Texas House of Representatives

INVESTIGATIVE COMMITTEE
on the
PANHANDLE WILDFIRES

Representative Ken King, Chair
Representative Dustin Burrows
Representative Todd Hunter
Jason Abraham, Public Member
James Henderson, Public Member

MAY 1, 2024
Investigative Committee on the Panhandle Wildfires

May 1, 2024

Ken King
Chairman

The Honorable Dade Phelan
Speaker, Texas House of Representatives
Members of the Texas House of Representatives
Texas State Capitol, Rm. 2W.13
Austin, Texas 78701

Dear Mr. Speaker and Fellow Members:

The Investigative Committee on the Panhandle Wildfires of the Eighty-eighth Legislature hereby submits its initial interim report including recommendations for consideration by the Legislature.

Respectfully submitted,

Ken King

Dustin Burrows

Todd Hunter

Jason Abraham

James Henderson
# Table of Contents

Preface .................................................................................................................................................. 1  
Dedication ......................................................................................................................................... 1  
Acknowledgements ......................................................................................................................... 1  
Charge ............................................................................................................................................. 1  
Introduction & Background to the 2024 Panhandle Wildfires ................................................................. 5  
  - Panhandle wildfire history ........................................................................................................... 5  
  - Pre-fire conditions ....................................................................................................................... 5  
  - Fire ignition & progression .......................................................................................................... 6  
  - Preliminary estimates of economic loss ...................................................................................... 9  
Summary | Findings ............................................................................................................................ 15  
Summary | Recommendations ............................................................................................................... 16  
Findings | Factors Contributing to Wildfires ......................................................................................... 17  
  - The primary & most destructive 2024 Panhandle wildfires were caused by power lines ....... 17  
  - Regulatory oversight of stripper well operators is grossly deficient ......................................... 18  
  - Existing fire prediction & modeling is ineffective ..................................................................... 20  
  - Mitigation strategies are effective but underutilized ................................................................. 21  
Findings | Allocation of Resources ......................................................................................................... 23  
  - VFDs are inadequately funded .................................................................................................... 23  
  - Predictable, prompt, & reliable aviation support is unavailable under the existing USFS program .......................................................... 26  
  - Antiquated & incompatible communications equipment prohibits effective wildfire response .... 28  
  - Vehicle manufacturer compliance with existing EPA emissions regulations poses a danger to firefighters ............................................................................................................................................................... 28  
Findings | Intergovernmental Coordination ......................................................................................... 29  
  - Coordination among responding local, state, and federal government entities was ineffective .... 29  
Recommendations | Legislative Solutions & Other Actions for Future Prevention ........................................ 30  
  - Increased oversight of oil & gas operators is required ................................................................. 30  
  - Increased oversight of utilities is required ................................................................................ 30  
  - Fire prediction & modeling must be improved ......................................................................... 30  
Recommendations | Allocation of Resources .................................................................................................. 31  
  - Increase funding to VFDs ........................................................................................................... 31  
  - Establish a state-owned firefighting air fleet & supporting infrastructure to be supplemented with private aircraft contracted directly with the state .......................................................... 32  
  - Legislate job protection for volunteer firefighters ..................................................................... 33  
  - Study & make recommendations to achieve greater coordination between local firefighters & TIFMAS ................................................................................................................................................. 33  
  - Direct TAMFS to maintain a county-by-county database of available firefighting equipment to coordinate use during wildfires .......................................................................................... 33  
  - Study procurement of surplus emergency vehicles from the Federal Surplus Personal Property Program, Texas Military, or other sources .................................................................................. 34  
  - Call on Congress & federal regulators to mitigate dangers posed to firefighters due to vehicle manufacturer compliance with EPA emissions regulations ........................................... 34
8—Encourage & incentivize retention of TAMFS agency administrators & personnel ............................... 35
9—Modification to fire mitigation strategies ............................................................................................. 35

Recommendations | Intergovernmental Coordination .................................................................................. 39

1—Appropriate funding for modernized equipment to enable reliable communications among first responders, governmental agencies, & local governments ................................................. 39
2—Mandate coordination of training & response efforts between TAMFS & VFDs ............................... 40
3—Guidance to TAMFS ............................................................................................................................ 41

Recommendations | Other Considerations ........................................................................................................ 42

1—Appropriate funding for modernized equipment to enable reliable communications among first responders, governmental agencies, & local governments ................................................. 42
2—Address insurance coverage concerns & restrict rate increases ......................................................... 42
3—Prohibit utility rate increases .............................................................................................................. 42
4—Revisit ranking system for plugging orphaned wells ........................................................................ 42

Appendix | Definitions & Acronyms ........................................................................................................ 43
Preface

Dedication
The committee offers its deepest condolences to the families of Joyce Blankenship, Cindy Owen, and Fritch Fire Chief Zeb Smith, whose lives were lost due to the wildfires.

The greatest asset of the Texas Panhandle is its people, known for their kindness, generosity of spirit, faith, and determination. Volunteer firefighters exemplify these traits. This committee extends to them its deepest possible gratitude.

As the 2024 Panhandle wildfires swept across the region, communities were evacuated, roads became clogged as families fled desperately for their lives, and social media outlets were bombarded with posts from users starving for assurance that their loved ones were safe and their homes still standing. Against that backdrop, an army of volunteer firefighters risked their lives to rush into the flames.

The sacrifice and commitment of volunteer firefighters cannot be overstated. They are heroes.

Acknowledgements
The committee is grateful to the many who assisted with its investigation and preparation of this report, including Cheryl Lively, Megan Quijano, Synda Foreman, Wendie Cook, Angie Flores, Margaux Fox, Paige Higerd, Matt Crowe, Margo Cardwell, Jeremi Young, Sabrina Dubberly, and Addisen Pirkle.

Charge
By proclamation dated March 12, 2024, Dade Phelan, Speaker of the House of Representatives, formed the Investigative Committee on the Panhandle Wildfires.

The committee was charged to conduct all inquiries into the 2024 Panhandle wildfires, including investigating:

- Factors contributing to the wildfires
- Allocation of resources to and effectiveness of wildfire disaster preparedness and response
- Coordination between local, state, and federal governmental entities with regard to wildfire prevention, disaster preparedness, and response

The committee was directed to submit a report no later than May 1, 2024, to include the committee’s findings as well as recommended legislative solutions and other actions for preventing future wildfires and improving wildfire disaster preparedness, response, and mitigation.
Beginning on April 2, 2024, the committee convened in Pampa, Texas for three days of hearings where the following witnesses provided testimony:

**April 2, 2024**

**Panel One**
Nim Kidd (Texas Division of Emergency Management)
Alphonse Davis (Texas A&M Forest Service)
Wes Moorehead (Texas A&M Forest Service)

**Panel Two**
Luke Boedeker
Derrick Holdstock
Paul Hannemann
Emmett Webb

**Panel Three**
JD Salinas (AT&T)
Craig Pritzlaff (Texas Commission on Environmental Quality)
Billy Tidwell (State Firefighters and Fire Marshalls Association)

**Panel Four**
Scott Brewster (Hemphill County Volunteer Fire Department)
Phillip Clark (Roberts County Volunteer Fire Department)
Trent Price (Hoover Volunteer Fire Department)
Robert Ford (Wheeler Volunteer Fire Department Chief)

**Panel Five**
Jacob Clifton (Skellytown Fire Department)
Archie Stone (Borger Fire Department)
Alan Wells (Stinnett Volunteer Fire Department)

**April 3, 2024**

**Panel One**
Monty Dozier (Texas A&M AgriLife Extension Service)
Dr. Angela Burkham (Texas A&M AgriLife Extension Service)
Josh Brooks (Texas A&M AgriLife Extension Service)
Andy Holloway (Texas A&M AgriLife Extension Service)

**Panel Two**
Major Chris Daigle (Texas Parks and Wildlife Department)
Chris Schenck (Texas Parks and Wildlife Department)
Kevin Mote (Texas Parks and Wildlife Department)

Panel Three
Judge Lisa Johnson (Hemphill County)
Judge Mitchell Locke (Roberts County)
Judge Chris Porter (Gray County)
Judge Cindy Irwin (Hutchinson County)

Panel Four
Blair Johnson (Texas Department of Transportation)
Clay Reid (BNSF Railway)
Jeffrey Soukup (BNSF Railway)
Korry Castillo (Texas Comptroller of Public Accounts)

Panel Five
Jason Whisler (City of Borger)
Cal Ferguson
Dr. Thomas Lansford (Animal Health Commission)
Holli Tietjan-Hale (Animal Health Commission)

Panel Six
Mike Wisko (Texas Commission on Fire Protection)
Keith Blair
Jeff Haley (Gray County)

Panel Seven
Dale Jenkins
George Briant
Craig Young
Joe Leathers (Texas & Southwestern Cattle Raisers Association)

Additional Witnesses
Dennis Cochran (Texas A&M Forest Service)
Kevin Pierce (Texas A&M Forest Service)
Erica McDowell (Texas Division of Emergency Management)

April 4, 2024

Panel One
Randall Collins (Texas Railroad Commission)
Mike Hoke (Public Utility Commission of Texas)
Panel Two
Adrian Rodriguez (Xcel Energy)
Randy Mahannah (North Plains Electric Coop)
Mark Bell (Association of Electric Companies of Texas)

Public Testimony
Jim Hirsch
Sena Brainard
Brent Clapp
Swasey Brainard

Additional Witnesses
Douglas Moneymaker (RRC)
Scott Simpson (RRC)
Jacob Clifton (Skellytown Fire Department)
Wes Moorehead (Texas A&M Forest Service)
Trent Price (Hoover VFD)
Introduction & Background to the 2024 Panhandle Wildfires

On February 26, 2024, the largest recorded wildfire in Texas history ravaged the northeastern Texas Panhandle. Joyce Blankenship, Cindy Owen, and Fritch Fire Chief Zeb Smith were killed. More than 15,000 head of cattle (including pregnant cows) perished, an estimated 138 homes and businesses were destroyed, and over one million acres of land were consumed.

Panhandle wildfire history

Over the past two decades, the causes of wildfires in the Texas Panhandle have included arson, chains dangling from vehicles, fireworks, and cigarette butts. Among fires with identified causes, wildfires started by power lines have been among the most destructive in the region between 2000 and 2024, causing more than 1,300 fires that burned more than 1.4 million acres.1 Texas has experienced a growing trend in the magnitude and intensity of wildfires across the state. Fire seasons are growing longer, and the fires are larger and more destructive.2

Increased occurrence of wildfires since 2006

Increased incidence of wildfire in the Panhandle since 2006 may be attributed to a number of factors. Incentivized by the federal government's Conservation Reserve Program (“CRP”), cultivated farm acreage has steadily decreased, dramatically increasing the area’s fuel loads and eliminating fire breaks provided by cultivated fields. Aging and inadequately maintained utility poles often fail, sparking ignitions. A regulatory “no-man's land” permits irresponsible oil and gas operators to neglect fuel loads and dangerous electrical safety problems on and around well site locations, where exposed wiring and other dilapidated electrical equipment make for ready ignition sources.

Pre-fire conditions

The Texas Panhandle, as part of the southern Great Plains, faces its highest fire risk in late winter and early spring. Unfortunately, in late February of 2024, the Panhandle experienced unusually high temperatures (20 degrees warmer than average on February 26th), low relative humidity, and severe winds, creating the perfect conditions for a record-setting fire outbreak.3

1 Subcommittee (Texas A&M Forest Service Panhandle Fire Causes Excel table).
3 NOAA.gov.
Beginning on Monday, February 19, 2024, the Texas Division of Emergency Management (“TDEM”) became aware of elevated fire conditions reported by the National Weather Service (“NWS”). Temperatures in Amarillo and Borger reached 80 degrees on February 20th and near-record highs were predicted for February 21st, with wind gusts as high as 40–50 miles per hour. On Thursday, February 22nd, NWS predicted gusts of 55 miles per hour for Tuesday, February 27th, with a warning that “we are starting to get into our main fire season.”

On Friday, February 23rd, TDEM activated the Texas Intrastate Fire Mutual Aid System (“TIFMAS”)—a program maintained by the Texas A&M Forest Service (“TAMFS”) that mobilizes local resources for statewide use—and began sending and staging ground resources around the Panhandle. On Saturday, February 24th, Amarillo news outlets reported the fire danger as critical. A “red flag warning,” “wind advisory,” and “high wind warning” were in effect on Monday, February 26th, until 8:00 p.m. on Tuesday.

Fire ignition & progression

Smokehouse Creek Fire

During the morning of Monday, February 26th, a decayed power pole broke at ground level and caused the three-wire power line atop it to fall and make contact with fine grassy fuels, igniting what would become the Smokehouse Creek Fire. By 1:00 p.m., Hutchinson County Judge Cindy Irwin had been notified that the fire was burning north of Stinnett. Highway 136 was closed.

The fire grew rapidly, moving at estimated speeds of six to eight miles per hour. Approximately 40,000 acres burned on February 27th, expanding to more than 900,000 acres over the next two days. The Smokehouse Creek Fire advanced 95 miles, stretching into Oklahoma. At its widest point, from north to south, the fire measured 35 miles. By the time of containment, an estimated 1.058 million acres had been lost, including approximately 80 percent of Hemphill and Roberts counties, making it the largest wildfire in Texas history.

4 NWS Amarillo Texas Facebook page.

5 A “red flag warning” is “used by fire-weather forecasters to call attention to limited weather conditions of particular importance that may result in extreme burning conditions . . . within 24 hours of issuance.” Criteria include “1) a sustained wind average 15 mph or greater 2) relative humidity less than or equal to 25 percent and 3) a temperature of greater than 75 degrees F.” https://w1.weather.gov/glossary/index.php?letter=r.

6 A “wind advisory” is issued when there are “[s]ustained winds 25 to 39 mph and/or gusts to 57 mph.” https://w1.weather.gov/glossary/index.php?letter=w.

7 A “high wind warning” is issued based on state-specific criteria indicating that “high wind speeds may pose a hazard or [are] life threatening.” https://w1.weather.gov/glossary/index.php?letter=h.
Grape Vine Creek Fire
On Monday, February 26th, a three-wire power pole located in Gray County, just to the south of Pampa, broke and crashed to the ground, bringing the wires in contact with fine grassy fuels and igniting the Grape Vine Creek Fire.

Windy Deuce Fire
What would become the Windy Deuce Fire was reported at 6:23 p.m. on Monday, February 26th, four miles east of US-287. The Windy Deuce Fire began at the location of a small pumpjack serviced by one power pole with three distribution lines. The power lines traveled through the top of a small tree on the pad site where they contacted several small limbs, starting the fire. The Windy Deuce Fire burned 144,045 acres by February 27th and jumped across the southern edge of Lake Meredith, destroying numerous homes on the south side of the town of Fritch and threatening the town of Borger.

2277 Fire
On February 27th, at around 1:13 p.m., a new fire started in the area of FM 2277 and Plemons Road in eastern Hutchinson County. The fire, originating near an oil field location, quickly burned to the east and merged with the Smokehouse Creek Fire.

Reamer Creek Fire
As the winds maintained high speeds through the afternoon of Tuesday, February 27th, another fire began in Hutchinson County south of Stinnett. Initially named the 687 Reamer Fire, it too was caused when a broken power pole led to utility wires coming into contact with fuels on the ground. This forced firefighters to evacuate from the 2277 Fire as it threatened their location and posed a greater threat to the community south of Stinnett.
Additional fires and progression

The Smokehouse Creek, Grape Vine Creek, Windy Deuce, 2277, and Reamer Creek fires constitute only the primary Panhandle wildfires that occurred in late February of 2024. Numerous additional fires also burned. The Smokehouse Creek and Windy Deuce fires were both declared 100 percent contained by TAMFS officials as of March 16, 2024, more than two weeks after ignition.

As the fires threatened the town of Canadian, school administrators dismissed students, allowing children to return to their families. Voluntary evacuations were announced, which were later followed by a mandatory evacuation order. Patients and residents in the hospital and nursing homes were evacuated—first to Pampa, then to Amarillo when the City of Pampa was threatened. The community of Glazier, northeast of Canadian, was evacuated. County crews rushed to cut fire breaks on the west side of Canadian at the intersection of highways 83 and 60. The fire jumped the highway, and the town of Higgins was completely cut off. As roads were closed, safe evacuation from Canadian became impossible. Hemphill County Judge Lisa Johnson ordered residents to shelter-in-place. Houses on the perimeter of Canadian were actively burning.

In response to the ongoing disaster, TAMFS placed the first order with the federal government for fire suppression aircraft on the morning of Tuesday, February 27th. The first aircraft were airborne at 12:18 p.m. on Wednesday, February 28th, twenty-four hours after ignition of the Smokehouse Creek Fire. Finally, by the afternoon of Wednesday, February 28th, air support...
was flying to assist legions of volunteer firefighters. Texas A&M AgriLife Extension Service (“AgriLife”) and TIFMAS established supply points for disaster relief.

On Thursday, February 29, 2024, it snowed, granting relief from the dangerous, fire-spreading conditions.

**Preliminary estimates of economic loss**

Testimony from the hearings indicated that the total economic loss to the Texas Panhandle, its economy, and the economies it feeds may ultimately exceed $1 billion.

An April 19, 2024, report provided by AgriLife conservatively estimated that the Panhandle suffered $123 million in agricultural and agriculture-related losses (including wildlife hunting revenue losses). The number includes $68.7 million in lost fencing, $26 million in grazing losses over 1.5 years, cattle losses of $27 million, and lost hunting revenues of $875,000 annually. AgriLife observes that losses from the wildfires “extend far beyond agriculture, touching multiple and various facets of community life within the Panhandle region.”

**Hemphill County**

According to Andy Holloway, AgriLife Agent for Hemphill County, 76 homes in or around Canadian burned to the ground or were heavily damaged. Over 7,000 cows (out of 23,000 in the county) were killed, and an estimated 15–20 percent of the remaining cows will likely be harvested due to burned hooves, udders, and body parts. Hundreds of water wells were destroyed. Thousands of native trees have been lost. Over 400,000 acres burned in the county, destroying or compromising over 2,500 miles of fencing.

Preliminary estimates based on information from the Hemphill County Appraisal District placed the value of lost homes at $35 million, the value of other structures lost at $13 million, and the value of other real property lost at $175 million. Landowners will be entitled to apply for an exemption from the obligation to pay a portion of their property taxes for 2024. This will result in a substantial reduction in tax revenue for the county.

Despite the losses, the Canadian community experienced an outpouring of support from volunteers and donors. As part of
what Holloway described as “loads of hope,” donors shipped over 1,000 loads of hay, feed, and fencing supplies. More than 140 people volunteered to help the community during the month following the wildfires. $3 million in livestock supplies were donated from people in at least 30 different states and internationally.

**Hutchinson County**
News outlets have reported that more than 50 homes were destroyed in and around the town of Fritch.

**Roberts County**
500,000 acres burned in Roberts County. Local officials testified to damage amounts up to $20 million in lost grazing lease revenues for one year alone.

**Gray County**
In Gray County, 35,000 acres burned. One home was destroyed. Two fire trucks were damaged, and one was lost.

**Livestock losses**
According to the Texas & Southwestern Cattle Raisers Association, approximately 15,000 individual head of cattle are known to have been lost in the wildfires. The value of cattle depends on various factors like weight, sex, age, and class. Cow-calf pairs were valued as high as $3,000 in April of 2024, with calves in the 500–600 pound range selling for $3.14 per pound and bulls at $10,000. AgriLife estimates cattle losses to be valued at $27 million.

Livestock losses extend beyond the death of any one animal or herd. Within their cells, these cattle carried DNA reflecting generations of genetic development fostered by Panhandle ranchers, much of which has been lost.

Although grasses will green quickly with any rain, pastures will not be suitable for grazing for as many as three to five years by some estimates.
Fencing losses

The committee was unable to obtain an estimate of total fencing losses. Thousands of miles of fencing were destroyed. AgriLife estimates ranch infrastructure losses, including fencing, at $68.7 million.

In recent years, the cost for materials and labor to install barbed wire fencing has run approximately $15,000 to $20,000 per mile depending on the terrain. With the massive increase in demand for posts, wire, supplies, and labor that will be occasioned by fencing losses on the scale experienced in the Panhandle, testimony indicated that the cost could increase to as much as $25,000 per mile. Unless a landowner had purchased insurance with a special endorsement covering fencing, those losses were entirely uninsured.

Tree and other vegetation losses

Thousands of native trees and other vegetation were reduced to ashes by the wildfires. Majestic cottonwood trees, some growing for hundreds of years, burned to the ground or were damaged so badly they will not survive.

Water wells

Hundreds of water wells were destroyed or rendered unusable, eliminating water sources for people and livestock and affecting the livelihoods of residents.

Family and community impact

The impact of lost revenue sources to landowners and businesses will almost certainly result in job loss and wage reduction. Some families will likely be forced to leave the small communities in which they have lived for decades, further depleting populations and depressing local economies and tax bases. These families will withdraw their children from
local schools, sell their homes (if possible), and leave their churches, leaving a void in these close-knit communities.

Loss of “romance value”
The value of Panhandle ranchland is enhanced by what some call its “romance value.” Beyond the revenue a ranch may generate from livestock operations, grass leasing, and hunting fees, many of these properties have additional value in the market because buyers associate them with a particular ideal. A ranch property with a beautiful home overlooking a creek, framed by towering trees, and surrounded by wood fencing for horses, carries a premium that is not easily quantifiable.

Erosion
Loss of vegetation is expected to lead to erosion in certain areas. The Panhandle is dotted with dirt dams that collect runoff during rainfall, forming ponds, sometimes supplemented with water from windmills or water wells and used to water livestock. Previous fires have demonstrated that many of these dams will likely be damaged during heavy rains compromising the availability of water for livestock.

Destruction of wildlife and habitats with resulting lost hunting revenue
Wildlife manager and hunting outfitter Cal Ferguson testified that he lost 55,000 acres leased for hunting. Based on his experience, quail will not return to these habitats for two to three years due to the lack of nesting cover. Deer and turkey numbers will also decrease, impacting the bottom line of those in the hunting industry and ultimately the revenues of landowners, some of whom receive as much as 50 percent of their income from hunting leases. AgriLife estimates lost hunting revenue of approximately $875,000 per year.

These losses, of course, will trickle down to local communities. Hunters buy firearms and ammunition, rent lodging, and buy fuel and meals from local merchants. For a time, at least, these revenues will be impacted.

Anticipated impact on local, regional, state, and national economies
According to the Texas Department of Agriculture, more than 85 percent of Texas cattle production occurs in the Panhandle. Before the wildfires, herd sizes were already suffering from prolonged and widespread drought. Ranchers with surviving cattle will now face shortages of feed and challenges in accessing water due to hundreds of miles of burned power lines that supplied electricity to run pumps.

Roberts County Judge Mitchell Locke estimated a 60 percent reduction in his county’s economy for up to three years. During that same time, the county will experience a reduction in tax revenue due to available abatements and reduced ad valorem tax values. In terms of
relief for impacted residents, the owner of a qualified property that is at least 15 percent
damaged by a disaster in a governor-declared disaster area may apply for and receive a
temporary exemption of a portion of the appraised value of the property commensurate to
the damage assessment.\(^8\) Qualified property includes tangible personal property used for
income production, improvements to real property, and certain manufactured homes. Texas
law also permits a property owner whose residential structure is rendered uninhabitable by a
casualty or by wind or water damage to continue to receive the homestead exemption on the
structure, land, and improvements while the owner constructs a replacement structure on the
land.\(^9\) While these measures provide important relief to taxpayers, they do depress revenues
for taxing entities struggling to recover from disasters.

**TDEM public assistance and available federal funds**

Although the Smokehouse Creek and Windy Deuce fires were large enough that Texas will
qualify for Federal Emergency Management Agency ("FEMA") Fire Management Assistance
Grants ("FMAG"), those grants will only reimburse 75 percent of the costs of fighting the
fire. Thirty-one Panhandle fire departments will receive this reimbursement at some point.
TDEM reported to the committee that TAMFS's costs for its response efforts to the two
eligible fires are currently $16,215,594.31, and the total amount expected to be submitted by
state agencies for federal reimbursement is approximately $20 million.

According to information provided by TDEM, losses to private property owners from the
wildfires likely do not qualify for FEMA's Individual Assistance Program.

Similarly, because damage caused by the Panhandle wildfires has been determined to not meet
the individual threshold of approximately $54 million, Texas will be ineligible for
reimbursement of agency costs under FEMA's Public Assistance Grant Program.

The Small Business Administration ("SBA") Loan Program provides low-interest loans to
businesses and homeowners for repairing damages from a disaster and covering other financial
losses during recovery. TDEM has reported that 39 residences in Carson County and 99
residences and businesses in Hemphill and Hutchinson counties have been certified as meeting
the required threshold for SBA loan eligibility.

---

\(^8\) [Tex. Tax Code § 11.35.]

\(^9\) [Id. § 11.135.]
TXDOT costs
The Texas Department of Transportation ("TXDOT") provided the committee with its preliminary costs associated with the 2024 Panhandle wildfires. Total costs of $585,403 were comprised of $266,246 in direct response costs (labor, equipment, material, and overhead), $145,764 in post-response costs (debris and carcass removal), and $173,393 in state highway damage costs (signage, delineation markers, guardrails, etc.).

Insurance and utility rate increases
The committee is concerned that homeowners insurance providers will increase premiums in the wake of the wildfires or that coverage may become entirely unavailable for Panhandle property owners. Similarly, it is anticipated that utility companies may seek to pass along the costs of electrical infrastructure repairs and damages paid to landowners for fire-related losses.

Litigation
According to publicly available filings, numerous lawsuits have already been filed against Xcel Energy, Osmose Utility Services, and others by homeowners and ranchers. Additional claims have been or likely will be filed by business owners experiencing lost profits stemming from reduced economic activity caused by the wildfires. At least one oil and gas operator, named as a defendant in pending litigation, has already filed for bankruptcy protection in Houston.
Summary | Findings

The largest and most destructive of the Panhandle wildfires were caused by electric power poles and lines that had not been effectively maintained or replaced by a utility provider and an oil and gas operator. Although volunteer firefighters fought valiantly to contain the wildfires, response efforts were inhibited by a lack of properly positioned, readily available, and timely dispatched air support on top of ineffective communication and coordination among agencies, local governments, and responders due in part to communications equipment that lacked interoperability.

Volunteer fire departments (“VFDs”), which the Panhandle region largely depends on, are grossly underfunded, making it virtually impossible for them to obtain the equipment and resources needed to fight wildfires of this magnitude safely and effectively.
Summary | Recommendations

Prompt and aggressive action is required to better predict, prevent, and respond to future wildfires. More effective monitoring and rule enforcement is needed to check irresponsible oil and gas operators and to improve accountability among utility providers in their pole inspection and replacement programs.

Texas must obtain and control its own firefighting air fleet and contract directly with private aerial support providers as needed for improved wildfire response. Additional funding and opportunities must be made available to volunteer fire departments to encourage more proactive and extensive fire mitigation strategies that will protect the people and industry the region supports. Efforts should be made to upgrade statewide communications systems to facilitate effective communication between all responders. Coordination of wildfire response efforts should be more localized, with primary responsibility for incident management in the hands of VFDs and local government officials, supplemented by agency resources in a supporting role unless and until incident command is handed over. Efforts must be made to better inform Panhandle residents of available fire mitigation strategies and incentivize their implementation.

The committee generally believes residents of the Texas Panhandle are asking for less government intervention, not more. This philosophy is particularly applicable to current reliance on federal resources in preparing for and responding to wildfires. Therefore, while the committee will make several recommendations in this report calling for action by the Texas Legislature, various state agencies, and other parties, implementation of its recommendations must be accomplished: (1) with careful consideration and attempts to avoid unintended consequences that may occur as a result of newly enacted or amended legislation, regulation, or guidance; (2) in a way that minimizes imposition of burdens on VFDs, local governments, and the communities they serve; and (3) without a reduction in funding of other legislative initiatives or current programs that benefit residents of the Texas Panhandle.

Texas is a big state. It has been blessed with many resources, but their allocation requires deliberate and principled reconsideration.
Findings | Factors Contributing to Wildfires

The primary & most destructive 2024 Panhandle wildfires were caused by power lines

Both the Smokehouse Creek and Reamer Creek fires were caused by downed power poles owned by Xcel Energy. The Windy Deuce Fire was caused by the lines on a power pole having been worn by the limbs of an adjacent tree on an oil and gas location. The Grape Vine Creek Fire was initially reported to have been caused by a power pole owned by Xcel Energy, which subsequently denied ownership of the pole and reportedly requested a correction of the investigation report.

The pole identified as the cause of the Smokehouse Creek Fire suffered from decay. According to testimony from Xcel President Adrian Rodriguez, the pole had been inspected in January of 2024 by Xcel vendor Osmose Utility Service (“Osmose”) and given a “priority one replacement” designation. On February 9, 2024, Osmose notified Xcel that the pole was in need of replacement. The replacement was not completed before the high winds later in the month caused the pole to fall. It is worth noting that while the legislature has recently passed legislation incentivizing more resiliency planning, Texas does little to regulate the inspection, maintenance, and replacement schedules of utility poles in the state. Utilities are able to establish their own programs in accordance with budgets and other company priorities.

Osmose refused an invitation to appear at the hearings to answer questions of the members and to participate in the task of investigating and preventing future wildfire disasters. Osmose bills itself as an industry leader in utility pole inspection services. Its institutional knowledge would have been instrumental in the committee’s work.

In a letter to the committee dated April 11, 2024, Osmose offered its “sincere apology” for not participating in the hearings but failed to provide an explanation for its absence. This committee, tasked with investigating the most destructive fires in state history, took its assignment with the utmost seriousness. It is sorely disappointing that a key fact witness elected not to participate in the public hearings.

Significant correlation between high winds and electrical system failures highlights need for improved resiliency planning

While lightning, vehicle chains, and cigarette butts cause wildfires, they are often extinguished with minimal spread and resultant loss. Utility poles and the wires they support tend to fail during high winds, causing fires at the worst possible time. The committee, therefore, concludes that identification and remediation of the risks unique to these poles, both those
owned by utility providers and those located on property leased to or controlled by oil and gas operators, must be prioritized.

Last session, the legislature enacted H.B. 2555, relating to transmission and distribution system resiliency planning by and cost recovery for electric utilities. The bill allows an electric utility to file with the Public Utility Commission of Texas (“PUC”) a plan to enhance the resiliency of the utility’s transmission and distribution (T&D) system through at least one of a number of approved methods over a period of at least three years. The bill provides for a review by PUC of associated resiliency-related investments, and if the costs are determined to be reasonable, for possible recovery of those investments.

The purpose of the legislation is to reduce restoration costs and times (for both utilities, and ultimately, customers) by incentivizing resiliency planning and installation of measures to enable electrical T&D infrastructure to withstand extreme weather conditions such as lightning mitigation, flood mitigation, information technology, cybersecurity measures, physical security measures, vegetation management, and wildfire mitigation and response and allowing them to recover reasonable and prudent investment costs.

PUC adopted rules implementing the new law in February of 2024, opening the door for utilities serving the state to begin submitting resiliency plans. If approved, these plans and their attendant rate riders could allow utilities to enhance pole inspection, restoration, and replacement programs. The expected outcome is to mitigate future risks of fires from downed poles and to reduce restoration times and expenses by reducing the number of poles downed due to weather events.

Regulatory oversight of stripper well operators is grossly deficient

The committee heard testimony from numerous witnesses that irresponsible oil and natural gas operators, particularly those responsible for non-producing or low-producing “stripper wells,” are among the most common culprits contributing to wildfires. Pumpjacks require electricity to operate; therefore, some level of electrical infrastructure has been installed at every location. However, the economic incentive of the operator to maintain the location, including any installed electrical components, diminishes when a well’s productive capacity drops below a certain level or terminates completely. In some cases, the well may even be abandoned or “orphaned.” Electrical current may still flow to an orphaned well as breaker

According to RRC inspector Douglas Moneymaker, 32,000 such wells exist in the 26 Panhandle counties.
boxes, wiring, and poles deteriorate or become damaged by weather or contact with livestock. The location becomes a minefield of potential fire ignition sources.

Craig Cowden, a private landowner, testified that 85 percent of the multiple fires on his ranch were caused by damaged electrical infrastructure at oil and gas locations.

Randall Collins, Assistant Executive Director for RRC, testified that the agency was unaware of and had no record of wildfires being caused by neglected electrical infrastructure at well locations. This testimony revealed a massive breakdown in communication between RRC and
TAMFS, two state agencies whose coordination is indispensable to preventing and fighting future wildfires. Further, the regulatory gap between RRC and PUC enforcement authority must be closed.

Information provided to committee staff indicated that the Public Utility Regulatory Act does not authorize PUC to inspect distribution voltage and transmission voltage power lines or to require electric utilities to report the results of its inspections for compliance with National Electric Safety Code (“NEC”) standards. PUC stated that it did not have the staff or funds necessary to contract with third parties to conduct on-site inspections of any element of utilities distribution systems or of the facilities located on a customer’s side of a meter.

RRC employs inspectors who, in response to a complaint by a surface owner, may be dispatched to evaluate the complaint. Should the inspector note a potential safety violation related to electrical infrastructure, RRC may send the operator a written notice of violation, but only if the operator, and its contact information, can be identified. The failure of an operator to respond to the notice within 15 days will result in RRC sending a second notice of noncompliance requiring remedial action within 30 days. In the face of continued inaction by the operator, RRC’s only enforcement mechanisms are to (1) sever the lease, which requires prosecution of a civil enforcement action, or (2) levy a fine. It was the committee’s impression that neither remedy is frequently pursued and is even less frequently effective. Therefore, the dangers persist.

3 Existing fire prediction & modeling is ineffective

TAMFS maintains a Predictive Analysis Department, which is tasked with monitoring and modeling weather patterns with a view towards predicting potential wildfires. These predictions are used by TAMFS to position and stage personnel and assets, including aircraft, used in wildfire response. In this instance, TAMFS’s predictive analysis appears to have not fully perceived the imminent fire risk.¹¹

TAMFS Director Al Davis described the conditions leading to the wildfires as “a new phenomenon,” a characterization that created confusion among panhandle residents who considered the conditions common. He further described the wildfire event as a Southern Plains Wildfire Outbreak (“SPWO”). Thirty-seven SPWOs have occurred since 2005 when the classification was created. Occurrence of a SPWO at the time and under the specific

¹¹ Committee testimony, Al Davis, Director, Texas A&M Forest Service (April 2, 2024).
conditions in question was “outside that paradigm” for TAMFS meteorologists, catching them “by surprise.” According to TAMFS, this is under further investigation. It is the committee’s expectation that the legislature will be apprised of the findings of that investigation, including how (1) existing fire prediction and modeling by TAMFS can be improved, and (2) improvements will be employed to more effectively pre-position personnel and equipment to respond to wildfires in the Texas Panhandle.

4 Mitigation strategies are effective but underutilized

The committee heard testimony concerning a variety of fire mitigation strategies:

- Pre-suppression lines, planned and installed well before wildfires start, are designed to stop fires before they engulf communities
- Fire breaks, created by using a motor grader to scrape the soil (removing vegetation and often cut parallel to existing roads or fences), can help prevent or impede fire progression
- Green strips, created by planting wheat or cool season grasses that will be green and less flammable during the winter fire season, act as fuel breaks
- Flash or “mob” grazing and mowing serve as effective fuel control methods and do not present the risks of prescribed fire or controlled burns
- Safety zones can be created that provide defensible space for firefighters
- Sprinkler arrays, increasingly used in fire-prone western states and Canada, are available to purchase for deployment on the perimeters of communities to protect structures
- Programs such as Fire-Wise USA and the S-215 training program by the National Wildfire Coordinating Group (“NWCG”) may be employed to educate property owners and volunteer firefighters in fire mitigation strategies and response preparation

While none of these strategies will necessarily stop wildfire, each has its place in helping to reduce the rate and spread of fire and in providing tactical advantages to firefighters.

Some witnesses recommended the use of prescribed fire or controlled burns as a mitigation strategy; however, this method has numerous drawbacks in the Panhandle. First, fires that are intentionally set present substantial risks regardless of the best-laid plans. Wind patterns and volatility in the Texas Panhandle often lead to controlled burns becoming uncontrollable.

12 According to information provided to the committee, such trailers are available to purchase for $210,000 each. They may be leased for $4,000 per day while deployed or $2,000 per day while on standby. Long-term rentals may also be available to lower costs.
Multiple prescribed burns conducted in recent years by the Texas Parks and Wildlife Department ("TPWD") on the state-owned Gene Howe Wildlife Management Area near Canadian, Texas have become uncontrolled, resulting in property losses by area landowners. Secondly, liability insurance for burn managers has become increasingly difficult to obtain or maintain. Finally, landowners participating in the CRP are subject to federal requirements, particularly around prescribed burns, that can be unconducive to wildfire mitigation in the region.
Findings | Allocation of Resources

VFDs are inadequately funded

**Insufficient funding for H.B. 2604 grants and complexity of applications**

The Texas Rural VFD Assistance Program was enacted in 2002. Pursuant to 77(R) H.B. 2604, funding for the program comes from an annual assessment on property and casualty insurers. Annually, the comptroller assesses the lesser of $30 million or the total amount appropriated from the volunteer fire department assistance fund account in the general revenue fund for the fiscal year pursuant to the General Appropriations Act. In other words, funding of the program is currently capped at $30 million. The total appropriation authorized by the legislature for the fiscal year ending August 31, 2023, was $23,051,548.13

Under the program, VFDs may apply for 2604 grants for the acquisition of firefighting vehicles, fire rescue equipment, protective clothing, tri-hydrants, computer systems, and firefighter training. However, the program is grossly underfunded. On average, for the previous three fiscal years, VFDs have submitted 2604 grant applications totaling $43.7 million per year. Only $21.7 million in grants have been distributed annually during the same time, leaving an annual unfunded shortfall of $22 million. Even for grants that are awarded, because funding is so limited, TAMFS must place limits on the amounts of individual grants. If a department needs to purchase a truck at a cost of $400,000, for example, it may receive a grant for only a fraction of the purchase price.

While available grant funds have remained consistent over the last several years (the assessment has remained approximately $23 million over the last three fiscal years), the cost of trucks and other equipment has escalated rapidly. In 2019, a type six fire engine, among the smallest available, could be purchased for approximately $160,000. In 2024, the same size and model truck costs approximately $280,000, a 75 percent increase. Trucks are built and customized only after they are ordered. Historically, it has taken one to two years for fire departments to receive trucks from the time they are ordered. Currently, the turnaround time is estimated to be two to three years.14

In the event of declared disasters, up to $15,000 is immediately made available from the program to responders in the form of emergency grants for lost equipment.

---


14 Committee testimony, Bill Tidwell, State Firefighters and Fire Marshalls Association (April 2, 2024).
Although 100 percent of available 2604 grant funds are passed through TAMFS to fire departments each year, 1,250 VFDs currently have thousands of pending applications for unfunded grants from years past totaling $172 million. As a result, it is not uncommon for departments to wait a decade or longer before receiving grant funds for purchases of equipment. Fire trucks in particular are difficult for departments to acquire because of their high cost. As a result, many departments operate with vehicles that are decades-old, requiring firefighters to spend nights and weekends repairing and maintaining antiquated equipment. Finally, while TAMFS prioritizes grant requests for training, the cost of meals, lodging, mileage, and days firefighters miss from paying jobs to attend that training are not covered.

In awarding grant funds, TAMFS uses a numerical rating based upon five metrics:

- Number of years the department has been in existence
- Size of the primary 911 protection area
- Population of the primary 911 protection area
- Distance to the nearest viable mutual aid department
- County wildfire exposure classification (the average risk of a wildfire in each county)

Applications are also eligible for bonus points based upon the age of the application. Beginning 12 months after a truck application is received, 0.5 bonus points are added each month to the application’s rating number. While there is significant wildfire risk in Texas Panhandle counties, the population criteria will always be a negative factor for Panhandle VFDs. For cultural and economic reasons, the populations of many small, rural Panhandle towns are shrinking. Although the acreage at risk from wildfires remains the same, fewer residents means fewer volunteer firefighters and less local government tax revenue available to support their VFDs. Yet the costs of equipment continue to rise. As such, departments in communities with larger populations receive higher rankings and are sometimes awarded multiple grants before other smaller departments receive even one.

Witnesses testified that the application process was complex and required VFDs applying for assistance to reenter detailed and time-consuming information each time they applied for a new grant. Recently, TAMFS has created FireConnect, a web-based portal available for use by fire departments to apply for 2604 grants. As described by TAMFS, this new system is more user-friendly, requiring less time.

Finally, many fire departments are comprised of both paid and volunteer personnel. Departments with 20 or more paid firefighters, many of whom are actually EMS personnel,
become ineligible for participation in 2604 grants. Legislation may be necessary to properly consider and address the unmet needs of these departments.

**Lack of job protection for volunteer firefighters**
Witnesses at the hearings testified to instances of volunteer firefighters being terminated from their paid jobs because they missed work while volunteering to fight the Panhandle wildfires. Current law provides no protection from job loss under those circumstances.

**Inadequate reimbursement to volunteer firefighters for training-related expenses**
The state provides tuition assistance for volunteer firefighters to participate in fire science courses. However, volunteer firefighters must pay out-of-pocket expenses associated with attending those courses, including costs for travel, meals, and lodging. In addition, to be eligible, volunteer firefighters must be participants in the Texas Emergency Services Retirement System. According to information provided to the committee by the State Firefighters’ & Fire Marshals’ Association, only approximately 10 percent of volunteer firefighters meet that criterion. The committee recommends reconsidering or eliminating this requirement.

**Need for improved information-sharing and database of available firefighting equipment**
While TAMFS maintains a list of response assets organized by office location, testimony at the hearings suggested the need for a comprehensive statewide database, which could be accessed and updated by individual departments to include their own firefighting equipment available for use in wildfire response efforts. While voluntary aid agreements exist between departments, typically those in close proximity, VFDs cannot easily find and request equipment they may need in marshaling their responses. When mutual aid deploys to a disaster, knowing the type and quantities of equipment already available could lead to better planning and coordination.

**Suboptimal coordination between local assets and TIFMAS**
TIFMAS is an organization of mostly paid fire departments that volunteer to travel to support other fire departments, a process known as mutual aid. Although they are paid from state funds, TIFMAS firefighters are employed by local governments. Panhandle communities and residents are grateful for the help they received from TIFMAS. At the same time, testimony during the hearings unearthed questions about lines of command and difficulties communicating. The committee urges the legislature, local governments, and state agency partners to continue support for policies addressing interoperability and multijurisdictional training exercises. These efforts will help ensure all firefighters are positioned to fight the state’s wildfire as safely and effectively as possible.
**Antiquated communications equipment**

Communication systems used by VFDs are antiquated and suffer from a lack of interoperability with systems used by government agencies, other responders, and law enforcement. The inability of all responders to communicate accurately and predictably is debilitating to wildfire response efforts.

Local solutions to the problem are often cost-prohibitive. Updated digital radios can cost anywhere from $2,000–8,000 per unit. Roberts County recently spent $100,000 to update its own communications system.

Further compounding communication challenges, responders from TDEM and TAMFS use different communication frequencies from those used by local law enforcement and firefighters. A department rendering mutual aid may use different frequencies than the department they are assisting. The need for enhanced communication interoperability was a common theme throughout the hearings.

**Predictable, prompt, & reliable aviation support is unavailable under the existing USFS program**

The State of Texas does not own any fixed-wing firefighting aircraft. Instead, the state obtains “contracted aircraft” via agreements with the United States Forest Service (“USFS”) and Bureau of Land Management (“BLM”). Single-engine air tankers and some helicopters are contracted through BLM. Large air tankers are typically contracted through USFS. Contracts fall into two categories: “exclusive use” and “call-when-needed.” As the names imply, exclusive use contracts call for aircraft to be staged at a designated location, leading to the fastest response times. Former BLM exclusive use contractor Emmett Webb testified that the contract he previously serviced in Moab, Utah required his aircraft to be “up-and-down within 15 minutes of getting a call.” Call-when-needed contracts are far more common and less expensive. For these contracts, aerial contractors are essentially on standby waiting to be dispatched, as further described below.

According to testimony from private air response contractor Luke Boedeker, effective aerial response to fighting wildfires requires positioning of assets based upon conditions well before ignition.

---

15 Specifically, TAMFS and TPWD have entered into a Master Cooperative Wildland Fire Management and Stafford Act Response Agreement with USFS, BLM, the National Park Service, the Bureau of Indian Affairs, and the United States Fish and Wildlife Service. The current agreement became effective on June 15, 2020, and will continue for five years.
Mr. Boedeker first received a phone call notifying him that his services would be needed on the morning of Tuesday, February 27th. He testified that the call should have been made four days earlier on Friday, February 23rd, or (at the latest) Saturday, February 24th, the day TDEM dispatched ground forces to the Panhandle.

Once a fire has started, efficiently dispatching aircraft becomes critical. According to experienced aerial firefighter Jason Abraham, also a member of the committee, “we had a window” the morning of Tuesday, February 27th, during which the Smokehouse Creek Fire could have been held if aircraft had been properly staged and dispatched. Similarly, Roberts County Volunteer Fire Chief Phillip Clark testified that his department could have used air support on Tuesday morning.

Ideally, aircraft should be airborne within 30 minutes of notification that a wildfire is burning. Currently, “resource ordering” is accomplished through an often cumbersome and inefficient process that places the state at the mercy of the federal government. First, someone from TAMFS contacts the Atlanta, Georgia-based Southern Area Coordination Center of the National Inter-Agency Fire Coordination Center (“NIAFC”) to request aircraft. Next, personnel in Atlanta contact NIAFC in Boise, Idaho to pass along the request. NIAFC then conducts what is known as a “best-value determination”—essentially a determination of which contractor can provide the service at the best value—which may not always be the contractor located closest to the fire or positioned to respond the fastest. Only after the shopping is completed does NIAFC contact the selected contractor to request deployment of the aircraft.

Although it is not necessary for aircraft to be located in every Panhandle community, the region currently lacks sufficient reloading facilities.

Aerial firefighting efforts in the Panhandle are also hampered by federal thresholds (promulgated by the NWCG) and federal contract provisions prohibiting flight in sustained wind speeds of 30 knots (roughly 34 miles per hour) with a wind gust spread of 15 knots (roughly 17 miles per hour) at the location of the fire. While the committee agrees that pilot safety must be prioritized and appropriate guidelines should be in place, the ultimate decision concerning whether a firefighting aircraft can safely fly must belong to each individual pilot in coordination with the chief pilot. The state must own or control access to fire response aircraft to accomplish that.
3 Antiquated & incompatible communications equipment prohibits effective wildfire response

Ineffective communication in wildfire prevention and response was an overarching theme during the hearings. Witnesses described how antiquated communications devices hampered the ability of firefighters to reliably communicate with other responders, state agencies, and representatives of local governments. Volunteer firefighters could not reliably communicate with TIFMAS support firefighters or state emergency services personnel. Pilots of private aircraft could not communicate effectively with contracted aircraft, preventing effective coordination of their efforts.

4 Vehicle manufacturer compliance with existing EPA emissions regulations poses a danger to firefighters

In 2007, the Environmental Protection Agency (“EPA”) imposed emissions restrictions for larger diesel-powered engines. As originally enacted, fire engines were not exempted from the requirements, and engine manufacturers were required to install emission control technology systems that used diesel exhaust fluid (“DEF”). The technology appears to have worked well with vehicles that are driven frequently and over long distances, but fire trucks usually are not.

After implementation of the regulations, fire departments around the country, particularly VFDs serving smaller communities, began experiencing engine performance problems in their trucks. Because the trucks were not driven frequently and were required to idle for long periods of time while fighting fires, the so-called regeneration process was not being successfully completed, leading to engines stalling or not starting at all. This presents an obvious and potentially lethal danger to firefighters.

The committee heard testimony that engines owned by VFDs in the Panhandle, particularly those of a certain age, remain susceptible to this problem.
Findings | Intergovernmental Coordination

Coordination among responding local, state, and federal government entities was ineffective

Delayed aviation response

On Monday, February 19, 2024, NWS warned of the existence of elevated fire conditions, forecasting potential wind gusts of 40–54 miles per hour on Tuesday and near record highs for Wednesday, February 21st. It recommended that residents “take proper precautions to avoid wildfire starts.” On Wednesday, February 21st, NWS observed that fire weather conditions would return to the area the following Monday and Tuesday. On Thursday, February 22nd, wind gusts exceeding 45 miles per hour were expected for Monday and Tuesday, with gusts up to 55 miles per hour possible in some locations. NWS announced, “we are starting to get into our main fire season.”

Although weather was expected to be mild leading into the weekend, on Saturday, February 24th, Borger tied its record for high temperatures. Also on Saturday, NWS issued both a “Red Flag Warning” and a “High Wind Warning” in effect until 8:00 p.m. on Tuesday.

Although TDEM dispatched and began staging ground forces on Friday, February 23rd, the federal government did not have contracted aircraft in place to timely respond to the 2024 Panhandle wildfires. According to Nim Kidd, Chief of TDEM, because the rest of the country, and particularly the West Coast, was not in fire season in late February of 2024, the federal government did not take the threat posed to Texas seriously.
Recommendations | Legislative Solutions & Other Actions for Future Prevention

1. **Increased oversight of oil & gas operators is required**

During the hearings, Xcel Energy reported that it will accelerate its “priority one” pole replacement program. On high fire-risk days, it will discontinue the automatic reclosing capability for circuits within its transmission and distribution systems until a visual inspection of the lines can be completed. As a last resort, it will discontinue power to lines in order to help prevent wildfire ignition caused by power poles and lines. While the committee appreciates Xcel’s response, questions persist regarding the pole inspection industry, best practices, the willingness of utilities to adopt adequate inspection, restoration, and replacement programs, and the obstacles faced by those utilities that do.

**Direct PUC to study and report on the need for direct oversight and monitoring of utility pole inspections in addition to the current private reporting system**

The legislature should direct PUC to study and report on the adequacy of the existing private reporting system by which utilities inform PUC of its pole inspection plan provisions. The study should include investigation of any correlation between Texas wildfires known to be caused by utility poles and lines as well as whether existing plans are reasonably sufficient to prevent future occurrences. Finally, the committee asks PUC to report on whether additional legislative or regulatory action may be required to increase the effectiveness of utility pole replacement programs and decrease the incidents of wildfires they cause.

2. **Fire prediction & modeling must be improved**

The committee believes rapid adoption and implementation of new technologies is critical to improving fire prediction and modeling. Potential innovations include:

- Use of unmanned aircraft systems
- Maximization of smartphones and tablets in the field
- Geo-tracking and geo-fencing for response resources
- Real-time wildfire modeling and wildfire/disaster information

The committee calls on TAMFS to redouble its efforts to explore and adopt new technologies that will allow Texans to be better prepared for the wildfires to come.
### Recommendations | Allocation of Resources

**Increase funding to VFDs**

**Appropriate additional funding for pending but unfunded H.B. 2604 grant requests and require simplification of the application process**

The committee recommends that the legislature make an appropriation to fully fund the $172 million in pending but unfunded 2604 grant requests. As part of this recommendation, the legislature should consider amending the laws governing the Rural Volunteer Fire Department Assistance Program to raise or remove the existing $30 million cap.

**Facilitate training for VFDs by expanding the 2604 grant program or identify alternative means to cover out-of-pocket expenses incurred by firefighters**

While the 2604 grant program seeks to make training more readily available to firefighters, the program does not cover travel expenses incurred by individuals to attend those trainings. These costs can include meals, lodging, mileage, and lost wages. The result is that the number of trainees able to attend is less than the demand. The committee therefore recommends that the legislature look for opportunities to help cover the costs incurred by fire departments and personnel who must travel to attend trainings.

**Reevaluate the metrics by which current grant applications are considered**

The committee calls on TAMFS to reevaluate the numerical rating system it employs for grant dispensation (including for the existing 2604 grant program) so that rural VFDs receive grant funds more quickly. Factors that should be considered for inclusion in a new or modified rating system include the (1) geographic size of a department’s service area; (2) relative difficulty of available vehicular access to remote portions of that service area; and (3) types and average ages of the department’s fire trucks.

**Establish a new grant program specifically for small VFDs**

Recognizing that small VFDs serving large geographical regions face unique challenges relative to their peers—both career and volunteer in more populous regions—the committee recommends the legislature consider establishing a new program tailored to meet those needs that is limited to VFDs with less than 50 volunteers.

---

Establish a state-owned firefighting air fleet & supporting infrastructure to be supplemented with private aircraft contracted directly with the state

The legislature should authorize and fund a state-owned firefighting air fleet, hire pilots and crews to operate and maintain it, and secure the infrastructure necessary to stage and deploy the aircraft to effectively fight wildfires in the Texas Panhandle and other high-risk areas.\textsuperscript{17}

Chief Kidd testified that as a starting point, the state should purchase four fixed-wing aircraft, two rotary-wing aircraft, and a command aircraft. The committee believes the number and type of aircraft should be the subject of additional evaluation. An early mix of exclusive use contracts and procurement is estimated to cost in excess of $500 million plus ongoing staffing and maintenance.

As conditions warrant, use of state-owned aircraft should be supplemented through the use of additional private aircraft contracted directly with the state, TDEM, and TAMFS.\textsuperscript{18}

\textit{Incentivize landowners to dredge dirt tanks deeper for more efficient water collection by aircraft}

Helicopters used in fighting the Panhandle wildfires frequently collected water from windmill overflow tanks. Because the tanks were not designed for that purpose, many were too shallow, resulting in pilots collecting substantial amounts of mud when dipping buckets. The committee recommends that the legislature appropriate funding, possibly through a separate TAMFS-administered grant program, through which landowners can apply for and receive funds to subsidize installation of new tanks or dredging of existing tanks to alleviate this problem.

\textit{Direct TAMFS to implement a geolocation system for ground and air forces to aid in locating water reloading sources}

No centralized, readily accessible resource exists through which firefighters in the Panhandle, both ground-based and aerial, can access the location and suitability of water reloading sources—particularly the stock and windmill overflow tanks frequently used by helicopter pilots. The committee recommends that the legislature direct and fund the creation of such a resource.

\textsuperscript{17} A helpful comparison for the program may be the Texas Department of Public Safety (“DPS”) Aircraft Operations Division, which is composed of 50 police pilots, 25 tactical flight officers, and five essential support personnel operating a fleet of helicopters and fixed-winged aircraft in six regions of Texas. https://www.dps.texas.gov/section/aircraft-operations-division.

\textsuperscript{18} TAMFS Director Al Davis testified that TAMFS is currently evaluating the inclusion of private aircraft contracting in its appropriations request for the next legislative session.
Information should be accessible to firefighters via the Internet and suitable for rapid download to mobile devices for use in rural locations where Internet access may be limited or nonexistent. Available information should include: (1) GPS coordinates that may be used to locate the water source; (2) a description or rating of the suitability of the water source for use in reloading; and (3) any known limitations or restrictions (e.g., that the reservoir is too shallow to permit effective reloading).

3 **Legislate job protection for volunteer firefighters**

The legislature should pass job protection laws protecting volunteer emergency responders, including firefighters. Volunteer firefighters risk their lives protecting their communities knowing they will receive no personal benefit. They must be reasonably protected from job loss.

Alternatively, the legislature could amend section 201.012, Labor Code (the Texas Unemployment Compensation Act), to exclude from the definition of “misconduct” absence from or tardiness to work resulting from responding to a declared natural disaster for up to 14 days in any calendar year. This change would allow terminated firefighters to obtain immediate, if modest, compensation to help alleviate the burdens of unexpected job loss.

4 **Study & make recommendations to achieve greater coordination between local firefighters & TIFMAS**

The committee recommends that the legislature, with assistance from TAMFS, study and make recommendations designed to lead to improved collaboration between local and TIFMAS firefighters. Parties should study the doctrine of incident command, its incorporation in trainings and drills, and examine how instruction can be improved by examining breakdowns in communication and chain of command in recent fires.

Texas is fortunate to have TIFMAS, and the committee is grateful to the firefighters who deployed to the Panhandle through the program. The committee also believes all responders can benefit from clear lines of communication and shared expectations, and it supports efforts to further that goal.

5 **Direct TAMFS to maintain a county-by-county database of available firefighting equipment to coordinate use during wildfires**

The committee recommends that TAMFS consider, and the legislature support, options to enhance its current firefighting equipment tracking, to include a database that fire departments can access and update to create a true, current, and statewide inventory for wildfire planning and response.
Two state programs and two federal programs exist to assist state agencies and local governments with the acquisition of surplus vehicles and equipment from state and federal entities.

The State Surplus Property Program and Federal Surplus Property Program, both operated at the state level by the Texas Facilities Commission and statutorily authorized under chapter 2175, Government Code, provide for the transfer or sale of surplus government property to state agencies and eligible entities.

The Helping Hands Program is a state program operated by TAMFS that allows donations of gently used fire and rescue equipment, fire trucks, and other items to be made available to fire departments throughout Texas while providing liability relief to donors.

The Firefighter Property Program is a U.S. Department of Defense (“DOD”) program that assists states and local firefighting agencies in acquiring excess DOD property for firefighting and emergency medical response.

The committee calls on TAMFS, in conjunction with the Texas Facilities Commission, to study and report on a potential expansion of the State Surplus Property Program and the Helping Hands Program or creation of a new program through which surplus emergency vehicles may be obtained and supplied to VFDs from the Texas Military or other sources.

In light of testimony regarding the risk to lives and the decades-old equipment firefighters in the Panhandle rely on as a result of EPA regulations, the committee recommends the state engage with the federal government, through adoption of a resolution and other suitable means, to create a new firefighting exception that addresses the unique circumstances of fire departments in the region.

---

19 For more information, see TFC’s Introduction to State & Federal Surplus Property Programs for State Agency Staff. https://www.tfc.texas.gov/divisions/supportserv/.

20 See the Helping Hands Program webpage for details about the program and the application process. https://tfsweb.tamu.edu/HelpingHandsProgram/.

21 For details about the program and the application process, see the following Firefighter Property Program webpage: https://tfsweb.tamu.edu/FirefighterPropertyProgram/.
The committee also recommends the state and local departments continue to evaluate the availability of fire protection packages and seek out opportunities to leverage the state’s buying power.

**8 Encourage & incentivize retention of TAMFS agency administrators & personnel**

TAMFS acknowledges that it has a huge turnover issue. This has resulted in a lack of institutional knowledge that can be carried forward from year-to-year to more effectively prevent wildfires. The committee calls on TAMFS to evaluate compensation and benefits for administration and staff (and on the legislature to intervene, if necessary) to encourage personnel retention.

**9 Modification to fire mitigation strategies**

*Increase funding for fuel load management, including fire breaks, mob grazing, green zones, and prescribed burns (with landowner consent and coordination)*

The committee believes that controlled burns on state-owned property should be conducted only with the consent of and coordination with potentially affected private property owners and local governments.

The committee also recommends greater emphasis on and funding for landowner education about available and appropriate fire mitigation strategies.

In addition, the committee recommends the creation of a dedicated grant program available to private landowners and local governments (working in conjunction with their VFDs) to apply for funding to implement their own fire mitigation strategies. The committee believes the legislature should appropriate additional funds for this program and charge TAMFS with the responsibility of designing and implementing the application and funding processes.

*Promote and incentivize burial of utility lines for new installations and in risk-prone areas*

The committee recommends that the legislature, in consultation with PUC, consider options to incentivize burial or “undergrounding” of new power line installations and existing power lines in risk-prone areas of the Texas Panhandle. While the committee appreciates that undergrounding is substantially more expensive than installation of overhead power lines, the additional protection against wildfires likely warrants greater expense in some instances.

---

22 Committee testimony, Al Davis, Director, Texas A&M Forest Service (April 2, 2024).
More than one private landowner testified during the hearings to using undergrounding when installing power lines on their property. Moreover, some western states, including California, have implemented undergrounding programs for some powerlines as a fire prevention strategy.

PUC agrees that undergrounding of lines in fire-prone areas can reduce ignition risk. However, factors such as the availability of easements and existing underground infrastructure, soil types, and geography affect the feasibility and cost of undergrounding. Undergrounding of distribution lines in the Panhandle could cost 8–15 times the cost of overhead lines (approximately $500,000–1 million per mile), which would lead to utilities requesting permission to cover these costs via increased utility rates.

**Study pole inspection and replacement standards**

The utility pole cited as the cause of the Smokehouse Creek Fire had been identified by Osmose as being decayed and requiring replacement. The pole was tagged to identify its defectiveness and to warn employees and contractors that the pole was not safe to climb. The pole was not timely replaced.

The committee calls on PUC to study and report on potential modifications to existing standards and regulations for pole inspection and replacement. The study should include (1) the need for and a mechanism to license and regulate contractors providing pole inspection services; (2) the imposition of a requirement mandating replacement of decayed or dangerous poles within a prescribed period of time after they are identified; and (3) adoption of appropriate rules requiring immediate reinforcement or stabilization of decayed or dangerous poles pending replacement.

**Direct TXDOT to study and report on fire mitigation strategies, including planting shorter vegetation on roadsides and more frequent mowing in risk-prone areas**

Executive Order 1-92 directs that TXDOT “will maintain highway vegetation in an environmentally sensitive and uniform manner consistent with the special conditions presented by local climate, topography, vegetation, and level of urbanization.” According to its vegetation management plan, TXDOT’s district engineers have discretion to determine the level of vegetation management in their district. The plan provides for a maximum of two full-width mowing cycles per year. Mower cutting height is required to be set no lower than

---


seven inches “to preserve wildflowers, create residual nesting cover, and provide for strong regeneration of native grasses and nectar plants.” The plan states that “low mowing is undesirable.” Overall, the plan appears to prioritize plant and wildlife preservation over wildfire mitigation.

“To promote cost savings,” mowing on rural roadways with very wide medians or rights-of-way is limited to a maximum of 30 feet in width. However, district engineers can make exceptions to this rule based on the distance to the right-of-way, brush control, and “other factors.” On rights-of-way, the plan states TXDOT “will conduct grading, mowing, emergency blading, or other activities to assist in prevention of wildfire spread.”

Witnesses at the hearings raised concerns that current vegetation control measures employed in the Texas Panhandle by TXDOT could be improved as another tool in the area’s fire mitigation strategy. The committee calls on TXDOT to study and report to the legislature how its vegetation management plan may be improved to mitigate wildfire ignition and spread in the Texas Panhandle, including consideration of (1) planting shorter, native grasses on roadides; (2) more frequent or more extensive mowing in risk-prone areas; and (3) lowering the height of mowers. TXDOT should also update the plan to provide for training its mower operators and other field personnel to identify potential wildfire hazards and ignition sources, including a mechanism through which employees can report (and TXDOT can respond) to such dangers.

**Study potential legislation authorizing utilities to implement fire mitigation steps within easements where utility poles and equipment are located**

According to testimony during the hearings, certain fire mitigation strategies available to utility providers are curtailed by restrictions contained in applicable easement agreements or leases, many of which have been in place for decades. As the committee understands it, while the utility providers may be entitled to install and maintain their transmission equipment, their easement rights may not include the right to access property subject to an easement in order to mow, perform brush control, or take other steps to mitigate wildfire risk.

The committee recommends that the legislature study the need for legislation or other policy changes to permit utilities and other easement holders to access property burdened by the easement with a view towards preventing the ignition and spread of wildfires. Any resultant policy changes should consider and properly balance the public’s interest in preventing wildfires with private property rights.
Call on Congress and federal regulators to review CRP requirements in wildfire-prone regions

Landowners participating in the CRP administered by USDA’s Farm Service Agency are subject to land management requirements that can exacerbate fire risks or otherwise run counter to fire mitigation techniques that are uniquely suited to the region. The committee recommends the state engage with Congress and USDA to revise these requirements to better consider fire risks.
The committee believes a statewide upgrade (including modernization) of existing communications systems is essential, and it encourages the legislature to take action to ensure all emergency personnel and first responders can communicate on the same channel during a crisis. Texas has seen significant investments in its communications systems; however, as testimony revealed, connecting the various communication technologies being utilized by the many different agencies and departments on scene was difficult and frustrated the response effort. Communications were conducted over a wide variety of channels and frequencies, leading to inoperable and disparate communication silos.

Interoperability refers to the ability of emergency response providers and government officials to communicate across jurisdictions, disciplines, and levels of government. The Statewide Interoperability Coordinator prepared a Texas Statewide Communication Interoperability Plan for 2023. The report acknowledges that such communication is critical to public safety, including saving lives. The plan supports adoption of P25 land mobile radio systems and implementation of next-generation 9-1-1 technology. The plan “articulates Texas' vision and mission for improving emergency and public safety communications interoperability.”

The committee heard testimony about steps undertaken in Florida, Wyoming, and Colorado to provide state and local first responders with radios and other necessary technical support. The legislature and relevant agencies, particularly TDEM and DPS, should look to these states to see what will work in Texas. While land mobile radio systems may remain the preferred mode of communication in the near future, policy makers should also look for opportunities to integrate broadband-enabled technology that is easier to configure, deploy, and maintain given the massive investments in broadband through the federal BEAD Program, the BOOT Program, and the Broadband Infrastructure Fund.

---

25 The committee was advised that the State of Colorado maintains a statewide communications platform made available to all responders at the state’s cost.

Chief Kidd repeatedly testified (and the committee agrees) that “all disasters are local.” Therefore, for wildfires in particular, control of the disaster response effort should also be local. Local volunteer firefighters typically live, work, and socialize in the communities they serve. They know the landowners whose properties burn and the location of and best access to those properties. In rural Panhandle communities, ranches are often referred to using the name of their owners, previous owners, or other terms not readily associated with a specific address or set of GPS coordinates. For example, if dispatched to a fire at the “northwest corner of the Mendota Ranch,” or “South River Road,” firefighters in Hemphill County would require no additional information to depart immediately to those destinations.

Local firefighters know the roads, including the fastest and most efficient means of ingress and egress to land, where access gates are located, and how best to reroute their approaches to fighting fires when winds change direction or new incidents occur. As importantly, with their knowledge of the land, local firefighters are more likely to know where not to go on a particular tract of property due to the presence of rivers or streams, ravines, or other topographical or man-made features that may impede ground-based fire response efforts.

The committee heard multiple examples of non-local government agencies directing—and sometimes prohibiting—wildfire response efforts by local government officials, VFDs, and local residents. For example, public committee member Jason Abraham, who has for years used his personal aircraft to fight fires in and around Hemphill County, described an incident in which TAMFS imposed a temporary flight restriction prohibiting him from extinguishing a small fire that threatened a private home.

TAMFS stations 36 of its employees in the Panhandle. However, the committee heard that TIFMAS firefighters often arrive with equipment that is unsuitable to wildland firefighting in the region. Upon arrival, rather than mounting a vehicle and fighting the fire, local volunteer firefighters report that TAMFS personnel attempt to assume an incident management role, directing (often ineffectively) the response efforts of local ground and air assets.

The committee recommends that the legislature mandate regular coordinated training at least annually between the TAMFS employees stationed in the Panhandle and representatives of each VFD within each VFD’s service area. Such training should include, at a minimum, familiarization with local geography, firefighting culture, existing equipment and communications capabilities, dispatch procedures, local historical wildfire patterns, and effectiveness of historical response efforts. Because familiarity fosters communication, the
committee believes forming and strengthening relationships between TAMFS employees and the local volunteer firefighters they support is critical to effectively fighting future fires.

3 Guidance to TAMFS

**Discourage use of and incentivize alternatives to dozer-constructed fire breaks in the Texas Panhandle**

While the committee recognizes the important role of motor graders and the crews who operate them in cutting fire breaks, the committee concludes that bulldozers should generally not be used for this purpose in the Texas Panhandle. They lack the precision of motor graders and unnecessarily, often irreparably, damage the land, leaving behind unsightly piles of debris and creating safety hazards for vehicles and livestock. TAMFS should look for alternatives with the goal of discontinuing the use of bulldozers to construct fire breaks in the Texas Panhandle.

**Make expressly clear where responsibility for ordering air assets rests**

While it is still not clear to the committee which organization was at fault for failing to ensure the state had access to firefighting aircraft as soon as the heightened risk of wildfires arose, the committee does believe the agencies involved in the contracting must have clearly delineated responsibilities to avoid future mistakes. The committee finds that TDEM is the organization most properly suited to make the call for aircraft when the need for air cover is imminent.
Recommendations | Other Considerations

1. Appropriate funding for modernized equipment to enable reliable communications among first responders, governmental agencies, & local governments

The committee calls on TDI to study and consider implementation of financial responsibility requirements for oil and gas operators in order to be eligible to obtain insurance for their operations in the state.

2. Address insurance coverage concerns & restrict rate increases

The committee recommends that the legislature evaluate ways to prohibit or mitigate insurance premium increases for property and business owners to recoup claims paid for wildfire-related losses.

Finally, the committee recommends that the legislature, in conjunction with TDI, consider avenues to make insurance coverage for fencing and cattle more widely available and affordable. Similarly, the committee calls on TDI and lawmakers to address the lack of options for prescribed burn managers seeking insurance to ensure coverage exists for all burns similar to that held by TPWD.

3. Prohibit utility rate increases

The committee recommends that the legislature, in conjunction with PUC, explore any and all available measures to prohibit or mitigate increases in utility rates to recoup funds spent for wildfire-related losses and liabilities.

4. Revisit ranking system for plugging orphaned wells

The committee recommends that RRC revisit the current ranking system used in determining which orphaned oil and gas wells should be plugged and how quickly plugging should occur after the end of the productive life of a well or its abandonment by its operator.

The committee also encourages policymakers to evaluate the current prioritization system for determining how quickly orphaned wells are plugged after the end of their productive lives or their abandonment by their operators and consider whether changes would result in decreased fire risks.
Appendix | Definitions & Acronyms

“2604 grant” means a grant under the Rural Volunteer Fire Department Assistance Program created by House Bill 2604, 77th Legislature, Regular Session, 2001.

“AgriLife” means Texas A&M AgriLife Extension Service.

“AT&T” means American Telephone and Telegraph Company.

“BLM” means Bureau of Land Management.

“BNSF Railway” means Burlington Northern Santa Fe Railway.

“CRP” means Conservation Reserve Program.

“DOD” means the United States Department of Defense.

“DPS” means Texas Department of Public Safety.

“EMS” means emergency medical services.

“EPA” means United States Environmental Protection Agency.


“FMAG” means Fire Management Assistance Grant.

“H.B. 2555” means House Bill 2555, 88th Legislature, Regular Session, 2023, which provides for resiliency planning and cost recovery for electric utilities.

“MOU” means memorandum of understanding.

“NEC” means National Electrical Code.

“NIAFC” means National Inter-Agency Fire Coordination Center.

“NWCG” means National Wildfire Coordinating Group.

“PUC” means Public Utilities Commission of Texas.

“RRC” means the Railroad Commission of Texas.

“SFMO” means State Fire Marshal’s Office.

“Xcel” means Southwestern Public Service Company (Xcel Energy).

“SPWO” means Southern Plains Wildfire Outbreak.

“T&D” means transmission and distribution.

“TAMFS” means Texas A&M Forest Service.

“TDEM” means Texas Division of Emergency Management.

“TDI” means Texas Department of Insurance.

“TIFMAS” means Texas Intrastate Fire and Mutual Aid Assistance System.

“TPWD” means Texas Parks and Wildlife Department.

“TXDOT” means Texas Department of Transportation.

“USDA” means United States Department of Agriculture.

“USFS” means United States Forest Service.

“VFDs” means volunteer fire departments.