

DEL NORTE COUNTY SAFE ROUTES TO SCHOOL PROJECT IMPLEMENTATION PLAN



JANUARY 9, 2014

Acknowledgments

This report was prepared by Green DOT Transportation Solutions under contract from the Del Norte Local Transportation Commission with funding provided by the Public Health Institute, through the California Endowment.

Contents

Introduction	2
Previous Efforts	2
Identified Projects	5
Financing Safe Routes to School Projects	7
Prioritizing Projects	7
Recommended Actions	10

Introduction

Following the *Del Norte County Safe Routes to School Research and Policy Report 2012–2013*, the Del Norte Local Transportation Commission (LTC) coordinated Phases 1 and 2 identified in the Report. Phase 1 included infrastructure audits for 14 school properties in Del Norte County. The audits were conducted and the findings were presented to the Del Norte LTC Technical Advisory Committee (TAC). From these findings two school zones were selected, based on the most critical safety and encouragement needs, for circulation studies outlined in Phase 2. The circulation studies were completed in December 2013 and recommendations for the two schools are detailed in the respective reports.

This Project Implementation Plan summarizes past efforts and provides recommendations for future applications supporting the Safe Routes to School program. The following section, *Previous Efforts*, describes these past activities. Next, improvement projects for each of the fourteen schools are listed in the section *Identified Projects*. The projects are selected based on opportunities found during the School Zone Infrastructure Audits. Of those projects, ones that are ranked as having a high need, with the most potential impact relative to the cost, are outlined in more detail in the section titled *Priority Projects*. Finally, the *Recommendations* section offers suggestions for actions moving forward that will directly lead to project implementation.

Previous Efforts

Previous efforts in support of the Safe Routes to School (SRTS) program are detailed further to provide context for this Project Implementation Plan.

Safe Routes to School Research and Policy Report 2012–2013

The Del Norte County Safe Routes to School Research and Policy Report 2012–2013, prepared by the California Center for Rural Policy (CCRP), examined survey results from parents with children at six schools in the County. The survey findings provide valuable data about parent desires and attitudes regarding their children walking or bicycling to and from school. Six barriers were identified as the most influential. Weather, amount of traffic, speed of traffic, safety of intersections and crossings, violence/crime, and time were cited as the most limiting factors for children living within a $\frac{1}{2}$ mile of the school—a reasonable distance.

The Report also found that of the children living within a $\frac{1}{2}$ mile, only 33% have a so-called “active mode of transportation” to school. However, 40% to 80% of parents, depending on the issue, stated they would probably allow their child to walk or bike if the issue(s) were alleviated. The Report asserts that policies and programs aimed at increasing walking and bicycling to school should target the 67% of children living within $\frac{1}{2}$ mile of the school who currently do not walk or bike to school. The report provided policy recommendations for three areas:

- Ensuring streets are safe and accessible for all modes of travel (Complete Streets Policy, Bicycle/Pedestrian Plans, Walking/Biking Corridors);
- Developing Safe School Zone Policies (Traffic Calming, Walking School Bus, Remote Drop-off/Pick-up, No Idling, Enforcement of Traffic Laws, Neighborhood Crime Assessment, and Get to Know Your Neighborhood Campaign);
- Promoting & Supporting SRTS (School Wellness Policies, Proclamations and Pledges, Bicycle and Pedestrian Education, Parent Handbook, and Positive Behavior Reinforcement).

In addition to the findings and recommendations, the Report set Policy Goals and has coordinated ongoing activities in support of those goals, listed below:

1. Make it safe, convenient, and fun for children to walk and bicycle to and from school.
2. Raise awareness and support for Safe Routes to School.
3. Create safe and accessible routes for walking and biking to and from school.
4. Ensure that all students and parents know transportation safety guidelines for arrival and departure at school.
5. Support School District Wellness Policies and ensure that active transportation is included in these policies.

Activities conducted in support of the above goals include, but are not limited to:

- Two Walk to School events.
- Walk and Bike to School event.
- Parent/Teacher surveys at 6 schools (initial and a follow-up).
- Walk and Bike in a Box curriculum provided for 5 schools.
- Drawings for bike-related goods after the Walk and Bike events.
- A tricycle/bicycle event for Kids Day at the Del Norte County Fair.
- Distributed flyers with pedestrian and bicycle education and tips to 6 schools, and at 3 community events.
- Implemented a Helmet Heads program to provide helmets for those riding *without* one, and incentives for those riding *with* helmets.
- Presented information on “walking school bus” and Neighborhood Watch for Back 2 School Night at 2 schools.
- Walking Wednesdays Golden Sneaker Challenge between Bess Maxwell and Mary Peacock Elementary schools, with trophy for the winning school, and book bags for the classroom with the most mileage and participation.

School Zone Infrastructure Audit

In August, transportation professionals audited 14 schools throughout Del Norte County to identify challenges and opportunities in the ongoing Safe Routes to School effort. The audit is intended to provide a critical look at the physical infrastructure within and near school zones, and help decision makers prioritize projects or seek further analysis of specific issues. While the audit focused on off-campus areas, it still provided a cursory look at drop off zones.

The School Zone Infrastructure Audits consisted of school site observations, mapping, a summary of the observations and a final report that defines recommendations. The following elements were considered during the audits:

- Signs identifying school zones
- Presence of sidewalks within a ¼ mile of school entrances.
- Presence of crosswalks in and near the school zone
- Presence of bicycle facilities within a ¼ mile of school entrances
- Connectivity between schools and residential and commercial areas
- Lane configurations at critical school entrances

Information from the Audit was used to identify critical safety and encouragement projects. Some of the recommendations will require further investigation, planning and design work and others will be simple maintenance projects. The Technical Advisory Committee (TAC) for the Del Norte LTC considered public input, information in the infrastructure audits and a presentation by the consulting team to determine two priority schools for further evaluation. Bess Maxwell and Redwood Elementary Schools were chosen to have traffic circulation studies prepared. The studies were conducted in October 2013, and the results and recommendations are detailed in these final reports.

School Zone Circulation Studies

With student safety as a fundamental principle, the Del Norte Local Transportation Commission had traffic engineers prepare School Zone Circulation Studies for Bess Maxwell Elementary School and Redwood Elementary School. These studies review current traffic and behavioral patterns in the school zones and associated roadways. The projects developed methods of congestion relief, addressed safety concerns and identified improvements to improve mobility for bicyclists, pedestrians, buses, and automobiles.

The School Zone Circulation Study identified existing volumes and traffic patterns for:

- Pedestrian and bicycle movements
- Vehicle movements

- Student pick-up and drop-off
- Bus operations and staging
- Visitor and school faculty/staff parking

With a thorough analysis of existing conditions at school campuses, the study developed solutions to address safety, congestion, and access issues and explored alternatives to better utilize school properties and public right of way to encourage walking and cycling to school. The specific recommendations can be found in the individual circulation study reports, and the critical, priority projects are identified in the following report sections.

Identified Projects

Using information collected from the Infrastructure Audits, actions were identified that can improve safety and mobility in the school zones. While some of the potential projects require infrastructure construction, others are simply maintenance oriented. These are categorized further in the section titled Prioritizing Projects.

Figure 1 identifies the top priority projects associated with each audited school zone. This project list is not a complete list of projects associated with each school and additional projects can be identified in the School Zone Infrastructure Audit for 14 district schools and the School Zone Circulation Studies for Redwood Elementary School and Bess Maxwell Elementary School.

Figure 1-Infrastructure Audit Identified Projects

Bess Maxwell Elementary
<ul style="list-style-type: none"> ○ Improve lane markings on El Dorado St. along school front. ○ Install bike lane along east side of El Dorado St. ○ Implement recommendations from School Zone Circulation Study.
Castle Rock Charter School
<ul style="list-style-type: none"> ○ Maintain vegetation and debris east side of Glenn St. in pedestrian area. ○ Repaint existing and install new crosswalks at Glenn St. and Small Ave.
Crescent Elk Middle School
<ul style="list-style-type: none"> ○ Replace thermoplastic school zone marking. ○ Install new curb ramps on both sides of G St. crosswalks.
Del Norte Community Day School
<ul style="list-style-type: none"> ○ Install Sidewalk and Bike Lane to fill gap 200 ft. east on W. Harding ○ Install bike lane on El Dorado St. to connect W. Harding and Hamilton
Del Norte High School
<ul style="list-style-type: none"> ○ Install bike lane along east side of El Dorado St. (Hamilton to high school parking lot ○ Install sidewalk along El Dorado, from north parking lot to intersection of Washington. ○ Improve pavement markings along school frontage (including traffic calming markings).
Joe Hamilton Elementary
<ul style="list-style-type: none"> ○ Trim vegetation encroaching onto sidewalks. ○ Relocate School Xing sign at north end of E St. sidewalk for ADA compliance. ○ Install curb ramps at 10th and E St. crosswalks.
Margaret Keating Elementary
<ul style="list-style-type: none"> ○ Install School Zone signs on Minot Creek Rd. ○ Install school zone pavement markings on Minot Creek Rd.
Mary Peacock Elementary
<ul style="list-style-type: none"> ○ Install new thermoplastic roadway markings at intersect In front of school. ○ Trim bushes encroaching on sidewalks along Madison Ave. ○ Install curb ramp at Madison Ave. and Arlington Dr. intersection.
McCarthy Center
<ul style="list-style-type: none"> ○ Install Sidewalk and Bike Lane to fill gap 200 ft. east on W. Harding ○ Install bike lane on El Dorado St. to connect W. Harding and Hamilton
Mountain School
<ul style="list-style-type: none"> ○ Sweep debris from shoulders areas along Gasquet Flat Rd. ○ Clear shoulder vegetation on Gasquet Flat Rd. on Smith River Bridge ○ Further analysis of school drop off area circulation.
Pine Grove
<ul style="list-style-type: none"> ○ Remove excess asphalt mound in bike lane and general sweeping. ○ Install additional traffic calming measures on Northcrest Drive. ○ Implement foot gate monitoring policy for access off Carole and Northcrest.
Redwood Elementary
<ul style="list-style-type: none"> ○ Improve striping at intersection of Moorehead and Lake Earl Dr. ○ Redesign ingress/egress. ○ Implement recommendations from School Zone Circulation Study.
Smith River
<ul style="list-style-type: none"> ○ Remove vegetation blocking school zone and speed limit signs. ○ Replace thermoplastic at crosswalk and school zone markings.
Sunset High School
<ul style="list-style-type: none"> ○ Resurface and repaint parking area. ○ Install turn pockets at school entrance. ○ Identify school zone on EVC directly in front of school.
Uncharted Shores Academy
<ul style="list-style-type: none"> ○ Remove vegetation growing up through sidewalk and pavement. ○ Install curb ramps at crosswalks adjacent to school grounds.

Financing Safe Routes to School Projects

The most robust funding program for Safe Routes to School projects is the newly established Active Transportation Program or ATP. This program is a consolidation of historic programs and will be available for project submissions in 2014. The limitations of this program are the competitive nature of the programs internal to the ATP and the fact that funding is available for construction costs only. Project development costs must be born from other resources such as local funding programs.

Active Transportation Program

The Active Transportation Program was created by Senate Bill 99 and Assembly Bill 101 to encourage increased use of active modes of transportation, such as walking and biking. The program is funded from various federal and state funds appropriated in the annual Budget Act, including 100% of the Transportation Alternative Program funds (except Recreational Trail Program funds), \$21 million in Highway Safety Improvement Program (HSIP) funds, and State Highway Account funds. The program capacity is \$124 million over a three year period cycle. The program has multiple project types including:

- Disadvantaged community's projects that demonstrate a benefit to a community that meets certain disadvantaged criteria.
- Safe Routes to School projects that directly increase safety and convenience for primary and middle school students to walk and/or bike to school.
- Recreational Trails projects that meet federal requirements of the Recreational Trails Program.

Capital projects should be fostered to be included in the established project development and construction protocol which begins with identification and inclusion in the Regional Transportation Plan, and local Capital Improvement Programs.

Prioritizing Projects

Now that projects have been identified for each school zone, a collaborative process should be used to establish priorities. It is recommended that the established Safe Routes to School Committee be expanded to include public works staff from the City and County. The committee should meet on a regular basis to discuss project priorities, pursue funding sources, and discuss on-going project schedules. Projects vary in scope, cost, schedule, planning, and work effort required. The projects have been broken down into categories to better manage the prioritization process.

Maintenance Projects

Projects with low capital cost that can be performed by school district, county, or city maintenance crews should be implemented immediately. These projects include:

- Vegetation removal along Madison Avenue near Mary Peacock Elementary School.
- Vegetation and shoulder debris removal along Gasquet Flat Road.
- Vegetation and debris removal along 1st Street in Smith River.
- Vegetation and weed removal from sidewalks surrounding Uncharted Shores Academy.

Curb Ramp Construction and Replacement Projects.

There are many locations throughout the school district that require installation of new curb ramps to allow safe and equitable access to schools. New ramps must be designed in compliance with the Americans with Disabilities Act (ADA) standards. The recommended priority projects in this category are in locations providing access directly in front of schools which expose the district, County, and City to the most acute liability risk. These critical locations are largely located at crosswalks that terminate at a full faced concrete curb. They include:

- Multiple locations providing access to Joe Hamilton Elementary School.
- Multiple locations providing access to Uncharted Shores Academy.
- 4 locations on G Street directly in front of Crescent Elk Middle School.
- 1 location near Mary Peacock School @ Madison and Arlington.
- 1 location on N. Beckstead Avenue in Smith River.
- 1 location on Lake Earl Drive directly in front of Redwood Elementary School providing access to crosswalk. This project is a component of a larger congestion relief project identified for the area.

In addition to the critical locations, there are many locations throughout the district school zones that have non ADA compliant curb ramps. These ramps should be replaced with compliant ramps starting with the highest use ramps and working through the entire non-compliant ramp inventory.

Sidewalk Construction and Gap Closure Projects

A contiguous sidewalk network is the safest way for pedestrians to travel to and from school. However, sidewalks do not necessarily make common sense in rural school zone locations. This geographic test was accounted for when evaluating the sidewalk construction and gap closure project needs of the district school zones. For the school zones in more urbanized areas, contiguous sidewalk systems should be the goal beginning with areas closest to the school entrances and high pedestrian traffic routes. Sidewalk projects should be evaluated by the Safe Routes to School Committee on a regular basis, but the following projects should take priority:

- A contiguous sidewalk on El Dorado Street directly in front of Bess Maxwell Elementary School. This project is a component of a larger safety and traffic calming project identified for the area.
- Gap closure project along E Street between 9th and 10th Streets near Joe Hamilton Elementary School.
- Gap closure project on 10th Street between C and D Streets near Joe Hamilton Elementary School.
- Gap closure project along the north side of W. Harding Street directly east of the Community Day School/McCarthy Center.
- Gap closure project along Arlington Drive between W Washington Boulevard and W. Jefferson Street.
- Sidewalk construction project on south side of W. Jefferson Street directly in front of Mary Peacock Elementary School.
- Construct sidewalks providing access to Pine Grove Elementary School on the east side of Northcrest Drive from Blackwell Lane to Oak Road and on west side of Northcrest Drive providing access to residential areas. This project is a component of a larger safety and traffic calming project identified for the area.
- 1 location on Lake Earl Drive directly in front of Redwood Elementary School providing access to crosswalk. This project is a component of a larger congestion relief project identified for the area.
- New sidewalk construction along the south side of 1st Street in Smith River from Fred Haight Drive to the entrance of Smith River Elementary School.
- Gap closure project along E Street from W. 4th Street to 2nd Street near Uncharted Shores Academy.

School Zone Sign Replacement and Pavement Markings

All of the school zones involved with the School Zone Infrastructure Audit had signs and pavement markings that are not in compliance with the California Manual for Uniform Traffic Control Devices. The school district, County of Del Norte, and City of Crescent City should establish a compliance achievement program to replace signs, install signs, replace pavement markings, and install new pavement markings. The existing conditions and placement of signs and pavement markings are identified on the maps in the School Zone Infrastructure Audit. This should be used as a guide for the compliance achievement program.

Traffic Calming and Safety Projects

Three critical areas were apparent as high priority safety concerns. The projects associated with these priority areas involve a combination of smaller project types including sidewalk and median construction, pavement markings, lane configuration modifications, and sign installations. The projects are:

- Redwood Elementary School pick up/drop off and ingress/egress onto Lake Earl Drive.
- Bess Maxwell Elementary School roadway and intersection improvements.
- Pine Grove Elementary School traffic calming and pedestrian improvements on Northcrest Drive.

Redwood and Bess Maxwell schools have undergone comprehensive observation and circulation studies have been prepared detailing the problems and potential solutions. Those project details can be found in the School Zone Circulation Studies. Pine Grove Elementary School remains to be evaluated in a similar detailed fashion, yet it is clear that the bicycle and pedestrian facilities serving the school along Northcrest Drive are inadequate and deserve prompt attention.

Administrative Projects

Schools in the district appear to be impacted by enrollment policies. This is especially apparent at Redwood Elementary School which has the circulation capacity of a 350 student population threshold and has an enrollment of about 500 students. Approximately 215 of these students are inter-district transfers that are restricted from busing services and therefore are most likely being driven to school in personal automobiles. The policy that regulates enrollment within the district schools should be evaluated to include consideration of the physical constraints that individual school sites have.

Outreach and Encouragement Projects

The Safe Routes to School Committee as well as individual schools have implemented a number of efforts to encourage school age children to walk and bike to school. These efforts are an important part of the ongoing effort to improve public health through physical and social activities. These activities often require minimal capital investment, but can benefit greatly from in-kind support by local officials and community members. Ongoing efforts are detailed in the Safe Routes to School Research and Policy Report 2012-2013.

Recommended Actions

This report outlines a myriad of issues and solutions associated with school zone infrastructure. In order to comprehensively address the problems and develop viable project solutions, it is important that the organizational composition of the Safe Routes to School Committee be maintained and strengthened. Just as much as the issues surrounding school zones are school district issues, they equally involve the City and County facilities and jurisdictions. The recent Infrastructure Audit and Circulation Studies should be used as a platform for making decisions, but specific actions and funding needs to be discussed with the Safe Routes to School Committee and associated stakeholders.

- Expand Safe Routes to School Committee to include City and County staff, parents, students, educators, business leaders, and community groups.
- Select preferred alternative (s) to improvements at Redwood Elementary School identified in the Redwood School Zone Circulation Study on coordinated with the school facilities plan. Possible solutions include:
 - a. Parking lot expansion option
 - b. Loop road option
 - c. Covered waiting area option
 - d. Staggered start time/release time
 - e. Enrollment reduction
- Secure funding and implement the Redwood School projects identified in the Redwood School Zone Circulation Study.
- Secure funding and implement the project identified in the Bess Maxwell School Zone Circulation Study.
- Initiate a circulation study and project development for a safety and traffic calming project at Pine Grove School.
- Implement a Safe Routes to School maintenance program.
- Implement ADA Transition Plans.
- Develop a prioritized list and implement a School Zone Sign Replacement and Pavement Marking program.
- Develop a prioritized list of sidewalk construction and gap closure projects based on projects identified in the School Zone Infrastructure Audit. Utilize available funding sources for project development and construction.
- Hold quarterly meetings of the Safe Routes to School Committee to discuss project priorities, implementation plans, upcoming funding resources, and project schedules.
- Continue outreach projects that encourage students in Del Norte County to walk and bike to school for physical and social wellness.
- Institute a performance monitoring system such as the regular parent and school surveys and participation tracking for walking and biking events. This should be evaluated on an annual basis to identify trends in the success of programs.