

Written Testimony of Jerry S. Heppes, CAE
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Hearing of the
United States Senate Appropriations Committee
Subcommittee on Labor, Health and Human Services,
and Education, and Related Agencies

This written testimony is submitted post the hearing conducted on January 21, 2010. Senator Harkin, Ranking Member Cochran and members of the subcommittee I am the CEO of the Door and Hardware Institute. Our written testimony will underscore several key points that were discussed during the January 21, 2010 hearing as well as to offer additional perspective.

Introduction to Organization

To provide some background the Door and Hardware Institute (DHI) is an IRC Section 501(c)(6) membership association founded in 1975 with a core purpose to advance life safety and security of the built environment throughout North America. DHI represents the architectural openings trade, a 6 billion dollar industry, with more than 5,000 members. Membership consists of individuals, consultants and corporations involved in the writing of architectural specifications, and the manufacturing and distribution of products (doors, frames, architectural hardware, and access control) in all commercial buildings. DHI is uniquely devoted to the interests of the door and hardware industry with its professional certifications, publications, advocacy, and educational programs.

Our members write the specifications, consult, and provide product for the architectural openings (doorways) in schools. Schools are comprised of many particular complicated openings which provide security, life safety, and ADA compliance. Specifying long term and on-going maintenance is also part of our responsibilities. As much as thirty percent of a distributors business can be dedicated to schools (K-12, colleges, and universities).

Recessions Impact on Construction

As we are all well aware, the construction industry has been severely impacted by the current recession. In fact, according to Stephen E. Sandherr, the Chief Executive Officer of the Associated General Contractors of America, construction spending declined by 137 billion dollars last year, and now is the lowest in six years.¹ The forecast for 2010 is just as bleak: McGraw Hill estimates a 3.1% decrease; Reed Construction Data estimates an 8.5% decrease; and the American Institute of Architects Consensus Forecast (AIA consensus forecast comprised of McGraw Hill, Global Insight, Portland Cement Association, Moody's Economy, and Reed Construction Data) estimates a 13.4% decrease. All of these decreases are for Nonresidential construction. Specific to schools, the estimates are: AIA consensus -5.6%; McGraw Hill a -5.4%; and Reed Construction Data -3.4%.²

Job Creation

During testimony, the topic of job creation through school construction was briefly touched upon. It is important to further explore the job creation opportunity and I thought it would be helpful from the perspective of one segment of the institutional construction industry.

What type of impact has the recession had on jobs? The construction industry is only 5% of the U.S. Workforce, however according to Mr. Sandherr, construction workers shouldered 20% of non-farm layoffs last year. He continues to state that the latest federal figures make clear, the depression-like conditions in the construction industry are one of the main factors dragging overall employment.³ These are staggering numbers!

What type of impact does this have on one segment of the construction industry such as our industry? The typical door and hardware distributor requires one employee for every

¹ Construction NEWS, Associated General Contractors of America 2010 Construction Industry Employment and Business Forecast Media Conference Call Remarks, Stephen E. Sandherr, CEO January 20, 2010.

² AIA Non-Residential Construction Forecast January 14, 2010.

³ Construction NEWS Associated General Contractors of America 2010 Construction Industry Employment and Business Forecast Media Conference Call Remarks, Stephen E. Sandherr, CEO January 20, 2010.

\$287,000 in sales.⁴ According to Brian K. Edwards, Chief of Staff of Montgomery County Schools, Montgomery County spent 250 million dollars of construction in 2009. Doors and hardware average 2.5% of the construction cost which means, based upon the sales per employee number referenced above, in 2009 Montgomery County school construction yielded (secured or created) 21 jobs in our industry in one county. Please consider that this is one county in one state. Magnify this number across the country and to all of the industries (the remaining 97.5% of the cost of the job) involved in a construction project and the job creation possibilities are impressive through school construction.

School construction involves a great number of professions, industries, and products, perhaps more than any other building type. This is because there is a specific end-user with a specifically detailed user population. At the onset of a school project, be it a new facility, addition, or renovation, the benefit to designers and engineers is immediate. Architects, site planners, and consulting engineers (civil, structural, mechanical and electrical) are put to work right from the first notice to proceed.⁵

After the design and construction documents are complete the contractors and material suppliers join the design team in the benefits of school construction. Virtually every construction trade is involved in the construction of the base building and interior fit out of a school. The shell building incorporates major trades such as excavation, steel, concrete, masonry, windows, paving, roofing, and utility contractors.⁶

Unlike a speculative office or commercial building a school then has full interior fit out. This project scope will typically include all build-out of metal stud, gypsum wall board, CMU partitions, lighting, plumbing, plumbing fixtures and of course, literally, hundreds of doors/frames and hardware sets in a typical school. Built in furniture, case work, and equipment is also designed and installed as part of the construction project. Finishing contractors can include flooring, carpet, paint, wall coverings, tile, ceilings, and window

⁴ Door and Hardware Institute 2008 Profit Report; Profit Planning Group

⁵ James W. Emr, AIA, President, Smolen Emr + Associates Architects

⁶ James W. Emr, AIA, President, Smolen Emr + Associates Architects

treatments. This interior work employs material suppliers, manufacturers, transportation companies, and installation contractors.⁷

A school will also typically include specialty designers, systems, equipment, and contractors. These can include kitchen/food service, information technologies, audio/visual, and theater/lighting/acoustics. Special teaching programs such as science, technical education and automotive, also include all the associated special design, equipment and contractors. The list goes on and on.⁸

However, this is not the only reason to support school construction.

Funding Cliff

One of the concerns raised during the hearing was the “funding cliff” for the American Recovery and Reinvestment Act set to expire in 2012. The concern surrounds creating obligations for states to continue programs funded by the ARRA which conclude in 2012. The Montgomery County Superintendent testified that to avoid a fiscal crisis for their state, the county is maximizing one-time spending that can support long-term educational improvement without a permanent commitment of local funds.⁹ The superintendent stated verbally during his testimony that utilizing the funds from the ARRA school construction was a “no brainer.”

A “no brainer” because, as he stated, school construction creates a program with an “immediate turnaround.” Construction, whether new or renovation, produces a benefit for years to come; both “statically” in terms of the economic infusion into the communities with jobs and “dynamically” with improved conditions for educating America’s next generations and presumably aesthetically by increasing community value. The Superintendent stated that school buildings are being utilized for up to 70 years. This translates into a real need for funds for ongoing renovations as well as the long term benefits of construction.

Additional Residual Value

⁷ James W. Emr, AIA, President, Smolen Emr + Associates Architects

⁸ James W. Emr, AIA, President, Smolen Emr + Associates Architects

⁹ Testimony of Dr. Jerry D. Weast, Superintendent of Schools, Montgomery County Public Schools, Hearing of the United States Senate Appropriations Committee, January 21, 2010.

In addition, the jobs that are created in construction assist small businesses. This community has recently been identified by many political representatives, including President Obama, as a segment of our country that we must assist as they create a minimum of 65% of the jobs in our country. The construction industry is primarily comprised of small businesses.

In addition, the majority of construction products are made in America; an additional consideration and consistent with advancing jobs. In fact the numbers of job creation noted earlier do not even consider the impact on the manufacturers of construction products.

As of late, there has been increased attention, both organically among Americans wishing to “do more” as well as by elected officials recognizing the need for increased focus on environmental issues, toward green construction. The benefits range from increased sustainability and healthy learning environments to decreased energy cost.

Finally, as suggested above, although admittedly an “intangible” benefit, Congress, local governments, and all concerned Americans have focused on the quality of education provided in our country in light of an ever more competitive world. Clearly, the environment in which learning occurs can contribute to their likelihood of success.

What better time to support school construction with so many residual values.

Decreased Construction Cost

Finally, there is another pragmatic reason to invest in school construction- decreased cost. The estimates of decreased pricing range as high as 75%. In fact Superintendent Weast stated that they were able to build a high school and with the savings build an elementary school as well. Why not take advantage of these cost savings to advance education.

The reasons to support school construction and renovation are compelling!

Life Safety and Security

Finally, allow me to address a final powerful topic that was not considered during the hearing but is on the minds of every educator as well as parent of a student.

Since 9/11 our country has become intensely focused on security. Often when facility managers have taken steps to increase security in the buildings' doorways they have done

so at the compromise of life safety- a dangerous trend. This is due to a lack of knowledge and comprehensive understanding of the applicable building codes which govern the opening as well as product application and capability. The result can often be disastrous whereby the doorway may be more secure but does not provide the intended egress which ensures life safety.

Furthermore, since events such as the shootings at Columbine High School and Virginia Tech, society has become concerned for the safety of our children in schools. Accordingly, schools are faced with complicated life safety and security issues like never before. Administrators, principals, teachers, parents, educational facility managers and school designers are faced with addressing the demand for security solutions every day. Of course, school life safety is a problem that requires sound psychological solutions as well as effective physical security solutions.

The psychological solutions are complicated and rapidly changing, making them difficult to address. Fortunately, physical security changes are readily available within existing products, technology and design and can make an impact. A paradigm shift needs to take place by putting a greater importance on the architectural opening (doorways) and the significant role these products play in improving life safety and security through specification design, product implementation and ongoing maintenance. Every school uses doors and hardware but few are designed to take FULL advantage of the immense role these products can play in creating safer environments for our children to learn. Access Control only goes so far, oftentimes it is simply the door and the locking hardware that provide the last barrier between an intruder and our children.

In 2007, the Door and Hardware Institute, through their efforts with the National Fire Protection Association, was successful in adding a requirement to the 2007 Edition of NFPA 80 Standard for Fire Doors and Other Opening Protectives for periodic annual inspections, by knowledgeable individuals, of fire door assemblies. In 2008 DHI was able to expand that requirement into NFPA 101, The Life Safety Code, to require inspections of doors which provide safe egress (exit) in the following occupancies: educational facilities, day care and places of assembly.

With these codes in place, thousands of jobs will be created or maintained since these updated codes require that these fire and life safety inspections be performed by knowledgeable individuals. There are literally millions of doors that have never been inspected. Money for training, repair and/or replacement of doors will put people to work. The end result is that we have a self sustainable project that, in the end, will provide thousands of jobs, update thousands of schools through renovations, and provide a safe learning environment for our children. As you can see, there is immediate payback on numerous fronts.

Over time, this will enable our industry to work with the building community to correct these types of code violations and to begin to offer better solutions for the balance of life safety and security. It is these types of solutions that we must continue to develop as there should be no greater priority for our government than protecting our students and citizens. What better use of our funds!

Unfortunately to date, during the process of maintaining existing schools, or designing new schools, the life safety and security features that doors and locks provide tend to be overlooked as to the crucial role they can play. This results in: designs which do not take advantage of simple life safety and security solutions; costly and unnecessary changes during the life of the building; and band-aid solutions which satisfy only an emotional response.

In the study produced by a Virginia Tech Review Panel appointed by the Virginia Governor Timothy M. Kaine in an effort to respond to the terrible events of April 16, a recommendation is offered by the Panel in regards to improving the security infrastructure of Universities across the county. Emergency Planning Recommendation II-1 states, "Universities should do a risk analysis (threat assessment) and then choose a level of security appropriate for their campus. How far to go in safeguarding campuses, and from which threats, needs to be considered by each institution. Security requirements vary across universities and each must do its own threat assessment to determine what security measures are appropriate."

The Virginia Tech Report addresses doors and locking systems and specifically noted that in regards to Virginia Tech "most classrooms, such as those in Norris Hall, have no locks.

Staff offices generally do have locks, including those in Norris Hall". It further states that "some universities have locks on classroom doors, but they typically operate by a key from the hallway. They are intended to keep students and strangers out when they are not in use and often cannot be locked from the inside." This illustrates the lack of knowledge within the university systems with regards to simple solutions. A report generated after the Columbine event noted the use of classroom function locks which enable teachers to lock the doorways from inside the classroom resulting in saved lives. These "intruder function" classroom locks have been on the market for quite some time and illustrate the need for our industry to be working closer with Educational Facilities to properly secure their campuses with simple solutions.

The VT Report also addressed "lockdowns" noting that they are not always feasible. However, there are sophisticated systems in place that can provide workable solutions to produce an effective lockdown.

Please consider the impact that funding the advancement of life safety and security in schools could have on our country.

Conclusion

In summary, school construction has tremendous benefits for our society. We have noted job creation, long term facility benefits, projects with immediate payback and a finite end, support of the green movement, ADA Compliance, and the advancement of life safety and security. School construction makes sense.