



An NIVIS Company

Safe Routes To School

OVERVIEW

The RBA Group, a multidiscipline firm of professionals dedicated to designs that enhance quality of life, has been shaping the world we live in since 1968. We combine technical ingenuity with seasoned experience of our staff to enrich the human experience, preserve our environment and enhance communities.

SRTS is a comprehensive mobility program that uses proven planning and engineering approaches, including the latest traffic calming measures, to make school routes safer for student walkers, bicyclists and motorists. Planning efforts focus on education, enforcement, encouragement and evaluation and include development of conceptual designs as part of School Travel Plans. Engineering components include development of final plans and specifications, environmental review and obtaining approvals for construction projects.

SRTS Planning

RBA SRTS specialists have not only developed School Travel Plans for many schools across NJ, they helped 'write the book' for what School Travel Plans should include and showed schools how these plans can make the trip to and from school more safe and enjoyable for everyone. Through developing the pilot SRTS program with schools in Montclair, Jamesburg and Lumberton, and the subsequent urban demonstrations in Camden, Newark and Trenton, RBA set the bar for School Travel Plans, including streamlining the process to identify physical enhancements for routes to school.

As National Complete Streets Coalition instructors, we make sure our engineering concepts help balance the needs of all travelers, emphasizing the needs of children getting to and from school. We are available to provide workshops and specialized training for school and municipal representatives to help plan and advance both SRTS activities and concept plans.

NJ SCHOOL ZONE DESIGN GUIDE



As a consultant for NJDOT, RBA developed the recently released School Zone Design Guide, a statewide resource focused on engineering measures that can be used to make the environment to, from, and around schools a place where children and their parents feel safe and want to walk and bicycle.

SRTS Design

Our understanding of how SRTS concepts are planned strengthens our ability to design SRTS projects efficiently, avoid scope creep and support environmental and community contexts. RBA has all required engineering and environmental/cultural resource services in-house to efficiently design SRTS projects. We have extensive experience designing self-standing SRTS improvements. Some of the SRTS enhancements designs can include ADA compliant sidewalk and curb ramps, crosswalks, reducing street crossing distances, curb extensions, traffic signalization and signal upgrades, pedestrian traffic control devices, intersection improvements, signing, pavement markings/stripping, traffic calming, connectivity paths, bicycle safety improvements, etc. We also integrate SRTS with our Complete Streets design approach on larger scope road and intermodal transportation projects.



New Jersey
Safe Routes
to School



SRTS Design Experience

- **SRTS Planning and Training** – RBA has developed Original and Urban Demonstration SRTS projects, Transportation Management Agency SRTS overview and site evaluation for engineering design concept training, and Walking School Bus training.
- **Complete Streets** – RBA prepared Complete Streets program support documents for NJDOT. RBA helped NJDOT refine the Capital Project Delivery Process and recommendations were made to the associated Activity Descriptions and Guidelines (Concept and Design phases) so that the Complete Streets policy is addressed.
- **Street/Intersection Improvements/Integrated Projects** – RBA prepared designs, concept designs for all NJ SRTS Demonstration Project Schools, and New York City School Safety Engineering (210 school campus areas). SRTS elements are routinely integrated in our major project designs such as Rt. 35 Reconstruction, Route 206 in Chester, Rt 46 in Netcong, Bridge Street Stockton Historic Streetscape, etc. many of which are within Historic Districts.
- **ADA Compliance** – RBA routinely integrates ADA requirements, an important element for SRTS projects. We have extensive ADA compliance experience from teaching seminars, to trained staff, to assisting NJDOT on policy procedures, to proven experience. RBA has been awarded an NJDOT Term Agreement specific to ADA projects.
- **Survey** – Field survey and base mapping involve the careful and efficient location of roadway/sidewalk elements and proposed improvements which are critical to SRTS design. Our Survey Department, which includes four survey crews with state-of-the-art equipment, was recently awarded an NJDOT Survey Term agreement.
- **Sustainable Environmental and Community Design** – Even small SRTS improvements require identification/ avoidance of environmental, historic resources and opportunities for achieving context sensitive, sustainable designs. RBA has a long history of environmental services to support transportation/ mobility projects in NJ and the region.
- **Full- Service Organization** – RBA has all required engineering, environmental and public outreach services in-house, enabling production of efficient, cost effective SRTS designs. RBA was also recently awarded NJDOT 2015 General Engineering Term agreement as has extensive experience with NJDOT policies and procedures and has served as an on-call consultant to NJDOT for bicycle/ pedestrian planning and design for over 20 years.

REPRESENTATIVE PROJECTS

Westfield Traffic Calming

The objective was to provide a safer environment for pedestrians and bicyclists by addressing through-traffic and speeding issues. RBA evaluated traffic calming strategies, examined the feasibility of methods and relative merits of alternatives; recommended appropriate treatments; and prepared final design plans and specifications.

Recommended treatments constructed include raised intersections, speed tables, curb extensions, and raised crosswalks.



Camden, NJ - Safe Routes to School Urban Demonstration Program



The NJ SRTS Urban Demonstration Program in Camden focused primarily on making sure that all children, can benefit from SRTS programs. RBA developed an approach for two schools that recognized that the issues faced by students there may be different than those affecting children in other NJ suburban or rural areas. The program goal was to assist the schools with strategies to develop and implement local SRTS programs that were reflective of individual school neighborhoods. SRTS planning assistance was provided to the Harry C. Sharp Elementary School & Camden's Promise Charter School and its city partners. This program demonstrates how communities can collaborate to plan SRTS improvements and serves to guide other urban schools and cities in establishing successful partnerships to promote SRTS activities.

North Avenue Hawk Signal in Westfield, NJ



In response to numerous pedestrian crashes on North Avenue, RBA designed a hybrid traffic signal for pedestrians to connect a parking lot across North Avenue with a store entrance.

REPRESENTATIVE PROJECTS *(continued)*

NYCDOT School Safety Engineering Project

Since 2002, RBA has been conducting pedestrian safety assessments for NYCDOT's School Safety Program which manages pedestrian safety for over 1,470 elementary and middle schools citywide. The School Safety Engineering Project seeks to improve pedestrian safety for school age children in the vicinity of elementary and middle schools by redesigning sidewalks, intersections, and travel corridors along school routes. RBA visited and studied streets around hundreds of schools, met with school representatives, and identified pedestrian safety concerns. Schools were then ranked as to the severity of the problems and potential improvements were identified. In the 2nd Phase of the multi-year project, RBA conducted more detailed assessments for the 210 highest ranked 'priority' schools (the schools with the most severe pedestrian safety concerns) identifying specific engineering and traffic improvements around each school. In subsequent contracts, RBA went on to develop engineering designs for over 46 capital projects where the priority recommendations were implemented. RBA has also worked on Safe Routes to Transit and Safe Routes for Seniors programs in New York City.



Reynolds Avenue Sidewalk

In order to access a new popular convenience store in Hanover NJ, school children began walking in the street creating safety concerns and the need for new sidewalk on Reynolds Avenue and Parsippany Road. RBA designed over 1,500 feet of sidewalk through difficult topography and modified a signalized intersection for new pedestrian accommodations.

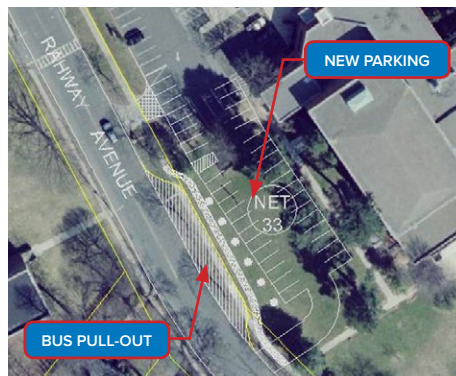


Essex County On-Call Traffic Engineering Services



As part of an ongoing traffic engineering on-call agreement, RBA designed new traffic signals for over 70 intersections, many near schools. All signals featured substantial ADA pedestrian improvements, including count-down pedestrian timers, push buttons that light up and beep, and new crosswalks and sidewalk.

Westfield High School Traffic Safety Study

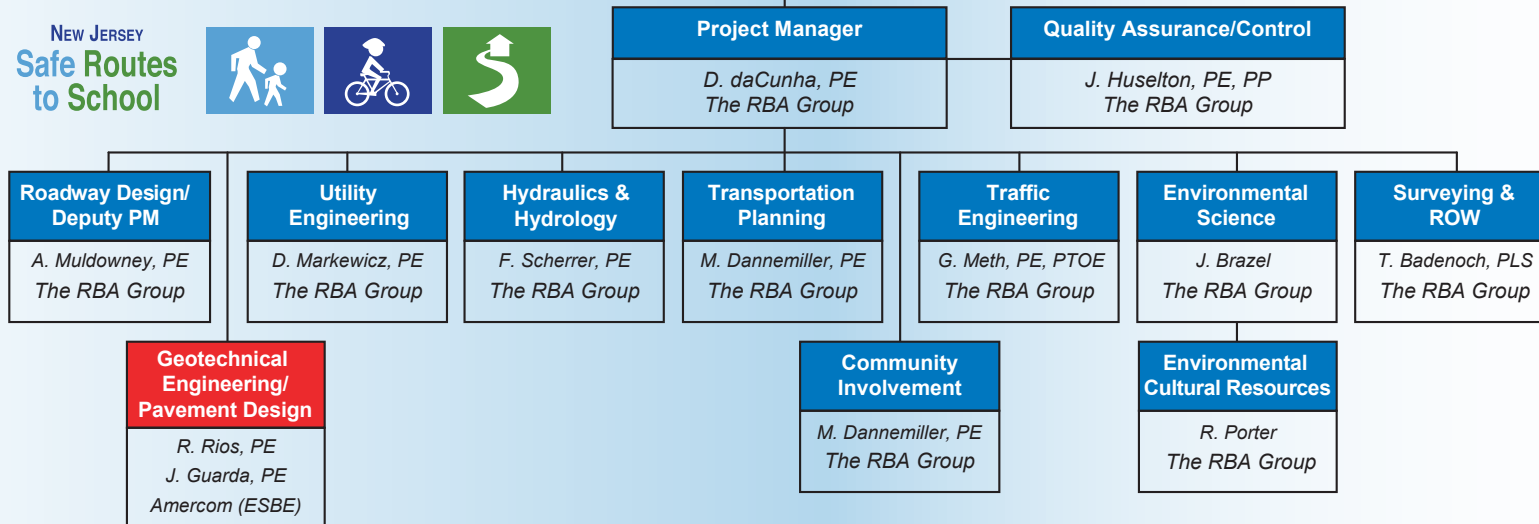
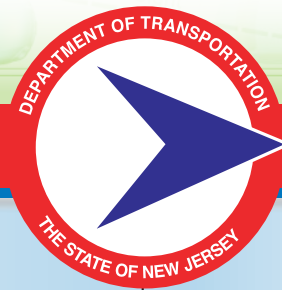


In conjunction with representatives of the Town of Westfield and the Westfield Board of Education, RBA conducted a thorough review of traffic safety and parking practices for Westfield High School. Multiple public meetings were held and parking and traffic data gathered. Recommended improvements included restricting parking from one side of the street for many streets, proving a bus pull-out and increased school parking. Complaints from neighborhood residents were greatly reduced.

Route 35 Reconstruction (Super-Storm Sandy Emergency Contract), MP 4.0 to 9.0

RBA provided final design and construction support services for a 5 mile section of RT 35 involving pavement replacement, corridor-wide drainage system upgrades and replacement/upgrades to 19 signalized intersections, significant sidewalk improvements, enhanced crosswalks, bike lanes, and designed over 800 ADA compliant curb ramp installations, which were constructed in accordance with the American with Disabilities Act Accessibility Guidelines (ADAAG).





Denice daCunha, P.E. -Project Manager

Direct: 973.946.5624

Denice is a professional engineer with over 28 years of experience at The RBA Group in the design and management of numerous highway, bridge, and traffic engineering assignments. Her experience also includes managing NJDOT projects throughout all design phases: conceptual, preliminary, final design and construction support. Projects have included SRTS type improvements involving pedestrian corridor safety, ADA compliance, signal upgrades, signing/stripping, streetscape, school zone safety, community outreach, etc. Several of Denice's projects have been recognized with awards from the American Planning Association, Engineers Council of NJ, NJ Concrete Association, Federal Highway Administration, and NJDOT Value Engineering.



Michael Dannemiller, P.E. -Transportation Planning/Community Involvement

Mike has been planning and designing bicycle and pedestrian projects for the last 24 years. He has developed plans and designs for enhancing bicycle and pedestrian accommodation from New England to Florida to Oregon. He has also developed and presented training sessions on safe routes to school and senior mobility, complete streets, traffic calming, bicycle and pedestrian planning and design. Mike is trained by the Federal Highway Administration for facilitating safe routes to school and complete streets workshops; and serves as an Advisor to the New Jersey East Coast Greenway Committee and the September 11th National Memorial Trail Alliance.

We have the in-house* expertise to provide the necessary SRTS design services and address virtually all of your planning, engineering, and environmental needs.

If necessary, the following resources could be called upon by our team leaders to provide needed manpower:

- Civil / Highway Engineers – 45 • Traffic / Transportation Engineers – 10 • Electrical Engineers – 1 • Landscape Architects – 15 • Planners: Urban / Regional – 10 •
- Surveyors – 8 • Archaeologists / Cultural Res./ Historians – 6 • Environmental / H&H / Water Resource Engineers – 10 • Structural Engineers – 10 • CADD / IT Technicians – 12 •
- Environmental Specialists – 13 • Engineering Technicians – 12 • Architects** – 10 • Project Managers – 25 • Administrative – 10 • Other Employees – 20 •

* This represents the combined resources of The RBA Group, Inc. and RBA Group - Architecture, P.C. The two companies are affiliated pursuant to a formal management agreement.

** Our Architects are assigned to the Professional Corporation. The remaining personnel are assigned to The RBA Group, Inc.



The RBA Group, Inc.

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For additional information please visit:

Safe Routes to School www.rbagroup.com/services/planning/SRTS.html

www.rbagroup.com