

Information Supporting Adoption of the Wildland-Urban Interface Code

For the reasons described below, the Fire Chief finds that the local fire environment, community values, limited resources, and land development in the Wildland-Urban Interface areas of Austin are features that can, under certain circumstances, affect emergency services. These features support adopting the International Wildland-Urban Interface Code, promulgated by the International Code Council, and designating certain areas of the City as "wildland-urban interface areas" with the goal to mitigate, to the extent possible, the impact of those features. Mitigating risk within wildland-urban interface areas is essential to protecting our community.

Finding 1: Local Fire Environment

In 2019, a third-party vendor, CoreLogic, conducted a Wildfire Risk Report that provides insights into single-family and multifamily residential properties at risk of damage from wildfires in the United States. The 13 states in the report experienced the greatest amount of acreage burned and experienced the most severe and devastating wildfire events when considering loss of life and property damage. Of the top 15 Metropolitan areas with wildfire risk, Austin, TX ranked 5th with 53,984 residence located in the high-extreme risk areas.

Local climate, topography, and wildland fuels provide conditions for wildfires in the Austin area that can threaten people, cause property damage, and disrupt services. Central Texas periodic brief or long term droughts are a major contributing factor to potential large, damaging fires. Large fires between 500 and 4,000-plus acres have occurred in the years 1959, 1961, 1962, 1968, 1989, 1993, 1994, and 2011 and have affected all parts of Travis County. The fires of 2011, at the peak of a multi-year drought, destroyed many structures in Austin, Travis County, and Bastrop County. However, as demonstrated by the Pinnacle fire in April of 2011 that covered 100 acres and destroyed 10 homes, smaller fires can also be destructive.

Local topography of hilly terrain and steep slopes allows faster fire spread by channeling winds and preheating flammable materials upslope. Topography also influences where land development is allowed and operability for firefighting. Local wildland fuel models have been developed for Central Texas to analyze risk levels and aid in firefighting. Active canopy fires are rare in these fuel types, however, when they do occur during extreme drought, high temperatures, and windy conditions they can be difficult or impossible to contain and can threaten residents, first responders, structures, neighborhoods, and infrastructure.

Since past incidents show that structure ignitions occur from blowing embers as well as direct heat, the Wildland-Urban Interface areas in Austin include developed and developable properties within 1.5 miles of a 750 acre or larger wildland area or within 150 feet of a 40 acre or larger wildland. Structures in these areas within 50 feet of wildland areas would have higher potential for ignition from direct heat while all structures in the area would be at risk of ignition from blowing embers.

Conditions in the local fire environment support the implementation of fire protection requirements as set forth in the Wildland-Urban Interface Code.

Finding 2: Community Values

The Austin-Travis County Community Wildfire Protection Plan, adopted by Austin City Council in 2014, identified natural community values including ecological ones of wildlife habitat, water, parks, and preserves. For this reason, in large part, the Austin-Travis County Joint Wildfire Task force that formed after the 2011 wildfire losses chose to use fire adapted community practices to improve safety from wildfires. As noted in the fire environment finding, historic fires and analysis of local conditions indicate large, damaging fires are likely to occur in Austin in the future.

Use of fire adapted community practices for wildfire safety further support the implementation of fire protection requirements as set forth in the Wildland-Urban Interface Code.

Finding 3: Land Development in the Wildland-Urban Interface

The wildland-urban Interface, where urban and suburban development abuts wildland vegetation such as forests, shrub, and grasslands, provides the greatest challenge in wildfire protection and preparedness efforts and is often the source of human-caused fires. City of Austin population increase will continue to push development into previously rural, undeveloped areas putting more structures and lives at risk from wildfire.

Land development in the wildland-urban interface further supports the implementation of fire protection requirements as set forth in the Wildland-Urban Interface Code.

Finding 4: Limited firefighting resources

During times of high fire activity, it is common to have multiple fires starting and burning simultaneously. As experienced during the fires of September, 2011, firefighting resources are limited and will be stretched responding to multiple incidents. Fires involving multiple structures will have a significant community impact and further challenge firefighting resources. Ignition resistant construction and maintenance of defensible space would reduce the severity of fires, reduce the impact to the community, and improve conditions for fire response.

Reducing risk of structure ignition and infrastructure impact during times of limited resources further supports the implementation of fire protection requirements as set forth in the Wildland-Urban Interface Code.