

Wildland-Urban Interface Code

Environmental Commission

September 18, 2019



Overview

Risk analysis on-line interactive

Austin's wildfire environment

What the code will do

How the code will be implemented



Wildfire Risk Analysis and Determination of WUI Areas

Risk analysis and hazard severity distinction

Interactive introduction to AFD GIS analysis of wildfire risk and
determination of Wildland-Urban Interface Areas

Nate Casebeer, GIS Analyst, AFD Wildfire Division



Wildfire Impact

Corelogic Report released September 12 ranks Austin 5th at risk of property loss from wildfire, previous 2015 report had similar findings

Historic large fires, 500 to 4,000 acre plus, have occurred in the years 1959, 1961, 1962, 1968, 1989, 1993, 1994, and 2011

High intensity fires leave lasting environmental impacts as opposed to rejuvenating periodic low intensity fires



Austin's Wildfire Environment

Local fire environment creates risk to property but is also part of our fire adapted community

CWPP identified ecological values: wildlife habitat, water, parks, and preserves

Silvis labs map shows development in WUI decade by decade since 1990

Firefighting resources can be limited if multiple starts occur in high fire risk conditions



WUI Code

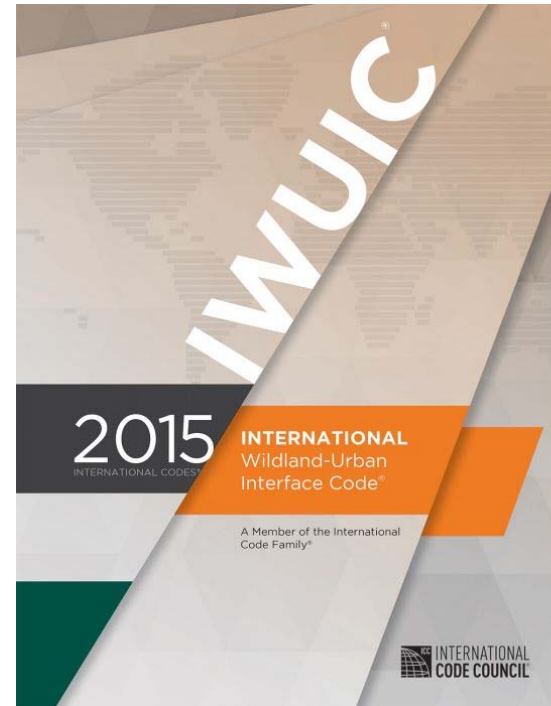
Technical Building Code
2015 IWUIC

LDC 25-1-501 – Initiation of Amendment
Council Resolution 20160512-016

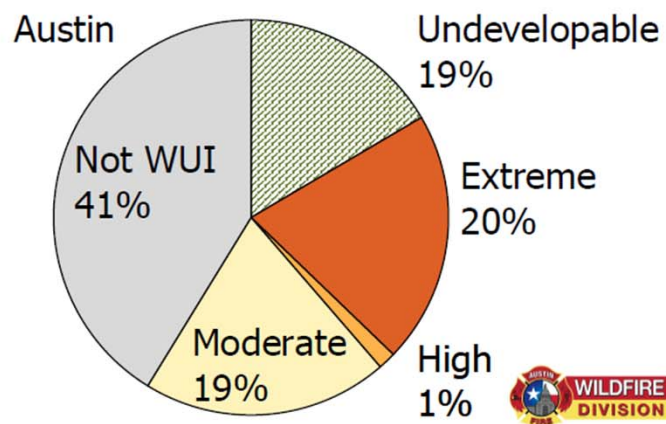
LDC 25-1-502 - Amendment; Review

(D) For a proposed amendment to or repeal of a technical code in Chapter 25-12 (*Technical Codes*), review by the appropriate technical board, if any, is required.

Building and Fire Code Board of Appeals

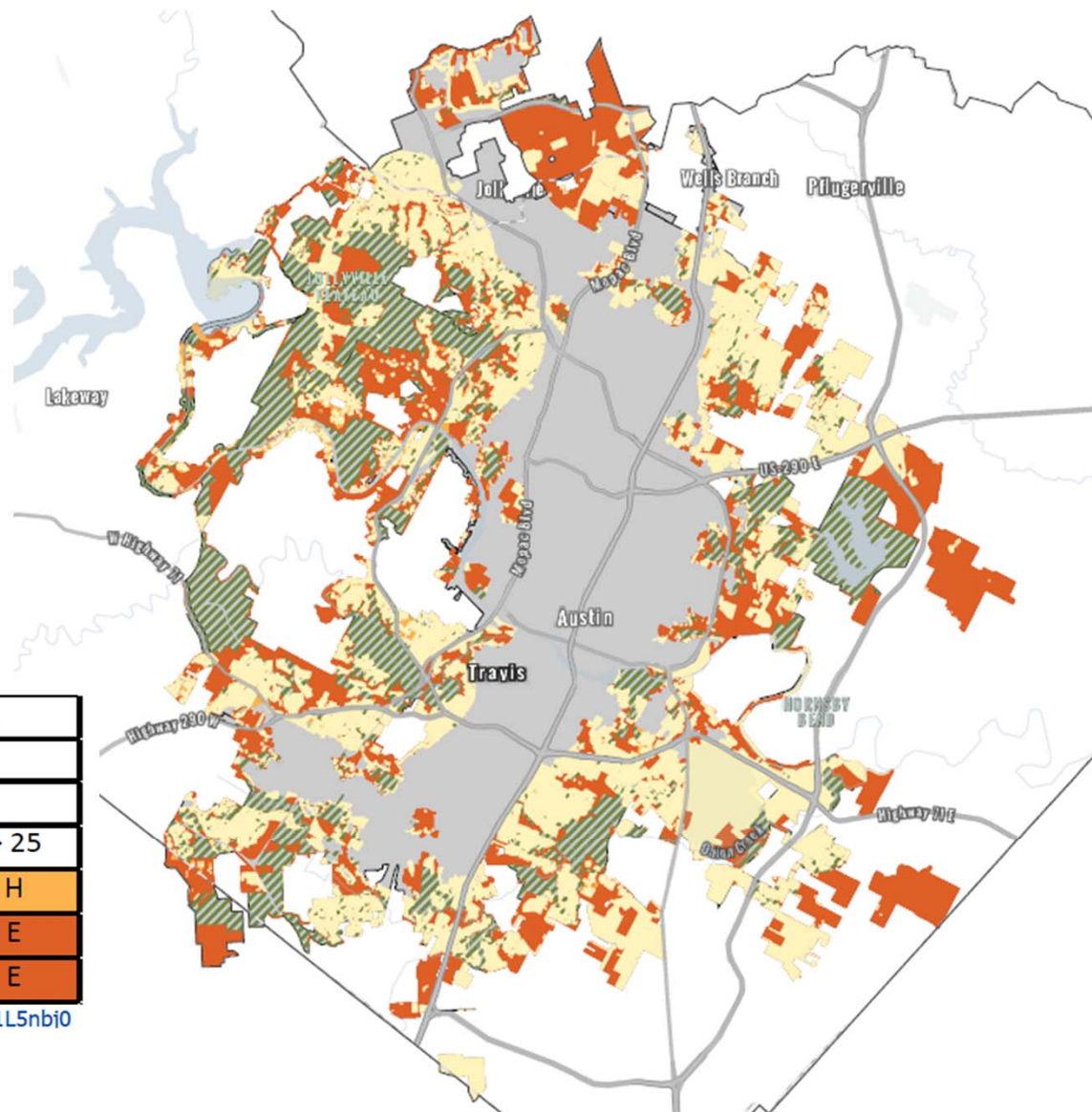


WUI Code Map



Fuel Model ^b	Proximity to Contiguous (40 Acres) Wildland Fuels					
	150' to 1.5 miles			< 150'		
	Slope (%)					
	< 10	10 to 25	> 25	< 10	10 to 25	> 25
Light	M	M	M	M	M	H
Medium	M	M	H	E	E	E
Heavy	H	H	H	E	E	E

<https://arq.is/1L5nbj0>



WUI Code

Ignition Resistant Construction - New & Remodeled Structures

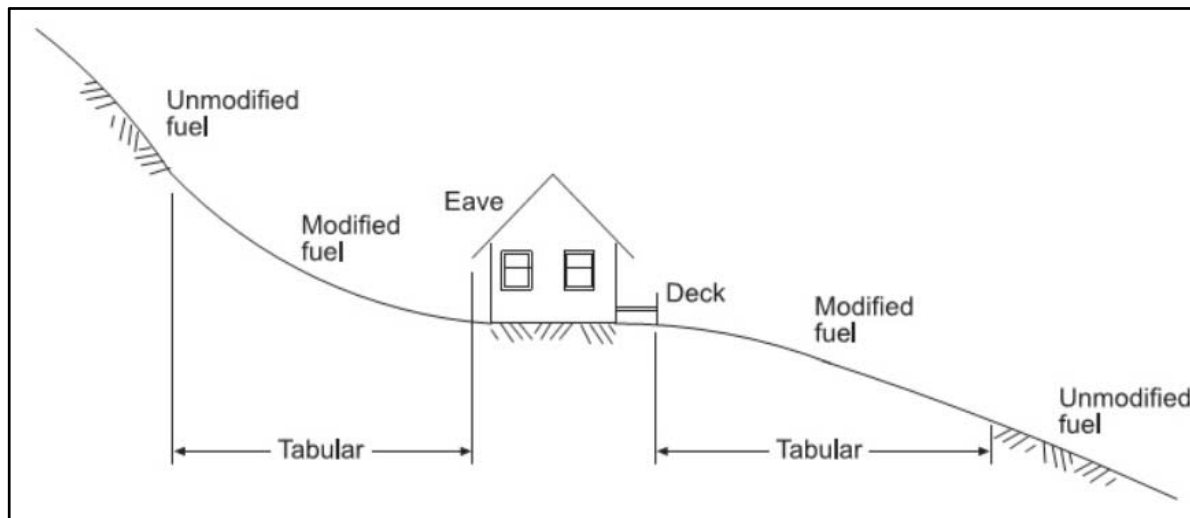
	Fire Hazard Severity					
	Moderate Hazard		High Hazard		Extreme Hazard	
	Water Supply ^b		Water Supply ^b		Water Supply ^b	
	Conforming ^d	Nonconforming ^e	Conforming ^d	Nonconforming ^e	Conforming ^d	Nonconforming ^e
Defensible Space ^c						
Nonconforming	R	R	R	R	R	NP
Conforming	NR	R	R	R	R	R
1.5 x Conforming	NR	NR	NR	R	R	R

NR-not required

R-required

NP-not permitted

Defensible Space



Modified Fuel Distances

Moderate	30 feet
High	60 feet
Extreme	100 feet

Area of modified fuel to slow the rate and intensity of a wildfire and to create space for fire suppression operations

Fire Protection Criteria Manual rules to be developed based on existing fuel treatment BMPs and tree care standards

Defensible Space

Example

Spring 2011

Pinnacle Fire



The concrete driveway and gravel walkway created a critical space that firefighters needed to defend this home in the path of the Pinnacle Fire in Austin.

2011 Texas Wildfires

Common Denominators of Home Destruction

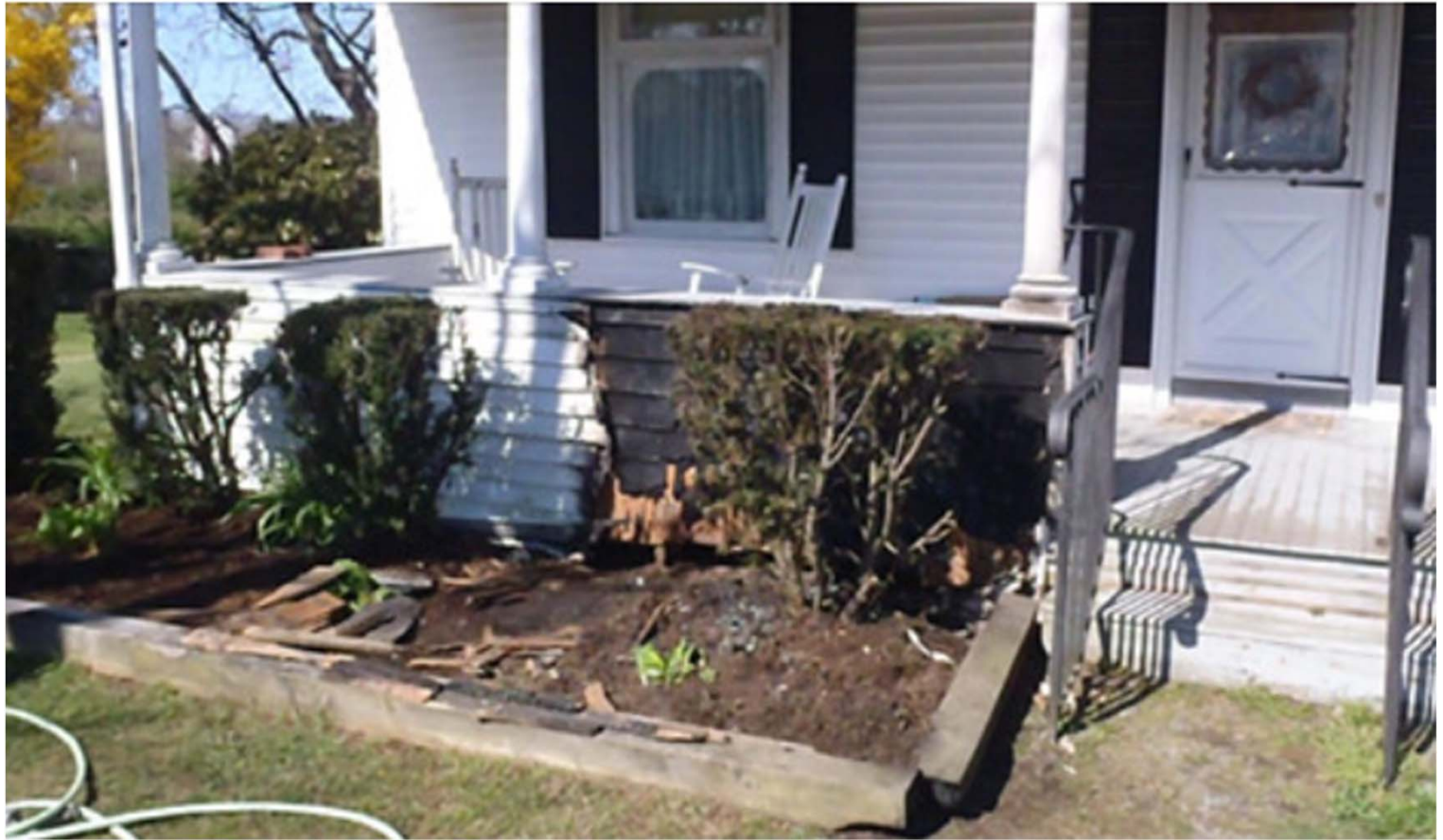
A publication of Texas A&M Forest Service

Download a copy of this report at <http://texasfirewise.org>

Defensible Space

Example

Mulch next to
flammable building
materials

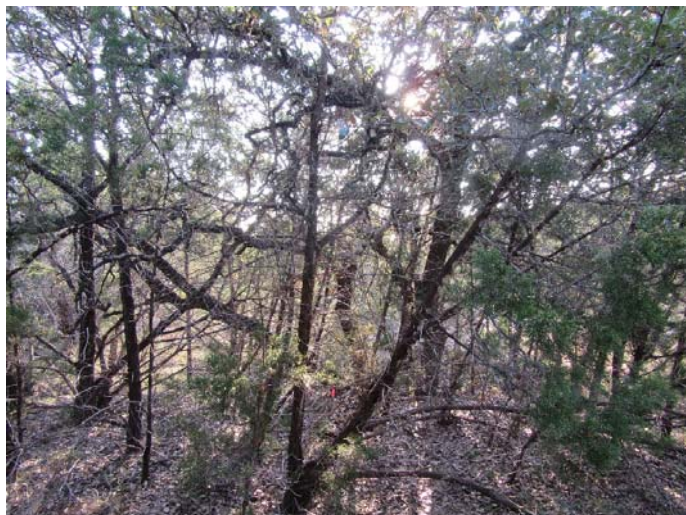


www.facebook.com/Central-Texas-Firewise

Shaded Fuel Break

AWU Kollmeyer tract

Before



After



Defensible Space Criteria

WPD Publication “Before and After the Fire”

Balcones Canyonlands Preserve Best Management Practices for wildfire fuels mitigation in Golden Cheek Warbler habitat

Texas A&M Forest Service recommendations for Firewise Landscaping

American National Standards Institute standard for tree pruning, ANSI A300



Schedule

Building and Fire Code Board of Appeals – September 2019

City Council - October 2019

Implementation – May 2020



Staff

Dedicated review and inspection team in AFD

4 Engineer reviewers

4 AFD officer inspectors

1 AFD Captain Supervisor

1 WUI Specialist

Fees, possibly \$300, could offset program costs



Wildland-Urban Interface Code

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