

EDUCATION

ARLINGTON PUBLIC SCHOOLS 2015-2016 ANNUAL REPORT

The tradition of excellence in the classroom, performing and visual arts, and athletics continued in the 2015-2016 school year. Motivated students, great teachers, dedicated administrators, involved parents, and a supportive community made this possible. This year the district continued its focus on building on past successes and moving forward on the vision of the Arlington Public Schools (APS) as detailed in the four over-arching district goals.



- The Arlington Public Schools will ensure that every graduate is prepared to enter and complete a post-secondary degree program, pursue a career, and be an active citizen in an ever-changing world by offering a rigorous, comprehensive, standards-based and data-driven K-12 system of curriculum, instruction, and assessment that integrates social, emotional and wellness support.
- The Arlington Public Schools will recruit, hire, retain, and build the capacity of a diverse staff to be excellent teachers and administrators by providing high quality professional development aligned to needs, instructional support, coaching, and an evaluation framework that fosters continuous improvement.
- The Arlington Public Schools will offer a cost effective education that maximizes the impact of taxpayer dollars and utilizes best practices, academic research, and rigorous self-evaluation to provide students and staff the resources, materials and infrastructure required for optimum teaching and learning in a safe and healthy environment.
- The Arlington Public Schools will be run smoothly, efficiently and professionally. The district will operate transparently and engage in effective collaboration and responsive communication with all stakeholders. It will provide timely, accurate data to support financial decision-making, envisioning of the district's future, and long-range planning in partnership with other Town officials. Through these actions it will create broad support for a high quality education system that is the community's most valuable asset.

The results of our efforts include:

- Clear expectations for what every child should know and be able to do (standards-based education) continued to be refined and integrated into daily life in the classroom. District-wide common assessments in mathematics, English, and writing helped teachers pace their instruction and informed them about students who had mastered the skills and content and those who needed further instruction. The District's intensive reading program, which focuses on early intervention and intensive support for struggling readers, demonstrated continued success in its tenth year of implementation. All K-5 students were assessed during the school year. Data from these assessments determined the level of support provided for students not meeting benchmark standards. This initiative has helped many more students read at grade level. At all levels, teachers and administrators focused on incorporating 21st century skills into every classroom. While the content of what is taught remained in place, greater emphasis was placed on team work, working in a multicultural global society, perseverance, communication skills, creative problem-solving, and the ability to evaluate and synthesize information.
- The Stratton Building renovation project commenced at the end of the school year, following the Capital Planning Committee's recommendation to Town Meeting to fund the project, and the approval by Town Meeting. Expected completion is for the opening of school in September 2017.
- Following the unanimous approval of the Board of Selectmen and the School Commit-

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tee last spring, the District submitted again this year a Statement of Intent (SOI) to the Massachusetts School Building Authority (MSBA), requesting support for facilities improvements to Arlington High School. The high school facility was noted as a key concern in its re-accreditation process. Prior to the submission of this SOI, the District received engineering reports from On-Site Insight and an Analysis of Programmatic Needs from HMFH Architects. In January, the MSBA Board of Directors voted to invite Arlington High School into the Eligibility Period and then voted in May for Arlington to commence the process of submitting documentation required in this first module of the process to rebuild or renovate the school.

- Given the trend of increasing enrollment in the Arlington Public Schools, particularly at the elementary level, the School Department contracted with HMFH Architects to complete a space and enrollment study of the schools that was completed in the fall 2015. A School Enrollment Task Force (SETF) was constituted to review the study and to make recommendations to the Town for a plan to address school space needs resulting from increasing enrollment. The SETF recommended plan included adding six classrooms to the Thompson Elementary School for opening in September 2017 and to repurpose the Gibbs School building for a sixth grade school. Town Meeting, subject to a town referendum, authorized the funding for the construction of six additional classrooms at the Thompson Elementary School and the renovation of the Gibbs School, as well as funds for a high school feasibility study. Three questions on the June 14 ballot asked voters to consider funding for: construction at Thompson and the renovation of the Gibbs, a study and design costs for renovating Arlington High School; and the funds to pay Arlington's share of a new Minuteman High School. All three questions passed by wide majorities.
- The Department of Elementary and Secondary Education allowed school districts to choose whether to administer MCAS or PARCC assessments for English Language Arts (ELA) and Mathematics in grades 3-8. APS, with the approval of the School Committee, chose to administer the PARCC assessment, which is more similar to the next generation MCAS than the older ver-

sion of MCAS. MCAS science tests were administered in grades 5 and 8, and MCAS ELA and Mathematics exams were taken by tenth grade students. MCAS science assessments, which are course related, were taken by students primarily in grades 9 and 10. In all assessments, students scored significantly higher than the state averages. Additionally, students could take the assessment online or on paper. There was no difference in scores between students who took the test online and those who took it on paper. Overall, the PARCC and MCAS results indicate that Arlington continues to be a high achieving district with moderate to high student growth.

- During the 2015-2016 school year, the staff, teachers, and administrators of Arlington Public Schools have each participated in over 70 hours of professional development focused on topics which enable the district to effectively work towards increasing the capacity of all staff to deliver an effective teaching and learning experience for all students. Teachers at all levels have participated in professional development centered around:
 - Building skills in instructional techniques that are necessary to close the achievement gap between struggling and succeeding students;
 - Assisting teachers with creating supports necessary to provide each student with the social emotional growth that will prepare them to become purposeful adults, and;
 - Providing teachers with the skills necessary to integrate the development of twenty-first century skills into the curriculum K-12.

In order to deliver wide-spread professional development in a fiscally responsive manner, the district has frequently utilized the expertise of its teachers and staff to share knowledge through a professional learning community model. Math and literacy coaches, assisted by teacher leaders, provided an expanded level of support for improving instruction not previously offered within the district. The expansion of the skills of teacher leaders has been generously supported by the Arlington Education Foundation (AEF). The use of mini-blended learning courses (courses which include both a face-to-face and an online component) taught by district curriculum coordinators and teacher leaders provided teachers with additional expertise in meeting

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the needs of English Language Learners and Special Education students. Libraries of exemplar videos have been expanded to assist teachers with continued refining of their classroom practices.

- Arlington High School (AHS) continues to excel on assessments of academic quality reflecting both high achievement and improvements in academic equity. AHS earned a level one designation on the Massachusetts School Report Card for the second year in a row. This reflects not only *high performance overall, but success in raising the performance of high needs* students. AHS again received Gold Medal distinction in the U.S. News & World Report Best High School Rankings. This year AHS ranked 19th among Massachusetts schools and in the top 2% of schools nationally. Arlington was also recognized as a top school in science, technology, engineering and mathematics, or STEM, ranking 157 nationally. Newsweek also ranked Arlington in the top 2% of schools. On the National Merit Scholarship Competition, the 2016 graduating class had two Merit Scholarship winners; five finalists; 5 semi-finalists; and 16 commended students.
- The Technology Plan was further implemented this year by increasing technology hardware, including LCD projectors, in all schools and increasing wireless density in all elementary schools. Internet capacity was increased, as well as data storage capacity, and security. A one-to-one iPad program and BYOD (Bring Your Own Device) was implemented in all sixth grade clusters at the Ottoson Middle School. Courses in technology have been expanded to increase the number of students studying digital modeling and computer science utilizing additional technology purchased through the support of the Arlington Education Foundation.
- Grants received by the District supported the expansion of technology, curriculum initiatives, professional development and academic and social-emotional support for students, as well as a grant from the Department of Public Health for Screening, Brief Intervention and Referral to Treatment (SBIRT), which provides funds to train staff and plan the implementation of substance abuse screening process in the middle school, and later, the high school. Additionally, Ottoson received a grant from Symmes

Medical Use Non-Profit Corporation for a pilot project designed to promote emotional wellness.

- Again this year, the Arlington Education Foundation continued to provide extraordinary support. Innovation Grants ranged from a supporting a new high school archaeology class to a Science, Technology, Engineering and Math surge at Dallin, and from using video to support mathematics coaching of teachers to building curriculum along with the Bishop garden. Continuing Scholars Awards allowed a Spanish teacher to travel to Cuba, three social workers to deepen their knowledge of trauma and the importance of connection, joy and playfulness, and a reading specialist to learn more about phonemic awareness, reading and spelling. The third and final year of the Technology Initiative resulted in a fully functioning Digital Imaging Studio at Arlington High School so that photography, animation, film-making, and graphic design are available. The new studio and studio improvements have made a dramatic impact on the Visual Arts curriculum. Also at AHS, mobile science computer carts now allow 3D modeling of chemicals, either for chemistry or biology, or using simulation software to model and study iterations of experiments using modern methods. At Ottoson Middle School, additional enhancements to the tech/ engineering class have included the addition of a third 3D printer. Additional technology was purchased to expand the Digital Media and Literacy Class. AEF also supported a new maker space for the high school, as well as support for a planning grant for Safe and Supportive Schools.
- The George and Elizabeth Sanborn Foundation continues to fund the APS to support a myriad of activities addressing tobacco prevention education, intervention for those who are users, and cancer support and education for the students in kindergarten through grade 12, the staff and the community.

- A grant from [C.A.S.IT.](#) (Centro Attivita' Scholastiche Italiane) was awarded to Arlington to continue to offer Italian courses at the high school, and an additional \$2,000 was awarded to provide additional curriculum support.
- The schools continued to work in partnership with the police, town, and community to ensure consistent and coordinated responses to inappropriate student behaviors. The Diversion Program started in 2006, which focuses on restitution and rehabilitation for first time, non-violent behavior, has proven to be an effective model. The APS partnered again this year with community and non-profit organizations to provide more options for counseling services. Meeting the social and emotional needs of children is as high a priority as meeting the academic needs of our students. The Parent Forum series continued again this year, free to all parents and community members. These forums include a variety of topics ranging from: Bullying Prevention, Cyber Safety, Guiding Good Choices, Raising Boys, Sleep and Nutrition, The Gifted Child, Non Traditional Families, Substance Use, Transitions, Behavior Management, Anxiety, and The College Process.

For more information about activities, school and department highlights and achievements in the Arlington Public Schools during 2015-2016, please see: <http://www.arlington.k12.ma.us/administration/budget/fy17/fy17budgettownmeeting.pdf>. In addition, monthly Superintendent's Newsletters provide additional insight: <http://www.arlington.k12.ma.us/administration/newsletters/>.

The Arlington Public Schools have a team of talented professionals working together towards our shared vision: All students will achieve at their full social, emotional, creative, and academic potential, and will be prepared for higher level academics, workforce success, active citizenship, and life-long learning.



Overview

Calendar year 2016 was historic for Minuteman High School. The school secured voter approval of its long-planned and long-awaited building project, secured a major state grant to launch a new Advanced Manufacturing program, saw continued improvement in student test scores, regained its Level 1 Accountability Rating from the state, adopted a budget that was smaller than the previous year's, won more accolades for its Girls in STEM program, helped launch a new statewide Girls in Trades initiative, and earned a spotless bill of health from its auditors for the second year in a row.

Voters Approve Funding for New School

Minuteman High School really made history on September 20. In a special district-wide election, voters in the Minuteman Regional School District approved funding for a new \$144.9 million Minuteman High School. The project was approved in a landslide.

Superintendent Edward A. Bouquillon thanked voters for supporting the project. "The level of support was simply overwhelming," said Bouquillon, "I'm so grateful to the voters and to everyone who worked so hard to make this happen. This is a major milestone in Minuteman's history." The final, certified tally was 12,160 in favor (69.47%) and 5,321 opposed (30.4%). There were 24 blanks (0.14%) Voter turnout was 9.78%.

The September 20 district-wide referendum only required a simple majority of those voting in the District to approve the project. They did, with nearly seven out of 10 voting in favor. "What this mean is that we're going to build a brand new school for future generations," he said. "And we're going to do it with solid support from the voters in the vast majority of our towns." Voters in 12 of the 16 member towns voted in favor of building the new school by wide margins. In one town (Needham) the margin was 92%-8%.

The MSBA has committed roughly \$44 million in state money to help finance the project. The District will pay for the rest through borrowing and through revenue generated by a new capital fee to be imposed on non-member communities that send students to Minuteman.

Building Project Advances

Here are some of the major milestones for the construction project during 2016:

- January 27, 2016 – The MSBA voted unanimously to pay up to \$44,139,213 for a new school.

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- March 11, 2016 – The Commissioner of Elementary and Secondary Education approved a revised Minuteman Regional Agreement that had been previously approved by all 16 member towns.
- March 15, 2016 – The Minuteman School Committee voted to approve \$144.9 million in bonding for a new school under M.G.L. Chapter 71, Section 16(d). This method requires all member towns to either approve the bonding (or not disapprove it) at Town Meetings.
- April-May 2016 – Fifteen of the District's 16 member towns voted to approve the bonding or take no action, a decision which is deemed approval. All votes were by overwhelming margins, several of them unanimous. Five towns made their Town Meeting approval contingent on a later debt exclusion vote by their town. All five of the debt exclusion votes later passed by wide margins.
- May 4, 2016 – Belmont rejected bonding for the Minuteman project, effectively blocking the project. It was the only town to vote against. (Later in the year, Belmont voted to withdraw from the District, a step that will not actually occur until July 1, 2020.)
- June 27, 2016 – The Minuteman School Committee voted 12-1 to issue \$144.9 million in debt for construction of a new school pursuant to M.G.L Chapter 71, Section 16(n), which requires approval at a district-wide referendum.
- September 20, 2016 – District voters approved funding for a new school in a district-wide referendum. The vote was overwhelming.
- December 13, 2016 – The District School Committee voted 14-0 to enter into a Project Funding Agreement with the Massachusetts School Building Authority (MSBA) and to approve the sale of \$8 million in bond anticipation notes (BANs) for the project.

State Approves Changes in Governing Agreement

In the spring of 2016, the state's Commissioner of Elementary and Secondary Education approved revisions in the Regional Agreement that governs the operations of the Minuteman District. Many town leaders had said that approval of a new Regional Agreement was critical to the ultimate success of the Minuteman building project.

The new Minuteman Regional Agreement creates a four-year rolling average for the assessment of operating costs, gives larger towns more of a say in some school committee decisions, eliminates the five-student

minimum charged to member towns for capital costs, and requires out-of-district communities to help pay for their share of capital costs of a new building.

The new Regional Agreement also allowed several towns, most of which send few students to Minuteman, an option to withdraw from the District. Town Meetings in Boxborough, Carlisle, Lincoln, Sudbury, Wayland, and Weston voted to exercise that option. Voters in Dover rejected the idea by a better than 2-1 margin. The departing towns will leave June 30, 2017.

\$500,000 State Grant for Advanced Manufacturing

With the help of a \$500,000 state grant, Minuteman High School will launch a new Advanced Manufacturing & Metal Fabrication program to train high school students and adults for high-wage, high-demand jobs in the field of advanced manufacturing.

The competitive grant was announced by Governor Charles Baker during ceremonies at the State House on February 24, 2016. The Governor announced grants totaling \$9.3 million from the new Massachusetts Skills Capital Grant Program. He was joined at the event by Lt. Governor Karyn Polito, Labor and Workforce Development Secretary Ronald Walker II, Education Secretary James Peyser, and Housing and Economic Development Secretary Jay Ash.

Some 68 schools and training programs applied for grants. Only 35 were successful. Minuteman received \$500,000, the largest grant possible under the program. Only one other school received the maximum award.

Competitive Grants for Biotechnology / Expanding Access

In August, the Department of Elementary and Secondary Education (DESE) awarded the school a \$10,000 planning grant to expand student access to career and technical education programs. It was one of only 12 institutions in Massachusetts to receive a Competitive Career and Technical Education Partnership Planning Grant.

In December, the Massachusetts Life Sciences Center announced that it had approved Minuteman's application for a STEM Equipment and Supplies Grant to assist the school's Biotechnology program. The grant will provide \$100,000 for equipment and supplies and another \$8,172 for professional development. The equipment will include a water purification system, vacuum pumps, biological safety cabinets, and two 3-D printers. The Massachusetts Life Sciences Center received 105 applications. It approved 49.

Improved MCAS Performance

Minuteman High School improved its performance on state MCAS tests this year, with that improvement extending to all disciplines and all student subgroups.

Results of the test were reported in October by the Massachusetts Department of Elementary and Secondary Education (DESE).

As a result of the continued MCAS improvement, Minuteman regained its Level 1 Accountability Rating from the state. Each year, DESE rates all schools and school districts in Massachusetts from Level 1 to Level 5, with Level 1 being the best. "In most cases, the improvement was consistent with the strides we made last year," said William J. Blake, Jr., Minuteman's Director of Curriculum, Instruction and Assessment. "As a result, we have reestablished our Level 1 Accountability Rating." Improvement continues to be particularly significant for students with disabilities, Blake said.

Minuteman has the highest percentage of students receiving Special Education services of any public high school in Massachusetts. Approximately 47% of the students at Minuteman are classified as Students with Disabilities. The state average is about 17%.

SC Approves Smaller District Budget

The Minuteman School Committee adopted a budget for the new fiscal year that was slightly smaller than the previous one. The Committee voted to approve a \$19.7 million budget for the fiscal year ending June 30, 2017. The budget was \$103,000 or 0.52% lower than the prior year's budget of \$19.8 million.

The FY 2017 budget continues a multi-year transition to a school with a smaller, 628-student enrollment. The new budget continues to phase-out two vocational-technical education programs, merge two programs, and phase-in two new programs.

Highest Bond Rating and Exemplary Annual Audit

The Minuteman Regional Vocational Technical School District got some excellent financial news.

First, it received the highest short-term bond rating possible from rating agency Standard and Poor's. Second, for the second year in a row, the District received a spotless bill of health from its auditing firm, Melanson & Heath. In a letter to the school, S&P Global Ratings assigned the Minuteman District an "SP-1+" rating, the highest short-term municipal bond rating possible. It assigned the rating for an \$8 million general obligation bond anticipation note for Minuteman's high school construction project.

The school also learned that its auditing firm would be making no audit findings for fiscal year 2016 – the second year in a row that that has happened. Observers say that public agencies such as the Minuteman School District rarely receive audits in which the auditors make no findings.

Girls in STEM Receives National Recognition

For the second year in a row, Minuteman's chapter of SkillsUSA was awarded the Grand Prize in the

Student2Student Recognition Program for its Girls in STEM (Science, Technology, Engineering and Mathematics) outreach to middle-school girls. The Minuteman students also earned this honor because of a successful paper recycling program they launched at the school.

SkillsUSA is a national organization that runs trade and leadership competitions for students in career and technical schools.

Minuteman Leads Girls in Trades Initiative

Minuteman joined with leaders in business, trade unions, and education in launching a new organization: to increase awareness and participation in the construction trades by young women: the Massachusetts Girls in Trades Advisory Group. The group held multiple planning meetings at Minuteman. These efforts culminated in the first-ever Massachusetts Girls in Trades Conference and Career Fair held at IBEW Local 103 in Dorchester on March 30, 2016. The initiative was jointly originated and spearheaded by Minuteman and Wynn Boston Harbor. Maryanne Ham and Michelle Roche from Minuteman were among the key organizers.

Electrical Union Partnership

The International Brotherhood of Electrical Workers (IBEW) Local 103 launched a partnership with Minuteman High School aimed at giving students a head start on high-paying careers in the electrical field. Officials from IBEW Local 103 visited the school to announce the initiative. "This is the real deal," said Richard Antonellis, Jr., the Business Agent for IBEW Local 103 who will oversee the Pre-Apprentice Partnership with Minuteman. "This partnership will give two Minuteman students, one male and one female, the opportunity to join our five-year training program." Antonellis said getting into the IBEW's training program is "highly competitive." Each year, he said the union has only 100-150 training slots and around 1,400 applications for the training. Antonellis and Business Manager John Dumas said the two Minuteman students would be selected by Minuteman teachers based on the students' overall attitude, attendance and grades. Nominees also need to pass an aptitude test.

Upon their graduation from Minuteman, the two students selected for the training would go into a five-year, union-paid apprenticeship program. Students work for an electrical contractor for four days per week and attend school one day per week. Students aren't paid for class time and need to pay for their books.

New Computer Lab in Bolton

Students at the Florence Sawyer Middle School in Bolton now have a brand new computer lab, thanks to a unique partnership with Minuteman High School. Officials from the two schools cut a ceremonial ribbon to mark the opening of the new lab, which is part of Min-

uteman's Middle School Technology Outreach Program. "We're very grateful to the partnership with Minuteman," said Sawyer School Principal Joel Bates. "This new lab gives students a practical experience that is engaging. It brings the 21st century into the classroom in a middle school." As part of its effort to reach out to middle school students in its district, Minuteman committed more than \$30,000 to provide Florence Sawyer with 24 computers, a 3D printer, a laptop computer, and week-long teacher training. The lab itself is operated by Minuteman Middle School Outreach teacher Mary Mullahy and serves students in grades 5-8. The students are taught using curriculum provided by Project Lead the Way, a national organization that promotes learning in applied design and engineering.

Minuteman Featured in Boston Globe Magazine

Minuteman High School was prominently mentioned in a feature story in The Boston Globe Magazine on October 2, 2016. In bold, capital letters, the front page of the Magazine stated: "Vocational Education is Crucial to Our Economy. It's About Time It Gets Some Respect." Inside, a 7-page article featuring students from Minuteman, Madison Park High School, and Greater Lowell Tech touted the success of vocational education in Massachusetts. Among other things, the story quoted Minuteman Superintendent Dr. Edward A. Bouquillon as well as Brendan O'Rourke of Lexington, a Minuteman graduate now attending UMass Lowell.

Minuteman in the National Spotlight

In January, the school announced that Superintendent Edward Bouquillon had been elected to the board of trustees of a national organization that is the leading provider of competency-based career and technical assessments in the country. Dr. Bouquillon will serve on the 11-member board of NOCTI based in Michigan. Dr. Bouquillon is the only person from New England to serve on the volunteer board.

On March 1, Minuteman played host to an international delegation from Thailand. Led by the nation's Minister of Science and Technology, a five-member delegation from Thailand visited Minuteman on March 1. The delegation was hoping to learn about Minuteman's STEM initiatives and innovative vocational-technical education programs.

Two Students Win Design Contests

Melanie Hennessey, a Minuteman student from Dover, was the winner of a logo design contest sponsored by the Battlegreen Run Foundation. The foundation is a non-profit foundation that organizes an annual road race in Lexington, MA to fund a number of worthy local charities. Ms. Hennessey is majoring in Design & Visual Communications at Minuteman. Her winning logo design can be found on the foundation's website:

www.battlegreenrunfoundation.org.

Student John "Jack" Ross of Arlington won a logo design contest sponsored by the Minuteman Futures Foundation, Inc., a private, non-profit organization that raises funds to support students and programs at Minuteman. Mr. Ross will receive a \$500 scholarship for his efforts. The winning entry features a hand outlined in gold supporting the letters MFF, with the words Minuteman Futures Foundation underneath.

Minuteman Grad Helps Build the Future

Minuteman graduate Dana Ham is thinking big these days. Really, really big. That's because he is now the Director of Facilities for what is probably the largest construction project presently underway in Massachusetts – Wynn Boston Harbor, the first five-star resort and casino in the Commonwealth. Located in Everett, this massive \$2.1 billion project will encompass over 3 million square feet on 33 acres and has an anticipated opening date of June 2019. Mr. Ham works with the Wynn team overseeing the project.

A Lexington resident, he is a 1983 graduate of Minuteman and was inducted into the school's Hall of Fame in 2015. He credits Minuteman with giving him a solid foundation for his professional success. "I wouldn't be where I am right now if it wasn't for Minuteman," he said.

District Enrollment

As of October 3, 2016, Minuteman had an enrollment of 623 students. Some 592 students were enrolled in high school day programs, including the "Minuteman in the Morning" program. Of these, 67% lived in one of the district towns and 34% lived outside the district. Some 31 students were enrolled in Minuteman post-graduate programs. Of these, 32% lived in one of the 16 district towns and 68% lived outside the district.

Minuteman School Committee

A 16-member School Committee, comprised of volunteers appointed by each of the member communities, approves the district budget, hires the superintendent, and sets policy for the district. School Committee officers include Jeffrey Stulin of Needham (Chair), Carrie Flood of Concord (Vice Chair), and David Horton of Lexington (Secretary). Other members included Pam Nourse of Acton, Susan Sheffler of Arlington, Jack Weis of Belmont, David O'Connor of Bolton, Vincent Amoroso of Boxborough, Judith Taylor of Carlisle, Ford Spalding of Dover, Jennifer Leone of Lancaster, Sharon Antia of Lincoln, Alice DeLuca of Stow, David Manjarrez of Sudbury, Mary Ellen Castagno of Wayland, and Douglas Gillespie of Weston. Mr. Weis resigned from the Committee in November and was replaced in December by James Gammill. Ms. Taylor moved away from the District and was succeeded in September by Christine Lear.