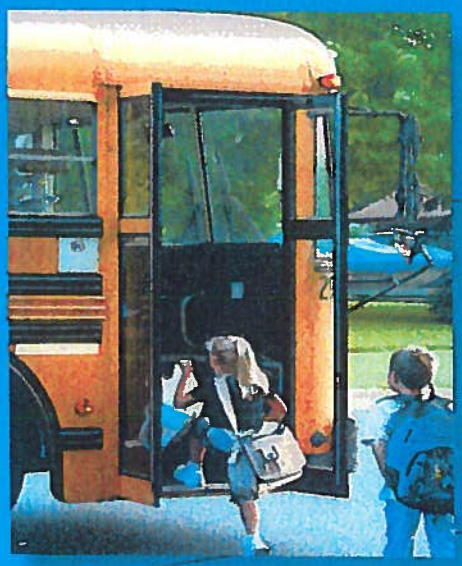
GLENROCK

SAFE ROUTES TO SCHOOL MASTER TRAVEL PLAN

July 2009



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Introduction

National Trends

For the past decade there has been a national trend that has increased the number of children traveling to school in vehicles and decreased the number that get to school by bicycling and walking. The primary reason cited for this behavioral shift is safety. While safety is a serious concern, this trend is causing more and more children to battle childhood obesity. The Safe Routes to School (SRTS) program has taken on a large goal to encourage communities all over the country to provide greater opportunity for students to utilize an alternate mode of transportation on their way to and from school and home. Some school districts already have established walking and bicycling routes that are highly utilized while other schools have minimal utilization of existing routes. Finally, there are schools with no routes established at all. SRTS can not only improve the routes for children, but can enhance the community's existing pathways system as well.

The SRTS program began in 1997 in New York City in the Bronx. As pilot projects continued to bring positive results to the communities, the federal transportation legislation assigned money to the program. From 2005 to 2009 there has been roughly $612 million allocated to continue making the routes for children safer and to help alleviate childhood obesity.

http://www.saferoutesinfo.org/

Introduction

Glenrock Trend

The Town of Glenrock has an excellent trail and sidewalk system established throughout the community. Al's Way, built in 1994, is a 2.5 mile pathway that stretches east and west along a significant portion of the Glenrock community. This trail has many access points and is utilized by the population of Glenrock, from young to old.

Al's Way near the end of trail

Al's Way running through Glenrock Town Park (photo by Mary Rookstool)

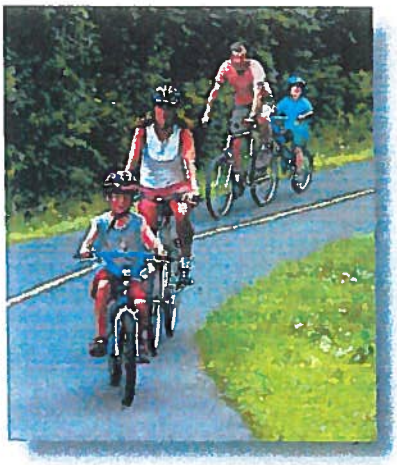
In addition to the trail, the Town sidewalk system is mostly complete and creates a number of different routes that a child can take to arrive safely to school. While the community overall has a great existing pedestrian system, there exists areas that would benefit from improvements and enhancements to the walking/biking infrastructure. To increase usage of the system by students, any impediments to safety must be addressed and solutions proposed and implemented. Impediments as defined by the SRTS program can include anything from physical elements such as broken sidewalks to safety issues such as creating a greater sense of safety by providing designated crossing guards. The primary goal for the Glenrock SRTS Master Travel Plan is to offer solutions to the existing impediments in order to maximize the usage of the trail and sidewalk system and provide students with a healthier and safer way to get to school.

Introduction

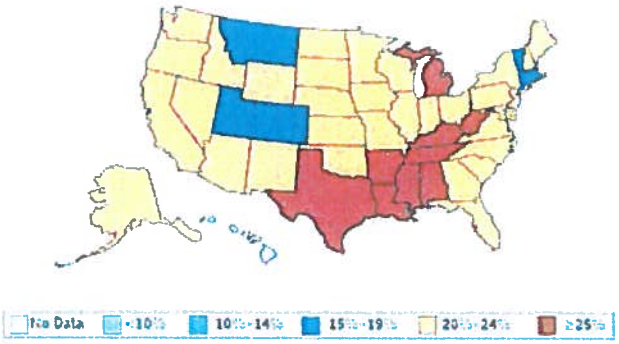
Childhood Obesity

In the last 30 years the number of children suffering from childhood obesity has tripled stated the Journal of the American Medical Association, September 2004. This trend is exacerbated by the lack of opportunities to bike and walk to school. The trend also reflects more time spent watching television, a cultural movement allowing children less independence, and a higher caloric intake than in the past.

When it comes to ensuring that children get a minimum of 60 minutes of recommended exercise a day, one solution is to increase the ability for them to walk or bike to and from school. For children living within ¼ mile to ½ mile of the school this can add approximately 30 minutes of activity to their daily routine.



One of the largest outfalls from developing obesity at a young age is that these children are twice as likely to become obese adults stated Preventive Medicine. March 1993. As an obese adult the dangers become even more alarming and can lead to diabetes, heart disease and ultimately death. Helping to reverse this trend by encouraging early childhood pedestrian and bicycling habits is one step towards a healthier future.



Obesity Trends Among U.S. Adults: 2004 (BMI ≥ 30, or ~ 30 lbs overweight for 5' 4" woman)

Introduction

Traffic Patterns and Safety

As new schools are built, a different set of standards has been established for identifying school sites. The protocol has led to the removal of neighborhood schools from the community and centralized population centers in favor of large consolidated schools, servicing wider populations. Large schools require exponentially larger tracts of land. Large tracts of land normally exist only at the edge of urban communities, forcing the schools to be located farther and farther away from population centers. There are two concerns surrounding the new school siting policy. The first is the distance. While many parents would be willing to allow their children to bike or walk to school, a distance of over one mile can be viewed as too far to expect children to travel. The second issue, directly linked to the first, is safety. The farther the distance that a child has to travel the higher the number of potential interactions with vehicles exist. The outcome of longer distances and more interactions greatly diminishes the safety. Planning specific safer routes can alleviate many of the dangers and in turn allow for an increased safety perception by both the parents and the students.

In Glenrock, the existing traffic patterns top the list of concerns for student safety. The primary impediment in the area is Birch Street / US Highway 20-26. This highway is the source of high speeds and traffic. It physically divides the elementary and middle school populations and forces students attending either school to cross Birch Street with its inhospitable vehicle speed limit. These high speeds need to be lowered in order to develop a safe traffic pattern for safety. In addition, the number of clearly labeled crosswalks and warning signs would greatly improve what are now dangerous intersections and promote awareness by both students as well as vehicle users.

Location of US HW 20/26 through the Town of Glenrock

Safe Routes to Schools Program

Safe Routes to Schools Program

The Safe Routes to Schools Program focuses on the 5 E's (Engineering, Enforcement, Encouragement, Education, and Evaluation) and how they can be used locally to promote safe school routes. A description of the 5 E's and the ways that they can be applied to Glenrock appear below.

Engineering

While there are programs that can be implemented and behavior changes that can hopefully be encouraged, a safe route to school must contain updated and usable physical infrastructure within the walking and biking distances of neighborhoods and schools. Complete sidewalks, handicapped ramps and unobstructed pathways are examples of the types of data that WLC collected with GPS and GIS mapping equipment. The data collected was analyzed to make a determination of high priority areas for potential projects and updates.

The engineering section of the 5 E's not only takes into account physical barriers but also transportation patterns that are detrimental to the safety of children on the routes.

Key areas for traffic engineering analysis is finding ways to slow down the traffic, alter patterns of traffic around schools and accommodating the needs of the various types of traffic that exist together (vehicle, bicycle, and pedestrian).

Handicap ramp added where only steps initially existed

Enforcement

Often enforcement is thought of as solely a police officer writing a speeding ticket or increasing drug enforcement in high crime areas. Enforcement can also create a community watch program or adult crossing guards for morning and afternoon rushes.

Safe Routes to Schools Program

Enforcement can establish safe routes for students that would otherwise encounter dangerous areas for crime or drugs, as well as increase awareness by law enforcement to school zones. The combined efforts of both the existing police department coupled with volunteer programs will create the most complete enforcement program.

Adult crossing guards used for enforcement

Encouragement

Encouragement is one of the most creative of the 5 E's. This is the portion of the program that tries to create a culture of walkers and bicyclers. One type of program that is utilized to provide encouragement is a rewards system. Rewards would be focused during warm weather months in Glenrock to encourage the most number of users.

Similar to the education portion of the SRTS, "encouragement" relies on the creation of a rewards system. Funding for the encouragement types of projects is typically very easy because there are many volunteers (retirees and parents) who are willing to implement the program.

Walking school bus

Education

The education portion of the SRTS program is aimed at the entire community from the students and parents to the community officials. Each group needs to be educated on different topics by using a variety of approaches. The students that are utilizing the pedestrian system need to learn safety and emergency behavior.

Safe Routes to Schools Program

In addition, there can be opportunities for them to learn to live a healthier lifestyle. Glenrock's existing trails system can be outfitted with exercise equipment to encourage more students to participate in a wider variety of physical activities. Also, the trail can incorporate education stations that introduce trail users to the flora and fauna in the area. The stations can be maintained by volunteers with new information posted on a monthly basis.

The second level of educational information should be provided to parents. Often parents are in a hurry to drop off their students and continue on to work at speeds which can endanger not only their own child but other children in the drop-off locations. Providing simple flyers and other educational materials to the parents is a method for them to be reminded of their important vehicular behavior in the school zones.

Educate the community through awareness

Obtaining community involvement can sometimes be difficult. Targeting the retirees and parents to create a volunteer program that provides walking or bicycling buses, provides crossing guards and creates the educational material will be a fantastic way to build interest in the program and expand the number of interested parties. There can be SRTS education provided in conjunction with any other event the community is holding.

Finally, the education provided to the local officials can include the adoption of ordinances and policies to encourage SRTS. In addition, county and state officials and legislators can help implement lowering of the speed limit through the school zones by reviewing the support that the community and local officials provide. Additional studies can be conducted such as traffic studies and drop-off behavior to provide a clearer picture of the needs for more public education.

Safe Routes to Schools Program

Evaluation

The final area of the 5 E's is evaluation. An action plan is meant to be focused to remain valid and to be updated on a regular basis. Deciding if the program has been changing the travel patterns of students can be conducted with the use of surveys (provided to each student). In addition the planning department or the school board can convene a SRTS task force on a yearly basis to decide which projects should be completed that year, which grants are available and who will be submitting the grant applications. After reviewing the completed projects, the list will be prioritized again for the upcoming year.

Why Develop a Safe Routes to Schools Master Travel Plan?

The 5 E's helps describe the basics of implementing the SRTS program. The question that remains is why would it be beneficial to develop a SRTS Master Travel Plan for Glenrock. The answer has multiple facets, which we will explore with the various portions of the 5 E's. In order to clearly understand why there is not more usage of the trail and sidewalks rather than bus and vehicle transportation, we reviewed the data and performed analyses to locate the areas of concern by parents of school aged children.

Glenrock has a wonderful trail and a well designed, primarily complete network of sidewalks. This system should encourage the use of bicycling and walking throughout early fall and late springs months.

Safe Routes to Schools Program

The development of the SRTS Master Travel Plan was based on the following steps:

1. Cataloged the data for routes to the Glenrock Elementary and Middle School
2. Mapped the data gathered regarding the routes and produced easy to understand graphics to increase trail usage
3. Obtained public input on the routes students are currently taking and what level of safety exists
4. Found the impediments and solutions to those impediments in order to attract more bicycle and pedestrian usage
5. Created a list of possible projects that relate to the 5 E's, responsible parties and funding sources for implementation.

Overall the answer to why it is important to develop a SRTS plan came about by the Town of Glenrock and WLC finding that there are impediments to the routes that are used by students. Implementation of solutions to these impediments will encourage a greater usage of the path, sidewalks and roadways. This increased usage will help create a community of healthier children.

Glenrock SRTS Planning Process

Background

In the summer of 2009 Glenrock hired WLC Engineering, Surveying and Planning to assist the community in writing a SRTS Master Travel Plan. The plan needed to conform with both the Wyoming Master Travel Plan and the examples provided by the National SRTS program.

Project Protocol

The first step in being eligible for the SRTS funding sources is to write the Master Travel Plan. It is highly advantageous to participate in this program as $1,000,000 has been awarded annually since 2005 for projects throughout the state. Information from the Wyoming SRTS website (http://www.saferoutespartnership.org/state/5043/wyoming) shows that Wyoming's SRTS funding totals $4,990,000 and includes the following annual apportionments:

2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Projected
$1,000,000	$990,000	$1,000,000	$1,000,000	$1,000,000

Task Force

With the assistance of Glenrock, WLC formed and established a task force. This task force consisted of the Town's planning staff, law enforcement, and school officials. Each member of the team provided data, ideas, goals, and concerns from their respective fields as well as from being part of the general community. The task force met two times prior to the first public meeting. The decision was made to collect GIS data from within ¼ and ½ miles distance from the school.

WLC gathered the data requested by physically walking the streets of Glenrock with a hand held GPS unit. Each roadway segment was labeled, and the information collected included a review of sidewalks, signage, crosswalks, speed limits or any other barriers to the routes.

The data was converted into a GIS database and finally into AutoCAD data so Glenrock will be able to integrate it into their existing data system. The data was also used to create the maps found in Apendix (A). The maps can provide a quick reference to the users not able to access the GIS data.

Glenrock SRTS Planning Process

Once the data was gathered and general conclusions were formed, the information was ready to be distributed for pub lic comments. A list of stakeholders was developed by the Town planning staff and the task force. The stakeholder list included parents, school officials, and local community officials. These stakeholders were mailed an invitation to a meeting. Also, the students in Glenrock's elementary and middle schools were provided with an invitation to give to their parents. Finally the meetings were advertised in the two local newspapers for two consecutive weeks each.

Public Participation

The first public meeting was held at the middle school and had roughly 15 people in attendence. General information was presented about the SRTS program as well as the data that WLC had collected.

The primary focus of this meeting was to obtain public comments regarding physical barriers, potential suggestions for related educational programs, and any other comments and concerns that the attendees wanted to address.

There were both comments and potential solutions brought up by those in attendance and solutions included:

- Decreasing the speed limit within the Town limits
- Better access across Birch to allow students to both access the trail as well as the sidewalk system (in need of completion) around the Glenrock middle school.
- Including more crosswalks
- Potential for an elevated crosswalk or a tunnel across Birch
- More enforcement in the areas of higher speed
- Safe path with signage designated for students
- Making Al's Way a destination point by adding "activity stations"
- Volunteer crossing guards
- Extending the path east
- Making Birch Street "no bikes allowed"
- Safety education as part of school orientation

The information gathered from the meeting along with the data collection was then incorporated into the first draft of the document. WLC and the Town of Glenrock planning staff worked together to ensure all of the information vital to the project was summarized.

Glenrock SRTS Planning Process

The draft was presented at the second public meeting. WLC presented a Power-Point presentation of a draft of the final Safe Routes to School Master Plan that was created from input by the Steering Committee, and comments and ideas from the first open house held on June 9, 2009.

Comments from open house #2 participants included:

- The need to prioritize projects based on the ease to accomplish
- Continued desire to place particular emphasis on reducing speed limits along Birch Street as the most desirable solution.

Other discussions took place relating to the solutions themselves and included the following comments:

- Maintenance of the 'no parking' curb paint should be easy to accomplish and should be done regularly
- Creating a painted no parking area farther back from the intersections would allow cars, pedestrians, and bicyclists to see each other more easily
- Place flashing lights on the top of each stop sign at the 4-way stop at 4th & Birch to help avoid anyone from running the stop signs

Goals

As requested in the proposal from Glenrock for the creation of the Master Travel Plan, WLC utilized the original goals set forth in the proposal as the guide throughout the project.

The SRTS program's goal is to build a physical environment and encourage a social climate that supports children's ability to walk or bicycle safely to school in order to:

- Reduce traffic congestion around school
- Create safer, calmer streets and neighborhoods
- Improve air quality and provide a cleaner environment
- Increase physical activity for children
- Promote a healthier lifestyle for the whole community

Glenrock SRTS Planning Process

This Master Travel Plan will include an inventory of existing conditions, a prioritized list of needs, safe routes development, mapping and visual data. The overall success of this program will be based largely on the involvement of students, parents, school administration, community members, and Town employees all working together to ensure that the program is successful.

The vision of the community is to see an increase in the number of students walking and bicycling to school to improve the quality of life for the Town's children!

Demographics of Glenrock

The Town of Glenrock, located within Converse County, Wyoming covers roughly 1.93 sq miles and has around 2,300 residents. There are approximately 600 persons under the age of 15. The estimated median household income in 2007 was $44,858.

There are two primary barriers to bicycle and pedestrian transportation in the community, Mormon Canyon (Deer Creek) and Birch Street (SR 87). The layout of the community places students residing in 6 distinct areas within the community (See Map 3 in Appendix A).

Area 1 is both residential and the primary downTown commercial business area. Students within Area 1 must access Glenrock Middle School by crossing Birch Street through a 30 mph area that includes a grid sidewalk system and crosswalks at the 4th Street intersection. Those students attending Grant Elementary are able to access the trail without crossing Birch.

Glenrock SRTS Planning Process

Area 2 includes primarily residential uses as well as a few blocks of central commercial and governmental buildings. Students within Area 2 must access Grant Elementary by crossing Birch Street through a 30 mph area that includes a grid sidewalk system and crosswalks at the 4th Street intersection. Those students attending Glenrock Middle School are able to access the grid sidewalk system.

Area 3 is a residential subdivision that is currently in the process of being built-out. The route for the students living in this area is extremely dangerous. Students within Area 3 must access Grant Elementary or the middle school by crossing Birch Street through a 45 mph area to reach the trail system. Those going on to the middle school will traverse the path headed west before making a second crossing at Birch Street through a 30 mph area that includes a grid sidewalk system and crosswalks at the 4th Street intersection.

Area 4 is a residential area with unpaved streets. Students within Area 4 must access Glenrock Middle School by utilizing the trail westward, then crossing Birch Street through a 30 mph area that includes a grid sidewalk system and crosswalks at the 4th Street intersection. Those students attending Grant Elementary are able to access the trail and do not have to cross Birch Street.

Area 5 is a strictly residential area located directly adjacent to both the Elementary and High school. Students within Area 5 must access Glenrock Middle School by utilizing the trail westward then crossing Birch Street through a 30 mph area that includes a grid sidewalk system and crosswalks at the 4th Street intersection. Those students attending Grant Elementary are able to access the school from the neighborhood streets and sidewalks.

Area 6 is a strictly residential area located in the most dangerous crossing area of Town. The crossing point from the area has a 65 mph speed limit. There is no access to the trail as it is not complete at this point.

Making a safe path for each of these distinct areas in the community is the key to implementing the SRTS vision.

Glenrock SRTS Planning Process

Demographics of Schools in Glenrock

- The total number of students at Grant Elementary is 260, and there are 215 students at Glenrock Middle School.
- The race demographics indicate there are .7% Black; 4.8% Hispanic; .6% American Indian or Alaska Native; and 94% White.
- Percentage of low income: 27%.
- Percentage of children by English proficiency: .4% are Limited English Proficient
- Percentage of children with special education needs: 13.4%
- Additional support during travel time (crossing guards, student crossing volunteers): school district employees monitor crossings
- School board policies that deal with transportation of students see Appendix B

Pedestrian Facilities

Because of the Town's existing grid pattern of roads and sidewalks, there are a variety of routes available for most students. Several of the subdivisions have more restrictive entry and exit traffic patterns, which should be monitored as the subdivisions build out.

The sidewalks within ¼ mile of school have good connectivity between the school and surrounding neighborhoods. The existing sidewalk network is in fair condition. There are several areas with breaks in continuity and rough sidewalk conditions that could be placed on a maintenance schedule and improved.

Bicycle Facilities

On-road bicycle facilities such as a dedicated bike lane are not available in the Town of Glenrock. However, the grid pattern street network that is around the middle school and Al's Way provides bicyclists with route options. Al's Way directly links Grant Elementary to the population centers in the easterly and westerly directions of the Town.

Example of added crosswalks and bicycle lanes

Data Collection

In order to have a clear picture of Glenrock's existing routes and potential impediments to those routes, GIS mapping software was utilized. The list of data that needed to be collected included:

- Priority intersection identification
- Sidewalks
- Crosswalks
- Streetlights
- Stop Signs
- Speed Limits
- Handicapped Ramps
- Flows of Transportation
- Impediments (breaks in sidewalks, rough sidewalks, high speeds, crosswalks not visible or nonexistent, lack of signage for crossings, no lights for children leaving after-school programs, major arterials, and drop-off and pick-up areas)

WLC sent a two-person team into the field where they walked each of the streets within a ¼ mile from the school locations. The basic data collection took about 6 hours. WLC downloaded the data captured in the field and other data from paper maps, to create a GIS database that was converted into Computer Aided Design (CAD) drawings.

Sidewalks, crosswalks , streetlights, stop signs and handicap ramp data were collected mainly for location identification. Missing or broken sidewalk locations were identified for the sidewalk analysis. There are very few crosswalks throughout the Glenrock community and we included the ones that were visible. Speed limit transitions and signage identified the three (3) speed zones on Birch Street (30, 45, 65 mph). The final collection item included impediments to the pathways. This point data and street segment information provided valuable information for analysis.

Analysis of Data

After the completion of the data collection, the team identified a priority list of projects. The analysis focused primarily on two items: priority intersections (high usage and dangerous), and flow of the pedestrian, bicycle and vehicular traffic.

Data Collection

Six priority intersections were targeted: **Birch Street and Sunup Road (Priority #1)** This intersection has 10 access points for vehicular and pedestrian/bicycling interaction. See map 4. The speed limit at this intersection is 45 mph.

Birch Street and Sunup Road Crossing

Birch Street and Boxelder Rd (Priority #2) This intersection has only 4 access points for vehicular and pedestrian/bicycling interaction. See map 4. The primary concern at this site is that both high school and elementary school students, as well as buses, cars, bicycles and pedestrians, interact at this intersection. The intersection is the main entrance to both the high school and elementary school and should be reviewed for possible opportunities to create separation between users. The speed limit is 45 mph.

Birch Street and Boxelder Rd

Boxelder Rd and Al's Way (Priority #3) Glenrock has been in the process of expanding the trail beyond Boxelder Road. See map 4. This expansion would increase the usage and the number of crossings over Boxelder. Separation between all of the users will be defined.

Boxelder Rd and Al's Way

Data Collection

Birch Street and 2nd Street (Priority #4) As students are riding eastwardly towards Grant Elementary School this is the last intersection for them to cross to access Al's Way. See map 4. While the trail does not start at this intersection, it is still accessible from here so the natural tendency, determined at the public meeting, was for the students to cross here. The speed limit is 30 mph.

Birch Street and 2nd Street

Birch Street and 4th Street (Priority #5) This is the only intersection in Glenrock that has crosswalks in all four 4 directions. See map 4. It's the most logical place for the students to cross. The information that needs to be analyzed for this intersection is whether it needs more signage or an attendant during school rush hours. The speed limit is 30 mph.

Birch Street and 4th Street

Birch Street and 3rd Street (Priority #6) As students are riding eastwardly towards Grant Elementary School, this is the second to last intersection for them to cross to access Al's Way. The speed limit is 30 mph.

Birch Street and 3rd Street

Data Collection

Boxelder and Oregon Trail (Priority #7) Many students cross this intersection. Lighting and an updated crosswalk pattern is highly needed at this point.

The second priority project identified from the GIS data analysis was to create a flow map showing the paths that children are currently taking to school. This map clearly identified the specific points where children are most vulnerable and how implementation of an educational program or an engineering upgrade can be used to make the route safer.

Final Maps

The final series of maps used in identifying and prioritizing the listed projects are included at the end of this document in Appendix (A).

The maps include:

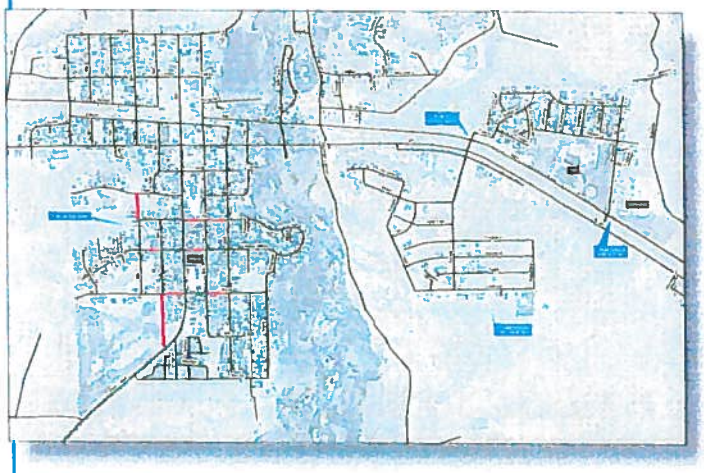
Map 1 - Analysis distances (¼ & ½ mile area)

Map 2 - Census data of students within Glenrock

Map 3- Locations where students exist by area

Map 4 - Priority intersection

Map 5 - Identification of the streets where there are no sidewalks



Mapping Example

Map 6 & 7 - Location of the stop signs / crosswalks / street lights (East - West)

Map 7 & 8 - Flow of student populations (East - West)

Recommendations & Action Plan

The basic concept behind the entire SRTS program is to find the pathways that currently exist for students and then make sure those roadways, sidewalks, pathways, intersections and crossings are safe. The WLC team, in conjunction with the Town of Glenrock and the community, reviewed the area and looked at the routes that the students are taking to get to school. After reviewing the pathways, the team developed a list of priority intersections and impediments that the students were facing, in order to come up with a list of solutions. The solutions run the gamut from being simple and low cost to being very complicated and costly. The goal was to look at the best possible solutions including a realistic look at the associated costs. Matching the highest priority solutions that will work within Glenrock's budget is the primary goal. The list will be modified on a yearly basis to determine the funding needed and the existing budget to achieve the goal.

Priority Intersections

Based on the research and field observations, we identified and prioritized six intersections as defined previously. Below is a summarization of the enhancements to each of these priority intersections that would encourage a higher usage by pedestrians and bicyclists.

Birch Street and Bridgers Crossing and South Sunup Road

This intersection was identified as priority #1 due to the speed limit and number of interactions that students could potentially have with vehicles. In addition to these two potential impediments, there is a catalyst that increases the number of students crossing here, namely the convenience store (snacks, games, and socializing) located on this corner.

The highest valued solution for this area is to decrease the speed limit from 45 mph to the desired 35 mph. Additionally, the solutions discussed for this corner include an elevated crosswalk for pedestrians or a tunnel underneath Birch. Those are both projects that would be ideal if a significant grant was obtained. The second solution for this area is to install additional signage. The signage would warn drivers that there are students on foot and bicycles crossing at this location. The signage should not lull students into a false sense of security that the area is safer for them but instead is only meant to be a warning to drivers.

Recommendations & Action Plan

Birch Street and Boxelder Road
The primary concern at this intersection is the age groups of the children and number of vehicles passing through the area. Glenrock High School sits across Boxelder street from Grant Elementary. Both the parents dropping off their children at the elementary school and the students that drive to the high school are interacting at the Boxelder and Birch intersection. The number one solution for this area is to decrease the speed limit from 45 mph to the desired 35 mph. This would allow more time for cars traveling in both directions to slow down prior to making the turn. The second solution is to add more signage to the intersection warning drivers to be on the highest alert.

Birch Street and Winchester Drive
The trouble with this intersection is the lack of trail connection. An expansion of the trail is currently planned and would allow students to cross here to utilize it. Yet, the danger that exists at this intersection is the speed limit at 65 mph. The current behavioral pattern shows children crossing here, then walking along the side of Birch Street to the entrances at Boxelder. Decreasing the speed limit is the primary solution to this intersection. The trail expansion will also assist in keeping children off of Birch Street for a longer stretch of roadway.

Birch and 2nd Streets - Birch and 3rd Streets - Birch and 4th Streets
All three of these downTown intersections could utilize signage and striping changes. The signage can include additional blinking lights during the morning and evening school rush hours. The striping has several dimensions. The first suggestion is to provide signage for bike lanes. The streets are wide enough to create a complete street. A complete street ensures that pedestrians, bicyclists and vehicles are provided with adequate space to perform at each of their optimal levels. The second suggestion for striping is to elongate the "no parking" areas from the intersections. This creates a better line of sight for students and vehicles approaching the intersection. The third suggestion is to ensure that the crosswalks are inspected on a regular basis and repainted as needed.

N Boxelder Trail and E Oregon Trail
Many children cross this intersection going to the elementary school. As this area is extremely close to the entrance to the high school, it is very dangerous. The speed limit is low. The crossing striping patterns should be updated on a yearly basis. A crossing guard would be appropriate here as well as additional signage.

Recommendations & Action Plan

Projects included on the list
Reviewing the description of the 5 E's, we then summarized the list of priorities that will enhance the Town of Glenrock's pedestrian and bicycle networks. While there is an excellent existing trail, sidewalk, and street system, the impediments that are lowering the usage of the system needs to be addressed and hopefully solved. Once the list of projects is created, funding sources and responsible parties can be identified and the projects can be implemented. Below is a list of projects that would help encourage students to walk and bike to school. Following the list is a spreadsheet that shows the details for phasing the project, the responsible parties, and potential funding sources.

Engineering
Projects:

Lowering the speed limit. The speed limit is to be lowered from 45 mph to 35 mph in front of the Grant Elementary School on Birch Street.

New striping for parking. Striping to move parking further back from the edge of the intersection can be placed along the central corridor as well as any of the side streets over a phased period of time.

Signage, blinking lights installed at more intersections. The following are high priority intersections:

- Birch St. and 2nd St.
- Birch St. and 3rd St.
- Birch St. and 4th St.
- Birch St. and Bridgers Crossing and Sunup
- Birch St. and Boxelder St.
- Birch St. and Winchester Dr.
- N Boxelder Trail and E Oregon Trail

Remove current intersection corners and install matching handicap ramps. This can be completed as other work is done in the area and phased over the next 20 years.

Sidewalk additions. The following streets would complete the network of sidewalks.

- 5th
- 6th
- Elk
- West Fir
- Fox
- West Grove

New striping for bike lanes. Striping can be placed along the central corridor as well as any of the side streets over a phased period of time.

Recommendations & Action Plan

New light poles. Light poles should be installed on all streets at a minimum of every 250 feet in a staggered formation.

Overpass over Birch Street. A cross-walk elevated over the roadway to be utilized by pedestrians and bicyclist.

Tunnel under Birch Street. A cross-walk underneath the roadway to be utilized by pedestrians and bicyclists.

Enforcement

1. Increase police observation at the intersection of Birch and Bridgers Crossing

2. Establish a volunteer program that has more crossing guards stationed at heavily used intersections

3. Establish a program through the police department (possible local criminology students) to create a student supervision program

Education

1. Create an education and exercise program along Al's Way to encourage more children to utilize the pathway

2. Develop a walk to school "bus" or a bike to school "bus". Utilize volunteers to lead the way to and from school by foot or on their bikes. This virtual "bus" creates a group of children walking or biking rather than a single child, thus safety in numbers.

3. Brochures, flyers, and website information can all be provided to the community to educate them on a) allowing their children to go to school via a safe route and b) the value of being aware and obeying the existing laws within the school zones etc.

4. Have a yearly training session as part of the student orientation the first week of school

Evaluation

1. Establish a yearly review of the projects on the list to update the completed projects and add to the list if needed

2. Verify that a member of the task force team will apply for funding for the projects on the list

Financing of Projects

The SRTS Master Travel Plan is the starting point for financing of projects throughout the community utilizing the SRTS funding available through the Wyoming Department of Transportation.

Many of the projects suggested above are volunteer programs. While others are projects that should be included in the yearly Town budget.

Examples of Town budget projects:

Crosswalk Striping

Additional Signage

Volunteers and Temporary Signage

Al's Way Trail Head Enhancement

Finally, the larger projects will need to obtain a combination of funding. Therefore the following is a list of funding sources that could be utilized in conjunction with the SRTS funding available. Appendix C is a listing of the proposed projects and cost estimates in 2009 dollars. As the plan is reviewed yearly, updates should be made to the dollars and the funding available.

Financing of Projects

The following is a listing of possible grant and loan opportunities available to local governments for a variety of projects.

WYOMING BUSINESS COUNCIL

Business Ready Communities and Community Facilities Grant and Loan Programs

The Business Council has two main state grant programs: the Business Ready Communities program and the Community Facilities program.

Business Ready Communities Grant and Loan Program: Eligible grant activities are typically infrastructure projects such as water, sewer, streets, telecommunications, airports, rights-of-way, land, spec buildings, or they may include amenities within a business or industrial park, industrial site, or business district or other appropriate physical projects in support of primary economic development. Educational development infrastructure, such as workforce training facilities, and recreational facilities, such as landscaping and convention centers, are also eligible. The primary applicants for this program are cities, Towns, counties, and joint powers boards. State and local community development organizations can assist and provide project management development under contract to the primary applicant. Project costs up to $250,000 require a minimum local match of 5 percent. For project costs between $250,000 up to a maximum $1,500,000, the required local match is a minimum of 10 percent. An applicant can submit two grant requests over the period of a year to receive up to $3 million in funding.

The highest priority for funding is publicly owned infrastructure projects which are needed for a business that has committed to locate or expand in Wyoming. A textbook example is PolyPipe in Evansville. WBC provided funding to construct a rail spur and utilities to PolyPipe's 70-acre industrial park. WBC's goal is to bring new businesses into Wyoming, or assist an existing local business to expand physically and by increasing the number of jobs. Bringing new, higher paying jobs to the local economy is a key factor in obtaining a WBC grant.

Financing of Projects

WBC's second priority for funding is the Community Readiness component. These funds can be used to construct publicly owned infrastructure projects that ready the community for new business development. An example of a project financed with this program is Natrona County's Bishop rail spur, which readied the surrounding 700-acre industrial park for development. The rail spur is a going concern and pays the county for each rail car that gets loaded or unloaded from the spur. The county uses these funds for economic development. The primary goal is to recruit a committed business to the park, then return to the Business Council for a Business Committed Grant to improve roads and bring utilities to the site.

The third component for funding is Community Enhancement. Funds are used when an applicant wants to improve the community's aesthetic character or quality of life. Eligible improvements include landscaping, recreational or convention facilities, and for purposes of making itself more attractive for business development under a specific strategy or plan of action. Commitment from a specific business to expand or locate in the applicant's community is not required. Maximum award is $500,000. Examples include the spray park in Cheyenne and a driving range in Rolling Hills.

Business Committed grants are accepted four times a year, on the first day of March, June, September, and December. Community Readiness applications are accepted twice a year; the first day of March and September. Community Enhancement funds are accepted once a year on the first day of September.

Community Facilities Grant and Loan Program: This program is used to assist communities in preserving former school and government facilities that have existing or future community uses. Examples include the conversion of the closed Mills Fire Hall to a Community/Senior center. A major goal of the program is to convert schools closed under the School Facilities Commission into community/recreation centers. Grants are limited to a maximum of $1.5 million and a match of 10% is required for grants up to $250,000. A 15% match is required for grants over $250,000. Community Facilities grants are accepted twice a year on the first day of June and December.

Financing of Projects

COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG)

The Business Council also has a federal grant program called the Community Development Block Grant.

There are two primary programs under the Block Grant program: community development and economic development.

Community Development: These grants are awarded from a state pool of money for every jurisdiction except Casper and Cheyenne, which get their own allocations. The competition for community development grants is significant. Projects must meet a national objective of serving moderate income people, eliminating slums and blight, or activities designed to meet community development needs having a particular urgency. These grants are often used to build water and sewer for low-income residential areas, build senior centers, etc.

Economic Development: The remainder of the grants in the CDBG program is for economic development projects. Projects must meet a national objective, typically, employment of low to moderate-income individuals. The goal of the program is to hire low to moderate-income individuals at above average wages for the type of position created.

Technical Assistance grants. Grants are available to fund for-profit businesses to develop business plans, marketing, etc.

Planning Only Grants. Provide $50,000 in funding with a 20% local match for a total budget of $62,500, which can be used for planning activities.

Infrastructure Grants. Chiefly used to extend publicly owned infrastructure to businesses that will employ low to moderate-income individuals. A good example is the Platte River Parkway's project to remodel the Old Midwest Pumphouse to include a restaurant. A $277,000 grant was awarded by the Business Council to extend water and sewer service to the site. In exchange, the business had to commit to leasing space at the Pumphouse and hiring at least 51% low to moderate-income people. These grants have a maximum grant award of $500,000.

Financing of Projects

SLIB (STATE LOAN AND INVESTMENT BOARD)

The traditional Mineral Royalty Grant program has been replaced by the legislature in the 2009/2010 budget session with three programs which are detailed as follows:

1. Countywide Consensus List: This is the largest allotment of funding available to local governments (municipalities, counties and special districts) with the greatest amount of flexibility available to local governments. Under this program, the legislature set aside a specific amount of funding for each county. The process to distribute this funding requires that the county commissioners and the Town council's representing at least seventy percent (70%) of the incorporated population agree on the list of projects to be funded from this program. There are no matching requirements. Counties have the entire biennium to select its projects and do not need to submit a complete list of projects at one time. Once a county has a project it would like financed from this program, it submits that project to the State Loan and Investment Board on a form signed by the commissioners and the mayors representing at least 70% of the incorporated population of that county. The State Loan and Investment Board must approve the project. Although there is a great deal of flexibility in the type of project that can be funded with this program, funding is limited to capital construction projects and the purchase of emergency vehicles. The State Loan and Investment Board meets every other month to consider these and other matters.

2. Unfunded or Partially Funded Large Capital Construction Projects program. Under this program, applicants (municipalities, counties and special districts) can submit individual applications for capital construction projects. This program operates much like the traditional State Loan and Investment Board grant program. Applicants must meet minimum taxation requirements. Municipalities must impose one of the optional sales and use taxes or levy at least seven mills. Grants can be awarded up to 50% of eligible project costs, but the Board has the ability to waive or reduce this matching requirement. The State Loan and Investment Board can consider these grants at any one of its meetings.

3. Emergency Grants. This program is designed to allow local governments (municipalities, counties and special districts) to apply for funding to alleviate an emer

gency situation. An emergency situation is defined as a direct and immediate threat to public health, safety or, welfare. Applicants must meet minimum taxation requirements. Municipalities must impose one of the optional sales and use taxes or levy at least seven mills. Grants can be awarded up to 50% of eligible costs, but the Board has the ability to waive or reduce this matching requirement. A good example of a qualifying emergency would be the loss of the Town's only ambulance. The State Loan and Investment Board can consider these grants at any one of its meetings.

JPA Loans – Joint Powers Act Loans. JPA state loans are not subject to federal requirements. The down side is that the interest rate is higher approximately six percent for JPA loans compared to 2.5% for SRF loans.

WYDOT (WYOMING DEPARTMENT OF TRANSPORTATION)

Safe Routes to School. These grants can be used to construct walking and biking paths to schools. A typical project example is Bar Nunn with a $138,750 grant to construct a walkway to the school across an open field. Cheyenne has used these funds to construct a portion of its greenway near schools.

TEAL – Transportation Enhancement Activity - Local. TEAL grants are used to construct improvements off the highway system. A good example of funding is the Platte River Parkway pathway in Casper. Other uses of these funds include: acquisition of scenic easements and scenic or historic sites; scenic or historic highway programs (including the provision of tourist and welcome center facilities); landscaping and other scenic beautification; historic preservation; rehabilitation and operation of historic transportation buildings, structures or facilities (including historic railroad facilities and canals); preservation of abandoned railway corridors (including the conversion and use for pedestrian or bicycle trails); control and removal of outdoor advertising; archaeological planning and research; environmental mitigation to address water pollution due to highway runoff or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity, and establishment of transportation museums. These are 80% grants. Applications are accepted each year from April 15 to June 30. Grants can range from $10,000 to $500,000. Normally most projects funded do not exceed $300,000. Up to ten percent (10%) of the grant amount requested can be used for environmental assessments.

Financing of Projects

CRIP – Commission Road Improvement Program. Provides a means of financing roadway construction projects on selected county roads. The Commission expressly retains its discretion in selecting candidate projects from proposals received by individual counties. The CRIP funding source is the federal Surface Transportation Program (STP) and is subject to guidelines for federally funded projects. County roads experiencing high demand induced by intra-state traffic or county growth, coupled with roadway exchange potential from the state highway system to county jurisdiction are two features that influenced the Commission to create the CRIP.

CSA – Context Sensitive Amenities. Provides additional funding for beautification improvements, which accompany a WYDOT reconstruction project. CSA's are intended to be incorporated in project designs with "urban districts." An "urban district" includes territory contiguous to, and including, any public street or highway adjacent to a business, industrial or residential area, and situated at intervals of less than 500 feet for a distance of a quarter mile or more. At the discretion of the WYDOT District Engineer, the 500-foot requirement may be waived to accommodate small, incorporated Towns that exceed the 500-foot spacing. The urban district boundary must allow the jurisdiction to maintain any CSA's authorized.

Eligible work includes landscaping and associated irrigation systems, bridge aesthetics, gateway signing, decorative lighting, pedestrian or bicycle pathways and amenities, historical enhancements and interpretive signs, patterned or colored concrete appurtenances, decorative fences, street furniture, or visual screening.
Based on preliminary cost estimates, up to 3% of the normal project costs will be added to the total project. CSA's are considered supplemental to Transportation Enhancement Activity Funding. Local matching funds are not required of any local entity requesting CSA's.

Prior to design, the participating community or governmental entity must agree to provide maintenance for any beautification in exchange for the non-local match provision. Other issues such as utility costs and maintenance (lighting & irrigation systems) must be considered.

Financing of Projects

SURFACE TRANSPORTATION URBAN PROGRAM

This is a federally funded road construction program to assist Wyoming urban cities, address road and street needs created by increased traffic generation, changes in land use patterns, and other community development characteristics. By definition, an urban municipality is one with a census population greater than 5,000. This discretionary funding program was created by the Wyoming Transportation Commission to address unique rural arterial road situations.

Originating as the Federal Aid to Urban Systems (FAUS) program, the urban program pre-dated the Intermodal Surface of Transportation Efficiency Act of 1991 (ISTEA). With the advent of ISTEA in 1991, the urban program was removed as a federally mandated program with an annual federal apportionment.
In Wyoming, the Transportation Commission determined that the urban program was an important funding program to assist cities in meeting construction funding needs for major streets. This annual apportionment is then distributed, by a formula based on population, to an urban account for each of the state's 16 urban communities.

Features:

- Authorized by the Wyoming Transportation Commission and administered by WYDOT Planning Program.
- Based on latest census, communities have populations greater than 5,000 and are eligible for participation in this program.
- STP-Urban funds are allocated based on the ratio of a community's population to total state urban population.
- Requires a local match of 9.51%.
- The local match may not include other federal funds. However, other funding sources may be used to achieve combined funding.
- Potential STP-Urban projects are prioritized and programmed by a local urban system advisory committee composed of local officials and representatives. Projects are selected and approved by the local elected officials with WYDOT concurrence. Representation of this committee process normally includes both technical and policy perspectives. WYDOT urban planners assist in the commit tee process.

Financing of Projects

- STP-Urban funds may be used for projects within the urban limits of the com munity on roadways functionally classified as collectors or higher.
- Administratively, WYDOT receives the project request from the local entity and prepares a Cooperative Agreement, which the WYDOT District Engineer submits to the local entity for its approval.
- After local approval, the agreement is submitted to the Wyoming Transportation Commission for its concurrence.
- The executed agreement initiates the Authority for Expenditure (AFE), which creates an account from which project funds can be expended.
- WYDOT is responsible for project administration, design, bidding, contract ad ministration, and other project oversight tasks.
- Upon completion, the city accepts the project and is responsible for maintaining and operating the roadway.

STATE FORESTRY

U&CF Grant – Urban and Community Forestry Grants. These grants are used to plant trees on public property, such as greenways, gateways, public buildings and street right-of-ways. Volunteer involvement is required; for example, trees are purchased using the grant and the Boy Scouts plant the trees. These grants require a one-to-one cash match. Minimum grant $1,000 and a maximum of $5,000. Applicant must maintain the trees for 3 years after completion.

Tree City USA. Initiated in 1976 as a project of our nation's bicentennial celebration, Wyoming ranks first in the nation for the percentage of incorporated municipalities that are Tree City USA's. The award is presented annually to communities that meet four criteria. The minimum criteria are:

1. The community must have a Tree Board or city department charged by ordi nance to oversee the community's tree program.

2. The community must enact a comprehensive tree ordinance that defines tree planting, maintenance and other requirements concerning trees growing along streets and public areas.

3. The community must spend at least $2 per capita on tree resources. This can include planting, city maintenance, grants and donations for eligible tree related projects.

4. The community must have an official Arbor Day celebration with a proclamation by the mayor and a tree planting ceremony

Preference is sometimes given to Tree City USA communities over other communities when allocations of grant money are made for trees or forestry programs. In competitive grant programs, there are invariably more requests than available funds given through state or federal agencies. If requests are equally worthy, some officials tend to have more confidence in communities that have demonstrated the foresight of becoming a Tree City USA.

STATE PARKS, HISTORIC SITES AND TRAILS

L&WCF – Land and Water Conservation Fund. Project sponsors such as cities, Towns, counties, school, and recreation districts are eligible to apply for L&WCF monies. The L&WCF is a 50% matching grant program. Only costs for the development and/or acquisition of public outdoor recreation lands and facilities are eligible for assistance.

A successful grant applicant must agree to dedicate the park or area where the project is located for use by the public in perpetuity. In addition, the grantee must also agree to develop, operate and maintain the development to acceptable National Park Service (NPS) standards for public outdoor recreation. All applications must meet a need identified in the State Comprehensive Outdoor Recreation Plan (SCORP), and will then be numerically ranked by the Open Project Selection Process (OPSP). Grants for matching funds are subject to approval by the NPS. All costs must be incurred after the project has received approval from the NPS.

Grants are due no later than January 30th of each year. All applications will be prioritized and approved by the Wyoming State Parks and Cultural Resource Commissioner, and then mailed to the NPS for their review and approval. It is anticipated the NPS will provide final approval by May 1st of each year.

Financing of Projects

Recreational Trails Grant Program. Eligible projects include: trail related environmental or safety education projects; maintenance of existing trails; restoration of areas damaged by trail use; trail-head and trail-side facility development; provision of features which facilitate access by people with disabilities; development of urban trail linkages; development of trail loop opportunities; construction of new trails where a need has been shown, and acquisition of easements and fee simple title to property for a trail. Grants may also be used by government and not-for-profit agencies for the purchase and/or lease of trail construction and maintenance equipment. These are 80% grants. Eligible applicants include local governments and not-for-profit organizations.

United States Department of Agriculture – Rural and Community Development Program.

The Department of Agriculture under the Rural and Community Development Program offers many grant and loan programs available to small rural communities for a variety of purposes and projects. Two of the major programs available to local governments is the Community Facilities Loan and Grant Program and the Water and Wastewater Disposal Loan and Grant Program

APPENDIX A

MAPS

APPENDIX B

EXISTING POLICY

SCHOOL BUS SCHEDULING AND ROUTING

Bus routes, schedules, and stops will be developed under the direction of the Superintendent. The purpose of bus scheduling and routing will be to achieve maximum service with a minimum fleet of buses consistent with rendering reasonable service to students.

Bus routes will generally follow state and county roads and highways. Parents will be responsible for getting their children to established bus routes.

Children living within the city limits will not be eligible to ride school buses unless the Board determines that distances are unreasonable or hazardous. Exceptions will be made for physically disabled students.

ADOPTED: May 11, 1984
REVISED: August 8, 1996

STUDENT TRANSPORTATION SERVICES

The major purpose of school transportation is to get students who live an unreasonable walking distance from school, to school and back in an efficient, safe, and economic manner. Other purposes include transportation for field trips in direct support of the curriculum, transportation for support of the co-curricular program, and transportation for community activities.

The Board may establish or alter bus routes to serve students as they determine the need.

ADOPTED: May 11, 1984

JFCC
(Also EEACC)

STUDENT CONDUCT ON SCHOOL BUSES

Safety is of prime importance for our students as we transport them to and from school and for school sponsored activities. Bus transportation safety depends upon alertness on the part of the bus drivers and courtesy and good conduct on the part of students being transported. Safety requires the cooperation of students, parents/guardian and school personnel. Parents/guardian should review and discuss the school bus rules with their child/children in an effort to help him/her understand and assume responsibility for good school bus conduct.

The school administration is charged with developing and enforcing rules and regulations which will promote good conduct of students on school buses.

Drivers and students are charged with the responsibility of conduct which will result in safe transportation in an atmosphere of mutual respect and cooperation.

Each bus student will be assigned to a bus and a bus route. Changes in bus assignment will not be allowed except with the approval of the principal and Director of Pupil Transportation.

ADOPTED: May 11, 1984
REVISED: June 12, 1986
REVISED: September 12, 1991

APPENDIX C

COST ESTIMATIONS

GLENROCK SAFE ROUTES TO SCHOOL
ESTIMATED COSTS (2009 DOLLARS)
6/23/2009

Ranking	ITEM	UNIT	QUANTITY	ESTIMATED UNIT COST	ESTIMATED TOTAL COST
1	SPEED LIMIT SIGNS ON BIRCH (HWY 87)	LS	1	$2,000.00	$2,000.00
				CONTINGENCY (10%)=	$200.00
				ESTIMATED DESIGN & CONSTRUCTION ENGINEERING FEE =	$6,500.00
				ESTIMATED TOTAL	$8,700.00

Construction is simple with the addition of 3 regulatory signs on the highway. The estimated engineering costs include a traffic study that will be required by WYDOT to support the chosen reduced speed limit.

2	NEW SCHOOL ZONE SIGNAGE	LOCATION	9	$6,500.00	$58,500.00
				CONTINGENCY (10%)=	$5,850.00
				ESTIMATED DESIGN & CONSTRUCTION ENGINEERING FEE (20%)=	$11,700.00
				ESTIMATED TOTAL	$76,050.00

System would include flashing yellow lights and electrical service

3	INTERSECTION ADA RAMP UPGRADING (4 CORNERS)	EA	1	$3,500.00	$3,500.00
				CONTINGENCY (10%)=	$350.00
				ESTIMATED DESIGN & CONSTRUCTION ENGINEERING FEE (20%)=	$700.00
					$4,550.00

This estimated price is for removal and replacement of existing curb gutter and sidewalk on a standard 4 leg intersection Replacement will consist of new ADA accessible ramps.

GLENROCK SAFE ROUTES TO SCHOOL
ESTIMATED COSTS (2009 DOLLARS)
6/23/2009

Ranking	ITEM	UNIT	QUANTITY	ESTIMATED UNIT COST	ESTIMATED TOTAL COST
4	REPAINTING NO-PARKING ZONES AT INTERSECTIONS	EA	1	$2,500.00	$2,500.00
	This item is represented on an estimated cost per intersection basis assuming a standard 4 leg intersection with radius and an additional 15' in each direction on each corner to be painted no parking.				
5	SIDEWALK INSTALLATION	LF	3600	$27.00	$97,200.00
	RETAIN WALL REMOVAL AND REPLACEMENT	LF	1500	$60.00	$90,000.00
	GRADING, IMPORT/EXPORT	CY	750	$10.00	$7,500.00
					$194,700.00
				CONTINGENCY (10%)=	$19,470.00
				ESTIMATED DESIGN & CONSTRUCTION ENGINEERING FEE (20%)=	$38,940.00
				ESTIMATED TOTAL	$253,110.00
	There are several retaining walls in the potential sidewalk paths where sidewalks do not exist now, there are other areas where soil will have to be imported to support the sidewalks. There may be issues with landowners and actual rights of ways vs. perceived rights of ways. ADA accessibility may be limited in some areas due to existing conditions.				
6	BIKE LANE STRIPING	LF	1	$4.00	$4.00
	PAVEMENT SYMBOL AND WORD PAINTING	SF	1	$45.00	$45.00
				ESTIMATED DESIGN ENGINEERING FEE =	$8,500.00
	These items are presented on a cost per lineal foot and square foot basis since a bike route plan does not yet exist. The cost for the design engineering fee is the estimated cost to develop a bike route plan for the Town of Glenrock.				

GLENROCK SAFE ROUTES TO SCHOOL
ESTIMATED COSTS (2009 DOLLARS)
6/23/2009

Ranking	ITEM	UNIT	QUANTITY	ESTIMATED UNIT COST	ESTIMATED TOTAL COST
7	STREET LIGHTING SYSTEM FOR SUNUP RIDGE SUBDIVISION 54 POLES	LS	1	$295,000.00	$295,000.00
				CONTINGENCY (10%)=	$29,500.00
				ESTIMATED DESIGN & CONSTRUCTION ENGINEERING FEE (20%)=	$59,000.00
				ESTIMATED TOTAL	$383,500.00
				LESS Rocky Mountain Power Credit @ approximately $500/ploe	$ 27,000.00
					$356,500.00

System has been estimated to include 54 lighting fixtures (metal poles with concrete bases) and all electrical appurtenances associated. The Town of Glenrock will also have an ongoing service cost of approximately $9.00/month with Rocky Mountain Power. A savings in instillation costs will be realized if wooden poles supplied by Rocky Mountain Power are used. The cost per pole will be near $500 per pole, but an estimate from RMP would be required.

8	OVERPASS AT BIRCH AND BRIDGERS	LS	1	$2,300,000.00	$2,300,000.00
				CONTINGENCY (10%)=	$230,000.00
				ESTIMATED DESIGN & CONSTRUCTION ENGINEERING FEE (20%)=	$460,000.00
				ESTIMATED TOTAL	$2,990,000.00

Pedestrian overpasses vary greatly in cost depending upon type of construction and span. The cost estimated is for a concrete pedestrian/bicycle overpass that is ADA accessible very similar to other pedestrian overpasses used throughout the state over state highways.

GLENROCK SAFE ROUTES TO SCHOOL
ESTIMATED COSTS (2009 DOLLARS)
6/23/2009

Ranking	ITEM	UNIT	QUANTITY	ESTIMATED UNIT COST	ESTIMATED TOTAL COST
9	UNDERPASS AT BIRCH AND BRIDGERS	LS	1	$525,000.00	$525,000.00
				CONTINGENCY (10%)=	$52,500.00
				ESTIMATED DESIGN & CONSTRUCTION ENGINEERING FEE (20%)=	$105,000.00
				ESTIMATED TOTAL	$682,500.00

The estimated costs for the pedestrian underpass includes a 24" RCP for nuisance drainage, electrical system for lighting the tunnel (approximately 400' in length), traffic control and highway restoration work.

WLC

Casper

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