

NV5 RELATED SERVICES

Safe Routes To School (SRTS)

NV5, Inc. (NV5), formerly The RBA Group, is a nationwide, professional and technical consulting firm and is ranked 34th in the Engineering News Record listing of top 500 A/E design firms. The northeast infrastructure team is headquartered in Parsippany, NJ and has multiple offices in the northeast, New York, NY and Philadelphia, PA. We are a multidiscipline firm of professionals dedicated to developing cost-effective solutions that enhance quality of life. Core specialties include bicycle/pedestrian planning and design, recreational planning and design, landscape architecture and streetscape design, highway and traffic design, transportation planning, traffic engineering, structural and bridge design, site design, utility design, environmental permitting and processing services, hydraulic design/hydrologic studies and construction management. We have provided design services for various counties and municipalities

throughout New Jersey, and other major transportation agencies including NJDOT, NJTA, NJTPA, NJ TRANSIT, PANY&NJ, DRJTBC, NYSDOT, NYCDOT, and NYCDDC, as well as numerous Local Public Agencies (LPAs).

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 conceptual designs as part of School Travel Plans. Engineering Design components include development of Preliminary and Final Plans, prior to Contract Plans, Specifications and Engineer's Estimate (PS&E), environmental review and obtaining approvals for construction projects.



ENCOURAGE SAFE BIKING



PROVIDE SAFE ROUTES

SRTS DESIGN EXPERIENCE

NV5 is a full service multidiscipline firm. Below are some specific SRTS services.

SRTS AND TRANSPORTATION ALTERNATIVE DESIGN ASSISTANCE: NV5 is familiar with the grant management process and design requirements for federally funded SRTS and Transportation Alternative Program (TAP) grants. Our team has training experience through Rutgers CAIT and is working with numerous Local Public Agencies (LPAs) to provide design services to see SRTS and TAP projects constructed in accordance with grant goals and federal requirements.

SRTS PLANNING AND TRAINING: NV5 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: NV5 prepared Complete Streets program support documents for NJDOT. We also assisted NJDOT in refining 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: NV5 prepared 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 constructed projects 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: NV5 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. NV5 has also been awarded multiple NJDOT projects specific to ADA improvements, including the design of over 100 curb ramps along Route 17 in Bergen County.

SUSTAINABLE ENVIRONMENTAL AND COMMUNITY DESIGN: Even small SRTS improvements require identification/avoidance of environmental, historic resources and opportunities for achieving context sensitive, sustainable designs. NV5 has extensive environmental services experience to support transportation/mobility projects in NJ and the region.

FULL-SERVICE ORGANIZATION: NV5 has all required engineering, environmental and public outreach services in-house, enabling production of efficient, cost effective SRTS designs. NV5 has served as an on-call consultant to NJDOT for bicycle/pedestrian planning and design for over 27 years.

NV5 PROVIDING SERVICES FOR:



NEW JERSEY
Safe Routes to School

SAFE ROUTES TO SCHOOL (SRTS)/DESIGN ASSISTANCE PROGRAM—NV5 REPRESENTATIVE PROJECTS



SRTS DESIGN ASSISTANCE—MULTIPLE PROJECTS FOR LPAs THROUGH NJDOT LOCAL AID AND ECONOMIC DEVELOPMENT USING FEDERAL AID HIGHWAY PROGRAM FUNDS FOR 2016 GRANT RECIPIENTS

NV5 has been selected by LPAs throughout NJ to provide Assistance Services for Preliminary Design, Final Design and Construction Support for the Federally Funded SRTS project grants listed below. Services to include: Pedestrian safety, sidewalk and ADA curb ramps, signing and striping, intersection improvements, bicycle compatibility improvements, utility coordination including RR crossings, environmental permitting, public outreach, and preparation of contract plans, specifications and cost estimates (PS&E) as well as construction support:

- Pemberton Township: SRTS improvements for roadways near Busansky/Emmons Schools
- Somerville Borough: SRTS improvements along Veteran's Memorial Drive East
- New Providence Borough: SRTS improvements for roadways near Allen W. Roberts School
- Highland Park Borough: SRTS improvements for roadways near Irving School and Bartle School
- Village of Ridgewood: SRTS improvement for roadways near Benjamin Franklin Middle School

COMPLETE STREETS (CS)—COMPREHENSIVE PROGRAM SUPPORT SERVICES



NV5 prepared CS program support documents for NJDOT. NV5 helped NJDOT refine the Capital Project Delivery Process and made recommendations to the associated Activity Descriptions and Guidelines (Concept and Design phases) to implement the CS policy. NV5 instructs NJDOT, agency, county and municipal staff on implementing CS.



TRANSPORTATION ALTERNATIVES PROGRAM DESIGN ASSISTANCE (TAP)—MULTIPLE PROJECTS FOR LPAs THROUGH NJDOT LOCAL AID AND ECONOMIC DEVELOPMENT USING FEDERAL AID HIGHWAY PROGRAM FUNDS FOR 2016 GRANT RECIPIENTS

NV5 has been selected by LPAs throughout NJ to provide Design Assistance Services for Preliminary Design, Final Design and Construction Support for the Federally Funded TAP project grants listed below. Services include Multi-Use Trail design, streetscape and landscape architecture, signing and striping, intersection improvements, bicycle compatibility improvements, pedestrian safety, pedestrian bridges, ADA curb ramps, driveway apron improvements, intersection and signal design, pedestrian scale lighting, cultural resources, technical environmental studies, environmental permitting, public outreach, preparation of contract plans, specifications and cost estimates (PS&E) as well as construction support:

- Morris County Park Commission: Patriots' Path on Great Morristown Greenway (approx. 1-mile trail)
- City of Passaic: Market Streetscape Enhancement Project
- Toms River Township: Ortleigh Beach Streetscape and Gateway Treatment Project along Rt. 35 and gateways to Ortleigh Beach
- Town of Morristown: MLK Promenade Transit Connection Streetscape, pedestrian safety improvements
- Raritan Borough: Pedestrian Improvements from the NJ Transit Rail Station to the Riverfront
- Pennington Borough: Downtown Streetscape Improvements within Historic District
- NJDEP: Waterloo Road Amphibian Passage System (Byram Township)
- NJDEP: Multi-year trail and Morris Canal Improvements at Historic Waterloo Village (Byram Township)



PEMBERTON COMPLETE STREETS IMPLEMENTATION AND SRTS PROJECTS

NV5 provided assistance in the development of a Complete Streets Implementation plan to address Complete Streets education, implementation tools, and project development and delivery. Recommendations include: Typologies for Township-wide Corridor Treatments, Intersection Treatments; Amenities and Maintenance; and Signage. NV5 is currently providing SRTS Design Assistance services for sidewalk, curbramp and crosswalk connectivity for Busansky and Emmons Schools.



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. NV5 developed an approach for two schools, which recognized that the issues faced by students 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. 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.

SAFE ROUTES TO SCHOOL (SRTS)/DESIGN ASSISTANCE PROGRAM—NV5 REPRESENTATIVE PROJECTS

NV5 NV5's 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 more of these plans can make the trip to and from school more safe and enjoyable for everyone. Through developing pilot SRTS programs in New Jersey, NV5 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, especially children getting to and from school, and provided workshops and specialized training for school and municipal representatives to help plan and advance both SRTS activities and improvements.

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. NV5 has all required engineering and environmental services in-house to efficiently design SRTS projects. Design elements 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.



ESSEX COUNTY ON-CALL TRAFFIC ENGINEERING SERVICES: As part of a traffic engineering on-call agreement, NV5 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 TRAFFIC CALMING: The objective was to provide a safer environment for pedestrians and bicyclists, by addressing through-traffic and speeding issues. NV5 evaluated traffic calming strategies, examined the feasibility of methods and alternatives, recommended appropriate treatments and prepared final design plans and specifications. Recommended treatments constructed include raised intersections, speed tables, curb extensions and raised crosswalks.



ROUTE 35 RECONSTRUCTION MP 4.0 TO 9.0 (SUPER-STORM SANDY EMERGENCY CONTRACT): NV5 provided final design and construction support services for a 5-mile section of Route 35, involving pavement replacement, corridor-wide drainage upgrades and replacement/upgrades to 19 signalized intersections, significant sidewalk improvements, enhanced crosswalks, bike lanes and over 800 ADA compliant curb ramp installations, which were designed in accordance with NJDOT ADA policies.



ROUTE 17-ADA NORTH CONTRACT 5: NV5 provided Preliminary Engineering and Final Design Services for this NJDOT ADA contract involving the upgrading of pedestrian facilities along Route 17 between MP 8.70 and MP 17.1 (40 separate locations). Key project elements included: environmental permitting; design of 118 new curb ramps; 5,500 linear feet of new or replaced sidewalk; traffic signal upgrades at 5 intersections; ROW documents.



ROUTE 47, HENDERSON AVE TO HIGH ST, MP 39.2-41.9 BICYCLE & PEDESTRIAN IMPROVEMENTS/CITY OF MILLVILLE CONCEPT DESIGN: NV5 is finalizing Concept Design Services for a 2.7-mile section of Route 47, with twenty-seven (27) intersections, six (6) signalized intersections and three (3) railroad crossings. Services include: traffic counts, crash analysis, intersection improvement recommendations, ADA recommendations, bus turnout improvements, public outreach, recommendations to improve bicycle and pedestrian safety (including traveling at railroad crossings), identification of substandard design elements, etc.



NORTH AVENUE HAWK SIGNAL/PEDESTRIAN HYBRID BEACON IN WESTFIELD, NJ: In response to numerous pedestrian crashes on North Avenue, NV5 designed a hybrid traffic signal for pedestrians to connect a parking lot across North Avenue. Pedestrian Hybrid Beacons (PHBs) can lead to lower conflict and crash rates for pedestrians and vehicles. FHWA's evaluation of pedestrian PHBs found that their installation can reduce crashes.

SAFE ROUTES TO SCHOOL (SRTS)/DESIGN ASSISTANCE PROGRAM—NV5 REPRESENTATIVE PROJECTS



NEW YORK CITY SCHOOL SAFETY ENGINEERING PROJECT

Since 2002, NV5 has been conducting pedestrian safety assessments for NYCDOT's School Safety Program which manages pedestrian safety for over 1,470 elementary and middle schools. The School Safety Engineering Project seeks to improve pedestrian safety for children in the vicinity of schools by redesigning sidewalks, intersections, and travel corridors along school routes. NV5 visited and studied streets around hundreds of schools, met with school representatives, and identified pedestrian safety concerns. Schools were ranked as to the severity of the problems and improvements identified. We then conducted more detailed assessments for the 210 highest ranked 'priority' schools (with the most severe pedestrian safety concerns) identifying specific engineering and traffic improvements around each school. In subsequent contracts, we develop engineering designs for over 46 capital projects.



BRIDGE STREET STOCKTON STREETScape

NV5 provided landscape architecture and streetscape design services for this NJDOT, Borough of Stockton \$2 million project, which is the connector roadway between the Route 29 Scenic Byway and Delaware River. Because Bridge Street crosses the D&R State Park and Canal, all design elements required approval from the NJ State Historic Preservation Office (SHPO). Streetscape improvements included: new blue stone curb and sidewalks, period lighting, street trees, ornamental plantings, bicycle trail crossing design and historic signage. *2010 Hunterdon County Planning and Design Award*



MONTCLAIR STREETS ARE FOR EVERYONE (SAFE) COMPLETE STREETS IMPLEMENTATION PLAN

The Montclair SAFE Complete Streets Implementation Plan provides a road map for improving the walking and bicycling environment in the Township of Montclair. The purpose of this plan is to provide guidance towards ensuring that Montclair's streets are designed to encourage safe driving, walking, and bicycling and to advance the Township's SAFE/Complete Streets philosophy.

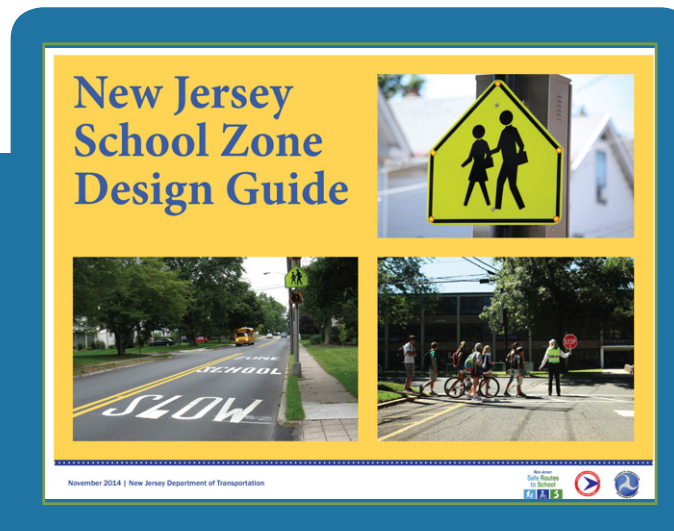


WESTFIELD HIGH SCHOOL TRAFFIC SAFETY STUDY AND ON CALL

In conjunction with representatives of the Town of Westfield and the Westfield Board of Education, NV5 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 several streets, providing a bus pull-out and increased school parking. Complaints from neighborhood residents were greatly reduced. NV5 continues to provide oncall traffic engineering services to Westfield Township.

SRTS DESIGN

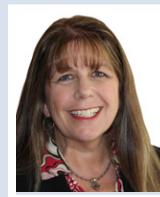
As a consultant for NJDOT, NV5 has developed the School Zone Guide, a statewide resource focused on engineering measures that can be used to make the environment to, from, and around schools a place where children and their parents feel safe and want to walk and bicycle.



SAFE ROUTES TO SCHOOL (SRTS)/DESIGN ASSISTANCE PROGRAM—NV5 REPRESENTATIVE PROJECTS

NV5 PROFESSIONAL STAFF

PROJECT ORGANIZATION



DENICE daCUNHA, PE—Project Manager Direct: 973.946.5624

Denice is a Professional Engineer with over 32 years of experience at NV5, in the design and management of numerous highway, bridge and traffic engineering assignments. Her experience includes managing NJDOT projects throughout all design phases: conceptual, preliminary, final design and construction support. Projects have included school zone safety, SRTS ADA compliance, bicycle and pedestrian improvements, signal upgrades, transportation alternatives, signing/stripping, community outreach, etc. She has completed Rutgers CAIT Federal-Aid Responsible Charge and Federal Grant Management training. 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, PE—Transportation Planning/Community Involvement

Mike has been planning and designing bicycle and pedestrian projects for the last 28 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.

PROFESSIONAL MEMBERSHIPS OF NV5 PERSONNEL INCLUDE:



SRTS DESIGN ASSISTANCE

NV5 is uniquely qualified and experienced with NJDOT's SRTS Design Assistance program, having been selected for multiple grant recipient projects for both SRTS and Transportation Alternative projects throughout NJ, developing the NJ School Zone Design Guide and previously assisting the Department with their SRTS Pilot Program. NV5 includes seasoned professionals, experienced in a broad range of transportation settings and Federal Aid training/experience. We are nationally and locally recognized, and active in organizations such as the Association of Pedestrian and Bicycle Professionals (APBP), American Society of Highway Engineers (ASHE), Institute of Transportation Engineers (ITE), New Jersey Chapter of the American Planning Association (APANJ), Association of New Jersey Environmental Commissions (ANJEC), New Jersey Main Street, and more.

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