THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS BOARD ACTION SUMMARY

DEPT:	District Attorney	BOARD AGENDA -	#: _{B-7}
		AGENDA DATE:	December 6, 2016
SUBJEC			
•	nce of the Twelve Month Report from the us County Regional Fire Investigation Unit	District Attorney's	Office Regarding the
BOARD	ACTION AS FOLLOWS:	No	5. 2016-607
	on of Supervisor O'Brien , Se	conded by Supervisor	r_C <u>hiesa</u>
	roved by the following vote, ppervisors: <u>O'Brien, Chiesa, Withrow, DeMartini, and</u>	Chairman Monteith	
Noes: Su			
Excused	pervisors: None or Absent: Supervisors: None		
Excused Abstainir	pervisors: None or Absent: Supervisors: None ng: Supervisor: None		
Excused Abstainir 1) X	pervisors:None or Absent: Supervisors: None ng: Supervisor:None Approved as recommended		
Excused Abstainir 1) X	pervisors: None or Absent: Supervisors: None ng: Supervisor: None		
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PAM VILLARREAL, Assistant Clerk

MOTION:

ATTEST:

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS AGENDA ITEM

DEPT:	District Attorn	ney	BOARD AGENDA #: B-7	
	Urgent O	Routine ⊙	AGENDA December 6, 2016	-
CEO CONCURRENCE:			4/5 Vote Required: Yes ○ No ⊙	

SUBJECT:

Acceptance of the Twelve Month Report from the District Attorney's Office Regarding the Stanislaus County Regional Fire Investigation Unit

STAFF RECOMMENDATIONS:

1. Accept the twelve month Stanislaus County Regional Fire Investigation Unit report from the District Attorney's Office.

DISCUSSION:

The Stanislaus Regional Fire Investigation Unit (FIU) was first established in October 2015. The FIU represents a partnership of County agencies (District Attorney, Sheriff, City of Modesto and Fire Warden), and a number of local law enforcement and fire agencies covering all areas of the County (with the exception of the City of Turlock). The FIU is supported by staffing and other resources contributed from partner agencies, and a financial contribution from the Less-Than County-Wide Fire Tax (LTCWT) as recommended in the annual Stanislaus County Fire Authority Business Plan.

The goal of the Fire Investigation Unit (FIU) is the proper investigation of all fires and explosions while providing for the effective criminal investigation and prosecution of any incidents which are determined to be criminal acts. The Stanislaus Regional FIU has law enforcement personnel conduct the criminal investigations and fire agency personnel conduct the fire origin and cause determinations. Under this model, each discipline is working to their core strengths and competencies and as a result any prosecution can better withstand legal scrutiny. Successful outcomes are accomplished by providing the proper training and leadership to the FIU members so that they can conduct thorough investigations consistent with current national standards, utilizing modern scientific methods to ensure accurate findings and, ultimately, the apprehension and prosecution of criminals while protecting the rights of the accused. Investigations are conducted consistent with the National Fire Protection Association (NFPA) Guide for Conducting Fire and Explosives Investigations (#921) which is recurring the industry and legal standard.

In September 2015, the Board of Supervisors approved the first Memorandum of Understanding (MOU) between the County, the City of Ceres, the City of Modesto and the Stanislaus Consolidated Fire Protection District, to implement the Regional Fire Investigation Unit. The MOU was effective October 1, 2015 through June 30, 2016.

Acceptance of the Twelve Month Report from the District Attorney's Office Regarding the Stanislaus County Regional Fire Investigation Unit

On May 17, 2016, the Board of Supervisors approved and authorized the Fire Warden to implement the Fiscal Year 2016-2017 Stanislaus County Regional Fire Authority Business Plan (Plan). The Plan includes \$388,670 to support the Regional Fire Investigation Unit (FIU) contingent upon a partnership between fire, law enforcement and the District Attorney. The services provided by the Regional FIU as defined in the Plan are:

- Determine origin and cause of fires in compliance with NFPA 921 guidelines
- Provide documentation and assistance to law enforcement agencies for follow up of criminal fire investigations
- Provide documentation and assistance to the District Attorney's Office regarding criminal fire investigations
- Provide documentation and assistance to private fire investigators and insurance industry representatives regarding civil fire investigations
- Establish and deliver an effective training program for chiefs and company officers throughout the County to conduct preliminary fire investigations and initial origin and cause determinations following NFPA 921 guidelines
- Establish effective lines of communications with partner agencies to promote information sharing
- Provide training for fire investigation staff to increase their skills and proficiency in the field of fire investigation
- Provide a quarterly report to the Fire Authority that outlines the number of fires investigated, case status, dollar loss, and number of arrests by jurisdiction
- Facilitate regular meetings for all county fire agencies to discuss issues and concerns related to fire investigations

A successor MOU was approved by the Board of Supervisors on July 26, 2016 continuing the FIU through June 30, 2017. The Regional FIU, as outlined in the MOU, will continue to be administered and managed by the District Attorney's Office with two fire investigators from the Modesto Fire Department, one fire investigator from Stanislaus Consolidated Fire Protection District and one from the Ceres Fire Department. The Stanislaus County Fire Warden's office will support the Regional FIU by acting as Fiscal Agent. Key functions of the District Attorney include: review and verify member agency resource contributions to the FIU on a quarterly basis; approve billings for payment by the Stanislaus County Fire Warden's Office; compile and produce data/statistics related to FIU performance, including monthly/quarterly/annual fire incidents consistent with the Fiscal Year 2016-2017 Business Plan.

Because the FIU became fully operational on October 1, 2015 a full year of statistical incident data could not be gathered until the end of a full twelve month operational cycle, (October 1, 2015 to September 30, 2016).

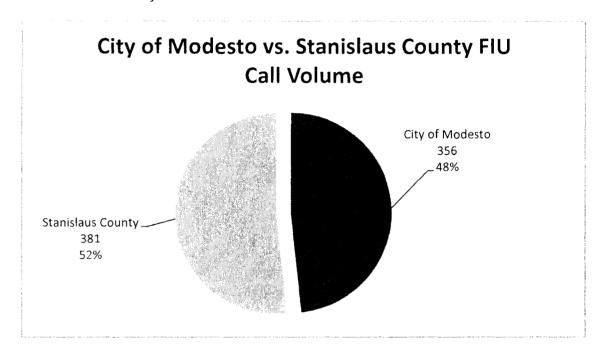
General Statistics

The FIU responded to 737 incidents in the twelve month reporting period. Of those incidents, 267 were documented via full investigation reports and 470 were documented via card closure incident reports. Card closure reports document the incident but do not involve a full investigation. This is similar to the way law enforcement simply documents non-injury vehicle collisions but fully investigates those collisions that have injuries.

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Calls Geographically

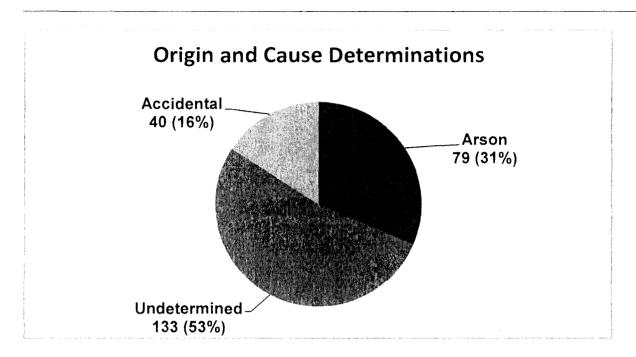
Below is the chart of the reporting period for the twelve months beginning October 1, 2015 through September 30, 2016. The breakdown of call locations reflects 48% of the calls in the City of Modesto and 52% of the calls in the County area. This is consistent with the ten year average experience in which 49% of the calls were in the City of Modesto and 51% of the calls were in the County area.



Origin and Cause Determinations

In analyzing the Origin and Cause statistics, it should be noted that NFPA 921 dictates that the scientific method must be used to determine whether the origin and cause of fires is to be ruled accidental, natural, incendiary, or undetermined. The fuel first ignited must be identified, the competent ignition source must be identified, and the explanation for how those two things came together must be identified. Additionally, the degree of certainty is addressed and can be either possible or probable. If these requirements cannot be met, the only allowable conclusion is "Undetermined". Therefore, although the FIU Investigator may be fairly confident in his conclusions, if it does not meet the thresholds required under NFPA 921, the origin and cause must be listed as undetermined.

The following chart shows the origin and cause determinations.

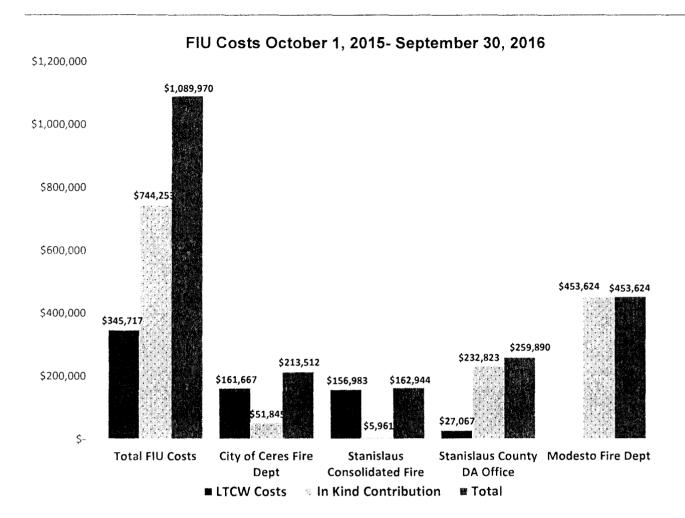


Financial

Financial support for the Regional FIU is provided in the form of staffing and other resources combined from partner agencies and a financial contribution from the LTCW Fire Tax as recommended in the annual Stanislaus County Regional Fire Authority Business Plan. County contributions to the program are represented by unreimbursed staffing resources allocated through the District Attorney's Office (equivalent of 1.5 full-time positions).

A twelve month review from October 1, 2015 – September 30, 2016, has been conducted of the FIU program finances to evaluate the financial value of all combined resources contributed from each member agency, as compared to the distribution of incidents occurring inside and outside of the LCTW service area. The call history justifies up to 52% of the FIU costs as eligible for funding by the LTCW Fire Tax revenue versus the 31.7% of actual LTCW funds used to support FIU. The review indicates that the cost of services provided in the LTCW service area exceeds the amount of the LTCW funding that has been made available to support the Regional FIU, and therefore confirms that LTCW Fire Tax revenue is not being used to subsidize non-contributing service areas.

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Successful Cases:

Cory Mauldin Serial Arsonist Case- Mauldin was believed responsible for numerous fires in the Burbank Paradise area. After a 3-month investigation by the FIU, Mauldin was arrested and convicted of arson.

Vanessa Muhammad Serial Arson Case-Muhammad was arrested for a series of 5 fires in the Spencer Street area in unincorporated Modesto. Muhammad was also a suspect in a prior series of fires in Ceres earlier in the year. This case is open.

Tamarea Byrd Case- A 3-alarm fire in the City of Modesto that involved 3 occupied residences one of which was occupied by 4 children under age 10 at the time of the fire. FIU resources responded to the scene and conducted an origin and cause and a separate criminal investigation lasting 4 months. Byrd was arrested after FIU Investigators served search warrants on Facebook and cell phone records.

Arrow Motel Arson/Murder- A fatal fire in an unincorporated Stanislaus County area that resulted in Jerome Smith being arrested and ultimately convicted of 1st degree regreer and arson. Good teamwork between the Sheriff's Office Crimes Against Persons Unit working the criminal investigation and the FIU working the origin and cause, along with effective prosecution by the specially trained arson vertical prosecutor achieved these results.

Acceptance of the Twelve Month Report from the District Attorney's Office Regarding the Stanislaus County Regional Fire Investigation Unit

POLICY ISSUE:

The Board of Supervisors approved the Stanislaus County Regional Fire Investigations Memorandum of Understanding to continue the Regional Fire Investigation Unit on July 26, 2016. This action included a task request for the District Attorney's Department to present a full year analysis of statistical and financial update on the FIU operations in December of 2016. The Board is asked to accept this report on the first twelve months of FIU operations.

FISCAL IMPACT:

During this reporting period of October 1, 2016 – September 30, 2016, the total cost to fund the Fire Investigation Unit was \$1,089,970. Of that amount, \$345,717 was funded by Less-Than-County-Wide Fire and \$744,253 was in-kind.

In Fiscal Year 2015-2016, the MOU allowed up to \$262,500 for Less-Than-County-Wide Fire for the period October 1, 2015 – June 30, 2016. In Fiscal Year 2016-2017, the MOU allowed \$350,000 and a one-time allocation of \$38,670 for Less-Than-County-Wide Fire for the period of July 1, 2016 – June 30, 2017.

There is no fiscal impact to the District Attorney's budget associated with the acceptance of this report.

BOARD OF SUPERVISORS' PRIORITY:

The efforts of the Regional Fire Investigation Unit support the Board's priorities of promoting A Safe Community and Efficient Delivery of Public services by investigating fires in compliance with the current national standards and prosecuting those that are determined to be criminal in nature.

STAFFING IMPACT:

The Regional FIU is currently managed and supervised by a Lieutenant from the District Attorney's Office, Bureau of Investigation who is a Certified Fire and Explosion Investigator (CFEI), from the National Association of Fire Investigators (NAFI). The unit is also staffed with a District Attorney's Office Criminal Investigator who serves as the Coordinator of the unit. Additionally, the Regional FIU has one Fire Investigator from the Ceres Fire Department and one Fire Investigator from the Stanislaus Consolidated Fire Protection District as well as two Fire Investigators from the Modesto Fire Department, one of whom is the Assistant Coordinator and lead training officer of the unit.

CONTACT PERSON:

Birgit Fladager, District Attorney (209)525-5550

ATTACHMENT(S):

None

Stanislaus Regional Fire Investigation Unit (FIU)















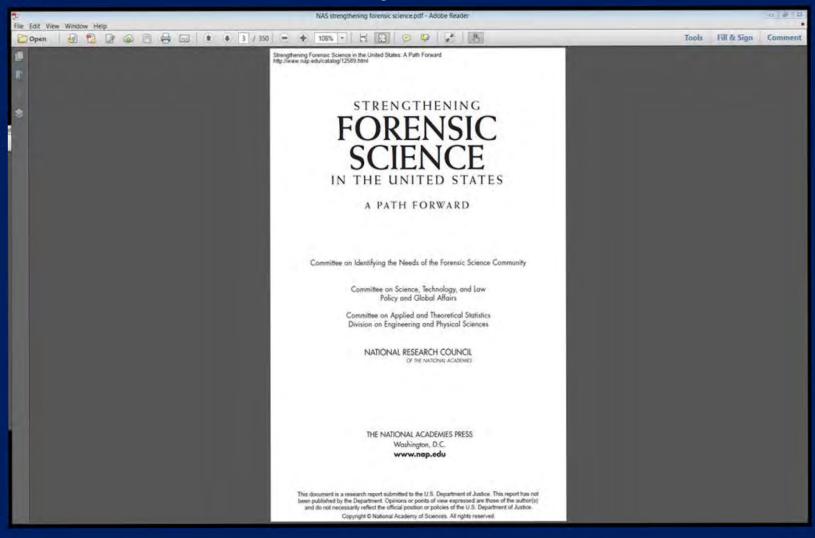
Arson/Fire Investigation History in Stanislaus County

- County Fire Department (pre-1995)
- Stanislaus Consolidated FPD (1995-2005)
- Modesto Fire Department (2006-2015)
- Regional FIU (2015-present)

Issues Nationally

- Evolution of the Forensic Science
- Cameron Todd Willingham Case
- National Academy of Sciences Report
- Texas Forensic Science Commission Report

Evolution of the Science

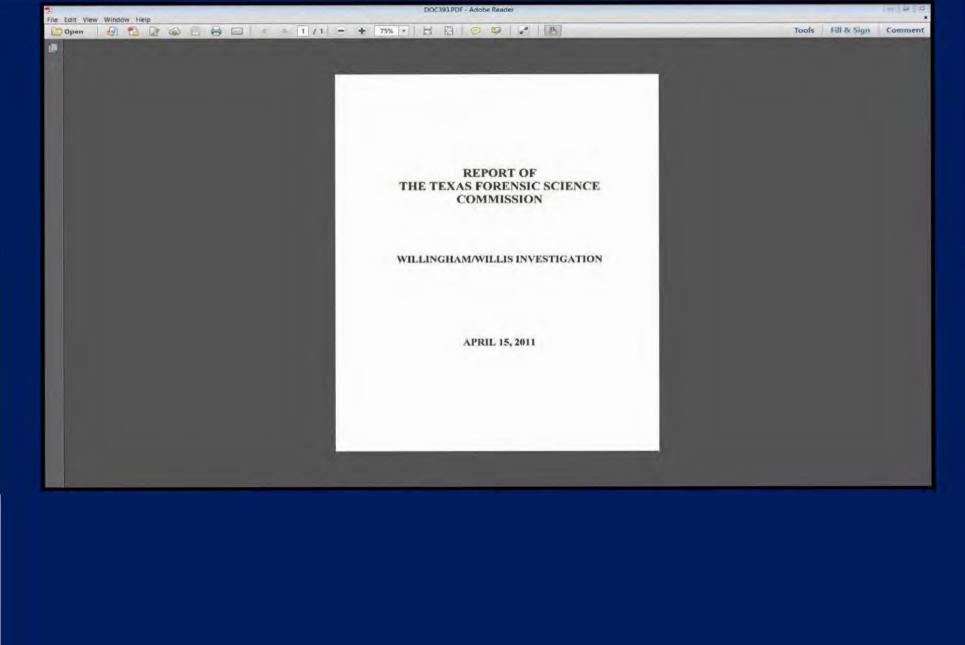


".....forensic investigations should be independent of law enforcement efforts either to prosecute criminal suspects or even to determine whether a criminal act has indeed been committed."

"The potential for bias induced conclusions is enormous when the forensic examiner is also the criminal investigator"

Cameron Todd Willingham





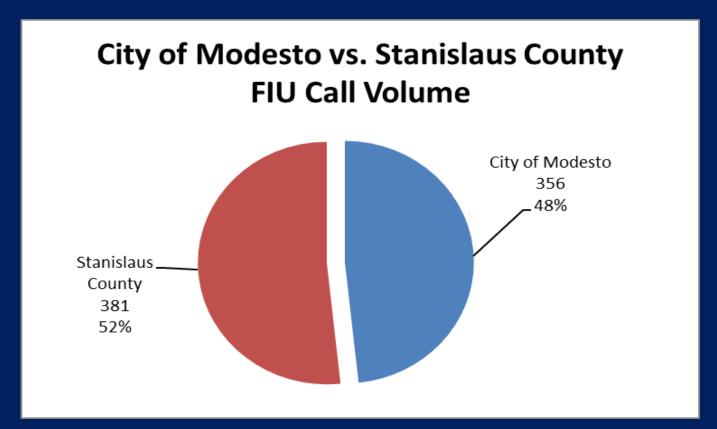
"Many Commissioners are concerned about perceived differences in understanding of fire indicators between the scientists and engineers who study principles underlying fire indicators, and the state and local professionals who respond to and investigate fires."

Issues Locally

- Lack of Coordination with Law Enforcement
- Members Not Meeting NFPA Standards
- No Independent Certifications
- Obstacles to Prosecution

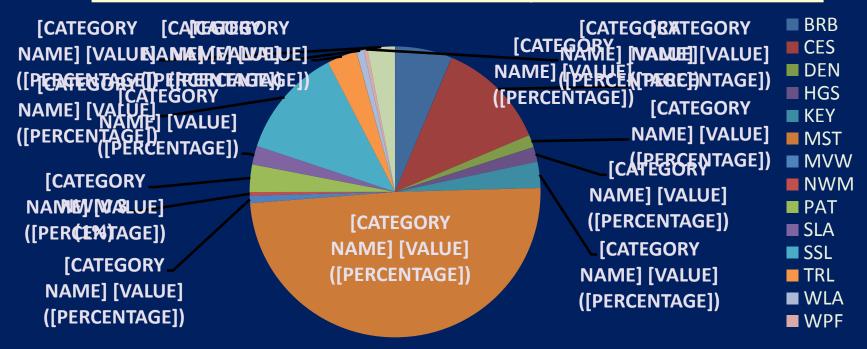
Stanislaus Regional FIU

- Multi-Agency, Multi-Discipline
- Each working to their core strengths
- Following the Science
- Mitigating Cognitive Bias



(Updated as of Sept. 30, 2016)

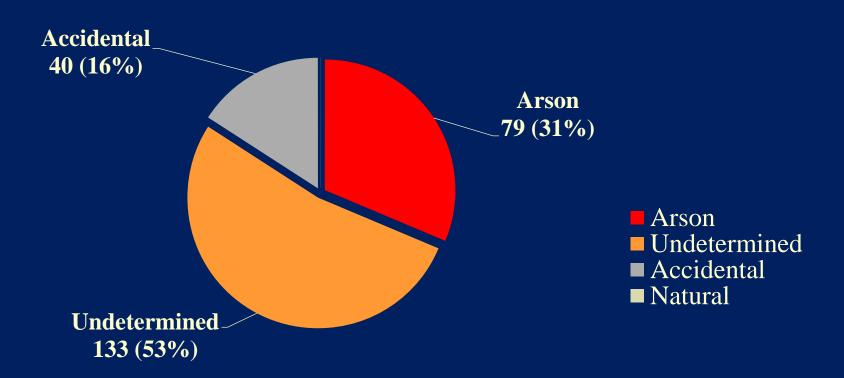
2015/16 FIU Call Volume By Area Breakdown

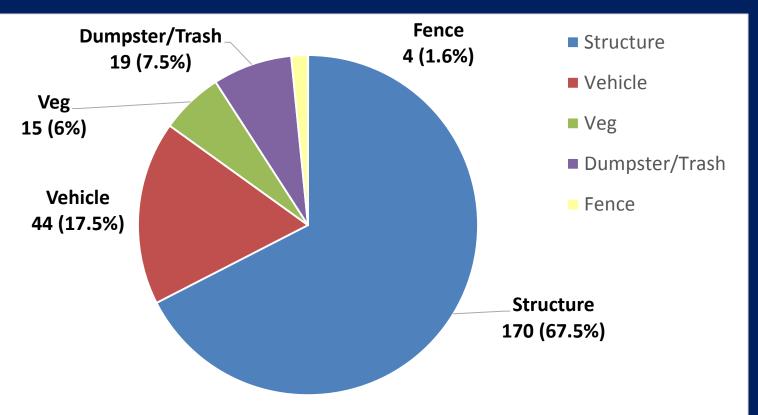


Total FIU Calls-724

(Updated as of Sept. 30, 2016)

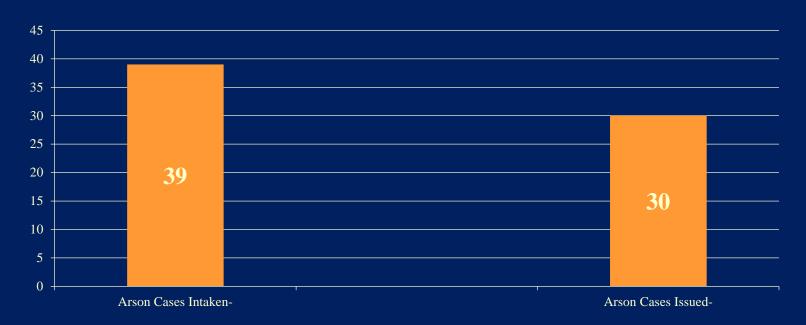
Origin and Cause Determination





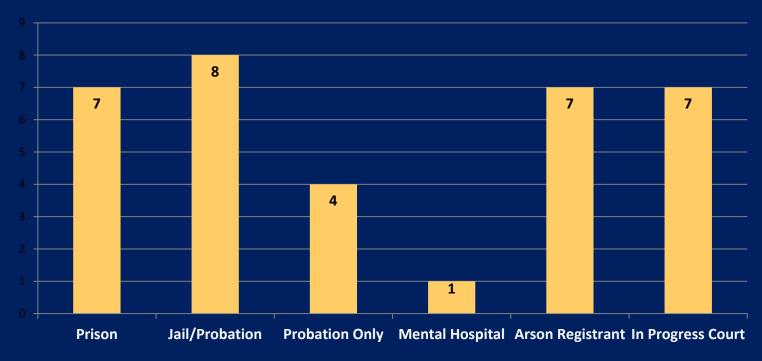
Property Type Breakdown Graph

Cases Intaken and Issued



(As of October 1, 2015 - Sept. 30, 2016)

2015/16 DA Arson Case Dispositions



(As of October 1, 2015 – Sept. 30, 2016)

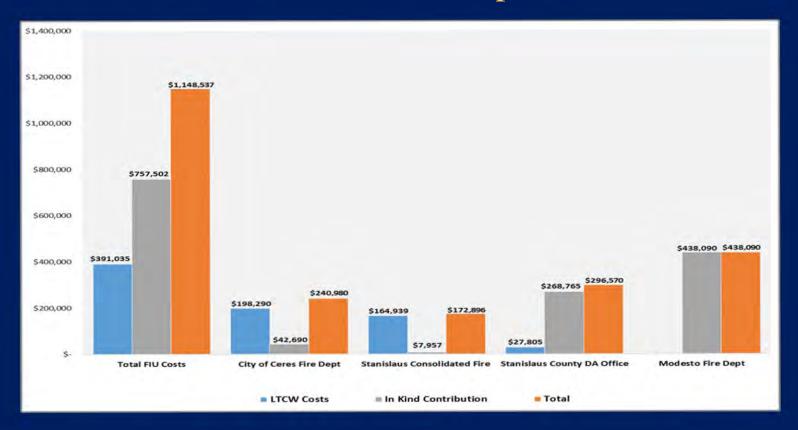
Successful Cases

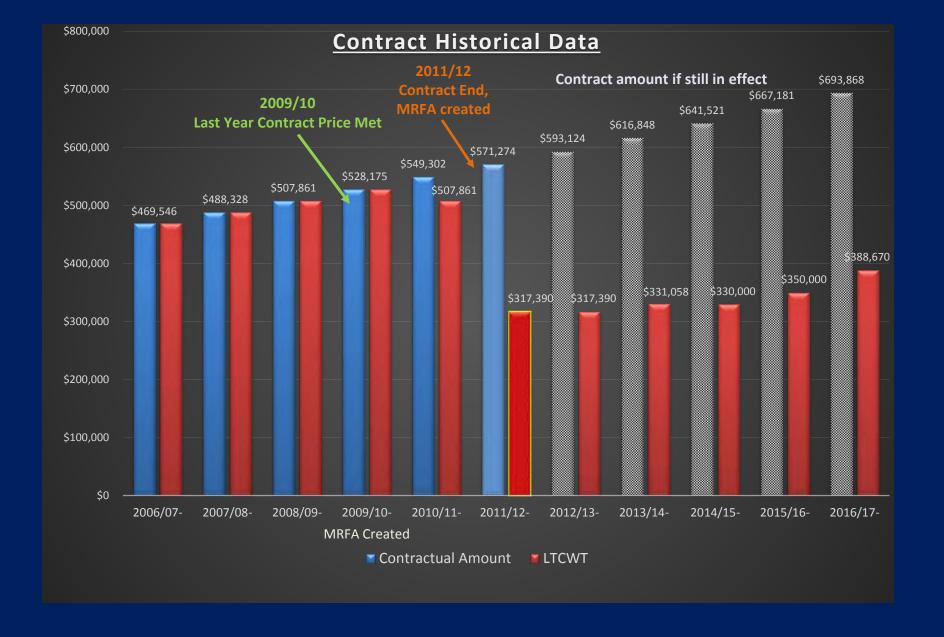
- Goldie Ave Fatal Fire
- Vanessa Muhammad Serial Arson Case
- Mauldin Serial Arsonist Case
- Tamara Byrd Case- Multi-Home Arson
- Arrow Motel Arson/Murder Conviction

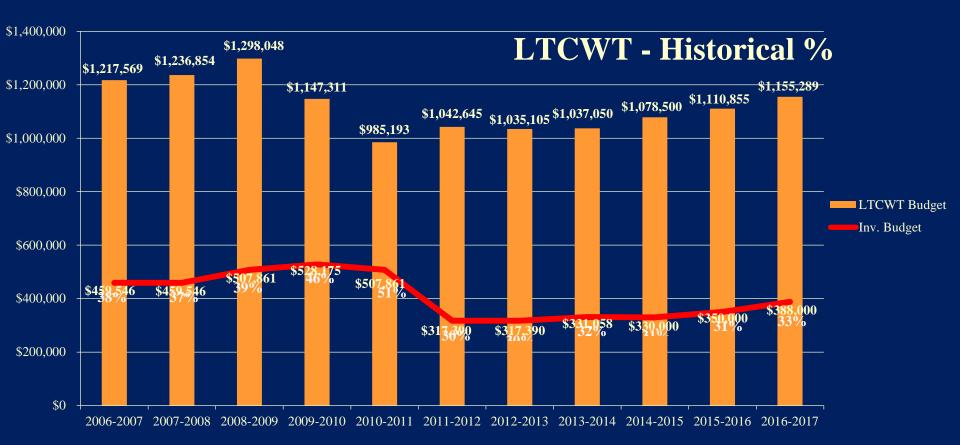
Funding Issues

- Less Than County Wide Tax Issues
- County Counsel Opinion Requested
- First Responder Unit Funded Outside of General Fund

FIU Costs October 1, 2015 – September 30, 2016







Next Steps

- County Counsel Opinion RE: Less Than County Wide Tax
- Develop Long Term Solution and Funding

Member Agency Comments

Questions?