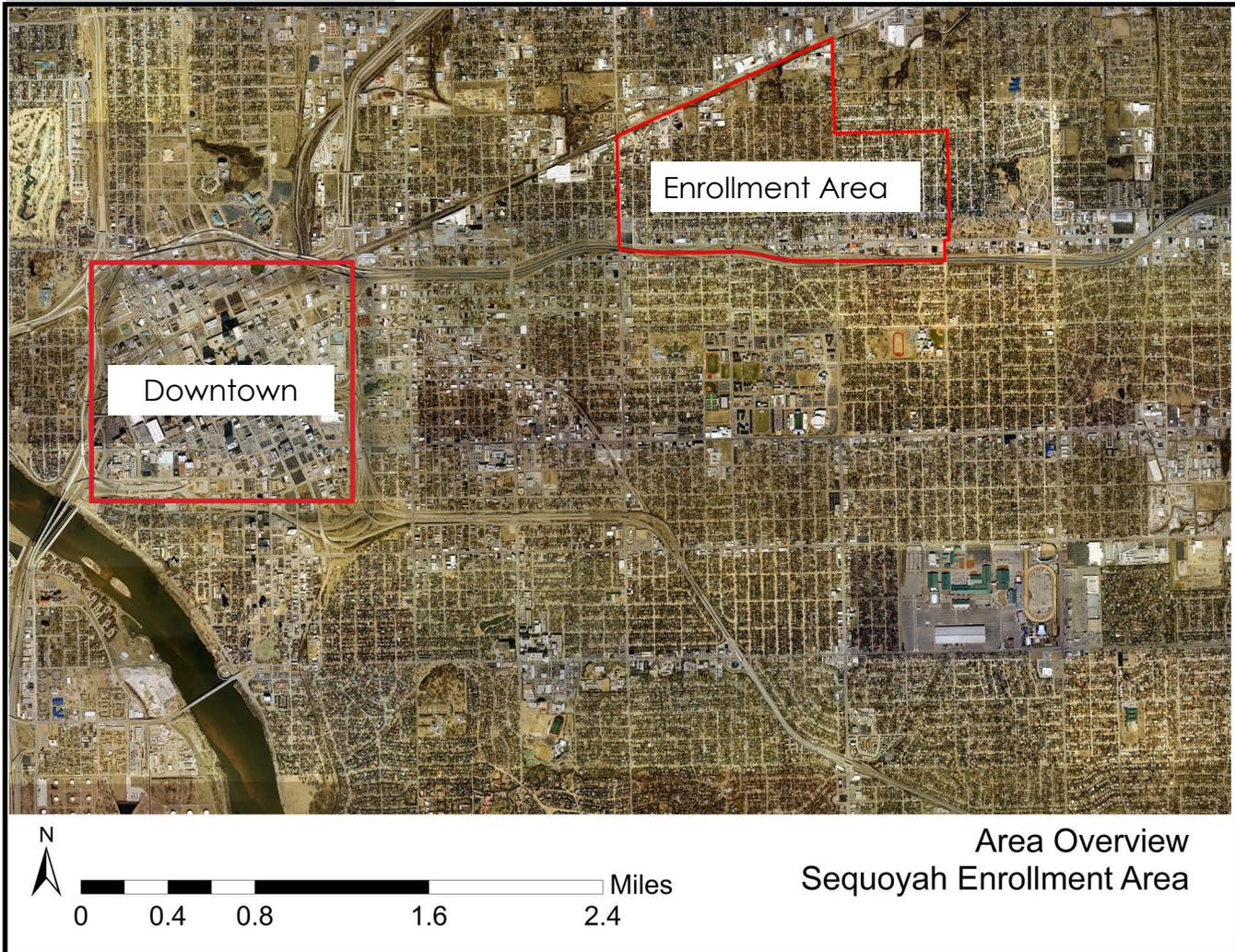
Key

Key	to survey	to walk	to bike	to school bus	to family vehicle	to carpool	to transit	to other
Sample AM	1	2	3	4	5	6	7	8
Sample PM	9	10	11	12	13	14	15	16

Tues. AM _____ Tues. PM _____ Wed. AM _____ Wed. PM _____ Thurs. AM _____ Thurs. PM _____

Please list any disruptions to these counts or any unusual travel conditions to/from the school on the days of the tally.

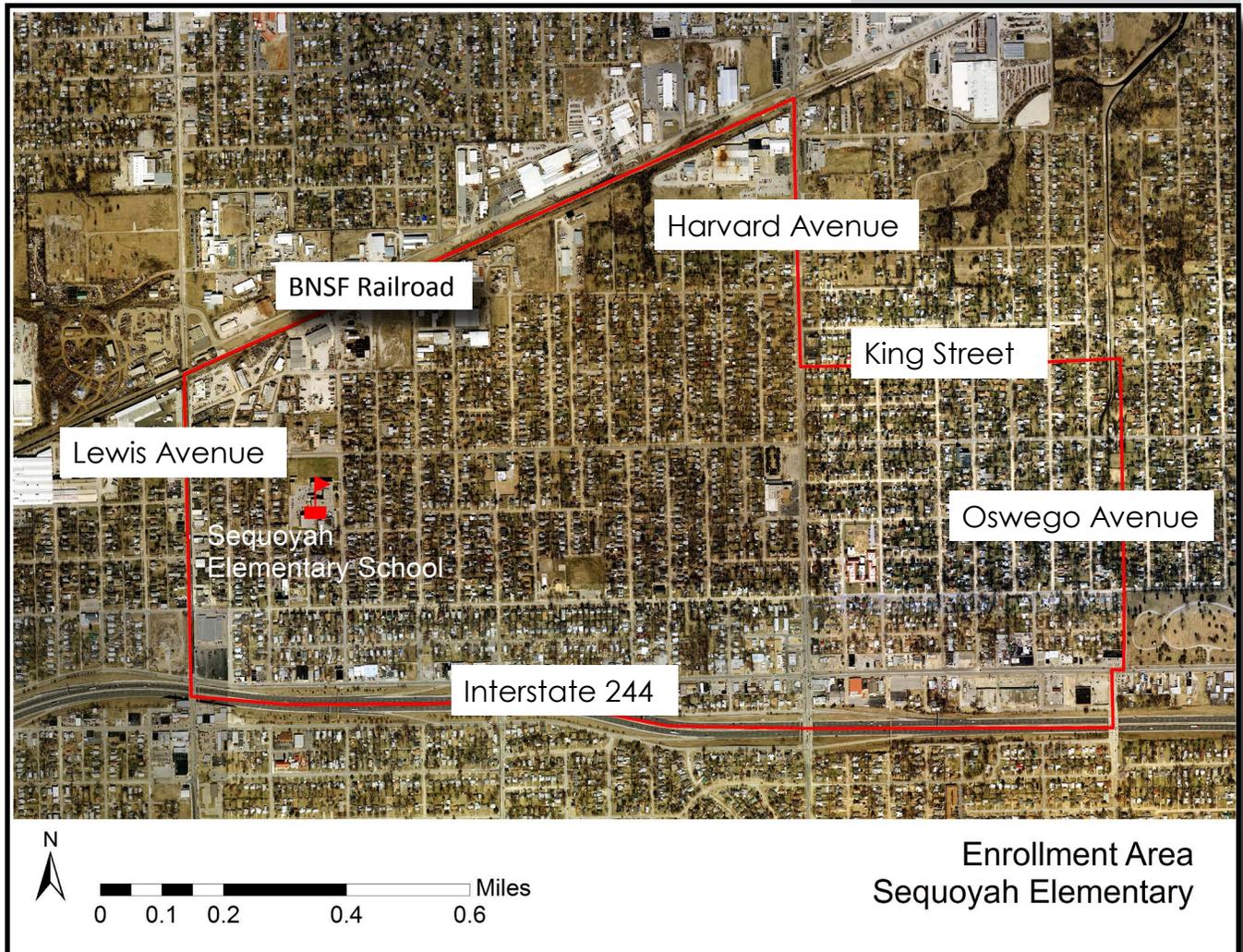
In-Class Survey (See full document in Appendix D)



Area Overview

Sequoyah Elementary is located Northeast of downtown Tulsa. South of this area is the Kendall-Whittier neighborhood. There are approximately 4,746 residents living within the enrollment boundary.

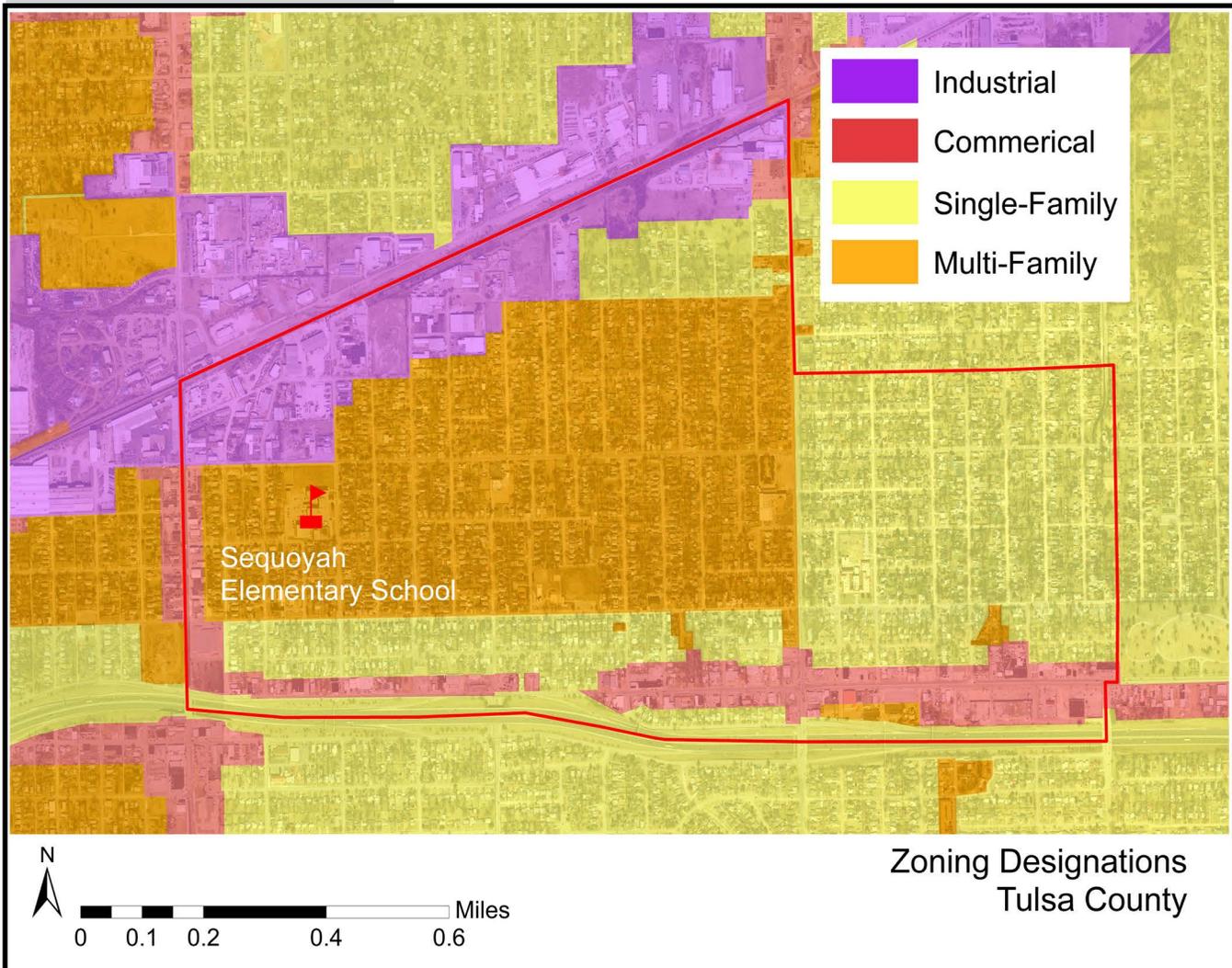
Methodology: Geospatial Analysis



Enrollment Area

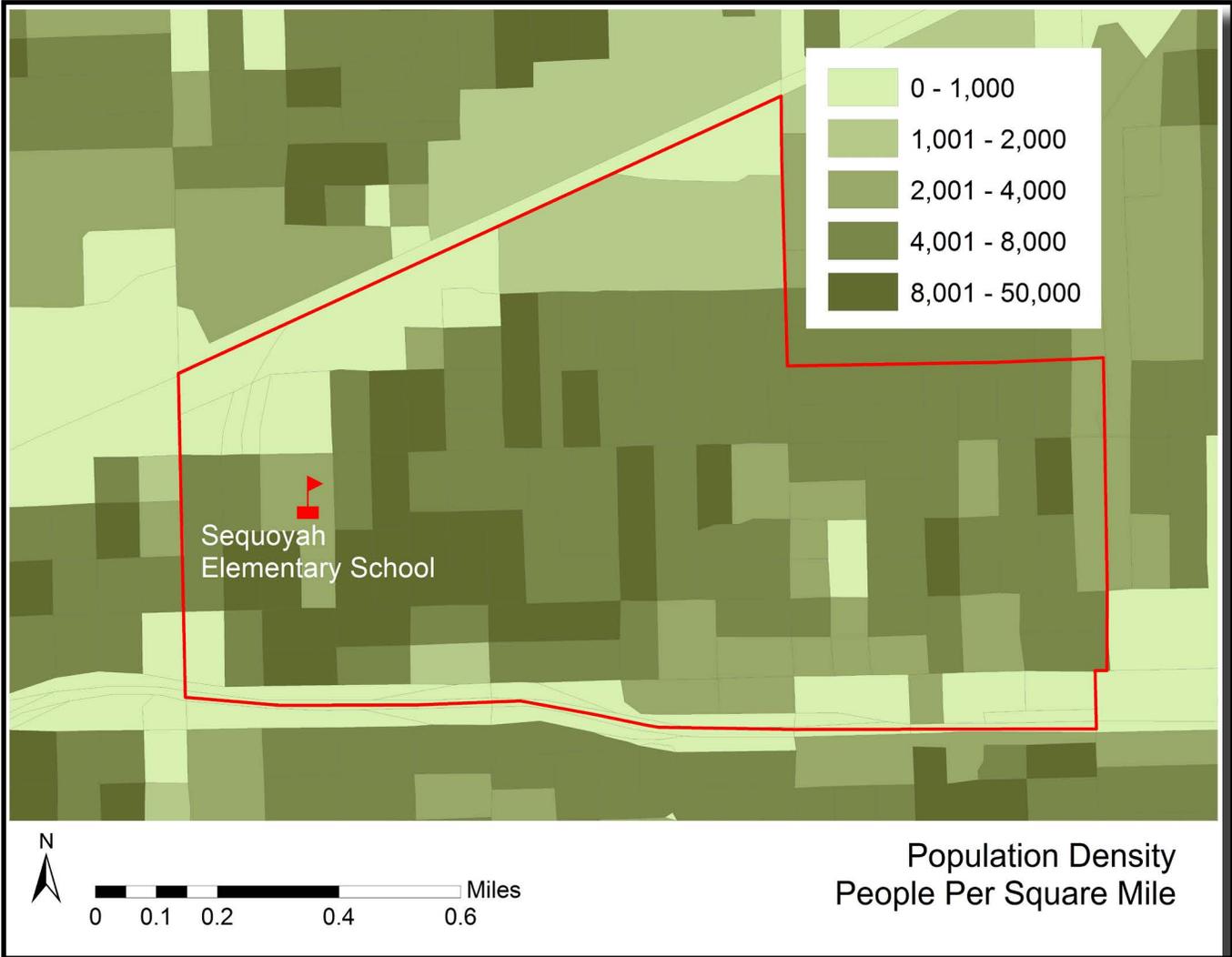
The enrollment area is roughly one square mile. Lewis Avenue is the Eastern border, the BNSF rail line and King Street is the North, Harvard and Oswego Avenue are the Western edge, and I-244 is the Southern boundary.

Methodology: Geospatial Analysis



Zoning

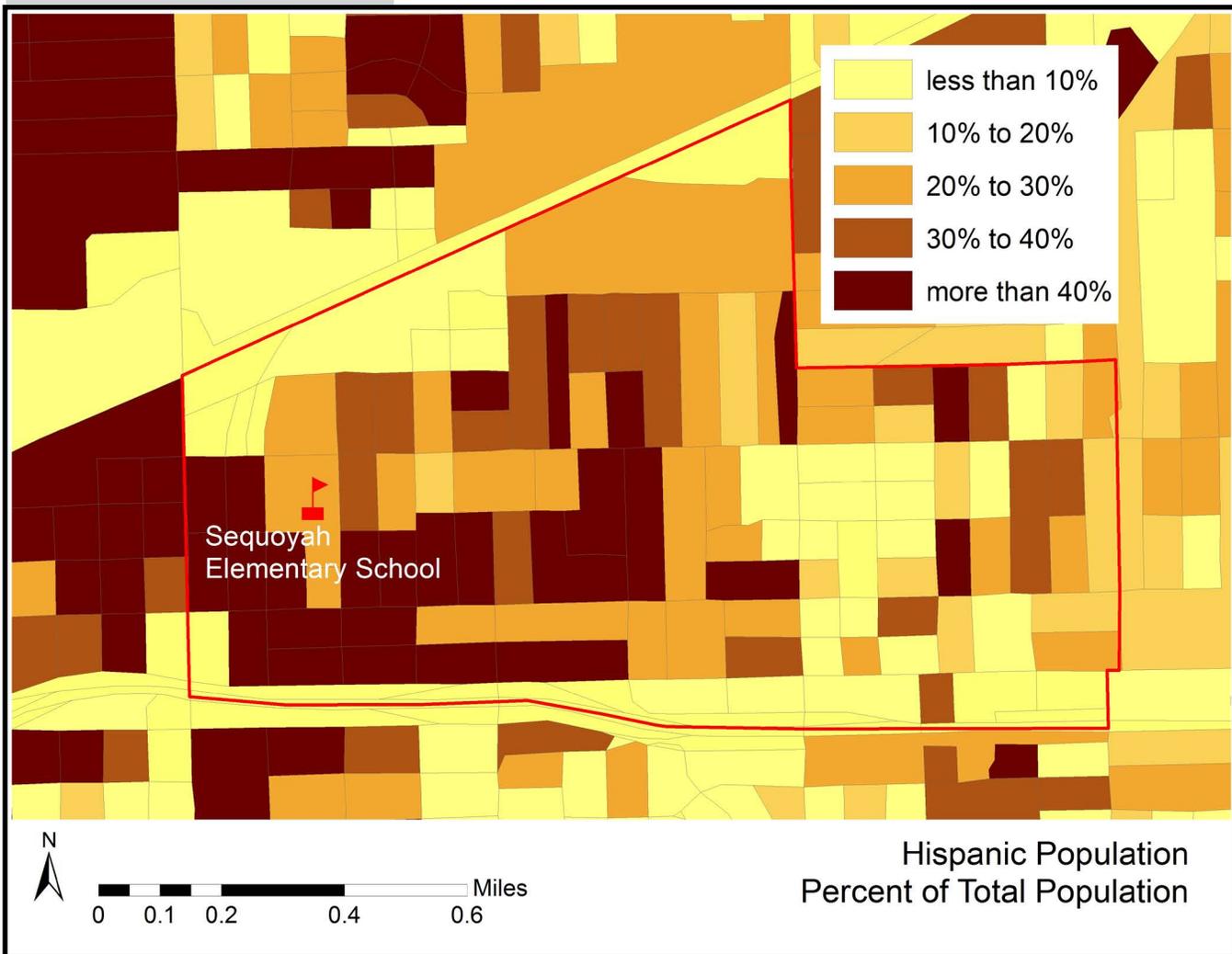
Industrial zoning makes up the northern boundary. The core area around the school is zoned multi-family while the area around that is single-family. Commercial property marks the southern edge. This map was created using zoning data from the Indian Nations Council of Governments.



Population Density

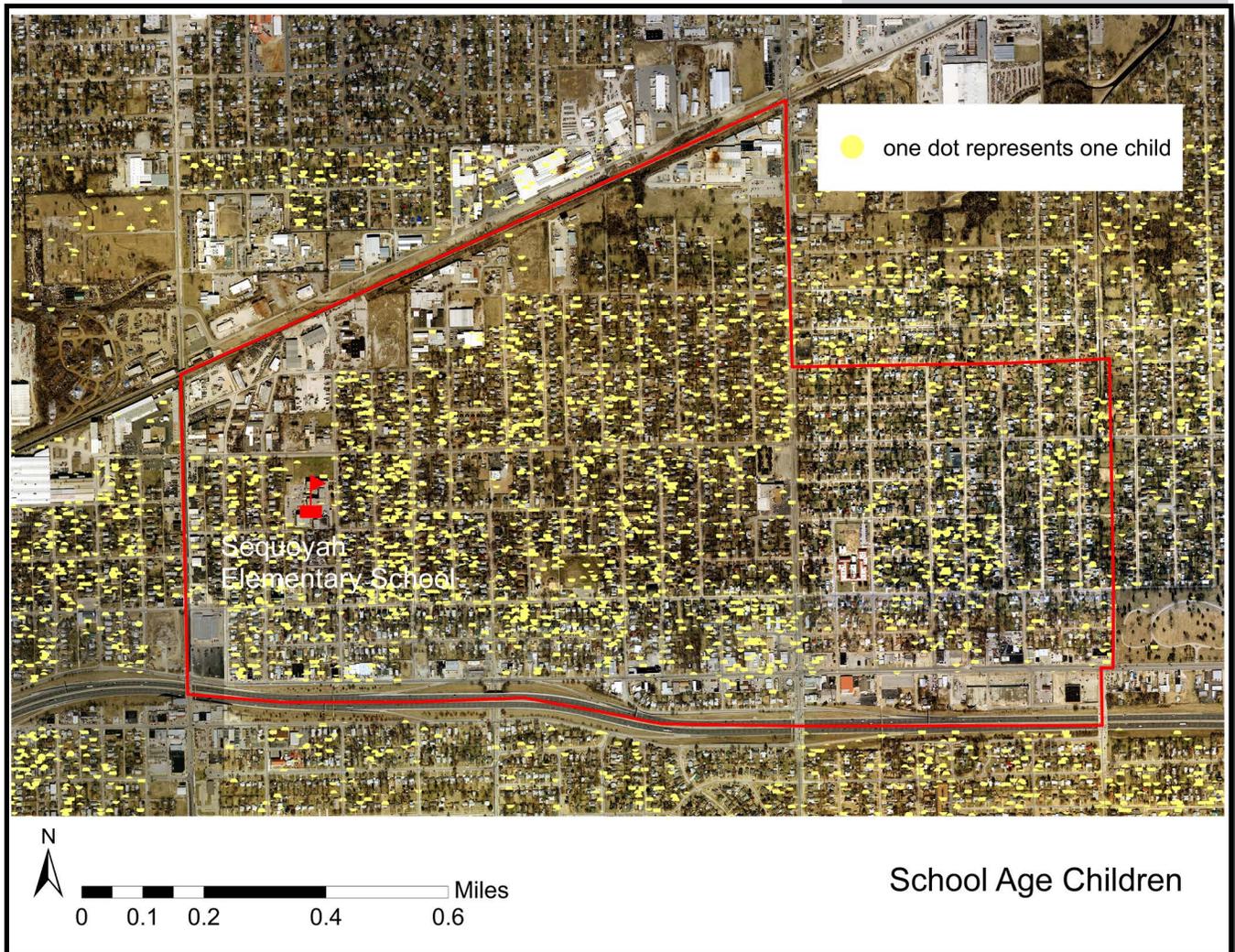
The population is the most dense around the school. This is consistent with the multi-family zoning designation in the area. Lowest population areas correspond to industrial and commercial zoning. This map was created using 2010 census data.

Methodology: Geospatial Analysis



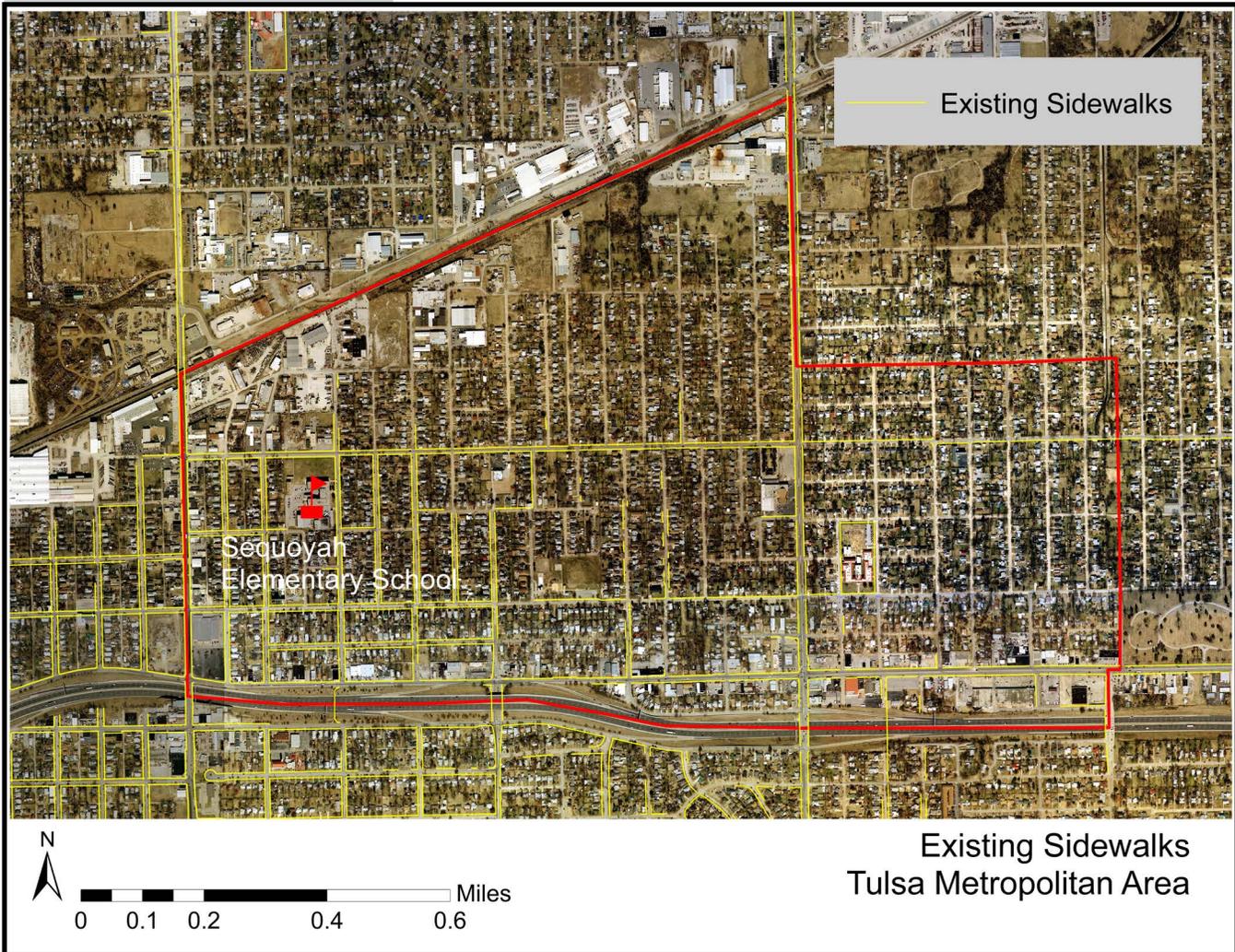
Hispanic Population

An estimated 25-30% of the population is Hispanic. The majority of the Hispanic population is concentrated around the school. To the west and south of the school the population exceeds 40% while the east side of the enrollment area represents lower percentages. This map was created using 2010 census data.



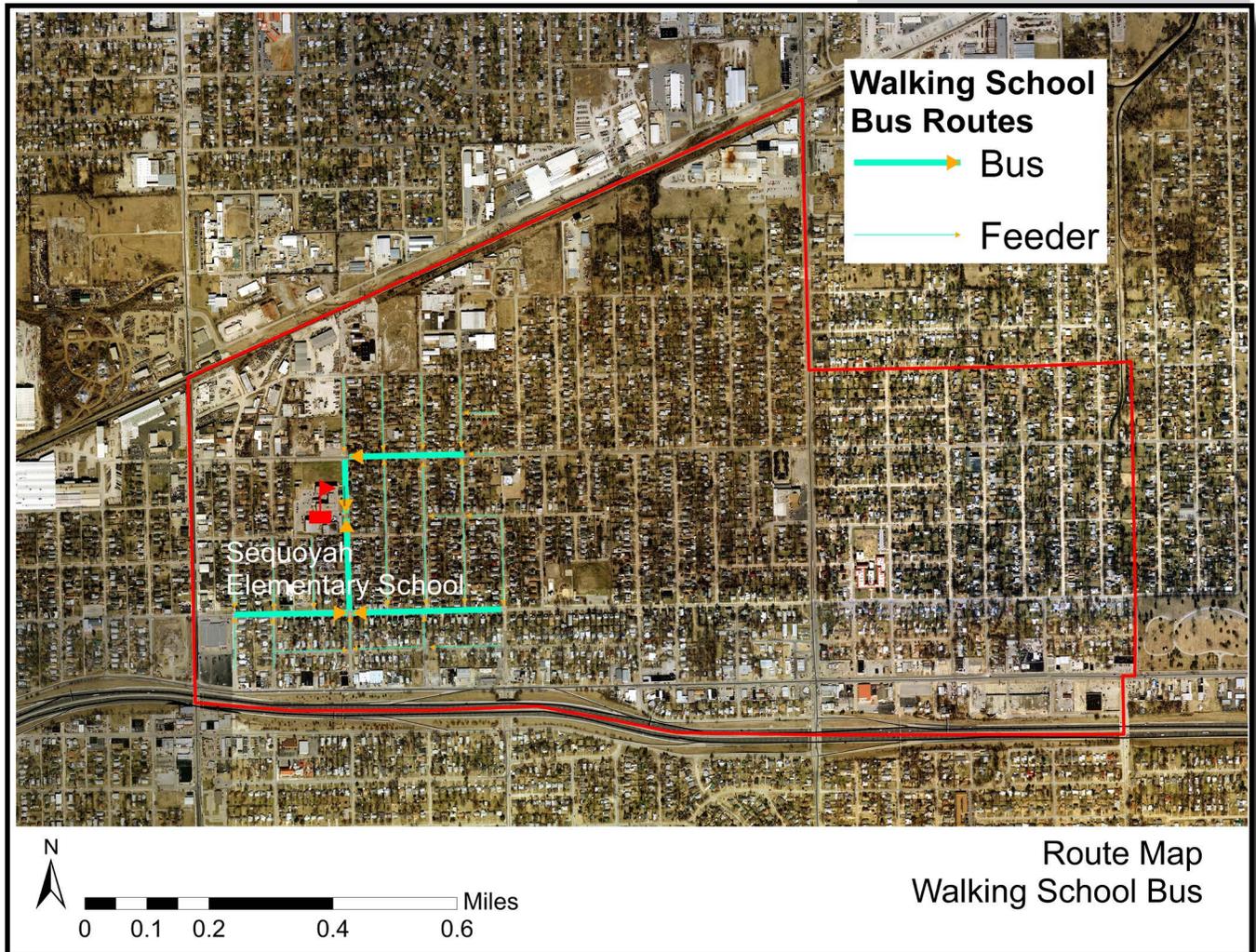
School Age Children

There are about 643 elementary school age children in the area and are generally evenly dispersed. As expected, there is a lower number of children along the northern boundary of the railroad (industrial zoning) and the southern border of I-244 (commercial zoning). This map was created using 2010 census data. This map was created using 2010 census data.



Existing Sidewalks

Sidewalks are an important structure in providing walkability to a neighborhood. A good network of sidewalks exist in the area immediately surrounding the school. Major arterial roads, Independence Avenue and Archer Street, have sidewalks on at least one side. North of Independence Avenue and East of Harvard is severely lacking in sidewalk infrastructure. This map was created using sidewalk data from the Indian Nations Council of Governments.



Walking School Bus Route

Walking School Bus routes extend east and west of the school on Independence Avenue and Archer Street. These paths extend roughly 3-4 blocks in each direction. The Northwest route is not currently being utilized due to lack of use by students but may be used again in the future if usage increases. This map was created using walking routes provided by Sequoyah Elementary School.



Paulina Baeza talking with parents at Parent Night December 3rd.



Paulina Baeza and Professor Shawn Schaefer at Parent Night December 3rd.



Students and parents signing up for free bikes at Parent Night December 3rd.

Informal Discussions with Parents and Teachers

October 1st

At the Superhero themed parent night I meet with several teachers and some volunteers from the AmeriCorps's City Year Program.

Volunteers from City Year are staffing the Walking School Bus both before and after school. For the 2015/16 school year there are 21 students signed up to walk in the bus. This is an increase from the 2014/15 school year when there were 16. One volunteer felt that if parents were involved in the program, there would be more participation. She cited parents as being protective of their kids and do not like the idea of someone they don't know watching after them.

Teachers did not know much about the Walking School Bus Program. Some said they did not promote it to their students and their parents because they did not receive any information about it. Teachers also expressed safety concerns in the neighborhood. One described "sketchy"/vacant properties as worrisome.

December 3rd

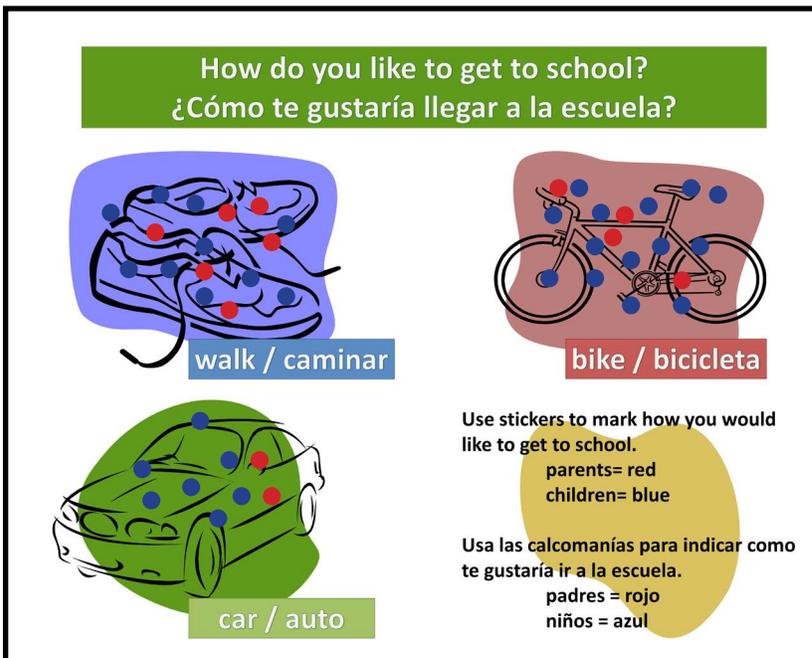
The December Parent Night was also the night the Tulsa Hub gave out free bicycles to Pre-K through 2nd graders. Space at the event was reserved for the Urban Design Studio. At the booth handouts were given away to promote walking and bicycling safety for parents and children, as well as collect data on how students were getting to school.

Activities included a route mapping exercise that ask parents and students to identify the route they take to school. This allowed researchers to visually see the most commonly used paths. Independence Avenue and Archer Street were the two most used streets but many people travel side streets as well. Most side streets do not have sidewalks which creates a barrier to walking.



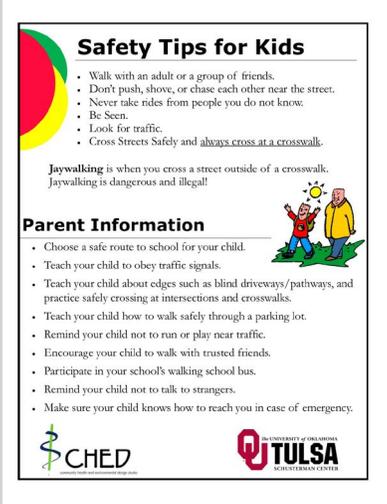
Route Map

Another poster gave students and parents the opportunity to identify how they would like to get to school. About 41 people participated. The majority of parents and students would rather use a bike or walk to school although most currently use a car.

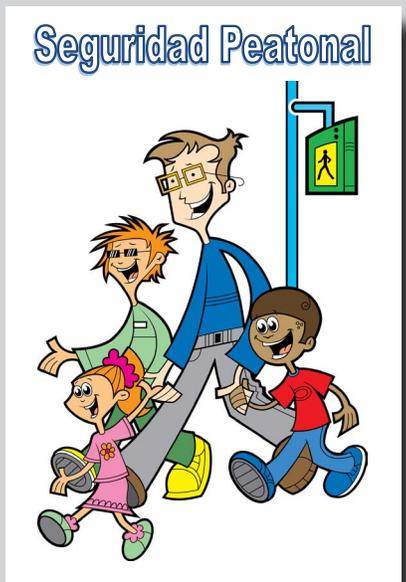


Preference Poster

Many conversations revealed that safety is a major concern for parents. Some of the issues stated include speed of traffic, drugs/drug dealers, poorly maintained homes/businesses, sex offenders and crime (robberies and shootings).



Parent Night Handout (See full document in Appendix E)



Parent Night Handout (See full document in Appendix E)

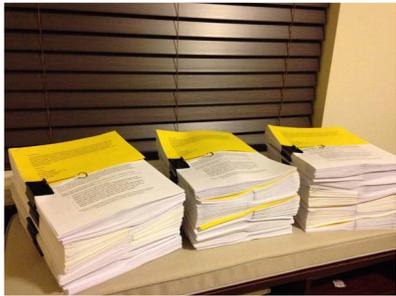
Results: Parent Survey

Survey results have a very similar ethnicity distributions as the total school enrollment population. Statistical analysis shows no significant difference between the samples. This data is representative of the overall population of Sequoyah Elementary School.

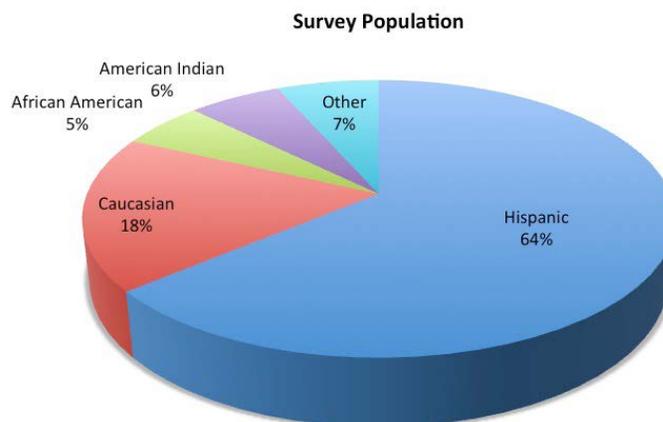
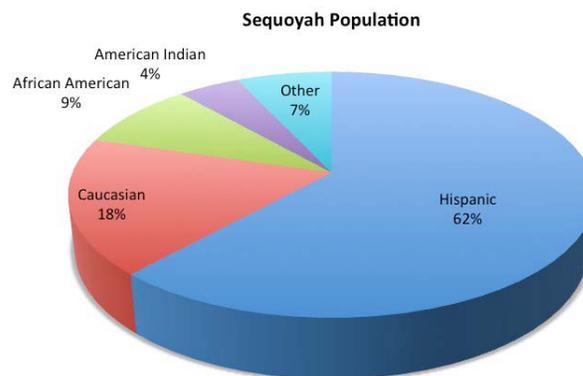
A total of 600 surveys were distributed to students and 166 were returned.

With an average of 2 children per household that completed the survey, the total number of children represented is **330**.

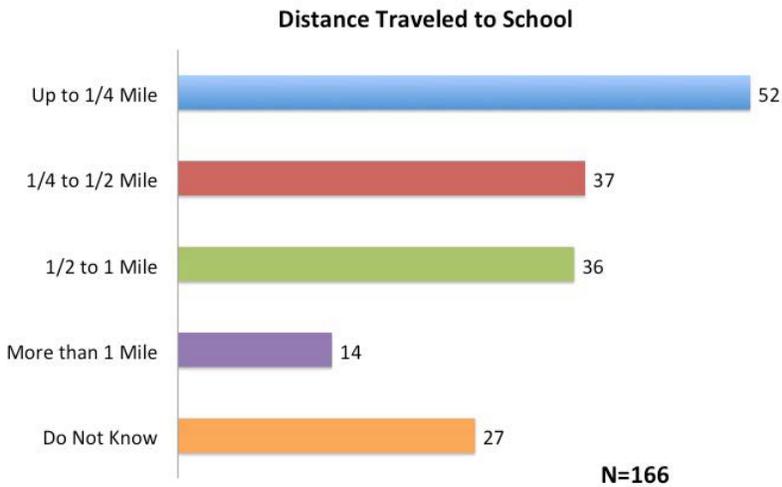
This represents **55%** of the students enrolled at Sequoyah Elementary.



600 Parent Surveys and 24 In-Class Tally Count forms ready to go!

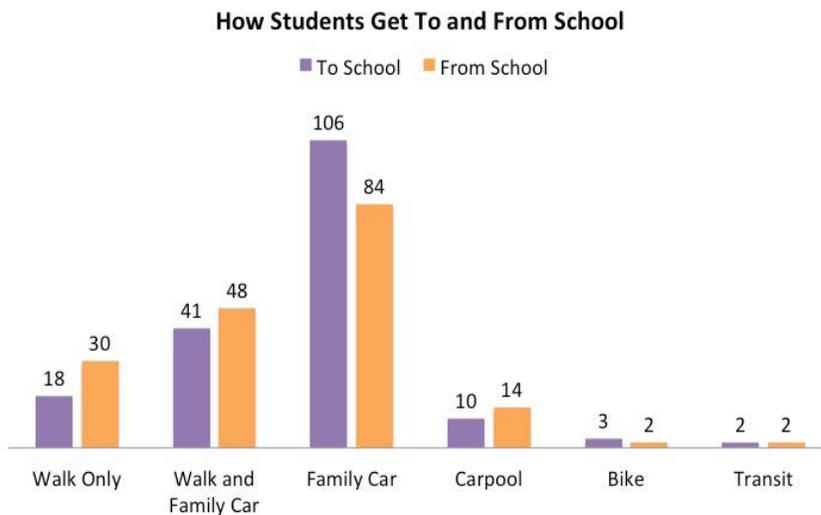


Results: Parent Survey



52% of parents who completed the survey stated that they live less than 1/2 mile from the school.

30% live between one half to one mile from the school and 16% were unsure how far away they live.

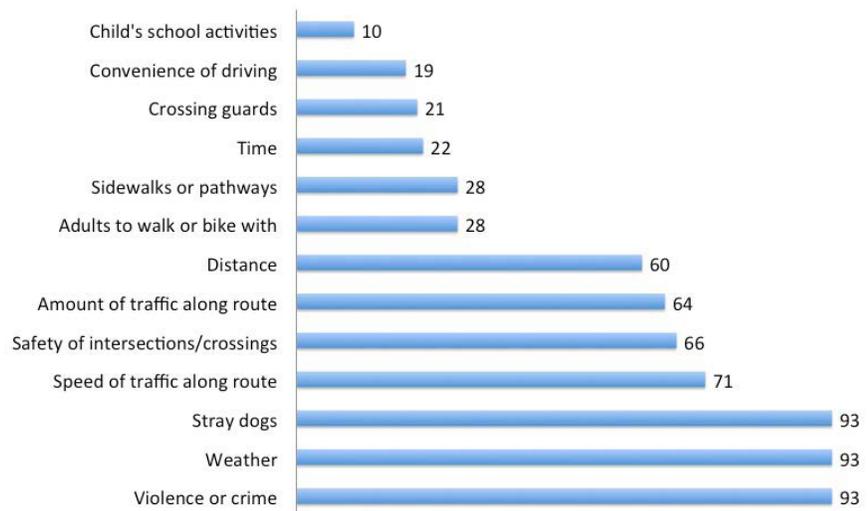


The majority of students are being driven to school and a much smaller number are arriving via carpool. The walk and family car category assumes that a combination of driving and walking are used. A small number of students are walking, most of which are using the Walking School Bus.

"We live directly across the street from the school so walking is not a big deal. If it were further than one block I would take them"
 - Parent Comment

Results: Parent Survey

What of the following issues affect your decision to allow or not allow your child to walk or bike to/from school?



"It would be good for their health, but this area is not very safe, since things happen all the time because of the kind of people in these neighborhoods are bad, vicious and drug addicts"
- Parent Comment

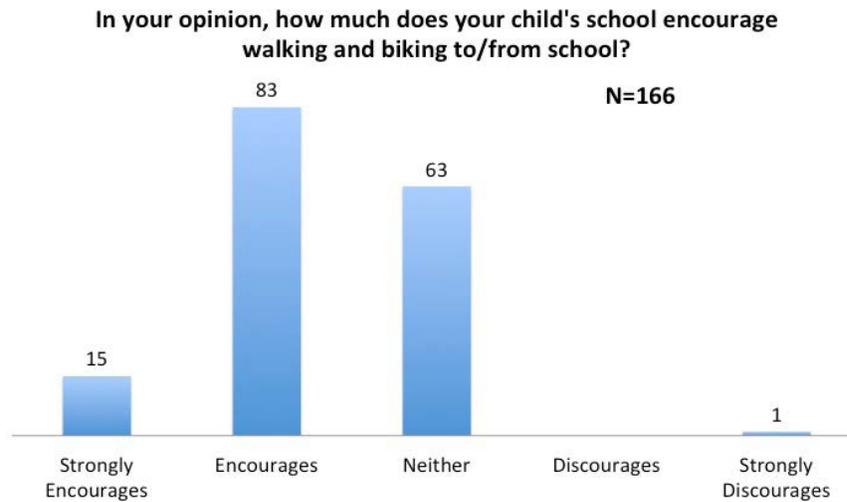
The most common obstacles to walking to school are stray dogs, weather, and violence and crime. The perception of violence seems to be higher than it actually is.

While there is a high crime rate in the area, most crime is non-violent or domestic. Parents reported drug crimes as a common occurrence although crime statistics do not support this claim.

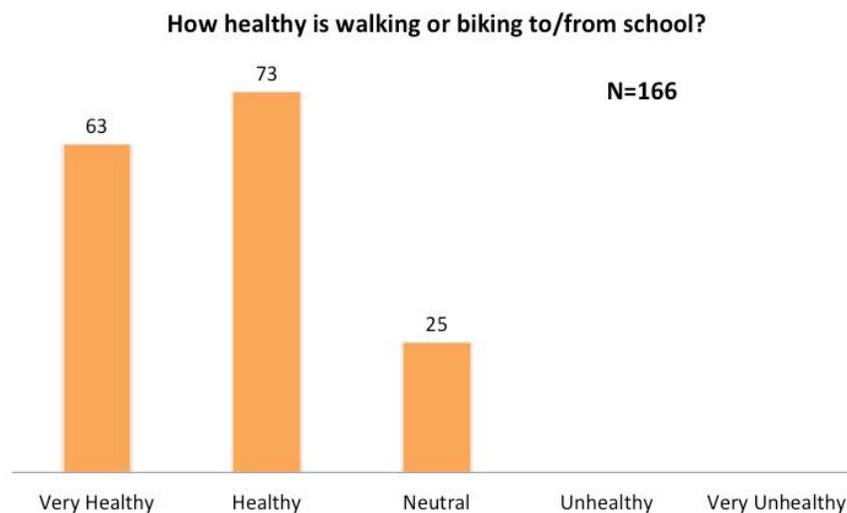
"I do want my kid to walk or bike to school, but not with the cold weather since he gets sick a lot, and I think he is still to young to go and return by himself"

- Parent Comment

Results: Parent Survey



Overall, parents feel that the school encourages walking and biking. 9% think it is strongly encouraged, 50% feel it is encouraged and 38% have no opinion either way. Only one respondent felt that the school strongly discourages walking.

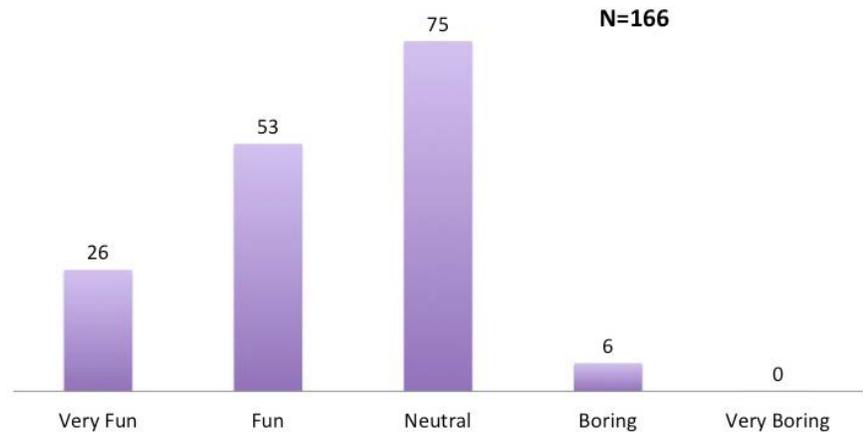


The perception of health and walking/biking is very positive. 38% of parents feel it is very healthy, 44% feel it is healthy and 15% are neutral. No responses identified walking and biking as unhealthy.

"The only things that makes me fear for the safety of my children walking to and from school are the reckless drivers picking up kids, usually parents themselves. But Sequoyah has done a very good job at providing crossing guards and safety of intersections and crossings"
- Parent Comment

Results: Parent Survey

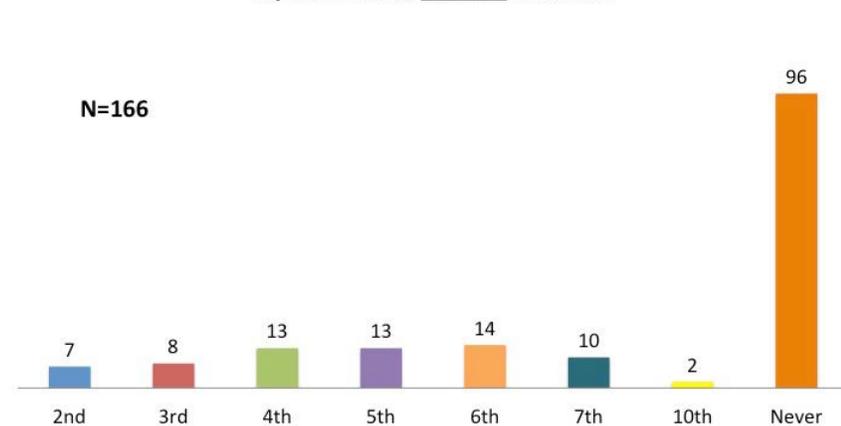
How much fun is walking or biking to/from school for your child?



45% of respondents feel that is neither fun or boring to walk or bike to school. 32% feel it is fun and 16% feel it is very fun. A very small number, 4%, think it is boring.

"I only allow my second grader to walk or bike because she has an older sibling to walk and bike with. I like the fact that the school offers bike club and encourages healthy activity"
- Parent Comment

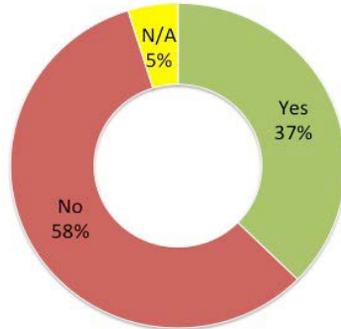
At what grade would you allow your child to walk or bike to/from school without an adult?



The majority of parents stated that they would not feel comfortable allowing their children to walk to school without an adult at any age. Of those who would feel comfortable at some point, the average grade level was 4th and 5th grade.

Results: Parent Survey

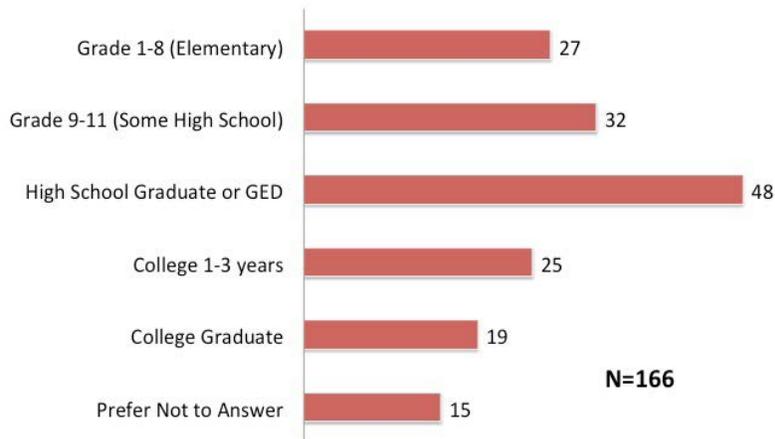
Has your child asked to walk or bike to/from school in the last year?



N=166

According to the survey, a surprising 37% of parents stated that their children have ask to walk to school in the last year. This is compared to roughly 18% who are currently walking to school.

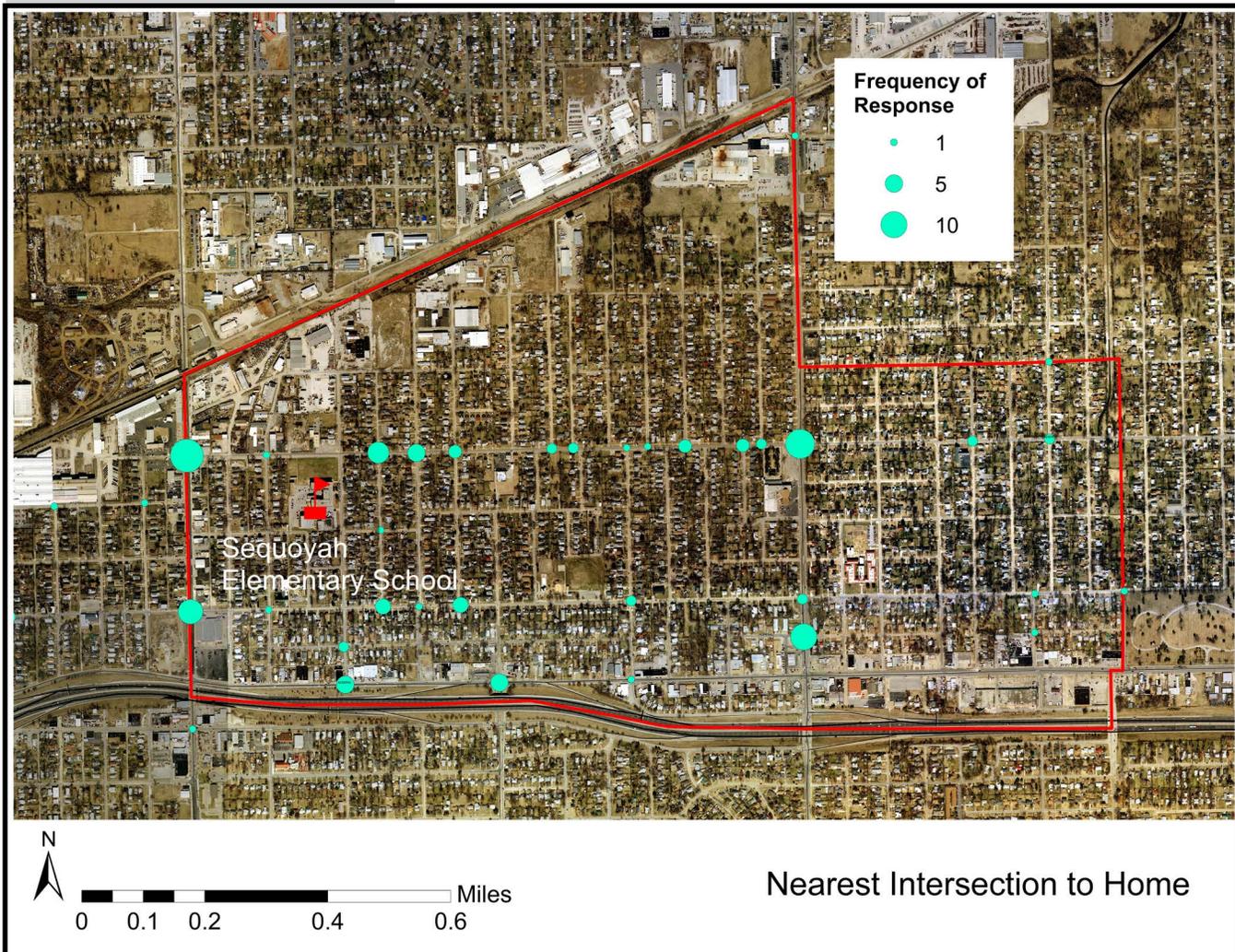
What is the highest grade or year of school you completed?



This question was ask to collect demographic data on the parents completing the survey. The large majority of parents have an education level of high school or less. Only 15% have 1-3 years of college experience and 11% are college graduates.

"I would never let my children walk or ride a bike to or from school because of crime"
- Parent Comment

Results: Parent Survey



Intersection Near Home

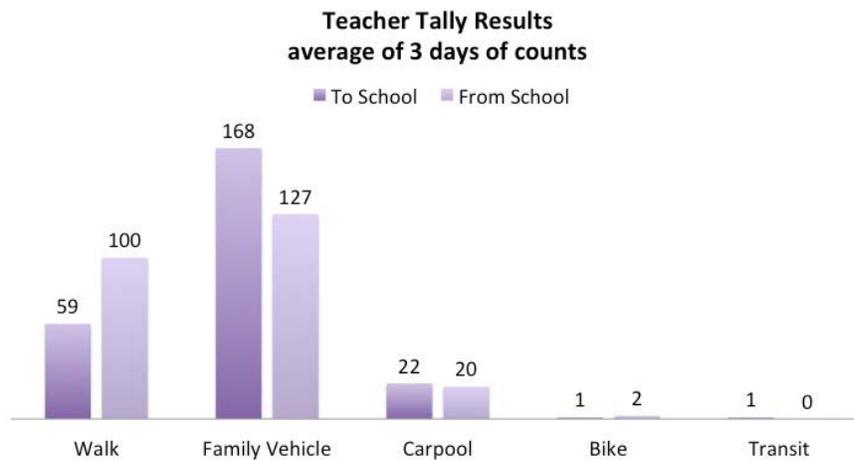
On the survey, parents were asked to identify the closest cross-streets to their home. This map identifies these locations. High concentrations of children are coming from Independence Avenue and Lewis Avenue, Independence Avenue and Harvard Avenue, Archer Street and Lewis Avenue, and Admiral Boulevard and Harvard Avenue.

Results: Teacher Tally

Teacher tallies were complete between November 30th and December 2nd.

A total of 13 out of 24 were returned.

The purpose of this exercise was to have teachers ask children how they get to and from school. The majority was by car as with the parent survey.



The number of students who said they walk was much higher in the in-class tally than in the parent survey. This may be due to differences in the definition of walking. Some students may think they are walking, even though their main form of transportation is by car. For example, walking from the car to the school entrance. Lack of definition could be caused by the age of students. Higher reports of walking were recorded by teachers of pre-k, kindergarten and first grade classes.

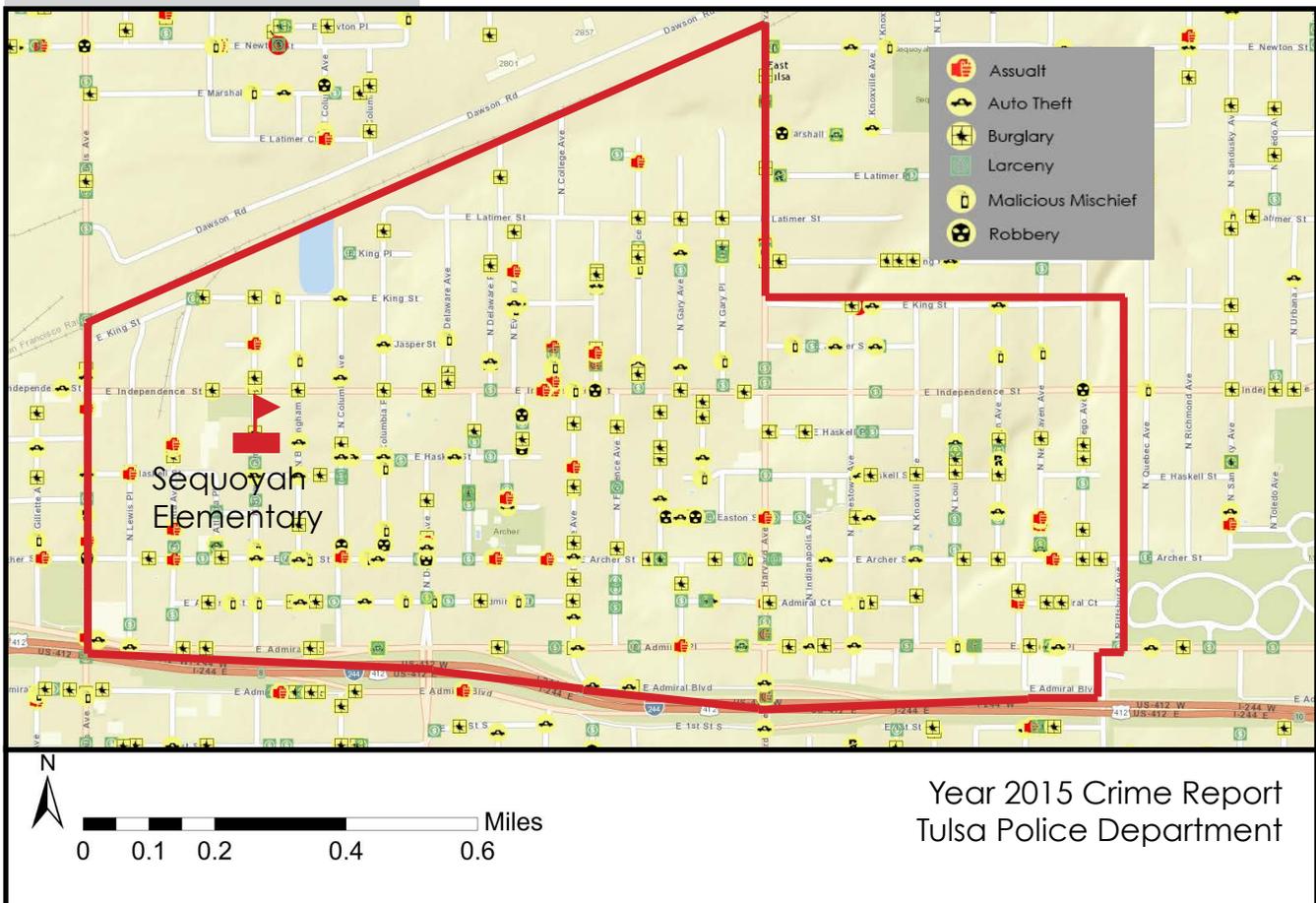
One fifth grade teacher reported abnormally high numbers of walkers as well. This could be a simple error in recording or a misunderstanding of instructions.

It should be noted that in the study by the National Center for Safe Routes to School (2011), the same discrepancy between parent-reported and student-reported data.

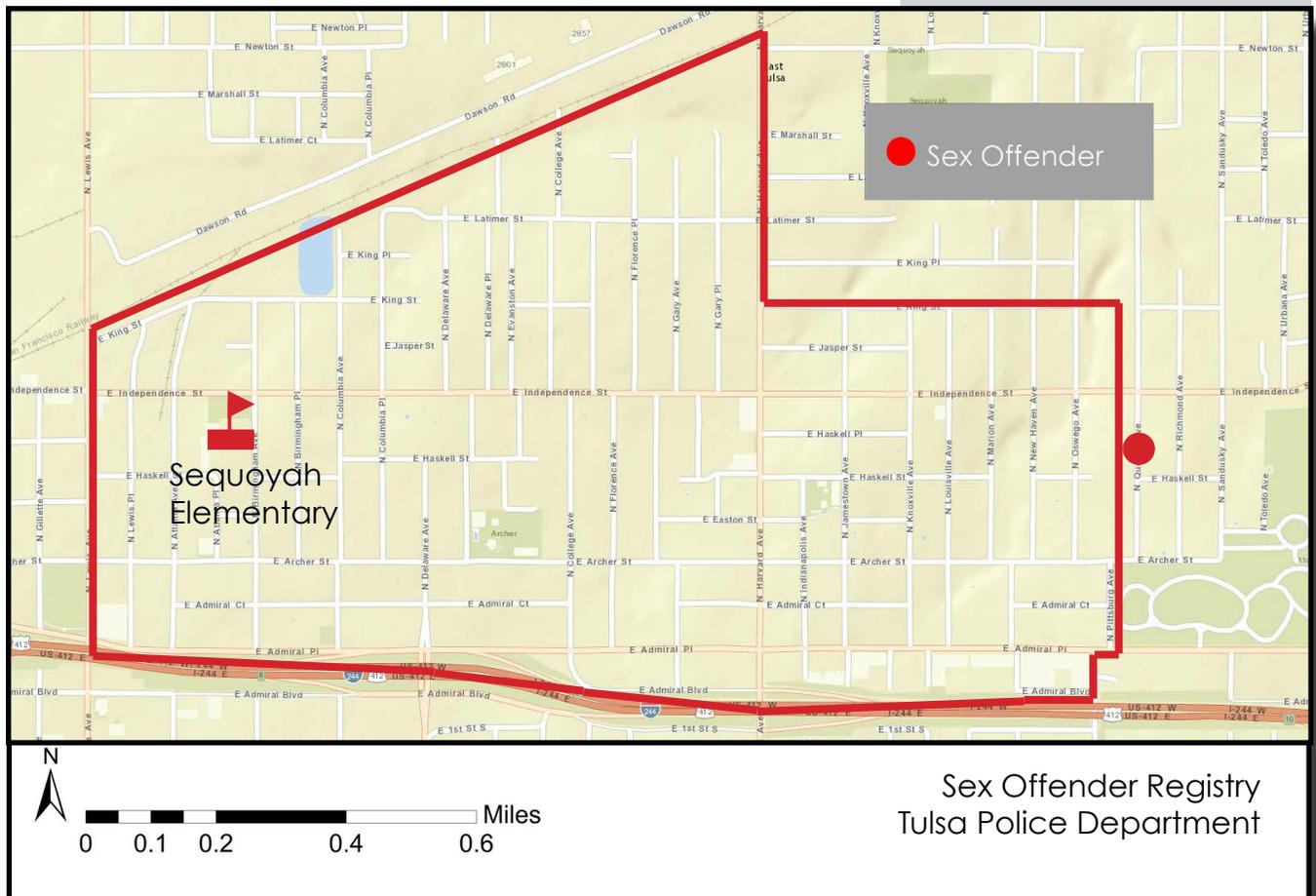
Discussion

It was clear from the parent night events that parents are very sensitive to crime in the neighborhood. Parent survey results confirmed this. The fear that something bad might happen is a huge deterrent to allowing children to walk to school. Parents reported seeing a range of criminal activity including burglary, drug deals and shootings.

According to the Tulsa Police Department's crime map, there were many instances of burglary, theft, auto theft, and larceny in 2015. Instances of violent crime are rare with the exception of assault, which seems to be limited to domestic abuse.



Sex offenders in the neighborhood were mentioned a few times in discussions with parents. There is a perception that there are a lot of sex offenders in the area and that makes parents feel uncomfortable allowing their children to walk without an adult. According to the Oklahoma Sex & Violent Offender Registry, only one individual registered lives within the school's enrollment boundary. Helping people feel safe in their neighborhood is a difficult task when they feel that crime is all around them.



Results of the parent survey are consistent with the findings of the National Center for Safe Routes to School. The survey found that the top factors that influence a parent's decision to allow students to walk/bike to school are:



Source: SRTS Guides

Parent survey results showed a significant number of parents would never feel comfortable allowing their children to walk to school without an adult. This is not unexpected given the heightened perception of violence in the neighborhood. Parents also commented on the high amount of traffic on streets, unsafe crossings and the lack of crossing guards as reasons they do not feel safe allowing children to travel on their own. The solution seems to be to encourage parents to walk with children or a large group.

Results from the SRTS also suggested three ways to promote walking and bicycling:

- The first way involves building upon the observed gains in walking. As more students walk between home and school, opportunities to develop walking school buses, “walking buddy” initiatives, and similar programs increase. As walking to school becomes a more accepted and normal daily activity, more students are likely to walk.

- The second way involves leveraging school support for walking and bicycling. Perceived school support is strongly associated with walking to/from school.
- A third method of enhancing active school travel involves encouraging families to discuss traveling to school using methods other than a car. When children asked their parents for permission to walk or bicycle to/from school, they were much more likely to walk or bicycle than children who had not asked for permission (National Center for Safe Routes to School 2013).

Promoting the Walking School Bus program would give more parents the opportunity to allow their children to walk to school and feel safe. Discussions with parents and teachers at the parent night events revealed that not many people are aware of the program, despite outreach attempts by both Sequoyah and the City Year staff.

The parent survey results provided data on where students live. Points of high concentrations of students exist outside the Walking School Bus route. Extending the route another quarter mile would give more students and parents the opportunity to participate in the program.

Residents in the area give the impression that they are isolated from one another, which seems to be feeding their fear. Creating a sense of community, with the school at the center, could have a huge impact on negating negative perceptions. Overall, parents believe that walking and biking to school is both fun and healthy and the majority of parents feel that Sequoyah is doing a good job at promoting walking and biking. Sequoyah has a great opportunity to become a community hub that brings people together.

Recommendation Overview



Slow Traffic on Major Streets

Responsible party: City of Tulsa, Tulsa Police Department



Create Safe Street Crossings

Responsible party: City of Tulsa, Neighborhood



Promote the Walking School Bus

Responsible party: Sequoyah Elementary School, City Year



Increase Neighborhood Safety

Responsible party: Neighborhood Association, Tulsa Police, Sequoyah Elementary School



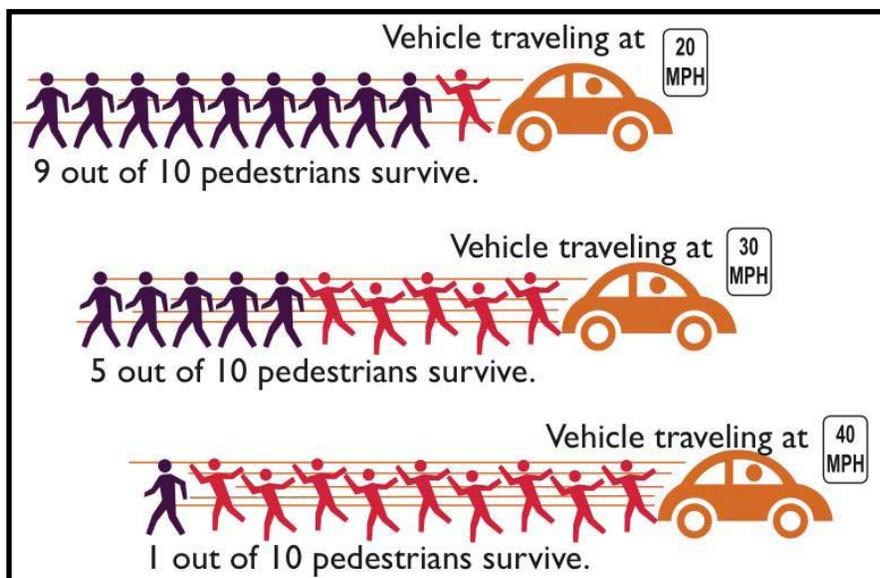
Increase Sense of Community

Responsible party: Neighborhood Association, Sequoyah Elementary School

Slow traffic on Independence Avenue and Archer Street

Reduce Speed Limit from 45mph to 20mph

- Vehicle speed is a major determinant of crash severity and is critical when a vulnerable user such as a pedestrian or bicyclist is involved. “Higher vehicle speeds increase the amount of force to be absorbed in a crash. Especially for pedestrians and bicyclists, minor increases in speed can profoundly affect crash survival rates” (Institute of Transportation Engineers).
- Studies by the Department of Transport and the Institute of Transportation Engineers found that survival rates of pedestrian crashes increase by 90% if the speed of the car is 20mph or less as compared to 40mph.



Seattle Department of Transportation Blog, 2014

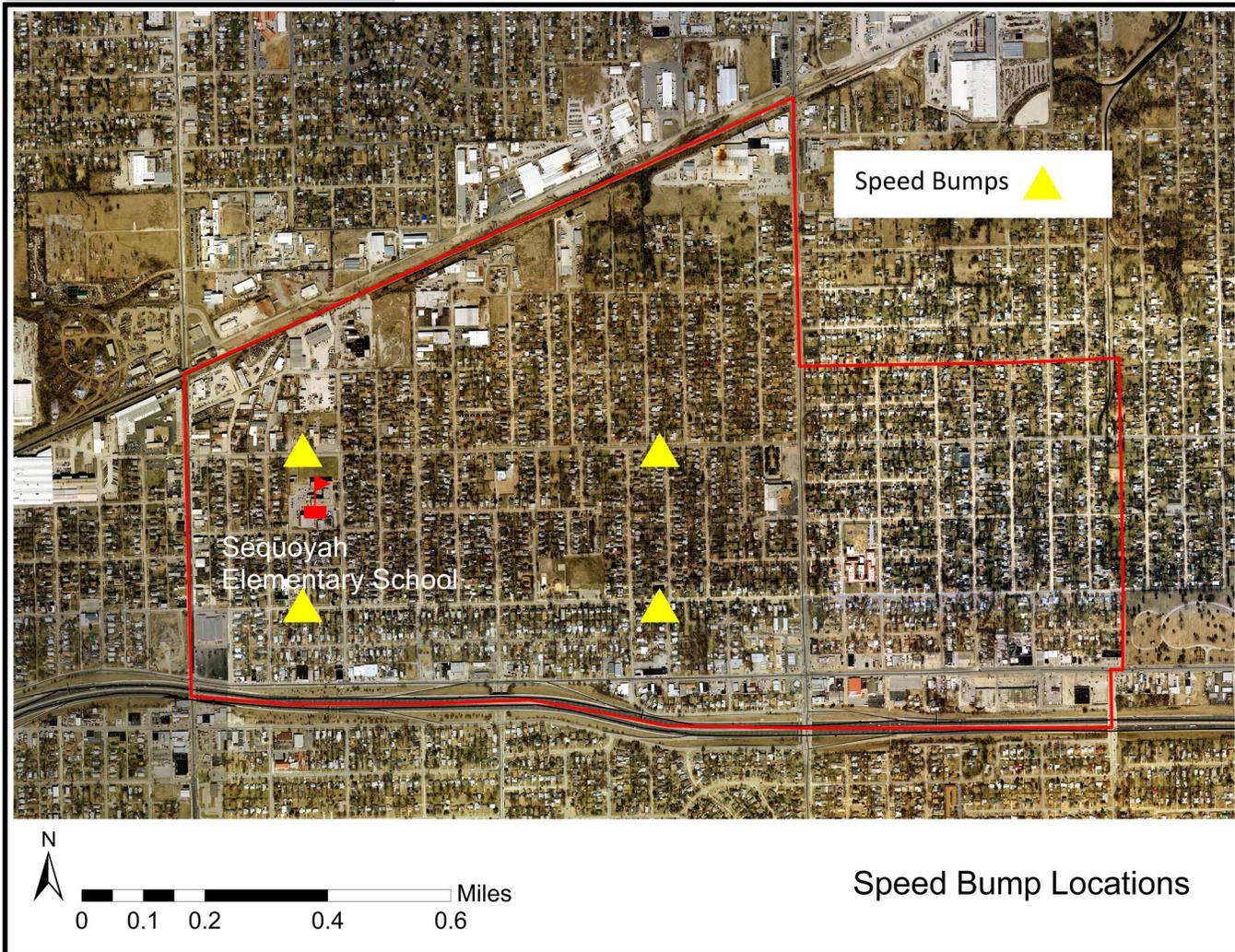
Add school zone signage on Independence Avenue and Archer Street

- There is currently only one speed limit sign near the corner of Independence and Birmingham. There is no signage that designates the area of as a school zone. Traffic flows quickly down these streets and is unsafe for children to cross.



Install speed bumps in school zone

- Speed bumps should be installed at the major crossings near the school. Bumps will slow traffic and add to the awareness of the drivers that they are in a slow speed area.



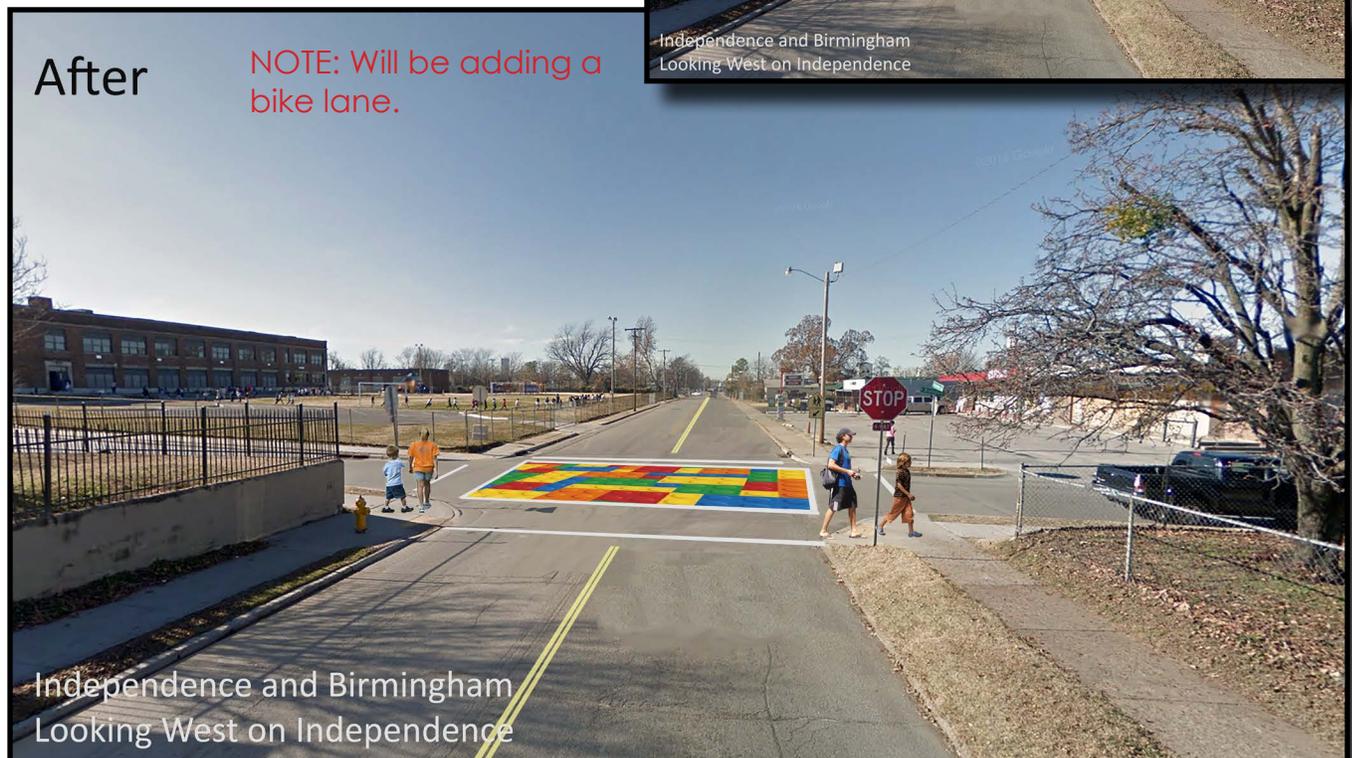
Police enforcement of speed zones

- Enforcement of new speed limits by the Tulsa Police Department will add visibility to changes and ensure traffic is slowed. Police visibility will also assist in promoting neighborhood safety which will be discussed later on.

Create Safe Street Crossings

Street Art Crossings

- The playground, driveway and sidewalks on the school property already have painted games and paths to make spaces more interesting and fun for students. Extending this concept into the neighborhood will give the neighborhood new character while connecting to the school.
- Painted crosswalks and intersections are a relatively inexpensive way to bring a community together and have the added benefit of improving safety.
- Street art crossings did not necessarily start as traffic calming devices. The goal was often to engage the neighborhood, to display culture, and to embrace the spaces that bind people together
- Cities including Portland, Ontario, Cambridge, Minneapolis, Tacoma have already begun experimenting with street art with great success.



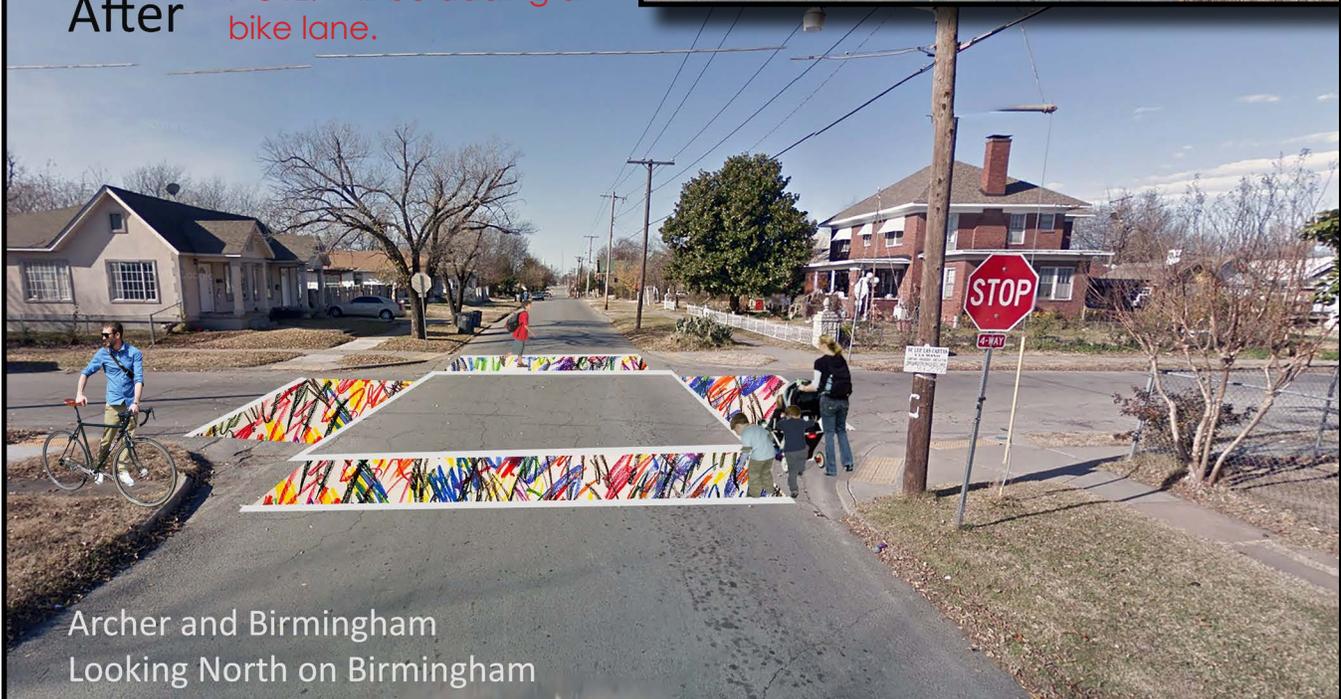
“Painting the street, murals, sculptures— basically anything that creates visual interest and surprise—also slows down vehicular traffic”.

–JM Rayburn,
(Civic Artworks)



After

NOTE: Will be adding a
bike lane.



Hire Crossing Guards

- Crossing guards would provide an increased level of safety at high-traffic intersections during the before and after school time frames. Crossing guards for Tulsa Public Schools are hired through the City of Tulsa. The school would be responsible for requesting assistance from the city.

Promote the Walking School Bus

Revise Handouts

- The current handouts distributed by Sequoyah are not visually appealing, very text heavy and provide information a level that is at a reading level above that of many parents. Revised handouts will help provide a better understanding of the Walking School Bus and how students and parents can participate.

Hold Informational meetings

- Informational meetings should be held at the beginning of each semester to update parents on Walking School Bus news and activities and to recruit parents to act as “bus drivers”.

Create WSB Facebook and/or Twitter account

- Social media accounts can be an easy and cost effective way to communicate with parents. Providing updates on the Walking School Bus location each morning and afternoon would give parents a sense of security about knowing where their child is at all times and help them to have their child ready meet the group at the correct time. Social media posts would also be used to inform parents of weather conditions and cancellation of the bus in the case of inclement weather.



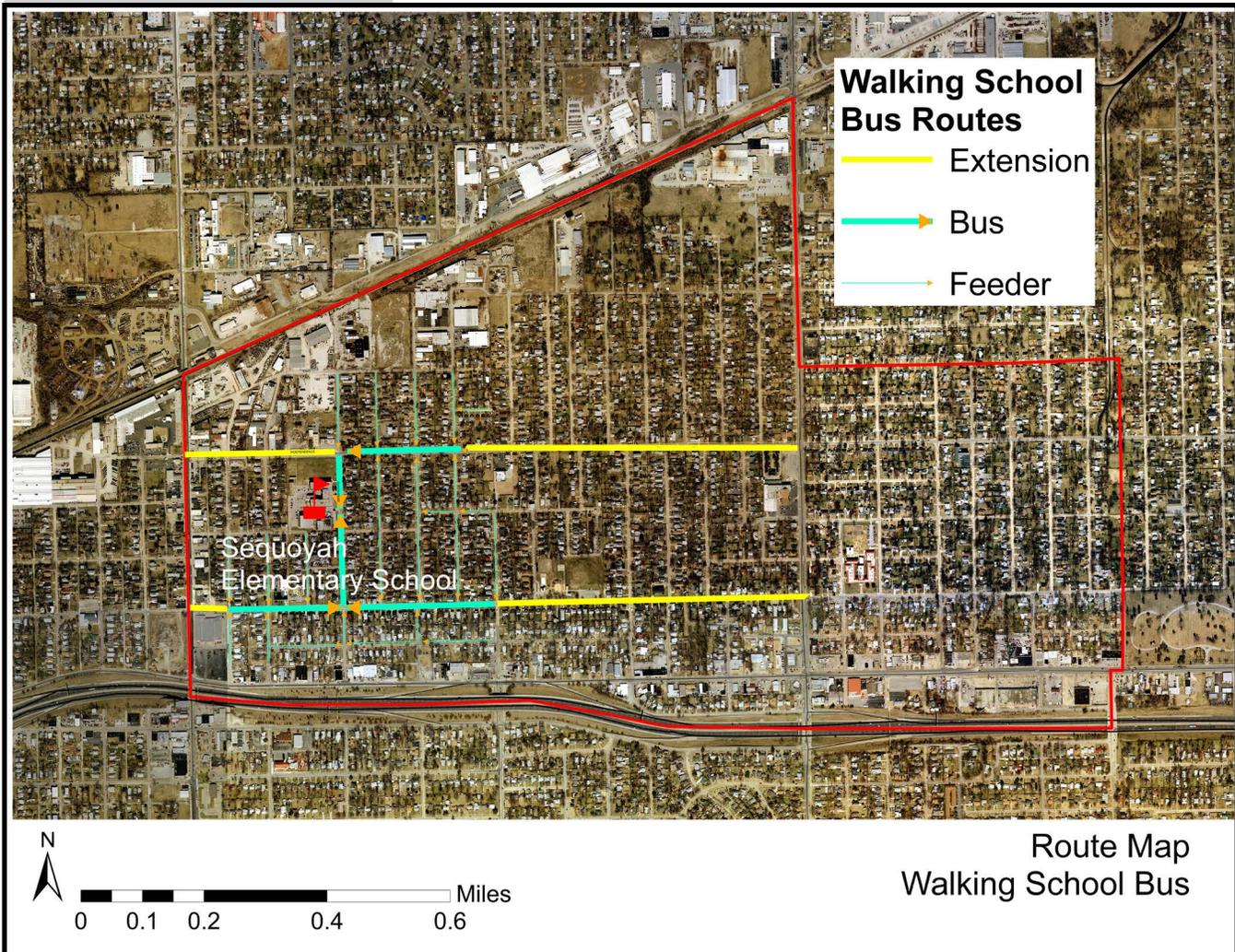
Walking School Bus Information Sheet
(See full document in Appendix F)



Walking School Bus Information Sheet:
Revised
(See full document in Appendix G)

Extend routes to higher concentration of children

- Results from the parent survey showed large concentrations of children located several blocks past the end of the eastern legs of the routes. Extending these routes would give children and parents in these areas better opportunities to participate in the Walking School Bus.



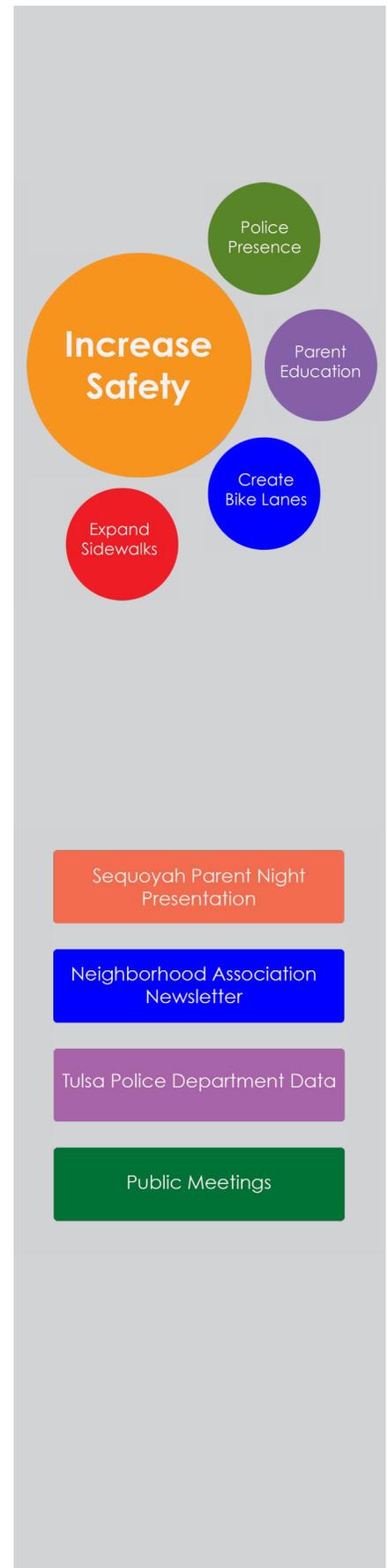
Increase Neighborhood Safety

Increased police presence

- As stated in the previous section on speed reduction, increase police presence in the neighborhood would help ensure that laws are followed, crime is deterred, and offenders are caught. Aside from these benefits, residents can feel safer knowing that the area is being patrolled on a regular basis. Having an officer outside the school both at drop-off and pick-up would allow children to get to know the officers and know that they are protected. Parents will gain a sense of security from having the authorities present.

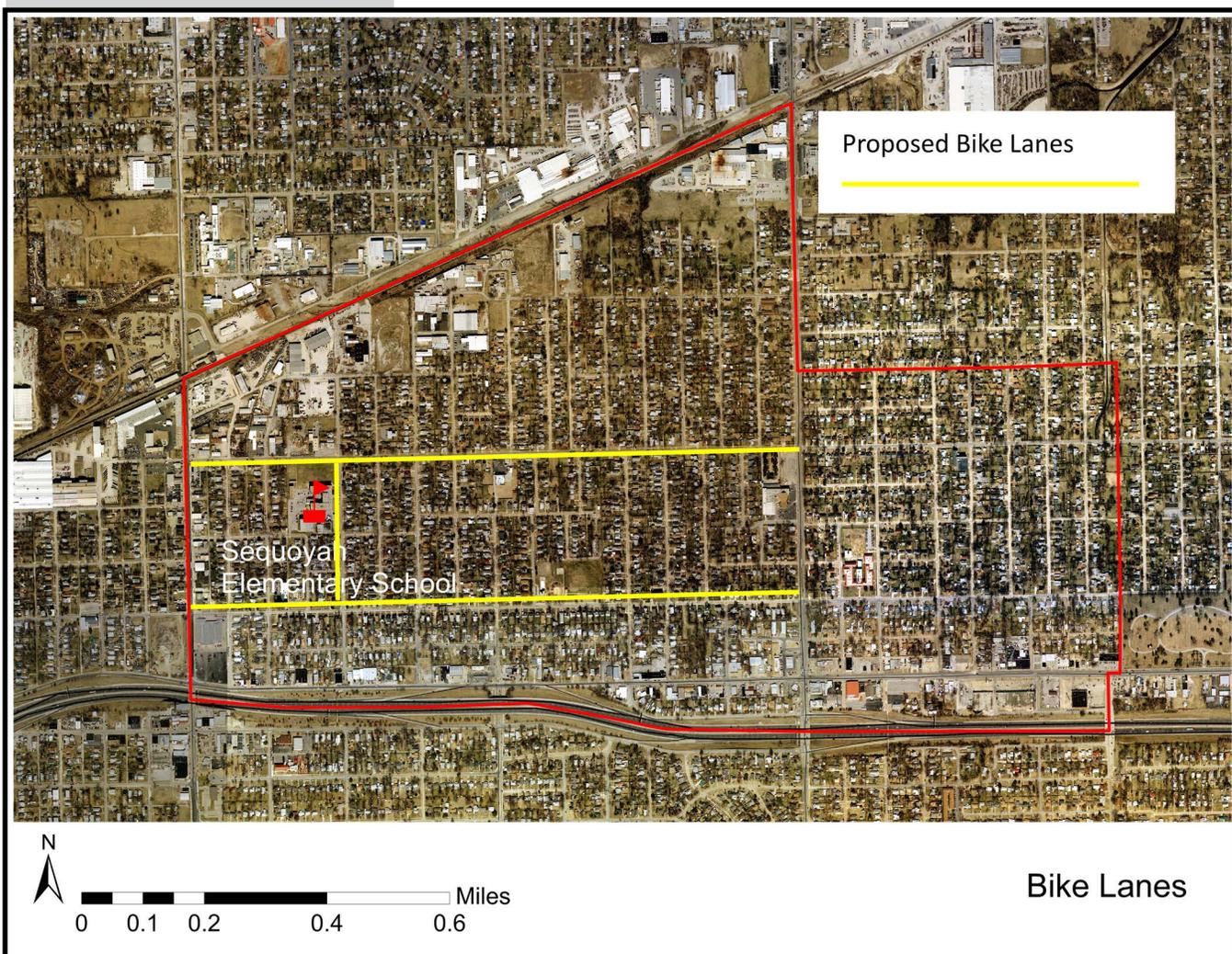
Educate parents on crime

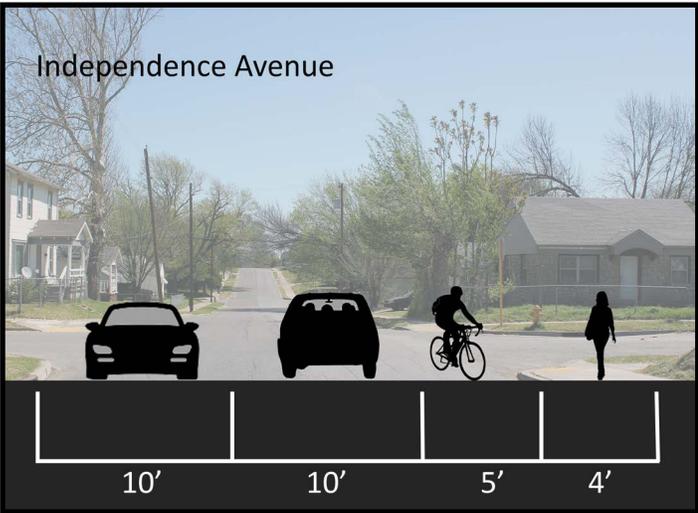
- Parents have a heightened perception of crime in the area. Providing accurate information on what crimes have taken place and what is being done to prevent them could have a positive effect of allowing people to feel safer in their neighborhood.
- Information could be provided as a handout sent home with students, or presented at Sequoyah's monthly parent nights. A community member that would be willing to create a community newsletter distributed by the Independence Heights Neighborhood Association could also take on this task. Data can be requested from the Tulsa Police Department to create these reports.
- Public meetings should be held as an opportunity for residents to voice concerns about crime and violence, as well as to come up with solutions to problems as a community. Representatives from the Tulsa Police Department should be present at these meetings and lend any assistance they



Create bicycle lanes to improve safety and promote cycling to school

- Bike lanes should be added on the South side of Independence Avenue, the North side of Archer Street and the West side of Birmingham Avenue.
- Locations for the lanes were chosen based on the Walking School Bus route and existing sidewalks.
- The three streets identified have sufficient width to support two driving lanes and a bike lane. Independence Birmingham Avenue have minimum widths of 25 feet and Archer Street has a minimum width of 28 feet.





*This configuration can also be used for Birmingham Avenue



Before

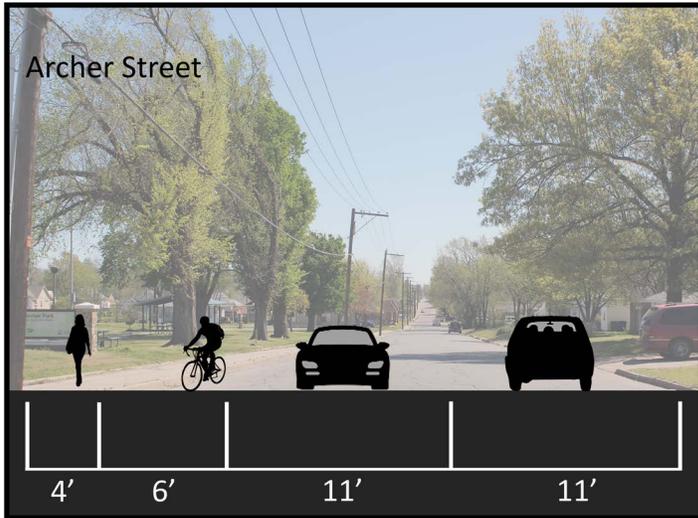
Archer Street
Looking East



After

Archer Street
Looking East

NOTE: I will be changing this crossing to something that is not a game. I don't want to promote playing in the street!



Archer Street

4'

6'

11'

11'

Expand and improve sidewalk system

- The area has some existing sidewalks around the school and along main thoroughfares. To increase safety for children walking along these roads, it is recommended to expand the current sidewalk infrastructure. Two phases of expansion address areas for improvement in order of need:
 - Phase I: Fill in and connect missing sections of sidewalks in the area immediately surrounding the school. Complete sidewalk on the southern side of Archer Street to accommodate the walking school bus route.
 - Phase II: Add sidewalk infrastructure to smaller, feeder streets, which lead to the larger thoroughfares.

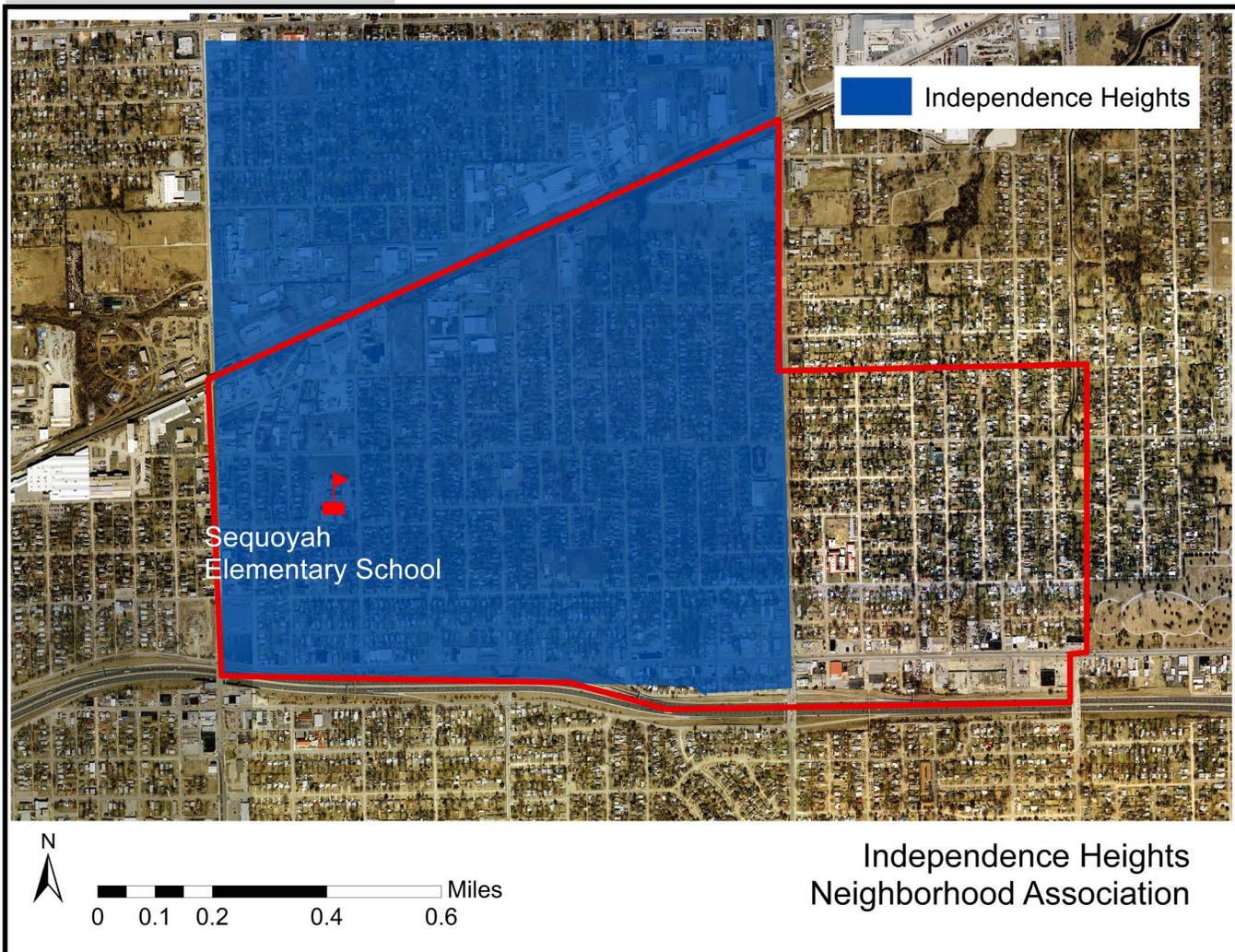


Increase Sense of Community

The City of Tulsa provides services for neighborhood associations such as leadership development and training, neighborhood liaison assistance and enhancement team support, dumpsters for neighborhood cleanups, and beautification grants (City of Tulsa).

Activate neighborhood association

- The side of the enrollment area west of Harvard Avenue is part of the Independence Heights Neighborhood association. Thus far, the association has remained inactive but could provide a host of benefits for the neighborhood if it were to be activated. An active neighborhood association could take on many of the projects recommended in this report (e.g., neighborhood newsletter, Walking School Bus promotion and acting as liaison to the city for collaborative projects).



Use vacant lot across from school as community space

- Making use of the vacant lots across from the school is a great way to promote Sequoyah as a part of the community. The reading garden proposed would act as an extension to the school and as a place where families can go to spend time outdoors.
- The lot directly across from the front door of the school has a fair market value of \$7,000 (Tulsa County Assessor). The neighborhood association, parent-teacher association or a philanthropic donor, could purchase this land. Creating the reading garden space could become a community activity where residents develop vested interest in maintaining the garden.



Sequoyah Reading Garden



Before

Birmingham Avenue
Looking South



After

Birmingham Avenue
Looking South

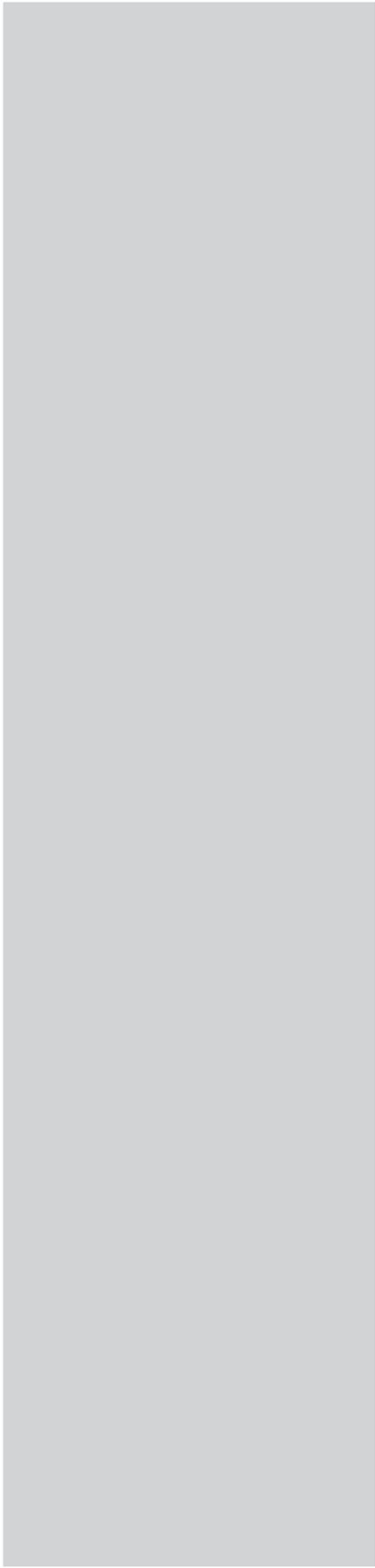
Joint use agreement between Sequoyah Elementary School and the City of Tulsa

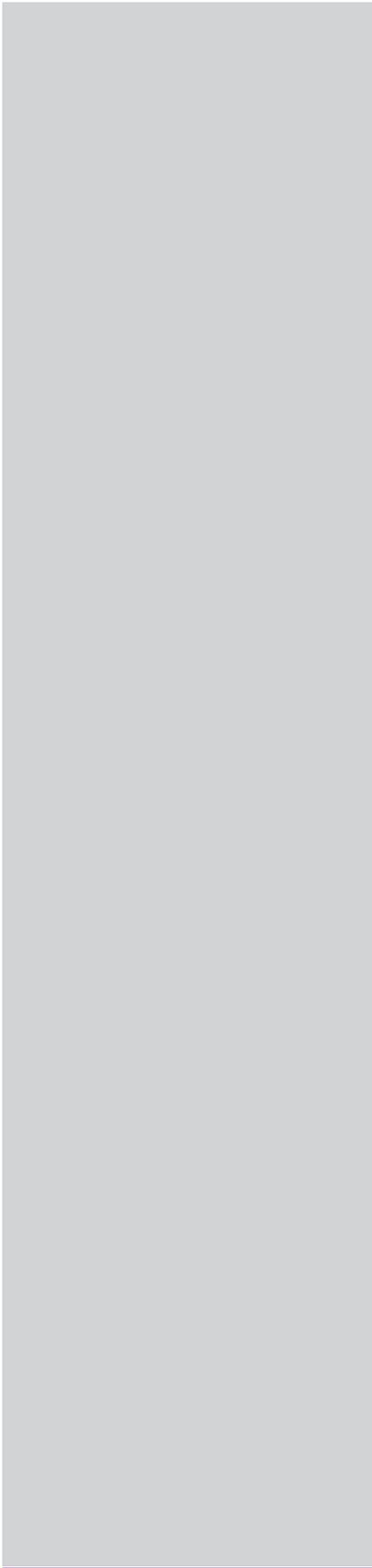
- A joint use agreement is “a formal agreement between two separate government entities—often a school and a city or county—setting forth the terms and conditions for shared use of public property or facilities” ([Change Lab Solutions](#)).
- The benefit to facilitating this agreement would be seen in the increased sense of community space and in having a policy in place to deal with vandalism and liability issues. As of now, after school hours the playground is available to the community and indoor facilities are locked not.



Entrance to playground open after hours

Summary





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Weinhold, B. 2011. "Children's Health: School Siting: EPA Says Location Matters". Environmental Health Perspectives, 119(1), A19.

Appendix A: IRB Application

1.0 General Information		
1.1 *Enter the full title of your study:		
Active Transportation Analysis for Sequoyah Elementary School		
1.2 *Enter the short title you would like to use to reference the study:		
Sequoyah Elementary School		
2.0 Add Department(s)		
2.1 List of Departments associated with this study:		
Primary Dept?	Department Name	
<input type="checkbox"/>	NC - NC - Norman Campus Student	
<input type="checkbox"/>	NC - NC - College of Architecture	
3.0 Assign key project personnel(KSP) access to the project *The current project status does not allow for changes to the Key Study Personnel. If you wish to change the Key Study Personnel, please contact the IRB.		
3.1 *Please add a Principal Investigator for the project:		
Amanda Lynn Yamaguchi		
3.2 If applicable, please select the Research Staff personnel:		
A) Additional Investigators		
B) Research Support Staff		
<input type="checkbox"/>	Beatriz Paulina Baeza Pinal Other	
3.3 *Please add a Project Contact:		

1.0 General Information

1.1 *Enter the full title of your study:

Active Transportation Analysis for Sequoyah Elementary School

1.2 *Enter the short title you would like to use to reference the study:

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2.0 Add Department(s)

2.1 List of Departments associated with this study:

Primary
Dept?

Department Name

- **NC** - NC - Norman Campus Student
- **NC** - NC - College of Architecture

3.0 Assign key project personnel(KSP) access to the project

***The current project status does not allow for changes to the Key Study Personnel. If you wish to change the Key Study Personnel, please contact the IRB.**

3.1 *Please add a Principal Investigator for the project:

Amanda Lynn Yamaguchi

3.2 If applicable, please select the Research Staff personnel:

A) Additional Investigators

B) Research Support Staff

- Beatriz Paulina Baeza Pinal
- Other

3.3 *Please add a Project Contact:

- 01. Shawn M Schaefer, MA
- 11. Amanda Lynn Yamaguchi

The Project Contact(s) will receive all important system notifications along with the Principal Investigator. (e.g. The project contact(s) are typically either the Study Coordinator or the Principal Investigator themselves).

3.4 If applicable, please add a Faculty Advisor:

Shawn M Schaefer, MA

4.0 4.0-Institutional Review Board (IRB) Office

4.1 Select the appropriate office to initially receive this application:

- Health Sciences Center IRB Office (Includes Tulsa Campuses affiliated with the HSC)
- Norman Campus IRB Office (Includes Tulsa and Cameron campuses affiliated with the NC)

5.0 25-NC Type of Submission

5.1 Select the type of submission you wish to complete:

- Study Application / Research Application
- Protocol Development Application
- Determination of Human Subjects Research Worksheet

6.0 100-Key Study Personnel (KSP) Information

6.1 Click the "Add a row" button to add a row, then select a member of your KSP and list the research responsibilities and availability. Click the button again to add another row until you have a row for each KSP. This table must reflect each person listed in Section 3.0.

Name	OU Capacity/Position		This person is trained and has adequate time to:			
Key Study Personnel : Yamaguchi,	<input type="checkbox"/> Faculty <input type="checkbox"/> Adjunct Faculty <input checked="" type="checkbox"/> Graduate Student	<input type="checkbox"/> Fellow <input type="checkbox"/> Resident <input type="checkbox"/> Intern	<input checked="" type="checkbox"/> Screen / Recruit <input checked="" type="checkbox"/> Obtain Consequence	<input checked="" type="checkbox"/> Conduct Follow-up <input checked="" type="checkbox"/> Manage/Monitor Data	<input type="checkbox"/> Administer Drug / Device <input type="checkbox"/> Dispense Drug / Device	<input type="checkbox"/> Other, describe: <input type="text"/> If applicable

<p>Amanda Lynn Degree / Credential s:</p> <p>MLIS</p>	<p><input type="checkbox"/> Undergradu ate Student</p> <p><input type="checkbox"/> Staff</p>		<p>nt</p>		<p><input type="checkbox"/> Advise / Consult</p> <p><input type="checkbox"/> Access to de- identifie d data / samples only</p>	<p>, indicate this individual' s affiliate institution (e.g., DMEI, VAMC, Cameron, etc.)</p>
<p>Key Study Personnel :</p> <p>Schaefer, Shawn M, MA Degree / Credential s:</p>	<p><input checked="" type="checkbox"/> Faculty</p> <p><input type="checkbox"/> Adjunct Faculty</p> <p><input type="checkbox"/> Graduate Student</p> <p><input type="checkbox"/> Undergradu ate Student</p> <p><input type="checkbox"/> Staff</p>	<p><input type="checkbox"/> Fellow</p> <p><input type="checkbox"/> Reside nt</p> <p><input type="checkbox"/> Intern</p>	<p><input checked="" type="checkbox"/> Scree n / Recrui t</p> <p><input checked="" type="checkbox"/> Obtain Conse nt</p>	<p><input checked="" type="checkbox"/> Conduct Follow-up</p> <p><input checked="" type="checkbox"/> Manage/Mon itor Data</p>	<p><input type="checkbox"/> Administ er Drug / Device</p> <p><input type="checkbox"/> Dispens e Drug / Device</p> <p><input type="checkbox"/> Advise / Consult</p> <p><input type="checkbox"/> Access to de- identifie d data / samples only</p>	<p><input type="checkbox"/> Other, describ e:</p> <p>If applicab le, indic ate thi s individ ual's af filiate institut ion (e.g., DMEI, VAMC, Cameron, etc.)</p>
<p>Key Study Personnel :</p> <p>Baeza Pinal, Beatriz Paulina Degree / Credential s:</p>	<p><input type="checkbox"/> Faculty</p> <p><input type="checkbox"/> Adjunct Faculty</p> <p><input checked="" type="checkbox"/> Graduate Student</p> <p><input type="checkbox"/> Undergradu ate Student</p> <p><input type="checkbox"/> Staff</p>	<p><input type="checkbox"/> Fellow</p> <p><input type="checkbox"/> Reside nt</p> <p><input type="checkbox"/> Intern</p>	<p><input type="checkbox"/> Scree n / Recrui t</p> <p><input type="checkbox"/> Obtain Conse nt</p>	<p><input type="checkbox"/> Conduct Follow-up</p> <p><input type="checkbox"/> Manage/Mon itor Data</p>	<p><input type="checkbox"/> Administ er Drug / Device</p> <p><input type="checkbox"/> Dispens e Drug / Device</p> <p><input type="checkbox"/> Advise / Consult</p> <p><input type="checkbox"/> Access to de- identifie d data / samples only</p>	<p><input checked="" type="checkbox"/> Other, describ e:</p> <p>Docume nt Translat or</p> <p>If applicab le, indic ate thi s individ ual's af filiate institut ion (e.g., DMEI, VAMC, Cameron, etc.)</p>

6.2 If any of the individuals listed above do not have adequate time to perform their research activities, provide the name of the individual and an explanation as to how this is being addressed:

(Additionally, provide name discrepancies for HRPP training in this text box.)

6.3 Describe the process used to ensure that all persons assisting with the research are adequately informed about the protocol and their research-related duties and functions.

Weekly meetings with the faculty advisor will ensure that the project stays on track. Sequoyah Elementary School Administration will be consulted weekly to provide information and share results.

6.4 Are there any non-OU collaborating researchers involved with this study (and this study is not an industry-sponsored study)?

Yes • No

6.5 By checking the box below you verify there is an adequate number of qualified research personnel to fulfill all necessary roles of the study.

I verify there is an adequate number of qualified research personnel to fulfill all necessary roles of the study.

6.6 Norman Campus Researchers Only: Are any of the investigators noted above currently associated with another institution?

Yes • No

If YES, please provide the name of the KSP and the other institution.

7.0 300-Primary Focus / Nature of Research

7.1 The primary focus / nature of the research is:

- Bio-Medical/Clinical
- Social/Behavioral

8.0 305-Use of Human Cell Lines

8.1 Does the research involve use of human cell line(s) and/or human cloned DNA/RNA?

Yes • No

9.0 310-Research Design / Project Abstract

9.1 Provide a brief summary for each of the items below:

Purpose and/or hypothesis:

This project will look at Sequoyah Elementary School in the Tulsa Public Schools district to identify reasons for inactivity in school children and create interventions to help increase activity within the community. This study will identify features in the built environment that make walking to school difficult. Identifying existing barriers in Tulsa school communities can lead to environmental interventions that may increase opportunities for outdoor activity.

Experimental design:

The entire enrollment area of the school will be incorporated into the study. The study area will be analyzed using school enrollment boundaries, demographic information, sidewalk systems, neighborhood safety statistics and any other information that may be helpful. The final output of this project will be a list of changes to the built environment for the Sequoyah Elementary School community. The information will be shared through a written report to be shared with the school administration.

Proposed procedure:

Data will be collected using two separate methods.

1. Parent surveys with attached information document will be sent home with children and returned to teachers. This will give parents a chance to provide information on deterrents to opportunities for active travel to school. A modified version of a survey used by the "Safe Routes to School" initiative for this purpose will be used. English and Spanish forms will be made available. Survey forms will be delivered to teachers by the PI. Forms returned by students will be held by the teachers until retrieved by the PI.
2. Short, in-class tallies will be given by teachers to tally the number of students walking home, being picked up by car or carpool. These surveys should only take a couple minutes and only need to be done for three days. This survey is also used by the "Safe Routes to School" initiative.

Importance of knowledge reasonably expected to result from the research:

The findings of this investigation is expected to provide valuable information on why children are not walking to school. With this information, recommendations for changes can be drafted to create a better walking environment for Sequoyah Elementary School and the surrounding community.

9.2 Has this research been previously submitted to the IRB?

Yes No

If YES, provide the IRB number previously associated with this research:

9.3 If the research involves more than minimal risk, describe the plan for monitoring the data collected to ensure the safety of participants.

There is a risk of student surveys being seen by other students and school faculty/staff. Surveys do not include names and only ask for the closest cross-street near where the student lives. The risk of sharing identifying information is minimal.

9.4 If you are using an online survey, enter the URL (link) to the survey in the box below and remember to upload a copy of the survey in the upload section at the end of this application.

<input type="text"/>	
----------------------	--

10.0 320-Participant Contact

10.1 Does your research involve direct interaction with potential participants?

Including, but not limited to:	
<ul style="list-style-type: none">• Obtaining Informed Consent• Conducting Focus Group Activities• Using Surveys/Questionnaires (paper as well as web-based)• Telephone Interactions	
<input type="radio"/> Yes <input type="radio"/> No	

10.2 Does your research involve review or analysis of pre-existing (retrospective) records / data / biological specimens?

<input type="radio"/> Yes <input type="radio"/> No	
--	--

11.0 900-Social Behavioral/Student Studies

11.1 Is this research considered a thesis or dissertation?

<input type="radio"/> Yes <input type="radio"/> No	
--	--

11.2 Does your research involve deception?

<input type="radio"/> Yes <input type="radio"/> No	
--	--

11.3 Are you conducting the research outside the United States?

<input type="radio"/> Yes <input type="radio"/> No	
--	--

12.0 1300-Radiation Exposure

12.1 Does the research involve the use of ionizing radiation?

<input type="radio"/> Yes <input type="radio"/> No	
--	--

13.0 1400-Institutional Biosafety Committee

13.1 Does the research involve the administration or transfer of recombinant DNA, microorganisms, viruses, or biological toxins to humans?

<input type="radio"/> Yes <input type="radio"/> No	
--	--

14.0 1500-Multiple Sites

14.1 Is this a multi-center study?

--	--

Yes No

If YES, has information management regarding risk and interim results reporting been addressed in sufficient detail in the protocol?

Yes No

15.0 1600 - Study Sites

15.1 Facilities

Describe the facilities/equipment available for this study (for example: address where consent will take place, where follow-up appointments will take place, any laboratory facilities/equipment anticipated, use of clinic facilities):

In class surveys and informal observation will take place at Tulsa Public School's Sequoyah Elementary School (724 North Birmingham Avenue Tulsa, OK 74110). Data will be analyzed at the University of Oklahoma-Tulsa in the Urban Design Studio (4502 E 41st St Tulsa, OK 74135).

15.2 What is the site of the research or data collection? (Check all that apply.)

Campuses

- OU Norman Campus
- OU HSC Campus
- OU Tulsa-Norman
- OU Tulsa-HSC

Affiliates

- Cameron
- VA OKC
- VA Muskogee
- DMEI
- OMRF
- OFDR
- OU Medical Center
- Tulsa Cancer Institute
- Rogers State University

Other

- Non-OU Site

16.0 1610-Non OU Sites

16.1 Non-OU Affiliated Site Information:

(If you have already entered a non-OU site in a previous section, you do not need to enter the same information again; save and continue to the next section.)

Click "Add a new row" to enter information for a site. Click it again to add a second site and again and again for a third, a fourth, etc.

--

Site Name:

Sequoyah Elementary School

Contact Name:

Dianna Potts

Contact's Email:

pottsd@tulsaschools.org

Phone:

918-746-9360

The research at this site will be reviewed by:

- Non-affiliated site's IRB or private IRB.
- The site is not engaged in human research and has provided a letter of support. Upload the letter of support at the end of the application.
- The site is requesting OU to be the IRB of record for this study. (You must provide justification for this request in the text box below.)

If you noted above that the other institution is requesting OU to be the IRB of record, please provide justification for this request.

The site has no IRB.

Has the Non-OU Site's IRB approved this study?

- Yes / In Progress
- No
- Not applicable

Note: If the non-OU site's IRB approval letter is available now, attach it at the end of the application. If the IRB approval letter is not yet available, submit it once you receive it. Or, if the other site is not engaged in human subjects research, attach the letter of support at the end of the application.

17.0 1700-Funding /Support Information

17.1 Check all of the appropriate boxes for funding / support sources for this research. Include pending funding source(s).

- OU Internal/Departmental (Check this if you are not receiving external funding.)

- External (Industry/State/Federal/Non-Profit)
- Direct / Indirect Federal Agency Funding (Depts. of Defense, Education, Energy, or Justice, or EPA)

(Direct vs. Indirect Federal funding will be addressed in another section if this box is checked.)

18.0 1800-Risks and Benefits

18.1 Does the research involve any of the following possible risks or harms to participants?

Check All that Apply:

- Economic Risks
- Employment/occupational risk
- Legal Risks
- Physical Risks
- Psychological
- Social Risks
- None
- Other:

If OTHER, describe:

18.2 Describe the nature and degree of all risk or harm associated with participation in the research. If none, state "None."

There is minimal risk of student surveys being seen by other students and school faculty/staff.

18.3 Explain what steps will be taken to minimize risks or harms and to protect participant welfare.

Surveys do not include student or parent names and only ask for the closest cross-street near where the student lives.

18.4 Describe the anticipated direct benefits of this research for the individual participants. If none, state "None."

Through completing the survey, parents may become more aware of the possibility of having their children walk to school.

18.5 Investigator's Risk / Benefit Assessment

Select the appropriate option.

- Research not involving greater than minimal risk.
- Research involving greater than minimal risk but presents the prospect of direct benefit to individual participants.

- Research involving greater than minimal risk and no prospect of direct benefit for the individual participant, but likely to yield generalizable knowledge about the participants disorder or condition.

19.0 1900-Research Population and Enrollment

19.1 Will your research involve the use of a control group for comparison? (If your study involves randomization, select NO - see HELP bubble)

- Yes • No

20.0 1920-Number and Source of Research Participants

20.1 Age Range for Children:

- Not Applicable (only adults in the study)

From

4

Years old

To:

11

Years old

20.2 Age Range for Adults:

- Not Applicable (only children in the research)

From:

18

To:

100

20.3 Gender:

Both

20.4 Maximum Number of Research Participants to be recruited (see HELP bubble for definition of recruited):

(If the number provided here does not match what is in the consent document, please provide rationale for the discrepancy in Section 5000; e.g. sponsor contract.)

1240

20.5 Specify the Source of the Research Participants:

- Your Practice Referral
- Outside Practice Referral

- Students from any class other than the researcher's
- Students from the researcher's class
- Chart Review / Registry / Medical Records to determine eligibility
- Advertisements / Recruitment Materials (phone, verbal, media scripts, email, flyer)
- Web Listing
- Recruitment Databases
- Recruitment through "snowball" sampling or random digit dialing
- Department Pool
- Other:

If Other, describe:

Sequoyah Elementary School (Part of Tulsa Public Schools)

21.0 1930-Participant Demographics

21.1 Protected Groups

Are you actively recruiting or specifically gathering information on any of the following protected groups?

- Yes ○ No

If YES, check all that apply:

- Children (under 18)
- Pregnant Women
- Elderly (65 & older)
- Decisionally Impaired (Unable to Consent)
- Fetuses
- Prisoners
- Psychologically Impaired (Able to Consent)
- Native American Tribes and/or Tribal Organizations
- Other Vulnerable Persons/Populations
- My research involves pre-existing materials (data, records, specimens, etc.). Some of the research materials may include one or more of the above groups, but these groups were not the focus of the research

For each protected group checked above, provide a description of additional safeguards included in the protocol to protect their rights and welfare.

Surveys will be completed by the parents of the students and will only collect basic information about the student's travel habits.

In-class surveys will be completed by teachers and only record a tally of the number of students who walk to school or are dropped off by someone.

21.2 Racial/Ethnic Origin:

Is the **focus** of the research to include a particular racial/ethnic origin?

- Yes ● No

If YES, check all that apply:

- Hispanic or Latino
- Native American or Alaskan Native
- Asian
- Native Hawaiian or Other Pacific Islander
- Black or African American
- Caucasian

If OTHER, describe:

22.0 1940 - Participant Medical Clearance

22.1 Will medical clearance or medical screening be necessary for participants to participate because of tissue or blood sampling, administration of substances such as food or drugs, or physical exercise conditioning?

- Yes • No

If YES, explain below how clearance will be obtained. If a screening instrument will be used, please upload it at the end of the application.

23.0 2000-Recruitment

23.1 Indicate how potential participants will be approached (upload applicable documents at the end of the application process):

Check all that apply:

- Direct Contact
- Dear Doctor Letter
- Dear Patient Letter
- Phone Call
- School Officials
- Advertisements / Recruitment Materials (Includes phone, media and verbal scripts, email and flyers.)
- Other

If OTHER, describe:

24.0 2100-Cost / Compensation to Participants

24.1 Cost:

If applicable, (Bio Medical Studies only) will participants incur any costs over/above their routine care as a result of their participation in the research?

- Yes
- No
- NA

If YES, describe:

24.2 Compensation:

Will participants be compensated (i.e. credit hours, food, monetary) for their participation in the study?

- Yes • No

If YES, specify the purpose:

25.0 2200-Informed Consent

25.1 Check each method that applies:

- Signed consent will be obtained from participants, legally authorized representatives (LAR) and/or parents.
- Electronic consent will be obtained from participants via the web or email.
- Verbal / implied consent will be obtained using an information sheet or script
- Informed consent will not be obtained
- Social/Behavioral Deception Study with consent being obtained at the end of the study

26.0 2230-Waiver of Signed Written Consent

26.1 Your selection requires a waiver of signed written consent.

Explain the reason for the waiver:

- Category 1 The only record linking the participant and the research is the consent document and the principal risk would be potential harm resulting from a breach of confidentiality. Each participant will be asked whether they want documentation linking them with the research and their wishes will govern. The research is not subject to FDA regulations.
- Category 2 The research present no more than minimal risk of harm to participants and involves no procedures for which written consent is normally required outside of the research context.

27.0 2400-Privacy and Confidentiality

27.1 Describe how information will be accessed from or about participants and the provisions used to protect the privacy interests of participants.

- Interactions are held in a private area.
- Only designated personnel are present during discussions.
- Medical, educational, client, and other records reviewed in a private area.
- Other

If OTHER, describe:

Gathering individual personal information is not the focus of this study. Surveys will not ask for student or parent names and only ask for the closest cross-street to their home to determine the distance they travel to school.

27.2 Describe the instituted measures to protect the confidentiality of identifiable private

data of study participants.

Indicate how data are kept secure (check all that apply):

- Data are coded; data key is destroyed at end of study.
- Data are coded; data key is kept separately and securely.
- Data are kept in a locked file cabinet.
- Data are kept in a locked office or suite.
- Electronic data are protected with a password.
- Data are stored on a secure network.

27.3 Will you provide a copy of identified research data to anyone outside of the research team?

- Yes • No

If YES, explain below why and to whom.

27.4 Will you obtain a Federal Certificate of Confidentiality for this research?

- Yes • No

If YES, attach documentation of application (and a copy of the Certificate of Confidentiality award if granted) at the end of the application process.

If the data collected contains information about illegal behavior, visit the NIH Certificate of Confidentiality. **See Help bubble for additional information.**

27.5 Will participants be identified in audio, video, or digital recorded responses?

- Yes • No

If YES, explain **why** these forms of data are necessary to the project **and** indicate whether or not the data will be destroyed at the conclusion of the study:

*(If the data will not be erased at the conclusion of the study, **provide a rationale** for why this is necessary in the text editor field above.)*

28.0 2450-Application Type

28.1 What level of review is appropriate for your research?

- Full Committee
- Expedited
- Exempt

29.0 2470-Exempt Review

29.1 Select the appropriate category (see HELP bubble for full definitions):

- 1 - Research involving normal educational practices

- 2 - Research involving the use of survey procedures
- 3 - Research involving appointed or elected officials
- 4 - Publicly available materials or information that is recorded in a de-identified manner
- 5 - Demonstration projects or public service programs
- 6 - Taste and food quality evaluation

30.0 2600-Conflict of Interest

30.1 Do you or any key study personnel, including non-OU collaborators, have a Conflict of Interest (as defined in the OU COI Policy – see help bubble) in the Sponsor/Agency that could possibly affect or be perceived to affect the results of the research, educational, or service activities proposed?

○ Yes ● No

If you answered 'Yes' to the COI question, click the bar to complete the COI Disclosure Form. If your campus's Office of Research has provided you with a COI management plan, upload it along with your other study documents.

31.0 2700-HIPAA

31.1 Does your research involve the collection, use or sharing of Protected Health Information?

○ Yes ● No

HIPAA forms are located in Operating Procedures, which is located under the blue [My Assistant](#) tab in the left-hand navigation from your iRIS home screen. When clicking on the appropriate HIPAA form, remember to "Save As" to your desktop. **For HSC HIPAA Forms 5 - 9, use only those forms located in Operating Procedures as these forms have been modified from the "paper-based" forms.** You will have the opportunity to upload HIPAA documents at the end of the application.

32.0 5000-Exit Application Interview

32.1 Use the text box below to add any other information you would like to include in this application.

Paulina Baeza added as KSP.

32.2 Principal Investigator Certification

- I certify that all information provided in this submission, including support materials, is complete and accurate.

For studies/research applications:

- I certify that all investigators have completed the education requirements of the Norman Campus IRB ("NC IRB") or OU Health Sciences Center Campus IRB ("HSC IRB"), as applicable and required for conducting human subjects research.

- I assure that I have obtained all necessary approvals from external entities, as applicable and required for conducting human subjects research.
- I assure compliance of all investigators to this submission as approved; relevant OU IRB policies and procedures; applicable federal, state and local laws; and, ethical conduct of the research and protection of the rights and welfare of human participants, as applicable and required for conducting human subjects research.
- I agree to obtain legally effective informed consent from research participants, as applicable.
- I agree to promptly report protocol deviations and/or unanticipated problems as defined by OU IRB policy to the OU IRB, as applicable.
- I assure that I have documentation of encryption for all electronic devices used in conducting human subjects research.

By providing electronic sign-off for this submission, the Principal Investigator agrees to the certifications listed above.

The Application portion of the submission process is now complete. Click the "**Save and Continue**" button in the top right to move into sections where all pertinent study documents for the initial submission packet can be uploaded and attached.



T U L S A

PUBLIC SCHOOLS

Sequoyah Elementary School

"Excellence and High Expectations with a Commitment to All"

October 13, 2015

Re: Student Thesis

Dear Amanda Yamaguchi,

Sequoyah Elementary School is aware of your proposed research project. We understand that the involvement of our school in assisting you to accomplish this project includes sending home and collecting parent surveys, conducting in-class surveys and allowing access to school grounds for the purpose of observing child/parent transportation behavior and traffic flow.

As the principal of Sequoyah Elementary, I have read through your research proposal and support the involvement of our school in this project and look forward to working with you.

Sincerely,

Mrs. Raye L. Nero, Principal
Sequoyah Elementary School
Tulsa Public Schools
918-746-9360

**University of Oklahoma – Norman Campus
Office of Human Research Participant Protection
Appendix B – Graduate Student as Principal Investigator**

Highest degree held by student: Bachelors x Masters

Student's degree program: x Masters Doctoral

This project has been reviewed to determine that the scope, anticipated risks and benefits, and methodology are appropriate for this research by:

- x Approval of thesis/dissertation proposal by faculty committee
- My personal review and approval of research proposal
- Other—describe below

The graduate student is qualified to conduct independent research based on the following credentials (Check all that apply):

- x has completed a graduate research methods course
- x has completed the training in Responsible Conduct of Research
- has experience as an independent or closely supervised research team member. Describe below and include the name of the researcher who supervised your activities.

- Other—describe below

FACULTY SPONSOR'S ASSURANCE

By my signature as sponsor on this research application, I certify that the graduate student investigator is knowledgeable about the regulations and policies governing research with human subjects and has sufficient training and experience to conduct this particular study in accordance with the research protocol. Additionally,

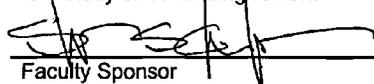
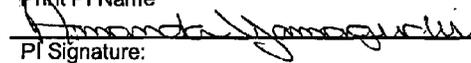
I confirm that I have reviewed this IRB application, including the protocol, and verify that it is complete and the research scope, anticipated risks and benefits, and methodology are appropriate in design.

I agree to meet with the investigator on a regular basis to monitor study progress.

I assure that the investigator will promptly report unanticipated problems and will adhere to all requirements for continuing review and modification.

If I will be unavailable, e.g., sabbatical leave, vacation, or resignation, I will arrange for an alternate faculty sponsor to assume responsibility during my absence, and I will advise the OU-NC IRB of such changes.

If the graduate student/investigator leaves the university, I will provide all necessary documents for terminating the study or continuing review.

	9/29/2015
Faculty Sponsor	Date (mm/dd/yyyy)
Amanda Yamaguchi	
Print PI Name	
	9/29/2015
PI Signature:	Date (mm/dd/yyyy)

**University of Oklahoma – Norman Campus
Institutional Review Board
Description of Study Protocol**

1. **Provide a description of the purpose of your study and your research design.** (Examples: A pre-test – post test 2 x 2 experiment, with a control group and an experimental group that will receive one intervention. A grounded theory exploration of a topic. A pre-test post-test evaluation of a new classroom teaching method. An online cross-sectional survey of students related to curriculum topic. An 8-week walking study with a control and 2 comparison groups receiving either a diet or exercise message intervention). Guidance: This description should be short and written for a lay reader not for someone in your field. Also, your response should be understandable without the reader having to refer to another study document. Do not cut and paste your thesis/dissertation research abstract.

This project will look at the communities surrounding Sequoyah Elementary School in the Tulsa Public Schools district to identify reasons for inactivity in school children and create interventions to help increase activity within the community. This study will identify features in the built environment that make walking to school difficult and provide recommendations to the school and city to improve the area.

Data will be collected using two separate methods.

1. Parent surveys sent home with children will give parents a chance to provide information on deterrents and opportunities for active travel to school. Teachers will hand out the surveys to students and students will return them to school after completion by the parents. (Survey is a modified version of one that is used by the “Safe Routes to School” initiative.)
2. Short, in-class tallies will be taken by teachers to count the number of students walking home, being picked up by car or carpool. These tallies should only take a couple minutes and only need to be done for three days. (Survey is used by the “Safe Routes to School” initiative.)

2. If your study will be conducted internationally, involves the military, involves deception, or includes non-OU research personnel, you should address the following areas related to your proposed study:
- a. deception – the debriefing process that will be used
 - b. international research – review and approval of the study by a local ethics council, in country research support, verification of the cultural appropriateness of all study intervention and testing procedures and study documents
 - c. research involving the military – the unit that will be responsible for providing IRR or research approval and completion of the applicable DoD research approval form(s)
 - d. non-OU research collaborators – provide a contact information, institution of employment, and a description of the specific research responsibilities of each collaborator

{Type your response here}

3. **Describe** your participants (examples: 10 day care directors in Tulsa, 50 employees of ABC Company in Norman, 5 people between 18 and 45 who do weight resistance exercise at least

two times a week). **Include** information for each type of participant. Guidance: Many studies gather data from different types of participants such as teachers and their students, employees and their supervisors, kids and their parents. Be sure to provide a description of all types of potential participants and the number of each.

Participants in this research will include the parents and students of Sequoyah Elementary School in Tulsa Oklahoma.

One parent or guardian from each household with a student attending Sequoyah Elementary will be asked to complete a survey. Current enrollment at the school is 620 students so an estimated 620 parents and/or guardians will be asked to participate.

Students will be asked to participate in a tally count during school to determine how children are getting to and from school. This tally will be conducted in all classes (Pre K-6th grade) giving an estimated number of participants of 620.

4. **Provide** the inclusion and exclusion criteria for selection for each type of participant. **Where** will you obtain the contact information for potential participants? Guidance: If the information is public, describe the source of the contact information. You may not ask an organization or other entity to provide contact information for potential participants without their (potential participants) consent to release this information. You may ask that institution to distribute recruiting material that includes the researcher's contact information so that potential participants can contact the researcher directly if interested in participating. If you involve an institution or other entity in recruitment activities, upload a signed, site- support letter, on the organization's letterhead, that confirms that the signor has reviewed your research design and is willing to assist you in participant recruitment. Please note that access to contact information as a component of your job function DOES NOT automatically mean that you have access to this information for research purposes. This permission must be provided by your employing organization.

Participants will come from Sequoyah Elementary School in Tulsa Oklahoma. Permission from the Principal of the school has been obtained. Surveys and information sheets will be sent home with students but they are not required to participate. No contact information will be collected from participants.

5. **Recruitment: Who** will approach potential participants? What information are potential participants given about the study? What safeguards are in place to minimize coercion? **If** the researcher(s) is also the participants' supervisor/instructor, how will you assure that the identity of the research participants remains unknown to the researchers until after (1) the data have been gathered and are de-identified or (2) the class grades have been assigned? Guidance: If the participants are under the direct supervision of the researcher(s) (such as employees or students of the researcher(s)), someone other than the researcher must conduct all recruitment and identifiable data collection activities. Upload recruitment materials, such as verbal or written scripts, email messages, postings to websites, flyers, and/or letters. If you recruit participants who are not at OU, include this language: ***"The University of Oklahoma is an Equal Opportunity Institution."*** For OU mass email – you must have the proper permission to use the email list and must include this language in your email message: ***"The OU IRB has approved the content of this advertisement but the investigator is responsible for securing authorization to distribute this message by mass email."***

Participants will be approached by being given a survey to complete. There will be no direct contact between the participants and researcher. Along with the survey, participants will be given an information sheet containing the purpose of the study, risks and benefits, a statement explaining that they are not required to participate and the contact information of the researcher.

Teachers of Sequoyah Elementary School will take tallies in class. There will be no direct contact between the participants and researcher. Students will not be required to participate in this exercise.

6. **What identifying information will you collect? How long will you retain participant contact/identifying information? How will you store this information during the study? How will you dispose of contact information when the study is completed or when you no longer need this information? Guidance:** If you do not have permission to report the names of your participants, then it is advisable to assign pseudonyms or study numbers to each participant as soon as the data are collected to reduce the risk to participants if research files are accidentally released. Participants can give you permission to release their identities or to store identifiable research records in the Waiver of Elements of Confidentiality section of the informed consent documents.

No personal or identifying information will be collected from parent or student participants.

7. **Provide** a step-by-step description of each of the tasks that participants will be asked to perform during the study. Guidance: Tasks include the consent process, completion of data collection instruments and any intervention or de-briefing activities.

For each study task, list each task sequentially in the order participants will complete it; indicate the approximate time it will take to complete each task and the setting (such as, in a classroom, in the participants' workplace, in a public place, at home). Guidance: If you have multiple kinds of participants (i.e., students and teachers, employees and executives, etc.), include separate entries for each kind of participant and each task.

For each data collection instrument, indicate the frequency of administration and the method of administration (i.e., face-to-face, telephone, mail, or via a website). Guidance: Upload a copy of each data collection instrument, including surveys, questionnaires, interview protocols, questions for focus groups, observation recording forms, etc.

For face-to-face interviews and focus groups/group interviews, describe other persons who are not participants who will be present and the activities of each of these persons. **What steps will you take to ensure that the discussion is held confidential by all the participants after the focus group? Guidance:** All non-participant attendees are considered key study personnel since they have access to identifiable data. If someone other than the researcher will transcribe interviews, a confidentiality agreement should be completed and submitted with your application. A copy of the OU-NC approved confidentiality agreement form should be modified for your study and uploaded with other study documents.

Task	Time	Setting	Method of Administration
-------------	-------------	----------------	---------------------------------

Consent: Consent will implied upon the return of the survey.

Survey: Surveys and accompanying information sheets will be given to teachers by the researchers. Teachers will send surveys home with students to be completed by a parent or guardian. Parents or guardians will return completed surveys to school with their child.

Teachers will collect the documents until the researcher can pick them up. Expected time for completion of surveys is one week, surveys will only be sent home one time.

Teachers will complete tallies in class twice each day for a total of three days. Documents will be delivered to teachers and picked up by the researcher.

8. **What** steps will you take to protect the identity of your participants? If interviews or focus groups are audio recorded and will be transcribed, who will transcribe the audio, and how will participants' identities be protected in the transcripts? Guidance: for audio-recorded data, you can mask the identity of the participants by using software programs such as Audacity (a free download). Also, participants should be addressed by a pseudonym or code during interviews to avoid inclusion of names that make interviewees identifiable or a procedure for de-identifying transcripts must be proposed. Photographs of classrooms should not include any identifiable images of the students under 18 who are in the classroom. If you intend to publicly release audio, video or photography, then you will need to have participants sign the OU Talent Release document.

All data will be collected on paper forms and no personal or identifying information will be collected from parent or student participants.

9. **How** will you store, secure, and dispose of each kind of data in your research records, including paper documents, electronic files, audio/video recorded data, photography and/or research records? **How** will you store and dispose of signed consent documents and master lists that link identifying information to ID code numbers? **For** what length of time will you retain your research records? Guidance: To retain research records that contain identifiable information about the participants (or that contain sufficient information for deductive re-identification) after the close of the study, you will need to provide a justification for this request. In addition, you will need to include the Waiver of Elements of Confidentiality section on the consent documents. For de-identified data sets with no potential for deductive re-identification of participants, research records can be kept indefinitely.

<u>Data type</u>	<u>Storage</u>	<u>Security</u>	<u>Disposal Method</u>	<u>Retention Time</u>
------------------	----------------	-----------------	------------------------	-----------------------

Records contain no identifiable information with no potential for deductive re-identification and will be kept until the conclusion of the research in May 2016. Physical documents will be stored in the Urban Design Studio at the University of Oklahoma-Tulsa campus. Any digital copies made will be stored in a password-protected file on the Studio's server.				
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Appendix B: IRB Approval Letter



Institutional Review Board for the Protection of Human Subjects **Approval of Initial Submission – Exempt from IRB Review – AP01**

Date: November 24, 2015

IRB#: 6165

Principal Investigator: Amanda Lynn Yamaguchi

Approval Date: 11/23/2015

Exempt Category: 2

Study Title: Active Transportation Analysis for Sequoyah Elementary School

On behalf of the Institutional Review Board (IRB), I have reviewed the above-referenced research study and determined that it meets the criteria for exemption from IRB review. To view the documents approved for this submission, open this study from the *My Studies* option, go to *Submission History*, go to *Completed Submissions* tab and then click the *Details* icon.

As principal investigator of this research study, you are responsible to:

- Conduct the research study in a manner consistent with the requirements of the IRB and federal regulations 45 CFR 46.
- Request approval from the IRB prior to implementing any/all modifications as changes could affect the exempt status determination.
- Maintain accurate and complete study records for evaluation by the HRPP Quality Improvement Program and, if applicable, inspection by regulatory agencies and/or the study sponsor.
- Notify the IRB at the completion of the project.

If you have questions about this notification or using iRIS, contact the IRB @ 405-325-8110 or irb@ou.edu.

Cordially,

A handwritten signature in black ink that reads 'Aimee Franklin'.

Aimee Franklin, Ph.D.
Chair, Institutional Review Board



Institutional Review Board for the Protection of Human Subjects
Approval of Study Modification – Expedited Review – APO

Date: April 04, 2016

IRB#: 6165

Principal Investigator: Amanda Lynn Yamaguchi

Reference No: 650972

Study Title: Active Transportation Analysis for Sequoyah Elementary School

Approval Date: 04/04/2016

Modification Description:

Paulina Baeza added as key study personnel.

The review and approval of this submission is based on the determination that the study, as amended, will continue to be conducted in a manner consistent with the requirements of 45 CFR 46.

To view the approved documents for this submission, open this study from the My Studies option, go to Submission History, go to Completed Submissions tab and then click the Details icon.

If the consent form(s) were revised as a part of this modification, discontinue use of all previous versions of the consent form.

If you have questions about this notification or using iRIS, contact the HRPP office at (405) 325-8110 or irb@ou.edu. The HRPP Administrator assigned for this submission: Karen Braswell.

Cordially,

A handwritten signature in black ink that reads 'Aimee Franklin'.

Aimee Franklin, Ph.D.
Chair, Institutional Review Board

Appendix C: Parent Survey

Dear Parents,

Please take a few moments to fill out this short survey and have your child return it to school.

Sequoyah Elementary school is participating in a research study with a graduate student researcher from the University of Oklahoma. The purpose of this anonymous survey is to identify barriers to walking to school. With this information, I hope to create recommendations for the school and city to improve walkability in your neighborhood.

No personal or identifying information will be collected. Information you provide will be shared with the researcher and faculty advisor from OU. There is a risk of completed surveys being seen by teachers and other students although no personal identifying information will be on it. The benefit of participation is assisting in improving your community by providing valuable information about it. By returning the survey, you agree to allow the information provided to be used for educational research purposes.

This survey should take 5-10 minutes to complete. You are not required to participate and can quit at any time. You will receive no compensation for the completion of this survey.

If you have any questions, please feel free to contact me by phone at (918) 207-2947. If I cannot be reached or you wish to discuss your questions or concerns with someone other than myself you are encouraged to contact the Director of the Office of Human Research Participant Protection (HRPP) at (405) 325-8110.

Thank you,

Amanda Yamaguchi
Graduate Student
University of Oklahoma-Tulsa
Urban Design Studio

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10. What of the following issues affect your decision to allow, or not allow , your child to walk or bike to/ from school? (select all that apply)

- | | |
|---|--|
| <input type="checkbox"/> Distance | <input type="checkbox"/> Sidewalks or pathways |
| <input type="checkbox"/> Convenience of Driving | <input type="checkbox"/> Safety of intersections and crossings |
| <input type="checkbox"/> Time | <input type="checkbox"/> Crossing guards |
| <input type="checkbox"/> Child's before/after school activities | <input type="checkbox"/> Violence or crime |
| <input type="checkbox"/> Speed of traffic along route | <input type="checkbox"/> Weather or climate |
| <input type="checkbox"/> Amount of traffic along route | <input type="checkbox"/> Stray dogs |
| <input type="checkbox"/> Adults to walk or bike with | |

11. In your opinion, how much does your child's school encourage walking and biking to/from school?

- Strongly Encourages Encourages Neither Discourages Strongly Discourages

12. How much fun is walking or biking to/from school for your child?

- Very Fun Fun Neutral Boring Very Boring

13. How healthy is walking or biking to/from school for your child?

- Very Healthy Healthy Neutral Unhealthy Very Unhealthy

Parent Information

14. What is the highest grade or year of school you completed?

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

15. What is your race?

- | | | |
|------------------------------------|---|--|
| <input type="checkbox"/> Caucasian | <input type="checkbox"/> African American | <input type="checkbox"/> Native American |
| <input type="checkbox"/> Hispanic | <input type="checkbox"/> Asian | <input type="checkbox"/> Other _____ |

Comments

16. Please provide any additional comments below.

Estimados Padres,

Por favor tomen unos momentos para llenar esta breve encuesta y enviarla de regreso con sus hijos a la escuela.

La institución Sequoyah Elementary School esta participando en un estudio de investigación desarrollado por una alumna de la Escuela de Posgrado de la Universidad de Oklahoma. El propósito de esta encuesta anónima es identificar las barreras e impedimentos existentes para caminar a la escuela. Con esta información pretendo desarrollar una serie de recomendaciones para la escuela y la ciudad que permitan mejorar y hacer mas accesible poder caminar en su barrio.

No se recolectará información personal o que identifique a los participantes. La información que nos provean será compartida con la alumna investigadora y el consejero de la facultad de OU. Existe el riesgo de que las encuestas terminadas sean vistas por profesores y otros estudiantes, aunque no existirá información personal de ningún tipo que permitan identificarlos. El beneficio de su participación es asistir en mejorar su comunidad al proveer valiosa información de la misma. Al devolver esta encuesta, usted esta de acuerdo en permitir que la información provista sea utilizada para propósitos educativos y de investigación.

Esta encuesta debe tomar de 5 a 10 minutos en completer. Usted no esta obligado a participar y puede terminar en cualquier momento. Usted recibirá una compensación por responder esta encuesta.

Si tiene alguna pregunta por favor siéntase en libertad de contactarme por teléfono al (918) 207-2947. Si no es posible localizarme o desea discutir nuestras preguntas o dudas con alguien mas, puede ponerse en contacto con la Dirección de Office of Human Research Participant Protection (HRPP) al (405) 325-8110.

Gracias,

Amanda Yamaguchi
Estudiante de Posgrado
University of Oklahoma-Tulsa
Urban Design Studio

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Encuesta sobre ir caminando o andando en bicicleta a la escuela

Estimado Padre o Encargado,

La escuela donde su hijo/hija asiste desea saber sus opiniones sobre niños caminando y andando en bicicleta a la escuela. Esta encuesta tomará entre 5 y 10 minutos para completar. Le pedimos a las familias que completen sólo una encuesta por escuela a la que asisten sus niños .

CAPITAL LETTERS ONLY

1. ¿En qué grado esta el niño que trajo esta encuesta al hogar? (PK,K,1,2,3...)

2. ¿El niño que trajo a casa la encuesta es niño o niña? Niño Niña

3. ¿Cuántos niños tiene usted entre Kindergarten y el 8vo grado?

4. ¿Cuál es la intersección más cerca de su casa? (el cruce de las dos calles)

	y	
--	---	--

Marque las cajas con "X"

5. ¿A qué distancia vive su niño de la escuela? No lo sé
 Menos de 1/4 milla Entre 1/4 y 1/2 milla Media milla hasta 1 milla Más de 1 milla

6. La mayoría de los días, ¿cómo va su niño a la escuela y cómo regresa a la casa después de la escuela?

Llega a la escuela

Regresa a casa

- | | | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Sólo caminando |
| <input type="checkbox"/> | <input type="checkbox"/> | Caminado y auto de la familia |
| <input type="checkbox"/> | <input type="checkbox"/> | Auto de la familia (solo con niños de la familia) |
| <input type="checkbox"/> | <input type="checkbox"/> | Compartiendo el viaje en auto con niños de otras familias |
| <input type="checkbox"/> | <input type="checkbox"/> | Bicicleta |
| <input type="checkbox"/> | <input type="checkbox"/> | Transporte público (autobús de la ciudad) |
| <input type="checkbox"/> | <input type="checkbox"/> | Otro (patineta, monopatín, patines, etc.) |

7. ¿Cuánto tiempo le toma a su niño para ir y regresar de la escuela?

Tiempo del recorrido a la escuela

Tiempo del recorrido para llegar a casa

_____ minutos No lo sé

_____ minutos No lo sé

8. ¿En el último año, le ha pedido permiso su hijo para caminar o andar en bicicleta hacia o desde la escuela? Sí No

9. ¿En qué grado permitiría que su hijo camine o ande en bicicleta solo a/o de la escuela?

(seleccione un grado entre PK,K,1,2,3...) O No me sentiría cómodo/a en ningún grado

10. ¿Cuáles de las siguientes situaciones afectaron su decisión de permitir, o no permitir, que su niño camine o ande en bicicleta hacia o desde la escuela? (marque todas las que correspondan)

- | | |
|--|---|
| <input type="checkbox"/> Distancia | <input type="checkbox"/> Aceras o caminos |
| <input type="checkbox"/> Conveniencia de manejar | <input type="checkbox"/> Seguridad de las intersecciones y cruces |
| <input type="checkbox"/> Tiempo | <input type="checkbox"/> Guardias de cruce peatonal |
| <input type="checkbox"/> Actividades antes o después de la escuela | <input type="checkbox"/> Violencia o crimen |
| <input type="checkbox"/> Velocidad del tránsito en la ruta | <input type="checkbox"/> Tiempo o clima |
| <input type="checkbox"/> Cantidad de tránsito en la ruta | <input type="checkbox"/> Perros en la calle |
| <input type="checkbox"/> Adultos que acompañen a su niño | <input type="checkbox"/> Otros _____ |

11. En su opinión, ¿cuánto apoyo promueve la escuela de su hijo a caminar y usar la bicicleta para ir o regresar de la escuela?

- Anima Fuertemente Anima Ni uno ni otro Desalienta Desalienta Fuertemente

12. ¿Qué tan DIVERTIDO es caminar o andar en bicicleta hacia o desde la escuela para su niño?

- Muy Divertido Divertido Neutral Aburrido Muy Aburrido

13. ¿Qué tan SANO es caminar o andar en bicicleta hacia o desde la escuela para su niño?

- Muy Sano Sano Neutral Malsano Muy Malsano

Parent Information

14. ¿Cuál es el grado o el año más alto de educación que usted terminó?

- | | | |
|--|---|---|
| <input type="checkbox"/> Grados 1 a 8 | <input type="checkbox"/> Grado 12 o GED | <input type="checkbox"/> Universidad 4 años o más |
| <input type="checkbox"/> Grados 9 a 11 | <input type="checkbox"/> Universidad 1 a 3 años | <input type="checkbox"/> Prefiero no contestar |

15. ¿Cuál es su raza/etnicidad?

- | | | |
|---|---|---|
| <input type="checkbox"/> Caucásico | <input type="checkbox"/> Afro Americano | <input type="checkbox"/> Nativo Americano |
| <input type="checkbox"/> Hispano / Latino | <input type="checkbox"/> Asiático | <input type="checkbox"/> Otro _____ |

Comentarios

16. Por favor proporcione comentarios adicionales:

Safe Routes to School Students Arrival and Departure Tally Sheet

+	CAPITAL LETTERS ONLY – BLUE OR BLACK INK ONLY										+			
School Name:					Teacher's First Name:					Teacher's Last Name:				
<input type="text"/>					<input type="text"/>					<input type="text"/>				
Grade: (PK,K,1,2,3...)		Monday's Date (Week count was conducted)				Number of Students Enrolled in Class:								
<input type="text"/> <input type="text"/> 0 2		<input type="text"/> <input type="text"/> M M		<input type="text"/> <input type="text"/> D D		<input type="text"/> <input type="text"/> <input type="text"/> Y Y Y Y			<input type="text"/> <input type="text"/> 1 5					
<ul style="list-style-type: none"> • Please conduct these counts on two of the following three days Tuesday, Wednesday, or Thursday. (Three days would provide better data if counted) • Please do not conduct these counts on Mondays or Fridays. • Before asking your students to raise their hands, please read through all possible answer choices so they will know their choices. Each Student may only answer once. • Ask your students as a group the question "How did you arrive at school today?" • Then, reread each answer choice and record the number of students that raised their hands for each. Place just one character or number in each box. • Follow the same procedure for the question "How do you plan to leave for home after school?" • You can conduct the counts once per day but during the count please ask students both the school arrival and departure questions. • Please conduct this count regardless of weather conditions (i.e., ask these questions on rainy days, too). 														
Step 1. Fill in the weather conditions and number of students in each class				Step 2. AM – "How did you arrive at school today?" Record the number of hands for each answer. PM – "How do you plan to leave for home after school?" Record the number of hands for each answer.										
Key	Weather	Student Tally	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other					
	S= sunny R= rainy O=overcast SN=snow	Number in class when count made	-	-	-	Only with Children from your family	Riding with children from other families	City bus, subway, etc.	Skate-board, scooter, etc.					
Sample AM	S N	2 0	2	3	8	3		3	1					
Sample PM	R	1 9	3	3	8	1	2	2						
Tues. AM														
Tues. PM														
Wed. AM														
Wed. PM														
Thurs. AM														
Thurs. PM														
Please list any disruptions to these counts or any unusual travel conditions to/from the school on the days of the tally.														
+											+			

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Safety Tips for Kids

- Walk with an adult or a group of friends.
- Don't push, shove, or chase each other near the street.
- Never take rides from people you do not know.
- Be Seen.
- Look for traffic.
- Cross Streets Safely and always cross at a crosswalk.

Jaywalking is when you cross a street outside of a crosswalk. Jaywalking is dangerous and illegal!



Parent Information

- Choose a safe route to school for your child.
- Teach your child to obey traffic signals.
- Teach your child about edges such as blind driveways/pathways, and practice safely crossing at intersections and crosswalks.
- Teach your child how to walk safely through a parking lot.
- Remind your child not to run or play near traffic.
- Encourage your child to walk with trusted friends.
- Participate in your school's walking school bus.
- Remind your child not to talk to strangers.
- Make sure your child knows how to reach you in case of emergency.





Consejos de Seguridad para Niños

- Caminar con un adulto o grupo de amigos.
- No jugar, empujar o perseguir cerca de la calle.
- Nunca subir a autos con extraños.
- Mantenerse visibles.
- Cuidarte en el tráfico.
- Cruza las calles con cuidado sobre los cruces peatonales

¡ Cruzar la calle fuera del cruce peatonal es peligroso e ilegal !



Información para los padres

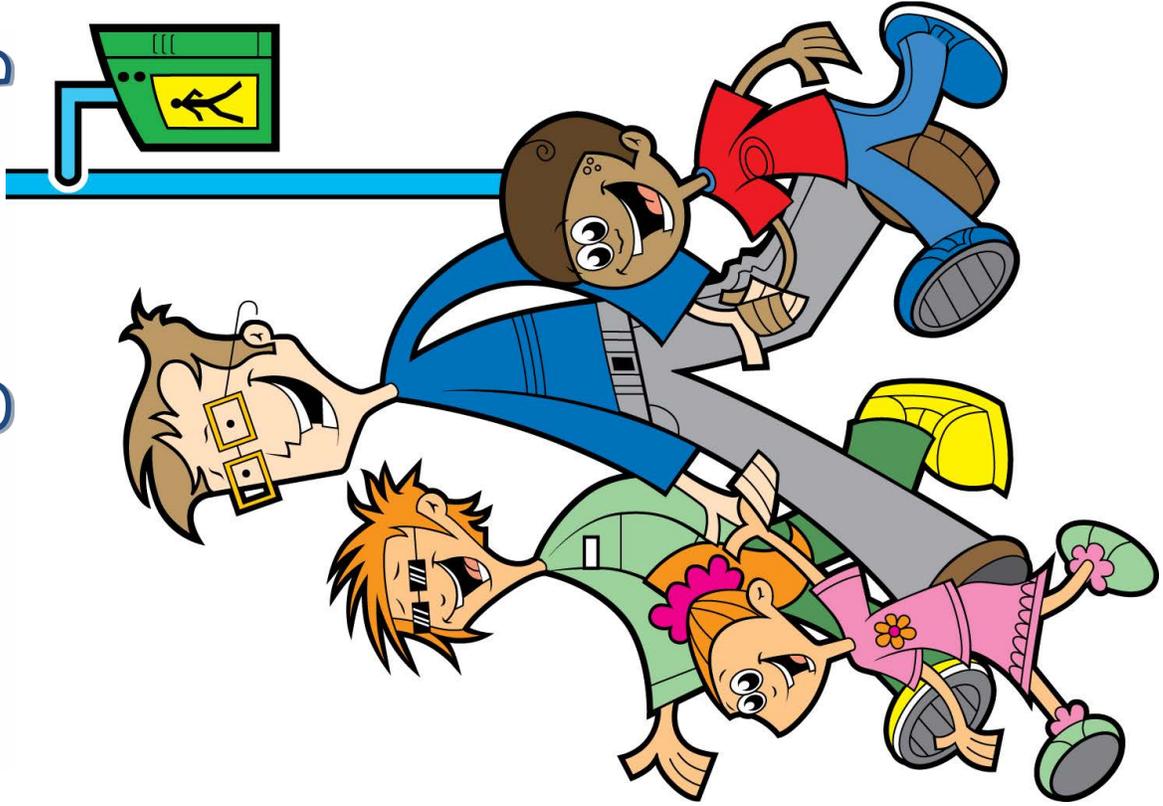
- Elige una ruta segura para que tu hijo camine.
- Enseña a tu hijo a obedecer las indicaciones vials.
- Enseña a tu hijo sobre puntos ciegos al caminar y practica con ellos como cruzar de manera segura intersecciones y cruces peatonales.
- Enseña a tu hijo como cruzar con cuidado un area de estacionamiento.
- Recuerda a tu hijo no correr o jugar cerca del tráfico.
- Aconseja a tu hijo a caminar con amigos o conocidos.
- Participa en los eventos de “Walking School Bus” de la escuela.
- Recuerda a tu hijo que no debe hablar con extraños.
- Asegurate de que tu hijo sepa como localizarte en caso de una emergencia.



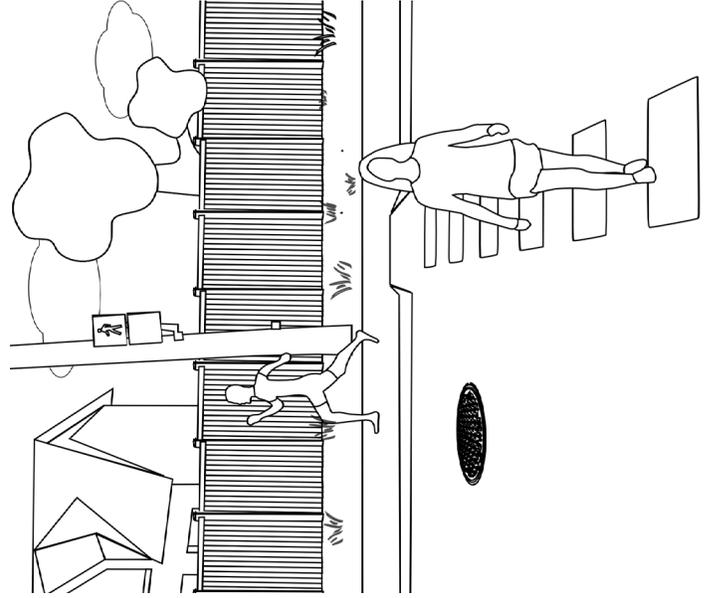
Be safe and
walk often!



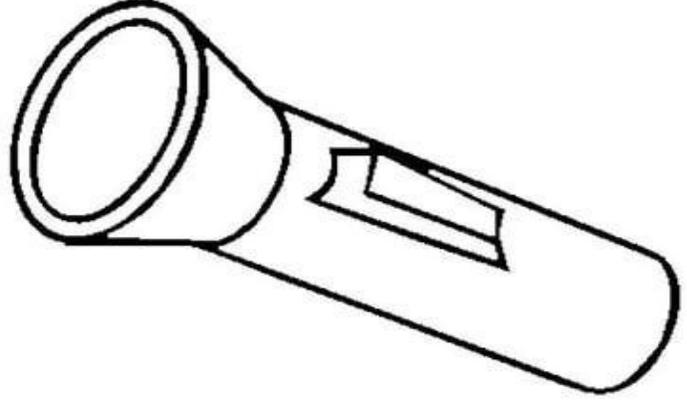
Walking Safety



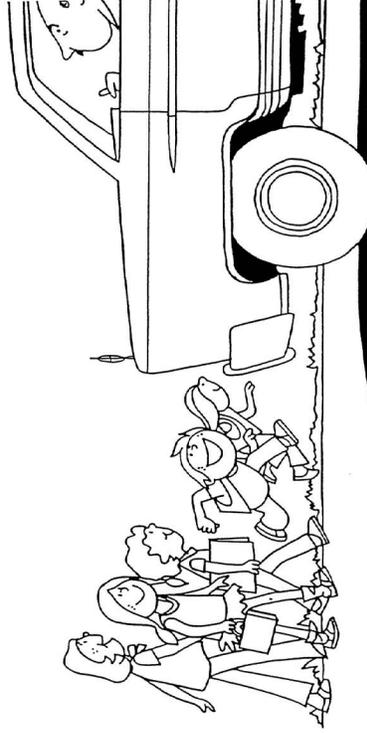
**Always cross
the street at a
crosswalk.**



**If you have to walk at
night, wear white
and use a light!**



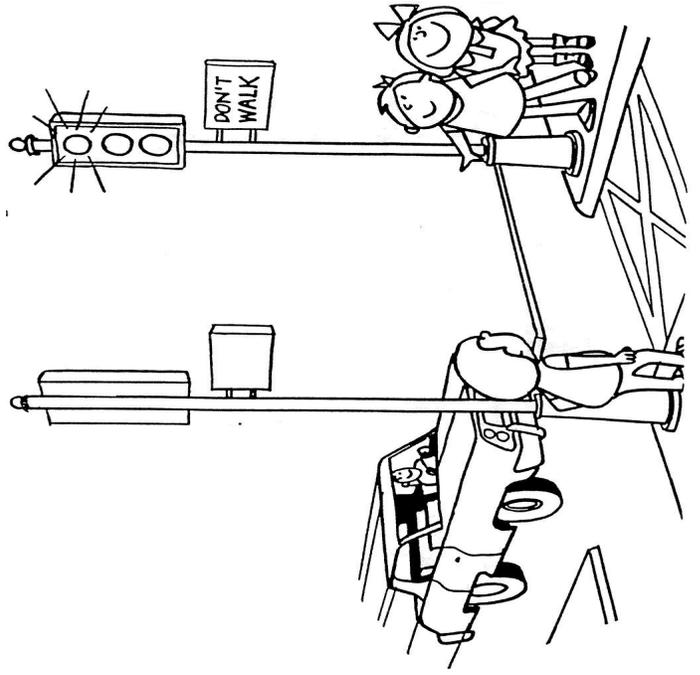
If there is no
sidewalk, walk facing
traffic on the left
side.



Look both ways
before crossing
the street.



Be careful at
intersections.



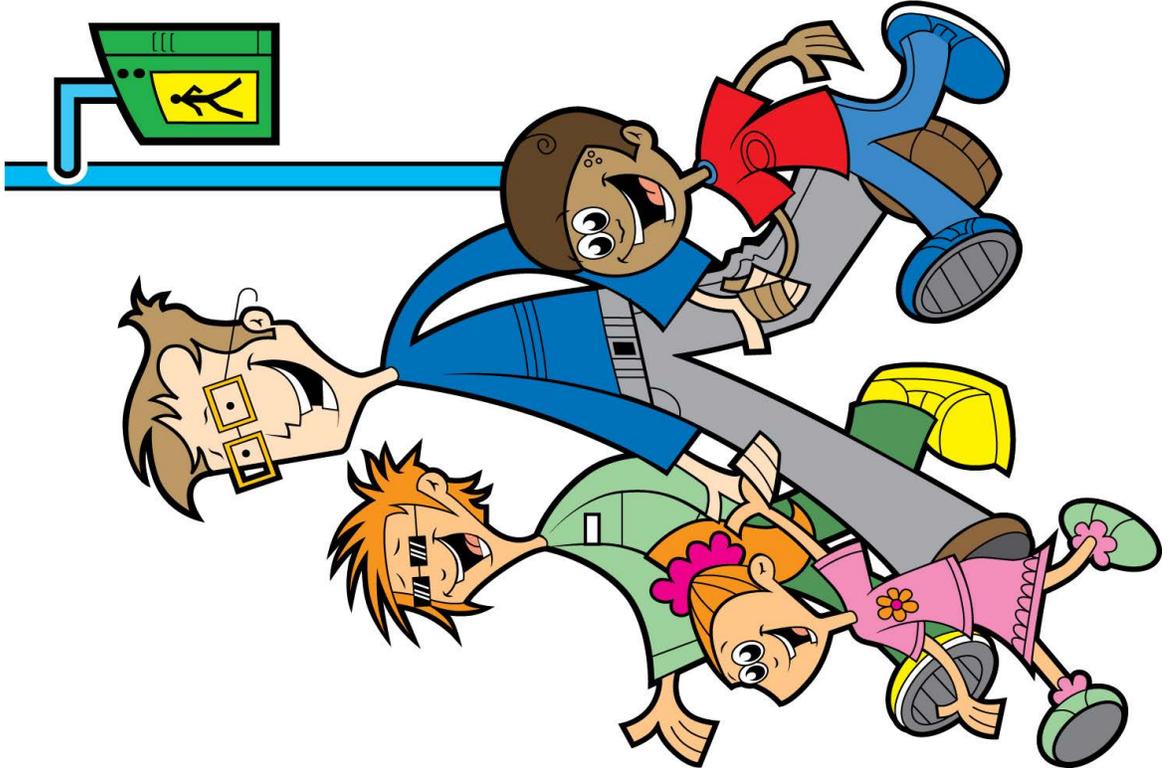
It is safer to
walk in groups!



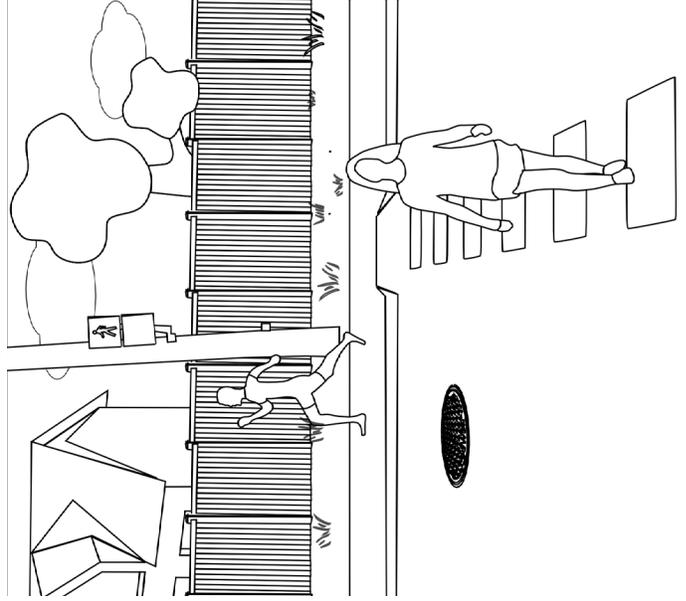
Toma precauciones y
camina seguido!



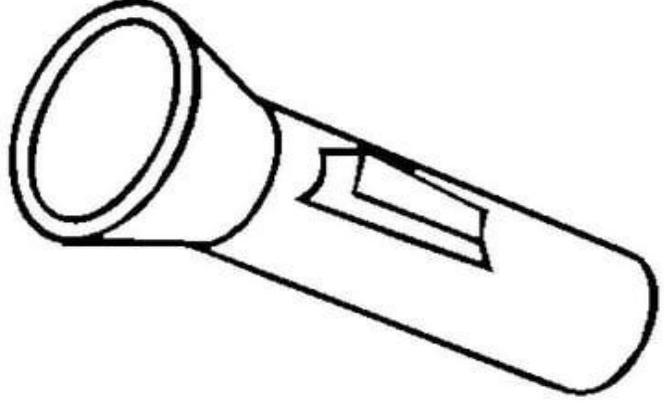
Seguridad Peatonal



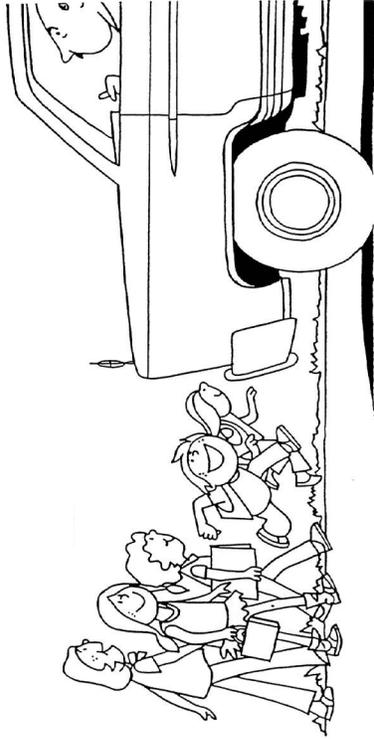
**Cruza siempre la
calle sobre el cruce
peatonal.**



**Si debes caminar de
noche, ¡¡utiliza ropa
blanca y lleva una
linterna!!**



Si no hay crucero,
camina viendo hacia
el tráfico sobre el
lado izquierdo.



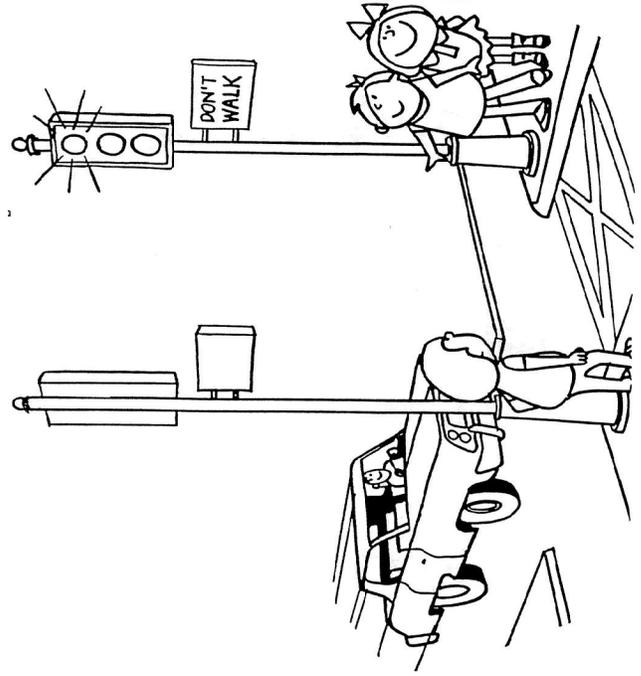
Mira hacia ambos
lados cuando
cruces la calle.



Ten cuidado en las
intersecciones.

¡¡Es mas seguro

cruzar en grupo!!



the WALKING school bus

is in your neighborhood!

The Walking School Bus is a group of parents and teachers who walk together to school in the morning and home in the afternoon, dropping students off along the route as they go. Parents are encouraged to volunteer to be bus drivers. The Walking School Bus is designed to:

- Give teachers and students more physical activity
- Reduce the amount of traffic in front of the school
- Provide a way for teachers, students and parents to get to know each other better

There are routes that vary in length, but you'll never walk more than a mile. It's a great way to get in some exercise!

Starts September 28

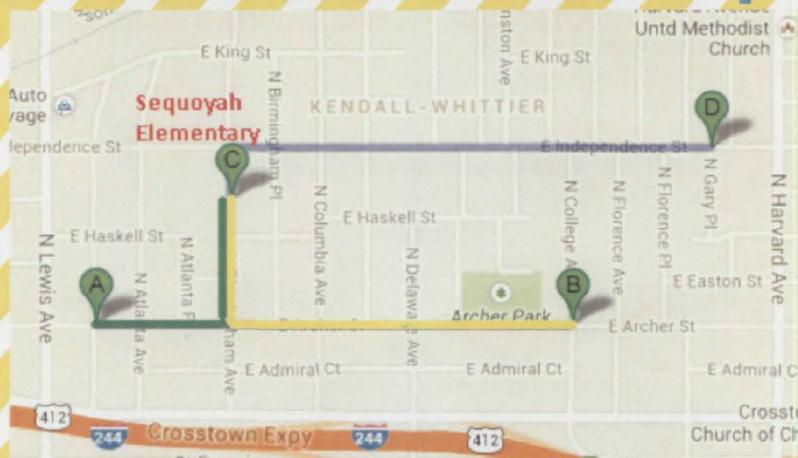
Groups will walk Monday, Tuesday, Wednesday & Thursday's

Morning routes meet at the first stop at 7:15 and arrive at the school no later than 7:45. Afternoon routes leave the school by 3:00.

NO WALKING if it is raining or 41 degrees or below.

Must have permission slips signed for students to walk with the group.

Find the route closest to you!





¡Está en tu vecindario!

“The Walking School Bus” es un grupo de padres y maestros que caminan juntos de la escuela hacia el vecindario y luego de regreso a la escuela dejando a los alumnos en sus casas en el trayecto de la caminata. Invitamos a los padres a que sirvan como voluntarios para ser los “conductores” del grupo. Es un programa diseñado para:

- Darle la oportunidad a los maestros y alumnos de tener más actividad física
- Reducir la cantidad de tráfico frente a la escuela
- Darle la oportunidad a los maestros de interactuar con otros maestros, alumnos y padres

Hay rutas que varían en distancia, pero nunca caminará más de una milla. Es una buena forma para hacer ejercicio.

Comienza el 28 de septiembre

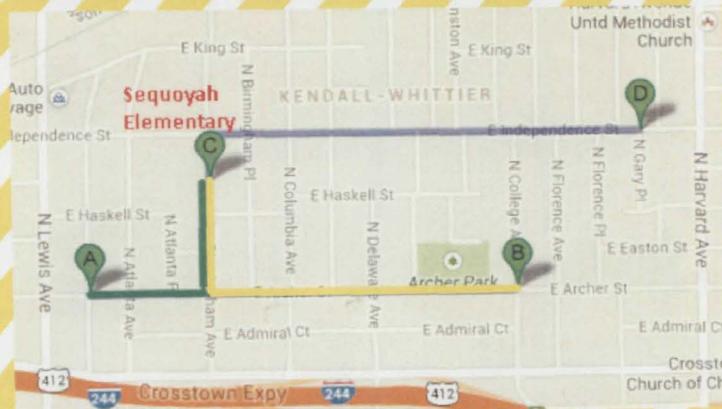
Los grupos caminarán los lunes, martes, miércoles y jueves

La ruta de la mañana se reúne a las 7:15 en la primer parada y llega a la escuela a más tardar a las 7:45. La ruta de la tarde sale de la escuela a las 3:00.

NO CAMINAREMOS si está lloviendo o el clima está por debajo de los 41 grados.

Los alumnos tienen que traer el permiso firmado por los padres para poder caminar con el grupo.

¡Encuentra la ruta más cercana!



Walking School Bus Information Sheet: Revised (Placeholder)

Walking School Bus Information Sheet: Revised (Placeholder)