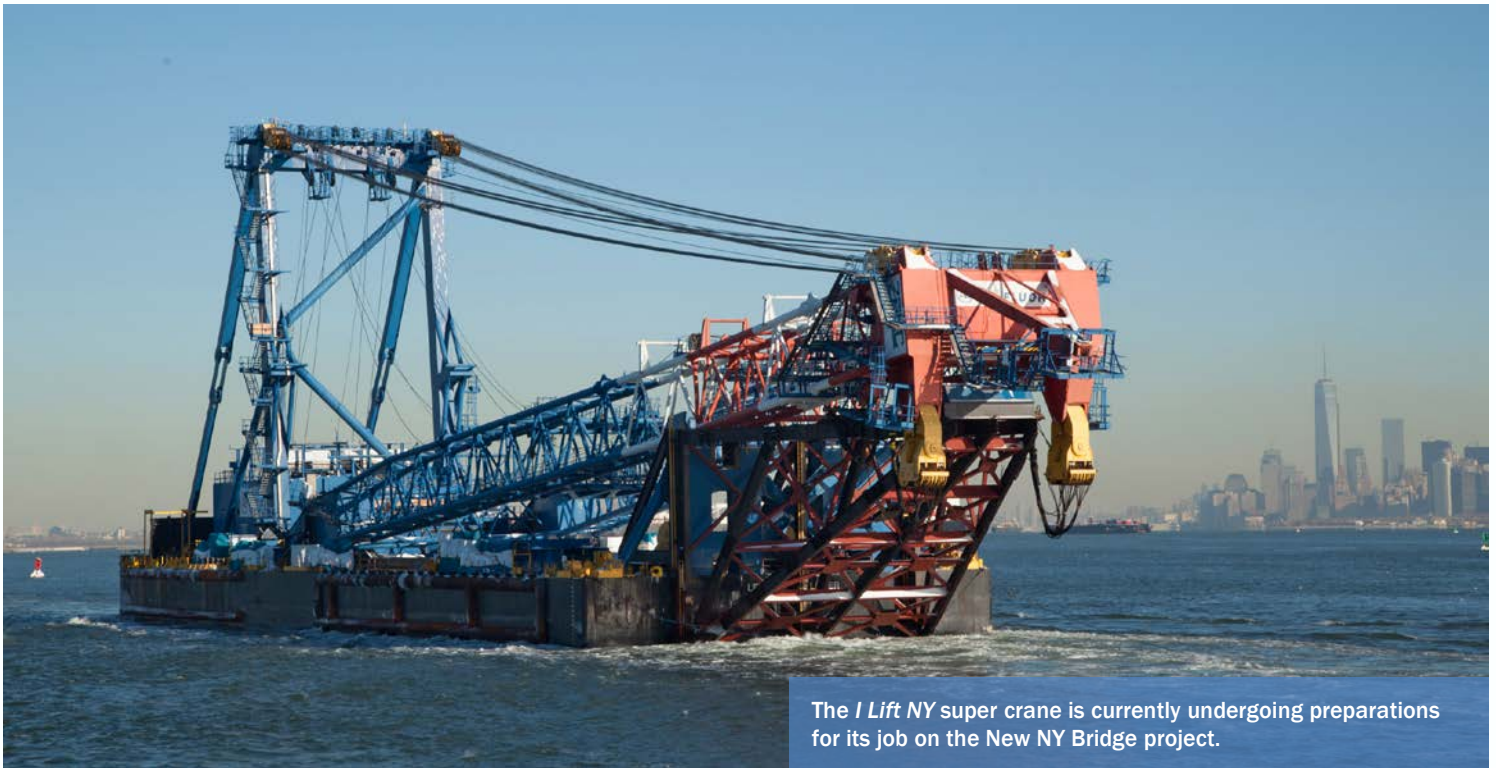


# Newsletter

APRIL 2014



The *I Lift NY* super crane is currently undergoing preparations for its job on the New NY Bridge project.

## Reving Up *I Lift NY*

### Preparing for Construction Work

THE NEW NY BRIDGE TEAM IS RAMPING UP construction as spring breathes new life into the project site. Tappan Zee Constructors, LLC (TZC) will double its work force in the coming months, with new hires and contractors already bustling over the thawed Hudson River. As pile driving continues on the river, dock builders, carpenters, welders, iron workers, mechanics and masons are preparing materials off-site.

All of these endeavors are in preparation for the team's biggest player, the *I Lift NY* super crane. When it arrives on the project site, the massive machine will

raise large sections of the bridge at once, saving the project team time and money.

*I Lift NY* is currently moored downriver in Jersey City, where the team is modifying the super crane for work on the New NY Bridge project. This process includes revving up the onboard systems and inspecting every inch of the machine to ensure *I Lift NY* will be in proper working order. Afterward, the machine will be rigorously tested for load capacity and safety before making its way up the Hudson River.

[Continued on Page 2]

### BY THE NUMBERS

**350**

Estimated team members currently on the project site

**3**

Generators keeping the *I Lift NY* super crane running during modification

**3,000**

feet of boom wire, weaved through the super crane

### IN THIS ISSUE

#### Bubble Curtains

**PAGE 3** Protecting Underwater Wildlife

#### Good Neighbor Policy

**PAGE 4** \$20 Million in Grants Available to Local Stakeholders

#### Falcon Webcam

**PAGE 6** Inside Look at Tappan Zee's Peregrine Falcon Nest



[Continued from Page 1]

The super crane is a complex piece of machinery with generators and mechanical systems that were carefully shrink-wrapped and covered with tarps to protect them from corrosive sea-water while in transit to New York Harbor. All non-essential systems were shut down on the vessel, while the rest were put into a special mode to conserve energy and preserve minimum electrical requirements. All systems will be restarted, warmed up and tested before they are ready to be used on the project.

The *I Lift NY* super crane arrived in New York harbor over the winter after a 6,000-mile journey from San Francisco. The mega-machine was specially modified to make the trip, as it was not originally designed to sail the open ocean, nor squeeze easily through the Panama Canal. Normally, large pontoons are used to keep the crane balanced as it lifts tons of

material for construction. However, these pontoons had to be removed in order to fit through the canal, and must now be reattached.

Even the crane's host vessel, an enormous barge, had to be modified to carry *I Lift NY* across the ocean. Wave guards were attached to ensure the vessel could withstand the unpredictable open seas, and a cradle was welded to the bow of the ship to support the crane's huge 300-foot boom. Both modifications will have to be carefully removed before the crane is put into working order.

On equipment as large as the super crane, even reweaving the boom wire can take weeks. TZC expects the crane to arrive on the project site as soon as June.

*I Lift NY* is registered as the Left Coast Lifter by the U.S. Coast Guard, and is owned by TZC.

**i** To learn more, visit [NewNYBridge.com](http://NewNYBridge.com)

## BOATER SAFETY UPDATE

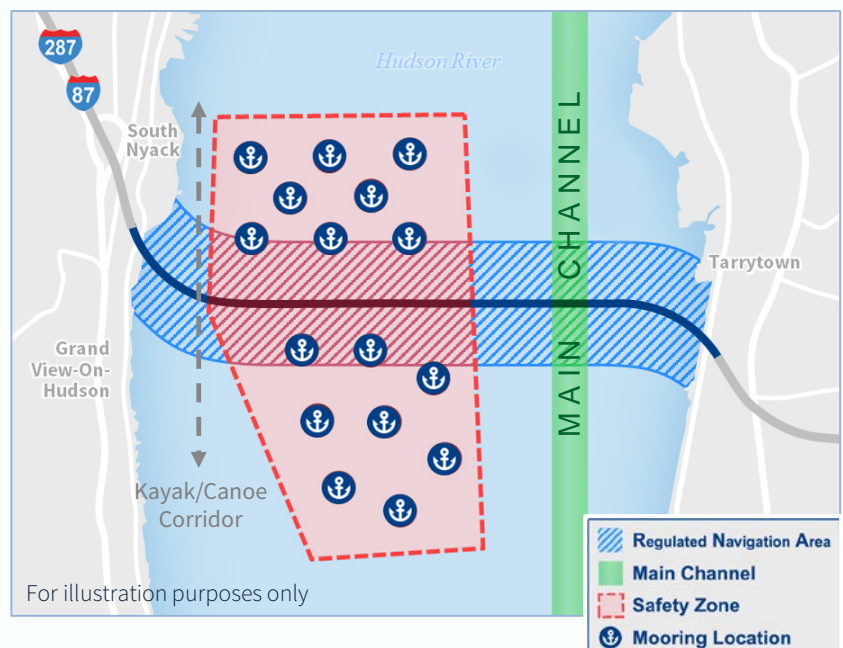
SAFETY IS THE NO. 1 PRIORITY ON THE NEW NY Bridge project, as Special Advisor to the Governor Brian Conybeare stressed to a packed crowd at the Washington Irving Boat Club on March 25.

The New York State Thruway Authority and Tappan Zee Constructors, LLC (TZC) continue to meet proactively with boating groups, the U.S. Coast Guard, marine law enforcement agencies and others to develop a comprehensive package of boater safety enhancements at the Hudson River worksite.

Starting this spring, TZC barges and other vessels on the site will be tracked by GPS technology, and boaters will be able to view vessel locations on [NewNYBridge.com](http://NewNYBridge.com), where they can also find U.S. Coast Guard Notice to Mariners safety information, maps and more. Some four dozen TZC vessels are currently on the Hudson River in the project area and as construction activity increases this summer, 100 or more vessels could be in the active work zone.

The GPS tracking system is currently being installed and tested and will include an electronic geo-fence that will instantly notify project officials if a vessel leaves the designated construction zone.

Boaters are advised to use extreme caution while navigating through the area. In March, the Coast Guard announced it will be extending its Regulated Navigation Area (RNA) around the project site to 500 yards north and 500 yards south of the existing bridge. The Coast Guard advises all boaters to utilize the main channel with no wake at a maximum speed of 5 knots in the RNA.



The RNA allows the Coast Guard to limit or prohibit marine traffic in certain areas when necessary. The Thruway Authority and TZC are also working with the U.S. Coast Guard to develop a Safety Zone surrounding 16 barge mooring locations at the site. In addition, buoys with lights are being installed to clearly

mark the Safety Zone and mooring locations on the water. Kayaks and canoes may utilize a 220-yard corridor west of the Safety Zone with extreme caution.

## Protecting Underwater Wildlife

### Bubble Curtains Reduce Underwater Pressure Waves

THE NEW NY BRIDGE WILL STAND ON MORE THAN 1,000 PIPE piles – enormous tubes of steel that provide the foundation to support the bridge. These piles are installed deep into the riverbed primarily using crane-suspended vibratory hammers, which tends to be among the louder operations on the project. While using noise shrouds reduces sound levels in the air, Tappan Zee Constructors, LLC (TZC) also developed additional techniques that specifically reduce underwater sound waves.

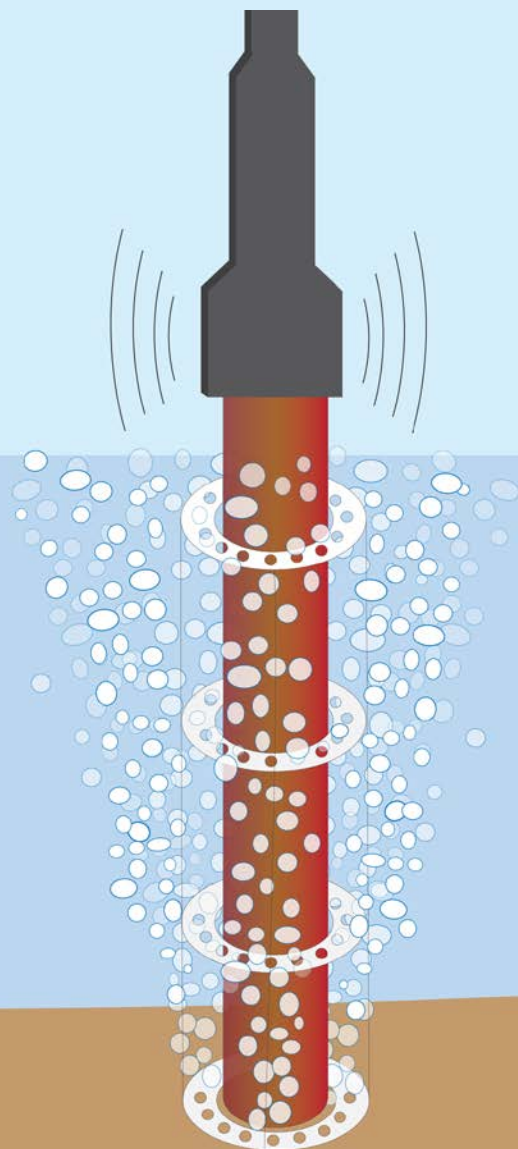
Sound waves cause pressure as they pass through water, and can confuse and even harm marine wildlife if left unimpeded. As these pressure waves pass by, they can rapidly compress and expand the air in a fish's swim bladder, causing potential damage to organs. Underwater sound pressure waves can also affect a fish's hearing, causing blood vessels to burst and in some cases lead to death. As a result, the New York State Department of Environmental Conservation and the National Marine Fisheries Service require that measures be taken to reduce these negative effects on Hudson River fish.

TZC's solution was to place a curtain of air bubbles around each pile as they are placed in the riverbed.

Bubble curtains are created using aluminum rings which slide over pilings like rings on a shower curtain rod. Pressurized air is then pumped through these rings, creating a continuous cloud of bubbles around the pile. These bubbles absorb the energy of the sound-pressure waves created when the pile is struck. The pressure waves subsequently change shape and have a lower decibel (sound) level. In addition to softening the impact of the underwater pressure waves, the air bubbles are thought to deter fish from swimming near the construction area.

Since bubble curtains are a relatively new technology, a series of tests was required to ensure maximum efficiency. The tides and river currents in the Hudson River near the Tappan Zee Bridge are strong enough to potentially disrupt the bubble curtain if sufficient air flow is not used. By stringing the aluminum rings closely along the pile length under water, engineers are able to maintain a thick and consistent froth of bubbles to quiet underwater noise and protect marine life.

As part of the project's environmental performance commitments, the bubble curtain system is required to reduce underwater noise by 10 decibels. In October, the New York State Thruway Authority proudly reported to state and federal environmental officials that the bubble curtains had surpassed those requirements. Thanks to the efforts of the project team, no sturgeon have been harmed as a result of construction activities on the New NY Bridge.



### How do bubble curtains work?

Bubble curtains are created around steel piles by pushing pressurized air through small openings in a series of aluminum rings. The result is a constant stream of bubbles that significantly dampen the sound-pressure waves to protect fish and other marine life.



## NNYB Team Takes “Good Neighbor Policy” to the Highest Level

### \$20 Million in Grants Available to Local Stakeholders



Installation of noise-reducing windows begins in Rockland County.

THE NEW NY BRIDGE PROJECT TEAM AIMS to serve the community, before, during and after construction. To see this through, the New York State Thruway Authority and design-builders Tappan Zee Constructors, LLC (TZC) have partnered to provide \$10 million each toward a unique Community Benefits Program (CBP).

The CBP will allow community and private organizations that are impacted by construction to apply for grant assistance. The Thruway Authority’s donation will be used for public grants and nonprofit organizations, while TZC’s will be applied to public, nonprofit and private organizations.

“At the request of Governor Cuomo, the Thruway Authority and TZC are going above and beyond what is typically done on major infrastructure projects to help residents and local communities near the construction site,” said Brian Conybeare, Special Advisor to the Governor for the project. “The \$20 million dollar Community Benefits Program is part of our good neighbor policy and the goal is to

improve the quality of life for people in Rockland and Westchester.”

The first grants were awarded late last month to The Quay of Tarrytown condominium complex, Salisbury Point Co-operative and Bradford Mews apartment complex in South Nyack. All were approved for funding to upgrade doors and windows with noise-reducing capabilities. The features are meant to reduce the noise caused by pile driving on the river during construction.

Since the program’s inception, more than 125 organizations have expressed an interest in the program, with requests totaling more than \$65 million.

**i** For more information on the Community Benefits Program, visit [NewNYBridge.com](http://NewNYBridge.com).

## COMPANY SPOTLIGHT: A. Estéban & Company, Inc.

A. ESTÉBAN & COMPANY, INC. IS A family owned business established in 1980. It specializes in digital graphics, color Xerox and high-quality printing services. More recently, it has expanded to provide online document management services, to help businesses track paperwork with greater ease. A local firm, it constantly strives to serve the community, and recently donated a printer to Campus Fun & Learn Child Development Center in Suffern. Dedicated to producing accurate distribution materials, the project team is proud to have A. Estéban & Company onboard the New NY Bridge project.



The A. Estéban & Company, Inc. team

## People Behind The New NY Bridge

### Thomas J. McGuinness, P.E.

*Construction Compliance Engineer, New York State Thruway Authority*

Tom McGuinness has been an integral member of the New NY Bridge team from the very beginning of the project, when he worked to develop the Environmental Impact Statement. Today, Tom serves as the project's construction compliance engineer and directs staff both on- and off-site to verify that all work meets the project requirements. McGuinness is also responsible for ensuring that construction of the new bridge works in coordination with ongoing Thruway operations. His experience and knowledge regarding state transportation standards, specifications and materials are invaluable assets to the New NY Bridge project.



## TZC Springs Forward With Approved DBE Plan

WITH CONSTRUCTION EFFORTS RAMPING UP ON the water, Tappan Zee Constructors, LLC (TZC) continues to hire companies, including disadvantaged business enterprises (DBEs) to help build the New NY Bridge project.

Potential DBE contractors are encouraged to attend TZC's monthly business orientation meetings, where they can meet with DBE program and procurement team members.

The monthly orientation is held on the second Wednesday of every month at 10 a.m. and is designed to help businesses understand how they can gain access to contract opportunities on the project. Interested businesses are encouraged to attend and can view the orientation presentation and regular procurement opportunity updates and DBE resources at [TappanZeeConstructors.com](http://TappanZeeConstructors.com)

### DBE PROGRAM UPDATE

As of March 31, 2014, 60 DBE firms have performed work on the project with a total subcontract value of \$49.7 million. There is a 10 percent federal DBE goal on the project, totaling \$314 million in opportunities to DBEs.

### TZC VENDOR DATABASE

TZC registered vendors interested in enhancing their business profile in the TZC Vendor Database can do so by submitting a completed TZC Vendor Questionnaire to [Procurement@TZC-LLC.com](mailto:Procurement@TZC-LLC.com). The questionnaire takes about 10 minutes to complete and will substantially increase your firm's visibility to the TZC procurement team. Tell us what you do and we will help connect you to related procurement opportunities. TZC will procure all project services and materials from registered vendors in the TZC Vendor Database.

### Upcoming Meetings

**Monthly Business Orientation**  
Wednesday, May 14, 2014  
10 a.m. – 11 a.m.

**TZC, LLC Design-Build Office**  
555 White Plains Rd., 4<sup>th</sup> Fl.  
Tarrytown, N.Y. 10591

DBE, local, and other businesses that attend the monthly orientation will hear from the TZC team about the following topics:

- TZC's Procurement Process
- How TZC Will Keep DBEs Informed
- Steps To Do Business With TZC
- Where To Get Assistance
- 90-Day Contract Look Ahead

To register for the event  
Email: [RSVP@TZC-LLC.com](mailto:RSVP@TZC-LLC.com)

## 90-Day Procurement Opportunities Look Ahead:

### SERVICES:

- ✓ Asphalt & Milling (Landings)
- ✓ Attenuator Installation
- ✓ Concrete Pumping
- ✓ Curb & Gutter (Westchester)
- ✓ Demolition
- ✓ Electrical Systems
- ✓ Formwork Installation
- ✓ Guardrail
- ✓ Mechanical Systems
- ✓ Movers
- ✓ Osterberg Test

- ✓ Radio Antenna Foundation
- ✓ Rail Road Shielding
- ✓ Rebar Installers (Rockland)
- ✓ Signage (Interior/Exterior)
- ✓ Soundwall Installation
- ✓ Temporary ORT
- ✓ Temporary Seeding

### MATERIALS:

- ✓ Main Span Bearings
- ✓ Anchor Pier Column Forms
- ✓ Backfill

- ✓ HS Bolts for Approach Spans
- ✓ Lock Up Devices
- ✓ Main Span Bearings
- ✓ Misc. Permanent Steel Fabrication
- ✓ Permanent Ladders, Platform & Catwalk System
- ✓ Pier Table Falsework
- ✓ Poly Inspection Platform System
- ✓ Precast Deck Panel PT System (Main Span)
- ✓ Pre Cast Drainage Structures and Systems
- ✓ Roadway Strut Falsework and Forms
- ✓ Stair Towers
- ✓ Stay Cable Inspection Platform System
- ✓ Touch Up Painting (Structural Steel)

## Bird's Eye View of the Hudson's Fastest Residents Coming Soon

### New Webcam Focused on Tappan Zee's Peregrine Falcon Nest

HUNDREDS OF FEET ABOVE THE HUDSON, a nest box installed in the steel super structure of the Tappan Zee Bridge provides a home for one of the fastest families on the Hudson River. This peregrine falcon nest box, maintained and monitored by the New York State Thruway Authority, will soon include a webcam accessible online. As construction ramps up this season, the project team is making plans to relocate the falcon nest box from its current location to a new perch high atop the towers of the New NY Bridge.

Thanks to the cooperative efforts of several organizations and many volunteers, nest boxes have helped foster the growth of the falcon population. The nest box on the Tappan Zee Bridge is just one of many installed on New York's skyscrapers and bridges.

These structures provide alternatives to the preferred nesting sites of peregrines, on the sides of cliffs with sheer drops. The bridge structures provide high vantage points for falcons to scour for and dive after prey with greater ease. During these dives, called stoops, peregrine falcons can reach speeds of more than 200 miles per hour, making them the fastest member of the animal kingdom.

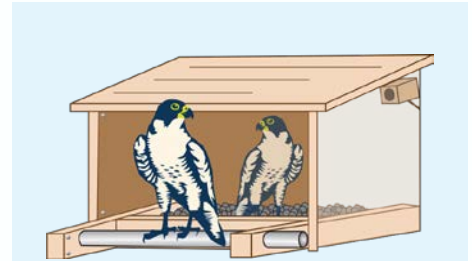
New York has been a leader in falcon conservation, hosting the highest concentration of the species in an urban environment. By installing nest boxes and introducing several falcons throughout the

city and tri-state area, their population has risen from a handful of pairs to several dozen.

Their residency has been mutually beneficial. The presence of a peregrine falcon pair on the current bridge deters other birds like seagulls, starlings, and pigeons, which they prey upon. This is especially important since pigeon droppings can deteriorate the structure and create a hazard for motorists. By maintaining a healthy number of falcons, the pigeon population is controlled for a more balanced ecology.

The New NY Bridge project is preserving this trend by making special accommodations for the falcons on the Tappan Zee. A 100-foot buffer area is in place around the existing nest box to help protect falcons during nesting season, which begins in February and ends in August. The nest box will continue to be monitored and maintained at its present location, allowing this pair to remain in the area until a new nest box is constructed in the towers of the New NY Bridge.

Starting in the late spring, you will be able to view the falcons from your computer, smartphone or tablet thanks to the installation of a new, non-invasive webcam. Located inside the nesting box, the webcam will provide a close-up view on the lives of these amazing creatures.



A pair of peregrine falcons reside in a man-made nest box like the one seen here, specially designed to suit their needs, courtesy of New York City Department of Environmental Protection and the New York State Thruway Authority.

The interior is filled with loose gravel, much like the loose rocks found on cliff sides. The edge of the box is higher than the interior as well, helping prevent eggs and chicks from falling out. A perch is placed at the entrance of the box to give the adult falcons a place to land. In addition, it allows them to watch the nest, and view the surrounding area for prey and potential danger.

Learn more at [NewNYBridge.com](http://NewNYBridge.com)

#### FALCON FACTS



- Known to reach speeds over 200 miles per hour in a controlled dive.
- Bony protrusions divert powerful airflow away from a falcon's nostrils, allowing them to breathe during dives.
- A third, translucent eyelid known as a "nictitating membrane" keeps their eyes moist and clear from debris while maintaining their vision.
- Falcon populations plummeted in the 1950s and '60s after the wide-spread use of an insecticide called DDT.
- The chemical's metabolite, DDE, caused bird eggshells to become thin and fragile, leading to frequent egg breakage and embryo deaths.



# Taking it to the Bank

New NY Bridge team supports local food bank



The New NY Bridge project team at the Food Bank for Westchester

THIS PAST WINTER, THE NEW YORK STATE Thruway Authority and Tappan Zee Constructors, LLC (TZC) gathered to donate non-perishable food items to Food Bank for Westchester in Elmsford. Committed to aiding the community throughout the year, project team members assembled once again to assist with food distribution.

To support the New NY Bridge holiday season drive, the team collected food items at

its New NY Bridge Outreach Centers and bridge project offices. Cash and gift cards to local grocers were also donated to support Food Bank for Westchester.


In early March, more than 6,000 pounds of non-perishable food items were packed and prepared for distribution to several centers, and team members look forward to participating again in the future.

TZC also plans to make monetary contributions to support Food Bank for Westchester as part of an ongoing partnership.

According to the U.S. Department of Agriculture's 2010 "Household Food Insecurity in the United States" report, 12.4 percent of New York residents are food insecure, meaning they lack consistent access to a nutritious, well-balanced diet. Food insecurity impacts many children, with one in four children at risk of hunger.

The Food Bank for Westchester estimates that 200,000 county residents are hungry or at risk of hunger. More than half of them are seniors and one-third are children under the age of 18.

The project team would like to thank everyone who donated and participated in its efforts to give back to the community.

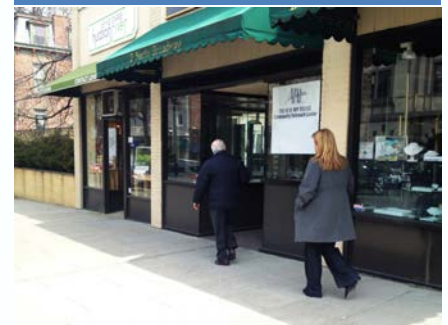
 Find out how you can help at [FoodBankForWestchester.org](http://FoodBankForWestchester.org)

## FAQ OF THE MONTH

### Q: How will construction noise impact those who live near the bridge?

**A:** The loudest construction activities, such as pile-driving and jackhammer usage, are limited to daytime hours (7 a.m. to 7 p.m.), are not allowed before 12 noon on Saturdays, and are prohibited entirely on Sundays. Also, 24-hour noise and vibration monitors post information to the project website, [NewNYBridge.com](http://NewNYBridge.com), and a 24-hour hotline (1-855-TZ-BRIDGE) is available. Contractors have one hour to stop work that creates noise exceeding established decibel limits, or the Thruway Authority project manager can shut down the operation.

## Westchester Outreach Center Moves Downtown



2 N. Broadway, Tarrytown, NY 10591

## HOW TO GET INVOLVED



Follow us on Twitter  
[@NewNYBridge](https://twitter.com/NewNYBridge)



Call the Project Hotline  
**1-855-TZBRIDGE (1-855-892-7434)**



Visit the Project Website  
[NewNYBridge.com](http://NewNYBridge.com)



Email Us  
[Info@NewNYBridge.com](mailto:Info@NewNYBridge.com)



Visit our Community Outreach Centers  
**2 N. Broadway, Tarrytown, NY 10591**  
**142 Main Street, Nyack, NY 10960**

Hours: Monday – Friday: 11 a.m. to 7 p.m.  
Saturday – Sunday: 11 a.m. to 4 p.m.