Metro Atlanta Safe Routes to School Demonstration Project

Final Report

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METRO ATLANTA SAFE ROUTES TO SCHOOL

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Metro Atlanta Safe Routes to School Demonstration Project

Final Report

Executive Summary

The Metro Atlanta Safe Routes to School Demonstration Project was funded in 2003 by the Georgia Department of Transportation to implement comprehensive Safe Routes to School programs in four metro Atlanta communities. The goals of the project were to improve the safety of children who walk and bicycle to and from school, increase the numbers of school community members who walk and/or bicycle safely to and from school, and to prepare a guidebook for Safe Routes to School in Georgia. The Final Report describes the implementation process at the schools, summarizes project findings, and provides an evaluation of the overall project.

The project was carried out using a "4E" approach, focusing efforts on engineering, enforcement, education, and encouragement activities that support safe walking and bicycling to school. Project staff worked with community members at each school to conduct baseline assessments, develop School Transportation Improvement Plans, implement the Plans, and conduct post-project evaluations.

Mason Elementary in Gwinnett County represented a suburban setting; the school was large in population and geographic area, and a majority of students traveled to and from school by bus or car. Project efforts focused largely on education and encouragement activities. Project staff worked closely with the school's physical education teacher to train all 3rd, 4th, and 5th graders through the first-ever on-bicycle safety education program at a public school in Georgia. The school also conducted monthly "Walk and Roll to School Days" with specific themes. Over the two years of the project, a sidewalk project was completed and improvements were made to the primary crosswalk. Evaluation results showed a significant increase in school journeys made by non-motorized transportation among students living within one mile of the school; an increase in journeys made by bicycle is particularly notable. Morning car drop-offs decreased by 26%. While the project's work officially ended in December of 2005, the PTA has continued Safe Routes to School efforts on their own through Walk and Roll to School Days.

B.B. Harris Elementary was also located in suburban Gwinnett County; although the school sat in a quiet subdivision, the lack of sidewalks was perceived as a major barrier to walking and biking, even among students who lived within one mile. Although project efforts focused on infrastructure changes, only minor ones, such as crosswalk striping, were implemented during the course of the project. School personnel, including the principal, strongly supported safety education and encouragement efforts: 3rd, 4th, and 5th graders were trained in both pedestrian and bicycle safety through the physical education program, and monthly Walk and Roll to School Days blended encouragement and education through creative themes. Results, however, did not show a change in daily walking or bicycling at Harris.

Reasons for this were instructive for this study. They include:

1) a strong perception by parents that without sidewalks the streets are unsafe for walking and biking;
2) many parents worked outside the home and were not available to accompany their children by foot or bike; since the school system provides bus service to all students, parents take advantage of this option;
3) no “Pied Piper”, a parent role model who could lead by example, emerged.

Dresden Elementary, in northern DeKalb County, represented an urban setting, with a significant number of students traveling to and from school on foot. Project efforts focused on infrastructure changes to improve safety along heavily traveled routes to school. 57% of the proposed near-term and long-range improvements were completed by DeKalb County during the project time period. Collaboration between the county transportation officials, the school system, the neighborhood organization, and the project staff was key to realizing the completion of the large number of improvements. In addition, in this predominantly Hispanic neighborhood, project efforts focused on family involvement in pedestrian safety education and encouragement, including the development of a Safe Routes to School Mothers Club and the local production of a Spanish language pedestrian safety video.

The City of Decatur Schools, Clairemont Elementary and Glennwood 4-5 Academy, represented a dense urban setting. Until just prior to the start of the project, Decatur featured neighborhood schools with large numbers walking and bicycling to school; a system-wide reconfiguration increased home-school distances, and though a walking and bicycling “culture” existed, more students began to travel by motorized vehicle. Project staff worked closely with city staff to incorporate proposed long-range infrastructure changes into the city’s new comprehensive transportation plan, and several near-term infrastructure improvements were completed during the project time period. Project efforts also focused on safety education and encouragement. Bicycle and pedestrian safety trainings were conducted through the physical education program, and both schools held ongoing “Walk and Wheel Days” coupled with prize incentive programs. In addition, there were several opportunities to incorporate transportation choice materials into the school curriculum and other school activities. Results at Clairemont showed an 85% increase in daily walking and bicycling, while Glennwood saw a 229% shift to non-motorized modes.

Implementation of the project in the schools yielded a wealth of findings regarding the development of Safe Routes to School programs at the individual school level. These findings include specific information on building positive and sustainable relationships with school communities, establishing and implementing Safe Routes to School working teams, assessment techniques, and implementation of engineering, enforcement, education, and encouragement activities. Key findings indicate that: 1) successful Safe Routes to School programs are designed to fit the unique nature and needs of each school community, operating organically and from within, rather than through a standardized, one-size-fits-all approach; 2) parent participation is essential; 3) the “4 E’s” – engineering, enforcement, education, and encouragement – are each interconnected, complimentary, and essential elements of a Safe Routes to School program, not easily conducted in isolation from each other; 4) Safe Routes to School programs can be very effective in raising awareness of transportation choices and increasing public involvement in transportation planning; and 5) comprehensive Safe Routes to School programs can significantly increase the numbers of school community members who walk and bicycle to school.

The Metro Atlanta Safe Routes to School Demonstration Project concluded its direct

work in the schools in December of 2006, completing all of its school-related objectives and task. Evaluation data shows that 140 distinct infrastructural improvements were identified, and 67 near-term improvements and 46 long-range improvements became action items on the Plans. One hundred percent of the students were trained in pedestrian and/or bicycle safety education during the first year of program implementation at each school. The percentage of school community members changing modes from motorized transportation to walking or bicycling on a regular basis ranged from 11% at Clairemont Elementary to 16% at Glennwood Academy.

The information gleaned from project work in the schools was used to develop a statewide guidebook on development and implementation of Safe Routes to School programs in Georgia. It was also used to conduct GDOT Safe Routes to School trainings around the state.

Metro Atlanta Safe Routes to School Demonstration Project

FINAL REPORT

Introduction

The Metro Atlanta Safe Routes to School Demonstration Project began its work in November of 2003 with funding by the Georgia Department of Transportation in association with the Federal Highway Administration. The project's concept was developed by the Metro Atlanta Safe Routes to School Coalition, and the day-to-day implementation was carried out by the Atlanta Bicycle Campaign, a coalition member.

The project had three specific goals:

1) To improve the safety of children who walk and bicycle to and from school;
2) To increase the numbers of school community members who walk and/or bicycle safely to and from school;
3) To prepare a guidebook for Safe Routes to School in Georgia.

During the fourth year of the project, the Georgia Department of Transportation requested that statewide Safe Routes to School trainings also be included within the scope of the project.

The first part of the following report describes the implementation process for Safe Routes to School programs at four distinct school sites in Metro Atlanta and summarizes findings at the conclusion of the project. The second part provides a summary and evaluation of the project itself with respect to its stated goals and objectives. A financial summary of the project's expenditures is also included.

Part 1 – School Program Implementation and Findings

I. School Program Implementation

A. School Sites

Four school sites were selected for Safe Routes to School program implementation: Mason Elementary and B.B. Harris Elementary in Gwinnett County, Dresden Elementary, and Clairemont Elementary/ Glennwood 4-5 Academy in DeKalb County. The DeKalb County sites represented urban settings, and the Gwinnett County sites represented suburban settings. Criteria for selection included existing moderate, but not severe, infrastructural challenges with good, practical potential for actual change, and a demonstrated willingness by various elements of the school community to support project objectives and implementation. We also sought to include a diversity of demographics across the study sites.

B. Methodology

The project used the "4 E" approach to implement programs in the schools:

- Engineering, focusing on infrastructure improvements around the school that support walking and bicycling;
- Enforcement, focusing on legal enforcement of traffic laws as well as school policies that support walking and bicycling;
- Education, focusing on bicycle and pedestrian safety training of children and adults in the school community;
- Encouragement, focusing on fun, educational, and motivational activities and events that promote safe walking and bicycling.

C. Personnel

Project staff was composed of the Project Director, a part-time assistant, the Executive Director of the Atlanta Bicycle Campaign who also served as the project engineer, and four School Site Coordinators. The Site Coordinators were the all-important "eyes and ears" of the project at the local school level; three were parents and one was a long-time paraprofessional at the school.

D. The School Team

The School Team at each school was the core group that planned and guided activities within that school. Specific composition of the Team varied from school to school, largely at the discretion of the school principal; however, Teams were typically composed of the principal, one or two school faculty representatives, one or two parents, the Project Director and the Site Coordinator. One school included a student representative, another school included a neighborhood representative, and another school chose to involve a teacher representative from every grade level as well as the PE teachers on the School Team. The Teams met on an as-needed basis, generally once a month.

E. Assessment

To learn about the school's transportation environment and to establish baseline data, four types of assessments were conducted at the beginning of the program at each school.

1) Parent Surveys – Parent surveys with an accompanying introductory letter by the principal were sent home with all students. The survey was two pages long, covering current transportation modes to and from school, mode preferences, perceived dangers and/or barriers to walking and bicycling, and recommended actions for addressing dangers and barriers. Parents could also indicate if they were interested in becoming involved with the project on a volunteer basis. At Mason, B.B. Harris, and Dresden, the surveys were distributed in English and Spanish. As an incentive, students were given stickers when they returned completed surveys and the classes with the highest return rate were treated to small parties. Rates of return were quite high: 40% (468 surveys) at Mason; 67% (463 surveys) at B.B. Harris; 58% (377) at Dresden; and 61% (348) at Clairemont/Glennwood.

2) Mapping - Parents were asked to mark maps indicating current and potential walking and biking routes. At Mason and Dresden, parents and students were asked to mark large maps in a group setting. At B.B. Harris and Clairemont/Glennwood, small maps were sent home with students with instructions for parents to fill them out and return to school.

3) Pedestrian and Bicycle Counts - At Mason, Harris and Dresden, staff and volunteers counted walkers and bike-riders as they arrived in the morning and left school in the afternoon. At Clairemont/Glennwood, we conducted a "show of hands" survey to determine how students traveled to school in the mornings. Counts were conducted twice and the data was averaged.

4) Motorized Vehicle Traffic Counts - Staff and volunteers conducted counts of motorized vehicles at selected intersections around each of the schools. Counts were conducted for half-hour periods during peak school arrival and dismissal times. Because Mason and Clairemont/Glennwood included traffic congestion reduction in their School Transportation Improvement Plan goals, data was also collected to determine numbers of cars in the morning carpool lines at those schools.

Post-project data was collected through surveys and traffic counts at the close of the project's work at each school, according to the goals set out for each school.

F. Infrastructure and Enforcement Task Force

Once the initial assessments were conducted, Infrastructure and Enforcement Task Forces were established at each school site. County and/or city traffic engineers and planners, representatives from the police department, the Atlanta Bicycle Campaign staff engineer, the school principal, parents, the School Site Coordinator, and the Project Director composed the working teams. Some of the Tasks Forces had the benefit of input from county/city commissioners, a city mayor, school system transportation personnel, county/city parks department personnel, neighborhood representatives, and a county Board of Health representative. In addition, the Executive Director of PEDS (pedestrian advocacy organization) and Parisi Associates, an engineering consulting firm from Marin County, California, served as consultants to the Task Forces.

Each Task Force reviewed the data collected and then conducted two on-street "Walk Abouts" to observe identified "Hot Spots" for student pedestrian and bicycle travel. "Hot Spots" included both locations of potential danger as well as areas of potential opportunity; generally, the groups focused on ten to twelve "hot spots" within a mile radius of the schools. On Walk-About I, Task Force members were given a checklist to record their observations of problems and opportunities and staff took digital photos; potential solutions were not yet discussed. Walk-About II consisted of on-street observations with our engineering consultant from Parisi Associates and an indoor workshop. During the workshop, the consultant presented a Safe Routes to School "toolbox" and then assisted the Task Force in identifying potential solutions for the Hot Spots. The Task Force met several times following that, and developed a report with recommendations for infrastructure and enforcement measures; the measures were indicated as short-, medium-, or long-term and ranked as high, medium, or low priority. The recommendations were reviewed by the School Team, and adopted, with some modifications, into the School Transportation Improvement Plan.

An Infrastructure Task Force on a Walk-About.

G. School Transportation Improvement Plan

Based on the data collected during the first few months of the project at their school, each School Team developed its own School Transportation Improvement Plan. They set several school goals, ranging from very broad in scope, i.e. to promote healthy lifestyles through physical activity, to very specific, i.e. to reduce traffic congestion by 15% per school as measured by the number of car drop-offs/ pickups. Each plan incorporated engineering and enforcement measures based on recommendations by the Infrastructure Task Force as well as specific education and encouragement activities to be carried out to achieve both the school goals and the overall project goals. Plans were made available to the constituents of the school communities (school staff, the PTA, neighborhood associations); however, only in Decatur did there seem to be interest in actively presenting the Plan to the public. The Clairemont/Glennwood School Transportation Plan was presented to the Decatur City Commission at a commission work session; the school websites have a link to the Plan. Subsequent work in each of the "4 E" areas by project staff and the School Team was based on implementation of the School Transportation Improvement Plan.

II. The School Sites: Program Implementation, Evaluation, and Results

A) Mason Elementary

The Safe Routes to School Project began its work at Mason Elementary in January 2004 and concluded in December of 2005.

School Profile

Mason is located in suburban Duluth (Gwinnett County) on Bunten Road, a moderately busy, two-lane collector, running between Old Peachtree Road and Highway 120. The school has a growing student population, currently at approximately 1,360. The area has experienced rapid and dramatic development over the past years, with several new subdivisions reaching completion during the course of the Safe Routes to School Project. Approximately 130 students lived within a one-mile radius of the school during the program implementation time period.

It is the policy of the Gwinnett County Public Schools to provide bus service to all students. At the time of selection for this project, approximately 2% of the school population walked/ biked to school.

The School Team

The School Team was composed of the principal, a teacher, a PTA representative, the volunteer project "champion" (a parent), the Site Coordinator (a parent), and the Project Director. The principal was generally supportive of the project, but had relatively little direct involvement; she also preferred that the teachers not be heavily involved, with the exception of the involvement of the PE teacher in safety education. The parents, then, became the active and driving force behind the project at Mason.

The paid Site Coordinator and the volunteer project "champion" were key to the development of the project at this school. The Site Coordinator was a mother who walked her children to and from school; later she began to bike them to school. This created the "Pied Piper" effect: other children in the neighborhood began to tag along. The project champion is an avid cyclist and led many of the bicycle efforts of the project; in addition, his expertise as a respected local bicycle advocate greatly supported the project's infrastructure efforts.

The School Team developed a School Transportation Improvement Plan with three overall goals:

1) increase the number of registered walkers and bike riders in school population from 4% (baseline) to 10% over 2 years;
2) train all members of the school community in bicycle and pedestrian safety at appropriate levels;
3) identify, design, and implement infrastructure improvements, and promote safety and utilization by school community so as to decrease levels of car traffic by 25% during arrival and dismissal times.

(See Mason School Transportation Improvement Plan in the Appendix.)

Engineering

The School Transportation Improvement Plan identified ten "Hot Spots" for project attention. These included on-street improvements as well as off-road trail connections from various subdivisions. Of

the 18 engineering "action steps", 5 were completed with visible results within the timeframe of the project. (See Table A-1.)

- ADA Ramps - Gwinnett County installed ADA ramps on both sides of the main school crosswalk; as an addition, the county also installed ramps near Bunten Road Park. The ramps at the main school crosswalk have facilitated safer crossings for children wheeling bicycles and scooters, as well as for mothers pushing strollers. The ramps have also provided access for students and parents who use wheelchairs.

- Sidewalks on Old Peachtree Rd. - Sidewalks were installed along the south side of Old Peachtree Road at the Sugarloaf Country Club subdivision. (See photo below.) The sidewalks provided an important pedestrian connection between the Sugarloaf Country Club subdivision and Mason Elementary. Old Peachtree is a busy arterial and the gap in sidewalk along the subdivision property represented a serious obstacle to safe walking. Sugarloaf Country Club is a very large gated community, and prior to the sidewalk installation, the lack of pedestrian facilities on Old Peachtree forced students to travel approximately two miles around by school bus or car. The sidewalk opened the potential for approximately 130 Mason students to walk or bike to school; the PTA President accompanied her children and several neighbors along the new route to connect to the monthly Walk and Roll Bike Train. This may eventually be an important factor in reducing traffic congestion around the school, since 68% of the respondents to our pre-survey indicated that they drive their children to school in the mornings. Reduction in traffic congestion can have an impact on real and perceived safety around the school.

- Repair of broken sidewalks - Broken sidewalks near the Barkley Square subdivision were repaired, allowing for safer pedestrian travel on the same route as mentioned above. However, the sidewalks were not widened, as was recommended in the School Plan.

- In-street Pedestrian Sign - A moveable in-street pedestrian sign was purchased using project funds allocated for Minor Infrastructure Improvements. The moveable pedestrian sign was intended for daily use in the main crosswalk in front of the school during arrival and dismissal times only; the crossing guard was asked to place the sign in the road when she arrived and remove it when she left. Although the sign was customized by project staff to move easily on wheels, the crossing guard felt that she did not have sufficient time between school jobs to move the sign back and forth. The sign, then, simply sat on the sidewalk near the crosswalk, chained to a post; it was visible to passing traffic, but did not have the same effect as it would have had positioned in the middle of the street. Project staff formally requested that the Gwinnett DOT consider more permanent installation of an in-street pedestrian sign at this location, and this request was under consideration at the conclusion of the project's work at Mason.

- Bicycle parking racks - Six bicycle parking racks were installed on the school grounds. While project funds paid for two racks, they were also leveraged to obtain a total of six racks: the North Georgia Bicycle Dealers Association donated one, a local dentist donated another, the school PTA paid for part of a rack, and the students raised enough for the other part and an entire rack more. The bike racks were prominently placed on the school grounds; as the

project progressed and students began to ride bicycles to school, the bike racks installed on the school property provided a needed "official" place to park bicycles. Perhaps just as importantly, the racks, along with the moveable pedestrian sign, served as strong visual indications to the community that walking and biking are indeed viable modes of transportation in the Mason area.

Formal written requests were made to Gwinnett County and the City of Duluth addressing 6 additional items on the Plan and were awaiting action by those jurisdictions at the conclusion of the project's work at Mason. The proposal for a multi-use trail along Old Peachtree and Bunten Road was submitted for consideration in the 2005 SPLOST list of projects; however, it was not funded.

The School Team eventually chose not to pursue three of the items on the Plan. One of those was a connection between Sugarloaf Country Club and Mason Elementary. The school's property abuts the Sugarloaf Country Club subdivision; because Sugarloaf is a gated community, however, there is no pedestrian or bicycle connection between the properties, and instead students must travel approximately two miles around on main roads by bus or car. Project staff investigated possibilities of creating an off-road trail connection, but because this involved a private neighborhood, it became a matter of decision by the subdivision's governing board. There did not appear to be sufficient interest by Sugarloaf residents in organizing an effort to make this happen, so the Team chose not to pursue it further. Happily, in the meantime, the newly built sidewalk along Old Peachtree at Sugarloaf opened possibilities for pedestrian and bicycle travel from the north end of the subdivision.

After the two-year project period ended at Mason, project staff and the project "champion" continued to work with Gwinnett County and the City of Duluth to address the long-range items on the School Transportation Improvement Plan. It was reported that since the project concluded at the school, a resident of one of the subdivisions was attempting to create an informal trail easement amongst neighbors to allow students a more direct walking and biking path to school.

While an interest in walking and biking has certainly been piqued in the neighborhoods closest to Mason, key pending projects have the potential to dramatically improve safety and increase numbers of school community members who travel to and from school by foot or bike.

- Sidewalks on Heath Lane - A high percentage of the current daily walkers and bike riders live in the Norman Downes subdivision; however, there is still concern that students must walk in the street along Heath Lane, the main street in the subdivision. If and when the requested sidewalk is funded by the City of Duluth, it is anticipated that many more younger children will join their neighbors in walking and biking to school.

- Sidewalks on north side of Old Peachtree - Although less than one mile from the school, the lack of sidewalks along the north side of Old Peachtree and the heavy morning traffic currently preclude students from the many subdivisions north of Old Peachtree from walking or biking to school. Installation of sidewalks, per the project's request to Gwinnett County, could support pedestrian travel to school from that area.

- Multi-use Trail along Old Peachtree and Bunten Rd. – A multi-use trail extending from the Sugarloaf Parkway bike lane along Old Peachtree and the east side of Bunten Road would greatly facilitate bicycle and pedestrian travel from many of the more outlying subdivisions that Mason serves.

The table below summarizes the status of engineering measures for Mason Elementary at the conclusion of the project.

Table A-1 Engineering Measures - Mason

Number of "Hot Spots"	Number of Action Items	Number Action Items Completed	Number of Pending Action Items (Requests Made)
10	18	5	6

Enforcement

Although the Duluth Police Department was supportive of the project's efforts, enforcement issues did not play a large part in addressing program goals at Mason. Three enforcement items were identified on Mason's School Plan.

- Speed Enforcement on Bunten Road - In an effort to control perceived speeding on Bunten Road, the project requested a "radar-certified" designation. The Gwinnett Police conducted an evaluation of the road, but found that it did not qualify. This may be, in part, because the heavy traffic congestion along the corridor in the mornings depresses the overall average speed.

- Crossing Guard Policies - The other items involved policies affecting the work of the crossing guard. We found that while crossing guards are a critical piece of the walking and bicycling to school picture, there is little in terms of written guidelines, policies, or training procedures. A proposal was submitted to the 2005 SPLOST committee for funding the development of a comprehensive manual for crossing guards, similar to one developed in Florida; this proposal, however, was not funded. The School Team has recommended that such a manual be developed for use statewide.

In general, parents seemed to feel quite satisfied with the crossing protection provided by the single crossing guard at the crosswalk in front of the school. The school administration handled several other traffic enforcement type of issues independently of the project (directing parent traffic in the mornings, concerns with illegal turn-arounds in subdivisions etc.) For this reason, there was little additional focus on enforcement through the project at Mason.

The table below summarizes the status of enforcement measures for Mason Elementary at the conclusion of the project.

Table A-2 Enforcement Measures - Mason

Number of Action Items	Number Action Items Completed	Number of Pending Action Items (Requests Made)
3	2	0

Education

Mason's safety education efforts centered on the bicycle and pedestrian training conducted as part of the Health and PE curriculum. Initiated by the health education teacher, grades K through 2 received week-long pedestrian education training, and grades 3 through 5 received on-bike safety training.

- Pedestrian Safety Training - The health teacher created a mini-city and used 4-wheeled mini scooters to simulate cars on the streets. Additionally, a pedestrian safety video was shown in every classroom over the closed circuit television system.

- Bicycle Safety Training - The health teacher worked closely with project staff and parents to acquire needed equipment: a fleet of 40 used bikes of different sizes; materials to repair the acquired bikes, donated by REI, Inc.; a set of 30 helmets donated by the Duluth Police Department; and painters caps as helmet liners for every student donated by Sherwin Williams Paint Company. The Project Director developed a 5-session course to fit the 45-minute time allotment for health classes. Entitled "Safe Bike Driving," it was presented to the students as their "first driver's education class", no matter what they grow up to drive. This framework, and the opportunity to ride a bike during the school day, motivated the students to move through the skill practices. The course culminated with "Mason City", a simulated city in which students practiced their safe bike-driving skills while "driving" to various destinations. At the conclusion, students earned a "Safe Bike Drivers License" with their name on it and an activity book by the same name, provided by the Governor's Office of Highway Safety.

The bicycle class was, to our knowledge, the first full on-bike safety class to be conducted in a public school in Georgia. The health teacher was chosen the Falcons "Teacher of the Week" for her efforts. Parents were very appreciative and complimentary in their feedback. Several months after the classes were concluded, a father brought his son's helmet to school broken in three pieces; he credited the bicycle training at the school with saving his son's life and asked that the helmet be displayed for other children to see as a "real life" example of the importance of helmet use. At the conclusion of the project, the school principal stated that she now viewed bicycle education as an important part of the health/PE curriculum, and wanted to incorporate the training on a yearly basis.

Incorporation of bicycle and pedestrian safety into the health curriculum appeared to have a major impact on the outcomes of the project at Mason. The project champion reported seeing area residents using bicycles more frequently after the classes. One School Team member commented that this method was important because "all of the children were involved, not simply those whose parents read the newsletter or brochures." The principal felt that the skills taught in the classes helped to allay parent worries about their children walking and biking to school, and, in interviews, many parents echoed that sentiment.

- Additional safety education efforts at Mason included:
  - A "Be Safe, Be Seen" campaign emphasizing the importance of wearing clothing and equipment that is visible to motorists. The "campaign" included a Walk and Roll to School Day dedicated to that theme; rewards for the brightest outfit in the "Be Safe, Be Seen Fashion Parade"; posters, skits on the closed circuit television, and newsletter articles. Many of the encouragement efforts included prizes that supported this theme: Be Safe, Be Seen flashing lights, reflective stickers, bicycle lights, etc.
  - Distribution of pedestrian and bicycle safety literature from NHTSA and other sources at all Walk and Roll to School Day events
  - Development and distribution of a "kid-friendly" flyer on proper ways to lock a bicycle

- Articles in the monthly school newsletter on a variety of pedestrian and bicycle safety topics These, along with the above-mentioned items, served to compliment, reinforce, and remind students and their parents about safety concepts covered in the in-school classes.
- A Kids "Effective Cycling" class offered extracurricularly; this class included actual on-road experiences in the neighborhoods around the school. However, offerings of extracurricular bicycle classes did not draw many students, largely because many children have on-going scheduled sports activities on weekends.

The table below summarizes the safety education activities conducted at Mason and how many community members were reached.

Table A-3 Education Activities - Mason

Safety Education Activities	Quantity	Approximate Number of School Community Members Reached
Pedestrian Education through PE classes	five 45-minute sessions	650 kindergarten – 2nd graders
Bicycle Education through PE classes	five 45-minute sessions	650 3rd-5th graders
Pedestrian Education Video	one showing in each class	1,200 students, 50 teachers
"Be Safe, Be Seen" Campaign	two month-long campaigns	1,200 students, 75 school staff, 600 parents
Ped and Bike Safety Literature Distribution	4 brochures	200 parents
Newsletter articles	3 articles	1,200 parents, 75 school staff
Extracurricular bicycle classes	1 6-hour class	6 students, 1 parent

Encouragement

Encouragement efforts gave the Safe Routes to School program its main public face at Mason. Walk and Roll to School Days, Walking Buses and Bike Trains, and incentive programs were the primary tools for promoting walking and bicycling at Mason.

- Walk and Roll to School Days - Walk and Roll to School Days were the project's signature event at Mason. On event days, school community members were encouraged to walk or bike to school and upon arriving at school were rewarded for their efforts with cheers, special stickers, refreshments, music, and a small prize or a special activity. We conducted 10 Walk and Roll to School Day events during the course of the two years at Mason, each with a different theme. The events provided fun, upbeat ways for students and parents to try out walking and biking to school. Participation averaged 85 students per event, though beautiful spring and fall weather often drew numbers of well over 100.

The Walk and Roll to School Days drew many parents and some staff members who lived in the area. On the initial parent survey, many parents indicated that they drove their children to school because the early morning time was their "together time"; the event days gave parents an opportunity to consider walking and biking as "together time" as well. The Walk and Roll Days also provided a means for parent involvement, both in

the project and in their children's school life. The principal observed that many parents participating in these events were not the parents typically involved in PTA or other school activities. Several parents and some older studentsbecame regular volunteers for Walk and Roll to School Days.

The publicity around the events –flyers, posters, skits, and newsletter articles –exposed the entire school community to the concepts of walking and biking to school. The message "Walk and Roll to School – It's Cool!" became a well-known slogan, appearing on event banners, posters, prize bracelets, T-shirts, and in skits, and indeed, walking and biking became a "cool" thing to do at Mason.

Interest in the events was added by the changing monthly themes for each Walk and Roll to School Day. The themes provided a variety of educational and encouragement messages to the school community; posters, TV skits, and newsletter articles publicizing the events all highlighted the theme messages.

The variety of event themes kept the almost monthly Walk and Roll Days new and exciting. The frequency helped them to grow in popularity and to become something to which families looked forward. In April of the school year the Site Coordinator received an urgent call from a father inquiring whether he and his son had missed the last event of the year; the father stated that they had been unable to attend an event so far and his son would be upset if the school year ended without participating in a Walk and Roll to School Day.

- Walking School Buses and Bike Trains - Important features of the Walk and Roll to School Day events were the adult-supervised "Walking School Bus" and the "Bike Train" offered as a service both in the morning and the afternoon. The routes and schedules were published on a flyer, and students were required to return a signed permission slip in order to participate in the Walking Bus or the Bike Train. The Walking Bus was led by the project's Site Coordinator with the help of many adults who enjoyed walking to school with the children. Students carried colorful signs identifying the group as a Walking School Bus and advising motorists to drive carefully. The Bike Train was led by the project champion; he was assisted by volunteer cyclists from the Gwinnett Bicycle User Group and parents. Bike train participants wore bright GDOT vests to enhance visibility on the road.

The Walking School Bus and Bike Train were key to the program's encouragement efforts; the fact that the walking and biking groups were well-supervised by adults addressed parent concerns both about traffic safety and personal safety. A clear sign of "success" was that eventually some families "outgrew" the Bus and Train; they began to bike or walk on a daily basis and opted for more "independent" travel on event days.

To address the goal of reducing traffic congestion around the school on a daily basis, the School Team attempted to provide support to families to create their own ongoing Walking Buses, Bike Trains, or even carpools. Although many forms were distributed on the registration days at the beginning of the school year, only one was returned. Feedback indicated that parents did not want to commit to a formal program, but preferred to make their own informal arrangements.

- Incentive Programs - To encourage walking and biking on an on-going daily basis, the School Team developed three incentive programs. The first was the Frequent Walker/Bike-Rider Program based on a punch card system: cards could be punched by a parent (on the honor system) every time a child walked or biked to school. After ten punches, the student could redeem the card for a prize, such as a water bottle or a "Be Safe, Be Seen" strobe flashers. Only 14 students claimed prizes, though observations indicated that many more were walking and biking on a regular basis.

The "Foot-Powered Vehicle Race" also met a lukewarm reception. This incentive program relied on students' typical delight at seeing their names displayed prominently. Each time a student walked or biked to school s/he could sign a brightly colored paper foot cut-out; the foot was then placed on the wall of the main school hallway as part of the "Race." The school community as a whole was challenged to contribute a sufficient number of feet to reach all the way down the hallway to the school cafeteria. Again, while observations indicated that students were walking and biking daily, the numbers of feet submitted did not reflect that.

Finally, in the last semester of the project, we launched another Frequent Walker/Bike-Rider Program, and this time we seemed to hit on a motivational "winner." A local bike shop owner donated a mountain bike as the grand prize in the program raffle. Each time a student walked or biked they could fill out a card and submit it; students were made aware that the more they walked and biked to and from school, the better their chances for winning. This time 340 entries were submitted from 64 different participants. As the project's "grand finale," we held the drawing for the bicycle and three other prizes on the school's closed circuit TV morning show. Since it was a matter of "chance", it turned out that the students who won the bike had not been one of the most frequent walkers or bike-riders; however, since he won the bike, he has, in fact, become a frequent bike-rider to school.

Other encouragement efforts included:

- "Walk and Roll to School – It's Cool!" T-shirts – These bright-yellow shirts were given to all participants in the project's kick-off Walk and Roll Day. They became very popular among children and adults, and the PTA has now adopted them as part of their regular fundraiser "spiritwear."
- "Walk and Roll to School – It's Cool!" wristband–In the style of the "Livestrong" wristbands, these served as prizes for the participants in the International Walk and Roll to School Day.
- Development of a "Walk and Roll to School" music CD, featuring popular songs with walking and biking themes.
- Thematic skits on closed circuit TV-Project staff wrote simple skits to publicize Walk and Roll events and to encourage students to participate in the Frequent Walker and Bike-Rider programs. The skits were performed and televised by 5th grade students.

- Public Service Announcements on closed circuit TV – The school's 5th grade "Youth Action Team" developed their own "Walk and Roll to School – It's Cool!" skits under the guidance of the PTA Health and Safety Chair and the project director. These were aired periodically on the school's closed circuit TV.
- Distribution of the flyer "Four Fantastic Reasons to Walk and Bike to School."
- Newsletter articles – The project director submitted monthly articles to the school newsletter. The articles highlighted the "Four Fantastic Reasons," publicized events and incentive programs, and spotlighted school community members who walked and biked to school.
- School Pools – At the School Team's suggestion, project staff offered to connect families who would be interested in forming their own walking buses, bike trains or car pools. There was little interest, so our efforts in this area were discontinued.

As the project came to the end of its two-year period, the Mason PTA elected to continue the very popular Walk and Roll to School Days on their own. Project staff worked with the PTA President to develop a budget for the events and a fundraising strategy. The paid Site Coordinator graciously volunteered to continue to coordinate the events on an unpaid basis through the end of the school year, and the project champion has taken on the role of bike train coordinator. A parent donated funds for a new event banner, another has donated snacks, and several hundred dollars earmarked for Walk and Roll to School were raised through a "hat day" fundraiser a month after the project officially ended.

The table below summarizes the encouragement activities at Mason and the estimated number of community members were reached.

Table A-4 Encouragement Activities – Mason

Encouragement Activity	Quantity	Approximate Number of School Community Members Reached
Walk and Roll to School Days/ Walking School Buses and Bike Trains	10 events	845 student participants; 25 parents/school staff average per event
Incentive Programs (Frequent Walker/Bike-Rider, etc.)	3 programs	115 students
Promotional Skits	14 skits	1,200 students, 75 school staff per skit
Flyers	15 flyers	1,200 students, 600 parents, 50 teachers per flyer
Posters	10 per event	1,200 students, 75 school staff, 100 parents per poster
Walk and Roll T-shirts	200	1,200 students, 75 school staff, 600 parents, neighbors and Duluth area residents
Newsletter Articles	13	1,200 parents, 75 school staff

Communication with the School Community

At the beginning of the project, the school principal sent an introductory letter about the project to all students' families; the letter accompanied the initial parent survey. The principal also arranged for a variety of opportunities to introduce the project to groups within the school community. The project director gave overview presentations to: the PTA Board, the PTA membership, the school faculty, and the school council. In addition, the project had exhibit tables at registration days and at several PTA meetings.

The PTA newsletter, the "Mustang Messenger," served as an important vehicle for updating the school community on the project. The monthly articles submitted covered information about Walk and Roll to School Day events, bicycle and pedestrian classes, and incentive programs, as well as updates on infrastructure happenings and safety education information.

The school's closed circuit TV system served as an excellent way to communicate with the students and school staff about project happenings. Posters with artwork, photographs, and an event all served to catch the eye and inform all who walked the school's halls. Flyers sent home in the weekly "Friday Folder" informed each student household of project events.

At the conclusion of the first year of the project at Mason, a Year 1 Progress Report was distributed to the School Team, the PTA, and made available to the school community.

Finally, information about the project at Mason appeared in the Atlanta area press; articles appeared in the Atlanta Journal-Constitution on March 19, 2004; May 10, 2004; and November 1, 2004. The articles included overviews of the project and Safe Routes to School, as well as interviews with parents and the school principal about the impact of the project on the school community.

Achieving Our Goals

The following is an assessment of the Mason Elementary Safe Routes to School program with respect to the goals stated on the School Transportation Improvement Plan.

Goal 1: To increase the number of "registered walkers" at the school from 4% to 10%.
While this goal was not achieved with regard to the entire school population, it was achieved and surpassed with regard to the population within a one-mile radius of the school, as reflected in the table below.

Table A-5 "Registered" Walkers/Bike-Riders - Mason

	March '04	October '05	Percent Change
Total	44	64	+44%
% School Population	4%	4.6%	+0.6%
% in1-mile radius	34%	52%	+18%

Over the two years of the project, the term "registered" walkers and bike-riders became a confusing one as the school no longer asked parents to sign their children up under that category. The intent of the School Team was to evaluate changes in travel patterns, so the project staff focused on the collection of data based on numbers of students observed walking and biking to school. The tables below reflect these changes over a two- year

period. It is important to note, however, that a school population is not static (students move, the 5th grade class graduates, the kindergarten class enters, etc.), so pre- and post- comparative data do not give a completely accurate picture of change over time. In addition, modality counts on any given day are influenced by weather, occurrence of before- or after-school activity, or even whether a large project is due in a given class, the transportation of which can make it difficult for a student to walk or bike or even take the bus. According to the School Site Coordinator, the October 2005 counts shown below do not accurately reflect the numbers of students she had observed regularly walking and biking throughout the fall.

Table A-6 Traffic Counts: Mason Walkers and Bicycle-Riders

	Morning Count 3/04	Morning Count 10/05	Percent Change	Afternoon Count 3/04	Afternoon Count 10/05	Percent Change
Walkers	7	11	+57 %	25	22	-12%
Bicycle-Riders	1	14	+1300%	1	14	+1300%
Total	8	25	212%	26	36	+38%

The numbers shown above are not large ones comparative to the student population of over 1300. The Mason school district covers a broad-reaching area with many heavily trafficked arterials, and this limits the percentage of students who can realistically walk or bicycle to school on a daily basis. For this reason, the figure of 130 was used, the number living within one mile of the school, to calculate the percentages in the following two tables below.

Table A-7 Percentage of Mason Students Living Within One-Mile Radius Who Walk or Bike

	Morning 3/04	Morning 10/05	Afternoon 3/04	Afternoon 10/05
Walkers	5%	8.5%	19%	17%
Bicycle-Riders	0.7%	11%	0.7%	10.7%
Total	5.7%	19.5%	19.7%	27.7%

Goal 2: To train all members of the school community in bicycle and pedestrian safety at appropriate levels.

During the fall of 2004, all kindergarten through 2nd graders were trained in pedestrian safety and all 3rd through 5th graders were trained in bicycle safety. However, since a school population is not static, the following year the incoming students had not received the training. It was the intent of the health teacher to repeat the training the following year (fall of 2005), but staffing issues prevented this from happening. Therefore, the goal was met during the first year, but maintenance of this level of training in the school community was not achieved in a sustainable way. However, the principal indicated strong interest in continuing the safety training as part of the regular curriculum in the future.

Goal 3: Identify, design, and implement infrastructure improvements, and promote safety and utilization by school community so as to decrease levels of car traffic by 25% during arrival and dismissal times.

Traffic counts taken reflect that this goal was met for the morning drop-off, but not for the afternoon pick-up. Reports from school staff indicated that on Walk and Roll to School Days, bus arrival times were earlier because there was less traffic congestion directly in front of the school.

Table A-8 Mason Drop-off/Pick-up Car Counts

Morning 3/05	Morning 10/05	Percent Change	Afternoon 3/05	Afternoon 10/05	Percent Change
310	228	-26%	73	69	-5%

In the spring of 2005, the project director conducted interviews with several families in the Norman Downes subdivision who had changed their travel patterns as a result of the work of the project. Several of the parents admitted to fears, doubts, and somewhat negative attitudes about walking and biking to school, but they credited the combination of the Walk and Roll to School Days, their neighbor (the Site Coordinator) as a role model, and the bicycle safety classes with changing their perceptions. They noted that the sidewalk on Bunten Road (installed just prior to the beginning of this project) and the installation of bike racks at the school had opened many options; several also noted appreciation of the curb ramps and in-street pedestrian sign. The parents interviewed all agreed that having walking and biking as transportation options relieves their families of early morning stresses.

It is interesting to note that while the Bunten Road sidewalk was already in place before the project began, it was used very little for school travel. It took an integrated mix of education and encouragement to make full use of an engineering improvement.

B) B.B. Harris Elementary

The project began its work at B. B. Harris Elementary in August of 2004 and concluded in May of 2006.

School Profile

B. B. Harris Elementary is located in Duluth (Gwinnett County) on Claiborne Drive, a residential street in an older subdivision just off of Highway 120. The area represents a suburban setting, with characteristic disconnected subdivisions adjoining main roads. Harris's student population of approximately 625 encompasses a wide range of ethnic, linguistic, and socioeconomic backgrounds; a significant portion of the parent population speaks Spanish or Korean. 97 students currently live within a one-mile radius of the school.

It is the policy of the Gwinnett County Public Schools to provide bus service to all students. At the time of selection for this project, approximately 2% of the school population walked/ biked to school from nearby neighborhoods.

The School Team

The School Team was originally composed of the principal, a classroom teacher, two PE teachers (one of whom is a long-time neighborhood resident), the PTA President, the Site Coordinator (a parent), and the Project Director. During the second year of the project, the Team expanded to include a teacher representative from each grade level and a parent who has an interest in biking with her children to school. The principal has taken a very active role in the project.

The Site Coordinator position underwent several changes; the original Site Coordinator moved out of state after the project's first year at Harris; a second Coordinator held the position for several months, and then transitioned over to the current parent who serves as Coordinator. Although supportive of the concepts of walking and biking to school, none of the Coordinators have lived within feasible walking or biking distance from the school. In addition, the project at this school did not have a resident "champion"; the champion at Mason Elementary served as the initial connection to the school and was involved in the efforts to improve infrastructure.

The School Team developed a School Transportation Improvement Plan with three overall goals:

1) To improve the safety of children who walk and bike to school;
2) To promote healthy lifestyles through physical activity;
3) To involve the broad school community in the Safe Routes to School Project at Harris.

(See B.B. Harris School Transportation Improvement Plan in the Appendix.)

Engineering

The School Transportation Improvement Plan identified twelve "Hot Spots" for project attention. These included on-street improvements as well as off-road trail connections.

Of the 26 engineering "action steps", 8 were completed with visible results during the project timeframe. Some highlights include:

- Crosswalks and Stop bars at school driveway - At the principal's request, Gwinnett County Public Schools installed two crosswalks and stop bars across both ends of the semi-circular school driveway and an additional stop sign at the end of the school driveway exit.
- Drainage - At the principal's request, Gwinnett County Public Schools improved the drainage along a potential trailway at the back of the school.
- Stop Bars - The City of Duluth installed "stop" bars at the intersections of Bromley Rowe and Davenport, and Bromley Rowe and Dover Dr.
- Crosswalk across Claiborne Dr. - Gwinnett County striped a crosswalk across Claiborne Drive in front of the school.

- Bicycle Parking Racks - Three bicycle parking racks were installed on the school grounds. Project funds allocated for Minor Infrastructure Improvements provided two of the racks. An additional rack was generously donated by a local bike shop. The PTA matched the project funds with the purchase of bicycle locks and the creation of a "lock lending library" for students who do not have their own locks.

Formal written requests were made to Gwinnett County and the City of Duluth addressing eight additional items on the Plan. Requests for crosswalk and shoulder striping along the heavily traveled Bromley Rowe-Dover Dr. corridor were under consideration by both the county and the city. The proposal for a short multi-use trail along Highway 120 was submitted for consideration in the 2005 SPLOST list of projects; however, it was not funded. Project staff began working with Gwinnett County Parks Department and the Gwinnett County DOT on potential off-road trail options along sewer easements connecting Davenport Road and Bristol Lane, and Cardinal Lake Drive and Claiborne Dr. (In 2007, it was announced that the county had approved this plan and is seeking funding for this trail.)

Although B.B. Harris is located within the seemingly quiet streets of an older subdivision, the neighborhood street patterns connected only by major arterials, and the lack of supportive infrastructure, such as sidewalks and trails, can be identified as major barriers to walking and biking to and from school. In fact, 35% of the parent respondents on the pre-project survey indicated that "more sidewalks and trails" was the most important condition that would need to be met in order for them to elect for their child to walk or bicycle to school.

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The engineering measures completed, principally crosswalks and stop bars, contribute to overall efforts in improving safety for walkers and bicycle-riders, but they have not been significant enough to increase numbers. Project staff have zeroed in on specific engineering measures that, when implemented, are expected to make walking and biking much more viable options for the B.B. Harris community:

- "Walk-able shoulders" along the Bromley Rowe-Dover Dr. corridor – Although small connecting residential streets, this corridor is a main travel route to and from school. There is no designated place for pedestrians, causing those traveling on foot to compete with cars and buses for space on the road. While sidewalks are recommended, the county does not typically fund neighborhood sidewalks. Shoulder stripes would, at the least, designate the area to the right of the stripe as a place for pedestrian and bicycle travel, "off limits" to motorists. Interviews with parents in the area indicated that this would improve the perception of walk-ability along that corridor.

- Crosswalks along the Bromley Rowe – Dover Dr. corridor – Crosswalks striped along the length of these roads will bolster the pedestrian "presence" along this corridor. Motorists will be reminded that pedestrians also use the roads and pedestrians will have a designated crossing.

- Multi-use Trails - Three short multi-use trails would open possibilities for pedestrian and bicycle travel to a large sector of the B.B. Harris population. One trail, only 300 feet long, along Highway 120, would connect two small residential streets, and provide walking and bicycling opportunities to students who live in the east end of the Cardinal Lake subdivision. Another trail, along a sewer easement, would serve the students who live in the western end of that subdivision. A third trail would allow students from the many neighborhoods on the west side of Davenport Road a much more direct route to school; such a trail would shorten a student's journey by a mile and a half and avoid travel on Davenport Road, a highly traveled, high-speed road with no sidewalks and little shoulder. It is expected that a connecting trail here would open possibilities for walking and biking for students living to the west of Davenport Road.

The table below summarizes the status of engineering measures for B.B. Harris Elementary at the conclusion of the project.

Table B1 Engineering Measures - Harris

Number of "Hot Spots"	Number of Action Items	Number Action Items Completed	Number of Pending Action Items (Requests Made)
12	26	8	8

<u>Enforcement</u>

The Harris School Plan included only one enforcement item: enforcement of city code regarding parking on the grass in front of homes; such parking added to the conflict for space between cars, buses and pedestrians. The Infrastructure Task Force representative from the city indicated that city police would actively enforce that ordinance.

Although no enforcement items with regard to traffic law were specifically identified on the School Plan, the School Team determined a need for police enforcement along the Bromley Rowe-Dover Drive corridor. In the absence of pedestrian infrastructure and any type of traffic calming, enforcement could serve an important role in improving the safety of those who walk and bicycle. However, while the Duluth police were quite responsive to the project's request for surveillance, the lack of daily pedestrian and bicycle travel along the corridor made it difficult to justify regular, on-going surveillance. Enforcement, then, became a "chicken and egg" issue. Focus was given to the other "E's" first, with enforcement playing an occasional supportive role.

The table below summarizes the status of enforcement measures for B.B. Harris Elementary at the conclusion of the project.

Table B-2 Enforcement Measures - Harris

Number of Action Items	Number Action Items Completed	Number of Pending Action Items (Requests Made)
1	1	0

Education

The importance of educational efforts was broadly embraced by the B.B. Harris School Team. Bicycle and pedestrian safety education training through the school's PE program was the cornerstone of the project's educational efforts at Harris and was supplemented by inclusion of educational sub-themes in Walk and Roll to School Days.

- Pedestrian Safety Training - All students in grades 1 through 5 participated in a one-session pedestrian education training. Students watched a pedestrian safety video and then participated in simulated on-street practice of selected skills. The PE teachers decorated the gym, and developed creative posters illustrating key pedestrian skills.

- Bicycle Safety Training - Students in grades 3 through 5 participated in the 5-session on-bike "Safe Bike Driving" training. The project director worked closely with the PE teachers to implement the project's bike safety curriculum. The project director taught the first classes of each session as a training for the PE teachers, and the teachers taught the rest of the classes, with the assistance of the School Site Coordinator and other parent volunteers. Although the groups were large – sometimes 50 students at a time – the teachers were very organized and the 5-part curriculum seemed to work well. The course culminated in an opportunity for the students to negotiate the streets of "Harris Town", a simulated city, and, at the conclusion, 450 students received "Safe Bike Driver" Licenses in a festive "graduation" ceremony. The students also received an activity booklet entitled "Let's Learn More About Bike Driving" courtesy of the Governor's Office of Highway Safety.

Parents received a hand-out summarizing thesafety skills their children had learned; the hand-out was developed by the project and produced in both English and Spanish. Feedback from the students, teachers, andschool administration was very positive.

Incorporation of pedestrian and bicycle safety training through the PE classes impacted the project in a variety of ways. First and foremost, the trainings were an organized method of providing opportunities for students to learn and practice basic safety principles in simulated settings. Secondly, the trainings allowed all of the 625 students at B.B. Harris some level of participation in Safe Routes to School activities. Third, it provided the PE teachers an opportunity to include pedestrian and bicycle safety in their yearly curriculum. After their first year of "on-the-job" training with the project director, the PE teachers took independent initiative in the second year; they developed their own condensed program and simply borrowed materials from the project. Finally, the trainings had a profound impact on the school principal. Observing the bicycle training, she commented, "This is one of the coolest things this school has ever done." With a life-long interest in bicycling, she was inspired by the children's classes to take an adult Effective Cycling course offered by the Atlanta Bicycle Campaign. Upon completing the course, she became a "certified Effective Cyclist," assumed the role of bike train leader for the monthly Walk and Roll to School Days, and found every opportunity she could to promote walking and biking as healthful transportation options for kids.

The knowledge the students gained through the PE classes was reflected in their conduct on Walk and Roll to School Days. Students were able to tell the Walking School Bus leader which side of the road they should walk on when there is no sidewalk and they clearly explained the importance of bright clothing.

- Educational sub-themes at Walk and Roll to School Day events - Educational sub-themes for the Walk and Roll to School Days proved successful as a supplement to the PE trainings. Through school-wide posters, skits, flyers in English and Spanish, newsletter announcements and e-mail lists, all students as well as their parents were reminded of a variety of basic safety messages when Walk and Roll events were publicized. On the Walking School Bus and Bike Train, participating students and their parents had an opportunity to practice the skills in real on-street settings, often with repeated applications so that the message would clearly "stick" and eventually become habit.

December's Reindeer Walk and Roll had "Warm and Bright" as its sub-theme, reminding students to dress appropriately for the cold and to be visible when its dark. January's Polar Bear Walk and Roll included the Polar Bear "Freeze," with the educational message: when you come to a road edge, FREEZE! Stop, look left, right, left again and over your shoulder before you cross the street. February focused on a Healthy Heart theme, and March carried out a "Think Green" theme, highlighting the benefits of walking and bicycling to the environment.

Additional education activities included:

- A Walk and Bike for a Healthy Heart Assembly, with a skit about the health benefits of walking and biking and a presentation by police officers on bicycle safety.

- An exhibit table at the school's Field Day events. Fourth and fifth grade students had an opportunity to test their knowledge about biking and walking through the Atlanta Bicycle Campaign's "Wheel Game"; upon answering a question correctly, students won small prizes.

- Students were provided "real life" opportunities to practice during their journeys to school. The leaders also included a general safety orientation for each group before they left their starting points.

- Distribution of pedestrian and bicycle safety literature from NHTSA and other sources at all Walk and Roll to School Day events.

The table below summarizes the education activities conducted at B.B. Harris and numbers of community members reached.

Table B-3 Education Activities – Harris

Safety Education Activities	Quantity	Approximate Number of School Community Members Reached
Pedestrian Education through PE classes	three 45-minute sessions	625kindergarteners–5th graders
Bicycle Education through PE classes	five 45-minute sessions	300 3rd-5th graders
Healthy Heart Assembly	one 45-minute assembly	625 kindergarten- 5th graders
Wheel Game	one field day	200 4th and 5th graders
Walk and Roll to School Day educational themes/ flyers, posters, etc.	4 events	625 students per event; 600 parents and 50 school staff
Ped and Bike Safety Literature Distribution	4 brochures	50 parents

Encouragement

With a seemingly walkable/bikeable environment in the immediate area around B.B. Harris, significant effort was spent in encouraging families in the neighborhood to "try" walking and bicycling to school. Distance and lack of supportive infrastructure, however, precluded many of the students from beyond the immediate area from making the journey purely by foot or bicycle, and there was concern among the School Team that the "fun" extended through encouragement efforts focused solely on a small percentage of the student population. Therefore, encouragement efforts were designed to promote both walking and bicycling to school as well as the general awareness of the benefits of walking and bicycling for all.

During the first year, encouragement efforts at B.B. Harris included the following.

- Healthy Heart Assembly - Addressing the goal to "promote healthy lifestyles through physical activity", the School Team chose February, National Heart Month, as the project's "kick-off" for educational and motivational activities. Early in the month, the Team presented a school-wide assembly entitled "Walking and Biking for a Healthy Heart." The Project Director wrote a simple skit and the principal and teachers gave a spirited performance emphasizing the relationship between walking and biking and a healthy heart. At the assembly, a Gwinnett County cyclist shared her thoughts on some of the benefits of bicycling, and two Duluth police officers added a safety message. The School Team followed up with a walking challenge during the week of February 14; teachers were encouraged to have their students walk laps on the school's track, and the class with the most laps was rewarded with extra PE time. In addition, the Project Director developed a set of short and easy classroom activities focusing on the heart and its relationship to physical activity (walking and biking in particular). Weekly messages about heart health were sent to parents on the back of the "Friday Flash" newsletter throughout the month of

February, and the PTA bulletin board contained the key message words “Safe”, “Healthy,” “Active,” and “Safe Routes to School.

- Walk and Roll to School Days - Walk and Roll to School Days became the project’s signature event at B.B. Harris. The first event, held on International Walk and Roll to School Day in October, 2004 drew close to 75 participants, despite the fact that the project was new and little-known at the school. This event was fairly informal; students were simply encouraged to walk or bike to school with a parent, and participants received refreshments and small prizes (pencils with safety messages). The end-of-the-year event in May was more structured, with an organized Walking School Bus and a Bike Train. 45 students walked and 30 biked, and many parents participated as well. All participants received refreshments and a “Walk and Roll to School - It’s Cool!” T-shirt. The three new bike racks were dedicated in a ribbon-cutting ceremony. On International Walk and Roll to School Day of 2005, the School Team made a special effort to carry out the “international” theme. Drawing on the rich cultural diversity in the school, students in the “English as a Second Language” program were asked to make event posters in their own language; posters in Korean, Vietnamese, Spanish, as well as English decorated the school. This event drew another 75 student participants, and each received refreshments and a “Walk and Roll to School – It’s Cool!” wristband.

While the turn-out at each of the initial Walk and Roll to School events was good, and feedback was overall positive, there were some concerns expressed among members of the School Team. First, despite the fact that we adopted a permission-slip format in which parents were to indicate their child’s after-school travel plan, a handful of students at each event were unsure as to how they were to get home. In addition, the teachers who had led the Walking School Buses expressed concerns about liability. There was also doubt as to the ultimate purpose of these events: they seemed to be occasional fun events that did not translate into ongoing walking and biking to school; in fact, most of the participants were not from the nearby neighborhoods but were instead driven to the starting points of the Walking Bus and Bike Train so that they could simply participate in the school event. These concerns led the School Team to develop a new encouragement strategy during the second year, which included the following.

- The project sponsored monthly Walk and Roll to School events, each with a theme and an educational sub-theme.
- The Walking School Bus and Bike Train routes were publicized, but no permission slips were required. The leaders of each group agreed to assume individual liability; the teachers did not lead the groups. An afternoon bike train was offered, but an afternoon Walking School Bus was not (students go home in their customary way).
- The principal lead the bike train accompanied by several parents. To add to the event’s excitement, the principal dressed up in a thematic costume: in November, she was a turkey; in December a reindeer, and in January a polar bear.

- Students who took the bus could participate in the events by walking around the track behind the school. This allowed the inclusion of a significant portion of the school population who otherwise were unable to participate and foster school-wide excitement around physical activity. It also enabled some students to consider walking or biking to school. The PE teachers and other school staff members supervised the students on the track. The “Walk

the Track" program was very popular, with an average 300 students participating each time. However, after several events walking the track seemed to become simply a fun before-school "hang-out" activity, detracting from the efforts to promote actual walking and biking to school, so prizes were phased out to encourage "on-street" walking and bicycling.

- A "Frequent Walker/Bike-Rider" Program was implemented in November of Harris's second year. Drawings for small prizes were held weekly on the closed circuit TV morning show. Students could submit a card each time they walked or biked to school, and on special event days, students who walked the track could also submit an entry. However, the program did not appear to increase the numbers of students who walked or biked to school on a daily or frequent basis. In April, the School Team chose to change the Frequent Walker/Bike-Rider program format to a "punch card" system. Each time a student walked or biked 5 times she/he could turn in a punch card for a prize; prize value increased as students turned in more punch cards, and anyone who turned in a punch card was eligible for the Grand Prize Drawing of a new bicycle. REI donated some of the prizes and the rest were purchased with project funds. A total of 18 students participated; 4 walked or biked every day for five weeks, and over half of the participants walked/biked at least 15 times. One 5th grader who had not previously walked or biked to school rode his bike over two miles to school every day for five weeks in the hopes of winning the grand prize bike.
- Special incentives for walking and biking to school were included on Walk and Roll Days. At one event, those who walked and biked to school were eligible for double "Frequent" program entries; at another, they were rewarded with special hot chocolate drinks.
- Extra efforts were made to involve families that lived in the nearby neighborhoods in the hopes that the "Pied Piper effect" could be cultivated. Households within a one-mile radius of the school received a letter from the principal encouraging them to participate in the monthly events; the letter also sought volunteer parents to lead informal Walking School Buses on non-event days.

With the monthly events, enthusiasm for walking and biking to school seemed to slowly build in the Harris community. On a cold morning in January, for example, 29 walkers and 11 bike-riders made the "Polar Bear" journey to school, and many of the walkers were actually students and parents who lived along the walking Bus Route. The students on the Walking School Bus looked forward to guessing how their principal would be dressed when the Bike Train rolled by. On the route, the children talked about the hot chocolate, the prize erasers, the Frequent Walker/Bike –Rider tickets, etc. that they expected to receive when they arrived. In fact, one student stated that she would have ridden the bus and participated in the walk around the track, but she wanted the hot chocolate offered to those who actually walked or biked to school. For some students, simply the opportunity to be hugged by the principal or have their photo taken with her was an exciting reward.

Parent involvement in the project was slow in coming at B.B. Harris, but the Walk and Roll events seemed to be a good "entrée". One parent began participating by biking on event days with her children, and then invited some neighbor children to accompany her. Experiencing the difficulties of biking on Davenport Rd firsthand, she became involved in the project's efforts to create an off-road trail for more direct access to the school from her area. She joined the School Team, and she and her husband were the monthly "cabooses" on the Walk and Roll Bike Train. In addition, a Spanish-speaking grandmother, who had not previously been involved in school activities, became an "official" Walking School Bus volunteer, and more and more parents were becoming 'regulars' on the Walking School Bus.

The table below summarizes the encouragement activities conducted at B.B. Harris and numbers of community members reached.

Table B-4 Encouragement Activities –Harris

Encouragement Activity	Quantity	Approximate Number of School Community Members Reached
Walk and Roll to School Days/ Walking School Buses and Bike Trains	9 events	300 student participants; 10 parents/school staff average per event
Frequent Walker/Bike-Rider	2 programs	400 students
Healthy Heart Assembly	1 assembly	625 students, 50 school staff
Walk and Roll announcement skits	7 skits	625 students, 50 school staff per skit
Flyers	7 flyers	625 students, 600 parents, 50 staff per flyer
Banners/ Posters/ Bulletin Boards	1 each per event	625 students, 100 parents, 50 staff per item
Walk and Roll T-shirts	100	625 students, 100 parents, 50 staff, neighbors and Duluth area residents
School Newsletter Articles	10	600 parents, 50 school staff

Communication with the School Community

At the outset of the project at B.B. Harris, the school principal sent an introductory letter about the project to all students' families; the letter accompanied the initial parent survey. In addition, the project director gave an overview of the project in English and Spanish to parents attending the PTA "International Night" and distributed the project Fact Sheet in both languages. At beginning of the project's second school year, the Site Coordinator staffed an exhibit table at registration day, with photographs from the previous year's activities and information for parents in English and Spanish.

Written communication with the school community occurred on a weekly basis through school newsletters and the school website. The weekly "Friday Flash" hard-copy newsletter and the on-line "Wildcat Wire" often contained announcements about events and brief educational information; the quarterly "Harris Happenings" newsletter also ran articles about the project. The school's webmaster included photographs and a brief write-up about the Walk and Roll to School events and announced upcoming events as well. In addition, the PTA marquee in front of the school announced the Walk and Roll Day events.

In addition, eye-catching posters, a bulletin board, and skits on the closed circuit TV inform the immediate school community of the monthly thematic events.

At the conclusion of the first year of the project at Harris, a Year 1 Progress Report was distributed to the School Team, the PTA, and made available to the school community.

The broader Gwinnett County community was apprised of the project in October, 2005 with a front-page article in the *Gwinnett Daily Post*. The article included an interview with the principal on the project's impact on her school and a photo of her leading the bike train.

Achieving Our Goals

When developing their Plan, the B.B. Harris School Team did not cite quantitative criteria for evaluation of their stated goals. (In hindsight, this was an omission on the part of the project director; since that time, much has evolved in the field of Safe Routes to School with respect to evaluation at the school level and this evolution is reflected in the Evaluation section of the Safe Routes to School in Georgia Guidebook.) Additionally, attempts to collect data at the end of the school year did not yield sufficient information; the majority of teachers did not complete the show-of-hands survey and only 12% of the parents returned post-project surveys. The narrative above provides anecdotal and quantitative data that describes progress toward each of the three stated goals.

Though not specifically stated as a goal, changes in travel patterns were also a focus of the project at B.B. Harris. The lack of major progress in that area over the two-year period is also instructive with regard to results of this demonstration project. The following is an analysis of progress in that area.

At the start of the project, approximately twelve to fourteen students walked to school on a regular basis, generally unaccompanied by adults; no one biked. After the May, 2005 Walk and Roll to School event, the crossing guard reported an increase in daily walking and biking; 5 to 7 bikes were seen at the newly installed bike racks daily through the end of the school year. In the fall, however, the numbers dropped back to the original twelve to fourteen, and except for Walk and Roll event days, the numbers did not increase, though four children switched to biking to school. School system data indicated that there were 97 students living within a one-mile radius of the school. There appear to be several reasons that the majority of these students did not walk or bike to school.

1) There is a strong perception by parents that without sidewalks the streets are unsafe for walking and biking.
2) There is a lack of direct street connections to some of the neighborhoods served by the school. Several densely populated neighborhoods are within walking and biking distance “as the crow flies,” but they are several miles away following street patterns.
3) Even within the one-mile radius, there are many heavily trafficked streets with no pedestrian or bicycle facilities.
4) Many parents work outside the home and are not available to accompany their children by foot or bike. Since the school system provides bus service to all students, parents take advantage of this option.
5) In the neighborhoods close to the school, there did not emerge a “Pied Piper” – a parent role model who could lead by example. This appeared to be a key ingredient in successful mode shifts at other schools.

C) Dresden Elementary

The project began its work at Dresden Elementary in August of 2005 and concluded in May of 2006.

School Profile

Dresden Elementary is located in north DeKalb County on Dresden Drive, a busy collector, just off Shallowford Road near I-85. It has a student population of approximately 650; 86% of the students are Hispanic. Because it is a DeKalb County Schools policy to bus only those students who live farther than 1.5 miles from the school, and because many of the families are recent immigrants and do not have private cars, approximately 120 students (18%) and their parents make the journey to and from school on foot on a daily basis.

The School Team

The School Team was originally composed of the principal, a teacher, two Spanish-speaking parents, the Spanish language interpreter (also a parent), a neighborhood representative and project "champion", a crossing guard, the Site Coordinator, and the Project Director. However, during the course of the year, the crossing guard, the parents and the teacher found it difficult to attend meetings. A parent/substitute teacher who walked to school each day, a kindergarten teacher, and a parent were added to the Team the following year. The parent had participated in a Walk to School event and became inspired to walk her children to school; she became a very active member of the Team.

The Site Coordinator, though not a parent, had been a paraprofessional at the school for 16 years, served as PTA co-president, and was well-acquainted with the school community. A neighborhood resident and long-time member of the Atlanta Bicycle Campaign served as the project "champion" for Dresden.

The School Team developed a School Transportation Improvement Plan with a single goal: to improve the health and safety of children who walk to and from school.
(See Dresden School Transportation Improvement Plan in the Appendix.)

Engineering

The School Transportation Improvement Plan identified eleven "Hot Spots" for project attention. These focused on street improvements but included a recommendation for an off-road trail connection as well.

Of the 28 engineering "action steps", 16 were completed with visible results. Some highlights include:

- DeKalb County Transportation striped the crosswalk across Shallowford Rd. at Dresden Dr. with high visibility markings; the county went beyond the request for marking a single crosswalk, striping crosswalks across all four sides of the intersection with high visibility markings. (See photos below.)

- The county striped a new crosswalk at Johnson and Plaster Rd.

- The county conducted an evaluation of school signage for the entire Dresden area; signage was updated per county standards.

- The county augmented the street lighting for the entire length of Dresden Drive between Buford Highway and Shallowford Rd.
- The county repaired sidewalk drainage problems.

- The county installed needed ADA ramps both on and off school property.

- The county installed a safety guardrail along park property on Dresden Dr.

- The school system re-painted a crosswalk on school grounds.

- The county restriped Dresden Drive from Dresden Ct. to Shallowford Rd. to include a "bike-able" shoulder. This is designed to narrow the perception of this 30 foot-wide, somewhat windy road, as well as to provide a buffer between the sidewalk and car travel lane. In addition, the bike-able shoulder will provide accommodation for bicycles until such time as the county repaves the road and installs a full bike lane.

In addition, though not specifically addressed in the School Plan, the county installed a new sidewalk along the school frontage; they also striped crosswalks across several commercial driveways along Dresden Drive.

Minor Infrastructure improvements funds from the project were expended on creative traffic calming signage. The wooden signs were designed and painted by the school art teacher featuring a bright-colored dragon, the school mascot. The signs remind motorized vehicles to obey speed limits and drive with caution. The signs messages appeared in both Spanish and English and were placed on school at two locations in front of the school on Dresden Dr. The Dresden Area Civic Association (DECA) provided the $200 local match.

The DeKalb County Transportation Division was very supportive of the project. Initially, they earmarked $40,000 for small improvements indicated on the School Plan, and they found other sources of funding to address several larger projects, such as the augmented lighting and the installation of a guardrail. One unresolved issue was the installation of "leading pedestrian interval" signals at the primary school crossing at Shallowford Road and Dresden Drive; transportation officials state that such a measure will involve a change in county-wide policy.

Newly installed sidewalks along Dresden Dr.

Project staff worked with the DeKalb County Parks Department and the PATH Foundation to evaluate possibilities for trail connections between Plaster Road and the newly renovated Dresden Park. The Infrastructure Task Force determined that Dresden Park could be an important foot and bicycle connection for school travel for residents of the Plaster Road area and beyond. However, the Task Force began its work just as the park re-design process was concluding, and the newly paved trails do not connect to Plaster Road. The Parks Department, on the other hand, did not erect any barriers between parts of the park and the adjoining properties. Project staff attempted to contact the owners of the adjoining property but did not receive a response. The local civic association, at the same time indicated strong concern about illegal activities and personal safety in the park and advocated installing a barrier which would

prevent a trail connection. The situation remained unresolved at the close of the project in May, 2006; however, it illustrated the intricate interface of engineering, enforcement, education and even encouragement strategies that comprise Safe Routes to School programs.

With the school's main goal to improve the safety of students who walk to school, engineering played a significant role in the impact of the project on the school community. The responsiveness of the DeKalb County Transportation Division allowed for significant infrastructure change within the life of the project. These changes – crosswalks, sidewalks, ADA ramps, drainage repair, lighting, and signage – all contributed to making the journey to school safer and more pleasant. In addition, the visible, practical changes in the neighborhood delighted many neighborhood homeowners, parents, and school staff, and increased their participation in the project. The school principal reported that many Spanish-speaking parents expressed great appreciation of these improvements; the changes represented a sense that their needs and their voices, often unheard due to language and cultural barriers, were in fact being addressed.

The table below summarizes the status of engineering measures for Dresden Elementary at the conclusion of the project.

Table C-1 Engineering Measures - Dresden

Number of "Hot Spots"	Number of Action Items	Number Action Items Completed	Number of Pending Action Items (Requests Made)
11	28	16	5

Enforcement

The Dresden School Plan included four enforcement items. With active participation of the DeKalb Police Department on the Infrastructure Task Force, several measures were quickly addressed: a speed trailer was placed on Shallowford Road north of Dresden Dr. for a limited period, and police surveillance of Shallowford Road between Dresden Dr. and I-85 increased for a month-long period of time. In addition, school personnel actively enforced the school's own policy disallowing truck deliveries during arrival and dismissal times to avoid conflict with pedestrians in the school driveway.

The initial responsiveness of the DeKalb police to the project's requests for additional monitoring of speed violations impressed the school staff and lent validity to our efforts as the project was trying to establish itself at Dresden. However, with limited police staff, increased police surveillance is a short-term solution, sustained only by frequent additional requests for surveillance. The School Team chose to put more of their efforts into engineering traffic calming and pedestrian safety enhancement.

The table below summarizes the status of enforcement measures for Dresden Elementary at the conclusion of the project.

Table C-2 Enforcement Measures – Dresden

Number of Action Items	Number Action Items Completed	Number of Pending Action Items (Requests Made)
4	4	0

Education

Pedestrian safety education was identified as a high priority for both students and parents at Dresden. The School Team devised several creative ways to address these audiences.

- Pedestrian Safety Skill Training - Pedestrian safety skills were taught in all Physical Education classes, grades K-5; the PE teacher showed a pedestrian safety video and the students then practiced the demonstrated skills in simulated street settings.

- Educational Sub-themes for Walk and Roll to School Days - During the project's second year, the School Team began to incorporate pedestrian education sub-themes for its Walk to School Days. On International Walk to School Day in October, the concept of "Be Safe, Be Seen" was emphasized, as students routinely walk to school in darkness at that time of year. In November, the "Turkey Walk" sub-theme was to "Stretch Your Neck and Look Left, Right, Left Again and Over Your Shoulder" at every road edge; to emphasize this, a teacher dressed in a turkey suit, walked with one of the Walking School Buses and practiced the skill with the children. In January, the emphasis was on dressing appropriately for the cold and dark as part of the "Polar Bear" Walk to School Day. Students who traveled to school accompanied by a "turkey" or as part of a Polar Bear Walk not only had extra opportunities to practice the skills, but they had fun, memorable experiences that make the skills "unforgettable."

- Walking Kids Safety Party – The party was held after school. Over 100 students and approximately 30 adults attended. Popcorn and drinks accompanied a pedestrian safety "movie" and then students created posters with specific pedestrian safety themes. The posters, created in English and Spanish were hung in the school cafeteria. Students were accompanied home in walking groups, giving them an additional opportunity to practice safety skills.

- Safe Routes to School Mother's Club -Early in the first year of the project, the project director conducted a short bilingual pedestrian skills workshop at a "Coffee and Conversation" session hosted by the school counselor. Approximately 50 parents were in attendance; most appeared very interested in the subject, and several engaged in skill demonstrations. In talking further with parents, it became clear that pedestrian safety was an issue that was "near and dear" to them, affecting them and their families quite personally, and there was an interest in educating the broader community as well. During the second year of the project, the Dresden Safe Routes to School Mothers Club formed and became an important vehicle for educational efforts. The Mothers Club was composed primarily of Spanish-speaking mothers who met once a month for "poster parties." Prior to each "Walk to

School Day," they created educational and motivational posters according to the event's theme. Through the task of poster-making at the pre-Walk to School Day poster parties, the mothers become both pedestrian education learners and teachers; they become familiar enough with the educational sub-theme message to be able to then express it through art and words in their own language. The parents seem to be quite pleased to see their artwork hanging in the halls of the school, giving them a sense that they are making a valuable contribution. In fact, the principal remarked that soon after the creation of the Mother's Club, several parents began to volunteer more frequently at the school.

- Spanish Language Pedestrian Safety Video - At one meeting, they viewed a pedestrian safety video produced by the National Highway Traffic Safety Administration (NHTSA) in the format of a "telenovela" (Spanish soap opera); the mothers critiqued the video, and discussed effective techniques for educating more parents. They decided to create their own Spanish language pedestrian safety video intended for other Spanish-speaking parents. A small group of mothers worked with project staff to identify key pedestrian safety concepts relevant to the needs of Dresden area families. They then outlined a general story line and the project director wrote a rough script entitled "Caminemos Seguros" (Let's Walk Safely). Filming began in mid-April of 2006. A young teenager served as the "production crew" (camera-man and editor), the Project Director served as "film director," and several mothers and their children served as the actors. The mothers generally followed the concepts in the outline but added their own style and creativity as the filming unfolded. The entire 9-minute film was set to lively music. The video was debuted at the final Dragon Walk to School Celebration at Dresden and it was very well received; the actors and filmmaker were honored for their efforts at a reception.

The development of the video brought to light an important educational strategy that can be used in any community. The video engaged families in their own educational process and in Safe Routes to School issues as a whole. It was relatively simple to do, very engaging because of its uniquely local flavor, and in the end, there was an educational product to share into the future with the community.

Additional education efforts included:

- Distribution of the National Highway Traffic Safety Administration's "Walking Through the Years" pamphlet, produced in English and Spanish.
- Development and distribution of a simpler bilingual pedestrian safety hand-out distributed to parents at a "Back to School Night" PTA meeting.

Early in the project, the School Team made a decision not to incorporate bicycle education or encouragement into the project's initial efforts. This was based on the conditions of the roads surrounding the school and strong concerns expressed by parents and school staff. The conditions around the school did not improve sufficiently to change this perception in the school community and hence no further attempt was made at bicycle safety education.

The table below summarizes the education activities conducted at Dresden and numbers of community members reached.

Table C-3 Education Activities – Dresden

Safety Education Activities	Quantity	Approximate Number of School Community Members Reached
Pedestrian Education through PE classes	One 45-minute session	650 kindergarteners – 5th graders
Walk and Roll to School Day educational themes/ flyers, posters, etc.	4 events	650 students per event; 600 parents and 50 school staff

Walking Kids Safety Party	1 party	100 students, 30 parents
Safe Routes to School Mothers Club	6 meetings	15 parents
Spanish Pedestrian Safety Video	1 video, 2 public showings	40 parents, 25 students, 15 staff
Ped and Bike Safety Literature Distribution	2 brochures	300 parents
Coffee and Conversation Presentation	1 20-minute presentation	50 parents, 1 staff member

Encouragement

With relatively large numbers of students walking to school at the outset of the program, the project's main focus was not on encouragement. Initial encouragement efforts celebrated those families who walked to school. However, as the program unfolded, encouragement played an increasingly larger role in the SRTS project at Dresden.

Walk to School Days – Year 1 - The Dresden school community participated in three Walk to School Day events during the first year of the project. The first was on International Walk to School Day in October. In the darkness of early morning, approximately 35 students carrying fluorescent "Slow Down!" and other message signs participated in the Walking School Bus down Dresden Dr. Upon arrival at the school, the children formed a parade through the school cafeteria; each child received an "I Walked to School With Kids Around the World" sticker, and a special pencil. The participating parents were given light breakfast refreshments to honor their efforts in walking their children to school on a daily basis. In the afternoon, over 100 students participated in the Walking School Bus down Dresden Dr. With many children already walking to school on a daily basis, encouragement efforts first focused on celebrating those who make the journey to school by foot.

The second event was held in November; despite the pouring rain, approximately 20 children, two parents, and several members of the school staff participated in the early morning event.

In March, approximately 110 students, 30 parents, the principal and several staff members participated in the Walking School Bus that started at the Wynscape Apartments on Shallowford Road. Students wore GDOT safety vests and carried brightly colored signs with messages in English and Spanish. One mother had cleverly made two cardboard buses into which children could fit to show a "walking school bus." The participating students and parents were honored on the auditorium stage; students received "Walk and Roll to School, It's Cool!" T-shirts, and parents were treated to breakfast refreshments.

This third event seemed to bring the project to another level of prominence for the Dresden community Participants in the Walk to School Day "parade" of 100+ walking students and parents along Shallowford Road presented a unified pedestrian presence, giving them a sense of empowerment and "strength in numbers." The small reception with refreshments rewarded their efforts to walk their children to school despite weather and safety conditions. The event also provided an opportunity to educate motorists; the bright vests and brightly colored signs with messages in Spanish and English drew motorists' attention and reminded them that pedestrians also use the road.

Community Outreach – In preparation for the October 2003 International Walk and Roll to School Day, parents were invited to a poster party. The parents seemed to enjoy an opportunity to participate in school activities and to meet each other, and in this way, the "Safe Routes to School Mothers Club" was launched (see Dresden Education).

Plans for International Walk and Roll to School Day in October included extending the Walking School Bus to an additional route from a more distant area with many apartment complexes. The local neighborhood association and the neighboring high school were enlisted to provide additional adult assistance with the new route, and mothers from the Parents Club took on leadership roles for the original Walking School Bus. Quite unfortunately, torrential rains descended upon Atlanta that morning, and only a handful of hardy souls, including the principal, and a few neighborhood residents, participated on each Walking Bus route.

The Walk to School Day events served as a way for a variety of school community members to get involved with the project. The principal walked with a Walking Bus at every event, rain, shine, or cold, and the vice principal, school counselor, and several teachers also participated. The principal commented that these events give her and her staff a better idea of what children experience even before they arrive at school. Members of the DECA homeowners association also participated in the events; because in large part they did not have children who attend Dresden, the events provided them a way to interact with their neighbors who lived in apartments in the area.

Thematic Walk to School Days - Subsequent Walk to School Days had specific themes and educational sub-themes. All students received the repeated educational message through the pre-event publicity -- flyers, posters, and morning announcements. The Parent's Club met the week prior to the event to create posters publicizing the themes. In November, the Turkey Walk drew close to 50 participants despite the cold temperatures; several more teachers walked with the Walking School Buses spurred by the principal's incentive that teachers could wear jeans and tennis shoes if they participated. On a very cold day in January, the Polar Bear Walk to School brought out a similar number, and the participants were very appreciative of the hot chocolate that awaited them at the school. An April event had an environmental theme "Good for the Body, Good for the Community, Good for the Earth." The final "Dragon Walk to School Day" was a culminating event, combining a walk to school in dragon costumes with the debut of the Spanish language pedestrian video and the unveiling of the creative dragon traffic calming signs.

Walking School Buses – Over the course of the project, the number of Walking School Buses expanded from one to three. Two of them served apartment complexes from which children were typically bused to school due to hazardous conditions. The fact that the Walking Buses were supervised by adults allowed these children from one of the complexes an opportunity to walk to school. In the case of the third walking bus, it was only when infrastructural improvements along

Dresden Drive (see Engineering, above) were made that the principal approved a Walking School Bus along that route.

The table below summarizes the encouragement activities conducted at Dresden and numbers of community members reached.

Table C-4 Encouragement Activities – Dresden

Encouragement Activity	Quantity	Approximate Number of School Community Members Reached
Walk to School Days/Walking School Buses	8 events	500 student participants; 30 parents/school staff average per event
Walk to School promotional posters	8 events; 10 per event	650 students, 50 parents, 50 staff per event
Walk and Roll announcement skits	4 skits	650 students, 50 school staff per skit
Flyers	9 flyers	650 students, 600 parents, 50 staff per flyer
Walk and Roll T-shirts	120 shirts	650 students, 100 parents, 50 staff, neighbors and Dresden area residents

Communication with the School Community

Early in the school year, the principal sent a letter to all parents introducing the Safe Routes to School Project. The project director gave an overview presentation about the project at a school faculty meeting and, during the winter and spring of the first project year, she attended several School Council meetings to keep the Council apprised of project happenings. The project director also gave a presentation to parents at a "Coffee and Conversation" gathering and a bilingual powerpoint presentation on the project's progress to a large PTA gathering.

Posters and flyers in Spanish and English publicized the Walk to School Days and their educational themes to students, parents, and school staff, and the principal included information about the events during the morning announcements. In addition, a parent who resided in one of the apartment complexes posted event flyers there as well. At the end of the first school year, the Site Coordinator created a display of Walk to School Day photos of children and parents on the PTA bulletin board, drawing quite a bit of attention.

The local neighborhood organization, Dresden East Civic Association (DECA), had a designated liaison with the project. The liaison often attended School Team meetings and received email updates of project progress, and he shared that information at the association's quarterly meetings. In April of 2006, the project director gave a summary presentation of the project at the quarterly meeting.

At the conclusion of the first year of the project at Dresden, a Year 1 Progress Report was distributed to the School Team, the PTA, and made available to the school community.

Press releases were sent to a wide range of English- and Spanish-language press for each event, and, for the final event, the press release appeared on the DeKalb County School System website. Following the Dragon event, a photograph and caption of students and staff crossing Shallowford Road appeared in the Metro Section of the Atlanta-Journal Constitution.

Achieving Our Goals

The Dresden School Team identified a single goal on its School Plan; however, it did not cite specific criteria for evaluation. Attempts to collect data at the end of the school year did not yield sufficient information to develop a quantitative analysis. The narrative above provides anecdotal and quantitative data that describe progress toward the stated goal at Dresden.

Changing family travel patterns was not a primary focus of the project at Dresden; it was believed at the outset that the majority of those living within a mile of the school already walk, and children biking on Shallowford Road or Dresden Drive was not considered an option due to safety reasons. Through the Walking School Bus effort, however, the project identified a significant number of children within a mile of the school that were bused due to safety hazards, and there were strong indications that more students would walk to school if these safety challenges were overcome. Changes in infrastructure along Dresden Drive, for example, allowed for the addition of a Walking School Bus toward the close of the project. If a safe walking or biking route through Dresden Park were developed, families who currently use bus service might be more likely to consider walking and biking as an option on a regular basis.

D) City of Decatur Schools (Clairemont Elementary and Glennwood Academy)

The project began its work in the City of Decatur in January of 2005. Clairemont had been selected as the original Decatur school site, but when the school system reconfigured and all 4th and 5th graders were sent to attend Glennwood 4-5 Academy, Clairemont and Glennwood were merged as one Safe Routes to School site in order to obtain a full grade-level spectrum for our work there.

School Profiles

Clairemont Elementary is located on Erie Avenue, a small residential street off of Clairemont Avenue near downtown Decatur. With a population of 265 kindergarten through 3rd graders, most live within 1.5 miles of the school. At the beginning of the project, approximately 25% indicated that they walk or bike to school with some regularity.

Glennwood Academy is located on E. Ponce de Leon Ave., just east of downtown Decatur. Its population of approximately 300 4th and 5th graders draws from across the four square mile City of Decatur. Our initial assessment indicated that around 8% walk or biked to school with regularity.

The School Team

The School Team was composed of the principal, a teacher, and a parent from each school, as well as the project champion, the Site Coordinator, and the project director. A 3rd grade student from Clairemont also served on the Team for the first year.

The first Site Coordinator was a parent of a student at Glennwood; though dedicated to the concepts, his family commitments did not allow him to continue after the close of the first school year. The parent who represented Clairemont on the School Team was able to step into the role at the beginning of the current school year and is actively involved in the project. She biked her sons to school on a daily basis and used the bicycle frequently as a means of transportation. The Decatur project "champion" was a parent at Clairemont Elementary, owner of a local bicycle shop, and a city commissioner with a deep interest in transportation alternatives.

The School Team developed a School Transportation Improvement Plan with three goals:

1) To reduce traffic congestion by 15% per school as measured by the number of car drop-offs/ pickups
2) Increase number of walkers and bike-riders by 50% at each school
3) Build community awareness of and participation in the Safe Routes to School program

(See Decatur School Transportation Improvement Plan in the Appendix.)

Engineering

The City of Decatur Schools were historically neighborhood schools within easy walking and biking distance of family homes. With the reconfiguration of the schools in 2004, this was changed, and some students had to travel further distances and negotiate more difficult traffic situations. Parent surveys and Infrastructure Task Force observations identified the railroad crossings as a major barrier to walking and biking to Glennwood Academy from the south side of Decatur. Project staff were unable to identify a single safe route for a bike train from the Winnona Park area. This was no surprise to the city staff; the railroad crossings have been an issue for many years. However, with the safety of 4th and 5th grade students now at risk, and a strong desire by many parents for their children to be able to travel by foot or bike, the need for resolution became that much more urgent.

The School Transportation Improvement Plan identified fifteen "Hot Spots" for project attention. The main focus was on the areas directly in the vicinity of Clairemont and Glennwood schools, but, since Glennwood draws from the entire city, the Infrastructure Task Force also evaluated key crossings of the railroad track that separated the north and south sides of Decatur. Of the 43 engineering "action steps", sixteen were completed with visible results. Some highlights include:

- ADA ramps - The City installed ADA ramps with textured surface (truncated domes) for visually impaired pedestrians at several intersections.

- High visibility crosswalks - The City striped high visibility crosswalks in several locations and aligned a crosswalk in another.

- Crosswalk signage - The City installed crosswalk signage as well as advance crosswalk signage on Clairemont Avenue at Erie Avenue.

- In-street Pedestrian sign – An in-street pedestrian sign was installed on Trinity Avenue to assist in proper trail crossing.

- Bike Parking Racks - Two bicycle parking racks were purchased with project funds designated for minor infrastructure improvements. A third was donated by a local bicycle shop owner. The school system paid for installation as their funding match.

- Trail Signage - Minor infrastructure funds from the project also paid for the production and installation of wayfaring signs indicating proper crossing of the PATH trail at Trinity Ave.

- Bicycle Ramp - The City installed a custom-made bicycle ramp on the steps in the tunnel under College Ave. in front of Agnes Scott College.

The School Transportation Improvement Plan was submitted to the city's contracted consulting firm for consideration in the development of the city-wide Community Transportation Plan. At the close of the project, it appeared that many of the long-range items on the School Plan would be incorporated into the larger plan. Several of the items pertaining to signalization were also under study through a grant the county received through GDOT. Project staff made requests to GDOT on behalf of the city regarding items pertaining to state roads (College Ave. and Clairemont Ave.)

The table below summarizes the status of engineering measures for Clairemont/Glennwood at the conclusion of the project.

Table D-1 Engineering Measures – Clairemont/Glennwood

Number of "Hot Spots"	Number of Action Items	Number Action Items Completed	Number of Pending Action Items (Requests Made)
15	43	16	19

Enforcement

The Decatur Schools rely quite heavily on crossing guards to assist children in crossing major streets; parents expressed great confidence in the work of the crossing guards at Clairemont and Glennwood. The Decatur School Plan included three enforcement items relating to crossing guards.

According to the police department representative on the Infrastructure and Enforcement Task Force, no crossing guard had been assigned to that intersection based on observed lack of pedestrian use; the parent surveys indicated that the crossing is not used because of concern about the lack of a crossing guard. The project was able to break the "chicken and egg" cycle by encouraging adults to supervise groups of children walking to school on that route. Then, for a Glennwood Walk and Roll to School Day event, the project director requested an additional crossing guard for that particular event; the police department complied by providing an actual officer at that intersection. The city police department submitted a budget request for an additional crossing guard at that intersection next school year. This was not funded; at the conclusion of the project, the police department had begun a citywide study on placement of crossing guards.

In appreciation of the work of the crossing guards, the project sponsored a citywide "Crossing Guard Appreciation Day." The School Team provided a bag of treats and hot chocolate to each crossing guard on duty that morning across the city, and many students gave small gifts and cards to the

guards as they crossed the street. The crossing guards were very appreciative of being appreciated and the activities highlighted the critical role these women and men play in Safe Routes to School enforcement efforts.

The Decatur Police Department worked very cooperatively with the project. On Walk and Roll to School Days at both Clairemont and Glennwood, officers on foot and bike accompanied walking school buses and bike trains. On the less formal "Walk and Wheel Days" an officer has assisted a large walking group at busy intersections.

The table below summarizes the status of enforcement measures for Clairemont/Glennwood schools at the conclusion of the project.

Table D-2 Enforcement Measures – Clairemont/Glennwood

Number of Action Items	Number Action Items Completed	Number of Pending Action Items (Requests Made)
3	1	1

Education

Pedestrian and bicycle education were a central part of the Safe Routes to School program at both Clairemont and Glennwood. Bicycle and pedestrian safety trainings for both children and adults were integrated into the program in a variety of ways. Building on what had already been learned at other schools, the activities provided opportunities to fine-tune what had worked and experiment further.

- Pedestrian safety education – During the project's first year, pedestrian safety education was conducted at each school's morning assembly using the "Otto the Auto" video and the new "Step to Safety with Asimo" DVD for the older children. At Clairemont, the principal and a 3rd grade teacher provided a "Tip of the Day" for pedestrian safety in preparation for the International Walk and Roll to School Day event in October. The Site Coordinator followed up by combining the weekly Frequent Walker and Bike-Rider drawings at Clairemont with pedestrian and bicycle safety tip demonstrations.

During the second year, a three-day pedestrian safety training was incorporated into the PE curriculum for all first through 3rd graders at Clairemont. The curriculum included a final "on-the-street" activity through which students could practice their newly learned skills. The project director developed the curriculum and provided training to the PE teacher and her assistant; the teacher and her assistant piloted the curriculum with assistance of parents and then provided feedback to the project director.

Through the process, we learned:

- Pedestrian skills classes are most effective at the 2nd and 3rd grade level. Younger children have difficulty with the concepts of "left" and "right;" older children often consider themselves too sophisticated for the material.
- Repeated exposure to the concepts at all age levels is important.
- Walking field trips to practice skills should have well-planned routes to include many traffic features in a short amount of time. Some "features," such as cars backing out of driveways may need to be staged.
- Parent volunteers should receive an orientation regarding the pedestrian skills covered in the class as well as their role on the walking field trip.

- Bicycle Safety Training through PE- In the spring of 2005, all 5th graders at Glennwood Elementary and all 3rd graders at Clairemont Elementary were trained in the "Safe Bike

Drivers" course. They were given an opportunity to demonstrate their skills by riding in "Glennwood City" and "Clairemont City" respectively, and at the end were awarded their "Safe Bike Drivers Licenses" and the Governor's Office of Highway Safety "Safe Bike Driver" activity book. To encourage reinforcement and practice of the skills, a flyer with information covered in the class was sent to parents. All of the 4th and 5th graders at Glennwood took the "Safe Bike Drivers" course through PE again in the spring of 2006.

The bicycle safety classes through the PE program were a key component of the project's kick-off efforts in the spring of 2005. The classes provided opportunities for students to learn and practice bicycle safety skills, and they brought about a general excitement about bicycling. On the Walk and Roll to School Day bike trains, it was evident which students had gone through the training; they clearly had a framework into which to put the bike train leader's instructions.

Parents have indicated that they value the PE bicycle classes; in the second year, when the classes were postponed from the fall to the spring, there was an outcry from many parents who were counting on their children receiving the training. After the October Walk and Roll to School event, a 4th grade student convinced his mother he wanted to bike the two miles to school; she refused to let him do so until he received safety training. On her own, she sought out a class that she and her son could attend through the Atlanta Bicycle Campaign.

There were pitfalls with the bicycle classes, however; the small physical space and competition for its use, large numbers of students, and lack of consistent presence by the PE teacher proved quite challenging. Through the process we learned:

- Transportation, maintenance, and storage of bicycles require great amounts of time and "people power."
- Numbers of fifty students at a time, as is a common arrangement for PE classes currently in Georgia, requires a large amount physical space; smaller numbers are preferable.
- Large numbers of students require the leadership of well-organized PE instructors; a guest instructor and/or parents should serve as *additional* adult supervision, but should not substitute for the PE teacher. The PE teacher must provide the behavioral framework for the classes.
- Parent volunteers should be briefed on their roles prior to the class.
- Hour-long sessions are optimal for thorough coverage of material and practice; however, sessions can be kept to 45 minutes if there is a good organizational framework, adequate supervision, and sufficient space for classes to divide up into smaller groups for work at activity stations.

- <u>Bicycle Safety Mini-Classes -</u> The 1st and 2nd graders at Clairemont participated in a 1.5 hour on-bike mini bicycle safety class; this class focused on helmet fit, stopping at the end of a driveway - and

dismounting to cross a street when riding on a sidewalk. These experimental mini-classes did not prove to be an activity we would recommend repeating. Many of the children were not yet riding two-wheel bikes, and most did not have the cognitive abilities to understand traffic rules in simulated settings. For skills to be internalized at this age, students typically need repetition over time, and this requires parental involvement.

- Extracurricular Bicycle Safety Training - In the fall of 2005, the project offered a Kids "Effective Cycling" class to Glennwood 4th and 5th graders on two consecutive Saturdays. The class, entitled "Takin' It to the Streets," provided opportunities for students to practice bicycling skills and apply them to actual on-street situations. Another bicycle skills class, called a "Family Class" was offered to Clairemont students and their parents.

- Safety Education for adults - While parents might know how to cross streets or ride a bike, many admit that they never learned the in's and out's of traffic safety. Even if they do, they don't necessarily know how to isolate the skills to model and teach them to their children.The project's adult education efforts sought to prepare parents to be active teachers and role models for their children and other children in the school community.

In preparation for International Walk and Roll to School Day 2005, the project director conducted a safety training for ten parent bike train and walking school bus leaders. The training was a small, targeted one, focusing on those who might likely walk or bicycle with students on an on-going basis The training covered practical logistics of leading a bike train or walking bus, as well as specific bicycle and pedestrian safety basics.

To encourage parents to learn more in-depth information about bicycling, a discount on the Atlanta Bicycle Campaign's "Effective Cycling" course fee was offered to adults; when it became apparent that there was interest in the classes but the offered Saturday courses did not work for many parents' schedules, members of the School Team organized a special weekday class for Clairemont and Glennwood parents. The class was held in early March of 2006, with 8 parents attending. While this was a comparatively small number, all of the class graduates were also bike train volunteers with the knowledge, ability and confidence to lead children on bicycle journeys to school.

In addition, the project director wrote a series of pedestrian and bicycle safety articles for the weekly school newsletters. At Glennwood, bicycle and pedestrian safety tips were included in the welcome packet for families of rising 4th graders, and bicycle and pedestrian safety information was made available to parents at PTA meetings and Walk and Roll to School Day events at both schools.

The table below summarizes the education activities conducted at Clairemont and Glennwood and numbers of community members reached.

Table B-3 Education Activities – Clairemont/Glennwood

Safety Education Activities	Quantity	Approximate Number of School Community Members Reached
Pedestrian Education through assemblies/ "Tip of the Week"	4 assemblies	265 kindergarteners – 3rd graders; 30 staff; 10 parents
Pedestrian Education Training	3 45-minute sessions	250 1st-3rd graders; 2 staff; 10 parents
Bicycle Education through PE classes	5 45-minute sessions – offered twice	600 3rd-5th graders
Bicycle Education mini-classes	3 30-minute sessions	100 1st and 2nd graders
Extracurricular Bicycle Classes	2 3-hour sessions	20 students; 11 parents
Parent Bike Train and Walking School Bus Training	1 2-hour training	10 parents

Adult Effective Cycling Class	1 5-hour class	8 parents
Ped and Bike Safety Literature Distribution	4 brochures	200 parents
School newsletter articles	15 articles	700 parents and staff

Encouragement

Encouragement efforts in Decatur included large events, small weekly events, incentive programs, and in-class activities.

- Walk and Roll to School Days - In May of 2005, each school held its kick-off Walk and Roll to School Day. At Clairemont, there were three designated Walking School Buses, all lead by school staff (including the principal), and one Bike Train, led by the project director, a School Team member, and school staff. Additionally, many students walked or biked with their parents, and some families formed informal walking and biking groups. 80 students walked to school that day, and 72 rode bicycles. Upon arrival at school, students signed the event banner, and received stickers, T-shirts, and refreshments. For Glennwood's Walk and Roll to School Day the project sponsored five Walking School Buses, and three Bike Trains. School staff, including the principal, teachers, and parents, provided leadership for the Walking Buses. Project staff, Atlanta Bicycle Campaign staff, Atlanta Bicycle Campaign volunteers, and parents provided leadership for the Bike Trains. The event drew 60 student walkers and 60 student bicyclists. Upon arrival at school, students signed the event banner, and received stickers, T-shirts, and refreshments.

The following fall each school held an International Walk and Roll to School Day, using the same Walking Bus and Bike Train routes and the same general procedures. At Glennwood, 112 walkers and 75 student bicycle-riders (61% of the school population) participated; at Clairemont 145 students (55% of the school population) participated despite the rainy weather. At both schools there was a reception area with refreshments, and students received "Walk and Roll to School It's Cool" wristbands and Frequent Walker/Bike-Rider cards (see below).

In 2006, the schools held a spring Walk and Roll Day and a fall International Walk and Roll event. The spring event was designed to connect the broader Decatur community with the Safe Routes to School program. In addition to the Walking School Buses, Bike Trains, and "Walk and Roll to School" shoelace prizes, each school held a bike

rack ribbon-cutting, Many public officials attended the events, including the Mayor, two city commissioners, and most of the Decatur police force. The Mayor read a "Walk and Roll to School Day" Proclamation at each ceremony, indicating the City's support for Safe Routes to School efforts.

The International Walk and Roll to School Days held in October of 2006 had an international flavor. The Spanish teachers at both schools assisted students to make signs announcing the event in Spanish. The event continued to bring out enthusiastic participation: at Clairemont, a record-breaking 182 students (75%) participated and at Glennwood 161 students (53%) of the students walked and biked that day. Students received "toe tokens" with small bracelet chains as rewards.

- Walk and Wheel Days - To continue the walking and biking enthusiasm on a more regular basis, both schools instituted a "Walk and Wheel Day" program. Clairemont held weekly "Walk and Wheel Tuesdays." Parents formed informal walking and biking groups to accompany students to school, and, to encourage participation from students living in the Housing Authority apartments (typically bused to school), school staff, including the principal, rotated responsibility for leading a Walking School Bus from the apartments. An average of 25 to 30 students from the Housing Authority apartments participated in the weekly Walking Buses. Glennwood began holdingmonthly Walk and Wheel Days in which the principal and her staff walked to school with students from the Housing Authority apartments; because of its popularity, the Walk and Wheel Days were increased to twice a month at Glennwood. An average of 34 to 40 students participated from the apartments each time. The principals reported that they enjoyed the walks to school because they provided exercise for themselves and opportunities to spend time directly with the students.

Several of the Walk and Wheel Days had themes. Clairemont held a "Bring a Friend" Day and students were rewarded with double prizes if they encouraged another student to participate. In November, the event was called "Turkey Walk and Wheel Day"; the principal of Glennwood dressed up in a stuffed turkey suit, and students practiced pedestrian skills by sticking their necks out like a turkey and looking "left, right, left again, and over your shoulder." Despite the unusually cold temperatures, over 125 students participated at each school; they were rewarded with turkey tokens to add to a token chain. In December, both schools held "Jingle Bell" Walk and Wheel Days; students received jingle bells to put on their shoes and "jingle all the way" to school. Students were treated to hot chocolate when they arrived at school.

- Frequent Walker/Bike-Rider Program - At the fall 2005 International Walk and Roll to School Day events, the project launched the "Frequent Walker/Bike-Rider" Program. Each time a student walked or biked to school they could fill out a "Frequent" card and were eligible for that week's drawing. The program

became wildly popular; the weekly drawings for small prizes seemed to be very motivating to students of all ages and even a teacher and the principal participated and won prizes. The project provided some prizes and the City of Decatur graciously donated many of the items as well. A final drawing was held at the conclusion of the fall program using all names submitted, with slightly bigger prizes.

The "Walk and Wheel Days" combined with the "Frequent Walker/Bike-Rider" Program generated great excitement about walking and biking at Clairemont. 1,836 "Frequent" tickets were submitted at Clairemont, indicating that at least that many trips had been made to the school by foot or bike over a 6-week period. Parents and staff reported that the weekly "live" drawings for prizes at the school's morning assembly motivated students to participate; just hearing their names called at assembly is a thrill to them. However, since those students are quite young, they did not fully comprehend the raffle process, and many who participated but did not receive prizes were baffled by this. At Glennwood, a total of 534 tickets were submitted; the smaller number can be attributed to the less frequent "Walk and Wheel Days" (twice a month), the inconvenient placement of the ticket collection box, and, perhaps, the older age of the students who are less motivated by "trinkets" (though teachers report that Glennwood students were also excited simply to hear their names called).

The program was continued in the spring of 2006 and again in the fall, with monthly, instead of weekly, drawings. At Clairemont, the program continued to be an incentive to walk and bicycle to school, and levels of participation were sustained at a high level. At Glennwood, however, the excitement tapered off, and fewer children participated over time; this was particularly true for the students who walked and bicycled regularly.

- Turn off the TV Week/Walk Across America - In the spring of 2006, the School Health Team at Glennwood dovetailed their efforts with Safe Routes to School goals; during the March "Turn off the TV Week" families were encouraged to use the non-TV time to get more physically active. The week's kick-off was a Walk and Wheel Day, combined with a healthy breakfast for families. Safe Routes Project staff worked with the School Health Team to obtain pedometers for all students in the school (through the Coca-Cola company) and to launch a "Walk Across America" program. Over the week, students tracked their mileage to see if, as a school, the miles walked would add up to a journey across the United States; they used a US map as a visual to track their progress over the week.

- Really Cool Reasons to Walk and Bike Poster Contest - In the fall of 2006, students at Glennwood participated in a "Really Cool Reasons to Walk and Bike to School" Poster Contest. Students were encouraged to use their creativity to design an attractive and informative poster illustrating the benefits of walking and bicycling from their point of view. Forty-four students submitted thirty-seven colorful entries. A committee of judges selected four winners. The winners were awarded their prizes in a special ceremony at the International Walk and Roll to School Day event. Posters were displayed throughout the school and at the first statewide Bicycle and Pedestrian Conference.

- In-Class Activities - The Decatur schools were very open to creatively incorporating walking and biking encouragement into their classroom curricula. The in-class activities below all served to connect the Safe Routes to School encouragement concepts with other aspects of learning. These connections deepened and solidified for students the reasons for biking and walking to school; this, in turn, fostered motivation and enthusiasm for doing it.

As part of the "expeditionary learning" program, and inspired by Safe Routes to School, the 3rd grade teachers at Clairemont chose to focus their first "expedition" on bicycling; students worked on the learning standards for their grade through the theme of the bicycle. The "expedition", called "We're on a Roll," included learning about the history of the bicycle, the effect of bicycling on the cardiovascular system, basic bicycle mechanics, and organizations and businesses in their community that support bicycling. The students concluded their study with a community service activity: they fixed up old bicycles and donated them to a local bicycle cooperative.

Encouragement efforts also focused on environmental reasons for walking and biking to school. During the fall of 2005, the project offered a small stipend, called the "Foot Power" stipend, to encourage teachers to implement units of study on air quality and transportation choices in their classrooms. The project director offered curriculum she had developed as well as assistance in tailoring the curriculum to meet the grade level needs. The result was an interest in implementing the curriculum in a "mini-course" format, an innovative educational approach at Glennwood. The "Foot Power Club", composed of sixteen 4th and 5th graders under the direction of the school counselor, met for one hour for nine weeks. Learning about the relationship of fossil fuels, automobiles, and air pollution, the students created their own "scientific dramas," conducted research on their own transportation modes, and calculated the amount of pollutants emitted into the air by their own car travel and by motorists across the Atlanta area. They also had opportunities to take a walking field trip and ride bicycles to learn more about walking and biking as transportation.

In 2006, the "Bicycle Mechanics Exploration" was established as a "mini-course." A veteran mechanic from Bicycle South bike shop led the "Exploration"; twelve fourth and fifth graders – both boys and girls -- participated. The students learned about the science behind the "not-so-simple machine" through hands-on mechanic work. Over six weeks they worked in teams to build a bicycle. Each received a T-shirt smock at the beginning of the "Exploration" and a mini-toolkit at the end.

Encouragement activities appeared to have a direct and marked effect on student travel mode shift. The post-project parent survey showed that 77% of the Clairemont respondents and 73% of the Glennwood respondents credited encouragement activities (Walk and Roll Days, Walking Buses and Bike Trains, and Frequent Walker/Bike-Rider Program) as prime motivators for increased walking and biking.

Twenty-three percent the parents responding to a parent survey at Clairemont, and 14% at Glennwood indicated that the Walk and Roll/ Walk and Wheel events were the main motivation for increased walking and biking to school. The frequency of the small "Walk and Wheel" events helped to maintain on-going excitement about and interest in walking and biking; outreach to students living in the Housing Authority apartments assisted them in participating in the Safe Routes to School efforts in meaningful ways.

At Glennwood, 20% of the parent respondents to our survey indicated that Walking/Biking with Others was the sole motivating factor in their child's increase in walking and biking to school. For children at this age, walking and bicycling provide opportunities for social interaction, and this was reflected in many of the student "Really Cool Reasons" posters. One mother, a member of the Winnona Park Walking Bus group, commented that initially her son did not want to walk to school; several months later he refused to accept a ride to school because he did not want to miss out on seeing his friends. The percentage selecting Walking/Biking with Others at Clairemont was somewhat lower at 12%, perhaps reflecting a difference in students' age and social development.

The majority of parent respondents, 38% at both schools, indicated that it was a combination of factors that led to increased walking and bicycling, with events, the Frequent Walker/Bike-Rider Program and Walking/Biking With Others as the most commonly cited at Glennwood; Clairemont parents included Safety Classes as an important motivator as well.

Another strong indicator of success was the "organic" development of three separate neighborhood walking/biking groups. It was primarily through the encouragement provided by the first Walk and Roll to School Day that the Winnona Park Walking School Bus was developed. Two fathers in the neighborhood decided that they would accompany their children on foot to school on a daily basis. The idea spread, and the group now consists of approximately 40 families in the Winnona Park and College Heights area. Similarly, on-going encouragement efforts have created a desire to get to school under "leg power" by a group in the Oakhurst area; a small group of parents and students currently walk, scooter, or bike to school on a daily basis, and. In addition, a group of Glennwood 4th graders who who had previously attended Clairemont, began to bicycle regularly from the Great Lakes area to Glennwood. (Note: The School Health Team at Glennwood sought funding to launch on outreach program to families living in the Housing Authority apartments. Grant funds would have provided stipends to parents willing to lead Walking School Buses on an on-going basis. The proposal, however, was not funded.)

Table D-4 Encouragement Activities – Clairemont/Glennwood

Encouragement Activity	Quantity	Approximate Number of School Community Members Reached
Walk and Roll to School Days/Walking School Buses and Bike Trains	8 events	150 student participants per event; 50 parents/school staff average per event
Walk and Wheel Days	60 events	25 students, 10 parents, 2 staff per event
Informal Walking Buses/ Bike Trains	Ongoing daily	50 students; 25 parents
Frequent Walker/Bike-Rider Program	Seasonal programs at each school	600 students each season; 50 staff
Turn off the TV Week/ Walk Across America	1 week-long program	300 students; 30 staff; 100 parents
Really Cool Reasons for Walking and Biking Poster Contest	1 contest	44 students
"We're On a Roll" Learning Expedition	1 unit of study	23 students; 1 staff member

Foot Power Club	9 one-hour sessions	16 students; 1 staff member
Bicycle Mechanics Club	18 one-hour sessions	12 students

Communication with the School Community

Prior to the beginning of the project in Decatur, the project director made a presentation at a meeting of the City of Decatur School Board. When the project was launched at Glennwood and Clairemont, the principals at each school sent a letter to the parents introducing the project. Project staff gave presentations and had exhibit tables at PTA meetings, distributing the project Fact Sheet as widely as possible to build familiarity with Safe Routes to School efforts.

Information about ongoing activities reached the school community through flyers, articles, posters, and verbal announcements. The project director contributed regular "Safe Routes to School Update" articles in both school newsletters, and information about particular events was also posted on the parent e-lists. The principal and Site Coordinator often made announcements about project happenings to the students and teachers at the daily morning assemblies at Clairemont and weekly assemblies at Glennwood.

Building community awareness of and participation in the Safe Routes to School project was a targeted goal of the project in Decatur, and the School Team actively sought ways to make those connections with the city government, the city-wide school community, as well as the business community. After the School Team completed its School Transportation Improvement Plan, the project champion arranged for a presentation of the Plan to the City Commission at one of its monthly working sessions. While the project director gave a slideshow overview of Safe Routes to School and the goals and activities of the Plan, other members of the School Team shared their perspectives on the project. A principal, a teacher, a parent, and a student all spoke briefly about the impact the project's activities had had on their schools. The Transportation Improvement Plan was also available to parents and members of the community on the school websites.

Local businesses showed some support for the Safe Routes to School project. Several donated prizes for the Frequent Walker/Bike-Rider Program; local grocery stores donated helmet liners for the bicycle classes and fruit for Walk and Roll to School Day events. The School Team submitted a proposal to the Decatur Business Association for sponsorship of new Walk and Roll to School T-shirts, but the request was turned down because the project did not serve all of Decatur.

Prior to working with the Decatur schools, a local city newspaper, "The Champion" published an article about the overall project. On International Walk and Roll to School 2005, a photographer from the in-town newspaper "The Story" accompanied a Walking School Bus and published a front-page photo of the principal and students walking to school. Articles about the project along with photographs of events appeared in the May and July/August issues of the "Decatur Focus." Additionally, a photograph of a bike-rack ribbon-cutting was included in the City Schools of Decatur calendar for school year 2006-2007. Photographs from the project were also included from time to time on the City of Decatur Schools website.

Achieving Our Goals

As the fourth and final site of the demonstration project, methods of goal development were more organized and implementation of evaluation strategies was more effective than in the previous schools. The following is an assessment of the Clairemont/Glennwood Safe Routes to School program with respect to the goals stated on the School Transportation Improvement Plan.

Goal 1: To increase walking and biking by 50% at each school.

This goal was achieved and surpassed as shown by a student Show-of-Hands survey conducted in classrooms. Results indicated an 85% increase in non-motorized travel (walking and bicycling combined) at Clairemont, and a 229% increase at Glennwood. The very large increase at Glennwood is due, in part, to the small percentage of non-motorized travel to that school at the outset of the project. Since the project began only a few months after the system reconfiguration, few families had yet reached a comfort level with walking and bicycling from greater distances or outside their own neighborhoods.

The surveys were conducted in March 2005 (baseline) and November 2006 (post-project); some members of the Safe Routes to School Team felt that these numbers would have been even higher if the post-survey had been conducted during warmer weather. However, observations indicate that walking and bicycling remained fairly steady even in cold weather; throughout the winter months, an average of 20 to 25 bikes were regularly parked at Glennwood.

Table D-5 Changes in Travel Patterns - Glennwood

Travel Mode	March, 2005 Percent of Total	November, 2006 Percent of Total	Percent Change
Walk	4	15	+ 275%
Bike	3	8	+ 167%
Bus	34	35	+ 3%
Carpool	7	8	- 14 %
Car	52	34	- 35%
Other	0	0	0%
Total Non-Motorized	7	23	+ 229%

Table D-6 Changes in Travel Patterns – Clairemont

Travel Mode	March, 2005 Percent of Total	November, 2006 Percent of Total	Percent Change
Walk	12	18	+ 50%
Bike	1*	6	+500%
Bus	32	29	- 10%
Carpool	5	5	0%
Car	50	41	- 22%
Other	1	1	0%
Total Non-Motorized	13	24	+ 85%

Goal 2: To reduce traffic congestion by 15% per school as measured by the number of car drop-offs/ pickups

November 2006 traffic counts were compared to counts taken in October of 2005. Results show a 20% decrease in morning car traffic at Glennwood, but only an 8% decrease in morning traffic at Clairemont. It is not clear why such a small decrease was observed at Clairemont; anecdotal accounts do not support this, and increases in walking and biking would likely indicate a commensurate drop in car traffic. Afternoon traffic at Clairemont, however, decreased by 22%.

Table D-6 Traffic Counts – Glennwood

Time	October, 2005	November, 2006	Percent Change
am	120	96	-20%

Table D-7 Traffic Counts – Clairemont

Time	October, 2005	November, 2006	Percent Change
am	73	67	-8%
pm	32	25	-22%

Goal 3: Build community awareness of and participation in the Safe Routes to School program

The School Team put strong emphasis on promoting the SRTS program within the immediate school communities as well as throughout the City of Decatur.

Participation in the program by parents and staff was quite high, as reflected in the education and encouragement tables above. One of the greatest observed changes resulting from these efforts came in terms of parent attitudes. Used to living in a small, walkable town, prior to the school system reconfiguration, many families considered walking and biking to school the norm. With the reconfiguration, customary travel patterns were interrupted, and many parents were confused and angry. This was strongly reflected in the results of the initial parent survey, conducted just six months into the first year after reconfiguration. However, according to several members of the Safe Routes to School Team as well as parents at both schools, the combination of education and encouragement efforts conducted in the spring and fall of the project's first year spurred many families to resume walking and biking, at least occasionally, even if it required going beyond their own neighborhood. The results and comments on the parent survey at the conclusion of the project's second year showed that parents were very aware of and quite receptive to the project's efforts and were finding new ways for their children to walk and bike to school. (See Appendix, Clairemont Post-Project Assessment Report.)

The Communication with the School Community section above documents the many ways in which the School Team built awareness of the program in the greater City of Decatur community. Participation by the greater Decatur community included:

- involvement by the Mayor and City Commissioners in meetings and events
- involvement by the police department in meetings and events
- involvement of project staff in multiple public input meetings on the Community Transportation Plan
- inclusion of other Decatur schools in Crossing Guard Appreciation Day
- donations of goods and services by local businesses

As a result of the broad community awareness and participation achieved by the project, the City of Decatur Schools went on to become the first school system in the state of Georgia to run a system-wide Safe Routes to School program.

III. Programmatic Findings

The following are programmatic findings based on the project's work in five schools. These findings were used in the development of the Georgia Safe Routes to School Guidebook

A. Working With School Communities

- **Every school community is different.**
  Schools are, in many ways, like countries. Each school is composed of distinct ethnic, racial, and socioeconomic population make-up; every school has its own surrounding geography; and each school has a unique system of organization, determined, to a large extent by the personality and style of the principal. Mason and B.B. Harris, for example, though neighboring school districts, are widely different environments in all three of those aspects. For these reasons, we found it important to design each school program to fit the needs, style, and organization of that unique school.

- **The "Getting to Know You" period is critical.**
  Getting to know a school community takes time and effort, but it is well worth the investment. Although our project was invited to work with each school, it took several months to establish credibility and acceptance as a true part of each school. First and foremost, we found that it is essential to develop a rapport with the principal. As the ultimate decision-maker in a school, he/she must be "on board" not only with the concepts of Safe Routes to School, but the methods and activities. The principal sets the tone in a school, and a strong and positive relationship with her/him can open many doors within a school.

  There are also other "key" people in a school: getting to know the school secretary, the custodian, the media specialist, the PE teachers, the cafeteria staff, or any number of the school faculty can all be of great assistance. In addition, we found that presentations to the school faculty were important. Faculty members appreciated being informed of what is happening in their school; they were able to associate a person with the project, and were better able to participate in the project. In fact, the idea for bicycle safety classes through PE classes occurred to the Mason Health/PE teacher as she listened to the Project Director's presentation to the faculty; the art teacher at Dresden Elementary was more open to contributing her talents to the project because she had background information from the presentation.

  In addition, it is critical to learn about the policies, procedures, and resources at a given School. These include everything from procedures for visitor sign-in and which door to enter, to who publishes the newsletter and what day of the week parent information is sent home.

- **School Site Coordinators are invaluable in developing and maintaining good relationships with the school community.**
  We found that employing a member of the school community as an on-site Site Coordinator was a key factor in working with the schools. The Site Coordinators were able to be at the school on a daily basis, were familiar with school personnel and procedures, and had a general sense of the "pulse" of the school community. By serving as both a liaison and a project "cheerleader," the Site Coordinators smoothed the way for integration of the project into the life of the school.

- **Flexibility, patience, persistence, and creativity are key to working with busy school staffs.**

School principals are very busy people; as important as "Safe Routes to School" issues are, and as supportive as the principal may be, his/her primary concerns are student academic performance and safety on the school grounds. This means, then, that a principal might not return phone calls or e-mails, be available to attend certain meetings, or even follow through on tasks in a timely manner. Teachers, too, are under great pressure, and do not typically have much "expendable" time, even if they wholeheartedly embrace the "Safe Routes to School" concepts. For a Safe Routes to School program to function well within a public school environment, program staff and volunteers must be flexible, patient, and understanding of the "bigger picture." At the same time, we also found that being persistent and finding creative, comfortable ways to engage school staff greatly contributes to a project's success.

- **School schedules dictate activity planning.**
  Schools have their own unique calendar, full of PTA events, book fairs, theme weeks, class trips, teacher planning days, vacations, and, quite importantly, standardized testing. Therefore, scheduling additional events and activities can be a challenge, particularly in the spring. Whenever possible, it is very helpful to plan for the full school year and get on the school's official calendar early and/or incorporate Safe Routes activities into other school activities. It is also important to limit activities to what is comfortable and manageable within the bigger context of the school.

- **Parents are an essential component.**
  While it is important to have active involvement of the school faculty, we found that parent involvement in the program is critical. Parents are the ones who wake their children and send them off to school in the morning, and thus they are the ultimate decision-makers about how their children get to school. Parents are the ones who know most intimately the routes their children travel and, as residents, can be the strongest voices for infrastructure change. At B.B. Harris, the program faltered when the project became a school faculty committee; at Mason, Dresden, and Decatur schools, on the other hand, the program has thrived with strong parent involvement.

- **Safe Routes to School can engage many members of the community.**
  We found that Safe Routes to School concepts and activities "speak" to many parents in very direct ways; several principals observed that parents who are not otherwise involved in the school have become active with the project. Project activities offer a variety of levels of involvement, from ongoing School Team membership to volunteering to hand out stickers at an event, to simply walking with a child to school.

  We have also found that local businesses have been quite willing to support project efforts. Requests for specific items --- from hairnets to a mountain bike – have yielded helpful contributions.

- **Schools are ever-changing environments.**
  School communities are dynamic: faculty, students, parents, even facilities and resources often change from school year to school year. For a Safe Routes to School program, a school year is a short time to cultivate significant infrastructural and behavioral change. Therefore, it is important to build continuity into the program. While at first the program's success might rely on the enthusiastic work of one or two key people, a truly successful program will have a broad base of support from the community.

B. School Team

- **The School Team plays a critical role.**

Schools are the recipients of many well-meaning programs, and school staff are often weary of them. The School Team is designed to be an active planning and decision-making body, and in this way, "Safe Routes to School" is not "done to" a school, as many programs are, but rather allows the school community to take direct "ownership" of the program's development. School Team members, as members of the school community, provide insights and ideas that project staff, as "outsiders," would not have. We found that the School Team effectively serves to integrate the project into the life of the school community.

- **The composition of the School Team is important .**
  We learned through our experiences with B.B. Harris and Dresden that the composition of the School Team influences the vitality of the project; at both schools the project went through a "low-energy" period, but once we re-vitalized the School Team, the project flourished. We also learned just how important it is to have a "Pied Piper" (a walking or bicycling parent) involved on a School Team. At B.B. Harris, the parents on the School Team were involved with the PTA, but lived too far to walk or bicycle to school with their children; they could not effectively speak to the day to day issues of walking or bicycling nor lead by example.

- **The School Transportation Plan is a useful tool.**
  The "School Plan" served as a useful guide for project activities. As one School Team member stated, the Plan was "a great way to document the proposed changes and outcomes. It was something that all Team members could easily understand, and because it was all encompassing, it was a quick way to evaluate our efforts at the end of the project."

- **Development of clear evaluation strategies is an important role of the School Team.**
  When we began our work in the schools, there was little information available on evaluation of SRTS programs. We found that our early Plans did not include well-written goals and objectives and in the end those programs lacked clear evaluative data. It is important for School Team to take time at the beginning of a program to set measurable and observable goals and objectives and to devise an evaluation strategy from the outset.

C. Assessment

- **Parent surveys provide a wealth of information.**
  We were pleasantly surprised with our rates of return for the parent surveys. The surveys proved to be an excellent way to introduce the project and to identify interested parents, as well to gather data regarding perceived barriers to walking and biking. We found that attaching a map directly to the survey was the most effective way to gather data regarding current and potential routes to and from school.

- **Traffic counts/ modality surveys are rough estimates at best.**
  We found that observational traffic counts have many confounding factors; car traffic as well as pedestrian and bicycle traffic can vary greatly depending on weather, time of year, time of sunrise, road construction in the area, community activities, school activities, homework assignments, etc. While the task is simple and provides an easy way to get school community members involved with the project, traffic counts require significant time on repeated occasions. In-classroom "show-of-hands" surveys require less staff or volunteer time, but they also have some confounding factors: teachers may forget to conduct the survey on a given day; students may not understand the directions, or students may not report their transportation mode accurately.

- **Pre- and post-project surveys also have confounding factors.**

School populations are very fluid; each year, the 5th graders leave the school and a new group of kindergartners enters. Even during a given school year, families move in and families move out of the school district. For these reasons, it is difficult to accurately depict modality change over time.

D. Engineering

- **The Infrastructure Task Force process is effective.**
  The Infrastructure Task Force brings together different elements of a school community that do not typically interface; principals and parents rarely interface with planners, engineers, police officers, and elected officials, and vice-versa. The Task Force meetings and Walk-Abouts allow each to share their knowledge and perspectives on the issues. The process also seemed to give the project more validity in the eyes of the principals; several remarked at they were impressed that we were able to get public officials to focus on their individual school. The dynamic process demonstrated that Safe Routes to School was more than "just another safety program."

- **Multiple Walk-Abouts and field checks are important.**
  The Walk-About (the physical inspection of existing conditions) provides a unique opportunity to experience walking and biking conditions in a very direct way; on each of our Walk-Abouts, it was clear that the planners, engineers, and school personnel all gained new perspectives and insights. We found that it was important to conduct multiple Walk-Abouts to first scout out potential routes and "Hot Spots", then to look at the Hot Spots each time with a closer and more practiced eye. Though photographs are very helpful, we found actual field checks to be important for measurements and ongoing verification of current conditions.

- **Bicycle and Pedestrian experts provide important perspectives.**
  While planners and engineers bring their own expertise to the process, they do not necessarily have a practiced eye for what works for pedestrians and bicyclists. Our bicycle and pedestrian experts were able to provide practical and technical information from the perspective of users of the bike and pedestrian facilities. This allowed us to identify potential problems and solutions that would otherwise be overlooked.

- **A checklist is helpful on Walk-Abouts.**
  We found that lay people do not automatically know what to look for in assessing street conditions, and therefore a checklist is helpful to guide them. However, we found that the standard checklists available do not provide enough detail for recording specific road conditions. We developed our own, but found it a bit cumbersome to use during the Walk-About.

- **Aerial photographs and on-ground photographs are very helpful.**
  The after Walk-About discussions involve thoughtful analysis of each Hot Spot within its geographic context; aerials and photographs provide important visual memory. Although we took some of our own aerial photos, we found that aerials can also be obtained through the internet. On-ground photographs should be taken from a variety of angles.

- **Off-road trails can be important connections.**
  We found it important to look for trail opportunities, particularly in suburban areas. Often, in fact, children have already created their own off-road short-cuts, and children and neighborhood residents can point to opportunities not always found on a map or even through an on-street Walk-About. At several schools, the installation of off-road trails have been key to facilitating walking and biking for large numbers of students.

- **Walk-About Summaries help keep information organized**.
  The Infrastructure Task Force gathers a great deal of information, so it is important to keep the data organized and useful. We found that a spreadsheet format outlining the locations, the issues, the potential solutions, and the "next steps" helped keep the Task Force members informed and involved in the process.

- **Publicizing the School Plan allows the community an opportunity for input.**
  Just as with other community plans, the School Transportation Improvement Plan can have an impact on a neighborhood. It is therefore important to give residents an opportunity to review the plan and make comments.

- **Good communication with public officials is critical.**
  We found that the engineers and planners assigned to the Infrastructure Task Force were helpful and actively involved in the process; the fact that the Task Force's work was time-limited (approximately 3 months) allayed fears that they might be committed to a long-term committee. During the implementation phase, we found that we needed to be clear in our requests and willing to "follow up, follow up, follow up." After meeting with city or county personnel, we found it very effective to provide written summaries of the meeting and use that as a basis for follow-up. As a result, we received many thoughtful recommendations and innovative ideas from the government representatives.

- **Some measures require policy changes.**
  While most engineering measures simply require funding, some require policy or "accepted practice" changes. On several occasions we found the jurisdictions hesitant to make changes based on liability issues or concerns about implementing a treatment in a single location.

E. Enforcement

- **Police Departments are generally interested in and supportive of Safe Routes to School efforts.** We found that small city police (Duluth and Decatur) were particularly supportive of the project; they were willing to provide escorts, have officers make presentations to students, and even help with bike classes.

- **Police Departments are very helpful for short-term (events, etc.), but are not able to maintain sustained surveillance efforts.**
  When specific requests for additional speed surveillance were made to police departments, we found that they responded well; however, since they were unable to maintain on-going efforts, the problem was not solved. The explanation was typically that there was insufficient funding to assign officers to the particular area on a more frequent basis.

- **There is a need for crossing guard protocol to be standardized.**
  We found that crossing guards are an invaluable component of the Safe Routes to School effort; in many places, however, crossing guards are not well supported or trained in any standardized way. We found that there is a need for a statewide training manual for crossing guards.

F. Education

- **Bicycle safety classes through Physical Education classes require extensive resources but are worth the investment.**

We found:

- PE teachers need the training and support of a certified bicycle instructor; with sufficient collaboration and communication, the team teaching approach works well. Through the process, the PE teacher learns the skills and process, and becomes trained to conduct basic classes.
- The program must provide bicycles and helmets. This involves acquisition of a fleet of bicycles, transportation to the site, and maintenance. Since young students range in size and ability, a variety of bikes must be provided. It is ideal to have a fleet of new, easily maintained bikes, but used children's bikes are much less expensive and fairly easy to come by at flea markets, yard sales, and through donations. We found, too, that bike "fix-up" days provided opportunities for volunteer involvement.
- Health departments, Safe Kids Programs, fire departments, and police departments are all possible sources for helmet donations. If helmets are to be used for many classes, helmet liners must be provided to prevent the spread of lice. Grocery stores or fast food restaurants are good sources of donated hairnets for helmet liners; the nets must be of the fine mesh variety. Nets must be labeled and stored individually in plastic between classes.
- Helmet distribution and fitting can be time-consuming; it is worth the effort to get parent volunteers to assist with this. An added benefit is that the parents also receive the training.
- On-bike PE classes work best when the class size is limited to no more than 25-30 students at a time.
- Class sessions need to be at least 45 minutes long; significant time is spent in simply getting the students ready with bikes and properly adjusted helmets.
- The "Safe Bike Driver" curriculum developed through the project works well; it condensed the material into a format that fits schools schedules yet provides the essential information and basic skill practice. Students are actively engaged in on-bike activities, and they are motivated by the opportunity to obtain their first "driver's license." Verbal responses to questions indicate that most have assimilated the information.
- Parents and school staff are generally very appreciative of the training; feedback was very positive from students, parents, teachers, and principals.

- **With a little support, PE teachers can teach pedestrian safety.**

  When project staff provided a pedestrian safety video and some basic guidance, PE teachers were willing to include pedestrian safety training in their PE classes. We recommend that the video be accompanied by verbal repetition of the basic skills, and, even more importantly, by actual practice in simulated or real street settings.

- **Parent education is an important component of the program.**

  Since pedestrian and bicycle safety skills have not historically been part of our education system, and adults often rely on motorized transportation, we have found that many adults do not know the basics; or, they may not know how to convey traffic safety information to their children in understandable ways. Therefore, we found it important to provide information to parents on the skills the children are learning in our trainings so that the concepts can be modeled and practiced at home.

- **Repetition and practice are key.**
  As with many aspects of learning, pedestrian and bicycle safety concepts must be repeated and practiced in order to fully integrate them and make them "habit." We found that, school-wide campaigns and artwork (posters and signs) are great ways to repeat safety messages; encouragement events with educational sub-themes repeat the messages and provide opportunities to practice the skills.

- **Safety education should precede large-scale encouragement efforts.**
  Because most students have little or no background with pedestrian and bicycle safety practices, it is very important to provide basic safety information to students and parents before launching any sort of encouragement campaign at a school.

G. Encouragement

- **Walk and Roll to School Day events are time-consuming but worth the effort.**
  Our experience revealed the following.
  - Walk and Roll events serve as excellent project "kick-offs."
  - Monthly Walk and Roll events keep walking and biking constantly in the collective mind of the school community and help maintain on-going excitement about the project.
  - Thematic Walk and Roll Days keep the monthly events interesting and provide opportunities for repeating educational messages.
  -
  - Walk and Roll events can easily involve the broader community in the project.
  - Walk and Roll events can naturally "plant seeds" for families to consider walking and biking to school on a more frequent or ongoing basis. Many families, however, will make the effort to participate in the event, but do not consider walking or biking on other occasions, so more efforts are needed to encourage actual mode shift.

- **Walking School Buses and Bike Trains are fundamental components of Walk and Roll to School events.**
  We found that in order to encourage broad participation in Walk and Roll events, it is important to offer adult supervised walking and biking groups. Although we attempted to develop ongoing Walking Buses and Bike Trains on non-event days, we found that few parents were interested in forming "official" on-going groups; instead, they preferred to set up their own informal arrangements.

- **Bike Trains are not simply Walking Buses on wheels.**
  Though based on the same concept, we found that Bike Trains require more expertise and planning than Walking School Buses in order for them to be safe and successful.
  - Bike Trains need a carefully planned route that does not involve complicated traffic maneuvers; we recommend strongly that bike trains not use the sidewalk.
  - Bike Trains need at a minimum a leader trained in bicycling basics.
  - Bike Trains leaders should have on hand: safety vests, extra helmets, and a first aid kit.

- If a Bike Train is offered in the morning, a return trip home must also be offered.

- Procedures must be in place for handling mechanical difficulties or crashes.

- For liability and safety purposes, we recommend that students younger than third grade be required to have a parent accompany them.

- **On-going incentive programs are effective ways to encourage mode shift.**
  At some of the schools, the Frequent Walker/Bike-Rider programs have successfully provided incentives enough for students to increase the amount they walk or bike to school. We found that weekly random drawings for small prizes are more inclusive, but they don't necessarily reward those who walk and bike regularly. In addition, many young students don't understand the "chance" concept, and are disappointed when they walk or bike to school but their names are never drawn. Punch cards or cards tallying numbers of walking/biking trips reward the students who actually walk or bike, but exclude those children who cannot do it frequently. We found that a combination of both methods works best.

- **Repeated messages, slogans, and images work well to get the message across.**
  Just like any "marketing" campaign, we found that repetition of messages, slogans, images, even colors served well to give our encourage efforts a recognizable "branding" and a clear identity.
  Our slogan, "Walk and Roll to School, It's Cool!" appeared on banners, posters, signs, skits, T-shirts, and stickers; our neon colored signs and GDOT safety vests appeared at every Walk and Roll to School Day. Both served to create a recognizable image to the school community and the public at large.

- **Determining what "sells" is important.**
  We used the "4 Fantastic Reasons for Walking and Biking" (It's Healthy! Less Traffic! Less Pollution! It's Fun!) as our framework for encouragement messages. We found that in all of our schools, the deep concerns about health, obesity, and lack of physical activity made the "It's Healthy!" reason an easy "sell." However, we found there is a possibility that "Safe Routes to School" be relegated strictly to the Physical Education department at a school; therefore, it is important to promote the broad variety of reasons for walking and biking. In some communities, like Mason, the traffic congestion issue is a huge one, and we found that "saving time" and the convenience of walking and biking were motivating factors for some families. We found the "Less Pollution!" reason somewhat harder to "sell" to adults, but that children respond well to it.

H. Overall

- **The comprehensive "4 E" approach is very effective.**
  We have found that engineering, enforcement, education, and encouragement are interconnected and complimentary. A major role of program staff is to coordinate efforts in all four of those areas.

  - At Dresden, for example, an engineering solution was proposed to address the issue of mid-block crossings; because of coordinated efforts, we were able to do concerted education around that issue, emphasizing the importance of crossing at the traffic light with the existing crossing guard. In this way, we substituted an education solution for an engineering solution; the results were more immediate and far less costly.

  - At Mason, though a sidewalk was installed by the county (engineering), it was essentially unused until our project began encouraging walking to school using that route; now it is a highly-used pedestrian route to school.

- In Decatur, enforcement, education, and encouragement combined to break a "chicken and egg" cycle: it was difficult to make the case for increased enforcement efforts until we could document pedestrian use of a crossing; pedestrian use was not there because there was no crossing guard and parents deemed the crossing unsafe. Once the project provided some basic pedestrian education and coordinated a Walking School Bus from the area on a Walk and Roll to School Day, the idea took hold among parents, students began walking from that area. We could then document for the police the need for a crossing guard to be assigned to that intersection.

- **A "custom-design" approach works best for school communities**. For expedience sake, many programs use a "cookie cutter" formula for implementation; all schools are offered the same "treatment." Because schools are such unique entities as described above (see "Working with School Communities"), we have found, however, that the "cookie cutter" approach cannot fit the needs of each school. By working with the school community to "custom-design" the program, the needs are better accommodated and the program developed has a deeper community buy-in.

Part 2 – Project Evaluation

I.Project Objectives and Tasks

A.Objectives
The Metro Atlanta Safe Routes to School Project had ten objectives which guided overall project implementation. The following is an evaluative summary of the work accomplished over the four-year project period. Additional information and the accompanying documents are referenced under each objective.

Objective 1: Review the state of the art in Safe Routes to School programs nationally and internationally.

Over the course of the four-year project, the national "state of the art" changed dramatically; while this objective was originally intended as an initial activity for the project (prior to school implementation),the literature review turned out to be an on-going one. The project director compiled a comprehensive resource file on a wide variety of Safe Routes to School-related topics. The Literature Review Report can be found in the Appendix of this report.

Objective 2: Develop a project master plan.

The project master plan was developed over the course of the project. The project timeline formed the initial basis of this plan. As the project unfolded, the School Transportation Improvement Plans collectively created the specifics of the project work plan. The Improvement Plans themselves evolved over the course of the two years at each school, and planning flexibility was an essential component to the success of the program at each school. The Master Plan can be found in the Appendix of this report.

Objective 3: Identify specific improvements to be made in the transportation infrastructure environments to allow children to walk and bicycle safely to school.

All 4 school sites identified infrastructural improvements. The Infrastructure Task Force at each school identified both near-term and long-range infrastructural improvements.

There were a total of 88 near-term infrastructural improvements identified.

There were a total of 51 long-range infrastructural improvements identified.

The types of identified improvements are listed in the Infrastructure Improvements Summary in the Appendix of this report.

Objective 4: Develop a near-term and long-range plan to address infrastructural improvements to create safe walking routes within a one-mile radius and safe bicycling routes within a two-mile radius of the school.

All 4 school sites developed School Plans with designated long-range improvements.

67 near-term infrastructural improvements were included in School Plans.

Types of near-term infrastructural improvements are listed in School Plans in the Appendix.

46 long-range infrastructural improvements were included in School Plans.

Types of long-range infrastructural improvements are listed in School Plans in the Appendix.

Objective 5: Develop a plan of near-term and long-range enforcement measures (including school policies and law enforcement) to support walking and bicycling to and from school.

All 4 schools developed School Plans with designated near-term enforcement measures; two School Plans included long-range enforcement measures.

2 School Plans included near-term school policy measures.

1 School Plan included a long-range school policy measure.

3 School Plans included near-term law enforcement measures.

2 School Plans included long-range law enforcement measures.

Types of measures are indicated on the School Plans in the Appendix.

Objective 6: Facilitate the school community's implementation of infrastructural improvements that support the use of non-motorized transportation on school journeys.

Project efforts resulted in implementation of near-term infrastructural improvements at all 4 school sites.

Types of near-term infrastructural improvements are indicated on School Plans in the Appendix.

Project efforts resulted in initiation of long-range infrastructural processes at all 4 school sites.

Types of long-range infrastructural improvements initiated are indicated on School Plans in the Appendix.

Objective 7: Facilitate the school community's implementation of enforcement measures that support the use of non-motorized transportation on school journeys.

3 schools implemented near-term enforcement measures. Types of enforcement measures are indicated on the School Plans in the Appendix. 2 schools initiated long-range enforcement measures. Types of long-range enforcement measures are indicated on the School Plans in the Appendix.

Objective 8: Provide pedestrian and bicycle safety education to school community members.

100% of the students received pedestrian and/or bicycle safety training through Physical Education during the first year of the program at each school. Approximately 10% of the total adult school community population received pedestrian and/or bicycle safety training.

100% of the students received pedestrian and/or bicycle safety materials.
Approximately 75% of the parents and staff received pedestrian and/or bicycle safety materials. This included hand-outs, brochures, and newsletter articles.

85% of the planned educational programs were conducted and brought to completion.

All five schools included on-going safety education programs in their School Transportation Improvement Plans.

Objective 9: Promote walking and bicycling to and from school among school community members

The percent of school community members changing modes from motorized transportation to walking or bicycling on a regular basis is recorded by school:

Mason Elementary: 13.8% (derived from morning trips made by students living within one mile of the school)
Glennwood Academy: 16%
Clairemont Elementary 11%

At Dresden Elementary and B.B. Harris Elementary, the stated goals on the School Plans did not address mode shift. Informal evaluation at both schools showed no significant change in daily walking and bicycling.

It is difficult to derive accurate data regarding the percentage of school community members indicating mode change due to any single one of the "E's" (infrastructural changes, enforcement measures, safety education measures, and/or motivational events and activities.) This is due to the comprehensive and integrated approach used at the school sites. No single "E" was used in isolation and, on surveys, parents typically indicated a number of factors for influencing their mode shift. Although we were unable to attribute direct cause and effect for any particular "E," data from the Decatur schools showed that motivational events and activities appeared to be the greatest factor in influencing mode shift. At Clairemont Elementary, for example, 39% of parent survey respondents indicated that some type of encouragement activity motivated their family to increase walking and biking to school. However, 38% indicated that a combination of factors contributed to their family's mode shift. The Clairemont Post-project Assessment Report in the Appendix provides a detailed break-down of sample respondent data.

Objective 10: Develop a Safe Routes to School in Georgia Guidebook.

The Georgia Safe Routes to School Guidebook for Schools and Communities was developed and completed.

Additional Objective added in 2007: Conduct 11 Safe Routes to School "Getting Started" Workshops statewide.

Eleven workshops were planned for June, 2007.
Workshops were conducted in the following locations: Atlanta area (2), Athens, Columbus, Rome, Macon (2), Tifton, Savannah.
Two evening workshops were cancelled by GDOT.

B.Tasks

Eighteen tasks were outlined in the project's scope of work. Progress on those tasks was documented in the quarterly progress reports submitted to the Office of Materials and Research. All eighteen tasks were completed.

II. Deliverables

The following documents were developed and submitted during the project period.

a) Literature Review report – Included in the Appendix of this report.

b) Project Master Plan – Included in the Appendix of this report.

c) Survey Forms and Assessment Tools – Included in the Appendix of the Georgia Safe Routes to School Guidebook.

d) School Transportation Improvement Plans - Included in the Appendix of this report.

e) Quarterly reports on the status of project implementation at each school – Submitted to the Office of Materials and Research on a quarterly basis.

f) School Year-End Evaluation Reports – Submitted to the Office of Materials and Research

g) A comprehensive Guidebook for Safe Routes to School in Georgia – Draft of the Georgia Safe Routes to School Guidebook for Schools and Communities was submitted to GDOT; final version to be submitted under separate cover.

h) Final Project Report including a complete analysis of the project with regard to overall project objectives as well as recommendations for future Safe Routes to School project implementation in Georgia – Submitted as this document.

III. Expenditure of Funds

Expenditure of project funds are shown in the budget summary below.

	Initial Budget 11-03	Revised Budget 10-07	Funds Expended
Salaries			
Project Director	$92,025	104,650.00	102,803.00
Executive Director	$11,650	42,550.00	42,512.50
School Site Coordinator	$40,500	26,750.00	26,730.00
Project Assistant		14,000.00	13,636.50
SRTS Staff Training		7,300.00	7,214.00
Subcontracts			
Bicycle & Ped Experts	$21,100	3,300.00	3,210.00
Engineering Consultant	$32,100	14,000.00	14,535.68
Bicycle Safety Training	$5,000	500.00	485.00
Pedestrian Safety Training	$5,000	0.00	0.00
Clerical, Data Entry & Analysis	$2,800	760.00	760.00
Graphic Design (Guidebook)		3,500.00	3,500.00
Travel Expenses			
Automobile	$2,300	500.00	445.78
Field Trip	$1,000	1,350.00	1341.35
Training Travel		1,770.00	1,769.33
Materials and Supplies			
Promotional Materials	$7,000	6,500.00	6,492.25
Procurement of Reports	$150	100.00	94.50
Ed Support Materials	$7,000	2,700.00	2,651.85
Printing	$4,000	1,250.00	1,245.97
Special Events	$9,600	5,250.00	5,236.76
Minor Short Term Infrastr Impr.	$3,200	3,150.00	3,114.50
Graphics and Photos	$2,000	1,100.00	1083.83
Training Materials and Supplies		1,100.00	1,098.47
Training Printing		250.00	236.87
Allocable Shared Costs	$122,300	122,300.00	122,304.00
Project Costs Total	$368,725	364,630.00	362,366.14
Fixed Fee (10%)	$36,873	36,463.00	36,232.47
Total	**$405,598**	**401,093.00**	**398,722.81**

Metro Atlanta Safe Routes to School Demonstration Project

Final Report

Appendix

- Literature Review
- Project Master Plan
- Infrastructure Improvements Summary
- School Transportation Improvement Plans
- Clairemont Post-Project Assessment Report

LITERATURE REVIEW

The field of Safe Routes to School in the United States grew by leaps and bounds between 2003 and 2007 as federal Safe Routes to School legislation was established. During the course of the demonstration project, literally hundreds of resources were reviewed in order to keep up with the "state of the art." The following is a listing of the most frequently used resources during project development and implementation.

General SRTS Program Implementation

The National Center for Safe Routes to School (www.saferoutesinfo.org) - Established under the 2005 SAFETEA –LU legislation, the Center is the national clearinghouse for Safe Routes to School. The on-line guidebook provides information on a wide range of SRTS topics. The Center also provides a question-and-answer service.

Marin County Safe Routes to School Program, www.saferoutestoschools.org

Way to Go! Program, British Columbia, http://www.waytogo.icbc.bc.ca

WalkBoston Safe Routes to School Project
http://www.walkboston.org/work/safe_routes.htm

Safe Routes to School (UK)
http://www.saferoutestoschools.org.uk/

Bronx Safe Routes to School (NY)
http://www.transalt.org/campaigns/reclaiming/saferoutes.html

Active and Safe Routes to School (Canada)
http://www.goforgreen.ca/asrts/home_e.html

2002 Summary of Safe Routes to School Programs in the United States, The
http://www.transact.org/report.asp?id=49

Safe Ways to School (Florida)
http://www.dcp.ufl.edu/centers/trafficsafetyed/html_safe-ways.html

Michigan Safe Routes to School Program, www.saferoutesmichigan.org

Engineering

The National Center for Safe Routes to School, www.saferoutesinfo.org

"The Georgia Guidebook for Pedestrian Planning," Georgia DOT, www.dot.state.ga.us

"The Georgia Pedestrian and Streetscape Guide," Georgia DOT, www.dot.state.ga.us

"Bike Sense, Georgia DOT, www.dot.state.ga.us

"Designing Sidewalks and Trails for Access:Part Two — Best Practices Design Guide, U.S. Department of Transportation, http://www.dot.gov.safety.html

"Development Manual," Transportation Department, Parks & Community Services Department, City of Bellevue, www.bellevuewa.gov

"Americans with Disabilities Act (ADA) Federal Requirements," www.usdoj.gov./crt/ada

"Road Diets," Dan Burden and Peter Lagerwey, www.walkable.org/library.htm

"Manual on Uniform Traffic Control Devices," Federal Highway Administration, USDOT, http://mutcd.fhwa.dot.gov

"A Policy on Geometric Design of Highways and Streets," American Association of State Highway and Transportation Officials (AASHTO,) https://bookstore.transportation.org

"Design and Safety of Pedestrian Facilities," ITE, www.ite.org

"Guide for Planning, Design, and Operation of Pedestrian Facilities," AASHTO https://bookstore.transportation.org

"Guide for the Development of Bicycle Facilities," AASHTO https://bookstore.transportation.org

Enforcement

"The Georgia Guidebook for Pedestrian Planning," Georgia DOT, www.dot.state.ga.us

"The Georgia Pedestrian and Streetscape Guide," Georgia DOT, www.dot.state.ga.us

"Adult School Crossing Guard Guidelines," Florida Department of Transportation, www.dot.state.fl.us/safety

"Guide for Planning Design and Operation of Pedestrian Facilities," AASHTO, https://bookstore.transportation.org

"Guide for the Development of Bicycle Facilities," AASHTO, https://bookstore.transportation.org

"Pedestrians Educating Drivers on Safety," PEDS WWW.PEDS.ORG

"Intrigue and Uncertainty: Toward New Traffic Taming Tools," (ebook,) David Engwicht www.lesstraffic.com

"Evaluation of Targeted Crosswalk Enforcement," Philip Salzburg and John Moffat, Washington Traffic Safety Commisiion, WWW.wtsc.wa.gov - Includes details on setting up a pedestrian decoy activity and evaluation of methods.

American Automobile Association Website, (AAA) www.aaa.com - Information on setting up and implementing a student patrol program.

Education

"Safety Street Georgia," 689 North Avenue, Hapeville, GA 30354, (404) 669-8015 ext. 131, cadore@fulton.k12.ga.us

"Maryland Pedestrian and Bicycle Safety Education Program," http://www.rockvillemd.gov/recreation/bicycling/education-program.htm - Downloadable curriculum.

"Pedestrian Safety Education Classes," Bicycle Transportation Alliance, http://www.bta4bikes.org/at_work/pedsafetyeducation.php - Downloadable curriculum.

"PEDS," KidsWalk Resources, http://www.peds.org/kw_resources.htm

"Safe Kids Worldwide," http://www.safekids.org/tips/tips_ped.htm

"A Message For Parents of Elementary School Children - Myths and Facts About Being a Pedestrian," www.nhtsa.dot.gov/people/outreach/safesobr/15qp/web/sbprevent.html

"Safety City for Kids," National Highway Administration http://www.nhtsa.dot.gov/kids/

"Step to Safety with Asimo," (DVD) http://asimo.honda.com/SafetyVideo.aspx - Appeals to younger and older elementary students, free in limited quantities.

"Otto the Auto on Pedestrian Safety," AAA Foundation, ex.cfm?button=catalog-list&start=1&storeid=1 - For younger students.

Videos - http://www.ksde.org/Default.aspx?tabid=1782 - Has a list of pedestrian safety videos for a variety of ages.

"Pedestrian Safer Journey," Federal Highway Administration, http://safety.fhwa.dot.gov/ped_bike/ped/saferjourney.htm - Interactive CD designed for older elementary school students.

"Hedgehogs," http://www.hedgehogs.gov.uk/main/main.html - Interactive website for children.

"Walk Smart," Oregon Center for Applied Science, http://www.hcimarketplace.com/products/category_list.html?index=12 - An interactive CD designed for grades K-3.

Pedestrian Safety posters, Federal Highway Administration, http://safety.fhwa.dot.gov/ped_bike/walk/order/index.htm - In Spanish.

Bike Ed Program, League of American Bicyclists, http://www.bikeleague.org/educenter/courses.htm,

"The Basics of Bicycling", North Carolina Department of Transportation Bicycle Program, http://www.ncdot.org/transit/bicycle/safety/programs_initiatives/curriculum.html.

"Children and Teens" and "Focus on the Texas Super Cyclist Program", Pedestrian and Bicycling Information Center, http:// www.bicyclinginfo.org/ee/ed_child_main.htm.

Maryland Pedestrian and Bicycle Safety Education Program, http://www.rockvillemd.gov/recreation/bicycling/education-program.htm.

"Good Practices for Bicycle Safety Education Guide", http://www.bicyclinginfo.org/ee/bestguide.cfm.

"The Guide to Bicycle Rodeos," and "An Organizer's Guide to Bicycle Rodeos," John Williams and Dan Burden, published by Adventure Cycling
http://www.bike.cornell.edu/pdf%20files/Bike_Rodeo_404.2.pdf

"Bicycle Rodeos," Bicycling Life, http://www.bicyclinglife.com/SafetySkills/BicycleRodeo.htm

The Bicycle Safety Education Resource Center, http://www.bicyclinginfo.org/ee/fhwa_db.cfm - Maintains a database of resources on a wide range of bicycle education topics.

The National Highway Traffic Safety Administration (NHTSA)
http://www.nhtsa.dot.gov/portal/site/nhtsa/menuitem.810acaee50c651189ca8e410dba046a0/ - Brochures, videos, activities and more for both children and adults.

"Bicycle Safer Journey," The Federal Highway Administration,
http://safety.fhwa.dot.gov/ped_bike/ped/saferjourney.htm - An interactive CD designed for older elementary school students.

"Bike Smart," Oregon Center for Applied Science,
http://www.hcimarketplace.com/products/category_list.html?index=12 -
An interactive CD designed for grades K-3. This site also has a Teacher Resource Guide.

"Let's Learn More About Bike Driving," Channing L.Bete Company, www.channing-bete.com - An information and activities book.

"Bicycling With Children: A Complete How-To Guide", by Trudy Bell, Mountaineers Press, 1999.

Be Safe, Be Seen information. http://www.birmingham.gov.uk/GenerateCon tent?CONTENT_ITEM_ID=16030&CONTENT_ITEM_TYPE=0&MENU_ID=12058

Be Safe, Be Seen at Night information
http://www.thinkroadsafety.gov.uk/arrivealive/walkingnight.htm

Pedestrian Safety Campaign, Federal Highway Administration,
http://safety.fhwa.dot.gov/local_program/pedcampaign/index.htm

Helmet Safety Campaigns, http://www.helmets.org/manual.htm

Helmet Safety Campaign for 5th Graders, http://www.euro.who.int/childhealthenv/stu dies/20060504_6

Pedestrian Safety posters in Spanish, Federal Highway Administration,
http://safety.fhwa.dot.gov/ped_bike/walk/order/index.htm

"Know the Rules School Safety Tips," National Center for Missing and Exploited Children,
http://www.missingkids.com/missingkids/servlet/ResourceServlet?LanguageCountry=en_ US&PageId=892

US Department of Justice,
http://ojjdp.ncjrs.org/publications/PubAbstract.asp?pubi=196166&ti=&si=&sei=&kw=&PreviousPage= PubResults&strSortby=&p=&strPubSearch=

Kidwise Institute, www.kidwiseinstitute.com

Kidpower Teenpower Fullpower International www.kidpower.org

Stop Bullying Now http://stopbullyingnow.hrsa.gov/index.asp?area=main#

McGruff's Blog on stopping bullying, National Crime Prevention Council – www.mcgruff.org

"HeartPower", The American Heart Association, http://www.americanheart.org/presenter.jhtml?identifier=3003345 - Includes free, science-based lesson ideas and activities.

"Move It! And Reduce Your Risk of Diabetes," The National Diabetes Education Program http://ndep.nih.gov/diabetes/pubs/moveit_school_kit.pdf A kit.

"Take 10!,"® http://www.take10.net/ - is a classroom-based physical activity program for kindergarten to fifth grade.

"Action for Healthy Kids," http://www.actionforhealthykids.org/ - A non-profit organization working to address the epidemic of overweight, undernourished and sedentary youth by focusing on changes at school.

The Air Quality Theme Page, http://www.cln.org/themes/air.html - Lists a variety of resources for information and lessons.

Project A.I.R.E web page, The US EPA, http://www.epa.gov/region01/students/teacher/aire.html, Lists air quality-related activities and reading materials.

The Georgia Clean Air Campaign http://www.cleanaircampaign.com/index.php/cac/for_schools/clean_air_lesson_plans/download_clean_air_lesson_plans - Air quality curriculum for 4th through 8th grade.

"You Can Clear the Air" curriculum developed by the Region of Waterloo, Ontario, www.tacatc.ca/english/pdf/conf2004/waterloo.pdf - An excellent curriculum for 3rd graders.

"Autos and Air," http://www.glc.k12.ga.us/BuilderV03/lptools/lpshared/displayunit.asp?unitId=1720 - The lesson plan unit that is part of a curriculum developed for use with 4th and 5thgraders specifically for use with Safe Routes to School programs.

Encouragement

"Walking School Bus Guidebook," The National Center for Safe Routes to School, (www.saferoutesinfo.org).

"Bicycling With Children: A Complete How-To Guide," by Trudy E. Bell with Roxana K. Bell, Mountaineers Press, 1999 http://home.att.net/~trudy.bell/Bicycling_with_Children.html

The International Walk to School Day in the USA website, www.walktoschool-usa.org/ - Provides many supporting resources for holding a Walk to School Day during the international celebration in October.

The official International Walk to School Day website, www.iwalktoschool.org - Provides a global perspective on the worldwide October event.

On-line Guide, National Center for Safe Routes to School, http://www.saferoutesinfo.org/guide/encouragement/park_and_walk.cfm

Arborfield, England Park and Walk – Walking Bus http://www.arborfield.wokingham.sch.uk/walking%20bus.htm

Walk and Bike Across America, http://www.saferoutestoschools.org/walk/

Golden Sneaker Award, http://www.saferoutestoschools.org/Forms/GoldenSneakerGuide2006.pdf

Assessment and Evaluation

National Center for Safe Routes to School On-line Guide, http://www.saferoutesinfo.org/guide

Marin County Safe Routes to School Program, www.saferoutestoschools.org

Active and Safe Routes to School (Canada)
http://www.goforgreen.ca/asrts/home_e.html

Metro Atlanta Safe Routes to School Demonstration Project
Master Work Plan

Time Period	Action Step	Notes
Nov. – Dec. 2003	Recruit Group 1 Schools – Gwinnett, Decatur	
	Conduct Literature Review	
	Schedule Field Trip to Marin County	
Jan. – June 2004	Introduce Project to Mason Elementary - develop Fact Sheet - write newsletter article	Decatur Schools unable to begin project due to system reconfiguration; will begin in Jan. 2005
	Establish Mason School Team - determine composition - initial orientation	
	Hire Mason Site Coordinator - develop job description & application - conduct interviews & hire	
	Conduct field trip to Marin County	
	Develop assessment tools	
	Conduct Mason School Transportation Assessment	
	Establish Mason Infrastructure Task Force	
	Begin Group 2 selection process	
	Conduct Mason Infrastructure Assessment - establish Infrastructure Task Force - conduct Walk-Abouts	
	Begin development of Mason School Transportation Improvement Plan	
	Hold Mason Kick-off event	
	Finalize Group 2 Schools selection	B.B. Harris Elementary (Gwinnett) and Dresden Elementary (DeKalb) selected
July – Dec. 2004	Conduct Literature Review	
	Finalize Mason School Plan, begin Plan implementation	
	Introduce Project to B.B. Harris and Dresden communities	
	Establish School Teams at Harris and Dresden	
	Hire Site Coordinators at Harris and Dresden	
	Conduct International Walk and Roll to School Day activities	October, 2004

	Conduct School Transportation Assessments at Harris and Dresden	
	Establish Infrastructure Task Forces at Harris and Dresden; conduct Walk-Abouts	
	Finalize Decatur school selection	Clairemont and Glennwood selected as combination site
Jan-June 2005	Continue School Plan Implementation at Mason	
	Develop School Plans at Harris and Dresden; begin implementation	
	Introduce Project to Clairemont/Glennwood school communities	
	Establish Decatur School Team	
	Hire Decatur Site Coordinator	
	Conduct Transportation Assessments at Clairemont and Glennwood	
	Establish Decatur Infrastructure Task Force; conduct Walk-About	
	Begin development of Decatur School Plan	
	Conduct spring kick-off activities at Harris, Dresden, and Decatur schools	
July – Dec. 2005	Conduct Literature Review	
	Develop Year 1 Reports for Harris and Dresden	
	Hold Site Coordinator meeting to share info between schools	
	Finalize Decatur School Plan; begin implementation	
	Continue School Plan implementation at Mason, Harris, and Dresden	
	Conduct International Walk and Roll to School Day events at all school sites	Oct. 2005
	Conduct end-of-project assessments at Mason	
	Conduct project closure activities at Mason	
Jan. – June 2006	Continue School Plan implementation at Harris, Dresden, and Decatur schools	
	Develop and submit Interim Project Report	
	Conduct end-of-project assessments at Harris and Dresden	
	Conduct project closure activities at Harris and Dresden	
July – Dec 2006	Continue School Plan implementation at Decatur schools	
	Conduct end-of-project assessments at Decatur	

	schools	
	Conduct project closure activities at Decatur schools	
Jan – Oct. 2007	Write Final Report	
	Develop Guidebook	

Infrastructure Improvements Summary

The following is a list of the types of infrastructure improvements identified by the Infrastructure Task Forces at the project's four school sites.

Install curb ramps
Install in-street pedestrian crossing sign
Stripe high visibility crosswalk
Install raised crosswalk
Install stop bar and stencil
Install "Stop for Pedestrians" signage
Make drainage improvements
Stripe shoulder
Install speed humps
Trim vegetation
Move blocking signage
Install advance crossing signage
Change confusing signage
Install overhead flashing signs
Install leading pedestrian signal
Modify pedhead
Install ADA accessible ped buttons
Install ped-activated signalized crossing
Install crosswalk
Install guard rail
Augment street lighting
Fix pothole
Install pedestrian refuge island
Add curb extension
Realign crosswalk
Offset signal phasing
Install bike ramp on stairway
Modify signal phasing
Paint and landscape underpass
Paint trail to show appropriate crossing
Install sidewalk
Create buffer between sidewalk and curb
Tighten turning radius at corner
Repair sidewalk
Widen sidewalk
Build multi-use trail
Establish connections with existing trails
Install bike parking racks

Safe Routes to School Transportation Improvement Plan – Mason Elementary – Update May '05

Overall Goals:

1) Increase the number of registered walkers and bike riders in school population from 4% (baseline) to 10% over 2 years
2) Train all members of the school community in bicycle and pedestrian safety at appropriate levels
3) Identify, design, and implement infrastructure improvements, and promote safety and utilization by school community so as to decrease levels of car traffic by 25% during arrival and dismissal times

Safety Education

Activities:	Timeline:
1) Train 3, 4, and 5th graders in bicycle and pedestrian safety	school year '04-'05 - first 9 wks, COMPLETED
2) Introduce grades K, 1, and 2 to concepts of pedestrian and personal safety	school year '04-'05 – 1st semester COMPLETED
3) Conduct a Halloween safety contest focusing on pedestrian and personal safety	school year '04-'05 - October COMPLETED through Be Safe, Be Seen Campaign
4) Survey parents regarding interest in Effective Cycling classes – 3,4,5 grade on-street follow-up? family class? adult class?	school year '04 –'05 - January Class offered/ no interest
5) Provide pedestrian and bicycle safety tips through a variety of school media	ongoing COMPLETED via skits, newsletter articles, event themes

6) Provide follow-up bicycle training to 4th and 5th graders; train 3rd graders in "Basics of Safe Bike Driving"	school year '05-'06 – fall semester UNABLE TO COMPLETE

Encouragement

Activities:	Timeline:
1) Staff a Safe Routes to School table at school registration; provide information on project, walking school buses and bike trains; encourage parents to register children as walkers/ (bike riders?)	August 5, 2004 August 4, 2005 COMPLETED
2) Work with neighborhoods to develop walking school buses and bike trains: - distribute press release to neighborhoods - provide training to interested neighbors on setting up and conducting a walking school bus or bike train	school year '04-'05 – August/September NO PERCEIVED INTEREST
3) Conduct monthly Walk and Roll to School Days	school year '04-'05 – Fridays school year Fall '05 – August 26, Oct. 6, November 11 - COMPLETED

4) Offer Frequent Walker/Rider prizes for those who walk and bike to school on a regular basis (punch card system)	school year '04-'05 – 1st semester Fall '05 COMPLETED
5) Provide encouragement messages through a variety of school media – morning news shows, PTA email, Mustang Messenger	ongoing COMPLETED
6) Coordinate "School-Pool" program; connect neighbors to form walking, biking or carpool groups	Fall '05 NO PERCEIVED INTEREST

Mason School Transportation Improvement Plan: Engineering and Enforcement

Location	Recommended Actions	Priority/	Progress
1) Bunten Rd @ Mason Driveway	1) east side - moderately tighten turning radius with tapered curb ramp, painted extension and/or raised markers; "stop line" marked for kids; shorten crosswalk	Medium/ Medium-term	Team chose not to pursue when county installed ADA ramp on east side
	2) west side – curb cut	High/ short-term	COMPLETED – Both sides
	3) in-street, moveable "Stop for Pedestrian" signs at xwalk	High/ short-term	COMPLETED – Purchased w/ project funds; not being used by crossing guard
	4) supplemental signage (see engineer's drawings, attached)	Medium/ medium-term	PRESENTED TO COUNTY FOR REVIEW
	5) change policy to allow crossing guard to stand on west side of street in a.m.	high/ short-term	NOT COMPLETED
	6) develop a statewide manual on crossing guard policies	Low/ long-term	Will make recommendation in guidebook
2) Bunten Road	1) get Bunten Road radar-certified to control speeding	High/ short-term	Road evaluated by PD, did not qualify
	2) plant along curb to provide buffer, discourage walking too close to road	Low/ short-term	NOT COMPLETED – Team chose not to pursue
3) Heath Lane	1) work with City of Duluth to put priority on Heath Lane sidewalk	High/ medium-term	Request made to City

	project		
	2) tighten turning radius with temporary markings – study re feasibility for permanent curb change	High/ medium-term	Request made to County
4) Bunten @ new subdivision (near Barkley Square)	request City/ County enforce development requirements re construction of sidewalks along right of way currently or previously under development	High/ short-term	COMPLETED
5) Bunten Rd and Old Peachtree	1) daily police traffic control at xwalk across Old Peachtree to east side of Bunten during am rush hour	High/short-term	NOT COMPLETED
	2) request addition of sidewalk on north side of Old P'tree from Bunten to Romulus as part of Old P'tree widening project	High/short-term	Request made to County
	3) work with County to improve intersection/pedestrian crossing of Old Peachtree @ Bunten or along Old Peachtree	High/ short-term	Tabled pending outcome of other construction projects
	4) repair and widen narrow sidewalk at Barkley Square	High/ short-term	Repaired, but not widened
6) Old Peachtree Road/ Bunten Road	1) create multi-use trail along south side Old Peachtree to Bunten, and along east side of Bunten to school	High/ long-term	Request made to County

7) Bunten Road Park behind Barkley Square	1) Discuss with property owner (Bob Peterson) re school community access during special "Walk and Roll to	Medium/ Spring '05	Not Addressed

	School" Days		
	2) Build access gate and trail with bridge across ravine	dependent upon use of temporary access (#1 above)	Not Addressed
8) Bunten Road Park near school boundary	1) Enhance existing park trails to connect to Barkley Square access trail	Medium/ medium	Not Addressed
	2) Connect existing park trails to multi-use trail along Bunten Rd to school; consider using park trail parallel to Bunten instead of building additional trail along Bunten	High/ long-term	Request made to PATH Foundation but not accepted
9) Mason@ Sugarloaf Country Club	Provide secure access gate and trail to connect to school property provided approval can be obtained from subdivision	Medium/ long-term	Discussions were held with neighbors, but there was no interest in an organized effort/ sidewalk along Old Peachtree connected northern entrance of subdivision with potential walking/biking routes

10) Mason Elementary School Site	Install bicycle parking racks	Short-term/ high priority	COMPLETED

Safe Routes to School Transportation Improvement Plan –B.B. Harris Elementary

Overall Goals:

1) To improve the safety of children who walk and bike to school;
2) To promote healthy lifestyles through physical activity;
3) To involve the broad school community in the Safe Routes to School Project at Harris.

Safety Education

Activities:	Timeline:
1) Hold Bike/Walk Rally "Kick-off"	January, 2005 COMPLETED in Feb.
2)Train 3, 4, and 5th graders in bicycle and pedestrian education	March, 2005 COMPLETED
3) Train K, 1st, and 2nd graders in pedestrian education	March 2005 COMPLETED
4) Conduct Heart Month Activities - Week of educational activities focusing on relationship of physical activity and heart health	February, 2005 COMPLETED
5) Conduct informal safety education activities: - Walk & Roll Days with educational themes - Bulletin boards - Friday Flash messages to parents	School Year 2005-2006 ONGOING
6) Conduct one-day bicycle and pedestrian safety reviews in PE classes	February, 2006 COMPLETED

Encouragement

Activities:	Timeline:
1) Conduct a bicycle and pedestrian question and answer contest; winner of weekly drawing wins a bike ride or walk with principal	March, 2005 Team chose not to complete
2) Hold a Walk and Roll to School Day	May 3, 2005 COMPLETED
3) Hold a Family Bike Night	May 19 Team chose not to complete
4) Provide encouragement messages through a variety of school media	COMPLETED
5) Conduct monthly thematic Walk and Roll to School Days	October, 2005 – May, 2006 COMPLETED
6) Conduct a Frequent Walker/Bike-Rider Program	November, 2005 – May, 2006 COMPLETED
7) Send letter to families living within one mile of school seeking parent participation (Pied Piper)	February, 2006 COMPLETED

Engineering and Enforcement

Location	Problem	Opportunity	Recommended Solutions	Comments	Priority	Progress
1) Claiborne Dr. - school exit driveway	a) no marked x-walk		a1) add marked x-walk across Claiborne		short-term	**COMPLETED 3-06**
	b) no sidewalks on south side; no place for students to stand to await xing		b1) install concrete pad on south end of x-walk b2) install sidewalk		short-term long-term	discuss with neighbor
	c) stop sign on driveway not highly visible		c2) trim tree			**COMPLETED 7-05**
			c3) place stop bar in driveway; add stop sign on other side of driveway		short-term	**COMPLETED 7-05**
	d) bus exit - turns conflict with ped/bike movements/ little room to stand on corner		d1) create larger, paved, area at corner (school-side) for pedestrians and add overhead shelter; trim bushes		short-term	check property lines
	e) no marked x-walk across school driveway		e1) mark x-walk across school driveway		short-term	**COMPLETED 7-05**
2) Claiborne Dr. - school vehicular entrance driveway	a) walkers/ coming from east side must cross several lanes of traffic on driveway		a1) mark x-walk across driveway		short-term	**COMPLETED 7-05**

			a3) tighten turning radius for turns into and out of driveway		long-term	
3) Duluth Hwy between Kent Ct and Meadowlark	a) no sidewalks; high speed, high volume	27' cleared right of way	a1) pave multi-path- locate at maximum distance from Duluth Hwy.		short-term	requested in SPLOST but not included; request made again to County
4) Behind School - northwest corner		a)existing trail along detention pond connects to backyards off Bugle Dr and Dover Dr. b) sewer easement/creek may provide opp. For trail extension	a1) improve drainage at playground corner b1) extend trail from school to Dover Dr. (at 3028 Dover Dr.) along creek		short-term long-term	**COMPLETED 7-05**
5) Dover Dr.	a) no sidewalk b) speeding cars c) no crosswalks		a1) stripe "walkable" shoulder a2) install sidewalk b1) install speed humps c1) install x-walks along Dover corridor at Claiborne, Bristol, Montheath in both directions	provides area for walking/biking; perception of narrow width may slow car traffic down	short-term long-term short-term short-term	requested in SPLOST; not included/ request made to GwinDOT; not accepted Request made to county requested in SPLOST; not included; request made to GwinDOT

6) Bristol Lane – Davenport connection		a)connect Bristol Lane to Star Pine Ct. b) connect Bristol Lane to Davenport along sewer easement	a1) option 1: create trail through undeveloped area at Bristol & Nelson b1)option 2: pave multi-use trail along length of easement	Star Pine Ct. has sidewalks; low traffic enough for biking would involve crossing of above-ground sewer pipe; could connect to trail around lake	long-term long-term	Discussed with Parks Department; working on contacting residents to determine community buy-in
7) Claiborne Pond		a)existing partial unpaved trail around lake connects Cardinal Lake subdiv with Claiborne b) existing sewer easement around lake (separated by fence), connects to Cardinal Lake Circle	a1)establish trail around lake to connect to sewer easement and Cardinal Lake Circle OR b1) establish trail along easement to connect to Cardinal Lake Circle	may be environmental (wetlands) concerns; safety concerns re children near water	long-term long-term	Discussed with County Parks Department
8) Dover Dr. @ Bromley Rowe	a) no crosswalk or stop bar markings; drivers turn quickly around corner without looking		a1) add stop bar/ "stop" stencil on pavement a2) install crosswalks		short-term short-term	**Stop Bar COMPLETED** In discussion with City of Duluth

9) Bromley Rowe	a) no sidewalks	a1) stripe "walkable" shoulders		short-term	Request made to City of Duluth
		a2) initiate joint city-resident sidewalk project		long-term	Discussed sidewalks with City Council Rep
	b) parked cars, school buses, peds conflict for space	b1) enforce code re parking on grass		short-term	**COMPLETED**
10) Davenport@ Bromley Rowe	a) unmarked crossing, sweeping turns	a1) paint stop bar/stencil on Bromley		short-term	**Stop Bar COMPLETED**
		b1) add "School Bus Stop" sign on Davenport approaching Bromley from both directions		short-term	
11) Davenport	a) no sidewalks				Discussed with Gwin DOT inclusion of sidewalks from Bromley to Creek Dr in next SPLOST
	b) no marked crossings across Davenport	b) mark and sign xings across Davenport if and when Davenport traffic control is effective		long-term	
12) School Site	a) no bike racks	a) install wave racks in small parking area off of driveway	project funds/ donations can provide	short-term	**COMPLETED 5-05**

Safe Routes to School Transportation Improvement Plan – Dresden Elementary

Overall Goals:

1) To improve the health and safety of children who walk to and from school.

Education

Activities:	Timeline:
1) Present Pedestrian Safety information to parents through Parent Coffee and Conversation meeting	Friday, February 25, 2005 COMPLETED
2) Conduct Kick-off Assembly with Pedestrian Education presentation	Friday, March 18, 2005 COMPLETED
3) Conduct Pedestrian Education trainings through PE classes – show pedestrian ed videos	last two weeks of March, 2005 COMPLETED
4) Hold Walk to School Day; include pedestrian ed information during walk	Tuesday, March 22, 2005 COMPLETED
5) Hold monthlyWalk to School Days with educational themes	November, 2005 – May, 2006 COMPLETED
6) Hold monthy Parent's Club Poster Parties to make safety education posters	October, 2005 – May, 2006 COMPLETED
7) Develop Spanish-language pedestrian safety video	Spring, 2006 COMPLETED
8) Hold Family Safety Party	March 16, 2006 - COMPLETED

Encouragement

Activities:	Timeline:
1) Hold Walk to School Day	Tuesday, March 22, 2005 COMPLETED
2) Establish Walking School Bus program - perform kick-off skit at PTA meeting	April – May, 2005 March 31, 2005 Completed as part of Walk to School Days; Not completed on ongoing independent basis
3) Hold monthly Walk to School Days	September, 2005 – May, 2006 COMPLETED
4) Add Walking School Bus routes on Walk to School Days	fall '05/ spring '06 COMPLETED

Dresden School Transportation Improvement Plan - Engineering and Enforcement

Location	Problem	Opportunity	Recommended Solution	Comments	Priority	Progress
1) Shallowford Rd @ Dresden Dr.	a) speeding		a2) overhead school zone flasher warning @ Shallowford & Woodside ?			
			a3) continued speed limit enforcement		short-term	Requests made to PD
	b) motorists turn quickly into crosswalk from Dresden onto Shallowford (southbound)		b1) tighten turning radius at corner, raise curb, highlight visibility of curb		long-term	
			b2) stronger x-walk markings		short-term	**COMPLETED**
			b3) position xing guards with more visibility to turning cars; enhance xing guard training		short-term	discuss with crossing guards
			b4) modify signal setting to provide a "leading ped signal"		short-term	Request made to County
	c) no ped xing button to cross Dresden on both sides of Shallowford		c1) add ped buttons to cross Dresden on both sides of Shallowford		short-term	Request made to County
			c2) use ADA accessible large ped buttons		short-term	
	d) ped heads and ped signs positioned 15 ft in the air		d1) lower to ped level		short-term	
2) Shallowford Rd.	a) narrow sidewalks		a1)widen sidewalks on both sides of Shallowford		long-term	

	b) little buffer between peds and traffic	b2) provide shoulder along curb lane to serve as buffer OR stripe at curb with reflectors OR consider a Road Diet	long-term	evaluate further
	c) personal safety issues - woods harbor vagrants	c1) discuss issue with property owners --- determine owner of overgrown vegetation/ form a work party to trim	short-term	write letter to Wynscape management
		c2) increase police surveillance	short-term	
	d) pedestrian mid-block crossings	d2) pedestrian education re safe crossings - child and adult	short-term	**COMPLETED through Walk to School Day theme, March, 2006/ included in ped safety video, pamphlet**
	e) no ADA ramps at Shallowford Lodge driveway	e1) install ADA ramps	short-term	**COMPLETED**
3) Johnson Rd	a)@ St. Pius HS: wide driveways, sweeping turns, concern about student drivers	a1) meet with St. Pius staff to bring awareness to students and faculty of ped concerns; consider re-design of driveway to be ped-friendly	short-term	
	b) no x-walk @ Plaster on west side of Johnson	b1)mark crosswalk		**COMPLETED**
4) Plaster Rd.	a)confusing signage	a1)change signage	completed	**COMPLETED**
		a2) evaluate location of flashing lights -- move closer to school	short-term	

	b) no xing to Park or MARTA stops on north side of street		b1)create crossing to park if trail to park installed	location of xing determined by trail connection; signalized xing or need for crossing guard to be determined	long-term	
	c) speeds make walking feel unsafe		c1) paint shoulder stripes to narrow vehicle lane widths		short-term	Request made to county
5) Dresden Ct.	a) crossing not well-marked @ Plaster/ no x-walk @ Dresden Dr.		a1)monitor need for marked crossings		short-term	
6) Plaster Rd. entrance to Dresden Park	a) unoffical trail through woods and apt parking lot		a1)connect Park spur trails to street & apt. parking lot		long-term	recommended to Parks Dept.
	b) narrow wood plank serves as creek crossing		b1) install bridge over creek if trail connection provided		long-term	recommended to Parks Dept.
		c) potential trail along creek	c1) create connecting trail to Park trail through woods or powerline right of way	PATH Foundation is interested in exploring further per 2/23/05 meeting	long-term	Discussed with PATH, DECA members and Huntington Creek Apartment management
7) Dresden Park	a) personal safety concerns -- isolated areas, lack of lighting		a1)Park redevelopment should create activity in park - no action recommended			

			a2) education & encouragement activities needed so that children do not travel alone or unaccompanied by adult			
	b) existing paved trail in park nor Park Master Plan do not lead toward school side of Dresden Dr.		b1) no action recommended at this time			
8) Dresden Dr. - Park to Frontier Tr.	a) overgrown vegetation onto sidewalks		a1) have property owners (Park) trim back vegetation		completed/ ongoing	**COMPLETED**
	b) woods and bamboo provide hiding places for predators		b2) build handrail barrier along sidewalk		long-term	**COMPLETED** (guardrail)
	c) poor street lighting		c1) augment street lighting		short-term	**COMPLETED**
	d) no safety barrier along creek overlook -- 10 ft drop		d1) install guard rail			**COMPLETED**
	e) wide enough for bike lane, but poor sight distance, speeds, and volume are of concern for child cyclists		e1) stripe shoulder -- provides traffic calming, ped buffer, area for adult cyclists	lanes are currently 15 ft. wide	short-term	County developing plans

9) Dresden Dr. Frontier Trail to Shallowford	a)crosswalk at Dresden Way: pothole, sight distance, speed, volume make crossing difficult	a2) improve x-walk markings per county priority list	long-term	**COMPLETED**
		a3) fix pothole	short-term	
	b) sidewalks in disrepair	b1) fix sidewalks	long-term	**COMPLETED**
	c) sidewalk next to school driveway pools in rain, fills with debris	c1) conduct sidewalk maintenance	short-term	**COMPLETED**
10) School Site	a) x-walk conflicts with teacher parking lot entrance and truck loading and unloading area	a1) re-adjust truck delivery times		**COMPLETED**
		a2) re-stripe x-walk	short-term	**COMPLETED**
	b) x-walk has no ADA ramp	b1) add ADA ramp	short-term	**COMPLETED**
11) Whispering Hills Dr.	a)speeding	a1) evaluate volume and speed and pedestrian demand	short-term	DeKalb Transportation will study
		a2) if warranted, work with neighborhood to petition speed humps	long-term	
		a3) if warranted,shoulder stripe for traffic calming benefit	long-term	
		a4) if warranted, sign as school route	long-term	

			a5) if warranted, increase enforcement	long-term	
	b) no sidewalk		b1) install sidewalk	long-term	

Safe Routes to School Transportation Improvement Plan – Decatur

Overall Goals:

1) To reduce traffic congestion by 15% per school as measured by the number of car drop-offs/ pickups
2) Increase number of walkers and bike-riders by 50% at each school
3) Build community awareness of and participation in the Safe Routes to School program

Education

Activities:	Timeline:
1) Conduct pedestrian education with simulated practice in PE classes; tie in to walking field trips when possible	Fall '05 – NOT COMPLETED
2) Conduct "Safe Bike Driving" classes through PE in 3rd and 5th grades	Fall '05 COMPLETED – Spring '06 modified to 4th and 5th grades
3) Pair 3rd graders with younger students in "Bike Buddy" activities	Fall/Spring '05 NOT COMPLETED
4) Provide pedestrian and bicycle education tips through newsletter articles	ongoing – IN PROGRESS
5) Provide incentives for adults to participate in Effective Cycling classes	Fall/ Spring COMPLETED

Education (cont.)

6) Integrate concepts into the curriculum through: - collaboration with ELOB 3rd Grade theme - participation in "Foot-Powered Vehicle" Stipend Program	Fall '05 COMPLETED
7) Hold Spring Bicycle Safety Fair	Spring '06 ???

Encouragement

Activities:	Timeline:
1) Hold International Walk to School Day events	Oct. 5 (Glennwood) Oct. 7 (Clairemont) COMPLETED
2) Implement "Walk and Wheel Wednesdays" on first Wed. of the month --encourage informal walking school buses and bike trains -- involve Decatur businesses in sponsoring/supporting	beginning Nov. '05 COMPLETED
3) Implement Frequent Walker/ Bike-Rider Program	begin Oct. '05 COMPLETED
4) Hold Spring Walk and Roll to School Day -- involve Decatur Business Association -- provide new T-shirt?	Spring '06 COMPLETED

Decatur School Transportation Improvement Plan - Engineering and Enforcement

Location	Problem	Recommended Action	Priority	Progress
1) E. Ponce de Leon - crosswalk @ Sycamore Pl.	a) left-turning car traffic into school driveway causes back-up, blocked x-walk; eastbound drivers squeeze past left-turning cars, come close to curb	a1) move driveway to align with Sycamore Pl.; add sidewalk along driveway	high/long-term	Included in City Comp.Transp. Plan
		a2) stripe high visibility crosswalk	high/short-term	Request made to City
	b)drivers turning east from Sycamore Pl. cut curb closely	b1) move ramp east; raise and define curb at corner	high/short-term	COMPLETED
	c) signal at x-walk slow to respond; students need assistance crossing street	c1)add leading pedestrian signal; coordinate with signal timing	high/short-term	study to be done by City
		c3) ensure crossing guards stay until 5 minutes after start of school	high/short-term	COMPLETED
2) Glennwood School Site	a) students must cross wide driveway	a1) tighten radius of curve of driveway	medium/long-term	study feasibility
	b) congestion in drop-off driveway and at driveway exit	b2) add "buses and bikes only" sign to "do not enter signage at exit	high/short-term	

3) Glendale Ave.	a) discontinuous sidewalks	b1) provide 5 ft sidewalks	high/ long-term -- develop neighborhood support in short-term	
	b) trail connection to Glen Lake Park has 3 entrances, only 1 curb cut	c1) add additional curb ramps	medium/ short-term	City adding signage to indicate existing curb ramp
4a) Trail through Glenlake Park		a1) extend trail/sidewalk to Church St. on pool side of driveway	high/long-term	Included in City grant request to DNR
4b) Trail through Cemetery	a)steep, unpaved trail at entry gate - non-ADA compliant	a1) pave entry trail and make bike and ped accessible	medium/ long-term	Included in City grant request to DNR
5) Church St. @ Lucerne St.	a) high volumes, speeds	a) add high-visibility x-walk across Lucerne	medium/ short-term	Request made to City
	b) insufficient time for some to cross	b1) add leading ped signal	high/short-term	Included in City's Traffic Signal Study

		b2) add 2nd crossing guard if ped/bike traffic increases (one for each side)		
		b3) improve bicycle detection	medium/ short-term	Included in City's Traffic Signal Study
	c) east side of crosswalk has curb-face drainage opening, no curb ramp	c1) add curb ramp in existing location; close part of drainage opening, if possible	high/short-term	Included in City's Comp. Transp. Plan
6) Geneva St. @ Michigan	a) no marked x-walk; T-intersection; blind hill from Church St.	a1) stripe x-walks on north side of Michigan and across Michigan	high/ short-term	COMPLETED – curb ramps added
7) Michigan Ave. @ Erie Ave.	a) broad, open intersection, sweeping turns	observe and document walking and biking patterns	high/ short-term	Observation to be conducted in the spring
	b) stop signs difficult to see; drivers fail to stop	study the following options: - splitter islands or refuge islands -mid-block crossings - signage indicating 3-way stop - add "stop ahead" advance warning - add "stop" pavement legend		

8) Clairemont Elementary School Site	a) no curb ramp at driveway	a1) install ramp	high/ short-term	COMPLETED
		a2) paint x-walk across driveway	high/ short-term	City to complete in spring
	b) bike rack is "old style" - may be insufficient capacity	c1) upgrade bike racks; add capacity	medium/short-term	COMPLETED
9) Clairemont Ave. @ Erie Ave.	a) high volume, speeds			
	b) no signal at intersection; 2 crossing guards control traffic	b2) install advance and x-walk signing	medium/ short-term	COMPLETED
		b3) install advance stop bars on both sides of Erie	high/short-term	request made to GDOT
	c) kids ride bikes in crosswalk; may conflict with peds on sidewalk	education		
10) Clairemont Ave. @ Wilton Dr.	a) signalized; some students cross Clairemont Ave. here (instead of at Erie w/ xing guards)			
	b) when traveling north, crossing Wilton Dr., signal is to pedestrian's back	b1) adjust signal b2) install a ped head	high/short term	

	c) turning cars from Michigan may conflict with peds crossing Clairemont	c1)analyze signal phasing	high/short term	
	d) Crosswalk across Wilton very close to traffic on Clairemont	d1) move x-walk to line up with sidewalk	medium/ short term	COMPLETED
	e) narrow sidewalks; potential conflict between peds and bikes			
11) W. Ponce de Leon corridor	a) high traffic volume	Study bicycle accommodation on Ponce de Leon to reach Glenwood Academy from the west	medium/ medium-term	
	b) some driveway crossings			
	c) no on-street bike facilities			

12) W. Howard/ W. College @ Atlanta Ave.	a) PATH trail interrupted by gas station property; potential conflicts in gas station driveways & car traffic at gas pumps	a1) Include in Community Transportation Plan as a problem to be overcome a2) Obtain a copy of the property survey to evaluate for possible alternatives a3) Evaluate existing Howard Street width and drainage infrastructure for potential sidewalk widening a4) remove marked parking space on sidewalk when other improvements are made	high/long term	Included in City's Comp. Transp. Plan
	b) bicyclist protocol unclear when westbound turning south on Atlanta Ave.	b1) Educate bicycle users to stay on the east side of Atlanta Ave and walk their bikes on the sidewalk	high/short term	
13) Tunnel under RR at Agnes Scott College	a) tunnel crosses under rr, but not street	a1)Educate users to cross safely		
	b) steps in tunnel make bicycle travel difficult	b1) add ramp for bikes	high/short term	Request made to City

	c) crosswalk, but no signal to cross W. College Ave.	c1) time signals to allow gaps c2) install advance and crosswalk signage c3) after re-timing signals, consider removing second eastbound travel lane and add ped refuge island (resume second east-bound lane east of the crossing) - leave room for bikes to share the roadspace	high/short-term	Request made to GDOT
14) Commerce Dr. and E. College Ave.	a) high volume , no crossing guards	a1) add crossing guards if and when pedestrian volume warrants.		Included in Police Dept. budget request
		a2) add leading pedestrian interval after pedestrian volume has increased sufficiantly	high/short-term	Included in City's Traffic Signal Study
	b) crosswalk striping faded	b1)add high visibility crosswalks	high/short-term	COMPLETED
	c) curb does not provide clear edge; no ADA ramps;sidewalk broken	c1) repair curb, add ramps	high/medi um term	COMPLETED
	d) underpass not appealing	d1) paint and landscape underpass	medium/ medium term	

14a) Commerce Dr. @ Sycamore Pl.	a) Pedestrial button not responsive enough and is in a confusing location next to slip lane b) High volume of traffic on Commerce c) Slip lane requires longer crossing d) Crosswalk not highly visible e) No crossing guards for the 4-lane crossing f) Slip lane is not signalized	a1) repair signal operation, add arrows for crossing direction,and evaluate placing it in a better location such as the traffic island to reduce confusion b1) install leading pedestrian signal c1) evaluate removal of slip lane with GDOT after signal improved	high/short-term	Included in City's Comp. Transp. Plan
15) Trinity Pl @ Dairy Queen	a) PATH meets Trinity abruptly; sharp turn for bicyclist	a1) add more trail signage a2) provide a map indicating proper route for crossing	high/short-term	
	b) appropriate crossing of Trinity hard to find; extreme circuitous route required to continue on trail	b1) provide a more direct crossing over Trinity in the Community Transportation Plan now in progress - include consideration of a direct crossing from the trail terminus to the Depot sidewalk, combined with signal cycle modifications to prohibit a right on red for west-bound College Ave traffic during the pedestrian cycle	high/long term	Included in City's Comp. Transp. Plan

	c) forces bicyclist to ride on sidewalk past Dairy Queen	c1) educate bicyclists to dismount	high/short-term	COMPLETED during Walk and Roll Days
	d) no signal for crossing Trinity	d1) provide solutions in the Community Transportation Plan, including consideration of widening of sidewalk on north side of Trinity Avenue to allow shorter ped crossing near dairy Queen, and removal of right turn lane on westbound Howard where it intersects with Trinity	high/ long term	Included in City's Comp. Transp. Plan;
		d2) move rr pavement legend closer to rr crossing (less driver distraction at x-walk)		
		d3) Install advance stop bar for eastbound traffic on Trinity (If RR crossing legend can be removed from that location)	high/short-term	
		d4) add in-street ped xing sign	high/short-term	request made to City as interim solution
	f) left-turning cars onto Howard create potential conflict with cyclists and peds crossing Howard from or to trail	f1) see b1		

Clairemont Post-Project Assessment Report
December, 2006

Show of Hands Mode Survey

Travel Mode	March, 2005 Percent of Total	November, 2006 Percent of Total	Percent Change
Walk	12	18	+ 50%
Bike	1*	6	+500%
Bus	32	29	- 10%
Carpool	5	5	0%
Car	50	41	- 22%
Other	1	1	0%
Total Non-Motorized	13	24	+ 85%

* Observations indicate that the average number of bicycle-riders as of March 2005 was approximately 1%. This number was not reflected in the show-of-hands survey, but is used here to calculate accurate mode change.

Drop-off/Pick-up Traffic Counts

Time	October, 2005	November, 2006	Percent Change
am	73	67	-8%
pm	32	25	-22%

Parent Survey

Total post-project surveys returned: 154

Rate of survey return: 56%

* Note: Percentages may not add up to 100%, due to non-responses on some questions.

Mode to School

Walk –19% Bicycle – 6% Other – 1%

Walk/Bike- 3% Combination Motorized/Non-motorized – 12%

Car –27% Bus – 24% Carpool – 4%

Mode from School

Walk – 16% Bicycle –5% Other – 4%

Walk/Bike – 3% Combination Motorized/Non-motorized – 12%

Car – 16% Bus – 39% Carpool – 0%

How Often Walk or Bike

Every Day	19%

Several Times/Wk	20%
Once a Week	15%
Very Occasionally	24%
Never	18%

Participation in Walk and Roll/ Walk and Wheel

Many	50%
Few	17%
One	13%
No	15%

Participation in Safety Classes

Yes – 53%

No- 44%

Changes in Safety Habits

31 responses (21%)

Sample responses:

*He is much more conscious of the rules and is eager to enforce them.

* He now knows the proper way to walk. He has been teaching everyone in the family about safety.

* She always wears a helmet and it is properly adjusted. She feels confident on the road, is careful of cars, and uses hand signals.

* She stops at intersections and looks left, right, left again

* If he doesn't see my head turn 180 degrees on each side before crossing the street, he gets onto me saying, "You forgot to look both ways."

Physical Changes along route that have enhanced safety

30 responses (19%)

Sample responses:

* Two new crosswalks at Geneva and Michigan

* When we got sidewalks completed last year it helped immensely

* Sidewalk repaired

* No, our walk in my opinion is unsafe. We have to cross Scott Blvd.

Child Preference

Walk –15% Bicycle – 24% Other – 1%

Walk/Bike – 8% Combination Motorized/Non-motorized – 6%

Car – 10% Bus – 12% Carpool – 1%

Motivation for Increased Walking/Biking

Frequent Walker/ Bike-Rider Program	4%
Safety Classes	5%

Physical Improvements	3%
Walking/Biking with Others	12%
Walk & Roll/ Walk & Wheel	23%
Combination*	38%
Other **	14%

*Most frequently cited were combination of Walk & Roll, Frequent Program, and Walking/Biking with others
** Responses included “we have always walked” and “establishing a culture of walking,” and “child is now old enough.”

Family Benefits
No - 29%
Yes – 47%

Sample Yes responses:
* By creating a community norm to walk/ride, my child is more likely to want to walk/ride. We explain that she is keeping us healthy and contributing to us living longer by our walking to school.
* We have taken advantage of his eagerness to walk/bike and exercised more as a family on the weekends.
* It has increased awareness about the benefits of walking or biking to school.
* Increased awareness of need to walk more regularly and improved comfort level with walking and biking skills.
* How can I count the ways? It’s got us up earlier, everyone walking or cycling or scootering. Makes Clairemont fun.
* It has been a great encouragement to get our whole family more active in day to day activities.
* More people are walking and biking, creating less traffic to and from school. The routes are safer for everyone.
* We like the focus it puts on walking, physical exercise, and other modes of transportation.

Comments on program at Clairemont:
* I think it’s wonderful. I applaud this school for trying to implement these programs.
* I think this is a great project and I hope there continues to be a focus on walking and biking to school at Clairemont.
* I wish it would be something that could be part of the curriculum and school day all year.
* I think this is a good program because it teaches us when we are young to walk and bike instead of jumping into a car anytime we go somewhere.
* Parents and teachers are very supportive of this program.
* We were lucky to be part of the program. I think the teachers that supported the project by helping with Walk and Roll Days and walking with students that might not have had the opportunity otherwise should be applauded. This project was one that pulled the entire community together in a fun, learning process.
* We’ve been at Clairemont for the last 10 years and have seen a big increase in biking to school. The cool thing is to see so many adults on bikes.
* Wonderful program. Hope that city or school system can sustain it indefinitely.
* Please walk with the Westchester neighborhood and observe morning traffic patterns to help improve our walk to Clairemont.
* Please continue the Walk and Roll celebrations to heighten awareness and remind people to take a few extra minutes and make the effort to teach your children about the importance of exercise.
* Please consider not rewarding children with prizes for walking. For those children who have no choice in walking (due to parent commitment) they are penalized. Make walking a “wellness” effort instead of a “reward.”

Input on future Decatur efforts:
*Bike lanes are needed throughout Decatur.
*Teach defensive driving to bikers/walkers the same way driver’s ed does.
* Enforcement of speed and crosswalks.
* Great idea. Keep it up. Remember that some kids don’t ride a bike until the age of 7 or 8, so promote scootering too.
*Great program. Could it be taught in PE for 1-2 weeks of instruction?

* There are so many bike riders that ride in the middle of the road, parents and children. If they're going to ride a bike on the road, they should learn the appropriate procedures.
*I wish there was a way to promote this without leaving kids out that the walk to school does not work for the family.
* The stop lights on the way to school should be more responsive to the "Press the Button" walk sign.
*I would like to see it extended and include Renfroe and the high school.
* Keep up the reminders. Without them, I fear people will return to their old habits.