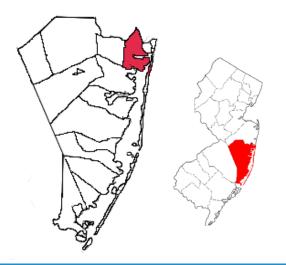




INTRODUCTION

New Jersey Safe Routes to School (NJ SRTS) Resource Center, created and supported by the New Jersey Department of Transportation (NJDOT) with funding from the Federal Highway Administration, enables and encourages safer and more accessible walking and bicycling environments for children in New Jersey through education, training, and research. Safe Routes to School projects result in physical improvements to the environment as well as encouragement programs that promote walking and bicycling to and from school.

NJDOT contracts with the Alan M. Voorhees Transportation Center at Rutgers, The State University of New Jersey (VTC), through support of the NJ SRTS Resource Center and Transportation Management Association (TMA) Regional



Brick Township, Ocean County, NJ

Coordinators, to contact federal-aid Safe Routes to School funding recipients to assess grantees' experiences in applying for and implementing SRTS-funded programming in their community. VTC used this information to assess the program's effectiveness and to identify strategies for improving access to the program in the future. In 2015, the NJ SRTS Resource Center conducted phone interviews with recipients awarded SRTS grant funds from 2007 to 2015 and queried about grantee experiences, progress, challenges, and plans for the future. These interviews yielded: 1) an analysis of the grant implementation process, and 2) case studies detailing grants awarded to four NJ municipalities—Brick Township, Garfield City, Montclair Township, and Ridgewood Village.

BACKGROUND

Named for the early 1800s ironworks owned by Joseph W Brick, Brick Township is a suburban community located in the northeast corner of Ocean County along the Barnegat Peninsula. Brick is well-served by major roads (NJ Routes 35, 70, 88, and 35 and the Garden State Parkway) and by NJ TRANSIT bus service. Settled in the mid-1700s, early industry focused first on milling and later on charcoal and turpentine. Brick's beach communities date from the mid-19th century when newly established rail service connected the barrier island section of the Township with New York and Philadelphia.

THE PROBLEM

During the 1950s and 1960s, Brick Township experienced significant population growth. From 1950 to 1960, the municipality grew by nearly 300% and gained nearly 12,000 new residents. From 1960 to 1970, Brick added nearly 19,000 more residents. Residents settled in new suburban neighborhoods, built largely without sidewalks and curbing. New schools, including Midstreams, Herbertsville, and Lanes Mill Elementary Schools, were built on roadways that are now heavily traveled, which place additional hazards upon students walking or bicycling to school.

A majority of students were bused to school. Of the remaining students, most were driven to school by their parents. Traffic congestion at the Midstreams Elementary School led parents to use nearby locations for student drop-off/pickup. One such location, Orion Drive, south of the school, served informally in that capacity, but not well. Speeding during drop-off and doubleand triple-parked cars at pick-up created unsafe conditions for students walking through the area, whether they were continuing on foot or traveling by auto. Incomplete sidewalks and crossings near Herbertsville and Lane Mills Schools, while not resulting in crisis similar to that at Midstreams, also imposed hazardous conditions upon those traveling to and from the schools as well as those traveling to a proximate high school and recreational facilities.

GETTING STARTED

Complaints from parents and local residents about traffic and safety issues at Orion Drive spurred Midstreams School Principal Trudie Davis-Rebelo and Brick Township officers Sergeant Donald Ling and Patrolman Christopher Getsky to approach Tara Paxton, Assistant Planner at the township planning office. Working together, local officials, school administrators, and local police officers concluded that a Safe Routes to School program could address the problems at Orion Drive and encourage children to walk to school. Pedestrian improvements would benefit the entire neighborhood around Midstreams Elementary School and enhance safety for all pedestrians.

The SRTS team worked with the PTO to host a training event to teach parents how to plan and organize an effective Walking School Bus Program. This event heightened public awareness of walking as a viable way for students to get to and from school and demonstrated strong public support for such programs.

Eventually, township officials, concerned parents, and other local supporters prevailed and gained acceptance for the plan. Through local meetings, and with support from Mayor Stephen C. Acropolis, the true costs and benefits of the SRTS improvements, both for individuals and the larger community, became clear and understandable.

Mayoral support came despite public opposition. In a letter to Orion Drive residents who opposed the plan, Mayor Acropolis wrote: "the benefits of this project, providing children with safe modes of travel to school, outweigh any inconvenience to the residents in the area of the project. My administration and the township council are committed to addressing what is best for the residents of Brick Township, especially our youngest citizens."

With the mayor's support, the SRTS team fostered local support gradually through school and public events, eroding resistance and gaining acceptance for new sidewalks and the overall Safe Routes to School program.

Brick Demographics

	Brick	Ocean	New
	Township	County	Jersey
Population	74,991	583,450	8,904,413
Population 5 to 14	11.1%	12.9%	12.7%
years (%)			
Median age (years)	44.3	42.8	39.4
Households	29,942	222,494	3,189,486
Median household	\$70,647	\$61,994	\$72,093
income (\$)			
Per capita income (\$)	\$35,649	\$31,200	\$36,582
Persons below the	6.5%	11.30%	10.80%
poverty line (%)			
Persons with	26.5%	25.4%	34.2%
Bachelor's degree or			
higher (%)			
Land area (sq mi)	25.72	628.80	7,354.22
Population per square	2,916	928	1,211
mile			

2011-2015 American Community Survey 5-Year Estimates

Brick Race & Ethnicity

	Brick	Ocean	New
	Township	County	Jersey
White	91.9%	91.8%	68.3%
Black	2.1%	3.1%	13.5%
Asian	2.2%	1.9%	9.0%
Other race	2.4%	1.6%	6.6%
Two or more races	1.5%	1.6%	2.5%
Hispanic or Latino	7.9%	8.8%	19.0%

2011-2015 American Community Survey 5-Year Estimates

Brick School Characteristics

	Brick Township	Ocean County	New Jersey
Students in Targeted Schools	1,243	NA	NA
Students in area or district	8,905	70,502	1,372,755
Students receving free or reduced lunch (count)	2,930	24,072	516,704
Students receiving free or reduced lunch (%)	32.9%	34.1%	37.6%
Spending per student	\$17,308	\$18,438	\$19,651
NJ District Factor	DE	NA	NA

NJ Department of Education. Enrollment Data, 2015. http://www.state.nj.us/education/data/enr/

KEY ACTORS

Principal Trudie Davis-Rebelo of Midstreams Elementary and Sergeant Donald Ling and Patrolman Christopher Getsky of the Brick Police raised their concerns about Orion Drive with Tara Paxton, Brick Township Grant Administrator/ Assistant Planner. Ms. Paxton served as the primary contact for all of the Brick SRTS grants. Mayor Stephen C. Acropolis and the Township Council embraced the project and built support for the SRTS program, particularly components of the Safe Routes to Midstreams Elementary project. Principals Jeffry Luckenbach of Lanes Mill Elementary School and Bonnie Giles of Herbertsville Elementary School were intricately involved in the 2012 SRTS grant.

BRICK TOWNSHIP SRTS GRANTS

Brick was awarded four grants through the NJ SRTS program. In 2007, Brick received approval for two grants focused on the Midstreams Elementary School—one for new infrastructure and one for non-infrastructure programming with a combined total of \$191,010. Brick implemented the \$184,500 infrastructure grant but declined funds for the small non-infrastructure grant, which was subsequently rescinded by NJDOT. The Township received two additional grants. In 2008, Brick received a noninfrastructure grant for \$39,000 to implement an SRTS education plan. In 2012, the Township received an infrastructure grant for \$450,000 to address safety issues at the Lanes Mill Elementary and Herbertsville Elementary Schools.

PARTNERS

Brick Division of Land Use and Planning Brick Engineering Department Brick Police Traffic Safety Division Brick Public Schools Greater Mercer Transportation Management Association New Jersey Department of Transportation Safe Routes to School National Partnership Ocean County Engineering Department Parent Teacher Organization (as "Wellness" Committee) Safe Routes to School Committee Township of Brick Alan M. Voorhees Transportation Center,

Bloustein School of Planning and Public Policy, Rutgers, The State University of New Jersey

SAFE ROUTES TO MIDSTREAMS ELEMENTARY (2007)

Grant Type: Infrastructure Project Grant Amount: \$184,500 Purpose: New sidewalks * Safety upgrades * Signage

The problem

The Midstreams School SRTS team sought to improve pedestrian access for students. School siting and other physical characteristics posed challenges and a majority of the school's more than 500 students arrived by bus. Main entrances and exits to the school are located on Midstreams Road, a heavily traveled two-way thoroughfare. Brick Township Police Department traffic surveys indicated consistent heavy traffic patterns along Midstreams Road with sharp increases at peak morning arrival and afternoon dismissal hours. Nearly 35,000 vehicles traveled north and south along the route during the one-week period survey period.

Safety issues arose when parents began using Orion Drive, a dead-end street bordering the school to the south, as an informal drop-off/pickup area, moving congestion from one location to another and creating a hazardous condition for students walking/bicycling to school. Morning drop-off saw incidences of speeding; afternoon pick-ups were frequented by double- and tripleparked cars of parents waiting for their children to exit the school. Children who walked to/from school via Orion Drive had little refuge. The street lacked sidewalks and students were often forced into the dangerous situation of weaving between idling cars.

The Midstreams School SRTS team also sought to improve pedestrian access for students living in the neighborhood north of the school. Arrowhead Park, a large, heavily wooded area to the north and west of the school, formed a barrier between Midstreams School and the neighborhood and necessitated bussing for students. Safety concerns have hampered an effort to establish an improved path through the woods.

What they did

The chief concern of the Brick SRTS team was improvements to Orion Drive that would allow children to walk safely to the Midstreams School. As Ms. Paxton noted, Orion Drive became "a parking lot during arrival and dismissal." The dead end street seemed to invite parents to park their idling cars while they dropped off their children, or waited for them after school.

The SRTS team utilized a series of small events to draw wider public recognition of the safety problems at Midstreams. For example, the SRTS team, with PTO support, persuaded students and their parents to get out of their cars on International Walk to School Day and discover the benefits and obstacles of walking in the community. The team worked with grade teacher Joseph Sulock and implemented a National Center for Safe Routes to School "Walk-ability Survey" to students to better understand the problems they faced when walking to Midstreams School. The survey asked students to rate their walk based upon the following criteria: space available for walking, the safety of drivers, desirability of walking, and street crossings. The ratings indicated areas most in need of improvement.

In June 2009, the Voorhees Transportation Center worked with school personnel to implement a

survey of parents to learn how students traveled to and from school and to better understand any issues or concerns they had about their child walking or biking to school. About 20% of the surveys were completed and returned. Nearly half of respondents reported that their children walked or biked to school and about 44% reported a trip of less than one-half mile between home and the school. Of parents who dropped off their children at school, over 60% drove less than five minutes; their children could be considered candidates for a walk and/or bike program. Parents cited a lack of sidewalks, traffic speed along the school route, and unsafe crossings and intersections as concerns affecting whether they allowed their child to walk or bike to school.

The Brick SRTS team addressed safety conditions along the high-traffic Midstreams Road through additional traffic signage and intersection enhancements. The team also sought to modify the Orion Drive dead end and add sidewalks on key streets throughout the neighborhood to make the street less appealing for parking and to make walking a more inviting option.

Orion Drive before and after improvements, Midstreams School



The grant resulted in the following:

Identification and development of alternate walking/bicycling routes from the north, west, and south of Midstreams Elementary School

Safety upgrades along Midstreams Road

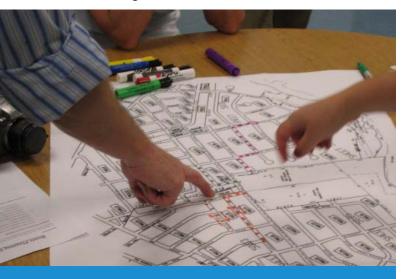
Sidewalks on Orion Drive to provide direct access to the school, alleviate congested parking conditions, and create a safe walkway for students traveling along this route

Advanced warning signage and intersection enhancements along Midstreams Road corridor to raise awareness of motorists

The original grant application also called for the construction of an improved walking path from Winchester Drive through Arrowhead Park. Parental concerns for their children's safe passage through the woods proved to be too great an obstacle to overcome. Grant proponents hope to implement this project at a future date when concerns can be more fully addressed.

Challenges

The SRTS proposal won support from the school, the Brick Township Board of Education, Brick Police Department, and the local governing body, but ran into stiff opposition within the community as many area residents questioned the benefits and costs of adding new sidewalks. Despite their repeated calls for a solution, some Orion Drive residents thought new sidewalks would prove to be a greater burden than benefit. Residents



Pedestrian route planning, Midstreams School

voiced concerns about the costs of maintaining the sidewalks as well as possible liability. "They favored strong traffic enforcement measures," said Paxton, "wanting to solve the traffic problems without addressing the difficulties in walking to school that caused so much of the traffic."

As more parents drove, the street [Orion Drive] became increasingly hectic during arrival and dismissal and walking became even more challenging."

~Tara Paxton

SRTS supporters in the community refused to allow this resistance to deter them from their goals. Knowing that parental support was key to success, the SRTS proponents engaged the Midstreams School's active PTO. A powerful demonstration of how parents can be educated about their role in causing traffic congestion arose at an early PTO meeting when the team presented a series of photographs showing the intense traffic around the school during drop-off time. "Parents were shocked to see the traffic conditions they had caused and the consequences of their own actions," said Paxton. Understanding the need for change, the PTO responded to the appeal for SRTS improvements.

Brick reported no problems with the SRTS grant logistics and were complimentary of the NJDOT Local Aid program that existed when they applied for this grant. They worked closely with program staff, and provided materials to staff who uploaded information to the grant application site.

Impacts & achievements

The effects of the SRTS program were dramatic. As a result of the curb and sidewalk installation and the education campaign, the amount of traffic on Orion Drive dramatically decreased, the parking problem was resolved, the length of stay of cars for children being dropped off greatly reduced, and the school stopped receiving complaints from Orion Road residents. More importantly, Brick saw an increase in the numbers of parents walking their children to school.

According to Tara Paxton, a champion of the project, "Midstreams Elementary is a pretty special place"—a very tight neighborhood-based school in the middle of a residential area. This

project improved upon a sense of place for the Midstreams neighborhood and made it more cohesive—especially for the children attending the school at the time of grant implement and their parents. That cohesiveness continues to today. An active PTO committee promotes Walk to School Day. Ms. Paxton noted that the SRTS program "got into the culture" and it got parents out of their cars and walking their children to school.

SAFE ROUTES TO MIDSTREAMS ELEMENTARY (2007)

Grant Type: Non-Infrastructure Project Grant Amount: \$5,510 Purpose: Curriculum development * Incentive program

In 2007, Brick received for SRTS funds to support the integration of SRTS information into school curriculum and incentive programs for the students at Midstreams Elementary. Brick declined the funds, instead choosing to use volunteers to implement these activities. The Brick SRTS team weighed the effort needed to administer SRTS funds and judged the paperwork required to be too onerous for the amount of requested funds. PTO volunteers undertook a program of activities to raise awareness about SRTS, conduct safety programs, and conduct an official "Walk to School Day" and developed an education plan to incorporate SRTS concepts into curriculum. The team determined that internal resources provided sufficient support to conduct the program and thus SRTS funds were not needed for the scope of this effort.

SAFE ROUTES TO MIDSTREAMS ELEMENTARY (2008)

Grant Type: Non-Infrastructure Project

Grant Amount: \$39,000

Purpose: Education programs * Community programs * Increased police presence * Community events

The problem

Support for bicycling to school lagged that for walking to school. School administration discouraged bicycling to school and expressed concerns regarding student safety and safe storage of bicycles. Work begun under the 2007 grant, as well as that undertaken by the PTO without benefit of SRTS funding, envisaged continued support for education and encouragement activities, items identified in the Midstreams Elementary Travel Plan (2008).

What they did

The Brick SRTS team sought to continue its efforts to increase awareness of, and participation in, the walking and bicycling programs at the school and ensure that students learned to conduct themselves safely when walking/bicycling. The SRTS 4-E program provided the framework for a robust education plan incorporating education, enforcement, engineering, and education.

The education plan for the 2008 Safe Routes to Midstreams Elementary non-infrastructure grant included the following activities:

- Bicycle rodeo
- Public awareness campaign
- Pedestrian safety curriculum
- Walking school bus
- Golden Sneakers Award program
- Student ambassadors
- Crosswalk stings
- Increased police presence
- "Coffee Klatch" meetings with parents and staff designed to educate parents on the benefits of walking and bicycling to school and to encourage further participation in SRTS programs

The bike rodeo activities included the purchase of bicycles to be raffled off. The Brick SRTS team worked with several community partners. The team approached three cycle shops and purchased 15 bicycles. Shop staff came to the rodeo, provided giveaways to the students, and conducted maintenance instruction. Another partner, the Jersey Off-Road Bicycle Association, fitted students for helmets. Brick Township bicycle patrol police officers allowed students to ride on department bicycles and discussed safety. In anticipation of the rodeo, the school redesigned the playground and installed bicycle racks.

The Golden Sneakers Award program also achieved success. Notably the school endeavored to include students who traveled by bus so they did not feel left out of all the SRTS activities. Gym teachers implemented a lunchtime walking program available to all students.

Challenges

Prior to this project the school administration discouraged bicycling to school. The diverse program, as implemented, created a great deal of buzz and support of more bicycling. A growing acceptance emerged among the school administration and the administration no longer discourages biking. The administration provided amenities in support of bicycling-to-school programs, such as installing bike racks.

Impacts & achievements

While the Midstreams SRTS team conducted no studies or counts in support of this grant, they received positive feedback about grant activities as well as anecdotal reports of more bicycling to school as evidenced by the increased number of bicycles present at the newly installed bike racks.

The grant also increased safety and awareness through crosswalk stings and increased police presence during walking and bicycling events and during school hours when children were present. The police stationed themselves along the student travel routes and increased the number of warnings and tickets issued. The increased safety presence provided incentive to parents to allow their children to participate in walk days.

Ms. Paxton commented that the bike rodeo was her "single best day working for the Township. They set up obstacle and agility courses and the students and adults loved it!"



Bike Rodeo, Midstreams School

MIDSTREAMS AND LANES MILL ROADS (2012)

Grant Type: Infrastructure Project

Grant Amount: \$450,000

Purpose: Safety signage installation * Crosswalk improvements * Curb, curb ramp & sidewalk improvements

The problem

Safety issues at Herbertsville Elementary School and Lanes Mill Elementary School resulted from a lack of sidewalks and safe road crossings along Lanes Mill Road between the two elementary schools. Traffic moved quickly along this route and motorists did not adequately heed school speed zones or crossings. Sidewalks were intermittent and switched sides along the busy two-way street. The street lacked curbing. Road crossings were poorly marked. Herbertsville Elementary enrolled about 250 students; the students that walked or biked to these schools numbered approximately 60. More than 500 students attended Lanes Mill Elementary.

Other educational and recreational sites are proximate to the schools. Brick Memorial High School lies between the schools and on the same side of the street as Lanes Mill Elementary. Enrollment at Brick Memorial High School is about 1500 students. Across from the Brick Memorials sits the Boland and Newman fields, a baseball facility. Pedestrian improvements directed toward to the elementary schools would benefit those attending the high school and the larger community.

What they did

Brick SRTS team sought to continue the improvement of pedestrian facilities with a second SRTS Infrastructure grant. The purpose of the grant was to install additional curbing and sidewalks in the Midstreams School neighborhood, extending pedestrian facilities toward the north, and to install curbing and sidewalks in the Lanes Mill and Herbertsville Schools neighborhoods. The grant also called for the installation of signage at road crossings to raise driver awareness.

Specifically improvements were made in the following areas:

Sidewalks on both sides of Midstreams Road from Suburban Road to Colonial Drive

Sidewalks on the north side of Lanes Mill Road from New York Avenue to Kirk Lane

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A note of appreciation

Illuminated signage at crossings on Lanes Mill Road at Kirk Lane, Sawmill Road, and Herbertsville Elementary School

A call for bids for construction was issued in 2015. Construction took place during the Summer of 2016.

Challenges

Experience gained through the implementation of earlier grants allayed challenges pertaining to this grant.

Impacts & achievements

The Midstreams and Lanes Mill Road project resulted in continuous sidewalks along the entire length of Lanes Mill Road, save for select locations where environmental issues prevented additional crossings. The project also resulted in the installation of painted crosswalks and signage assemblies at pertinent intersections.

These improvements helped to connect three schools, Lanes Mill Elementary, Midstream Elementary, and Brick High School, with each other and with the surrounding neighborhoods. All told, these improvements have resulted in greater safety and a healthier walking/bicycling environment throughout this part of Brick Township.

LESSONS LEARNED

Changing minds through education * Parents as allies * Working with partners * Building on success

Brick Township's SRTS success story started with a desire to find a solution to a specific problem an unsafe, informal drop-off area in a residential neighborhood adjacent to a school. Examination of root causes brought together a team of school personnel, law enforcement, planners, and parents and led to the understanding that insufficient pedestrian infrastructure and a concomitant culture of "driving to school" contributed to the dangerous conditions at Orion Drive. SRTS programs, which combine infrastructure improvements with education and other supportive activities, provided a process crafted to meet their need.

Township officials, concerned parents, and other local supporters comprising the Brick SRTS team worked hard to gain and maintain support for the SRTS program. The team had considerable success with their first SRTS grant and demonstrated both the need for the sidewalk and curbing installation at the Midstreams School neighborhood and the impact of the improvements. Outreach to the school community, particularly to parents, demonstrating the effect of their collective behaviors on the safety of students arriving and departing school via Orion Drive, established communication with those affected and credibility about the process. Success at the Midstreams Elementary School brought about a desire to expand the program both in scope, with additional education and engagement activities, and in geography, the improvements to two additional elementary schools and nearby educational and recreational facilities.

Brick now has deep commitments to SRTS programs and improvements and has continued its program despite other needs, such as addressing damage incurred during Hurricane Sandy in 2012. The effects of Hurricane Sandy were severe, with economic losses exceeding \$30 billion in New Jersey. Brick Township was one of the hardest hit areas in the State, suffering widespread damage. Notably Brick Township submitted a grant application during the 2012 round of funding.

PLANS FOR THE FUTURE

Brick Township plans to pursue other SRTS and TAP projects. They anticipate significant benefit to students' health and safety through future sidewalk and curbing projects and they hope to incrementally reduce reliance on busing throughout the Township by removing barriers that prevent students from walking and bicycling to school. Additionally, township planning staff intends to use knowledge gained while working at Midstreams to affect similar support within Herbertsville and Lanes Mill school communities. Specifically efforts will engage with parent-teacher associations and administrations to conduct SRTS

NJ SAFE ROUTES TO SCHOOL RESOURCE CENTER

outreach and education through assemblies, incentives, and training designed to grow the walking and biking populations and local support for the SRTS program.

RESOURCES

Paxton, Tara B., and the Township of Brick, Division of Land Use & Planning. *Midstreams Elementary School Travel Plan*. March 25, 2008. http://www.saferoutesnj.org/toolkit/stp/ MidsteramsTravelPlanA small.pdf

The NJ SRTS Resource Center supports public officials, transportation and health professionals, and the general public in creating a safer and more accessible walking and bicycling environment through primary research, education, and dissemination of information about best practices in policy and design. The NJ SRTS Resource Center is supported by the NJ Department of Transportation with funds provided by the Federal Highway Administration. The NJ SRTS Resource Center is managed by the Alan M. Voorhees Transportation Center, at the Edward J. Bloustein School of Planning and Public Policy at Rutgers, The State University of New Jersey.



Above right: Walkability audit Below: Walking School Bus, Midstreams School

On cover:

Above left: New signage, Lane Mills School Above right: New sidewalks and crossing, Orion Drive, Midstreams School Below: International Walk to School Day, Midstreams School