IMPLEMENTING THE Z10 STANDARD
Q&A With Steven Guillory Jr., City of Houston Public Works & Engineering

The ANSI/ASSP Z10 standard establishes requirements for an occupational health and safety management system and how to adapt that system to an organization. Steven Guillory Jr., a quality risk manager at the City of Houston, shares the journey of implementing the Z10 standard in Houston.

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PSJ: How did you become familiar with Z10, and how did you decide to implement it in the City of Houston?

Steven: I learned about safety management systems during my doctoral studies at Indiana University of Pennsylvania. Prior to a class on the subject, I had no clue about management systems. In the Houston area, safety professionals are very knowledgeable about process safety management. But safety management systems were new to me. In my doctoral course on safety management systems, there was a case study, and I applied some of the trials and tribulations I was currently dealing with as the manager to that case study. On paper, it worked. So I took that theory right over to the City of Houston, and it grew through trial and error. And then boom, that is what we have today. Zero Is Possible is the name of our safety program—ZIP for short. My initial dissertation was on the implementation of a safety management system at a large municipality. I eventually went in another direction completely, but I wrote my dissertation, did extensive research and applied it to the City of Houston in this program, and it worked.

PSJ: Explain how you learned about Z10, brought it to the city and worked to implement it across different departments.

Steven: I have to start with a quick history of the safety program at that time. In 2018, we had roughly 21,000 city employees. We had and still have more than 1,000 facilities. At that time, we were averaging about 1,800 injuries a year and 1,800 incidents, including vehicle incidents and property damage. We had only about 30 safety staff at that time. So for every 700 employees, we had about one safety professional allocated to the bill for facilities. We had one in 100 for injuries, one in 60 for property damage, and one in 60 for vehicle incidents. Looking at the big picture, we had one safety professional for every 928 safety events. From a safety standpoint, our staff was simply too small for the number of incidents that we were experiencing. With the way budgets work in municipalities, it is not possible to just hire 10, 20 or 30 safety managers. We needed to put a program in place that was effective and efficient. That case study proved that even with a limited number of safety professionals, if we put an effective and efficient program or road map in place, we would see reductions in injuries.

In 2018, our safety program was a brief nine-page document. There was no real system in place. It was just a safety policy. Our goal was to take the safety management system and replace our safety policy, which drove safety in the City of Houston for decades. It was a big undertaking, but the case study showed that it could work. We applied bits and pieces of it to the city, even before we started implementing ANSI/ASSP Z10.

PSJ: How did you get buy-in from different departments across the city that were facing different hazards and risks?

Steven: Prior to introducing Z10 formally to the City of Houston, I was acting risk manager or acting assistant director of risk management. I took that opportunity, and I took some guidance from

KEY STEPS TO IMPLEMENTING A SAFETY STANDARD

- **Build trust before pitching the program.** Meet individually with key stakeholders to learn about their operational challenges and perspectives on safety before formally introducing a safety management system.
- **Secure leadership commitment.** Start implementation by gaining support from department directors, then cascade communication and expectations through middle management, safety committees and frontline employees.
- **Use data to guide training priorities.** Analyze incident and injury data to identify common risks (e.g., vehicle incidents, slips, trips and falls, back injuries) and develop targeted safety awareness training.
- **Establish a clear implementation road map.** Define specific milestones (e.g., leadership meetings, employee surveys, training completion, updated incident prevention plans) that departments must complete before fully launching the program.
- **Gather employee feedback.** Use surveys and open discussions to establish a baseline understanding of safety culture and identify department-specific concerns.
- **Focus on culture before metrics.** Prioritize building employee ownership and engagement in safety; improvements in incident rates and costs will follow once a strong safety culture is in place.

the human resources (HR) director. He understood safety management systems better than me at the time. He told me that it was a great idea, but I would have to sell it. But before I could sell it, I would have to to reach out to the key stakeholders to get their take—not on the safety management system per se, but on safety. At that time, some of the department directors loved safety, but more of them did not really care for our group too much. They all wanted the employees to go home the way they came, but there was some discord between our safety group and some departments. My job was to reach out to each department director and meet with them and have discussions. I would introduce myself, get feedback from them on their operations, the challenges that they see in operations and budgets, but overall it wasn't really about safety. Of course, I ended the conversation talking a little bit about safety, getting their feedback on how they felt about employee safety. I asked what things my team and I could do to improve safety in their department. Toward the end of the meeting, I would mention that I was working to implement the management system for the City of Houston. I did not tell them too much at the time, just that something was coming. Over the span of a year, I was able to get on every director's calendar and have those very informal meet-and-greet conversations. It allowed me to get to know them, so that when it was time to implement the safety management system, I knew what buttons to push. It was strategic. But this was all due to my HR director and his advice: you have to get buy-in, but before that, you have to get trust.

In time, we had to determine which safety management system we would use. And once we decided to go with ANSI/ASSP Z10 and got approval to implement from our new HR director, we had formal meetings with department directors. This time, it was more of an official introduction to Z10. We shared statistics with the department directors to show that safety could improve, whether it was the frequency of the injuries or the cost associated with them. We told them what we could do as a safety team but explained that we needed buy-in and support. And it is written in ZIP how the program could be effective for not only their operations but each department, and also the safety of the employees and the bottom line.

PSJ: What did the implementation look like, and how did you measure success?

Steven: The City of Houston has more than 20 departments. Each department director has their own personality, and every department has its own personnel. We had to be able to say the same thing to each department in these meetings but say it differently so that they were receptive to it. That took a

lot of homework, time and effort. I have been with the city for 19 years. I had relationships with many of these departments already, being that I actually started at the airports and public works. So I had experience on the other side of safety, and I knew how to get a conversation started and what they wanted to hear. I knew how to get the response that we needed to move forward. My team is seasoned; they have probably been around longer than I have.

We created a road map for presenting to the department directors. The road map is split in half, with administrative things going on both sides. On one hand, we meet with department directors and inform them about ANSI/ASSP Z10 program, ZIP. We explain what it is, how it came to be, its purpose, what we expect to see from it at the implementation and, most importantly, what we need from that department director. Once that meeting has taken place and we have commitment from that director, that is the green light.

That meeting with the director leads to the next meeting, with middle management. We get into a little more detail with this group than we did with the director as far as statistics and what we need from them. At the executive level, they just need to know this is a program that is going to work and will affect bottom line operations in a positive way. With middle management, we get a little more into the weeds.

Once that meeting with middle management takes place, the next two meetings are with the actual employees in the department or the safety clinic. Some departments are small, and we can schedule several meetings to meet with every employee. But for those larger departments, such as a public works, airport or health department, we meet with their safety committees instead.

When we get to the safety committee and employee level, the meetings are very detailed. The whole purpose is to be transparent about the issues occurring in the city, the costs and the types of injuries occurring. We wanted to make it a point that everyone, whether a director of management or a frontline employee, all got the same pitch. We had to stress to our employees that this is their program.

My executive team in risk management and I met with the director, safety managers and safety supervisors met with management, and safety representatives and safety officers met with safety committees and employees. Every level of the safety team met with their counterpart levels in leadership. While that was happening, we had other things going on behind the scenes. Once a director agreed to support us in our efforts, the first thing we did was email a safety survey to all employees in the department to get a baseline on their perceptions of safety and any current challenges. We included generic safety questions and some that were specific to the department.

We also created in-house safety training modules. Our implementation of the Z10 standard did not cost much money because we did the majority of work in-house. We used the talent and programs that we had in place. I prided myself on hiring very qualified safety professionals. As we started to build to actual Z10 implementation, we made sure to bring people on board that had experience in the management system.

We started to create safety training. Those trainings were looking at data that we had, things that we needed to address immediately such as vehicle incidents; slips, trips and falls; and back injuries. We identified the subject matter experts on our team for many of these topics, and we assigned them to an expert that we had at the time that oversaw training for the City of Houston and HR. We paired him with each of those safety professionals to create safety modules. The intention was safety awareness, not full training—a pretest, 20 to 25 minutes of content, followed by a post-test. Every department had the same core courses regardless of whether they were an administrative or operational department, big or small: slips, trips and falls; vehicle incidents; hazard communications; and other similar things. We created six in-house courses and tracked course completion in-house using our talent management system. When we had those initial meetings with the department managers, we asked them to make sure that their employees take the survey and the six courses that would be coming out.

The last piece was incident prevention plans, which were always required by the city. At one time, we had a template in place that everyone followed. But over time, departments started using their own templates, if they even did an incident prevention plan. This was an opportunity to make it a requirement again. In our meetings with directors, we asked them to help out. For us to officially say a department has now launched ANSI/ASSP Z10, multiple tasks had to be completed. All three meetings had to be delivered, safety surveys had to be completed, and the six core safety training courses for each employee had to be done. In addition, the director had to provide a revised incident prevention plan created with our template. Once we had all those items in a department, the department was officially in the check phase: we planned it, and now we are doing it. Let's see it work and learn from our mistakes so we can act on our corrective actions. That was the game plan.

Keep in mind, this is just one department. We had to do this for 20 departments. We had not gotten to police and fire yet. There were some union issues that made us decide to hold off on those departments. When I stepped away from the program 6 to 8 months ago, every department was in the check phase except for police and fire. But they were enthusiastic.

PSJ: When you think about the results of your efforts and the city's efforts, what stands out to you?
Steven: It was culture. When I first brought this to the city, our focus was on reducing injuries and workers' compensation claims. We thought if we implemented this program, we would see improvements in safety. We did not account for the support from not only frontline employees, but middle management, executives, directors and even the mayor. I think everyone knowing that they had a voice and that it was the same voice helped them feel ownership of the program. As we built the program, we received a lot of feedback and involvement from all levels of the city, from the front line to middle management. I brought a lot of people in the room to get feedback.

When we actually went live, many employees knew about it already because they were part of it. If I had a conversation with an employee who brought up a safety-related concern, I would bring that to the team so we could discuss it. Many employees who had brought these concerns to me came back later and were happy that we had done something about it.

If a strong safety culture is not in place, this will not work. Supportive leadership and qualified safety professionals are great, but if a safety culture is lacking, the employee base will not feel that the organization has their best interest in mind and it will just be another program. No movement will occur, and sometimes there may be pushback, more injuries, fatalities or property damage.

What I learned from this whole experience is not to look for reductions in dollars and cents or reductions in injuries. Instead, look for improvements in safety culture. Once that is done, everything else will fall into place.

When we started to get buy-in from everyone, it was amazing. We had ZIP T-shirts that we would give to employees who finished all six core courses. We initially ordered 5,000 shirts thinking it was not going to be popular, but we started getting 95% participation rates in these departments, so we had to order more. When you see people want to wear shirts that represent and advertise safety, that is unexpected. Design for our shirts, logos, videos, mugs and newsletters were all done in house, and we did the training internally. Outside of purchasing the shirts, the budget was really nonexistent.

We did not create ANSI/ASSP Z10, but we tailored it to our needs, promoted it and implemented it on a minimum dollar. We have taxpayers' dollars in mind; we are not a private sector organization and must be mindful of money. But that is why we hire qualified people and that is why we use all the resources that we have available, to make the dream work.

PSJ: What would you would say to other safety professionals thinking about implementing a safety management system standard?

Steven: Implementation is challenging, especially when trying to change an organization's culture. Not everyone is going to have the best interests in mind. In my case, I thought employees, management or department directors were going to be the Achilles' heel. It was actually my own internal group. The way our risk management team was structured, we put more resources into workers' compensation at the City of Houston than into safety. We were budgeting millions of dollars for injuries and thousands of dollars for safety. Many of the challenges I faced came from my own leadership and leadership in workers' compensation because they only knew the reactive side. It took some time to get them to see the proactive side. I had to sell it in-house that if we put more money on the front end, injuries and costs would decrease. But some may see that as trying to eliminate workers' compensation as a department.

That brings me to the one thing I would do differently. I brought everyone in the room—frontline employees, middle management, engineers, budget-minded people, communications, police officers, firefighters—every department at every level at one time or another met with my team. We met twice a week for 2 to 3 hours for about 2 years. These were intense meetings. I wanted every person in the city, every job classification to have a voice. But the one group that I did not bring in was workers' compensation. My mindset was that I could not afford to deal with the negativity. I thought bringing them in would just cause problems. But in hindsight, if I could do it again, I would have brought them in earlier. They are also part of the city. If I had brought that team in early and often, we could have avoided many of the roadblocks we faced throughout the journey because we would have had that support.

PSJ: Any final thoughts you would like to share?

Steven: When I was drafting my research, the methodology, I had many conversations with the professors. Dr. Jan Wachter was the instructor for the course. When it comes to safety management systems, he knows what he is talking about. I had asked him if this is something we could do at the City of Houston, and he said it was possible, but it would be a challenge. It is not something that is going to happen overnight. I remember thinking that 3 years was a long time, but he said we would need 5 to 7 years just because of the size of the city and the politics involved. He knew some of the challenges that I was facing, where workers' compensation and that mindset of reactivity outnumbered safety and being proactive with trying to change a culture.

I talked to Dr. Janicek, who worked for the City of Chicago or a large municipality in Illinois. He knew the politics. I remember him saying, "You are going to make a lot of enemies." And I have made a lot of enemies. I am no longer in safety at the City of Houston for a reason. But at the same time, my job is done. I was able to bring over a safety management system that no one else has done at a municipality this size. At that time, no municipality had ever implemented ANSI/ASSP Z10. And the feedback from employees, the positivity of ZIP, seeing the T-shirts—I would not trade it for the world. I know I did the right thing, and I know that over time, as the program grows, we will start seeing those reductions that we sought in the beginning.

One thing I would tell others creating these programs is that it is not about the person putting it together. It is not about the people in place at the time. The program will grow. I am no longer there, and most of the team that were instrumental in creating the program and tailoring it to the city's needs are retired or are no longer there. But the program is still going strong. That is a testament to the quality of the Z10 standard, the work that we put into implementing it, the buy-in from the department directors down to the frontline employees and the buy-in from HR directors.

I would caution people not to focus on the numbers right away. Focus on the plan and how to implement it. Ensure that everything is covered. Make sure to get buy-in from everyone before the plan is introduced. Focus on safety culture. Without buy-in from employees, it is a waste of time. If internal resources are available, use those first. If a subject matter expert is available, do not go out to an external consultant.

It can be done. It is not easy. It takes years, and it takes commitment. It takes a strong team. It takes everyone being on the same page. It takes resilience, and it takes thick skin because people will question you, the program and everything else, especially if you are trying to change mindsets. Going from reactive to proactive sounds simple, but it is not. But it is possible. **PSJ**

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