

- 2nd Annual STEM Day
- Research Project Engages 5th Graders
- Distance Learning Opportunities



## Proposition Would Address Critical Infrastructure Needs

Community members will vote on a proposition as part of the May 20 budget vote that would allow the district to address three critical school infrastructure issues over the summer.

Plans to replace two 59-year-old water main pipes in the High School, connect the school to village water and resurface part of the Middle School roof was originally part of a larger Capital Project.

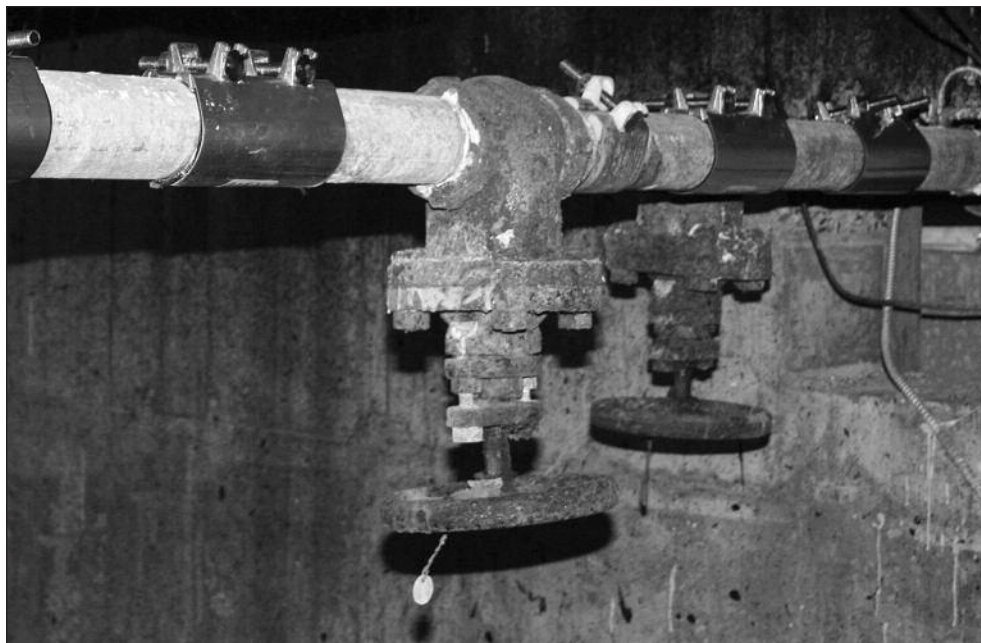
The Board of Education, however, decided in January to postpone a Capital Project vote until October to provide additional time to plan a more thorough project while placing the three most critical infrastructure issues on the May 20 budget vote.

“If the proposition is approved, we could take care of these three issues over the summer and get 76.6% state aid on the project,” said Superintendent Bob Horan. “The rest of the Capital Project would be put to a separate vote in October. That will provide us more time to plan a thoughtful project and share our plan for the future of Schodack schools with our community.”

The maximum total cost of the three projects on the May 20 proposition would be \$1.25 million. However, the district would be reimbursed by the state for approximately 76.6 percent of the project cost.

### Replacing Water Mains in High School

The most critical infrastructure project involves replacing water mains in the High School that date back to the school’s construction in 1955. The two, 4-inch galvanized pipes supply hot and cold water to the building but have been patched numerous times over the years.



*A water main in the High School basement that has been patched numerous times. The pipe would be replaced if a proposition is approved.*

“These are the main arteries of our school,” explained Superintendent of Buildings and Grounds Matt LaClair. “If one of those pipes burst, it could not only flood our basement but we would be required to close school until we could repair it.”

The project would cost approximately \$855,300. A large portion of that cost is for asbestos abatement.

“The asbestos is on the outside of the pipes which are located in a crawlspace where no students or staff can enter,” said Mr. LaClair. “They pose no risk now but we would like to take this opportunity to have the asbestos removed from the building.”

### Connecting High School to Village Water

Maple Hill High School is the only school building not currently on village water. Instead, the school uses well water, which requires daily testing totaling about \$3,000 a year.

A recent agreement between the village and town allows the village’s water system to have the capacity to provide water to the High School. The school would connect to the village system through a pipe on Maple Hill Road in front of the school, at an estimated cost of \$77,200.

“The district has wanted to connect to village water for some time and now the village has the capacity,” said Mr. LaClair.

### Resurfacing Middle School Roof

To ensure the entire Middle School roof is under warranty and to protect the building, a portion of the roof would be resurfaced over the summer at an approximate cost of \$317,500.

“It’s kind of like seal coating your driveway,” said Mr. LaClair. “A protective layer would be sprayed on the roof. We would not have to rip up the roof.”

Mr. Horan explained the district would like to resurface the roof now before grades 6-8 are moved to the Elementary and High School for 2016-17. With students still in the building, the district will receive the 76.6% state aid reimbursement for the project.

“We’ll have students in that building for another two years,” said Mr. Horan. “The district is also committed to repurposing the building for community, business and other uses so we need to take care of it. It’s a great building and we need to ensure it doesn’t become an eyesore.”

# STEM Day Offers Students Hands-On Learning

Students in grades 4-8 had fun while learning about Science, Technology, Engineering and Math as Maple Hill Middle School held its 2nd Annual STEM Day on Feb. 27.

The event provides opportunities for students to explore STEM through a day of hands-on, small group activities while working closely with faculty, staff, students and business owners.



“These are activities that really teach students how to think, how to problem solve,” said Principal James Derby. “Some of the best moments of STEM Day was seeing students think and trying to figure it out. That’s how we learn the best.”

Students in one classroom learned about material sciences from Rensselaer Polytechnic Institute students like junior Konanen Bay, who had students standing in awe as they created long, hair-width strands from melted hard candy. “The melted Jolly Ranchers act like polymers so we’re showing students how fiber optics are created,” Ms. Bay explained.

In another classroom, Beth Chittenden from Dutch Hollow Farms taught students how science and technology are used in agriculture. “Farmers make up only 2% of our population. But one farmer feeds 154 people,” Mrs. Chittenden told students. “The United States is the biggest producer of food in the world. We have five farms here in Schodack.”

Other activities included using catapults to launch mini marshmallows while recording results, engineering bridges from dried pasta then testing their strength, and learning from a curator at the Smithsonian American Art Museum in Washington D.C. in the school’s Distance Learning classroom.

In addition to the STEM activities, Castleton Elementary School students also had the opportunity to become familiar with the Middle School building and its faculty, staff and administrators.

“A lot of our focus is getting students prepared for colleges and careers,” said Mr. Derby. “This helps them think about what they might possibly do in high school, college and careers.”

## WRAPS Program Enhances Learning

From STEM Day to reading programs to initiatives to ease the transition for 6th graders, Maple Hill Middle School’s WRAPS program continues to provide students opportunities at little cost to the district.

Funded by a three-year, \$600,000 state grant, the WRAPS program is currently in its second year. Schodack CSD was awarded the grant in 2011 after it was one of only a few districts in the region to apply for the competitive grant.

Principal James Derby explained WRAPS provides additional opportunities in four key areas: Writing and Reading, Advisory, Positive behavior support and STEM (Science, Technology, Engineering and Math).

To help Writing and Reading, faculty have brought in guest authors and started programs like We Read on Wednesdays, where every student, faculty and staff member reads for eight minutes on Wednesday mornings.

“We don’t want to just tell students that reading is good, we want to model it,” said Mr. Derby. “The more kids read the better readers they’ll become and the stronger learners they will be.”

Advisory helps provide additional support for students, including efforts to ease the transition to Middle School with faculty creating a 6th grade survival handbook. Faculty also recorded and posted videos to YouTube for open house this year to describe their classes.

Encouraging Positive behavior in students has always been a part of the Middle School with its Wildcat Pride. But the WRAPS program has provided additional resources.

“It really sets a tone,” Mr. Derby said. “That’s part of the reason we have such a good thing going here with our students.”

The WRAPS program also funds STEM Day and other similar opportunities, including investments in technology infrastructure to support student learning.

“While the grant to fund WRAPS runs out after next year, we have been able to invest in areas and jump start initiatives that will continue to provide opportunities for students into the future,” Mr. Derby said.

# Research Project Engages 5th Graders

A three-week research project culminated with a gala event in the Castleton Elementary School library on March 25 where students, parents and teachers dressed to the nines to celebrate their work.

The fifth-grade project was inspired by "Escape from Mr. Lemoncello's Library," a book that students read. Students chose individuals who made a difference in the world, researched their lives, wrote about them and created unique projects to illustrate the lives of the individuals they chose.

"They had a difficult task," said teacher Sid Reischer. "Instead of just writing a report about someone who made a difference, students had to do it in the 'Lemoncello' spirit, coming up with something creative."

Student Justin Sober agreed, noting he was a little overwhelmed when given the assignment.



"When I read what we had to do I thought 'Whoa, I don't know if I can do that'," Justin said. "But once you started researching, it was easy. Trying to decide what I wanted to do was the toughest part."

Student Andrew Penn chose Pablo Picasso, creating a game titled "Guess the

Picasso" to help people learn more about his art. Andrew also shared Picasso's art style of cubism by recreating a painting using tissue paper.

"I think I'm good at art and it was fun to do," said Andrew. "I knew some things about Picasso but wanted to learn more."

Student Kylee Roloson chose Nellie Bly, a reporter who wrote about the homeless and less fortunate. Ms. Bly even faked insanity to write an expose on mental institutions. Because Ms. Bly also traveled around the world in 72 days, Kylee

created a board game to illustrate her travels. "The project was fun because you got to put yourself into your project," said Kylee. "I loved walking around at the gala and learning how people made a difference. While winners were chosen, everyone was a winner. They all just had different opinions."

# Learning Opportunities Through Distance Learning

Now in its 7th year, Maple Hill High School's Distance Learning program has expanded outside its original classroom to science labs.

Using a mobile unit that resembles a TV with a video camera atop it, students are able to participate in science classes for high school and college credit that otherwise might be unavailable to them.

In Topics in Biology class, for example, Maple Hill students take part in science experiments while learning from Averill Park CSD teacher Chris Reddy. Students interact with Mr. Reddy as if he was in the room, asking him questions and showing their work.

"I thought it was going to be tough to ask questions through a screen," said senior Jordanne Unser. "But it's really easy. Mr. Reddy is a great teacher."

Because the course is part of HVCC's College in the High School program, Jordanne and her classmates earn three college credits, at one-third the regular tuition cost. Credits typically are accepted by whatever college students ultimately attend.

"With only five students taking the class, it would be very difficult for us to offer this opportunity without Distance Learning," said Principal Ron Agostinoni. "Distance Learning started as humanities-based but now students are able to take sciences too."

## Maple Hill a Pioneer in Distance Learning

In 2007, Schodack CSD became the first of 22 school districts in Questar III BOCES to join the full Distance Learning service. Since then, numerous schools such as East Greenbush and Catskill have visited the classroom and modeled their own after Schodack CSD's.

BOCES' regional Distance Learning program currently includes 52

school sites serving more than 1,500 students. The cost of running a Distance Learning program is small as much of it is reimbursed with aid.

Maple Hill both receives and hosts classes, allowing faculty to teach other districts' students. Maple Hill students have taken classes such as Mandarin Chinese, French IV, Japanese, nanotechnology, biotechnology, accounting, creative writing, macroeconomics, sociology, environmental science and many others.

Students also benefit from unique learning opportunities, such as observing an autopsy conducted at the University of St. Louis. After school, faculty often collaborates with teachers from other schools for professional development.

"It really is a cost effective way to do business and it opens up a whole new world to our students," said Mr. Agostinoni.



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### Follow us on Facebook and Twitter

As part of the district's efforts to continue to improve communication with our community, the district now has a Facebook page and five Twitter pages. These social media accounts are at no cost to the district.

Schodack CSD was the first school district in Rensselaer County to have a Facebook page, which now has more than 600 followers. Follow us at:

[www.facebook.com/SchodackCSD](http://www.facebook.com/SchodackCSD).

Schodack CSD is the only district in Questar III BOCES's 22 component districts to have an official Twitter page. The district also has four others.

District Twitter page:

[www.twitter.com/SchodackCSD](http://www.twitter.com/SchodackCSD)



Middle School:

[www.twitter.com/MapleHill\\_MS](http://www.twitter.com/MapleHill_MS)

High School:

[www.twitter.com/MapleHill\\_HS](http://www.twitter.com/MapleHill_HS)



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Superintendent Bob Horan:

[www.twitter.com/SuptBobHoran](http://www.twitter.com/SuptBobHoran)



### Superintendent Horan Promotes District

Superintendent Bob Horan received the loudest applause at the April 2 StartUp Tech Valley event, where he was a featured speaker pitching his idea to locate start-up businesses in unused Middle School building space.

"'We're not closing buildings; we're going to repurpose them!' Who else is loving Horan's progressive economic ideas?!" tweeted an entrepreneur at the event.

As soon as Mr. Horan finished his speech, local business leaders stopped him to discuss possible opportunities. The district already has three start-up companies in the Middle School basement and has shown the space to other interested entrepreneurs. To ensure the safety of students, start-up business employees must undergo the same fingerprinting and background checks as district employees.

Mr. Horan noted that when he started attending regional business meetings and events, he often received quizzical looks from business leaders who had never seen school superintendents at their events.

"They'd often ask me 'Why are you here?'," Mr. Horan said. "So I tell them 'What better way to prepare our students for 21st century jobs than by connecting with local business leaders so we know what type of skills our students need to be successful'. Once they hear that, they're excited to work with us. We have built some very strong connections with local business leaders as a result."