Safe Routes to School in Rural Communities

Austen Dole

Capstone 2018

Ruth Steiner, PhD
University of Florida
# Table of Contents

1. Introduction.................................................................2
   a. Background - US......................................................3
   b. Background- Florida...............................................6
2. Methodology...............................................................8
3. Literature Review.........................................................8
   a. Best Practices.......................................................9
   b. Peer-Reviewed.....................................................13
4. Case Studies...............................................................14
5. Interviews.................................................................25
6. Discussion & Future Work ..............................................31
7. Conclusion.................................................................32
8. References.................................................................34
9. Appendix.................................................................38
1. **Introduction**

Traffic congestion, safety, travel costs, health and obesity, and environmental quality are five issues that are plaguing our society today. They also impact rural communities in larger ways. Rural communities can be defined as any community outside of an urban center than contains 50,000 people or less. (Branch, G.P., 2012). Safe Routes to School (SRTS) has the ability to address and help resolve these issues across our country, and specifically support rural areas that are also attempting to overcome these concerns. The links between the five issues and SRTS are easy to see. By increasing the amount of student walking and biking to school there is a direct correlation to a reduction in traffic congestion surrounding schools during drop-off and pick-up times. Pedestrians are twice as likely to be hit by a vehicle in locations where there are no sidewalks. In 2013, 288 pedestrians and bicyclists ages 14 and younger were killed by vehicles. That same year, 15,000 pedestrians and bicyclists from the same age group were injured from encounters with vehicles. (Pedestrians, 2009). The safety concerns are much more prevalent in rural towns where sidewalks and bike lanes are less available.

Health and obesity rates have skyrocketed in the last 40 years amongst children. (Ogden, C.L et al., 2006). If we can encourage children to walk a mile to and from school every day, this activity can account for two-thirds of the recommended sixty-minutes of play. (McDonald, N., 2007). We also bus approximately 55% of our students to and from school every year. This service results in $21.5 billion of transportation costs. Eliminating just one of those bus routes could potentially save $45,000 annually. Imagine what could be done with these funds. They could go towards infrastructure,
education, or providing bikes and helmets to these under-resourced areas. And lastly, if we could return to student walking levels from 1969 where 50% of students walked or biked to school, 3.2 billion vehicle miles could be saved. This also means 1.5 billion tons of carbon dioxide could be removed from our atmosphere which is also equivalent to removing 250,000 from our roads every year. (Digest of Education Statistics, 2010). Safe Routes to School has the ability to resolve all of these issues and specifically support rural communities.

2. Background

a. Background - US

The origin of Safe Routes to School, and the idea of encouraging and motivating students to walk and bike to school began in Denmark in the 1970’s. (National Partnership, n.d.). Safety for students traveling to and from school quickly spread to other areas of Europe before coming to North America. The Bronx, in New York City began the Safe Routes to School program in the U.S. in 1997. This same year, Florida piloted the first statewide program called Florida Safe Ways to School. By the year 2000, Congress funded two programs through the National Highway Traffic Safety Administration. From here, grassroots efforts bloomed across the country to spread and implement the SRTS program. Through momentum and progress at local levels, Congress established federal funding in 2005.

The funding that began in 2005 was a part of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). (FHWA, 2015). Congress approved a budget of $612 million for the initial funding as a push for students
to actively walk and bike to school. This federal program stretched until 2012 with a total of $1 billion being dedicated to SRTS. Each state received annual funding between 2005 and 2009. Funds were based on student enrollment from primary to middle school. A full-time SRTS coordinator was a requirement for each state to have to successful implement these programs. After 2012, funding for the program was altered. SRTS, along with Transportation Enhancements program and Recreational Trails program, were compiled together under the Transportation Alternatives Bill. As a result, Safe Routes now competes for funding with two other transportation programs. This shift in funding calls into question how equitable SRTS funding really is. For example, urban counties have more resources in order to assemble a competitive application. On the other hand, rural counties and communities may lack the technical capabilities to compete with funding. McDonald et al. found that “schools that received SRTS funds had higher enrollment, had more Latino students, and were more likely to be located in cities.” As a result of this finding, it appears that an examination of the distribution of SRTS funds is warranted (McDonald et al., 2013).

This federal funding also supports two nationwide organizations, the National Center for Safe Routes to School and the Safe Routes to School National Partnership. The National Center for SRTS is funded by the U.S. Department of Transportation Federal Highway Administration and was founded in 2006 under the University of North Carolina’s Highway Safety Research Center. The role and tasks that the National Center for SRTS are as follows: develop and maintain various websites that act as a resource for a wide audience, create and maintain a national database of the Federal SRTS program (student tallies and parent surveys), lead U.S. Walk to School and Bike
to School day that offers various forms of technical assistance, develop online and in-person training, track progress of the federal SRTS Program, develop a plan for national evaluation, and lastly offer support the SRTS state coordinators. The National Center has developed two systems to collect and track data on the program at various levels. The first is an interactive map and tracking system to show the announced state level funding, and the second is “The School Travel Data System” that allows schools to collect data about trip modes and parental perceptions. (NCSRTS). Using the National Center as a resource will allow the sustainable and successful Safe Routes to School projects. The resources and insight that the Center provides is beneficial to state level coordinators and school officials attempting to implement their own projects.

The Safe Routes to School National Partnership (SRTSNP) is a national non-profit and advocacy group that supports and offers assistance to communities and partners throughout the country that are involved with Safe Routes to School in various ways. SRTSNP supports projects in various ways, whether providing direct technical assistance or publishing guides and toolkits that provide assistance on a broad scale.

b. Florida’s Participation in SRTS

The state of Florida established the first pilot program of Safe Routes to School, titled Safe Ways to School in 1997. Since then, the Florida Department of Transportation (FDOT) has developed a modern version of SRTS. In order to help communities successfully submit grant applications, FDOT has numerous resources and stakeholders providing assistance. At the state level, the SRTS coordinator instructs training sessions throughout the state. These sessions are a mandatory component of the Florida application process. They offer informative tips and
approaches to each section of the application including how to manage and implement them in simple and also innovative ways. Various stakeholders in the process attend these workshops including officials from city or county planning agencies, school staff and administrators, or private consulting firms hoping to work with their local schools.

FDOT also understands that rural communities and counties throughout the state would benefit greatly from successful implementation but are aware they face barriers when compiling an application. As a result, the state offers and promotes REDI (Rural Economic Development Initiative) technical assistance. Sarita Taylor is the current statewide coordinator for SRTS. She has developed annual workshops to educate schools, school districts, communities, counties, and various other individuals who are potential applicants. Taylor and her team have also funded technical assistance programs like the team at the Center for Health and the Built Environment at UF.

UF’s Center, supported through FDOT grant funding, provides assistance to rural and under-resourced communities that are putting together a Safe Routes application. This support ranges from developing technical components related to Geographic Information Systems (GIS) analysis to community outreach. In addition to working directly with applicants, UF’s team is revising existing tools and developing new resources that can aid potential applicants. One specific task the Center has taken on is a revision of a FDOT toolkit initially produced in the early days of Florida’s Safe Ways to School. While it originally provided creative ideas for implementation and guidance for understanding each section of the application, the Center’s updates include recent, innovative projects across the country. The Center has also been developing a GIS model that helps pinpoint the number of students in a one and two-mile buffer around a
school to see how many children would be impacted and benefit from the proposed infrastructure improvements. This GIS model also works on a larger scale by helping counties and school boards pinpoint schools that may not be aware that they are a good fit for the SRTS grant. Many school districts are aware that the grant exists but are unsure of which schools within their county would be best suited to submit an application. This GIS model looks at all elementary, middle, and high schools in a given county and analyzes the student attendance boundary, crash data, student population rates, and current sidewalk and bike paths to determine which school or schools have the most need for improved infrastructure.

The final resource that the Center for Health and the Built Environment has been developing for FDOT are regional strategies. These strategies break down demographic information and available support from Safe Routes regional coordinators, community traffic safety teams, and regional planning councils.

2. **Methodology:**

   To understand the current resources available to rural communities it was imperative to review the guides, tool-kits, best practices, and summaries that have been published from state DOT’s, national partnerships, and technical assistance agencies in order to highlight useful materials while also taking notice of gaps that need to be filled. The use of case studies has also provided direction in the development of my project. Aside from reviewing these secondary data sources, conducting interviews was a primary data source. Interviews with these individuals was helpful in offering insight into how their agencies function and consider rural communities when writing and publishing their Safe Routes to School guides.
After compiling and reviewing this information, as well as taking into account my personal work with the Center for Health and the Built Environment, I have been able to develop gaps in the current available materials and begin to work on regional strategies to offer targeted support to rural counties in the state of Florida.

3. Literature Review:

This literature review analyzes peer-reviewed journal articles as well as best practice guides and reports published from various DOTs, the Safe Routes to School National Partnership, the National Center from Safe Routes to School, and other agencies.

a. Best Practices:

In Rails to Trails, (Rails to Trails, (n.d.)) the core of the SRTS program is introduced. The guide notes that not only do residents need a desirable destination, but they also need a safe way of getting to and from their destinations. This means lower speeds, low traffic roads, crosswalk, bike lanes, and sidewalks. The complete streets policies is a tool and resource that can be used in these rural areas. When a comprehensive plan is going up for review active travel is something can be considered and added when thinking of future planning. Forty percent of rural trips are shorter than three miles, and 20% are less than one mile. (Rails to Trails, n.d.). There is strong
opportunity to convert these trips, that are traditionally taken by vehicles, into active travel.

Another best practice article is from the Federal Highway Administration’s report “Creating Healthier Generations”. (FHWA, 2015). This article found that benefits from SRTS include lowered transportation costs, higher connectivity amongst neighborhoods, improving student’s readiness to learn in the classroom, and the added value to the larger community as a whole. It also noted the success of the Safe Routes program means tailoring projects to their specific community. This requires working and collaborating with local governments, school administrators, and parents to find what works best. The report highlighted that it is not only important to differentiate best practices based on the specific community, but also to take note of the different approaches that are required for urban or rural communities stating that urban communities typically have stronger support in place to put together a competitive SRTS application. The report continues to stress the importance of adequate funding, resources, and employees to bring together the required materials finding that urban areas have better administrative support. Importantly this paper clarifies that rural areas can be a great fit for Safe Routes, but they require a different approach. Rural counties and communities tend to be less dense. This means there is more space between student’s homes and their local schools. Administratively, rural counties may have fewer employees. This means various county and city officials are wearing various jobs and cannot solely focus on the grant application. By highlighting these gaps between urban and rural conditions, this report helps focus the need for a variety of support structures.
“Vision Zero and Safe Routes to School: Partners in Safety” highlights similarities and differences between the two programs and lessons SRTS can learn from Vision Zero. (Pedrosa, M., n.d.). Safe Routes works with schools from the bottom up, while Vision Zero works with cities across the nation with a top down approach. Some important key factors that SRTS can learn from and incorporate into its own practices are to include more than one school and to embrace the larger community when designing projects and establishing a community coalition.

This report, like others, notes that there is an underinvestment in infrastructure amongst low-income communities including a lack of sidewalks, bike lanes, and street lamps. That lack of infrastructure, coupled with highways and heavy truck traffic cutting through low-income and rural areas are creating unsafe conditions in areas where active infrastructure is key. Because low-income children are twice as likely to walk to school they have a higher exposure to the existing unsafe conditions, so there is a greater need for improved infrastructure.

Pedrosa notes that although it may be daunting enough on its own, Safe Routes to School should consider working with Vision Zero to amplify its own projects and programs. The support that is gained politically from various city and county departments will ensure the longevity of Safe Routes programs, while also informing future development and comprehensive plans for the larger communities that they are working within. (Pedrosa, M., n.d.).

“Rural Communities: A Two Pronged Approach for Improving Walking and Bicycling” (SRTSNP, (n.d.)) breaks down how to enhance active travel in rural towns by looking at effective strategies to increase walking and biking in rural areas. The
paper analyzes how rural communities can be the ideal place for project implementation as they shift from an agricultural focus. This paper highlights the issues addressed in UF’s rural-focused approach to SRTS by noting that these long distances may be a barrier for those who are trying to walk and bike more. The paper also notes that rural towns face barriers that make it more difficult to plan for and implement these active transportation methods. Limited resources and funding may be the largest of these barriers. Rural areas are known for having limited staff, which makes it difficult to dedicate the time and energy to developing and implementing active infrastructure. There is also limited funding, and most rural towns will dedicate funds to maintaining current infrastructure, rather than building new infrastructure that might be deemed necessary. This report also states that it is important to redefine and prove that sidewalk and bike lane infrastructure is a vital investment. Additionally, the report presents a creative approach suggesting the creation of an activity hub. The second idea is to develop “spokes” that can draw distant residents to a central downtown. These spokes can result in improved public infrastructure as well as the creation of walking and bicycling trails.

Safe Routes to School National Partnership (SRTSNP, n.d.-b) breaks down key statistics that act as barriers to rural communities. This guide highlights the strong need for SRTS programs in rural and under-resourced areas and reiterates the higher obesity rates among children and adults and lack of proper infrastructure that plague these communities. This report analyzes a number of rural challenges but highlights innovative approaches to overcome them. For example, a common barrier in rural communities are the long distances between schools and neighborhoods. This guide
suggests using remote drop-offs as a way to address the problem. Remote drop-offs involve driving children a majority of the way to school but then allowing them to walk a shorter distance to school grounds. The guide suggests appropriate distances and locations where this program is most suitable in order to make parents and students comfortable and excited to participate in active transportation to school.

**B. Peer Reviewed Research:**

While peer reviewed literature on active travel amongst youth covers a broad range of topics, this review will focus on ones related only to SRTS implementation and relevant literature.

Moudon, A. V., Stewart, O., & Lin, L. (2010) published a report through the Washington State Department of Transportation to analyze the first phase of state-level management of Safe Routes to School. The goals of this report were to use existing tools to establish benchmarks for children walking and biking to school, provide recommendations for future Safe Routes funds, and highlight tools to use in future evaluation and effectiveness of the program. This study found that the data that is required for SRTS grants are either incomplete or absent and that DOTs should be using the NCSRTS student tallies and parent surveys to gain consistent data over time.
Chriqui, et al (2012) analyzed the factors that impact active travel to school. These factors may be minimum bussing distances, sidewalks, speed zones and other traffic related laws and their impacts on physical activity amongst elementary school children. This study found that laws which were meant to improve student safety did in fact reduce barriers to active travel to school amongst elementary school students. In specific, implementing crossing guards without making infrastructural changes had a positive impact on active travel.

DiMaggio, Frangos and Li, (2016) analyzed the impact of injuries related to Safe Routes to School implementation on school-aged children. Using crash data for elementary to high school students and adults 30-64 years old, DiMaggio et al. was able to determine Safe Routes interventions and the risk of school-age bicycle and pedestrian injury. The results showed that there was a 23% reduction of injuries and a 20% in fatalities amongst school-aged walkers and bikers when SRTS was implemented. This study indicated a direct correlation of improved safety where Safe Routes to School practices were put into place.

Stewart, Vernez Moudon and Claybrooke (2014) reviewed the impacts of active transportation to school after Safe Routes to School was implemented in Florida, Mississippi, Washington, and Wisconsin. This study used a sample of 48 completed projects and 53 schools that were also affected by the program implementation. Stewart et al. measured any mode of active transportation in these locations and found that state-funded Safe Routes programs did in fact increase rates of active travel to and from school in all four states.
4. Case Studies

City of Alachua

At the end of the summer of 2017, our team began working with the City of Alachua on two potential applications. Adam Hall, a planner with the city, suggested possible applications for Irby Elementary School and Sante Fe High School. After an initial meeting with the various figures that would be collaborating on this project, the team did an overview site visit at each school. After this initial assessment, it was decided that both schools were candidates for an application with an opportunity to implement infrastructure at both locations. The city proposed LED lighting structures and the extension of current sidewalks for both sites. Proposed site overviews can be seen below in Image 1.
It is important to note that different projects require different services from our team. There are some instances where some cities and schools have already chosen a project that they would like to implement. There are other circumstances where the communities are aware of the grant, and are interested in applying, but do not know where to start. In this instance, the City of Alachua had already put together general schematics and had an enthusiastic staff to help put the various parts of the application together.

After our initial meeting, a game plan was made for the appropriate next steps. Making contact with both schools’ principals was key. The success of the applications
and projects relies on support and coordination with principals and parent, teacher associations. Initial emails explaining the background of the SRTS grant and what was proposed for each site was next. Then, a conference call between myself, Adam Hall, Principal Fortner (Irby Elementary), and Principal LeClear (Sante Fe High School) further explained the help we would need from each school.

Required components of the application include creating, and meeting with the SRTS committee that each school must establish (this committee can be the current PTA/PTO for convenience), incorporating educational components, administering student tallies and parent surveys, gaining support from the city or county commission, and releasing a press release detailing the project to make the general public aware.

Establishment and designation of these tasks allowed for the successful application process.

As Alachua’s application progressed, I sent both principals information about the student tallies and parent surveys. It can be difficult to obtain a high response rate from parents, so a combination of emails (including a hyperlink) and distribution of surveys at school events were the most logical and effective way of gaining responses. The student tallies were administered in class by the teachers. Tallies are meant to be given during a week where the weather is mild and pleasant. Its requirements are simple: take a tally of the total students in each class, and count how many were driven by car, took the bus, walked, or cycled in both the morning and afternoon. Next, I entered this data into the national database.

We then established meetings to gauge and inform the PTA’s for each school. Irby’s PTA was excited and responsive to the project. We were able to confirm that they
would act as the SRTS on-campus committee. Due to the upcoming deadline, we had limited time to attend a PTA meeting at Sante Fe High School. Other channels of communication had to suffice in order to gain feedback and support. Education events are a part of the application process, but due to the point of the semester that we were working in, one was not able to be established and planned.

The next order of business was notifying the public through a press release and presenting the project to the city commission. Mr. Hall was able to coordinate the newspaper press release and added our item to the next city commission agenda. Gaining support from the city was the final step in gaining the required materials for the application. From here, it was a matter of compiling letters of support from both schools, PTAs, the city, and the sheriff's department. After filling out the application and having the county approve the project (because one of the proposed projects would be built on a county road), the application was submitted to the SRTS district coordinator. We are currently waiting to see if either or both of the projects will be approved and funded.

The application process for the City of Alachua was a valuable learning experience. The experience taught our team how to prioritize different tasks and develop a project timeline. Although this project was initiated during the summer, there were hold ups when the school year began and as the semester was winding down. The majority of work for the application was done from October to December. Ideally, we would begin to initiate a project during the spring semester to allow for more time to flush out and obtain components of the application. There are cases where we are not able to work with this longer timeline. As a result, our team has developed two, flexible
timelines as a guide for when a project begins, one with a fall start and the other for a spring star. These guides are seen in Image 2.
Image 2. Timelines for the Application Process
Lawtey Elementary:

The Center for Health and the Built Environment is currently recruiting and developing projects for the 2018/2019 grant cycle. Through connections made at an SRTS-FDOT workshop in Gainesville our team made a connection with Morris Sherman, who is the Safe Routes to School coordinator at WellFlorida. WellFlorida is one of the state’s local health councils that provides activities and implementation on various health topics. Mr. Sherman is responsible for educational events that teach children the proper and safe ways to walk and bike in their communities. These learning events are hands on; one of the resources that are offered through WellFlorida is a bike trailer. The trailer filled with helmets, bicycles, scooters, and strider bikes to help students learn to ride a bike in a safe way.

Mr. Sherman was approached by an individual at the Bradford County School District who believed Lawtey Elementary would be a good candidate for SRTS. Sherman reached out to our team to collaborate on this project. Because of his background, Sherman would be able to provide a strong educational component of the 5 E’s, while our team could provide technical assistance in other areas for a strong application.

To give background and context, Lawtey Elementary is located in Bradford County which is a REDI community. REDI stands for “Rural Economic Development Initiative” and is meant to offer aid to economically distressed rural communities around the state. This project and community perfectly align with the Center’s goal of assisting rural communities. This project was initiated in January of 2018. Using lessons learned
from a tight schedule during last year’s grant cycle, our team understands it is imperative to be productive during the early stages of this application. Initial contact was made with Principal Prevatt, Sherman, myself, and other members of the SRTS team at UF. We asked Principal Prevett to complete a walkability audit of the school’s grounds and students. This allows our team to gain a basic grasp of the school and the surrounding areas that we are working with for the application. This process also allows Lawtey Elementary to get a better understanding of what the grant process will entail.

We scheduled a site visit to see what a typical morning drop-off looks like at Lawtey Elementary. The school has a relatively small student population, about 210 students. Prior to the site visit, we also identified three surrounding neighborhoods that could be home to students and would be good areas to implement infrastructure that would make a cohesive connection to the school.

Our initial observations showed that there was a sidewalk on the west side of the school. It was broken and did not fully extend to the school grounds. The surrounding residential areas did not provide any infrastructure for walking or biking but did house some of the student population (refer to Image 3).
There was an apartment complex slightly north of the school grounds that was home to a teacher and a few students. After meeting with the physical education teacher and Principal Prevatt, we were able to gather some more details to gain a comprehensive knowledge of the area and to give us ideas as we move forward. For example, in the mornings when the weather is good, students are able to walk and run laps in the adjacent PE field. We thought this would be a good idea to initially get students excited about active travel. This offered our team a foundation to work with. Various state resources have used PE classes and lap walking as an introduction to getting students active throughout the school day. (UERPC, 2014). We were also informed that a second-grade teacher as well as a handful of students reside at the Lawtey Apartments, which is only 420 feet away from the school grounds (refer to Image 4).
This feature would be another opportunity to begin the process of getting students to walk or bike to school. The supervision of a teacher would offer safety for the students, convenience for parents that no longer have to drive their kids such a short distance, and a reduction in car emissions from fewer cars in the parent drop off. There may be more students further down Adams Street that could also join on these walks to and from school. During a SAC meeting that Sherman and I attended, we were able to ask parents, teachers, and administrators what they would specifically like to see implemented, and where they best thought infrastructure could be placed. Park Street and Lake Street were two options that school staff thought would be best suited for
sidewalks. The idea to collaborate with the Lawtey Police Station was also discussed. For example, it may be possible to set up an initial “Walk to School Day” where police officers can get involved to get parents and students excited about walking and biking to school.

Moving forward, we are going through the logistics and engineering surrounding the implementation of sidewalks. We are also organizing small educational pieces - dropping off coloring books, comics, and planning a day to bring the bike trailer to campus. We are also planning to administer the student tallies and parent surveys. This will be done via hyperlink, on at school events in order to get a high response rate. Once more of these details are solidified we plan to present to either the city or county commission. This puts us in a good spot before summer break starts. When school begins in the fall we will already have a few of the major milestones covered in order to complete the application in a timely manner.
5. Interviews

B. Interviews:

1. Michelle Lieberman

Michelle Lieberman, Senior Technical Assistance Project Manager from the Safe Routes to School National Partnership, offered insight into the functionality of the national partnership. The National Partnership operates as a non-profit as well as an advocacy group for Safe Routes to School (about 50% of their staff dedicated their time to advocacy work). Although the team is based in California, it works on SRTS projects throughout the country. Lieberman also explained how lucky they are to be based in California, because of the support from the state-level Safe Routes programs. The National Partnership has been trying to expand the current mission of SRTS. The traditional SRTS program is made up of the “5 E’s” - education, encouragement, engineering, enforcement, and evaluation. What the National Partnership has been attempting to do is include a 6th E, which is equity. Lieberman stated this is how the National Partnership is attempting to address rural and under-resourced communities. Lieberman reiterated what previous literature has stated regarding rural communities. They have limited staff to dedicated to SRTS projects and applications, they have greater distances between neighborhoods and schools, higher rates of sprawl, and a different landscape compared to their urban counterparts. As the National Partnership continues to develop the equity part of SRTS they will be updating their current rural community application resources.
An interesting component that Lieberman mentioned was that SRTS is more than infrastructure and engineering projects. A purely infrastructural project has difficulty standing on its own. Making sure to incorporate the educational component can be a key component to whether or not an application gets funded. This may be beneficial to rural communities that do not have access to engineers. Smaller, tight-knit rural towns may have much greater ease when implementing the education or encouragement piece because of the close town relationships.

2. Tara McCue

Tara McCue from the East Central Florida Regional Planning Council (ECFRPC) highlighted how her region has been increasing resources to offer support to its rural counties. It is important to note that the East Central Florida RPC encompasses the following counties, Brevard, Lake, Marion, Orange, Osceola, Seminole, Sumter, and Volusia. Although none of these counties fall under the Florida REDI designation, there are still rural communities within these urban counties.

The ECFRPC has developed an online “Central Florida Safe Routes to School Portal” which is a one-stop-shop for data and resources for any community, school, or county aiming to improve walking and biking conditions. Entering the portal reveals extensive tools for anyone looking for information or assistance related to Safe Routes to School. There is a “Kid’s Corner” which offers resources to engage, encourage, and educate students and parents how to be active and safe in their community. This portion of the portal supports more than one of the five E’s that are key to SRTS’s mission. Another section of the portal which is especially beneficial and supportive to rural and under-served areas is the “Toolbox”. McCue mainly referenced this Toolbox when
discussing how the ECFRPC considers rural communities. It provides the technical component that is required for the application. It includes an interactive map that visually shows how an SRTS infrastructure project could benefit your community. It also provides data on crashes, demographics, and school attendance in order to decide which school and area of your county has the greatest need for improved infrastructure.

Another section of the Toolbox is a “Safe Routes Calculator” which calculates and takes into consideration the environmental, health, and economic impacts of implementing an SRTS project. A final section of the Toolbox which McCue highlighted and is especially useful to rural counties is the “Safe Routes Grant Mapper”. It can create standardized maps that are required for the grant application. This is a technical tool that would be beneficial if it could be expanded to aid counties throughout the state and possibly the country.

3. John Egberts

John Egberts from the Florida Traffic and Bicycle Safety Education Program has a grant from FDOT to oversee all of the funded Safe Routes to School education programs. Egberts lends technical assistance teams that work with state-level organizations to provide support to the different components of SRTS. There are currently 11 regional Safe Routes education programs that are being funded. Egberts and his team travel throughout the state and host trainings and workshops for the regional coordinators. These workshops break down what SRTS is, discuss how simple it can be to implement safe walking and bicycling, and breakdown the resources that Egberts and his team have put together. Those resources include a curriculum of
videos, resources, safety lessons, and how to access other useful Safe Routes resources.

The goal for Egberts’ team is to reach every community and county across Florida. They are currently working with 54 SRTS educational programs in various communities and are expanding to 67 by next year. As their educational program expands year after year, Egberts and his team make sure to update their resources and curriculum to keep pace with the also evolving SRTS program and grant. When asked how the Florida Traffic and Bicycle Safety Team works with and tailors resources to rural communities, Egberts explained it was an ongoing process. As they have seen their program expand they have been conducting more workshops in rural towns and communities. They have realized the lack of knowledge of what Safe Routes is, and the benefits it holds for their rural towns. By expanding their program and outreach, the team is supporting rural communities’ access to SRTS. And as they rework their resources, they are making a conscious effort to keep towns in the forefront of their program development. As Egbert notes, it is important to spread the message that safe walking and biking can be done in any community. Rural areas shouldn’t be discouraged, with proper education and support, active transportation can be implemented anywhere.

Egberts focuses on the education component to SRTS and reiterates what Michelle Lieberman from the National Partnership was emphasizing. A purely engineering-based Safe Routes application cannot stand on its own. Education and encouragement are critical components that engage every actor in community that is involved with an SRTS grant application.
4. Mike Lopez

Mike Lopez works for Texas A&M’s Agrilife Extension as the Extension Health Program Specialist-Planning For Active Communities. The purpose of Lopez’s team is to “improve healthy lives for families”. Most of their work is done through web-based programs that are meant to educate and motivate communities, parents, and children to lead an active lifestyle. An example of one of their online and real-life programs is “Walk Across Texas” where users can log their mileage to track how far across Texas they have walked. The extension program also uses practices that SRTS has established and used in numerous of their guides and resources. The “walking school bus” is just one example of this. This is an event that can easily be organized to motivate and incentivize kids, faculty, staff, and parents to walk to school and bring comradery across the community.
Lopez’s team focuses on school facilitators and officials at local levels to implement their educational components. When asked about how the extension office focuses on rural communities, Lopez stated that his team has been trying to rethink the traditional one and two-mile school buffers where a majority of walking occurs. By setting up events like “Walking Wednesday,” Lopez and his team are able to change the stigma in Texas that it is difficult to walk to school in rural communities.
6. Discussion & Future Work:

Resources that have been published from various agencies and interviews with individuals who are experts in their fields have highlighted strategies that benefit rural areas, but also shows gaps that still need to be filled.

Safe Routes to School National Partnership is innovative in their approach to incorporating *equity* into their SRTS guides. Equity is beneficial to Safe Routes projects, but specifically supports under-resourced communities that may be at a disadvantage when putting together an application. The National Partnership is consistently releasing guides and case studies that can guide an individual or school through the application process. As the National Partnership continues to offer technical assistance new approaches (that include incorporating equity) specific to rural areas will be released and guide future rural applications.

Using the East Central Florida’s Regional Planning Council’s online portal, as well as Texas A&M’s AgriLife Extension Services online programs, applicants can find broader technical assistance. East Central Florida’s RPC has been able to generalize mapping capabilities that rural communities can benefit from when preparing their application. This is one of the specific cases where rural towns, lacking the technical skills that are required for the SRTS application, can find a solution to this problem. These online technical applications can help complete an application.

There are all resources that are currently in place. But moving forward, other gaps in current resources can be filled by regional strategies. Regional strategies are a tool that I have been developing for the Center for Health and the Built Environment. They currently cover FDOT District 1 through District 5. The strategies include first-hand
information from the district’s respective regional planning councils, community traffic safety teams (CTST), and the district’s Safe Routes regional coordinator. Apart from first-hand knowledge, the strategies list every elementary, middle, high, and charter schools in every county. They also identify which counties and school are a REDI community, have Title I status, and are local agency program (LAP) certified. These three designations play into points that are given during the review of Florida SRTS applications. Florida gives extra points to REDI communities and Title I schools. Having this information readily available, in a single document, to a region, county or school can make the application process that much easier. An example of these regional strategies are provided in the Appendix.

As I continue developing these regional strategies and expand them to encompass the entire state of Florida, I hope they will offer additional support to rural areas and inspire other agencies to develop similar strategies.

7. Conclusions:

This paper reviewed the background of SRTS at a national and Florida level. A literature review highlighted clearinghouse materials that provide potential applicants helpful information about the grant process, including current resources available to rural community applicants. The literature review also included papers from research journals that reported on the results of SRTS programs. In addition to the analysis of case studies and interview results, I was also able to establish gaps in the available resources and the impact these gaps have on rural communities’ SRTS applications.
Developing regional strategies is just one tool to help close these gaps. As I continue with my graduate work and thesis I will continue to develop other tools.
References


Stewart, O., & Lin, L. Safe Routes to School (SRTS) Statewide Mobility Assessment Study-Phase I Report.


Appendix:

Appendix A: FDOT District 1:

District One Regional Strategy

Demographic data is from Florida’s Office of Economic and Demographic Research, using estimates from census data and other resources.

Charlotte County
CTST: Gary Harrell
Harrell@ccmcpo.com
LAP certified
Not REDI designated

Charlotte County has a population of about 172,700 - 0.8% of Florida’s population. The average median household income of the county is about $44,244 with a poverty rate of 12.4%. Charlotte County’s median age is 57.4 years. Census data show race and ethnicity makeup to be 90% white (alone), 5.7% Black or African American (alone) and 5.8% Hispanic or Latino (of any race). Primary industry employers include construction, trade, transportation, utilities, and professional and business services. The majority of growth has occurred in the unincorporated areas of Fort Charlotte and adjacent areas on the coast. Charlotte is considered an urban county. In 2017, there were 254 persons per square mile. About 89% of residents hold at least high-school diploma. Less than 1% of the state’s public education schools (elementary, middle, high) are located in Charlotte County.

Collier County
CTST: David Buchheit
LAP certified
Not REDI designated
Contains REDI communities

Collier County has a population of about 357,470 - about 1.7% of Florida’s population. The county’s median household income is about $57,452 with a poverty rate of 13.8%. The median age is 48.4 years. Census data show race and ethnicity makeup to be 83.3% white (alone), 6.6% Black or African American (alone) and 5.9% Hispanic or Latino (of any race). Primary industry employers include professional and business services, trade, transportation and utilities. In 2017, there were 179 persons per square mile. Collier is considered an urban county. About 86% of residents hold at least high-school diploma. Less than 2% of the state’s public education schools (elementary, middle, high) are located in Collier County.

Collier County is also LAP certified. It has an active CTST that meets monthly to discuss safety issues related to traffic. Although Collier County is not REDI designated it contains REDI communities and cities. Those REDI area is the unincorporated area of Immokalee.
Counties in bold are LAP certified which is an eligibility requirement for SRTS applicants. Schools in italics are Title 1 schools.

<table>
<thead>
<tr>
<th>District 1</th>
<th>Elementary (10)</th>
<th>Middle (6)</th>
<th>High (5)</th>
<th>Other (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charlotte</td>
<td>Deep Creek</td>
<td>L.A. Airtec</td>
<td>Charlotte</td>
<td>The Academy</td>
</tr>
<tr>
<td></td>
<td>East</td>
<td>Murdock</td>
<td>Lemon Bay</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kingsway</td>
<td>Port Charlotte</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Liberty</td>
<td>Punta Gorda</td>
<td>Port Charlotte</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meadow Park</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Myakka River</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neil Armstrong</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Peace River</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Salle Jones</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vineland</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Collier</th>
<th>Elementary (29)</th>
<th>Middle (11)</th>
<th>High (9)</th>
<th>Other (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avalon</td>
<td>Corkscrew</td>
<td>Barron Collier</td>
<td>Gulf Coast Charter</td>
</tr>
<tr>
<td></td>
<td>Big Cypress</td>
<td>Cypress Palm</td>
<td>Everglades City</td>
<td>Community School</td>
</tr>
<tr>
<td></td>
<td>Calusa Park</td>
<td>East Naples</td>
<td>Golden Gate</td>
<td>Immokalee</td>
</tr>
<tr>
<td></td>
<td>Corkscrew</td>
<td>Golden Gate</td>
<td>Gulfview</td>
<td>Lely</td>
</tr>
<tr>
<td></td>
<td>Eden Park Estates</td>
<td>Everglades City</td>
<td>Imokalee</td>
<td>Lorenzo Walker</td>
</tr>
<tr>
<td></td>
<td>Everglades City</td>
<td>Golden Gate</td>
<td>Manatee</td>
<td>Technical</td>
</tr>
<tr>
<td></td>
<td>Golden Gate</td>
<td>Gulfview</td>
<td>North Naples</td>
<td>Naples</td>
</tr>
<tr>
<td></td>
<td>Golden Terrace</td>
<td>Imokalee</td>
<td>Oakridge</td>
<td>Palmietto Ridge</td>
</tr>
<tr>
<td></td>
<td>Highlands</td>
<td>Manatee</td>
<td>Pine Ridge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lake Park</td>
<td>North Naples</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lake Trafford</td>
<td>Naples</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Laurel Oak</td>
<td>Okeechobee</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lely</td>
<td>Palmettos</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manatee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mike Davis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Naples Park</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Osceola</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Palmetto</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>