

NORTH CENTRAL TEXAS  
COUNCIL OF GOVERNMENTS  
REGIONAL CODES  
COORDINATING MEETING



# Objectives

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- Identify conditions within the NCTCOG that are driving an increase in loss exposure from wildland fire occurrence
- Define the National Cohesive Fire Strategy and the Fire Adapted Community approach towards mitigating wildland fires
- Provide the benefits of the ICC WUI Code



# Before we get started what is the Wildland Urban Interface?

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Wildland Urban Interface is a Situation, not a Location



It is Where Combustible Homes Meet Combustible Vegetation



# Types of Wildland Urban Interface

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## Traditional

- Subdivision or neighborhood surrounded by wildland

## Mixed or Rural

- Home or recreation areas scattered in the wildland

## Occluded

- Wildland such as parks or greenbelts surrounded by urban area

Within in the North Central COG all of these Wildland Urban Interface types are found

# Occluded Wildland Urban Interface located in the City of Dallas Texas





# Land Use Changes...

**Cross Plains 1947...**



# ★ ....Equals Fuel Buildup





# Fuel Conditions Across the NCTCOG



# Hunt County (North of Greenville)

August 2016



# Denton County (Aubrey): January 2017

Fuel buildup along railroad tracks that cut through town.



# Denton County (Denton): January 2017



# Dallas County (Dallas): May 2016



# Tarrant County (Kennedale): January 2017



WUI backs up to  
multiple junkyards  
filled with automobiles  
and metal scraps



# Tarrant County (Fort Worth): January 2017



# Kaufman County (Whitehead): January 2017



# Erath County west of Dublin (December 2016)







# Erath County (Dublin): January 2017

Dead end road; one way in, one way out.  
Lack of address markings on homes.



# Erath County (Stephenville): January 2017



No address on business.



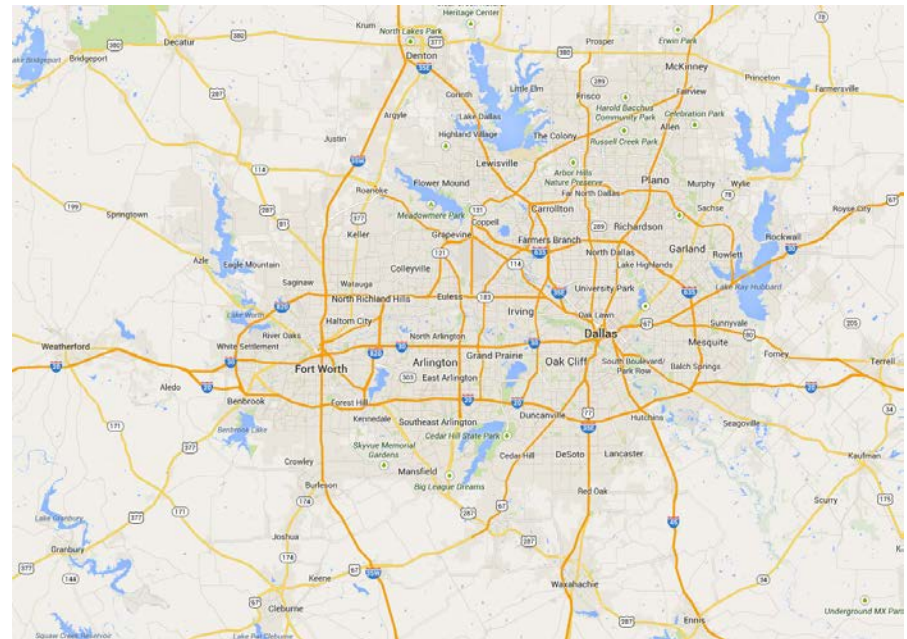
# Somervell County (Glenn Rose): January 2017



# Population Growth Dallas-Fort Worth Timelapse: 1984 - 2016



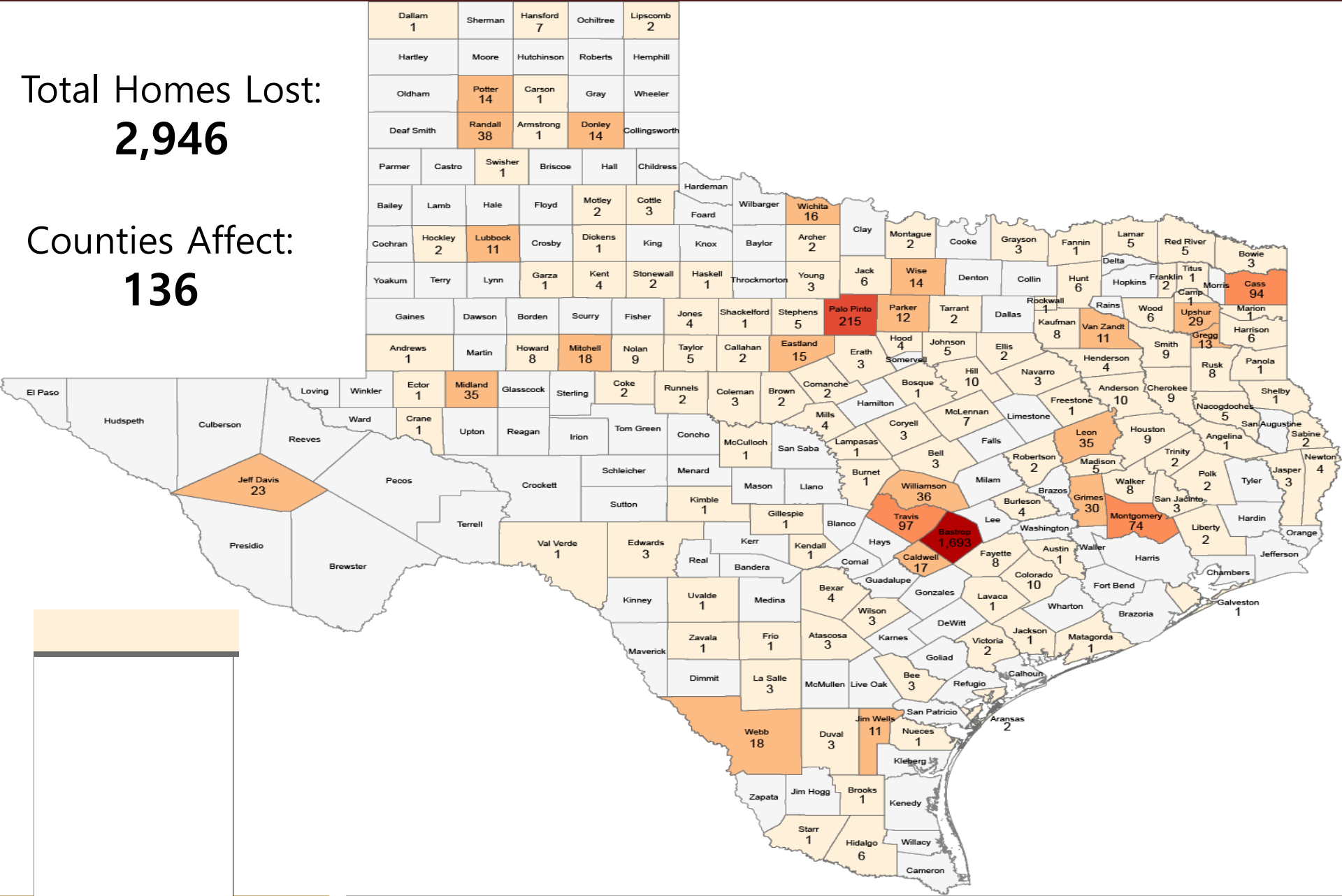
## Dallas-Fort Worth



# 2011 FIRE SEASON HOMES LOST BY COUNTY

Total Homes Lost:  
**2,946**

Counties Affect:  
**136**



# People & Lightning Start Fires

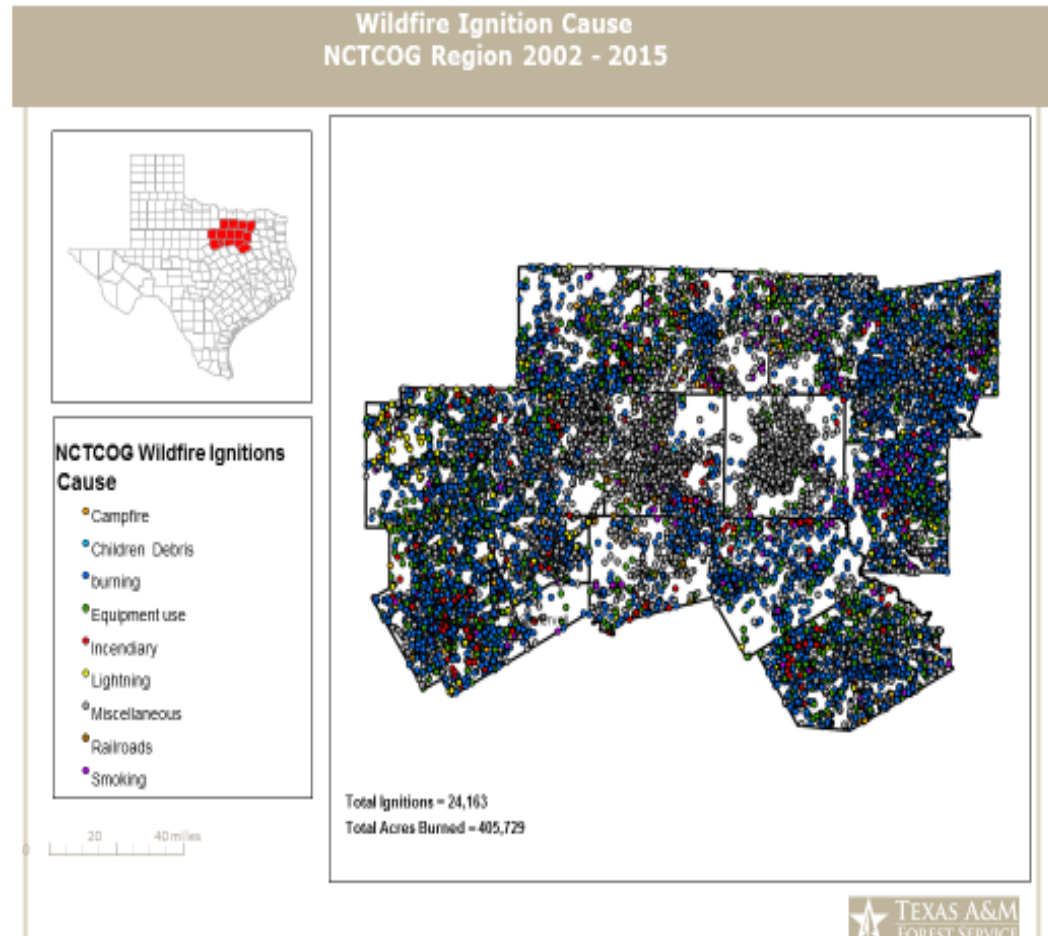
## NCTCOG 2005-2015



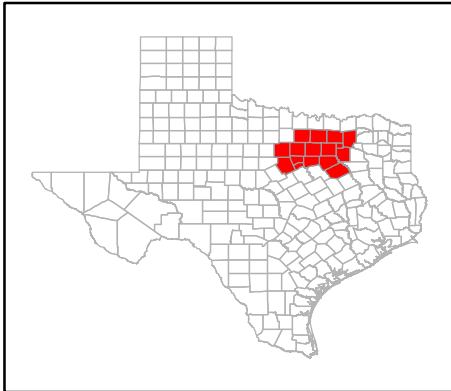
22

Cause	Number of Ignitions	Acres Burned
Campfire	245	3554
Children	284	3205
Debris Burning	8821	59255
Equipment Use	2995	51527
Fireworks	10	257
Incendiary	819	9057
Lightning	384	142338
Powerlines	751	27456
Railroads	148	5055
Smoking	834	6106
Miscellaneous	8859	97916

**Total Ignitions = 24,163**  
**Total Acres Burned = 405,729**

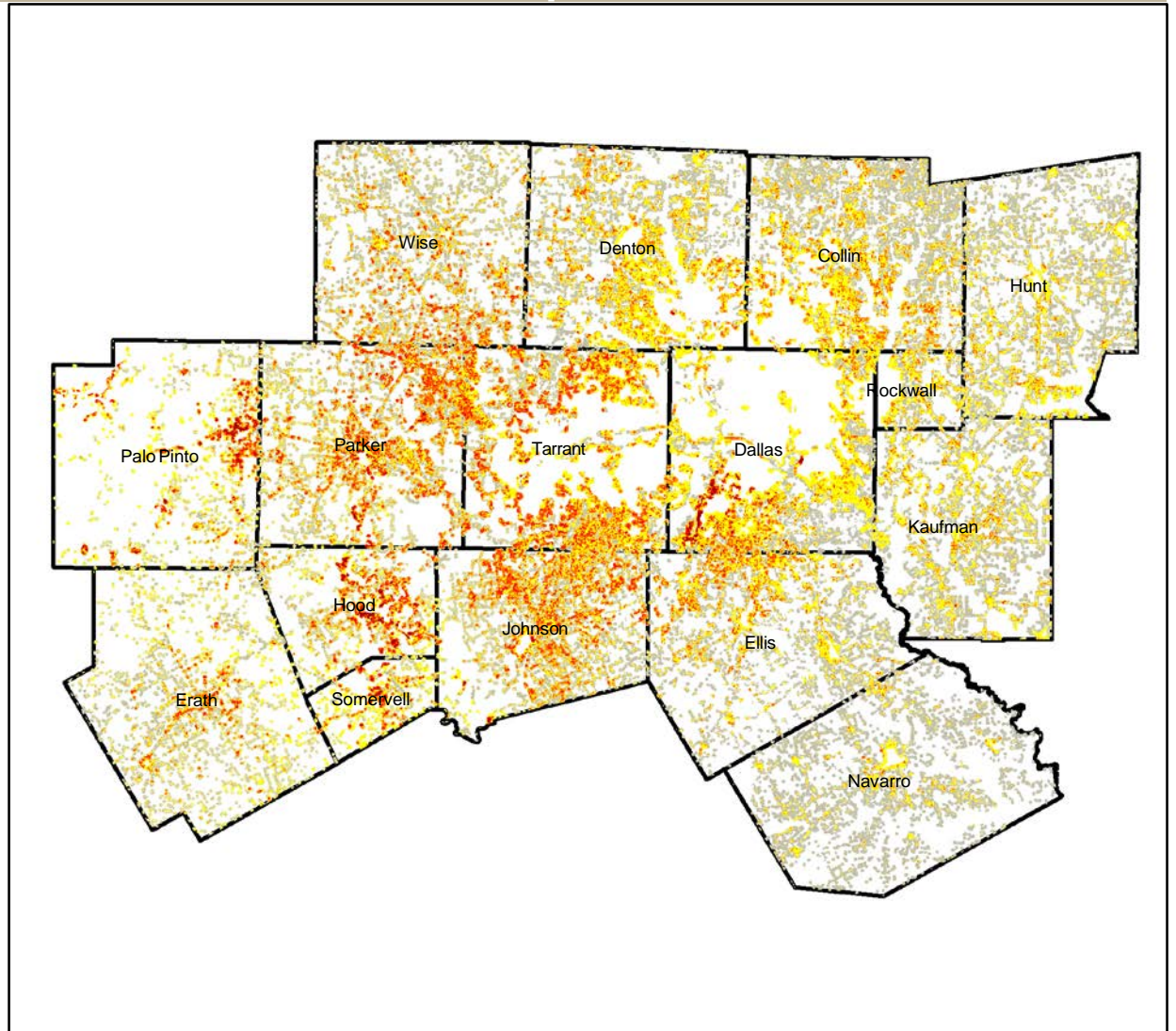
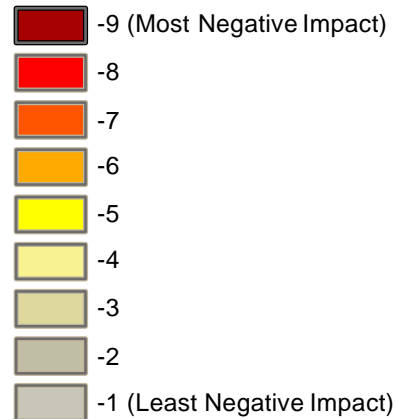


# Wildfire Risk Wildland Urban Interface Response Index



## WUI Response Index

The layer shows the potential impact of a wildfire on people and their homes.





# National Cohesive Fire Strategy

- Restore and maintain fire adapted ecosystems
- Creating Fire Adapted Communities
- Responding to wildfires

Collaborative process





# Texas Roadmap to Achieving a Fire-Adapted Community



**Outcome: Foster Self-Reliance and Increase Resiliency**



# ICC WUI Code

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## Chapters

## Subjects

1-2	Administration and Definitions
3-4	Wildland-Urban Interface Area Designation Requirements
5	Building Construction Regulations
6	Fire Protection Requirements
7	Referenced Standards
Appendices A-H	Adoptable and Informational Appendices

# ICC: Chapter 3 Wildland-Urban Interface Areas.



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Chapter 3 provides for the fundamental aspect of applying the code—the legal declaration and establishment of wildland-urban interface areas within the adopting jurisdiction by the local legislative body. The provisions cover area analysis and declaration based on findings of fact (located in Appendix E), mapping of the area, legal recordation of the maps with the local keeper of records and the periodic review and reevaluation of the declared areas on a regular basis. If needed, revisions can be directed by the legislative body of the jurisdiction.

A screenshot of the Texas A&amp;M Forest Service Wildfire Risk Assessment Portal website. The page has a dark red header with the Texas A&amp;M Forest Service logo and the text "Wildfire Risk Assessment Portal". Navigation links for "Home", "Support", and "Contact" are visible. The main content area features a large image of a wildfire with a yellow tractor in the foreground. To the right of the image is a section titled "Are you at Risk?" with a "LEARN MORE" button. Below this is a section titled "Applications" with four buttons: "Public Viewer" (Identify your risk), "Professional Viewer" (Support your fire protection plans), "Fire Occurrence Explorer" (Analyze historical fire occurrence data, marked as BETA), and "Community Editor" (Assess Homes and Communities). The footer includes "About the applications" and "Testimonials" sections, along with a "MEMBER OF THE TEXAS A&amp;M UNIVERSITY SYSTEM" logo and copyright information for 2014.

# Chapter 4 Wildland Urban Interface Requirements



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1. Fire service access to the property that is to be protected, including fire apparatus access roads and off-road driveways;
2. Premises identification;
3. Key boxes to provide ready access to properties secured by gated roadways or other impediments to rapid fire service access;
4. Fire protection water supplies, including adequate water sources, pumper apparatus drafting sites, fire hydrant systems and system reliability;
5. Fire department access to equipment such as fire suppression equipment and fire hydrants; and
6. Fire protection plans.



# Why WUI requirements are Critical

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Post Fire Assessments 2005-2016

Lack of Access + No water + No Planning = Home Loss



# Chapter 5 Special Building Construction Regulations



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The construction provisions of Chapter 5 are intended to supplement the requirements of the International Building Code and address mitigation of the unique hazards posed to buildings by wildfire and to reduce the hazards of building fires spreading to wildland fuels.



# Chapter 6

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Establishes minimum fire protection requirements to mitigate the hazards to life and property from fire in the wildland-urban interface. The chapter includes both design-oriented and prescriptive mitigation strategies to reduce the hazards of fire originating within a structure spreading to the wildland and fire originating in the wildland spreading to structures.





# Summary

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- WUI is present & expanding within the NCTCOG
- Fuel conditions combined with human-caused fires and lightning caused fires creating increase home/structure loss exposure within the NCTCOG
- Need to apply Fire-Adapted Community approach to mitigate wildfire loss exposure
- ICC WUI Code valuable proven tool towards mitigating wildfire loss exposure