



10 Trends Transforming Fire Station Planning & Design



Building a Better World
for All of Us®

INTRODUCTION

10 Trends Transforming Fire Station Planning & Design

Putting out fires is just 3% of a firefighter's role. Today, they're relied on for emergency medical services, public safety and protection, community education, and so much more. Unfortunately, the continuously increasing demand is taking a toll on our nation's 1.1 million firefighting professionals.

In response, future-forward leaders are seeking not to accommodate but rather empower their workforces – a shift in thinking that is transforming fire station planning and design.

Throughout this eBook, a fire chief of 30+ years, senior architects, and a leader in design-build share 10 trends that speak to the transformative state of fire services, as well as the planning and design steps you can take to future-proof your departments in an era of constant change.

Short Elliott Hendrickson Inc. (SEH®) is a multidisciplined, professional services firm made up of 800+ engineers, architects, planners and scientists who provide complex solutions to clients throughout the U.S. With offices across the Midwest, Colorado, Virginia and Wyoming, SEH focuses on improving mobility, improving infrastructure, engineering clean water and creating better places. We are guided daily by our core purpose of Building a Better World for All of Us®.

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CHUCK LEIPZIG

Chuck is an operations planner for fire station projects and former fire chief of the City of Kenosha (WI) Fire Department, a position he held for 30+ years and retired from in 2020. Chuck's unique municipal and leadership experience in public safety has positioned him to pinpoint a community's immediate and long-term needs. He then strategically plans how to bring fire stations and other public safety projects to fruition in the most practical yet innovative manner.



TREVOR FRANK AIA, LEED, AP®, PMP, NCARB

Trevor is a senior architect, renovation specialist, and facilities visionary with 30+ years of experience. Trevor is passionate about designing public safety facilities in a way that empowers a community's future. He has renovated and transformed millions of sq. ft. of public safety, library, and city hall buildings, as well as a number of award-winning fire stations.



ALLISON MILLER, AIA, NCARB

Allison is a senior architect and project manager with 10+ years of experience designing residential, commercial, educational, and public safety buildings. Allison believes strongly in "designing for every square inch" to optimize return on investment. She has the expertise to make this happen for all kinds of clients.



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Brian is a senior architect and project manager with 20+ years of architectural experience developing sustainable, creative, and innovative design solutions. With a focus on incorporating green design features, Brian has led multiple project teams on large-scale public safety facility renovation, design, and construction projects throughout the nation.



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STEVE PETERSON, PE

Steve serves as president for [SEH Design|Build](#), a subsidiary of SEH. Throughout his 35+ year career, Steve has been actively involved in the development of design-build projects across the nation. He has led project teams in the design and construction of various large-scale building types, including fire stations and municipal facilities.



1

TREND

Career fire departments on the rise

There are 1.1 million firefighters in the U.S. serving at 30,000 fire departments (50,000 stations in total). More than 50% of the nation's firefighters are volunteers and 12% are on-call, paid-per-call firefighters. For firefighters to safely carry out the responsibilities asked of them, and feel supported doing so, more departments are shifting to full-time/career workforces.



How can you future-proof your fire department?

Uncover whether a career department is feasible

Being on the ground floor of community planning gives you a clear understanding of the trajectory of your community and public safety departments. It provides you with the information needed to make informed decisions, such as uncovering whether to transition to a career fire department, whether you can afford the transition and whether your facility can accommodate the change.

To start, fire services and municipal planners should partner to look closely at your community's long-term plans and growth initiatives. Fire services should have a seat at the table when developing comprehensive and capital improvement plans, especially in areas related to public safety.

Factor in call volume trends, the increasing responsibilities of your workforce, infrastructure age, and the overall mood of staff. Explore questions like:



Are call volumes increasing? What are the types of calls?



Does your workforce require additional skillsets, and how might you factor those into the facility design?



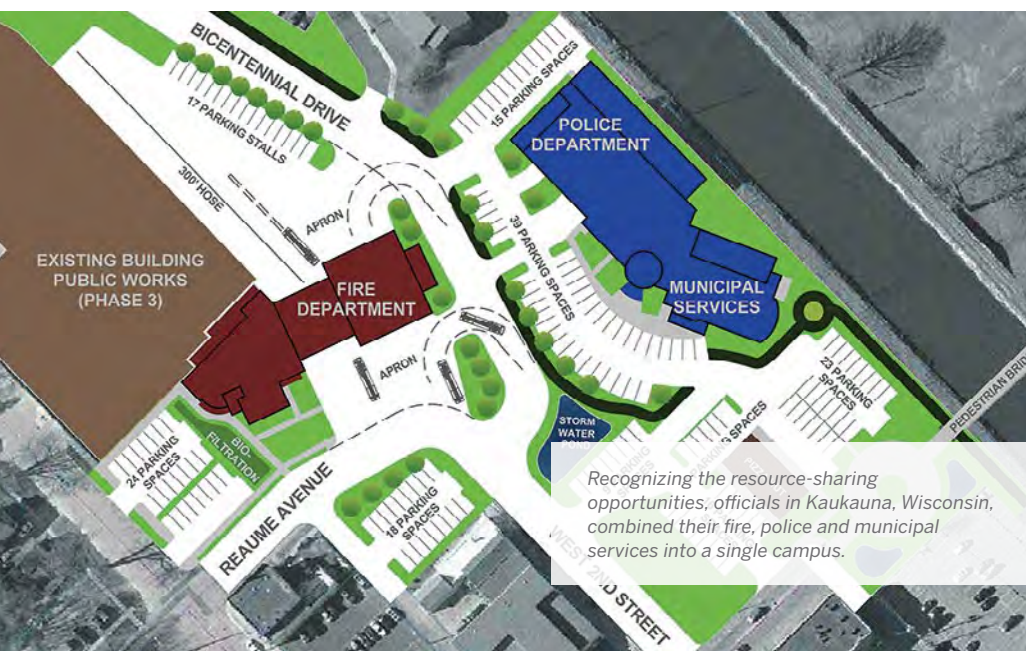
Are neighboring departments transitioning to career workforces? If so, why? Is there an opportunity to partner?



Can your aging facility accommodate the design changes needed to become a career department?



Do you need additional services or stations to meet geographic growth or demographic changes?





Actionable insight FROM THE EXPERT



Most municipalities understand the need to shift to career departments and are working to do so, but they're competing for dollars with existing public services, upcoming developments, and other community growth needs.

Resource-sharing with other public safety departments – including equipment, facilities, and training – is one way communities are overcoming needs across multiple areas with restrictive budgets. Look for resource-sharing opportunities as you examine your community's long-term and strategic growth plans.

CHUCK LEIPZIG | OPERATIONS PLANNER, FORMER FIRE CHIEF



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2

TREND

The challenge of recruitment and retention

The role of a firefighter has changed. In a given week, firefighters may spend time searching for wreckage from a plane crash, responding to a car accident, lending support during a protest or riot, and tending to sick or injured individuals, all while being readily available to extinguish fires. The rapidly increasing demands of the job combined with limited compensation and health risks, among other obstacles, have made recruitment and retention a significant and expanding challenge.

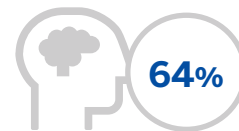




Percentage of U.S. fire departments providing specialist services:



VEHICLE
EXTRICATION



FIRE/INJURY
PREVENTION/PUBLIC
EDUCATION



WILDFIRE/
WILDLAND URBAN
INTERFACE



BASIC LIFE
SUPPORT



EMERGENCY MEDICAL
SERVICES (EMS) NON-
TRANSPORT RESPONSE



TECHNICAL/
SPECIALIZED
RESCUE



FIRE INVESTIGATION/
FIRE CAUSE
DETERMINATION



FIRE INSPECTION/CODE
ENFORCEMENT



DEPARTMENTAL
(IN-HOUSE) TRAINING
ACADEMY



ADVANCED LIFE
SUPPORT

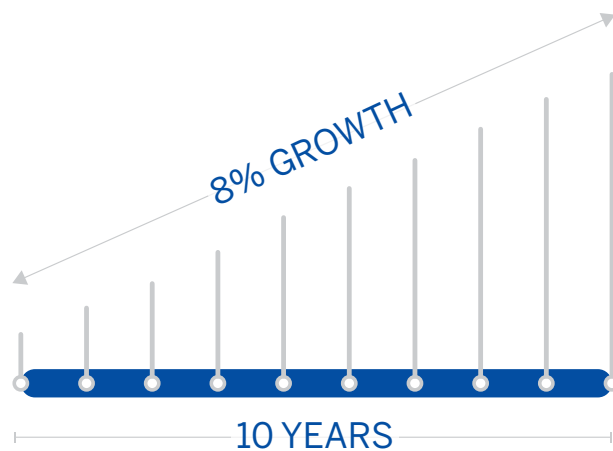


EMS AMBULANCE
TRANSPORT



Limited supply of candidates, high demand

Adding to the challenge of recruitment and retention is the widening candidate supply-demand gap. Firefighter employment is expected to grow by 8% over the next 10 years – meaning 27,000 new openings each year.



6 reasons why supply is low and demand high

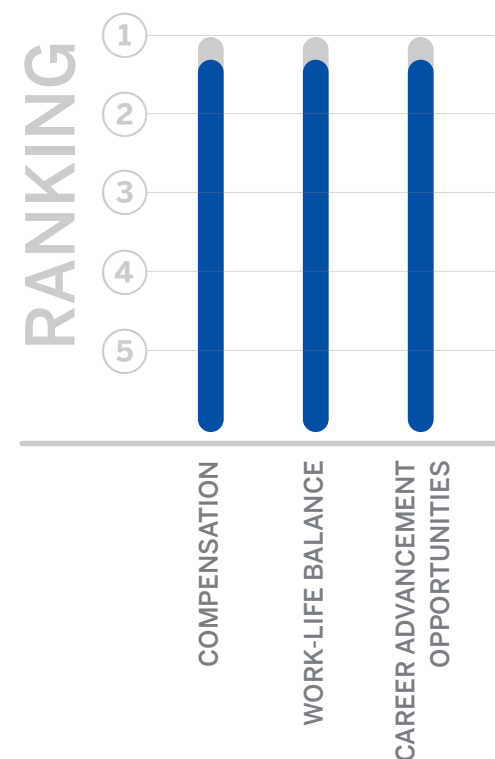
- 1** | Volunteers are walking away from the industry, focused on finding paying jobs.
- 2** | Volunteers are finding full-time firefighting roles at neighboring departments.
- 3** | Many suburban and rural communities are growing faster than they can staff their departments.
- 4** | In an industry that lacks diverse representation, women and minorities are hesitant to apply for open positions.
- 5** | Firefighters trained in emergency medicine are finding safer, more lucrative careers in healthcare and other applicable trades.
- 6** | An aging workforce has created the need for an infusion of young talent.

How can you future-proof your fire department?



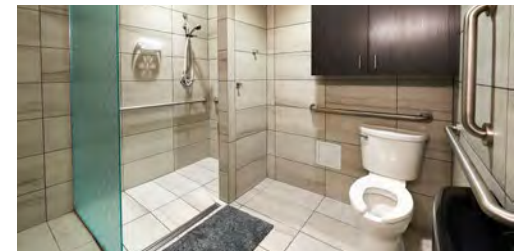
Prioritize recruitment and retention during planning and design

Compensation is a top priority for professionals in all industries, but reports show work-life balance and career advancement opportunities rank just as high if not higher. From on-site training spaces to more welcoming designs, it's possible to create spaces that meet the needs of today's candidates.





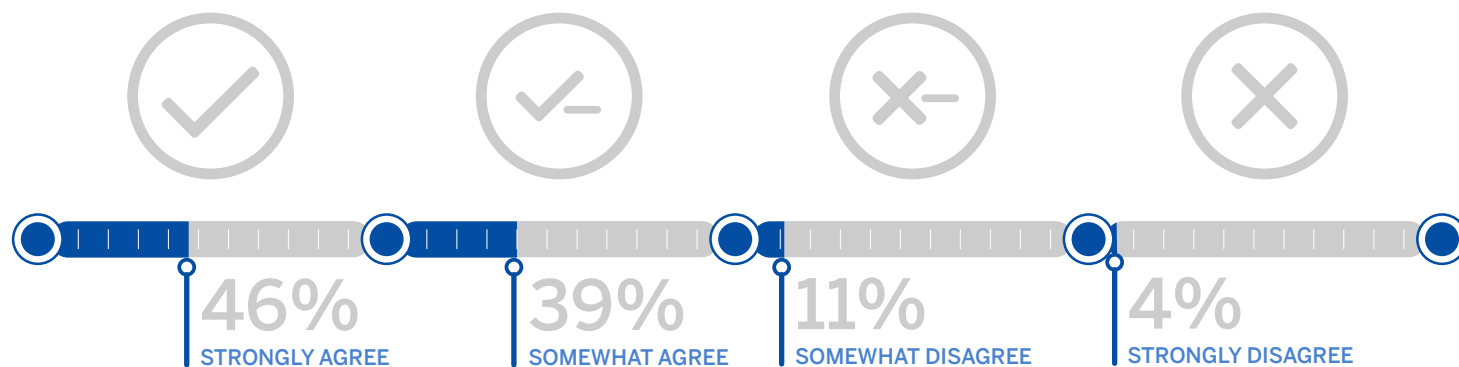
Welcoming spaces



Many fire stations house staff 24 hours a day, 7 days a week, including major holidays. Designing your station as a home away from home supports your current workforce and helps attract prospective candidates. Look for opportunities to

include a fitness center, recreation spaces like a living room or rooftop patio, and make sure your dormitories are welcoming to physically and mentally exhausted workers (e.g., natural lighting, private bathrooms, strategic layouts).

85% of firefighters say their jobs are stressful.





Actionable insight FROM THE EXPERT



Buildings are often a physical representation of what lies beneath, from culture to performance, and beyond. In addition to efforts like internships and cadet programs, departments can be more competitive in attracting candidates with more intentional planning and design. Design features like those highlighted on the previous page showcase to candidates how important their on-site experiences are to you.

Further, specific to the desire for career advancement, on-site training facilities (explored in Trend 10) protect your workforce and empower them to grow as professionals. Ultimately, candidates will be more likely to join your workforce – and current staff more likely to stay – if their experiences match their aspirations.

CHUCK LEIPZIG | OPERATIONS PLANNER, FORMER FIRE CHIEF



3

TREND

Identifying and segregating “hot zones”

Firefighters and EMS workers returning from calls can bring carcinogens, toxins, and biological pathogens (viruses) into the fire station if not properly decontaminated – infecting apparatus bays, kitchens, fitness areas, dormitories, and even the homes of your staff.

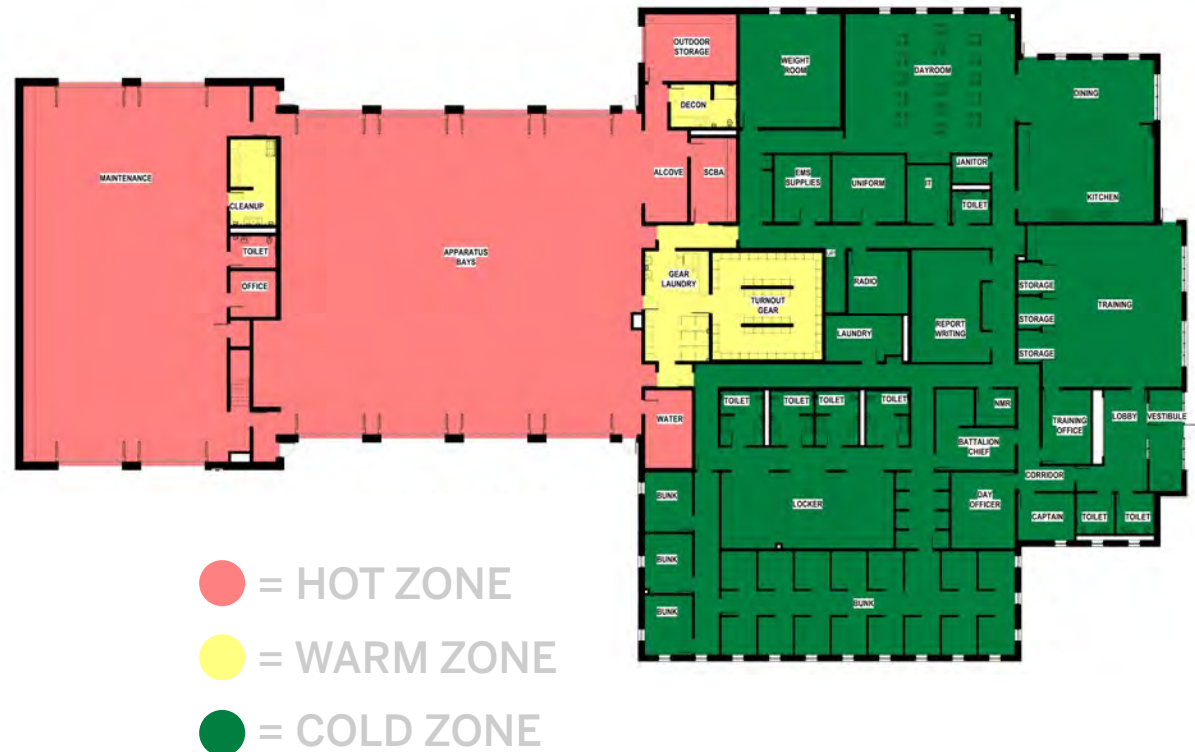


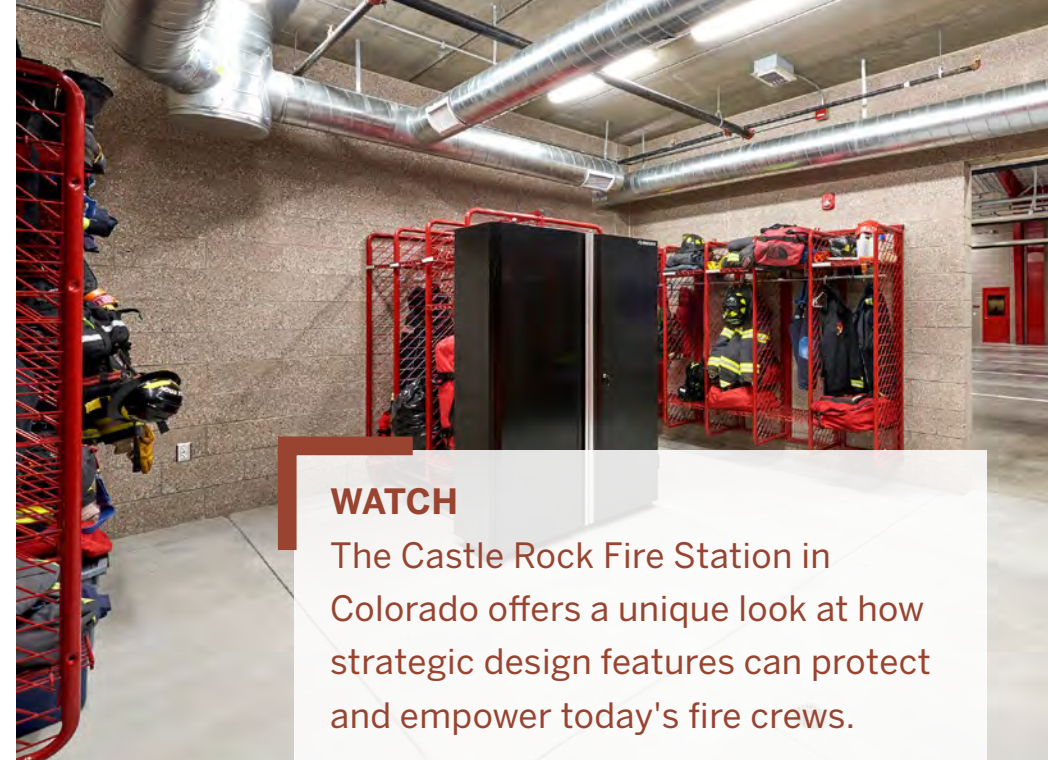
Hot, warm and cold zones

Harmful carcinogens and toxins include dust, asbestos, diesel fumes, bacterium, and other chemicals that burn when fires catch, all of which can cause heart problems and increased risks of cancer. In fact, cardiac-related events account for 44% of on-duty firefighter fatalities. Firefighters also face a 9% increase in cancer diagnosis compared to the general population.

“Hot zones” are becoming widely used to prevent prolonged and unnecessary exposures.

Hot zones are spaces within your station that may be contaminated, while cold zones are free from risks. Warm zones are the transitional spaces in between. Departments are identifying these zones, then completely segregating them from one another through strategic design and protocols.

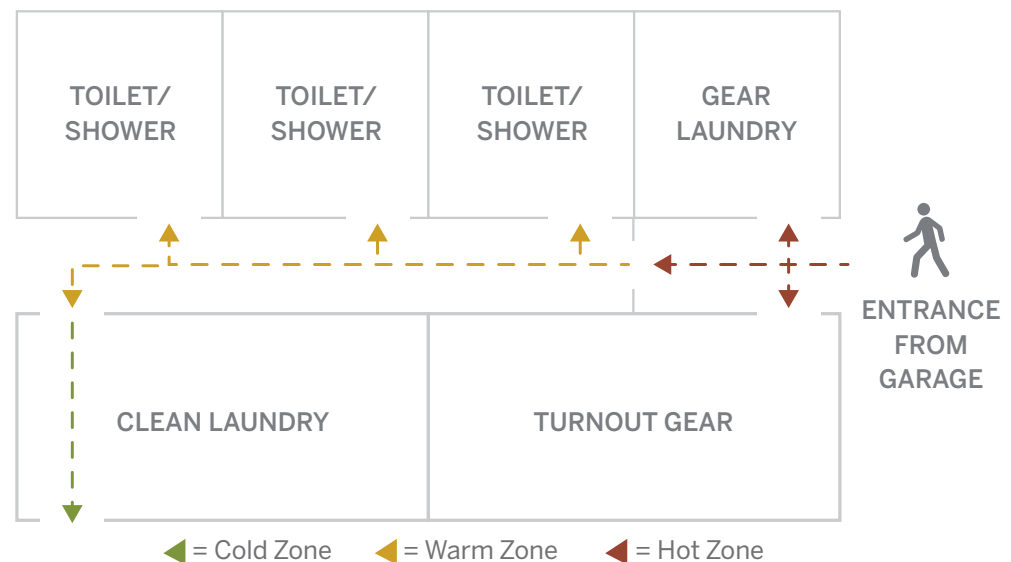




Prevent illnesses through strategic planning and design

Decontamination spaces (hot zones) encourage and ensure the separation of contaminants from recreational areas (cold zones). Examples include dedicated areas – like laundry rooms, steam showers, and turnout gear rooms – used specifically for the decontamination of clothing and equipment, and spaces for your staff to safely change and rehabilitate to prepare for the next call.

It's also important to plan flow patterns and institute policies that ensure your teams clearly understand the various zones and steps they need to take to decontaminate. The roots of these patterns and policies can be strategically planted during the fire station design phase.





Actionable insight FROM THE EXPERT



Firefighters are expected to be dressed, out the door, and on the scene of an emergency in just a few minutes. Because service is so timely, crew members are often focused on protecting the lives of others rather than their own safety.

Integrating hot and cold zones and carefully crafted flow patterns into fire station planning and design reaffirms to your workforce that you value their safety, and that you've put strategic plans in place to protect them from harm.

It also empowers your crew to focus on serving because they know the exact steps to take when leaving and returning to the station, as well as the equipment and facilities available to them to ensure their protection.

TREVOR FRANK | SENIOR ARCHITECT



4

TREND

Community risk reduction

Fire departments understand their communities better than any other organization. They see firsthand how people live, and this uniquely positions them to educate the public. Enter the rise of community risk reduction (CRR) programs, a proactive and preventative process municipal leaders are using to identify and reduce risks within their communities.





Fire departments are prioritizing CRR to educate the community in a way that decreases call volume and lowers demand on staff.

CRR programs provide equal value to the largest urban departments and smallest rural stations. They're especially timely for departments with limited resources. For example, departments unable to hire more staff are prioritizing CRR programs to educate the community in a way that leads to decreased call volume—subsequently easing the burden on their workforces.

Five Es of community risk reduction



EDUCATION

makes the public aware of risks and how to prevent them.



ENGINEERING

gives fire departments the opportunity to partner with the community to promote safety tools and technologies.



ENFORCEMENT

identifies potential risks and non-compliance; teaches the community (e.g., retirement homes, businesses, educational institutions) the importance of fire safety codes.



ECONOMIC INCENTIVES

encourage better decision making throughout the community (e.g., fire sprinkler tax incentives for small businesses).



EMERGENCY RESPONSE

protects your community and firefighters by making sure they have the necessary equipment and training.



How can you future-proof your fire department?

Reduce call volume and staff demands with a CRR program

CRR programs go far beyond providing free car seat inspections or educating residents on the importance of sprinklers. They require a comprehensive community risk assessment, then developing and putting formal response and mitigation plans into action.

If you answer yes to any of the following questions, a CRR program may be helpful to your department:

- | YES | NO | | |
|-------------------------------------|-------------------------------------|----------|--|
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 1 | Are emergency needs as well as federal and local requirements increasing the demands of your staff to an unsustainable level? |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 2 | Does the demand on your workforce outpace the resources you have available? |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 3 | Is your workforce in need of better work-life balance? |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 4 | Has your budget required you to shut down proactive public education activities (e.g., outreach events at public libraries or schools) to exclusively meet emergency response needs? |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | 5 | Can you readily identify the top 2-3 demographics or user groups (e.g., retirement communities, areas with high drug use) most in need of education? |



Actionable insight FROM THE EXPERT



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If done right, CRR programs can reduce the rapidly increasing demands on your workforce and overall call volume. As CRR takes hold, we're seeing more stations designed to serve as daytime hubs of non-emergency response support, rather than continuously providing on-demand emergency services that tax your workforce.

As the saying goes, an ounce of prevention is worth a pound of cure. The effort to proactively educate the community and identify high-priority risks is small compared to what fire departments are gaining in resource allocation and budget flexibility.

TREVOR FRANK | SENIOR ARCHITECT



5

TREND

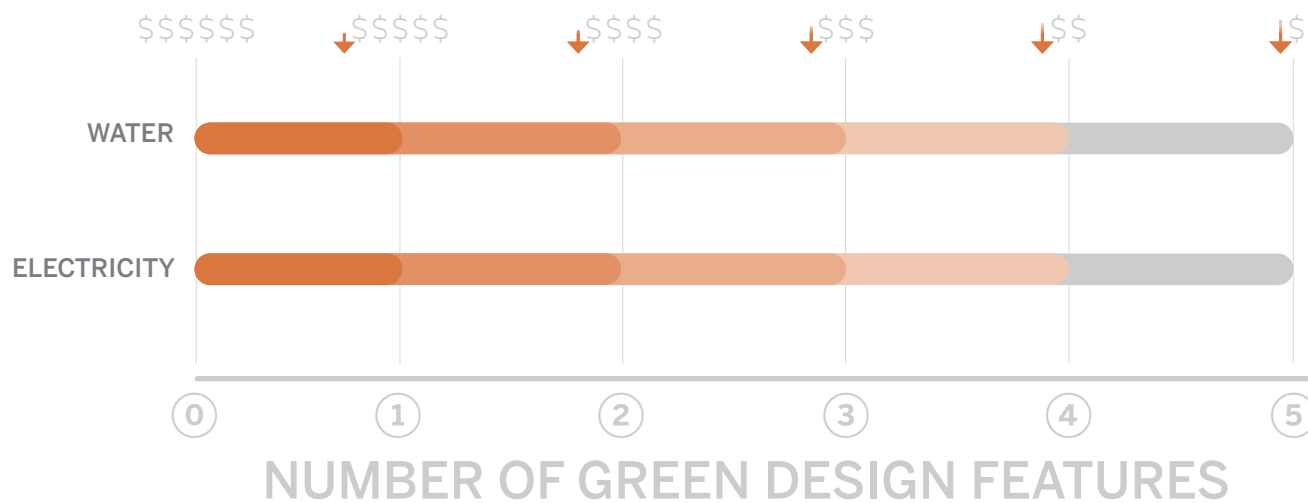
Sustainable design becoming a norm and priority

Vegetative roofs, photovoltaic (PV) panels, electric emergency vehicles mitigating high gas prices, and energy-efficient windows – these sustainable design features can be found in fire stations across the country.





Vegetative roofs provide energy savings, improve air quality, and reduce the demand on stormwater drainage and treatment systems.



Long-term cost savings

A primary reason for the growth in sustainable design is the long-term cost savings many departments are experiencing. Green design features can significantly lower energy bills and reduce water usage.

Beyond the financial advantages, they nurture the environment and create safer, healthier, and more supportive environments for your workforce.

How can you future-proof your fire department?



Evaluate the experiences of your neighbors

Two fire station designs in Wisconsin provide examples of how you can use green designs to equip your stations to thrive in a more sustainable, energy-conscious world:

Kaukauna Fire Station

Kaukauna's 25,000 sq. ft. fire station features geothermal heating and cooling, solar PV, and light-emitting diode (LED) lighting. These features save the City nearly \$40,000 in energy costs each year. The department's 90 kW PV array is the largest PV system serving a fire department-owned building in Wisconsin.

In addition, each room in the fire station is equipped with motion-activated LED lighting, further saving energy costs. The parking lot is equipped with a charging station for electric cars – equipping the station for the future as electric vehicles become commonplace.

North West Fire Station, Fitchburg

The North West Fire Station in Fitchburg is a single-level, 25,000 sq. ft. station. The windows around the building have low-E glazing which reduces solar heat gain. The transparent metallic coating from these windows economizes heating energy – the dual action coating reflects heat back into the room while allowing heat and light from the sun to pass into the building.

The design also includes a geothermal system, radiant in-floor heating, rooftop PV panels, LED lighting, and a solar hot water heating system, all of which are saving the City \$46,000 per year in energy costs.

See more of the Kaukauna and Fitchburg fire stations:

[▶ WATCH VIDEO](#)





Actionable insight FROM THE EXPERT



The biggest challenge for fire departments trying to prioritize sustainable design is quantifying and proving the return on investment. This is critical because buy-in is often needed to secure funding, especially as green designs can cost more upfront than traditional building layouts and materials.

As you plan your next fire station or explore remodeling options, uncover and present the full picture to help secure buy-in for green design features: financial gains, improved workforce health, environmental protection, attractive to new candidates, and beyond.

BRIAN BERGSTROM | SENIOR ARCHITECT



6

TREND

Diversity and inclusion – designs inclusive of all genders

In the U.S., 96% of career firefighters are men and 82% are white. The fire services workforce is steadily becoming more diverse, which is encouraging, but there is much more work to be done and opportunities for improvement.



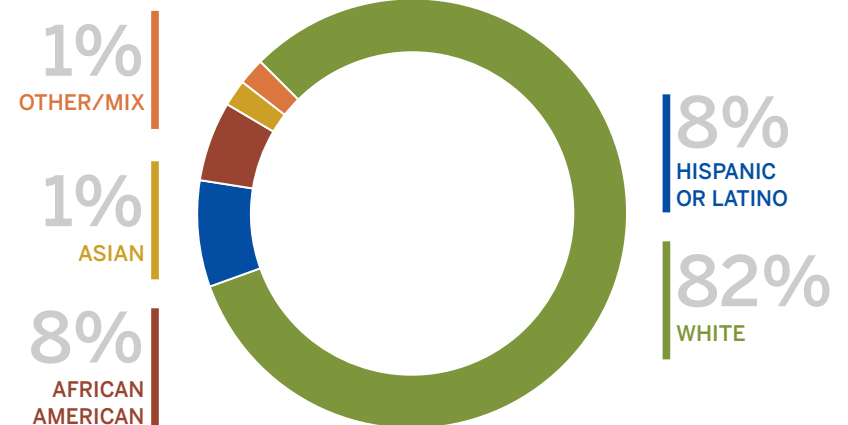


Renewed focus on diversity and inclusion

With the rapidly growing recruitment supply-demand gap and the responsibility we all have to advance diversity, fire services leaders are renewing their diversity and inclusion efforts. Beyond just closing the recruitment gap, the following two pages highlight the innumerable benefits of prioritizing diversity and inclusion in the fire services industry, as well as multiple design options that support these efforts.

Ethnicity of registered U.S. firefighters

Source: U.S. Department of Labor, Bureau of Labor Statistics



How can you future-proof your fire department?



Foundational design features reaffirm to prospects and the community the importance your department places on diversity and inclusion.

✓ Private Sleeping Quarters

Equip your fire department for better diversity and inclusion by making your stations safer, more functional, and more inviting to a broader audience of candidates. Foundational design features reaffirm to prospects and the community the importance your department places on diversity and inclusion.

✓ Private Bathrooms

✓ Private Nursing Areas

✓ Collaborative Public Spaces

Many fire stations are being designed with private sleeping quarters and bathrooms, as well as private nursing areas for mothers, while still prioritizing collaborative public spaces. Unlike gender-specific designs, such as the traditional communal dormitory and locker room layout, gender-inclusive stations are more inviting and respectful of all genders and ethnicities.



Actionable insight FROM THE EXPERT



Diversifying your workforce not only opens your stations up to more candidates but brings in new and invaluable ideas, leadership, and character. Greater workforce diversity – whether age, gender identity, race, and even personality traits – better reflects the community your team is serving. It can bridge communication divides, language barriers, and so many more differences.

From inclusive fire station designs to intentional recruitment and marketing efforts, from targeted internship opportunities and succession planning to celebrating employees' differences, there are steps all fire departments can take to attract a broader, more diverse pool of candidates and, in turn, better serve our communities.

ALLISON MILLER | SENIOR ARCHITECT

7

TREND

Every second matters

Response time is one of the most important and scrutinized elements of fire services, as one minute is often the difference in preserving life and property. Response times also determine resource allocation. For example, slow response times may indicate the need for more staff, training, and efficient street design in areas of your community.

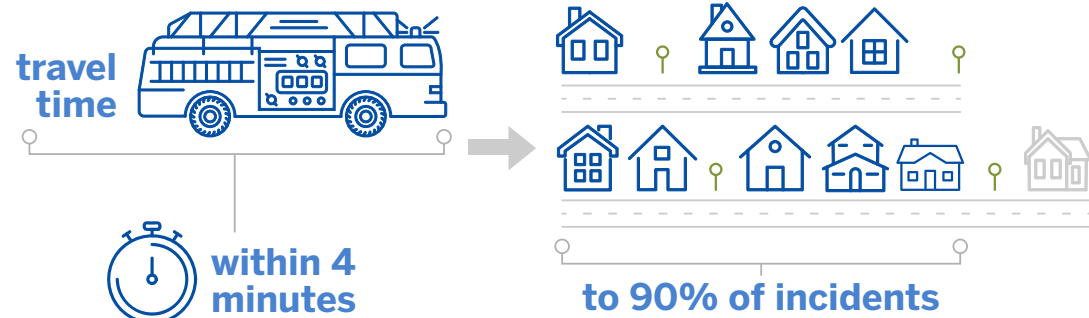




Response time standards

The NFPA 1710 standard states: “The fire department’s fire suppression resources shall be deployed to provide for the arrival of an engine company within a 240-second (4-minute) travel time to 90% of the incidents” with minimum staffing of four personnel.

Although one-third of large cities in the U.S. are unable to meet this timely response standard, nearly all fire stations respond to calls in less than 6 minutes. From gearing up to leaving the station to arriving on the scene prepared to act, every second matters indeed.



How can you future-proof your fire department?

1

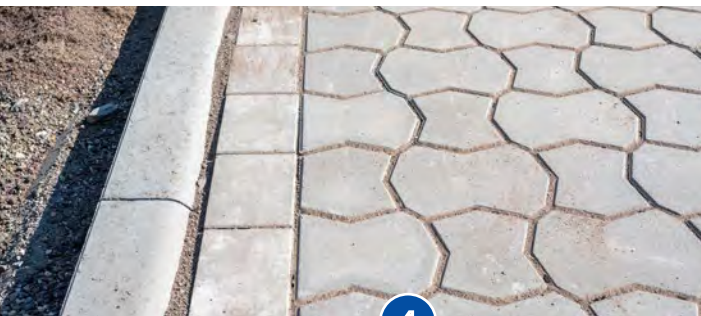
- 1 Single-story designs
- 2 Four-fold side-motion doors
- 3 Community planning
- 4 Flat curbs
- 5 Traffic signals
- 6 Planned parking regulations



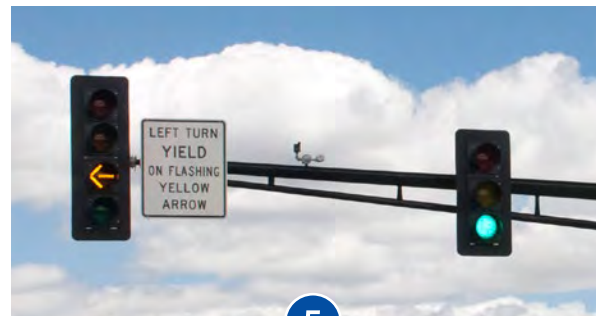
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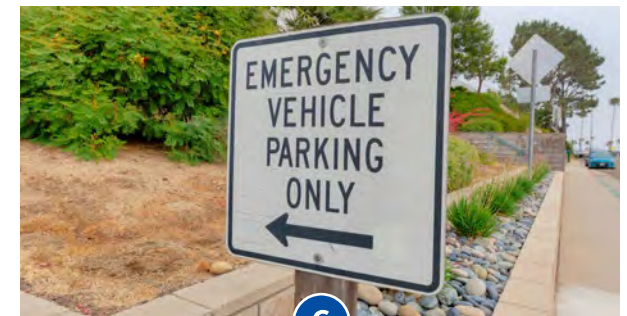
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4



5



6

Performance-forward design features that support response time include single-story designs and four-fold side-motion doors. Single-story designs allow your staff to reach bays more quickly, while removing fire poles reduces the risk of injury and subsequent delays. Four-fold doors open twice as fast (24 in. per second) as conventional overhead and coiling doors (8-12 in. per second).

Another critical step is making sure fire departments play an active role in community planning, such as the design for new housing developments. Developments with tree-lined, narrow streets, and houses clustered together can significantly increase response times and limit access. Roundabouts need to provide the proper width for trucks to safely and efficiently maneuver.

Conversely, flat curbs allow fire trucks to make sharper turns. Traffic signal and emergency vehicle preemption enables first-response vehicles to request signal preemption through equipped intersections. Carefully planned parking regulations make sure fire trucks, ambulances, and school buses always have access.



Actionable insight FROM THE EXPERT



Legend
Municipality
Roads
Potential Sites1
4 minutes
5 minutes
6 minutes
Drive Time Source
ArcGIS Online - Drive Time
Analyses

66



As communities grow, new land developments arrive, and road connectivity changes, it's important to continuously evaluate the location of your public safety and protection teams. Fortunately, technology has made precision a norm.

Geographic information systems (GIS) create heat maps that pinpoint locations that optimize response time. These heat maps factor in community hazard locations, population densities, access to major roadways, response times, drive time analyses, 911 calls, and other important data. Whether evaluating where to place a new fire station or seeking to pinpoint roadway reconstruction needs to support your response efficiency, GIS-driven heat maps can help ensure you're maximizing every second.

BRIAN BERGSTROM | SENIOR ARCHITECT

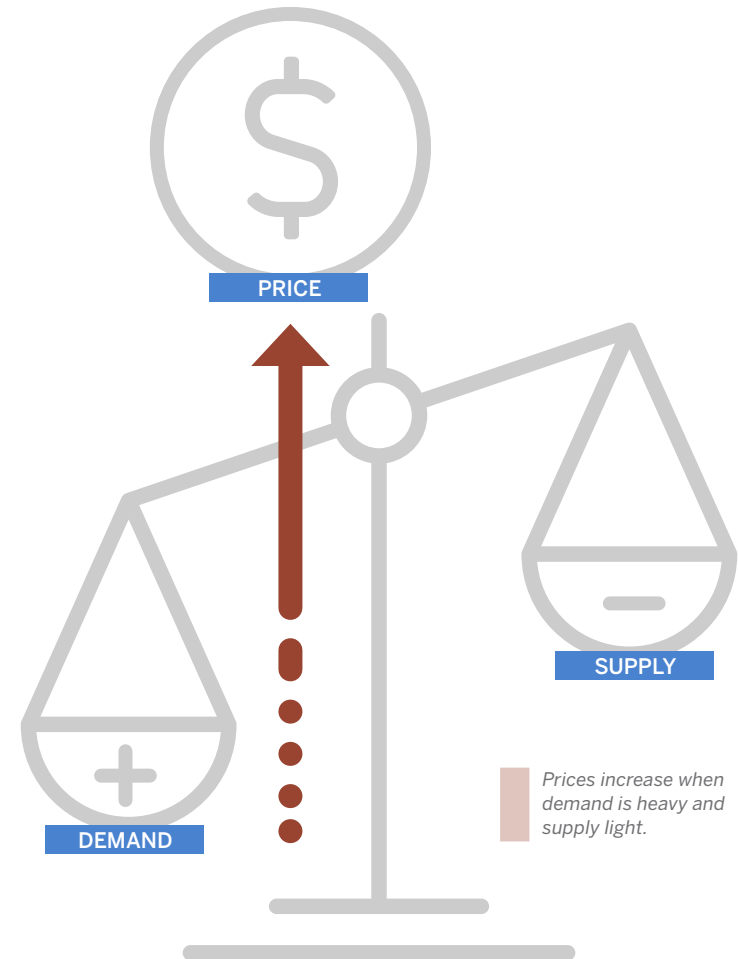
8

TREND

Every dollar matters (market fluctuation)


The fire services industry has long relied on the “just in time” (JIT) approach to inventory management. The JIT approach means sourcing and purchasing building materials (e.g., lumber, lighting, HVAC systems) when you need them for a new fire station or remodeling effort – not before.





COVID-19 highlights flaws in the JIT approach

The flaws in this approach have been recently tested by the pandemic and subsequent impacts of factory shutdowns, which resulted in supply reductions and a strained economy. As municipalities shifted their focus back from pandemic operations and began to advance critical projects, there was a rapid increase in demand, leading to higher material costs.



How can you future-proof your fire department?



Be proactive; partner with planners to look ahead

Market fluctuation and the interaction between supply-demand are not new concepts. However, the pandemic has spotlighted the opportunity for fire services (and all public safety departments) to shift away from the JIT approach and become more proactive with their planning.

As touched on in Trend 1, partnering with municipal planners opens the door for long-term planning and a more methodical approach by giving you insight into future needs and the ability to act without being dictated by the market.





Actionable insight FROM THE EXPERT



Every square inch of a fire station costs you hundreds of dollars. Understanding what you have and what you need in advance of critical projects, without being driven by somebody else's timeline, allows your team to focus on maximizing every square inch of design and every valuable dollar.

Market fluctuation will always be part of the equation. Proactive planning, budget alignment, partnering with consultants capable of working within your budget and timeline – all of these add up to a project that fits your needs and goals, not one driven by whatever changes take place within the market in a given month or year.

ALLISON MILLER | SENIOR ARCHITECT

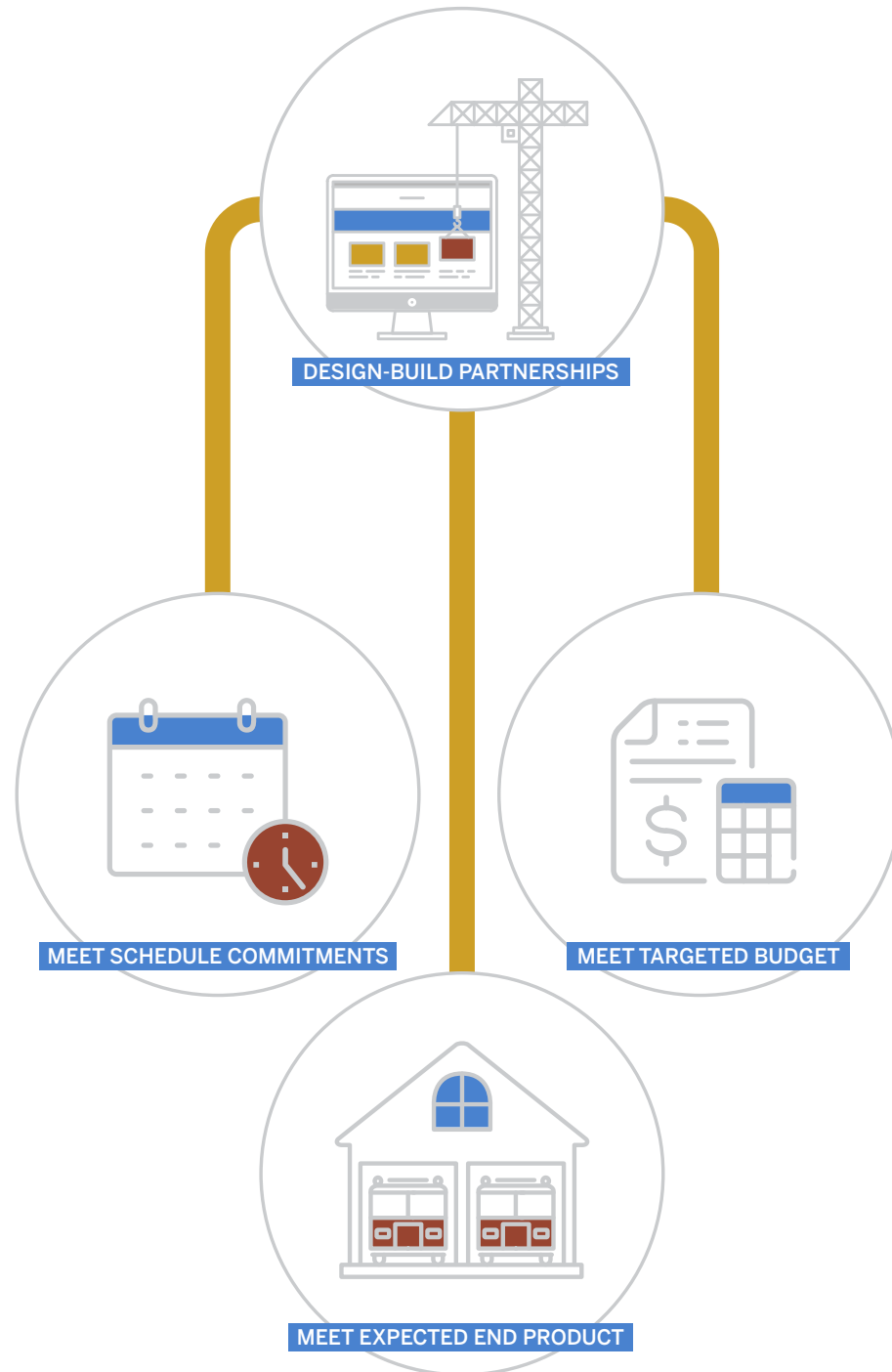
9

TREND

Design-build project delivery: better control, more flexibility

The design-build project delivery method brings fire station design and construction consultants together as one team under a single contract. For a design-build fire station project, the city, fire services, architects and engineers, and the general contractor operate as a single team.





In an industry with limited resources, the design-build project delivery method creates better control over budget, timeline, and design, a deeper level of collaboration, and fewer change orders and surprises. As part of design-build partnerships, the project delivery team assumes full responsibility—such as designing to your target budget and meeting schedule commitments, and an end product that meets all contractual expectations. This removes liability for the city and fire department.

Although not the right approach for all fire departments, the design-build project delivery method creates an undeniable advantage for many fire stations and other public safety facility projects.





How can you future-proof your fire department?

WATCH

The City of Longmont, Colorado, shares why design-build delivery was the right fit for the City's fire stations as well as the innovative, sustainable design features that followed.

ARCHITECT

ENGINEER

CONTRACTOR



The City of Longmont partnered with SEH Design|Build for two new fire stations. City residents approved a bond that provided the City with a set amount of money to be used by a specific date. At the same time these projects entered the design phase, the cost for materials had risen by 25% – further adding to budget constraints.

Condensing the number of contractors into a single team allowed the project to move forward quickly and efficiently, taking full advantage of the bond allocation.

Further, partnering with a single multidisciplinary team empowered the architects to think like builders and builders to think like architects. For example, the SEH Design|Build team designed both stations with similar layouts using many of the same building materials; subsequently, purchasing materials in bulk reduced overall costs, offset the 25% price increase and shortened the design timeline.



The traditional design-bid-build project delivery method often requires experienced oversight from the city and fire department, as well as additional flexibility within the project schedule and budget. In some cases, the city and fire department know ahead of time their project will require an expedited construction schedule with restrictive budget; this makes design-build delivery an attractive option.

The architect/engineer-led design-build delivery method ensures your fire station will be built on time and within budget using the most efficient building practices and materials.

At SEH Design|Build, we provide a cohesive team of architects, engineers, planners, and contractors experienced in collaborating and addressing the specific needs of your community. We also offer P3 (private-public partnerships) and lease-purchase programs that provide creative financing options.

STEVE PETERSON | SEH DESIGN|BUILD PRESIDENT



10

TREND

Safety first, always

Safety is an overarching trend that touches every aspect of fire services. Though firefighting professionals have long been asked to risk their lives to fight fires, they are facing more danger than ever before.





1



4



2



5



3



6

Protecting your crew against physical threats

Responsibilities have skyrocketed, including responding to possible arson, attending to criminal complaints, arriving on the scene of mass shootings, lending support during riot events, and sometimes even bracing for threats against the department.

In this new normal, department leaders are taking a careful look at how they can better protect the individuals who serve during these dangerous events. Specific to fire station planning and design, examples include:

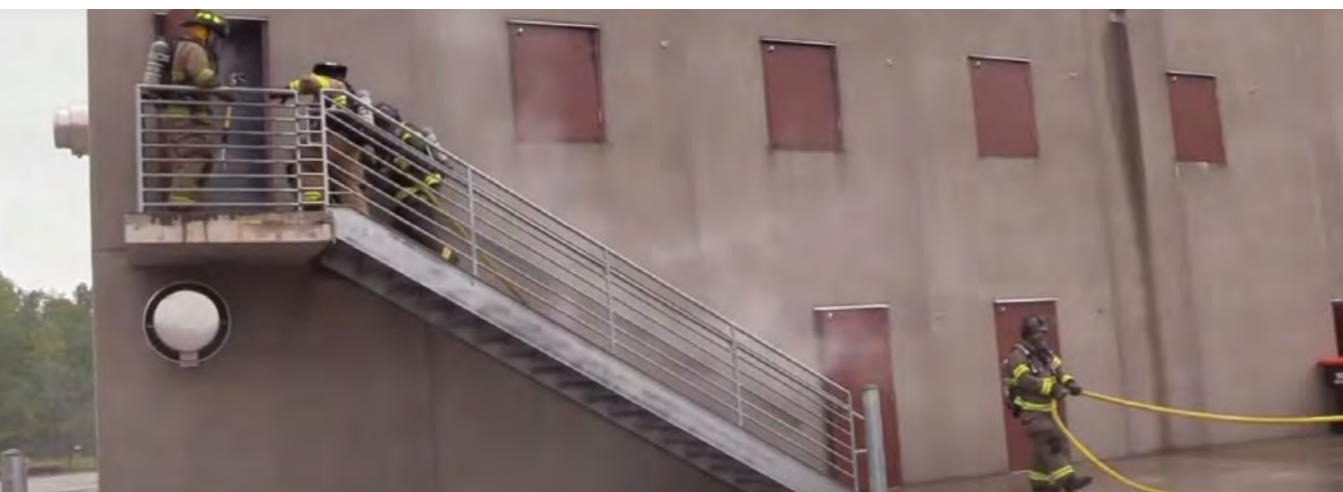
- 1 | Decreasing the size of windows and increasing how high they're placed in communal areas.
- 2 | Placing hardened barriers or fences around fire station grounds.
- 3 | Factoring crime rates into site selection.
- 4 | Planning and designing escape routes for your workforce.
- 5 | Having safe rooms where staff is protected.
- 6 | Making sure counseling is available after traumatic events.



How can you future-proof your fire department?



More fire departments are building training facilities into their fire departments so that all firefighters can train while on-site.



On-site training facilities and opportunities

America's fire losses represent a dramatic improvement from just four decades ago, underscoring just how high of a priority safety is to all fire departments and communities. But today, safety measures also need to factor in physical threats against your crew and department. Beyond design alternatives, more advanced and continuous training is another route fire stations should explore.

Whether volunteer or career, your crew is balancing personal lives (friends, families), jobs, and other responsibilities with their firefighting roles, often meaning they have little time to travel and attend training academies.

In response, more fire departments are building training facilities into their fire departments so all firefighters can train while on-site.

[▶ WATCH VIDEO](#)



Actionable insight FROM THE EXPERT



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As fire chief for the City of Kenosha, Wisconsin, for over 30 years, my team experienced the violence, danger, and even death that comes along with civil unrest and rioting. As leaders of our departments, our ultimate goal is to protect and serve – both the community and our workforce.

Today, we are required to think about issues we hadn't before considered. We need to secure equipment and utilities in a more central area, plan escape routes should the worst happen, and support our workforce when events happen that may affect them on more than a physical level.

Our nation's firefighters are fathers, mothers, brothers, sisters, sons, and daughters. They have families at home who depend on them returning safely. Continued education and training, as well as careful planning and design, can protect the well-being of your workforce and our heroes.

CHUCK LEIPZIG | OPERATIONS PLANNER, FORMER FIRE CHIEF



CONCLUSION

Intentional fire station planning and design

In an age where our nation's firefighting professionals are being asked to do more, risk more, and be more available, you can better support your workforces and fortify your public safety facilities for the long term through intentional planning and design, culture building, and training/education.

Would you like to discuss any of the 10 trends explored in this eBook? Are you searching for the right design approach or feature to overcome a complex challenge? Are you faced with an aging public safety facility but unsure whether to remodel or rebuild? We welcome the opportunity to have a conversation about your needs!

 **LET'S CONNECT**

Although this eBook focuses on fire services, many of these trends are relevant to public safety as a whole. While we undertake many fire station projects, at SEH we also help plan and design joint public safety buildings/campuses, uncover resource-sharing opportunities, and identify remodeling options.

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