

THE NEW NY BRIDGE

SUMMER 2014



IN THIS ISSUE

4

Boater Safety:
GPS Tracking
Enhances Safety

5

Q&A: Visual Quality
Panel, Designing
Outdoor Amenities

8

Setting the Stage:
Preparing for Project
Construction Offsite





Andrew M. Cuomo
Governor of New York State

MESSAGE FROM THE GOVERNOR

It was a pleasure to welcome President Barack Obama to the New NY Bridge project site this month. President Obama witnessed the progress being made on the iconic twin-span replacement for the aging and outdated Tappan Zee Bridge. New York once again is demonstrating that we can make government work efficiently and effectively for the people of the state. The support of our federal partners has been instrumental in helping to move this project forward at an extraordinary pace.

Another major step in this progress is the state's investment in new transportation opportunities. The 2014-2015 state budget designates \$20 million to support the implementation of recommendations by the New NY Bridge Mass Transit Task Force (MTTF), a group made up of local and state officials and transportation experts, professional planners, transit advocates and other regional stakeholders.

The recommendations include a range of improvements to support a bus rapid transit (BRT) system between Rockland and Westchester counties that will increase transit ridership by 10,150 people per day in the region and cut commuter travel times by 20 to 25 percent.

Additionally, the state has applied for a \$26.7 million Transportation Investment

Generating Economic Recovery (TIGER) matching grant through the U.S. Department of Transportation to provide additional support for the BRT system and other MTTF recommendations.

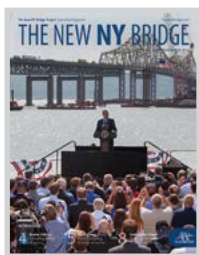
Riders will enjoy a new, clearly branded BRT system with high-quality transit stations with passenger amenities such as seating, real-time bus arrival information, and Wi-Fi at stations and on board. Targeting major residential, commercial and employment corridors, the system will be used for travel between or within Rockland and Westchester counties, and into New York City through connections to Metro North rail service and local buses.

These innovative mass transit investments in Westchester and Rockland counties will make the New NY Bridge an even greater asset for commuters in the region. We have advanced this project with an unprecedented level of community involvement, and I commend the MTTF members for recommending practical improvements to local transit options as we continue to build the new bridge that is so vital to our state's infrastructure and economy. ■

Andrew M. Cuomo
Governor of New York State

FEEDBACK

We want to hear from you. Share your thoughts on the project and more by emailing us at Info@NewNYBridge.com



ON THE COVER

President Obama visited the project site this May.



Andrew M. Cuomo
Governor



New York State
Thruway Authority



New York State
Department of
Transportation



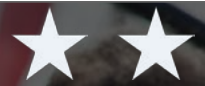
Federal Highway
Administration

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Andrew M. Cuomo, Governor of New York State
Howard P. Milstein, Chairman, New York State Thruway Authority
Thomas J. Madison, Jr., Executive Director, New York State Thruway Authority



PRESIDENT OBAMA SPEAKS ON REBUILDING AMERICA

To highlight the extraordinary progress being made on the New NY Bridge project, Governor Andrew M. Cuomo welcomed the President of the United States to Tarrytown on May 14.

Standing at the foot of the Tappan Zee Bridge, President Barack Obama thanked Governor Cuomo for his leadership and ability to move the \$3.9 billion project from dysfunction to construction. The President pointed to the expedited environmental review process that helped get the project moving after more than a decade of discussion and delay.

"Now, here's the thing – this never happens – you are building this bridge ahead of schedule," said President Obama. "We don't need a 'can't do' spirit; we need a 'can do' spirit. That's what Governor Cuomo has."

The President used the New NY Bridge project as an example of how major infrastructure initiatives around the nation can and should be operating. He also announced plans to get more projects into an expanded federal "fast-track" review system and urged congress to approve his \$302 billion GROW America Act to finance vital surface transportation plans nationwide.

**"I want us to be
first when it comes
to infrastructure
around the world."**

Governor Cuomo in his remarks highlighted the major accomplishments made on the project and thanked President Obama for fast tracking a record-setting \$1.6 billion TIFIA (Transportation Infrastructure Finance and Innovation Act) loan from the U.S. Department of Transportation to help pay for the state-of-the-art transit-ready replacement for the Tappan Zee.

"Mr. President, to New York this is not just a bridge from Rockland to Westchester," said the Governor. "It is a bridge from what was to what can be – from gridlock to bipartisanship; from paralysis to progress; from yesterday to tomorrow." ■



Governor Cuomo and the President spoke at Sunset Cove in Tarrytown, overlooking the New NY Bridge construction site.



Chris Horton, operating engineer for Tappan Zee Constructors, LLC, shaking hands with Governor Cuomo.

BOATER SAFETY UPDATE

SAFETY ENHANCEMENTS

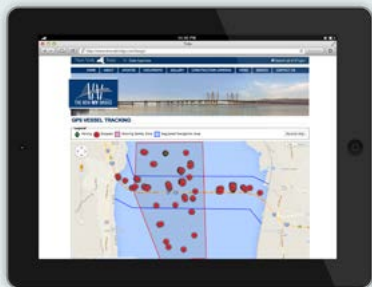
1. Extending the Regulated Navigation Area (RNA)
2. All boaters to transit RNA with no wake at 5 knots maximum
3. Establishing a Safety Zone, no vessels allowed
4. Installing buoys with lights at Safety Zone and moorings
5. Enhanced marine law enforcement patrols
6. GPS tracking for TZC's vessels and barges

WHAT IS GPS?



GPS stands for Global Positioning System, a satellite-based navigation system that provides precise time and location information to anyone with a GPS receiver. It works in all weather conditions, anywhere on Earth, as long as there is a clear line of sight to the GPS satellites orbiting the planet.

STAY INFORMED



Scan QR Code or visit link below to access more boater safety information, including the GPS tracking map and the U.S. Coast Guard Notice to Mariners.



[NewNYBridge.com/
Documents/Boat-Safety](http://NewNYBridge.com/Documents/Boat-Safety)

GPS Tracking Enhances Safety

The safety of recreational and commercial boaters in the vicinity of the New NY Bridge work zone remains a top concern for the project team. Regular meetings with the Thruway Authority, Tappan Zee Constructors, LLC, the US Coast Guard, boating groups, local marine law enforcement agencies and other stakeholders have helped inform and enhance boater safety measures.

The latest improvement involves the use of GPS technology to track TZC construction vessels onsite.

“With these new enhancements being put in place, boaters will be better protected, as will the construction crews working on the New NY Bridge,” Governor Andrew M. Cuomo said. “Every precaution we take on this active work zone now will not only help keep people safe, but will also keep the project on schedule and ultimately provide drivers with a less-congested commute and a safer bridge to get where they need to go.”

Currently, over 90 Tappan Zee Constructors vessels – including crew boats, tug boats, barge mounted cranes and barges – are in the area of the existing Tappan Zee Bridge. At the peak of activity, this number could increase to 130 or more. GPS trackers enable boaters to monitor the location and movement of each vessel in this very active work zone.

Recreational and commercial boaters can now access GPS information on an interactive map at NewNYBridge.com. The GPS tracking

map is for informational purposes and not intended for navigation.

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 transit the main channel with no wake at a maximum speed of 5 knots in the RNA and no vessels may stop, moor, anchor or loiter in the area. Additional safety signage has been installed to alert boaters of the RNA.

The RNA allows the Coast Guard to limit or prohibit marine traffic in certain areas when necessary. The Coast Guard is also considering a new Safety Zone surrounding 16 barge mooring locations at the site. In addition, buoys with lights are being installed to mark the Safety Zone and mooring locations on the water.

Other boater safety enhancements include enhanced marine law enforcement patrols, 24-hour TZC safety/security patrols, a new thermal imaging security camera system monitoring the work zone, additional deckhands and training as well as new mooring line inspection protocols.

You can find more New NY Bridge boater safety information, including the GPS tracking map and the U.S. Coast Guard Notice to Mariners at NewNYBridge.com. ■

Q&A VISUAL QUALITY PANEL

Designing Outdoor Amenities

When it came to designing the New NY Bridge, Governor Andrew M. Cuomo insisted that the local community have a voice. As a result, a visual quality panel, or VQP, was formed, comprised primarily of Rockland and Westchester residents involved in the arts, architecture, planning and historic preservation. The project team is consulting with the VQP on the aesthetic features of the bridge, including the shared-use path and belvederes. Led by Brian Conybeare, special advisor to Governor Cuomo, the group developed unique and thoughtful amenities for the New NY Bridge.

Project team members Heather Sporn and Ezra Groskin were integral in the development of the shared-use path and belvedere designs. We asked them to share some insight on the design process for these New NY Bridge features.



ASK A VQP MANAGER

Heather Sporn

THRUWAY VISUAL QUALITY MANAGER
New York State Department of Transportation



ASK A BRIDGE ARCHITECT

Ezra Groskin

BRIDGE ARCHITECTURAL DESIGNER
Wilkinson Eyre Architects

Q What is the New NY Bridge team doing that will make the shared use-path, the bridge's bikeway/walkway, unique and exciting?

Our goal was to combine functionality with park-like elements. To that end, the shared-use path will feature six belvederes, or overlooks. Each belvedere will feature its own distinct seating, interpretive elements, shade structure and comfort barrier. In addition, the shared-use path will serve as an exciting destination, allowing people to walk and bike between Rockland and Westchester for the first time while taking in spectacular views.

Q How will the design reflect the rich history and culture of the adjacent communities?

In collaboration with the community-based VQP, distinct themes were identified for each of the belvederes. For example, the “Fish and Ships” belvedere celebrates the fishing and boat-building history of the Nyacks and “Tides of Tarrytown” reflects the history of Tarrytown, including the writings of Washington Irving. While each belvedere will be unique, the overall design will maintain a unified and consistent aesthetic that matches that of the bridge and reflects local culture and history.

Q What influence did the Hudson River have on the design of the belvederes?

The layout of each belvedere responds to its specific location within the river valley. The user experience is further enhanced in certain locations through the use of ‘prows’ or extensions, which allow visitors to feel more in touch with the surrounding environment. The history of the area will be reflected in the interpretive signage, comfort screens, seating and canopy design. The goal is to provide a high degree of variation within a consistent design vocabulary.

Q How have you anticipated people using the facilities and how is that reflected in your design decisions?

The entire pedestrian realm, both on and off the bridge, will cater to a range of users. There will be seating for one or two, as well as flexible spaces suited to larger groups. Belvederes closest to land will receive the most pedestrian traffic, while those mid-river may receive more cyclist traffic. For this reason the amount of seating and cycle parking will vary accordingly. The facilities must also function throughout the year, providing shade in the summer and wind shelter in the colder months.

LEARN **MORE ON THE**
NEXT PAGE



[OUTDOOR] rooms with a view

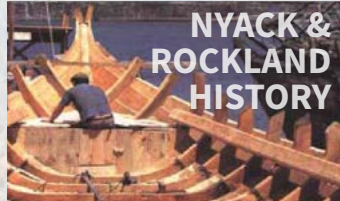
The New NY Bridge's shared-use path will give visitors the opportunity to cross the span on foot or by bike. Six overlooks – or belvederes – will project out over the river, providing a place to rest and take in the spectacular views of the majestic Hudson Valley. Each belvedere features a unique theme, custom-designed seating, a shade structure, a comfort barrier and interpretive panels. The belvedere closest to the Rochland shoreline, for example, is themed "Fish & Ships".

FISH & SHIPS

The Nyack villages derive their name from the native Algonquin term "Nay-ack", meaning fishing place. Using this as inspiration, bridge architects designed the belvedere featured on the right, called "Fish & Ships". The images below reflect the borrowed elements from the rich history of the Nyacks. For example, the playful sculptural benches are influenced by a school of fish and the shade structure resembles the ribs of a ship's hull or a fish's skeleton.



"FISHING PLACE"



NYACK & ROCKLAND HISTORY

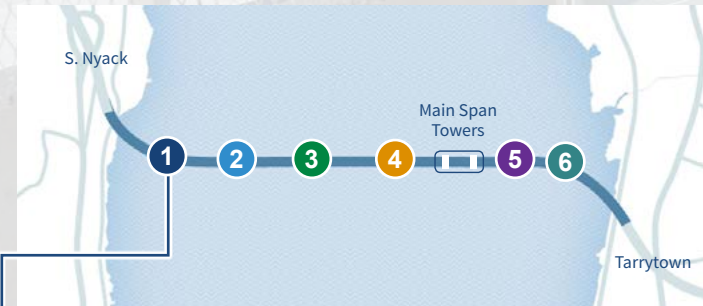


NYACK SHIP BUILDING HERITAGE



MARINE ENVIRONMENT

BELVEDERE LOCATIONS



FISH & SHIPS

is just one of six belvederes, each with its own theme. They are located in the following order, from Rockland to Westchester, along the northern span of the New NY Bridge.



2 PALISADES



3 PAINTERS POINT



4 RIVER CROSSING



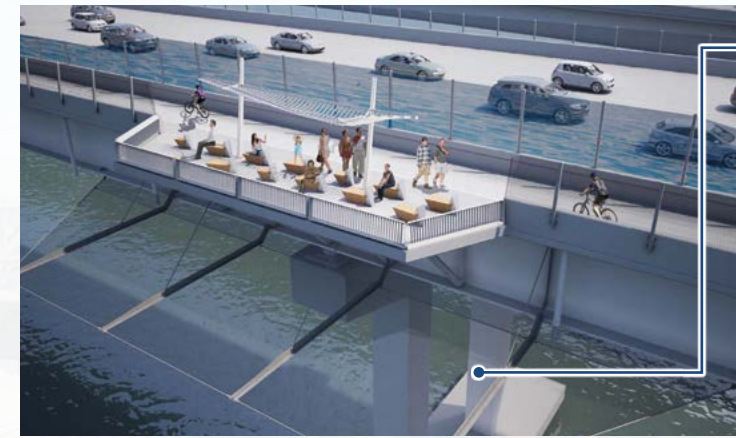
5 HALF MOON



6 TIDES OF TARRYTOWN



1 FISH & SHIPS



STEEL MESH SAFETY NETTING

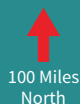
Stainless steel netting will be installed beneath each belvedere, below eye level. Safety measures such as these nets are intended to act as deterrents and save lives.



For a closer, high-quality look at each belvedere and its individual features, scan the QR code above, or visit NewNYBridge.com

SETTING THE STAGE

Building a 3.1-mile-long bridge requires a tremendous amount of material and preparation. While some construction efforts take place directly on the New NY Bridge project site, others require a large amount of space to accomplish. As a result, Tappan Zee Constructors, LLC (TZC) utilizes a number of staging areas, positioned up and down the Hudson River, to prepare, store and fabricate a number of crucial bridge components.



PORT OF COEYMANS *Albany County, N.Y.*

Structural steel for the project's enormous steel girders is preassembled at this site. Once fabricated, these two- to three-span girder sections will be sent downriver to be used in the bridge's superstructure, with a little help from the *I Lift NY* super crane.

TOMKINS COVE *Stony Point, N.Y.*

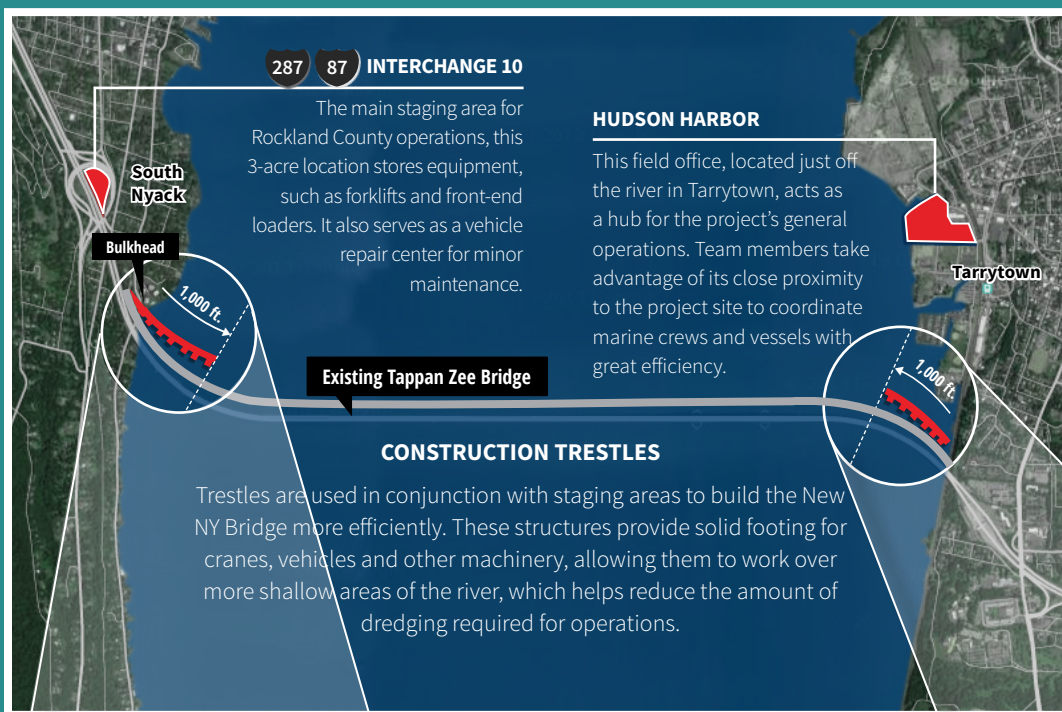
Formwork assembly for the concrete columns on the New NY Bridge takes place here. This is also where rebar (reinforced steel bar) is assembled for piles and pile caps, serving as key aspects of the bridge's **modular construction** process.



NEW NY BRIDGE Project Site

Modular Construction

is a method in which various sections of a structure are assembled in remote facilities, then delivered to a worksite for use. Using large cranes, such as *I Lift NY*, these modules are set into place and joined together to form a single structure. This method allows workers to perform more operations on the ground, rather than high above the river.



287 87 INTERCHANGE 10

The main staging area for Rockland County operations, this 3-acre location stores equipment, such as forklifts and front-end loaders. It also serves as a vehicle repair center for minor maintenance.

HUDSON HARBOR

This field office, located just off the river in Tarrytown, acts as a hub for the project's general operations. Team members take advantage of its close proximity to the project site to coordinate marine crews and vessels with great efficiency.

Existing Tappan Zee Bridge

CONSTRUCTION TRESTLES

Trestles are used in conjunction with staging areas to build the New NY Bridge more efficiently. These structures provide solid footing for cranes, vehicles and other machinery, allowing them to work over more shallow areas of the river, which helps reduce the amount of dredging required for operations.

GERDAU AMERISTEEL *Perth Amboy, N.J.*

Here, reinforcing steel bar or rebar is fabricated and then shipped to Tomkins Cove for pre-assembly for use in concrete columns and piles. In the future, additional rebar will also be shipped directly to the new bridge's piers.

ROCKLAND TRESTLE

Supported by the Rockland bulkhead, a portion of this trestle will ultimately serve as a maintenance facility to support the day-to-day operations of the New NY Bridge.





**PETERSON BOAT
YARD & MARINA**
Nyack, N.Y.

Hosts numerous
project vessels
during construction
operations.



TEAM HEADQUARTERS
Tarrytown, N.Y.

Team HQ is located
just off the Thruway,
minutes away from the
project site. Here, bridge
team representatives
work together to plan
and organize the New
NY Bridge project.

JERSEY CITY FACILITY
Jersey City, N.J.

Heavy marine
equipment is prepared
and maintained here.
This includes the *I Lift*
NY super crane, which is
currently being modified
for the project.

**WESTCHESTER
TRESTLE**

This temporary
work platform will
be removed once
construction of
the new bridge is
complete.

PRESERVING FRESHWATER SPECIES STURGEON TAGGED & MONITORED

Among the oldest fish in the world, the sturgeon is a prehistoric wonder that traversed the Hudson River long before any human. However, pollution and overfishing have led to shortnose and Atlantic sturgeon becoming identified as endangered and threatened species. Now, the New York State Thruway Authority is taking steps to minimize any impact to these species during the construction of the New NY Bridge.

ENVIRONMENTAL ACTION

Through the Endangered and Threatened Species Mitigation Plan, the Thruway Authority will study and monitor these creatures, their habitats and foraging habits. Thruway will also develop and implement an outreach program to reduce the impact of commercial fishing on the sturgeon.

Sturgeon were studied prior to construction efforts, which resulted in strict environmental performance commitments for the project team. Underwater sound produced during pile driving is being reduced through a

bubble curtain system. In addition, dredging is restricted to a specific window of time to avoid sturgeon spawning and migration patterns.

CURRENT EFFORTS

Biologists began tagging and monitoring these fish with state-of-the-art technology in late April. The tagged sturgeon are tracked via an array of acoustic telemetry receivers. These receivers are positioned up and down the river, from Haverstraw to the George Washington Bridge.

Additionally, the project team installed an array of 28 receivers in the construction zone. Acoustically tagged sturgeon will continue to be monitored throughout pile driving and dredging to better understand their habits in the Hudson. As tagging operations continue, the team will provide the information to scientists to supplement their research.

Ultimately, the team's efforts to learn more about sturgeon will inform other construction projects in the years to come. ■

STURGEON QUICK FACTS



Living Fossil

To many, a sturgeon looks more like a dinosaur than a modern fish at first glance. With large bony plates in place of scales and a vacuum-cleaner-like mouth, its unique appearance only adds to its mystique as ancient members of the animal kingdom.



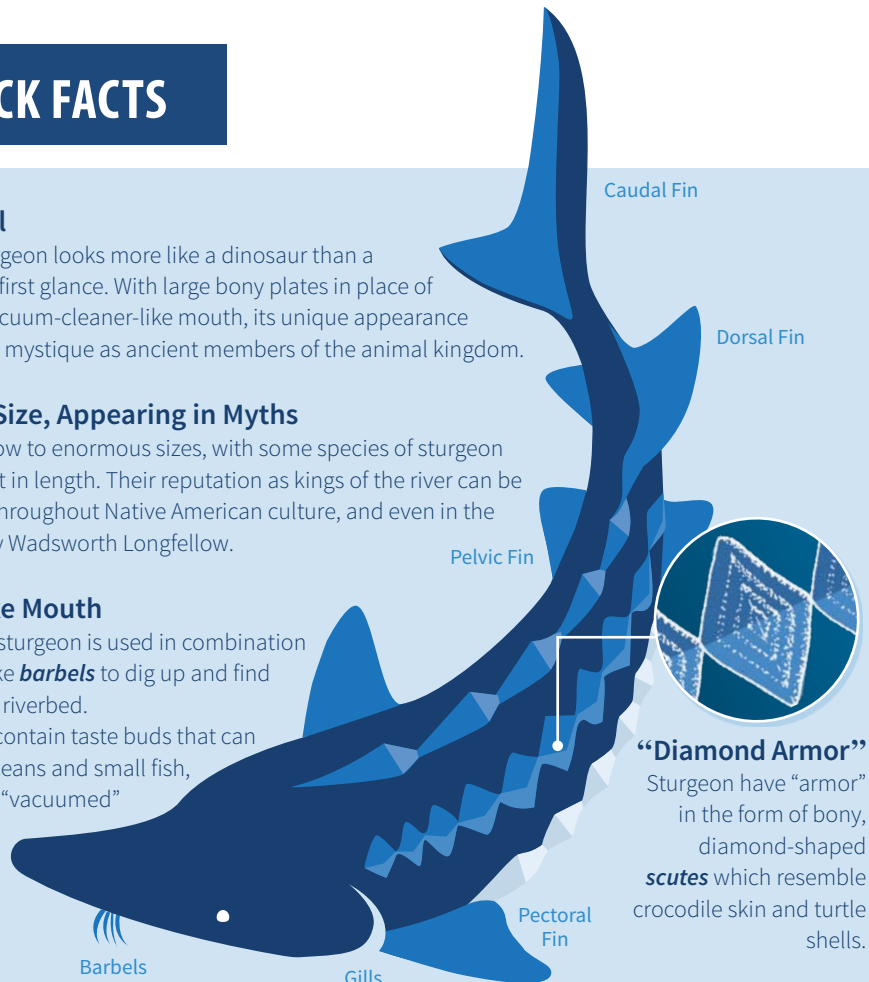
Legendary Size, Appearing in Myths

The fish can grow to enormous sizes, with some species of sturgeon reaching 20 feet in length. Their reputation as kings of the river can be found in tales throughout Native American culture, and even in the poetry of Henry Wadsworth Longfellow.



Vacuum-Like Mouth

The **snout** of a sturgeon is used in combination with whisker-like **barbels** to dig up and find food in the soft riverbed. These barbels contain taste buds that can identify crustaceans and small fish, which are then "vacuumed" up in their suction-like mouths.



"Diamond Armor"

Sturgeon have "armor" in the form of bony, diamond-shaped **scutes** which resemble crocodile skin and turtle shells.

One Project, One Team

Design-Build Delivery Streamlines the New NY Bridge Project

After more than a decade of deliberation and delay, the New NY Bridge project is moving forward on a fast track, thanks to the leadership of Governor Andrew Cuomo. The New NY Bridge is the largest highway bridge project in state history, and the first major design-build project since the Governor signed 2011 legislation to allow design-build in New York.

WHAT IS DESIGN-BUILD?

Design-build is a method of project delivery in which designers, engineers and builders come together as a single entity to deliver a project for fixed price on a rigid schedule. The design-build method helps keep a project on time while shifting significant project risks like cost overruns and time delays from the owner to the design-builders.

The New NY Bridge will be completed under a single design-build best-value contract with Tappan Zee Constructors, LLC (TZC), a group of industry-leading design, engineering, and construction firms with extensive experience in bridge building and design-build delivery throughout the world. TZC includes Fluor, American Bridge, Granite, and Traylor Bros., along with lead design firm HDR and engineering support from Buckland & Taylor, URS, and GZA.

THE PROCESS

The New NY Bridge project was awarded after an innovative procurement process that emphasized best value over low bid, a key advantage of design-build. The project contract was then developed in concert with TZC based on its proposed design and construction methods and timeframes, along with detailed performance and design criteria and specifications prepared by the Thruway Authority. These criteria and specifications cover every detail, from major elements such as foundation strength and deck capacity to details such as permissible lane closures during

construction – and they allow for maximum private sector innovation on the project.

Another feature of design-build is that construction activities typically commence even before all design details are finalized. For example, foundation elements of the New NY Bridge are currently being installed while other features, including the shared-use path and scenic overlook belvederes, are still being finalized.

WORKING SIDE BY SIDE

A vitally important aspect of design-build is the need for owners and project delivery teams to work closely together toward the common goal of finishing projects on time and on budget. The Thruway Authority and TZC recognized the importance of effective partnering from the start, and continue to work together throughout every day in co-located project offices to share advice, solve problems in real time and keep the New NY Bridge project moving forward.

THE BOTTOM LINE

Being able to utilize design-build for this landmark mega-project allows the Thruway Authority to streamline design and construction, avert potential crises, and save money. Design-build is a powerful tool that is making the New NY Bridge a model for delivering major transportation infrastructure projects in the 21st century. ■



The design-build method integrates and overlaps the design and construction processes. This adds up to an expedited project schedule, and ultimately, a lower production cost for the state of New York.

NEW TEAM MEMBER

COLETTE MCCREADY is a dock builder, currently working on the Rockland trestle on the New NY Bridge project. Starting as a fourth-year apprentice, she gained the experience and skills required to complete her training, and became the first female journeyman on the project site. Like other journeymen, she works full-time and is well-trained in working with wood and steel to build sturdy structures on the water. A local resident, Colette is well respected by her co-workers on Crew 32 and the project team is proud to have her as a fellow member. ■



Colette McCready

OUR COMMUNITY TIMELINE

The New NY Bridge project team continues to be actively involved in the community, partnering with local groups, leading educational outreach and sharing the latest project updates through many avenues.



BUILDING A LEGO NEW NY BRIDGE

Partnering with the White Plains Public Library and its weekly LEGO club, the project team helped design a scale replica of the New NY Bridge. Local children built the LEGO model over the course of February, learning about real-world engineering in a creative and fun way.

VISUAL QUALITY PANEL REVEALS BELVEDERE DESIGNS

Composed of local experts, planning officials and cultural representatives, the visual quality panel (VQP) helped the New NY Bridge project team develop six unique and thoughtful belvedere design concepts to be built along the proposed shared-use path on the new bridge.

Turn to [page 6](#) for a look at the design concepts ➤



NEW NY BRIDGE 2014 ANNUAL PUBLIC MEETINGS

Held in both Westchester and Rockland counties on March 26 and 27, the annual public meetings gave the New NY Bridge project team the opportunity to share construction progress with the local community. Event attendees were able to interact and participate in question and answer sessions with a panel of project experts.

LOWER HUDSON VALLEY ENGINEERING EXPO

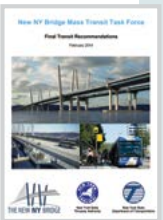


The project team sponsored and attended White Plains High School's annual Engineering Expo on March 30, promoting career opportunities in the field and engaging attendees to explain the design-build project. Over 40 representatives from the region's leading colleges and businesses gave hundreds of prospective college students the chance to learn more about careers and college admission opportunities.

PROPOSAL FROM MASS TRANSIT TASK FORCE

The 31-member task force, assembled by Governor Andrew M. Cuomo, released its mass transit proposal for the New NY Bridge on February 20. The task force's proposed bus rapid transit system could serve as many as 10,150 additional riders per day.

Read Report: NewNYBridgeGallery.com/updates/MTTF-Report



FOOD BANK FOR WESTCHESTER

Project team members helped with food distribution efforts at Food Bank for Westchester, in Elmsford on March 6. Non-perishable food items were packed and prepared for several food distribution centers. Tappan Zee Constructors, LLC plans to make monetary contributions to support the local nonprofit in the future.

BOATER SAFETY MEETING

New NY Bridge project team leaders met with the Hudson River Boat & Yacht Club in Tarrytown on March 25 to discuss boater safety and U.S. Coast Guard regulations. Mariners were informed about enhanced measures, including the extended Regulated Navigation Area (RNA) and proposed Safety Zone around the project site.

CONSTRUCTION CAREER DAY

The team participated in Rockland Community College's Construction Career Day on March 28, which provided an opportunity for students to learn more about construction through interactive exhibits. Brick laying, welding, and even crane operating were simulated for students to discover the intricacies of skilled labor.



NEW TAPPAN ZEE CONSTRUCTORS WEBSITE LAUNCHED

Project design-builder Tappan Zee Constructors, LLC has launched a brand new website with a number of new features for the public. One notable addition is a regularly updated list of upcoming procurement opportunities for subcontractors and certified Disadvantaged Business Enterprise (DBE) companies.

To explore the site, visit

TappanZeeConstructors.com ➤





@NEWNYBRIDGE

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GET UPDATES BY EMAIL

Prefer to receive project information in your email inbox? Visit NewNYBridge.com to subscribe for periodic email updates.



NEWNYBRIDGE.COM

The project website provides detailed information about the design and construction of the New NY Bridge. Check back often to see the latest project progress.



1-855-TZBRIDGE

Our phone hotline is open 24 hours a day, 7 days a week, ready for your questions and comments. You can reach us at 1-855-TZBridge (1-855-892-7434).