DEFORST WINDSOR FIRE AND EMS PLANING AND DESIGN GOALS

Ensuring Efficient Emergency Response and Community Safety

ABSTRACT

This white paper outlines the DeForest Windsor Fire and EMS District's comprehensive, data-driven strategy to expand emergency services in response to sustained population growth, increased call volumes, and evolving community needs. Over the past decade, the district has transitioned from a volunteer-based model to a full-time staffing structure, significantly improving response times and operational efficiency. Detailed analyses of demographic trends and emergency response data have informed the phased development of additional fire stations, beginning with a second facility in the rapidly growing southern region. The plan also emphasizes firefighter health and wellness through innovative station design and mental health support features. By aligning with NFPA 1720 standards and anticipating future growth in the eastern and western areas, the district demonstrates a proactive commitment to public safety, equitable service delivery, and the long-term resilience of its emergency response infrastructure.

Prepared by: Steven D. LaFeber, Fire Chief

June 2025

Planning Process

The planning process for expanding fire and emergency services within the DeForest Windsor Fire and EMS District has been a strategic, data-driven initiative spanning more than a decade. This long-term effort was initiated in response to sustained population growth, increased call volumes, and evolving community needs. The district recognized early on that maintaining high standards of emergency response would require a phased and proactive approach to infrastructure and staffing.

The first phase of the plan focused on enhancing the capabilities of the existing station. Between 2014 and 2024, the district transitioned from a volunteer-based model to a more robust staffing structure, culminating in a full-time staffing model with paid part-time fire and EMS crews. These changes significantly improved operational efficiency, reducing average turnout times from 7 minutes and 26 seconds in 2014 to just 2 minutes and 13 seconds in 2024.

Simultaneously, the district conducted comprehensive analyses of population trends, housing development, and emergency response data. The population within five miles of the current station grew from 22,304 in 2010 to 27,512 in 2024, with projections estimating 29,630 by 2028. EMS call volume rose sharply, particularly among residents aged 60 and older, who accounted for 61% of EMS calls in 2024. The district also saw a significant increase in fire-related risks due to industrial expansion, including over 900,000 square feet of new development in the North Industrial Park and another million square feet proposed.

These trends underscored the need for a second fire station in the southern portion of the district—an area experiencing rapid residential and commercial growth. This second station is the next critical step in the district's strategic plan, aimed at reducing response times and ensuring compliance with NFPA 1720 standards for staffing and service delivery.

Looking ahead, the district's long-range plan includes the eventual addition of stations in the eastern and western regions to accommodate continued growth. This phased approach reflects a commitment to proactive planning, community safety, and operational excellence.

What We Hope to Achieve

The DeForest Windsor Fire and EMS District is committed to enhancing the safety, health, and well-being of both our community and our personnel. Our goals are rooted in a district-wide vision—not a division between DeForest and Windsor—but a unified effort to improve emergency services across the entire district.

1. Reduction in Response Times

A primary objective is to reduce emergency response times throughout the district. By aligning with NFPA 1720 standards, we aim to ensure timely and effective service delivery, regardless of location. This initiative supports equitable access to emergency care and strengthens our overall readiness.

2. Strategic Distribution of Resources

We are focused on the thoughtful distribution of assets to ensure that all areas of the district are adequately covered. This includes the development of new stations and the optimization of existing infrastructure to meet current and future demands.

3. Functional Design and Firefighter Health

The new station will incorporate a Hot/Warm/Cold zone layout to minimize contamination and reduce cancer risks among firefighters. This design is a direct response to alarming statistics from the NFPA and Firefighter Cancer Alliance, which show significantly elevated cancer risks among firefighters, including:

- 2.02× greater risk for testicular cancer

- 1.53× for multiple myeloma

- 1.512× for non-Hodgkin's lymphoma

- 1.39× for skin cancer

- 1.28× for prostate cancer

- 1.31× for malignant melanoma and brain cancer

- 1.21× for colon cancer

- 1.14× for leukemia

Emerging data also indicates increased breast cancer rates among female firefighters.

4. Mental Health and Wellness

We recognize the mental health challenges faced by emergency responders. Studies show that approximately 20% of firefighters and paramedics experience PTSD, with suicide rates surpassing those of the general population. To address this, our station design will include:

- Natural lighting to reduce stress and enhance mood

- Outdoor living spaces to foster connection and relaxation

- Communal areas like day rooms and large kitchens to encourage social interaction

- Private sleeping quarters to support sleep hygiene and recovery

Through these initiatives, we aim to build a safer, healthier, and more resilient fire and EMS district—one that supports both the community we serve and the professionals who serve it.

Conclusion

The DeForest Windsor Fire and EMS District's strategic expansion plan is a testament to its unwavering commitment to public safety, operational excellence, and the well-being of its personnel. Grounded in over a decade of data-driven planning and community foresight, the district has taken deliberate steps to adapt to rapid growth, evolving risks, and increasing service demands. From transitioning to a full-time staffing model to designing facilities that prioritize firefighter health and mental wellness, every initiative reflects a proactive and holistic approach to emergency services.

The planned addition of a second station in the southern district—and future expansions to the east and west—demonstrates a clear vision: to provide equitable, timely, and effective emergency response across all communities served. By aligning with NFPA 1720 standards and embracing innovative station design, the district is not only enhancing its operational capacity but also setting a new standard for fire and EMS services in the region.

As the district continues to grow, this forward-thinking approach ensures that safety, health, and community trust remain at the heart of every decision.