



Designing Safer and More Accessible Walking and Bicycling Environments for Children

Congratulations on being selected for a Safe Routes to School (SRTS) Grant!

Now it's time to select a consultant from the NJDOT preapproved pool of SRTS design consultants to assist you with engineering design and project management. Greenman-Pedersen, Inc. (GPI) has the optimal blend of comprehensive engineering and management experience to navigate your project from the start of design to authorization of the construction funding. The staff at GPI is well acquainted with the federal SRTS process and has worked with the personnel of the NJDOT Division of Local Aid and Economic Development on numerous occasions to advance projects of all types through design and construction. Examples of eligible SRTS projects include: installation of ADA compliant sidewalks and curb ramps, bike paths, signing, pavement markings, signals, lighting, pedestrian and bicycle route connectivity, traffic calming improvements, etc. GPI has the pedestrian and bicycle safety expertise to develop a solution that is the right fit for your community.

Based on your needs, we will assist you in performing some or all of the activities necessary to develop a bid/authorization package that complies with all applicable state and federal laws, rules and regulations. GPI is well-versed in federal, NJDOT, and recognized industry design standards including AASHTO, MUTCD, ADA, NJDOT and/or local Complete Streets Policies.

GPI's Design and Project Management Expertise Includes:

ADA Compliant Intersection Design

- Compliant Curb Ramp Design
- Including Detectable Warning Surfaces
- Countdown Pedestrian Signals and Pushbuttons

Bicycle Facilities Design

- Bicycle Lanes / Boulevards
- Bike Parking Facilities
- Bike Route Signage
- Cycle Tracks
- Off-Road Bike Routes
- Shared Use Paths

Intersection Improvement Design

- Drainage / SWM
- High Visibility / Raised / Textured Crosswalks
- Intersection Lighting

ITS and Traffic Signal Design

- Pedestrian Flashing Beacons
- HAWK Signals
- In-Pavement LED Lighting
- Radar Speed Displays / VMS
- Lead Pedestrian Intervals

MUTCD Signing and Striping Design

- School Crossing Signs
- High Visibility Crosswalks
- Shared Lane Markings

Pedestrian Facilities Design

- Buffer Zones (landscaping)
- Compliant Curb Retrofitting
- Curb and Sidewalk Design
- Pedestrian Scale Lighting
- Repair and New Installation
- Pedestrian Refuge Islands

Public Outreach / Involvement

- Formation of SRTS Coalition / Team
 Interviews with Neighborhood Parents, School Children, Teachers / Principals, Elected Officials, Businesses and Community Groups
- Public Meetings and Forums
- Presentations
- Mailings / Surveys

School Zone Design

- Bicycle and Pedestrian Trails
- School Travel Plan Development
- Traffic Regulation Development

Traffic Calming / Corridor Improvement Design

- Complete Streets
- Pavement Markings and Stencils
- Road Diets
- Speed Tables

Relevant Experience

Traffic Calming Study/Signal Optimization/Streetscape Improvements

As part of an on-call agreement with the Township of Maplewood, GPI conducted a comprehensive township-wide traffic calming study, optimized the traffic signals along Springfield Avenue within the Township, and prepared contract documents for the replacement and modernization of three traffic signals. GPI also prepared contract documents for streetscape improvements along Springfield Avenue which included decorative traffic signal and lighting standards and arms, brick pavers, and other context sensitive solutions.

The traffic calming study included six (6) intersections and six (6) corridors. The study addressed pedestrian and bicyclist related concerns of high speeds and cut-through volumes and was initiated with local stakeholders completing a survey to identify problematic intersections and corridors. *Client: Maplewood Township, Location: Maplewood, NJ*



Morristown Mobility Project

GPI, in partnership with Arup and TechniQuest (the Team), provided planning and engineering services to establish a multi-modal transportation approach in Morristown as envisioned in their Morristown Moving Forward (MMF) Master



Plan. As an urban regional center and the County seat, Morristown serves a multitude of purposes that make transportation planning more complex. The multi-modal re-envisioning outlined in the MMF was done within existing right-of-way, requiring a delicate balance of various user demands.

The Team conducted data collection (asbuilt plans and timing directives; traffic data; and field inspections); performed traffic counts; prepared traffic models using Synchro for the existing conditions; and evaluated the current state of

multi-modal mobility within the study area. The Team developed Measures of Effectiveness (MOE) for each travel mode and performed alternatives analysis for seven (7) corridors.

Client: ARUP, Location: Morristown, NJ

Safe Routes to School Infrastructure Improvement for 4 Schools

This Locally Administered Federal Aid Safe Routes to School Project involved



providing safer, more walkable routes for students to the City of Kingston schools. Many of the routes around and near the Washington, Kennedy and Edson Elementary Schools and the Bailey Middle School did not have areas that conformed to current ADA guidelines; some pedestrian signals were missing or non-operational; sidewalk ramps and crosswalks needed improvement; sidewalk connections were missing; and traffic speeds were higher than desirable

along key routes. The goals of this project were to provide the City with improved sidewalks and pedestrian accommodations along select routes to these schools



and to provide traffic calming that would make the adjacent roads safer for pedestrian and bicycle travel. The project included pedestrian signal improvements with countdown timers at three intersections; restriping all crosswalks within the project limits; ADA accessible ramps at all intersections; flashing beacons on crossing signs to improve awareness; traffic calming features such as speed humps, radar speed feedback sign and speed hump on a local road to reduce traffic speeds; new sidewalks to form a complete pedestrian connection and access within the project limits. GPI provided preliminary design and final design services as well as construction support and inspection services. Preliminary design included topographic survey and mapping; environmental screenings; alternatives analysis; preparation for and attending a public information meeting; preparation of a design report. Final design included developing all plans and details needed to construct the proposed improvements, along with preparing the construction bid documents. *Client: City of Kingston, Location: Kingston, NY*

Geyser Road Safe Routes to School Project

GPI provided preliminary design, final design, construction support and inspection services for this locally administered federal aid project, which involved the construction of a sidewalk on the south side of Geyser Road, which eliminated

the gaps in the existing sidewalk network and provided a continuous pedestrian path along the east side of the Geyser Road Elementary School entrance and the adjacent developments.

A signalized pedestrian crossing was constructed on the east side of the Geyser Road Elementary School east entrance driveway which will permit safer crossing of Geyser Road. Preliminary design included developing preliminary design plans, conducting topographic survey and mapping, environmental screenings, alternative analysis, coordination with public agencies, determining permits that are needed, conducting a public information meeting and completing a design report. Final design included developing all plans and details needed to construct the proposed improvements,



along with preparing the construction bid documents. During Construction, GPI provided full time inspection staff. *Client: City of Saratoga Springs, Location: Saratoga Springs, NY*



School Safety Project for 75 Priority Schools

The New York City Department of Transportation (NYCDOT) developed a school safety program for 75 "priority" schools that were located throughout New York City. The schools included in this program were primarily elementary and intermediate schools with an enrollment of at least 250 students. These schools were located in the vicinity of high pedestrian and vehicular crash locations.

Under this program, GPI was assigned 29 schools to develop school safety reports and develop pedestrian safety improvement plans. The goal of this program was to improve walking conditions for students and provide safety in their daily commute to school.

Client: New York City Dept. of Transportation, Location: NY, NY

Somerset County Bikeway

GPI, doing business as Keller & Kirkpatrick, was awarded the design of a bikepath through Duke Island Park which is located on the Raritan River in Raritan Borough and the Township of Bridgewater. The project included survey and mapping and design for the horizontal and vertical alignment of the bikepath, multiple State Open Water crossings with bridges, Freshwater Wetlands Statewide General Permits, Freshwater Wetlands Transition Area Averaging, drainage and signage. Emergency call boxes where placed along the route at strategic locations. The total length of the 8-foot wide bikepath was approximately 2.4 miles.

Client: Somerset County Park Commission, Location: Duke Island Park, NJ

West Milford Bikeway Improvements

GPI, doing business as Keller & Kirkpatrick, was awarded the design of a bikepath extension and roadway improvements to Nosenzo Pond Road by the Township of West Milford. The project was partially funded with a grant from the New Jersey Department of Transportation. The total length of the 4-foot wide bikepath on both

sides of the road was 1.25 miles, and the length of the roadway improvements was 0.625 miles. The project included survey, mapping and design for the horizontal and vertical alignment of the bikepath, a study of physical and environmental constraints, identifying and evaluating impacts such as wetlands, steep gradients and project costs. GPI prepared construction plans for the bikeway and roadway improvements, including profiles, cross-sections, details and specifications. The design of this project enhanced the recreational amenities offered by the municipality consistent with the planned growth for the community.

Client: Township of West Milford, Location: West Milford Township, NJ





Safe Routes to School Program - Improvements at 30 Intersections

GPI, doing business as Keller & Kirkpatrick, provided additional pedestrian, bike route and wayfinding signage for pedestrians, bicyclists and motorists. Walking and biking routes were identified with crosswalks and signage. Engineering and surveying services included upgrades to sidewalks and new curb ramps at over 30 intersections within one-quarter mile of the school. All work was completed in compliance with ADA, NJDOT and MUTCD design standards. *Client: Maplewood Township, Location: Maplewood, NJ*

GPI's Project Manager

Our proposed Project Manager, Bernie Boerchers, P.E., P.T.O.E., has over 32 years of experience in transportation planning and design in New Jersey. He has managed a wide variety of transportation projects through the local federal aid process including a previous SRTS NJDOT Local Aid On-Call Agreement and an on-call agreement with NJDOT Local Aid to provide design support and guidance in the development of a number of locally sponsored Transportation Enhancement (TE) projects. Many of the projects he has managed have included pedestrian and bicycle facilities and accommodations, ADA compliant sidewalks, ramps and signals, streetscaping, decorative street lighting, wayfinding signage, trail design, drainage improvements, traffic calming, connectivity and safety improvements.

As an extra level of quality and support, GPI's Dave Kuhn, P.E., will facilitate delivery of your project. Mr. Kuhn has 30 years of experience with NJDOT. During his tenure with NJDOT, Mr. Kuhn served as the Director of the Division of Local Aid as well as Assistant Commissioner for Planning and Grant Administration. His knowledge of the federal-aid delivery process is invaluable. He is well versed in the review and coordination of planning, design, and construction, including required federal documents, to ensure complete compliance with all applicable regulations.

Mr. Boerchers and Mr. Kuhn are successfully delivering several other design assistance projects.

Contact Dave Kuhn, P.E. <u>dkuhn@gpinet.com</u> 908.236.9001 Local Offices: Lebanon, Morris Plains, Red Bank, Oceanview, NJ Philadelphia, PA