REIMAGINE AMERICA'S SCHOOLS CASE STUDY

A STATE OF CHANGE: MASSACHUSETTS SCHOOL BUILDING AUTHORITY





"This wasn't a building project; this was a project about redesigning education."

- Mary Skipper, Superintendent, Somerville Public Schools, Massachusetts

There are no real established road maps on how change occurs in public education; one strategy for bringing change to our public schools is by studying examples of successful change strategies employed by other cities, school districts, and statewide organizations. This case study is an example of how change can occur when an institutional crisis necessitates change. Here we look at how widespread institutional challenges within the Massachusetts school facility funding system in the early 2000s led to the creation of the Massachusetts School Building Authority (MSBA) and the positive impact MSBA had on school design, communities, and students.

The MSBA is a quasi-independent government authority created to reform the process of funding school construction projects in the Commonwealth's public schools. Its creation began a new design and funding process for schools in the Commonwealth of Massachusetts that has had demonstrated financial transparency, an overt commitment to excellence in education, and a meaningful impact on the education of over 600,000 students in the state.

This case study is based on interviews with the Executive Director of MSBA Jack McCarthy and Barbara Hansberry, MSBA's Director of Strategic Planning as well as superintendents from Lawrence, Somerville, and Springfield Public Schools in Massachusetts. Interviews were conducted by Ted Landsmark, Director of the Dukakis Center for Urban and Regional Policy at Northeastern University and Ron Bogle of Reimagine America's Schools.

Participants included:

- Jack McCarthy, Deputy Chief Executive, Officer / Executive Director, Massachusetts School Building Authority
- Barbara Hansberry, Director of Strategic Planning, Massachusetts School Building Authority
- Cynthia Paris, M.A., Superintendent of Schools, Lawrence Public Schools, MA
- Mary Skipper, Superintendent of Schools, Somerville Public Schools, MA
- Daniel J. Warwick, Superintendent of Schools, Springfield Public Schools, MA
- Ron Bogle, President & CEO, National Design Alliance, Team Leader, Reimagine America's Schools
- **Ted Landsmark**, Distinguished Professor, Director of the Dukakis Center for Urban and Regional Policy, Northeastern University
- Kerry Leonard Director of Architecture, Reimagine America's Schools

In 2003 an audit of the existing school construction program found that it was irretrievably broken. There was a failure by the state legislature to properly fund the former School Building Assistance Program (SBA); the funding of specific projects was often based on individual legislators' ability to advocate for their constituents. There was also a lack of staff to successfully manage the program. This ultimately led to an accumulated backlog of reimbursements to school districts of more than \$10 billion for SBA-approved projects which at the time were administered by the Massachusetts Department of Elementary and Secondary Education. A small staff of only four people was simply overwhelmed by the tasks at hand. The crisis was so severe that the new MSBA halted all projects for several years, a moratorium until a new program for funding, school design, and construction was designed.

Since its creation, MSBA has worked on over 600 projects that improved school facilities for over 600,000 students and has made more than \$14.9 billion in reimbursements to cities, towns, and regional school districts for school construction projects. In addition, it has been able to reduce the \$10.1 billion of existing debt to under \$200 million.

The new MSBA was specifically designed to have a dedicated revenue stream from one penny of the state's 6.25-percent sales tax. This provided a legislatively approved continuous revenue stream, allowing multi-year planning. One of the most significant changes of the MSBA program is its ability to pay school districts quickly. Once a project is approved, funding payments are made as construction progresses. Instead of waiting years for reimbursement, districts now receive payments from the MSBA within weeks. Timely reimbursement has made a significant difference to school districts, saving them significant interest costs because they no longer have to borrow the entire cost of construction. The funding process designed by the MSBA is also a critical factor in the design process

The MSBA has created a common-sense design template that requires schools to have extensive community input on the creation of an educational plan before architects and designers are even brought in to start the building process. For superintendents, this extensive community engagement is the key to the success of their projects. As Jack McCarthy, the Executive Director of MSBA, noted, "Some people start the school design process with a budget. We start the school design process with an educational plan." What is clear is that the MSBA template with its strong emphasis on community engagement, really does allow school communities to reimagine what they want and puts a special emphasis on creating a future-oriented educational.

The program also requires a feasibility study, which has multiple benefits: a way to answer the community's questions and concerns, and a formal analysis of existing facilities and the district's educational program needs. This, along with incentives, a model schools program, and science lab design information, has led to a better overall design for schools in addition to the many cost benefits of the program. The design process also encourages a very strong future orientation, despite the fact that MSBA is supporting adaptive projects on schools that date back to the 1890s. MSBA also takes great pride in respecting the historic local decision-making process that is integral to how things are done in the Commonwealth.

Another extraordinary feature of the MSBA program that is unusual for a big agency is flexibility. Barbara Hansberry described MSBA's nimbleness as follows: "The agency encourages a data-driven approach to problem solving. Staff is supported to create programs and initiatives that provide value to our stakeholders."

An example of this is the Accelerated Repair Program, as described by Jack McCarthy: "The Accelerated Repair Program came out when President Obama came in, he had that American Recovery and Reinvestment Act of 2009 (ARRA) and we had those ARRA funds. It was for shovel-

ready projects, and so the MSBA said, 'All right, how do we get some of this money?' And so that's how the Accelerated Repair Program really came into being. It was called Green Repair at the time. And it was just for roofs, windows and boilers, because that's stuff you could do real quick and stuff you could do over a summer. It was so successful that when we ran out of the ARRA money, we changed the name of it. One of the reasons we changed the name was to just keep the ARRA money separate from the state money. It became the Accelerated Repair Program. And that's basically where you take an otherwise pretty good building and if it needs a new roof, windows or a boiler, you give it 20 more years of life."

Somerville, Massachusetts

Somerville is a diverse community of over 80,000 people, located just on the outskirts of Boston. Occupying 4.1 square miles, Somerville is one of the most economically, culturally, and linguistically diverse communities in Massachusetts. More than 50 different languages are represented in this vibrant and eclectic city. Somerville was officially incorporated as a city in 1872, but its roots date back to 1630 when it was originally settled as part of Charlestown. Today's Somerville is a mix of long-time Somerville families, young professionals, college students, and immigrants from around the world who proudly celebrate the city's rich diversity. The Somerville High School student population reflects that diversity: 45.9% Hispanic, 10.9% African American, 34.7% White, and 6.2% Asian. Approximately 5,000 students attend the public schools, and nearly 80% of the graduating seniors attend a 4-year college or community college. The city is considered one of the most-well run in the state and has many assets, bounded as it is by two universities, Tufts and MIT, as well as a thriving artistic community. Mary Skipper, the Somerville Public Schools (SPS) Superintendent for six years, grew up in the Arlington-Somerville area. She worked in the Boston Public Schools for 20 years prior to becoming the SPS Superintendent. For Mary, becoming SPS Superintendent was very much a homecoming.

One of Mary Skipper's first projects after being hired as superintendent of the Somerville Public Schools was the redesign of Somerville High School, a building dating back to 1895. It was also the only comprehensive high school in the community. As a result, the vast majority of people in the community have graduated from the same high school going back generations. As Skipper noted, Somerville is a community "where the vast majority of folks went through Somerville ... so there's a long and rich history, tradition and pride in the school itself." Given that intense community pride, Skipper recognized that this adaptive project of an old school building dating back over 100 years was not just a technical solution, but a project that had to "actually consider what the building means to the community and to the students and staff."

For Skipper, her task was to recognize and respect the community pride inherent in the design, yet still create 21st-century solutions in a very compact space built on a hillside. She also recognized the strong environmental values of the community, an element that "was always at the forefront of our architectural design and our landscaping design which included bike paths, electric car hookups, and the ability to really address parking issues in the community."

In short, the building became a comprehensive high school for the entire community, serving all students. Skipper was also keen to recognize the community's deep history in the trades and find ways to really weave together the Career and Technical Education (CTE) world with the academic world for the benefit of the entire community. As a result of the unique aspects of the design process, unlike a traditional high school, there was a blending of CTE and traditional academics through strategic adjacencies of programs such as placing the electrical shop next to the robotics club area.

As Skipper noted, "That's how students best learn. They don't think physics, robotics, electrical. If they do, then when they go out into the real world, they haven't synthesized those skills enough to really use them. Our focus was to really think both about the layout of the school, but also from the educational program, how we might deliver curriculum or do programmatic delivery in a way that was really different in terms of teacher collaboration, staff collaboration, and bringing the business community in. We are very proud of our CTE program; 65% of our students go through some portion of CTE." One of the key aspects of the design process was reaching out to the CTE Advisory Committees to provide insights about the future of an industry that would allow the design team to incorporate future elements into the design of the school's shops and classrooms.

One of the key themes that emerged from the interview was Skipper's recognition that the new building was a community-wide asset. She went to great lengths to embrace the community and make the building accessible by integrating some of the adult education classes so that they could use the facility at night. As she explained, "It's really not seeing the school as an entity that starts at 7:30 in the morning and ends at three o'clock in the afternoon, but one that you can actually have 24/7 in many ways to be able to service all people that live in Somerville. We really saw the ecosystem of Somerville as a place where our students should go and put into practice what it was they were learning within the classrooms. And so that's an exciting part to us of our educational program."

For Skipper, the MSBA design process was very much about engaging community stakeholders to envision a way forward. As she recalled, "We went through many sessions where we would just vision, and at no point were there limits. It wasn't, we can't do this, you can't do that, you can't do this, but rather what do you want? It became very clear to people that this wasn't a building project, this was a project about redesigning education, not only for the current generation of Somervillians, but for the future. I think that's what really differentiates the work and our partnership with MSBA."

In the interview, Skipper made the point that she and her team visited multiple other communities, and it was the MSBA process that enabled her and her team to do that. "I think in the case of where innovation is the most successful, we really are enablers of divergent thinking, that's what we are. We give people the permission to think differently, to say, 'It's okay.' And if they get that cue from the leaders then they're more apt to be able to take that canvas and really dream of something that's going to not only meet the needs of now but more importantly meet the needs of the future. We're pretty blessed in Massachusetts to have MSBA."

Springfield, Massachusetts

Springfield is the second largest school system in the Commonwealth with 55 school buildings and 26,000 students. The superintendent is Daniel Warwick. The district has worked with MSBA on nine different building projects since 2012. The average age of the school building is fifty-five years and there are three buildings that date back to the 1890s. The city has a rich immigration history, and the current student population is largely immigrant, with 67% Hispanic, 18% African American and 9% White. Warwick noted that there is a "lot of pride in the public-school buildings. Our mayor is a public school product and really takes a lot of pride in our schools."

One of the first building assignments that was taken on through MSBA was an old school built by FDR's public works projects: the Roger Putnam Vocational Technical High School. As Warwick noted, "Putnam was probably our most interesting project because we have the vocational piece, very tight urban tract. A lot of debate about the project, it wasn't an easy project from the funding perspective, but we were a city right at that time, just coming out of receivership for financial

issues. Our new mayor at the time, Domenic Sarno said, 'Let's make these buildings a priority. I'm going to find a way to pass bond for these projects.'

One of the specific challenges in the Putnam design process was the need to build the new Putnam facility on the school's football fields named after a legendary coach. As Warwick explained, "My dad actually was the captain of the football team and played for that coach. So that was a huge piece selling the community on that because that football field had been a part of the fabric of the community forever. And I had emotional investment in it. I went there as a kid and watched the teams. We made a commitment to the community we would rebuild the field in another location. And we're working on that now because you have to live up to your commitments. But there was a lot of community engagement. Folks really owned it and they felt part of it. And that's a good part of the MSBA process."

For Warwick, the key to the success of the project was the MSBA design process: "We did the design with the community, with the business community heavily involved. In every one of our 22 programs we had business folks from those areas come in and really help us with the design and the new thought process at the time. And we worked a lot with Wooster Technical High School because they had a great project too. It was really around what it's going to take and what are these vocations going to look like in the future? And we actually designed the classrooms to go with the vocational areas right next to the vocational areas, to really get that connection between the academics and the vocational." In the interview, Warwick also signaled out the quality of the screening of the architectural firms.

The redesign of the building had a strong impact on graduation rates. According to Warwick, "Putnam now has a graduation rate that's in the high 90s. Back in the early 2000s, it was in the 50s, it just completely changed the dynamic. It's become our first choice of high schools in the city. Putnam went from last choice to first choice. Good leadership, good teaching, but the building really made a big difference and the design that went into it and the thought and the ownership." Warwick placed a heavy emphasis on how the new design of school facilities made a tangible difference in academic outcomes. "We've had drastic gains in the schools that have been completed since this project. We got businesses involved and they're taking on students in these co-op projects lead to great employment. I think having some tight metrics, and then reporting back to the community on what those metrics look like. The measure is there to make the community want to say, 'Let's keep investing.' Our mayor looks closely at those gains, and has been our biggest advocate."

Warwick also discussed how community involvement in the design process contributed to helping create change: "Folks work with you if they feel they own it, we got them involved from the beginning. Community advisories actually working with the teachers on that community advisory team and the business community, they actually own the design on all of the shops in that vocational high school. We didn't start with the shops we had. We started with where do we want to go with a shop and engage the community in that decision with the help of MSBA, and then designed it with them so they owned the change. And when people feel they're part of the change, then the ownership is there and they embrace the change. Our biggest proponents were folks from the community that had worked on the design. Some had attended Putnam years ago and are prominent business members now. They really wanted input, and when they give folks real input and they own the change and they help you sell the change because that's part of the process."

All of the projects since then have followed the Putnam format of community engagement including taking old elementary schools that were built in 1898 off-line. According to Warwick, "We really took projects that had the greatest need, they weren't necessarily where you could get the best political

advantage. Instead of just building larger elementary schools because most of the research would support schools of 400 or less, we actually came up with the idea of building the larger schools so we could replace more schools in an economical kind of framework but also keep that small school design. MSBA has been a good partner because they get around the table with you and they challenge your thinking and they ask a lot of questions, which is also very, very helpful, but this did change the community."

Warwick also noted how the redesign process allowed them to address connectivity and equal access to the internet. "We got the mayor to work with us, with Comcast, our vendor, to provide the internet essentials program to all of our families. If we're going to give kids the technology, then they have to bring the laptop home, of course, to do their homework. If they don't have that access, it's a huge inhibiting factor. We saw it as a social justice issue, and we built that up, so we've been able to provide that connectivity," which has made an enormous difference during the pandemic according to Warwick. "Our average daily attendance, even in remotes, has been over 92% since we opened the year. It shows that it's really taken hold. It's only about 1.6 off what our normal attendance is. It really has made a big difference in our community."

Daniel Warwick also expressed similar sentiments as the other superintendents, "From Springfield's perspective, it's just been a pleasure to work with MSBA, and from a long-time person who's lived in Western Mass, it's nice to see that in a state agency. We've always felt we don't get a fair shake relative to the politics in this state, certainly with the resources. The MSBA process has been a fair process where we can compete for projects, and really that political piece hasn't played out negatively in Springfield. We have a lot of need. We have a lot of old buildings; it's a very poor community. The MSBA process has opened it up, made it a fair process. We really feel that in a city where we have very high poverty rates, and in the past, we haven't had a fair amount of the projects coming our way, we've really been able to address the great need in our community through that process, through that fair process." Daniel Warwick went on to note that replacing two elementary schools, Brightwood and Lincoln, that dated back to the 1890s and 1910, in the poorest neighborhoods in Springfield, galvanized these often-ignored communities. The "community is so proud of those schools that are going up, because they feel they designed them, they own them. We let the community representatives from those neighborhoods lead the neighborhood meetings. We were there helping, but they were part of it. They owned this project. I feel great pride in it because of what we've been able to accomplish, but these folks are so excited about this project, and they feel better about their community now. You can't put a price on that."

Lawrence, Massachusetts

Cynthia Paris is the superintendent of Lawrence Public Schools, which serve approximately 14,000 students. Lawrence is a city 30 miles north of Boston, a historic working-class mill town with a very large immigrant community. Over 90% of the students are Latino with the vast majority coming from the Dominican Republic and a recent influx from Central America. Lawrence, like Somerville, is a very compact, dense city, eight miles square with 21 school buildings for its 14,000 students.

According to Paris, immigrant students come to school with very different expectations, and each immigrant group has its own unique history: "Families who have migrated from the Dominican Republic are very trusting of our public school system and they pretty much give us carte blanche when it comes to telling them how things work and what we also expect in return." Paris went on, "My role as a superintendent is not only acclimating others to those cultural nuances but also in the specifics of what a building is, helping them navigate that.

"As a very clear example, in the Dominican Republic if you were to visit a school, the schools are atrium-like for obvious reasons, it's a tropical island. What my students and families have experienced on the island, I did too because I went to school in Puerto Rico, it's more of an atrium feeling where the school house is a round and then you have big open spaces where kids travel back and forth in and out of the big, open, airy spaces where there's green, lush greens, the sky, the air, those are huge big differences in terms of the actual space environment. When we envision new spaces, this comes at the forefront, how do we bring some of those cultural aspects that our families and students have experienced before in order to help them be in a more comfortable space for learning?"

For Paris, being culturally responsive in the MSBA design process was a key aspect in her choice of architects. "When you have structured a process that is inclusive and a thoughtful one that includes hiring and bringing onto your team folks who can be culturally responsive. The MSBA gives us a template and allows us that room in that space to do some good interviewing of architects and owner's project managers. In that process, when we were interviewing architect firms, we wanted to make sure that those folks were bilingual, that they were able to address and engage in the native language of our community, so that there was some trust and confidence being developed between our community and the team that ultimately was going to be articulating that vision."

A key aspect of the educational design in Lawrence was an intense focus on the arts and wellness. Paris explained, "I care a lot about the arts and I care even more about wellness, physical wellness and movement for kids. So, of course, I have an influence in that and I envision it that way and it's my role to also share that vision with my community." She went on, "My role specifically is doing the translation piece of the community desires. And I think what the MSBA has done is not just set up the framework for making, ensuring that the different stakeholders in the community are part of that process, the superintendent's challenge is how to use that template that MSBA has designed and then fill in with the different team members, including the community, and do the translation... We remain as superintendents acutely aware that these projects are a point of pride in the cities." She also noted that in the redesign of the Oliver Partnership Elementary the community made it very clear that they wanted a historic mural retained in the new design which is something that Paris made sure to happen. Finding the right balance between retaining the history of the school and the community while designing for the future was a theme articulated by all three superintendents.

For Paris, working with MSBA was a first-class experience. She observed, "I think my big takeaway and what I would share with others is that, if you are able to partner with an agency organization like the MSBA, you've won the lottery, but otherwise really, really think about how to be able to have inclusive process, ensuring that you start with your learners first, your families and staff, of course, and the community that eventually will be there long after you are a superintendent in that community; that you are sensitive to the fact that buildings stay for a long time. They become a point of pride in a city and in a district. That they are what the community gathers around. Keep that in mind, ensure that you, again, make sure that feedback is gathered throughout this process, and push the boundaries. Dream big with your people, and enjoy it. It's a fun process to be part of. We're looking forward to seeing our two projects that are in line come true pretty soon."

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