

# Table of Contents

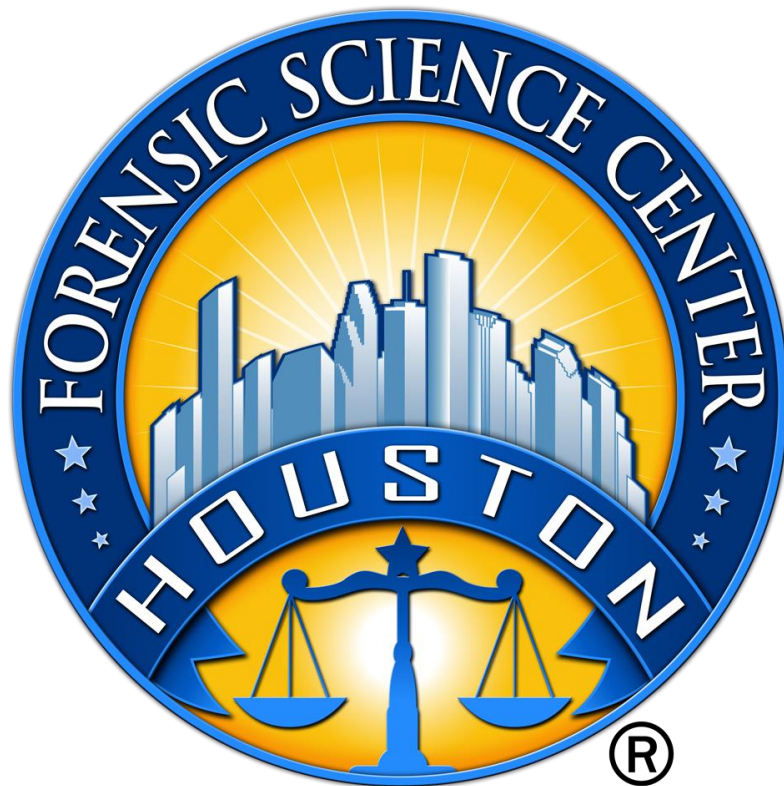
- Agenda..... [Page 3](#)
- November 18, 2019 Special Meeting Draft Minutes..... [Page 6](#)
- Proposed Board Resolution..... [Page 8](#)
- President’s Report ..... [Page 13](#)
- Operations Report..... [Page 29](#)
- Treasurer’s Report..... [Page 34](#)
- Crime Scene & Digital Multimedia Units Update..... [Page 42](#)
- Probabilistic Genotyping Report..... [Page 114](#)
- Facility Update..... [Page 130](#)
- Quality Report..... [Page 133](#)



Houston Forensic Science Center, Inc.

## Board of Directors Meeting

*January 10, 2020*



**Position 1 - Dr. Stacey Mitchell, Board Chair**

**Position 2 - Anna Vasquez**

**Position 3 - Philip Hilder**

**Position 4 - Francisco Medina**

**Position 5 - Janet Blancett**

**Position 6 - Dr. Robert McPherson**

**Position 7 - Vacant**

**Position 8 - Mary Lentschke, Vice Chair**

**Position 9 - Vacant**

**Ex-Officio - Tracy Calabrese**

HOUSTON FORENSIC SCIENCE CENTER, INC.

**NOTICE OF PUBLIC MEETING**

**January 10, 2020**

Notice is hereby given that beginning at 9 a.m. on the date set out above, the Board of Directors (the "Board") of the Houston Forensic Science Center, Inc. (the "Corporation") will meet in the Council Annex Chambers, 900 Bagby St. (Public Level), Houston, Texas 77002. The items listed below may be taken out of order at the discretion of the Chair and any items listed for closed session may be discussed and/or approved in open session and vice versa as permitted by law.

**AGENDA**

1. Call to order.
2. Roll call; confirmation of presence of quorum.
3. Reading of draft minutes from November 18, 2019 special meeting. Consideration of proposed corrections, if any. Approval of minutes.
4. Public comment.
5. Report from Dr. Stacey Mitchell, board chair, including a monthly update of activities and other announcements.
6. Consider a resolution designating the annual selection of the Vice Chair of the Board of Directors, to coincide with the annual appointment of HFSC's corporate officers, and possible related action.

Reports and presentations by corporate officers, and possible related action items

7. Report from Dr. Peter Stout, president and CEO, including technical updates, outreach efforts, staffing changes and other corporate business items.
8. Monthly operations report from Dr. Amy Castillo, vice president and COO, including a review of turnaround times and backlogs.
9. Report from Mr. David Leach, treasurer and CFO, regarding company financials and other fiscal updates.

Reports and presentations by staff

10. Report from Mr. Jerry Pena, director of CSU and digital multimedia evidence, on evidence collection, turnaround times and other updates.
11. Report from Ms. Robin Guidry, DNA technical lead, on HFSC's validation and training for the implementation of probabilistic genotyping .

12. Report from Mr. Charles Evans, director of business development, regarding the Corporation's completed facility project and move to 500 Jefferson, and an upcoming renovation project for the vehicle examination bay.
13. Report from Ms. Erika Ziemak, quality director, regarding quality assurance, including review of testimony monitoring, proficiency tests and corrective actions.
14. Adjournment.

–NOTICE REGARDING SPECIAL NEEDS –

Persons requiring accommodations for special needs may contact the HFSC at 713-929-6760 to arrange for assistance.

–NOTICE REGARDING PUBLIC COMMENT –

Members of the public may address the Board during the "Public Comment" segment of the meeting. Each speaker should limit his or her comments to three minutes. The Chairman may limit both the number of speakers and the time allotted for each speaker. A speaker who plans to submit a document for the Board's consideration should provide at least ten copies of the document, each marked with the speaker's name.

– NOTICE REGARDING CLOSED MEETINGS –

As authorized by Texas Government Code Chapter 551.001 (the "Open Meetings Act"), if during the course of the meeting covered by this Notice, the Board should determine that a closed or executive session of the Board should be held or is required in relation to any items included in this Notice, then such closed or executive session as authorized by Section 551.001 et seq. of the Texas Government Code (the Open Meetings Act) will be held by the Board at the date, hour and place given in this Notice or as soon after the commencement of the noticed open meeting, for any and all purposes permitted by Section 551.071-551.089, inclusive, of the Open Meetings Act.

The presiding officer shall announce that the Board will convene in a closed meeting; that is, in "a meeting to which the public does not have access," sometimes known as an "executive session." The presiding officer's announcement will identify the provision(s) of the Open Meetings Act permitted by Section 551.071-551.089 under which the closed meeting will be held. Should any final action or vote be required in the opinion of the Board with regard to any matter considered in such closed or executive session, then such final action or vote shall be taken only in a meeting open to the public, including reconvening the open meeting covered by this Notice.

**Certification of Posting of Notice of the Board of Directors ("the Board) of the  
Houston Forensic Science Center, Inc. (the "Corporation)**

I, Jordan Benton, coordinator of board relations and executive administration, do hereby certify that a notice of this meeting was posted on Tuesday, the 7th day of January, 2020



in a place convenient to the public in the Council Annex Chambers, 900 Bagby Street. (Public Level), Houston, Texas 77002, and on the HFSC website as required by Section 551.002 et seq., Texas Government Code.

Given under my hand this the 7th day of January 2020.

---

Jordan Benton

Houston Forensic Science Center, Inc.

SPECIAL MEETING OF BOARD OF DIRECTORS

MINUTES

November 18, 2019

The undersigned, being the duly appointed secretary of the Houston Forensic Science Center, Inc., (“HFSC” and/or the “Corporation”) hereby certifies the following are true and correct minutes of the November 18, 2019 special meeting of the Board of Directors (the “board”) of the Corporation.

- A. In a manner permitted by the Corporation’s Bylaws, the meeting was called by providing all directors with notice of the date, time, place and purposes of the meeting more than three days before the date of the meeting.
- B. In accordance with Chapter 551, Texas Government Code, made applicable to the Corporation by Section 431.004, Texas Transportation Code, a notice of the meeting was duly posted on November 13, 2019, in the same manner and location as required by law of the City of Houston, Texas (the “City”).
- C. The meeting was called to order by Dr. Stacey Mitchell, board chairwoman, at approximately 8 a.m. on Monday November 18, 2019 in the Council Annex Chambers, 900 Bagby St. (Public Level), Houston, Texas 77002.
- D. Ms. Jordan Benton called the roll. The following directors were present during roll call: Dr. Stacey Mitchell, Philip Hilder, Anna Vasquez, Francisco Medina, Janet Blancett, Dr. Robert “Bob” McPherson and Mary Lentschke

Ms. Tracy Calabrese was absent

Chairwoman Mitchell declared a quorum was present

Dr. McPherson arrived at approximately 8:01 a.m. after the roll was called. Chairwoman Mitchell asked board members if they had any changes to the October 11, 2019 board meeting minutes. The board did not request any changes. Mr. Hilder made a motion to approve the minutes. Ms. Vasquez seconded the motion. The motion passed unanimously.

- E. Chairwoman Mitchell asked if members of the public wished to address the board. No one addressed the board.
- F. Chairwoman Mitchell presented a chair’s report. Dr. Mitchell said HFSC’s grand opening was a success and she congratulated HFSC staff for completing the move to 500 Jefferson. Dr. Mitchell reminded the board about HFSC’s holiday party on December 14, which will be held at 500 Jefferson. She reminded members who had not already donated to fund the party to make donations to cover the remaining costs since HFSC does not use taxpayer dollars to fund

the event.

- G. Chairwoman Mitchell requested the board approve the appointment of Director Mary Lentschke to serve as Vice Chair of the board. Mr. Hilder made a motion to approve. Ms. Blancett seconded the motion. The motion passed unanimously.
- H. Chairwoman Mitchell requested the board approve a motion to renew the appointment of the Vice Chair position annually. She suggested the reappointment occur in June when the board appoints HFSC's corporate officers. Ms. Akilah Mance, HFSC general counsel, recommended the board consider approving a Resolution to affirm the change at its January meeting. Dr. McPherson made a motion to approve Chairwoman Mitchell's recommendation that the reappointment of the vice chair position occur every year in June. Ms. Vasquez seconded the motion. The motion passed unanimously.
- I. Dr. Stout requested board approval to negotiate and enter into the Interagency Cooperative Agreement (ICA) between HFSC and the Houston Police Department (HPD.) Dr. Stout explained that the proposed ICA will reflect changes caused by HFSC's move to an independent facility in 500 Jefferson. The agreement will provide a plan for the disposal of certain assets, define space sharing at the vehicle examination bay and outline accessibility between the parties to their respective computer networks, among other items. Ms. Blancett made a motion to approve. Mr. Medina seconded the motion. Ms. Mance requested the board authorize Dr. Stout to sign the finalized ICA prior to the next board meeting. Chairwoman Mitchell requested an amended vote. Ms. Blancett made a motion to approve the inclusion. Vice Chair Lentschke seconded the motion. The motion passed unanimously.
- J. Dr. Stout requested board approval to negotiate and enter into agreement with a financial institution to manage the corporate employee retirement fund. He requested the authority to sign the agreement prior to the next board meeting. Dr. Stout said the new agreement will be more cost effective, offer lower fees for HFSC and its employees and have a broader selection of funds for staff to choose from. Vice Chair Lentschke made a motion to approve. Dr. McPherson seconded the motion. The motion passed unanimously.
- K. Chairwoman Mitchell reminded the board that the December 13 board meeting is cancelled. Chairwoman Mitchell asked for a motion to adjourn the meeting. Dr. McPherson made a motion to adjourn. Mr. Medina seconded the motion. The meeting ADJOURNED at approximately 8:20 a.m.

By: \_\_\_\_\_

Jordan Benton Secretary

**HOUSTON FORENSIC SCIENCE CENTER, INC.**

Regular Meeting of the Board of Directors

January 10, 2020 at 9:00 a.m.

<b>Agenda Action Item No.:</b>	<b>6.</b> Consider a resolution designating the annual selection of the Vice Chair of the Board of Directors, to coincide with the annual appointment of HFSC's corporate officers, and possible related action.
<b>Subject:</b>	Resolution to designate the annual selection of the Board's Vice Chair.
<b>Background:</b>	At the November 2019 special meeting of the Board, the Board of Directors voted to select a new Board Vice Chair, from among the directors, after the resignation of the previous Vice Chair. This selection prompted the Board to consider the appropriateness of selecting the Vice Chair on a reoccurring basis. After discussion, the Board voted to approve a motion to set the reoccurring selection/ appointment of the Vice Chair of the Board.
<b>Executive Summary:</b>	Pursuant to the Corporation's Bylaws Section 2.04, the Vice Chairman of the Board shall be selected from among the directors of the Board. The Vice Chair shall perform the duties and exercise the powers of the Chairman upon the Chairman's death, absence, disability, resignation, or inability to perform the duties of the office. The Corporation's Bylaws and Certificate of Formation do not set forth how often the Vice Chair shall be selected from among the directors or set a term of service in the position. The Board has voted to select or re-select the Vice Chair, at the annual Board meeting in which the Corporation's Officers are appointed, pursuant to Article 5 of the Bylaws. The Board now considers the adoption of a Board resolution to memorialize this procedure relating to the Board's management.
<b>Fiscal Impact:</b>	No anticipated additional fiscal impact.
<b>Staff Recommendation:</b>	No recommendation.
<b>By:</b>	Stacey Mitchell, Board Chair Legal review by General Counsel

HOUSTON FORENSIC SCIENCE CENTER, INC.

RESOLUTION NO. 2020-001

**RESOLUTION DESIGNATING THE ANNUAL SELECTION OF THE VICE CHAIR OF THE BOARD OF DIRECTORS.**

**WHEREAS**, the Board of Directors (the “Board”) of Houston Forensic Science Center, Inc. (the “Corporation”) desires to designate the annual selection of the Board Vice Chair; and

**WHEREAS**, pursuant to Section 2.04 of the Corporation’s Bylaws, *“from among its members the Board shall select a Vice Chairman of the Board”*; and

**WHEREAS**, pursuant to Section 2.04 of the Corporation’s Bylaws, *“the Vice Chairman shall perform the duties and exercise the powers of the Chairman upon the Chairman’s death, absence, disability, resignation, or inability to perform the duties of the office”*; and

**WHEREAS**, the Corporation’s Bylaws and Certificate of Formation do not establish a term of service for the Board’s Vice Chair or provide for the reoccurring selection of the Vice Chair; and

**WHEREAS**, the Board has concluded that it is in the best interests of the Corporation to establish the annual selection of the Vice Chair and that such action will further the purposes for which the Corporation was created;

**NOW THEREFORE, BE IT RESOLVED BY THE DIRECTORS OF THE CORPORATION:**

**SECTION 1.** That the findings contained in the preamble of this Resolution are declared to be true and correct and are adopted as part of this Resolution.

**SECTION 2.** That this Resolution applies to the Directors of the Corporation.

**SECTION 3.** That the annual selection of the Vice Chair of the Board, shall be conducted in a manner consistent with the Corporation’s Bylaws.

**SECTION 4.** That the selection of the Vice Chair of the Board shall occur annually, at the Board’s annual meeting to appoint its Corporate Officers, as required by the Corporation’s Bylaws.

**SECTION 5.** That the Vice Chair of the Board, shall hold said position until the next annual meeting of the Board, at which meeting the Corporate Officers are appointed.

**SECTION 6.** That notwithstanding any provision of this Resolution, the Board may select a new Vice Chair upon the death, disability, resignation, or removal of the Vice Chair, or upon the expiration of the appointed term of the Director serving as Vice Chair.

**SECTION 7:** This Resolution shall become effective immediately upon passage by the Board of Directors.

**ADOPTED** this \_\_\_\_ day of \_\_\_\_\_, 2020.

**CERTIFICATE**

The undersigned hereby certifies that this Resolution **2020-001** was duly adopted by the Board of Directors of Houston Forensic Science Center, Inc., on the \_\_\_\_ day of \_\_\_\_\_, 2020.

Executed this \_\_\_\_ day of \_\_\_\_\_, 2020.

By: \_\_\_\_\_

Jordan Benton, Secretary of the Board of Directors

**HOUSTON FORENSIC SCIENCE CENTER, INC.**

**BYLAWS (excerpt)**

**ARTICLE 2 – DIRECTORS**

...

**SECTION 2.01. MANAGEMENT.** Subject to the Certificate of Formation and these Bylaws, management of the affairs of the Corporation shall be vested in the directors, who together constitute the Board of Directors (the "Board").

**SECTION 2.02. QUALIFICATIONS, APPOINTMENT, AND REMOVAL.** The qualifications of the directors as well as the procedures for their appointment and removal shall be as prescribed by the Certificate of Formation.

**SECTION 2.03. CHAIRMAN.** The Chairman of the Board (the "Chairman") shall be selected as provided in the Certificate of Formation. In furtherance of the purposes of the Corporation and subject to any limitations contained in the Certificate of Formation and these Bylaws, the Chairman, by resolution of the Board, may execute all bonds, notes, deeds, conveyances, assignments, mortgages, notes, contracts, and other instruments of any kind in the name of the Corporation.

**SECTION 2.04. VICE CHAIRMAN.** From among its members the Board shall select a Vice Chairman of the Board. The Vice Chairman shall perform the duties and exercise the powers of the Chairman upon the Chairman's death, absence, disability, resignation, or inability to perform the duties of the office.

...

**SECTION 2.11. PROCEDURES.** At its meetings the Board shall consider matters related to the purpose of the Corporation in such order as the Board may determine. The Chairman shall preside at all meetings of the Board, except that the Vice Chairman shall preside when the Chairman is absent. In the absence of the Chairman and the Vice Chairman, a temporary chairman shall be chosen by the Board from among the directors present. The Secretary shall act as secretary of all meetings of the Board, but in the absence of the Secretary the presiding officer may appoint any person to act as secretary of the meeting. As required by Section 394.025 of the Texas Local Government Code (made applicable to the Corporation by Section 431. 102 of the Texas Transportation Code), the Corporation shall keep minutes of the proceedings of the Board.

...

**HOUSTON FORENSIC SCIENCE CENTER, INC.**

**BYLAWS (excerpt) cont'd**

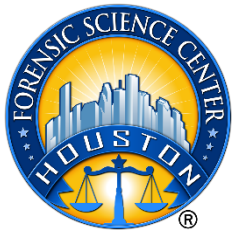
**ARTICLE 5 – OFFICERS**

**SECTION 5.01. APPOINTMENT OF OFFICERS.** The Board shall appoint a President, a Vice President, a Secretary, and a Treasurer of the Corporation. The persons appointed may not be directors of the Corporation but may be employees of the City. The persons appointed shall hold the said offices until the next annual meeting of the Board, at which meeting the Board shall appoint (or reappoint) persons to hold the said offices until the next annual meeting, repeating the cycle annually. Any two or more offices, other than the offices of President and Secretary, may be held by the same person.



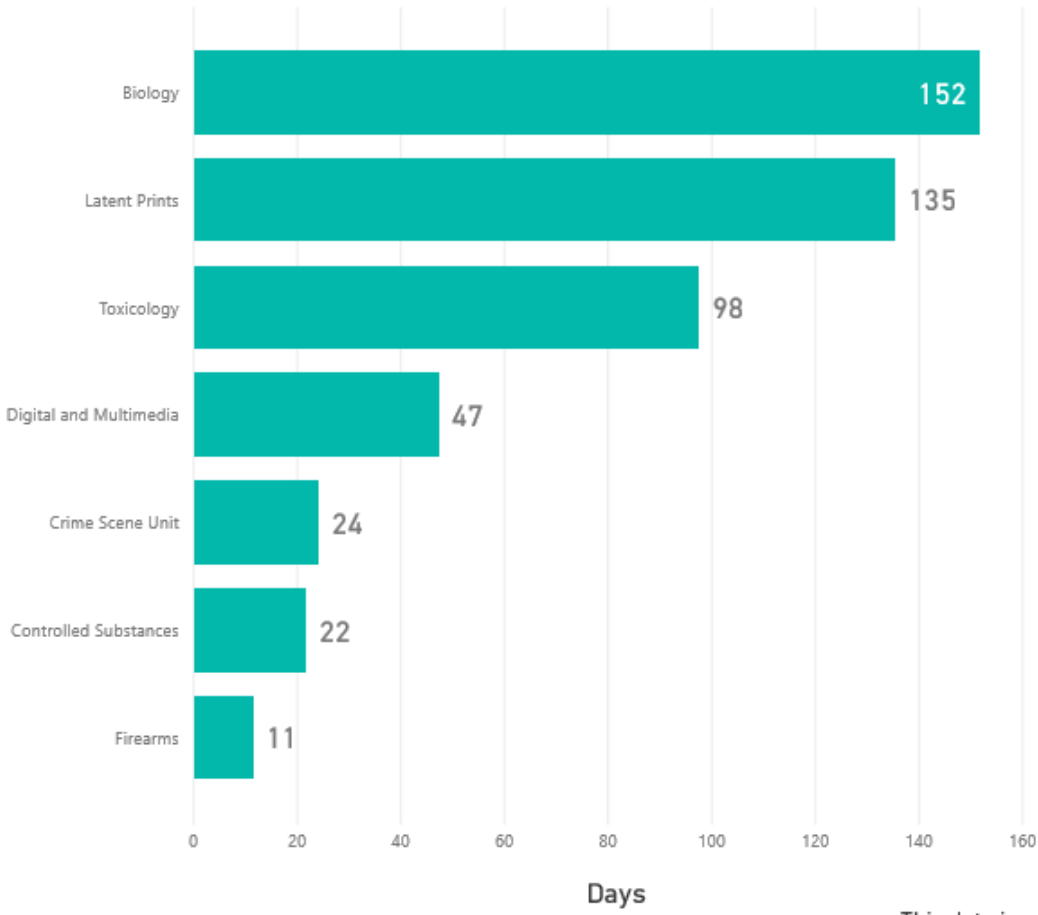
# President's Report

January 10, 2020

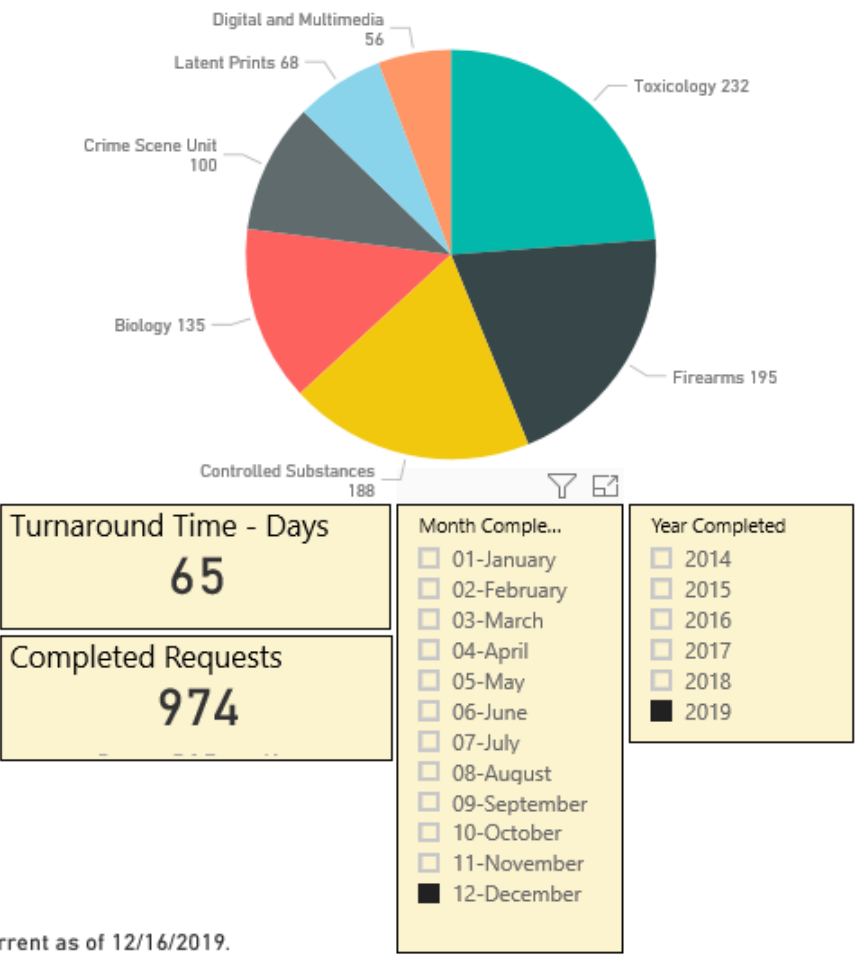




### Average Turnaround Time for December 2019



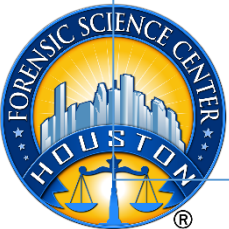
### Requests Completed by Section



This data is current as of 12/16/2019.

# Staffing – January 2020

- |  |   |
|--|---|
| <ul style="list-style-type: none"><li>• 192 staff<ul style="list-style-type: none"><li>• 7 City of Houston civilians</li><li>• 199 HFSC employees</li></ul></li><li>• 6 open positions, 3 offers accepted<ul style="list-style-type: none"><li>• 3 crime scene investigators</li></ul></li></ul> | <ul style="list-style-type: none"><li>• 4 active vacancies<ul style="list-style-type: none"><li>• 2 crime scene investigator supervisors</li><li>• Forensic biology technical lead (job posted - future opening)</li><li>• 1 research and development</li></ul></li></ul> |
|--|---|



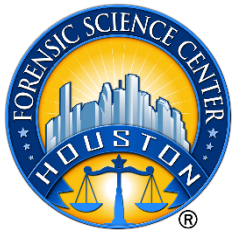
# Certifications

- Adam Vinson – Molecular Biology Diplomate
  - American Board of Criminalistics (ABC)
- Brook Knapp – Drug Analysis Diplomate
  - American Board of Criminalistics (ABC)
- Cloressa Guidry – Drug Analysis Diplomate
  - American Board of Criminalistics (ABC)
- Doug Gotfredsen – Certified Mobile Examiner
  - Cellebrite
- Melissa Henry – Diplomate, Forensic Toxicology
  - American Board of Forensic Toxicology



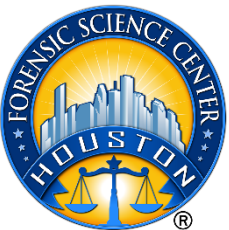
# The Big Move

January 10, 2020



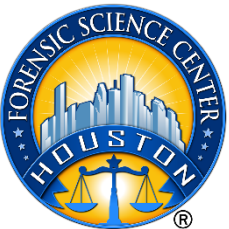
# The labs

- All labs operational
- Toxicology resumed blood alcohol analysis December 30
  - Drug analysis will resume later this year following validation of new instruments

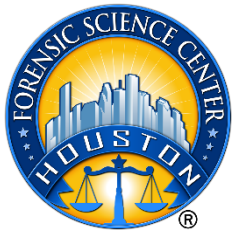


# NIJ Needs Assessment Report

- Mandated by Justice for All Act of 2016
- Put a price tag on the funding and resource gaps in forensics:
  - As of 2017 the gap is estimated at ***\$640 million / year***
- 570,000 backlogged requests nationally, largest number in seized drugs
- HFSC mentioned specifically for processes that offer solutions:
  - The posting of evidence submission guidelines on website helps improve quality of evidence handling, potentially increases efficiency
  - The latent print section's preliminary investigative reports hailed as a process improvement
  - Transparency and eDiscovery



# Lydell Grant case

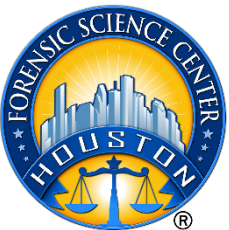




# Lydell Grant: Background

- Lydell Grant convicted in 2012 for a 2010 fatal stabbing that occurred in the parking lot of a Montrose night club
- Conviction largely based on testimony from **six** eyewitnesses who identified Grant as the killer in a photo array
- DNA analyzed by the HPD crime lab was found to be **inconclusive**
- Innocence Project took the case. Additional testing and analysis done:
  - DPS uses new technology (probabilistic genotyping) to **exclude** Grant
  - 2010 findings sent to private company, analyzed again using probabilistic genotyping, DNA points to another suspect
  - HPD tracks suspect down in Atlanta. He confesses to the murder and is charged with murder in Houston
- Lydell Grant has been freed and will seek a ruling of “actual innocence”

**WHAT HAPPENED?**



# DNA Reports

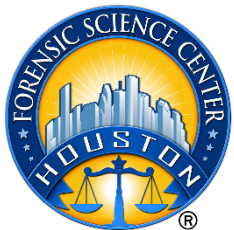
## **2010:**

No conclusions will be made regarding Lydell Grant as a possible contributor to this DNA mixture.

## **2020:**

The DNA mixture is not suitable for comparison due to an excessive number of contributors.

The minor component is not suitable for comparison due to insufficient data.



Q. It says: No conclusions will be made regarding Lydell Grant as a possible contributor to this DNA mixture. What does that mean?

A. It means that with a mixture now we're dealing with a lot more information. And when I sit down and look at the mixture and compare it to Lydell, I was not able to make a clear determination if he was a contributing individual to that mixture. I could not make a conclusion.

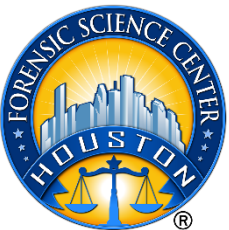
Q. So, in that circumstance, you could not exclude him from being a potential contributor to that DNA?

A. Correct.



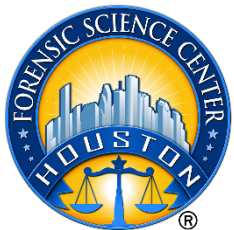
# What can we learn?

- Guard against “suspect driven conclusion”
- Policy, controls, proficiency, blind control
- Testimony monitoring, transcript review, testimony training
- Report language
- WILL be discussion and questions about CODIS entry and CODIS rules
- WILL be more discussion about eyewitness testimony and photo lineups



*Nothing vast enters the lives of  
mortals without a curse.*

-Sophocles, 441 BCE



## GRITS FOR BREAKFAST

WELCOME TO TEXAS JUSTICE: YOU MIGHT BEAT THE RAP, BUT YOU WON'T BEAT THE RIDE.

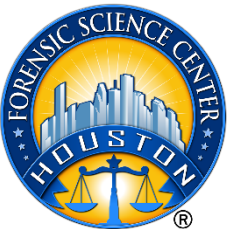
WEDNESDAY, DECEMBER 11, 2019

### The iceberg's tip: CA man walks free bc of DNA-mixture SNAFU

It's perhaps a testament to the reduction in size of and competition among MSM outlets that nobody has yet covered the problems with DNA-mixture forensics raised by federal District Judge Janet Neff of Michigan's Western District\* ([discussed by Grits here](#) and on the [latest Reasonably Suspicious podcast](#)). *That must change*; some full-time reporter(s) must step up. These issues deserve high-level coverage and national context that this humble, regional blog cannot provide.

Once you begin to pay attention, these cases are cropping up everywhere. In San Diego, we have the case of Flamencio Dominguez. In 2011, he was convicted of a 2008 murder based on DNA mixture evidence and sentenced to 50 years, [reported the San Diego Union Tribune](#). Months before the trial, the crime lab realized the mathematics behind their old DNA-mixture analyses used an invalid baseline. They decided to abandon their old approach and switch to "probabilistic genotyping" instead.

(Similarly, in Texas in 2015, crime labs discovered *every lab in the state was using erroneous math* in DNA-mixture analyses in ways that risked [falsely accusing innocent people](#), see coverage [here](#) and [here](#). In Travis County alone, [11 cases were found](#) where suspect matches changed to "inconclusive." Our crime labs, too, were advised to switch to probabilistic genotyping.)

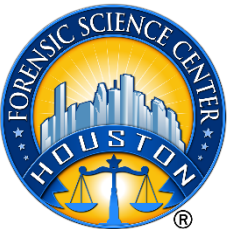


One also wonders if the good folks at the Houston Forensic Science Center, which late last month **announced they would begin using the STR-Mix software**, might now begin to consider that decision ill-timed? Certainly, after Judge Neff's decision, one would question using it for either mixtures involving more than three sources or three-source mixtures where the target makes up less than 20 percent of the sample. Lots of trace-DNA samples are submitted to crime labs that don't meet those criteria!



# Technology: Pros, cons, challenges

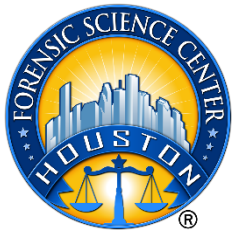
- Technology changes, scientists learn more, outcomes can change
- HFSC has an obligation to keep up with changes in science and technology
  - It can help with accuracy, quality
  - Sheds new light on old cases
  - Can put old conclusions into question
  - Raises questions about a crime lab's obligation to look back
- Must improve to offer stakeholders the best information, but diverts HFSC resources and time to training, slowing down production
- Not being the first can be advantageous: learn from others' experiences, helps improve validations testimony





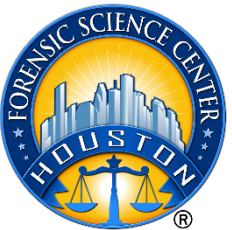
# Operations Report

January 10, 2020

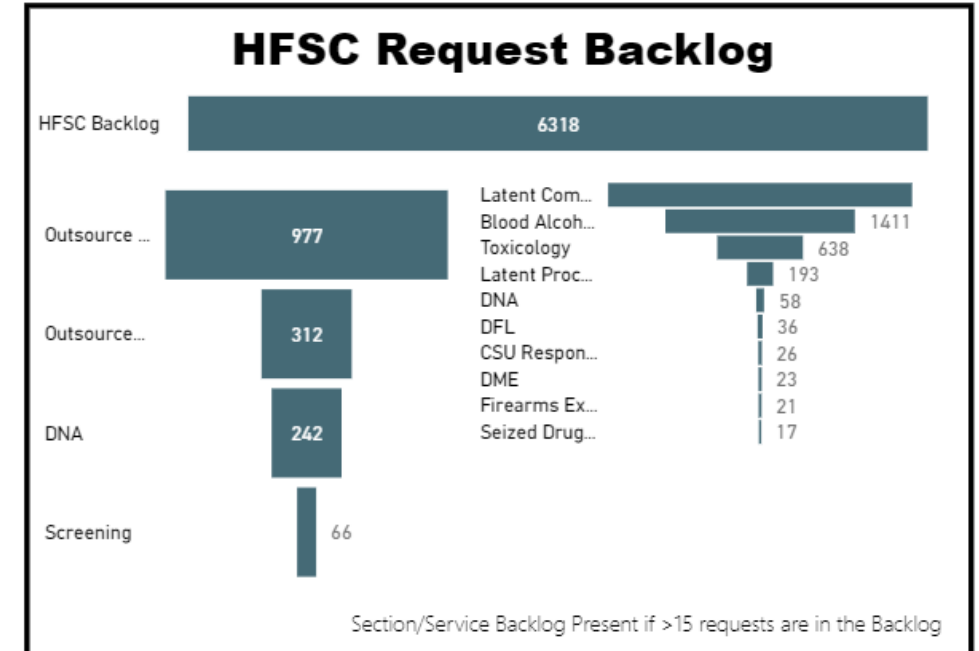
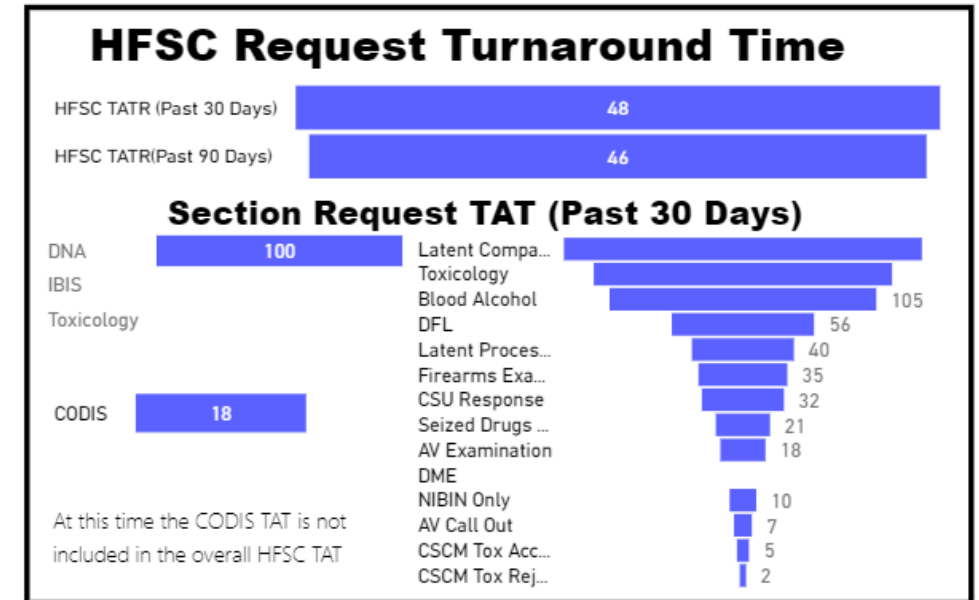
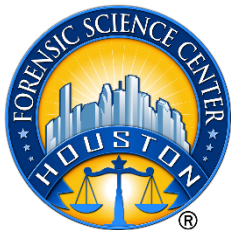
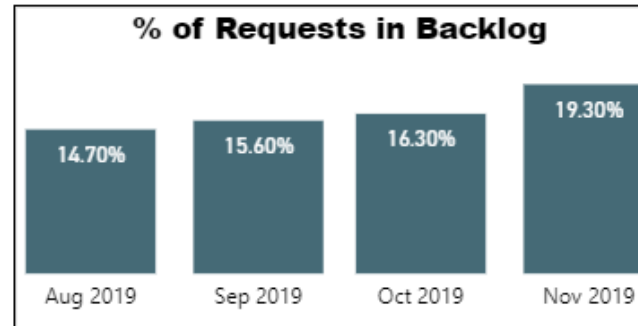
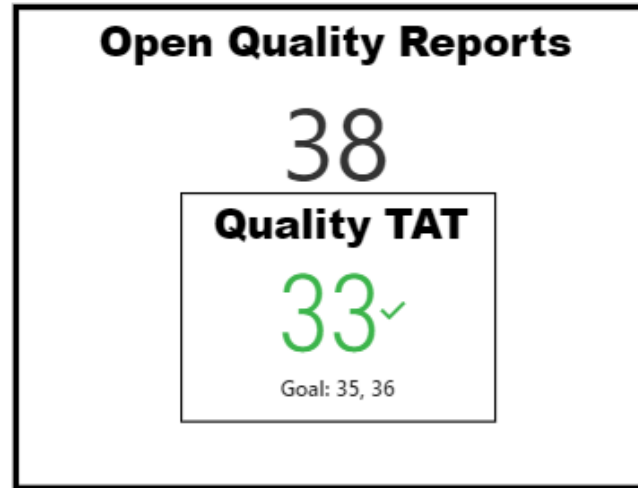


# Highlights

- Forensic Biology/DNA update



# January 2020 Company Overview



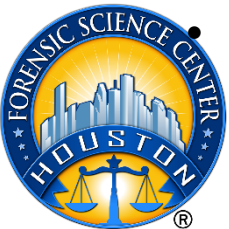
# Forensic Biology/DNA Update

## **Backlog/Outsourcing**

- Internal backlog: 242 (July 2018 internal backlog: 1,086)
- Backlogged outsourced cases: 312
- Backlogged cases awaiting CODIS review: 977
- Outsourced cases completed: 1,771

## **Training**

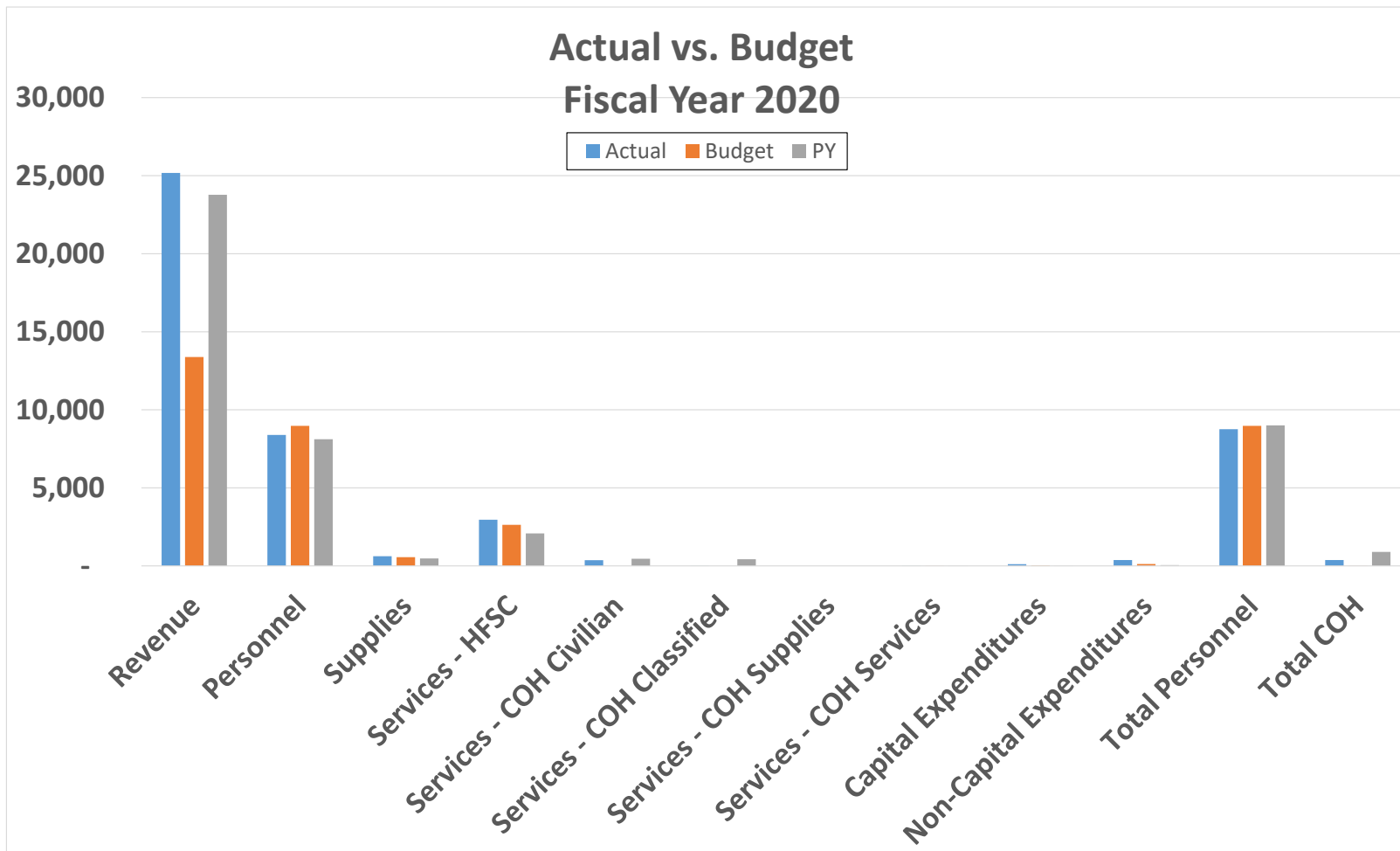
- Screeners that completed training: 4
- Technicians that completed training: 7
- Report writers that completed DNA training: 1 full, 2 experienced new hires completed modified training program
- Report writers that had DNA training extended to include STRmix (probabilistic genotype) training: 6
- Report writers that completed STRmix training: 3
- Experienced report writers in STRmix training: 12
- Number of HFSC report writers after all training is completed: 11 full-time, 1 part-time, 9 support (largely do reviews)



# Forensic Biology/DNA Challenges

- Facility move impacts casework capacity and training
- Commercial lab's turnaround time 120 days
- Report writers initial training delayed due to government shutdown
- STRmix implementation/training longer than initially estimated
- Two report writers promoted internally
  - Only 5 full-time report writers until STRmix is training is complete
- Final batch of sexual assault kits will be outsourced due to lab shutdown during move





**HOUSTON FORENSIC SCIENCE CENTER, INC.**  
**COMPARATIVE STATEMENT OF ACTIVITIES - ACCRUAL BASIS**  
**For the Period July 1, 2019 through Dec. 31, 2019**

		Current Month (Preliminary)								YTD						FY20	
		FY20	FY20	FY19	Variance				FY20	FY20	FY19	Variance				FY20	% Year
		Dec. 2019	Budget	Dec. 2018	Budget - Actual	%	FY20 - FY19	%	July 1-Dec. 31, 2019	Budget	July 1- Dec. 31, 2018	Vs. Budget	%	Vs. FY19	%	Budget V1	Completed
		# of Months							# of Months								
		1							6								
Revenues:																	
411000	City of Houston-Appropriations	\$ -	\$ 2,013	\$ -	\$ (2,013)	-100%	\$ -		\$ 23,689	\$ 12,080	\$ 22,832	\$ 11,609	96%	\$ 857	4%	\$ 24,160	98%
415000	City of Houston Direct OH-Appro	-	122	122	(122)	-100%	(122)	-100%	730	730	730	(0)	0%	(0)	0%	1,460	50%
416000	City of Houston - Safe funds	-	-	-	-	0%	-		-	-	-	-	0%	-	0%	-	0%
420000	Contributions	-	1	6	(1)	0%	(6)	-100%	2	6	8	(4)	-69%	(7)	-79%	11	15%
425000	In-Kind Donations	-	-	-	-	0%	-		-	-	-	-	0%	-	0%	-	0%
426000	Training Services	-	1	-	(1)	0%	-		-	5	7	(5)	-100%	(7)	-100%	9	0%
440000	Grants	5	92	3	(87)	-95%	1	33%	632	550	179	82	15%	453	253%	1,100	57%
450000	Forensic Services	-	2	(0)	(2)	-100%	0		34	12	16	22	189%	19	119%	24	145%
443000	Other	-	-	-	-	0%	-		1	-	-	1	0%	1	0%	-	0%
450002	Interest Income	10	0	1	10	1948%	9	1645%	83	3	4	81	2749%	80	2253%	6	1425%
Total Income		15	2,231	131	(2,216)	-99%	(117)	-89%	25,172	13,385	23,776	11,787	88%	1,396	6%	26,771	94%
Expenses:																	
Personnel:																	
500010	Salary Base - Civilian	1,143	1,227	1,121	84	7%	(22)	-2%	6,814	7,360	6,613	546	7%	(200)	-3%	14,720	46%
501070	Pension - Civilian	66	72	65	5	8%	(1)	-2%	398	429	346	32	7%	(51)	-15%	859	46%
502010	FICA - Civilian	79	89	79	9	11%	(0)	-1%	488	533	475	45	8%	(12)	-3%	1,066	46%
503010	Health Insurance - Active Civil	115	93	97	(22)	-24%	(18)	-19%	665	557	586	(108)	-19%	(79)	-14%	1,115	60%
503015	Basic Life Ins - Active Civil	(10)	10	10	20	196%	20	192%	5	60	62	56	92%	58	93%	121	4%
503060	Long Term Disability - Civilian	-	-	-	-	0%	-		-	-	-	-	0%	-	0%	-	0%
503090	Workers Comp - Civilian Adm	4	4	4	0	10%	(0)	-5%	24	27	26	3	10%	2	7%	53	45%
503100	Workers Comp - Civil Claims	-	0	-	0	100%	-		-	0	-	0	100%	-	0%	0	0%
504030	Unemployment Claims - Admin	-	-	-	-		-		-	-	-	-	0%	-	0%	-	0%
504010	Pension - GASB 27 Accrual	-	-	-	-		-		-	-	-	-	0%	-	0%	-	0%
504031	Unemployment Taxes - Admin	0	1	0	1	90%	(0)	-6%	2	7	3	5	68%	1	35%	14	16%
		1,398	1,496	1,376	97	7%	(22)	-2%	8,395	8,973	8,112	579	6%	(283)	-3%	17,947	47%
Supplies:																	
511010	Chemical Gases & Special Fluids	-	1	1	1	100%	1	100%	11	7	6	(4)	-52%	(5)	-78%	15	76%
511040	Audio Visual Supplies	-	-	-	-		-		-	-	-	-	0%	-	0%	-	0%
511045	Computer Supplies	-	3	-	3	100%	-		-	16	5	16	100%	5	100%	32	0%
511050	Paper & Printing Supplies	-	2	-	2	100%	-		3	14	15	11	81%	12	82%	28	9%
511055	Publications & Printed Material	0	0	0	0	64%	0	67%	4	2	1	(2)	-74%	(3)	-269%	5	87%
511060	Postage	-	0	0	0	100%	0	100%	0	0	0	0	53%	0	58%	0	24%
511070	Miscellaneous Office Supplies	0	11	22	10	98%	21	99%	35	63	63	28	45%	29	45%	126	27%
511080	General Laboratory Supply	136	71	78	(65)	-92%	(59)	-76%	526	427	360	(99)	-23%	(166)	-46%	853	62%
511090	Medical & Surgical Supplies	-	-	-	-		-		-	-	-	-	0%	-	0%	-	
511095	Small Technical & Scientific Eq	-	1	1	1	100%	1	100%	4	3	2	(1)	-36%	(2)	-93%	6	68%
511110	Fuel	-	-	-	-		-		-	-	-	-	0%	-	0%	-	
511120	Clothing	1	1	1	(0)	-38%	0	9%	9	4	8	(5)	-144%	(1)	-11%	7	122%
511125	Food/Event Supplies	1	1	6	0	45%	5	91%	8	6	12	(3)	-47%	4	31%	11	74%
511130	Weapons Munitions & Supplies	-	1	0	1	100%	0	100%	0	3	3	3	91%	3	90%	7	5%
511145	Small Tools & Minor Equipment	-	0	0	0	100%	0	100%	12	2	1	(10)	-579%	(11)	-993%	3	339%
511150	Miscellaneous Parts & Supplies	0	2	1	1	90%	0	74%	7	10	5	2	26%	(2)	-45%	19	37%
		138	93	110	(45)	-49%	(29)	-26%	619	557	482	(62)	-11%	(137)	-28%	1,114	56%

**HOUSTON FORENSIC SCIENCE CENTER, INC.**  
**COMPARATIVE STATEMENT OF ACTIVITIES - ACCRUAL BASIS**  
For the Period July 1, 2019 through Dec. 31, 2019

		Current Month (Preliminary)						YTD						FY20	
		FY20	FY20	FY19	Variance			FY20	FY20	FY19	Variance			FY20	% Year
		Dec. 2019	Budget	Dec. 2018	Budget - Actual	%	FY20 - FY19	%	July 1-Dec. 31, 2019	Budget	July 1-Dec. 31, 2018	Vs. Budget	%	Budget V1	Completed
Services:															
520100	Temporary Personnel Services	-	0	-	0	100%	-		-	1	2	1	0%	2	0%
520105	Accounting & Auditing Svcs	6	4	3	(2)	-59%	(2)	-60%	23	21	21	(2)	-11%	42	55%
520106	Architectural Svcs	-	-	-	-		-		-	-	-	-	0%	-	0%
520107	Computer Info/Contracting Svcs	-	3	-	3	100%	-		-	17	4	17	100%	34	0%
520109	Medical Dental & Laboratory Ser	-	7	3	7	100%	3	100%	791	43	67	(748)	-1760%	85	930%
520110	Management Consulting Services	5	8	13	3	33%	8	61%	102	45	90	(57)	-126%	90	113%
520112	Banking Services	0	0	0	0	30%	0	42%	1	2	2	0	22%	4	39%
520113	Photographic Services	-	-	-	-		-		-	-	-	-	0%	-	
520114	Misc Support Serv Recruit Relo	1	5	5	4	85%	4	85%	34	28	19	(5)	-19%	56	60%
520115	Real Estate Rental	69	194	88	125	64%	18	21%	358	1,166	518	808	69%	2,331	15%
520118	Refuse Disposal	0	2	2	1	77%	2	82%	36	9	11	(27)	-287%	18	193%
520119	Computer Equip/Software Maint.	29	72	39	43	60%	10	26%	434	430	512	(3)	-1%	861	50%
520121	IT Application Services	-	11	6	11	100%	6	100%	(0)	68	48	69	100%	137	0%
520123	Vehicle & Motor Equip. Services	-	-	-	-		-		-	-	-	-	0%	-	
520124	Other Equipment Services	11	24	18	13	55%	7	40%	384	142	157	(242)	-170%	284	135%
520143	Credit/Bank Card Svcs	-	0	-	0	100%	-		0	0	-	(0)	-275%	0	188%
520145	Criminal Intelligence Services	-	-	-	-		-		-	-	-	-	0%	-	0%
520520	Printing & Reproduction Serv.	-	1	-	1	100%	-		26	5	2	(21)	-462%	9	281%
520605	Public Information Svcs	-	1	0	1	100%	0	100%	0	8	3	8	96%	17	2%
520705	Insurance (Non-Medical)	2	10	10	8	80%	8	81%	122	58	58	(64)	-112%	115	106%
520760	Contributions	-	-	-	-		-		-	-	-	-	0%	-	0%
520765	Membership & Prof. Fees	0	2	4	2	96%	4	98%	10	12	10	3	22%	25	39%
520805	Education & Training	-	16	2	16	100%	2	100%	210	96	98	(115)	-120%	191	110%
520815	Tuition Reimbursement	2	3	5	1	43%	3	59%	4	19	14	15	79%	39	11%
520905	Travel - Training Related	4	16	11	12	78%	7	67%	73	94	91	22	23%	188	38%
520910	Travel - Non-training Related	0	2	1	2	95%	1	92%	19	11	11	(7)	-63%	23	81%
521405	Building Maintenance Services	0	1	1	1	73%	0	62%	2	7	8	5	70%	14	15%
521505	Utilities	0	0	0	0	57%	0	34%	3	2	3	(1)	-35%	5	68%
521605	Data Services	4	19	34	15	77%	29	87%	89	115	116	25	22%	229	39%
521610	Voice Services, Equip & Labor	0	3	5	3	96%	5	98%	8	20	26	12	61%	40	19%
521705	Vehicle/Equipment Rental/Lease	-	0	-	0	100%	-		-	0	-	0	0%	0	0%
521725	Other Rental Fees	5	3	3	(2)	-67%	(2)	-80%	32	17	17	(15)	-91%	34	96%
521730	Parking Space Rental	15	13	17	(1)	-10%	3	16%	97	79	97	(18)	-23%	158	62%
521905	Legal Services	-	4	18	4	100%	18	100%	10	22	18	12	54%	43	23%
522205	Metro Commuter Passes	1	8	5	7	82%	3	70%	16	49	31	33	68%	98	16%
522305	Shipping and Freight	(1)	1	2	2	235%	3	188%	19	6	5	(13)	-202%	12	151%
522430	Misc. Other Services & Chrgs	(1)	7	2	8	111%	2	144%	60	42	26	(18)	-42%	85	71%
522720	Insurance - General & Professional	-	-	-	-		-		-	-	-	-	0%	-	0%
523100	Civilian Payroll	62	-	69	(62)		7	10%	364	-	459	(364)	0%	95	21%
523200	Classified Payroll	0	-	52	(0)		52	99%	1	-	430	(1)	0%	429	100%
523300	Supplies	-	-	-	-		-		-	-	-	-	0%	-	
523400	Services	1	1	2	0	14%	1	34%	7	9	9	2	19%	18	41%
523000	Sub-Contractor (COH-HPD) Total	64	1	124	(63)	-4223%	60	48%	372	9	898	(363)	-4088%	526	59%
	Total Services	216	441	419	225	51%	204	49%	3,334	2,644	2,982	(690)	-26%	(352)	-12%



**HOUSTON FORENSIC SCIENCE CENTER, INC.**  
**COMPARATIVE STATEMENT OF ACTIVITIES** - ACCRUAL BASIS  
For the Period July 1, 2019 through Dec. 31, 2019

		Current Month (Preliminary)						YTD						FY20	
		FY20	FY20	FY19	Variance			FY20	FY20	FY19	Variance			FY20	% Year
		Dec. 2019	Budget	Dec. 2018	Budget - Actual	%	FY20 - FY19	July 1-Dec. 31, 2019	Budget	July 1- Dec. 31, 2018	Vs. Budget	%	Vs. FY19	Budget V1	Completed
<b>Non-Capital Expenditures</b>															
551010	Furniture and Fixtures	1	4	-	3	69%	(1)	263	26	19	(237)	-901%	(244)	53	501%
551015	Computer Hardware/SW	5	14	-	9	68%	(5)	107	84	23	(23)	-27%	(83)	168	63%
551025	Scientific/Foren Eqmt	-	2	2	2	100%	2	11	10	3	(1)	-7%	(8)	20	54%
Total Non-Capital Expenditures		6	20	2	14	71%	(4)	381	120	45	(260)	-217%	(335)	240	158%
<b>Capital Expenditures</b>															
170140	Improvements	-	-	-	-	-	-	20	-	-	(20)	0%	(20)	-	0%
170210	Furniture & Fixtures	-	-	-	-	-	-	-	-	-	-	0%	-	-	0%
170230	Computer Hardware/SW	-	-	-	-	-	-	-	-	28	-	0%	28	-	0%
170240	Scientific/Foren Eqmt	56	7	-	(49)	-696%	(56)	95	42	8	(53)	-125%	(86)	84	113%
170270	500 Jefferson - Intangible	-	-	-	-	0%	-	-	-	-	-	0%	-	-	0%
170980	Const in Progress	121	-	8	(121)	-	(114)	(8)	-	(36)	8	0%	(28)	-	0%
Total Capital Expenditures		177	7	8	(170)	-2431%	(170)	107	42	0	(65)	-155%	(107)	84	128%
Total Expense and Capital Before Depreciation		1,935	2,056	1,915	121	6%	(20)	12,836	12,336	11,623	(500)	-4%	(1,214)	24,673	52%
561230	Depreciation	143	42	42	(101)	-240%	(101)	856	252	252	(604)	-240%	(604)	504	170%
600003	Reconciliation Discrepancies	-	-	-	-	0%	-	21	-	-	(21)	0%	(21)	-	0%
570505	FA Gain/Loss	90	-	-	(90)	0%	-	21	-	-	(21)	0%	-	-	0%
531085	Interest Expense	-	-	-	-	-	-	542	-	-	(542)	-67%	-	-	55%
610000	City of Houston Direct Overhead	-	33	122	33	100%	122	327	196	730	(131)	-67%	403	392	83%
620000	HPD-Reimbursed Expenses	-	-	-	-	-	-	-	-	-	-	0%	-	-	0%
	Grant and Training Expense	-	-	-	-	-	-	-	-	-	-	0%	-	-	0%
Total Expense and Capital After Depreciation		2,168	2,131	2,078	(37)	-2%	1	14,583	12,785	12,604	(1,799)	-14%	(1,979)	25,569	57%
Net Ordinary Income less capital spending		(2,153)	100	(1,947)	(2,179)	-2177%	(116)	10,589	601	11,171	9,988	1663%	(582)	1,201	881%

**HOUSTON FORENSIC SCIENCE CENTER, INC.**  
**COMPARATIVE STATEMENT OF NET POSITION**  
**By Quarter**

(in '000's)

	Preliminary 12/31/19	As of 09/30/19	As of 06/30/19	As of 03/31/19	As of 12/31/18
<b>ASSETS</b>					
<b>Cash and Cash Equivalents</b>					
Bank of Texas-Operating	\$ 12,596	\$ 18,538	\$ 1,124	\$ 6,670	\$ 12,657
<b>Total Current Assets</b>	12,596	18,538	1,124	6,670	12,657
<b>Accounts Receivable</b>					
Accounts Receivable	42	209	1,063	669	16
<b>Total Accounts Receivable</b>	42	209	1,063	669	16
<b>Capital Assets Net of Depreciation</b>					
Capital Assets	37,927	37,657	37,654	37,533	6,218
Accumulated Depreciation	(3,181)	(2,753)	(2,335)	(1,918)	(1,887)
<b>Total Net Capital Assets</b>	34,746	34,904	35,319	35,615	4,331
<b>Other Assets</b>					
Prepaid - HR	(5)	8	-	2	0
Prepaid - Insurance	59	50	54	61	88
Prepaid - Service Agreements	224	255	129	131	226
Prepaid - Other	4	3	2	145	61
<b>Total Other Assets</b>	282	317	184	339	375
<b>TOTAL ASSETS</b>	<b>\$ 47,666</b>	<b>\$ 53,967</b>	<b>\$ 37,690</b>	<b>\$ 43,292</b>	<b>\$ 17,379</b>
<b>LIABILITIES</b>					
Accounts Payables	\$ 300	\$ 790	\$ 388	\$ 3	\$ 152
Payroll Tax Liability	996	994	1,603	552	490
Other Liabilities, Including Fund 2213 Billing	191	127	127	63	260
500 Jefferson Lease Liability	31,840	31,928	31,920	31,911	
Deferred - Others	6	6	6	6	248
<b>Total Liabilities</b>	33,333	33,846	34,044	32,536	1,150
<b>NET POSITION/FUND BALANCE</b>					
Unrestricted/Unassigned	11,426	17,146	248	7,053	11,898
Net Investment in Capital Assets	2,906	2,976	3,399	3,703	4,331
<b>Total Net Position</b>	14,333	20,121	3,647	10,756	16,229
<b>TOTAL LIABILITIES AND NET POSITION</b>	<b>\$ 47,666</b>	<b>\$ 53,967</b>	<b>\$ 37,690</b>	<b>\$ 43,292</b>	<b>\$ 17,379</b>

## Awarded

<b>Awarding Agency:</b> USDOJ-OJP-NIJ			
<b>Name of Project:</b> NIJ FY 17 DNA Capacity Enhancement and Backlog Reduction Program			
<b>Start and End Dates:</b> 01/01/2018 - 12/31/2019			
<b>Contact:</b> Monte Evans			
<b>Award Number:</b> 2017-DN-BX-0027	<b>Awarded</b>	<b>Invoiced</b>	<b>Current Receivable</b>
<b>Amount of Award:</b> \$	867,755	\$ -	\$ -
<b>Grant Inception to date:</b> \$	(847,849)	\$ 737,497	\$ 110,352
<b>Grant Balance:</b> \$	19,906		
<b>Status:</b> Awarded			

<b>Awarding Agency:</b> USDOJ-OJP-NIJ			
<b>Name of Project:</b> Cap Enhancement for Drug and DNA Testing in Sexual Assault Cases			
<b>Start and End Dates:</b> 01/01/2018 - 12/31/2020			
<b>Contact:</b> Monte Evans			
<b>Award Number:</b> 2017-DN-BX-0176	<b>Awarded</b>	<b>Invoiced</b>	<b>Current Receivable</b>
<b>Amount of Award:</b> \$	114,000	\$ -	
<b>HFSC Match:</b> \$	38,000	\$ -	
<b>Grant Inception to date:</b> \$	(999)	\$ -	
<b>Grant Balance:</b> \$	151,001		
<b>Status:</b> Awarded			

<b>Awarding Agency:</b> University of Virginia			
<b>Name of Project:</b> Quality Blind Testing Research			
<b>Start and End Dates:</b> 11/26/2018 - 05/31/2019			
<b>Contact:</b> Lynn Boyter			
<b>Award Number:</b> 2018 CSAFE	<b>Awarded</b>	<b>Invoiced</b>	<b>Current Receivable</b>
<b>Amount of Award:</b> \$	59,000	\$ -	
<b>Grant Inception to date:</b> \$	(62,177)	\$ 62,177	\$ -
<b>Grant Balance:</b>	(3,177)		
<b>Status:</b> Sub Award			

<b>Awarding Agency:</b> USDOJ-OJP-NIJ			
<b>Name of Project:</b> NIJ FY 18 DNA Capacity Enhancement and Backlog Reduction Program			
<b>Start and End Dates:</b> 01/01/2019 - 12/31/2020			
<b>Contact:</b> Shelia Anderson			
<b>Award Number:</b> 2018-DN-BX-0096	<b>Award Bal.</b>	<b>Expenditure Reported</b>	<b>Current Receivable</b>
<b>Contact:</b> Charles Heurich			
<b>Award Number:</b> 2014-DN-BX-0116			
<b>Amount of Award:</b> \$	1,530,927	-	\$ -
<b>Grant Inception to date:</b> \$	(942,330)	\$ 684,044	\$ 258,286
<b>Grant Balance:</b> \$	588,597		
<b>Status:</b> Sub - Award			

<b>Awarding Agency:</b> USDOJ-OJP-NIJ			
<b>Discipline:</b> Seized Drugs			
<b>Primary Recipient:</b> HFSC			
<b>Federal Program:</b> 2018 Research and Evaluation for the Testing and Interpretation of Physical Evidence in Publicly Funded Forensic Laboratories			
<b>Solicitation Number:</b> NIJ-2018-13900			
<b>Name of Project:</b> Establishing Sufficiency Thresholds for Assessing the Quality of Mass Spectral Data			
<b>Purpose:</b> This study proposes to initiate and test the development of a sufficiency standard that can be used as a model for the nationalized mass spectral standard. In addition, both results and methodology from this project should have direct extension to other forensic disciplines using mass spectral data, such as Toxicology and Trace Analysis.			
<b>Collaboration:</b> Ohio University			
<b>Start and End Dates:</b> 01/01/2019 - 12/31/2019			
<b>Contact:</b> Peter Harrington			
<b>Award Number:</b> 2018-DU-BX-0184			
<b>Award Date:</b> 9/27/2018			
<b>Amount of Award:</b>	<b>\$282,703</b>	<b>Award Bal.</b>	<b>Expenditure Reported</b>
			<b>Current Receivable</b>
<b>HFSC Amount of Award:</b> \$	174,682		
<b>Grant Inception to date:</b> \$	(40,148)	\$ -	\$ 40,148
<b>Grant Balance:</b>			
<b>Subrecipient:</b> Ohio University			
<b>Subrecipient Official:</b> P. Maureen Valentine			
<b>Contact:</b> Peter Harrington			
<b>Subaward Total:</b> \$	108,021		
<b>Grant Inception to date:</b> \$	(11,591)	\$ 11,591	\$ -
<b>Grant Balance:</b>			
<b>Status:</b> Awarded			

**Awarding Agency:** USDOJ-OJP-NIJ

**Discipline:** Latent Prints

**Federal Program:** 2018 Applied Research and Development in Forensic Science for Criminal Justice Purpose

**Solicitation Number:** NIJ-2018-13600

HFSC fully intends to collaborate and provide the resources to assist RTI in creating and validating the fingerprint database. We are able to assist in this

**Purpose:** research effort by providing the time and expertise of 10 of our latent print examiners for the Selection and AFIS Team. We will also assist in recruiting 20 latent prints donors as part of the Detection Team.

**Primary Recipient:** RTI International

**RTI Contract Administrator:** Meghaan Hampton

**Start and End Dates:** 06/15/2019 - 04/30/2020

**Contact:** Heidi Eldridge

**Award Number:** 2018-DU-BX-0227

**Contract Title:** Selection, Detection, AFIS Teams

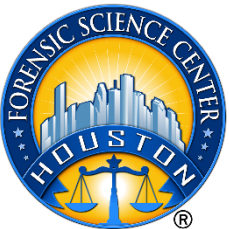
**Contract Type:** Fixed Price

	Award Bal.	Expenditure Reported	Current Receivable
<b>HFSC Contract Funded Amount:</b>	\$ 71,902		
<b>Grant Inception to date:</b>			
<b>Grant Balance:</b>			

**Status:** Awarded - Contract Service Agreement

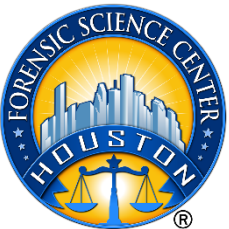
# Crime Scene and Multimedia

January 10, 2020

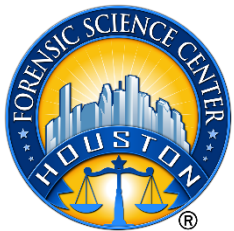


# Crime Scene Unit

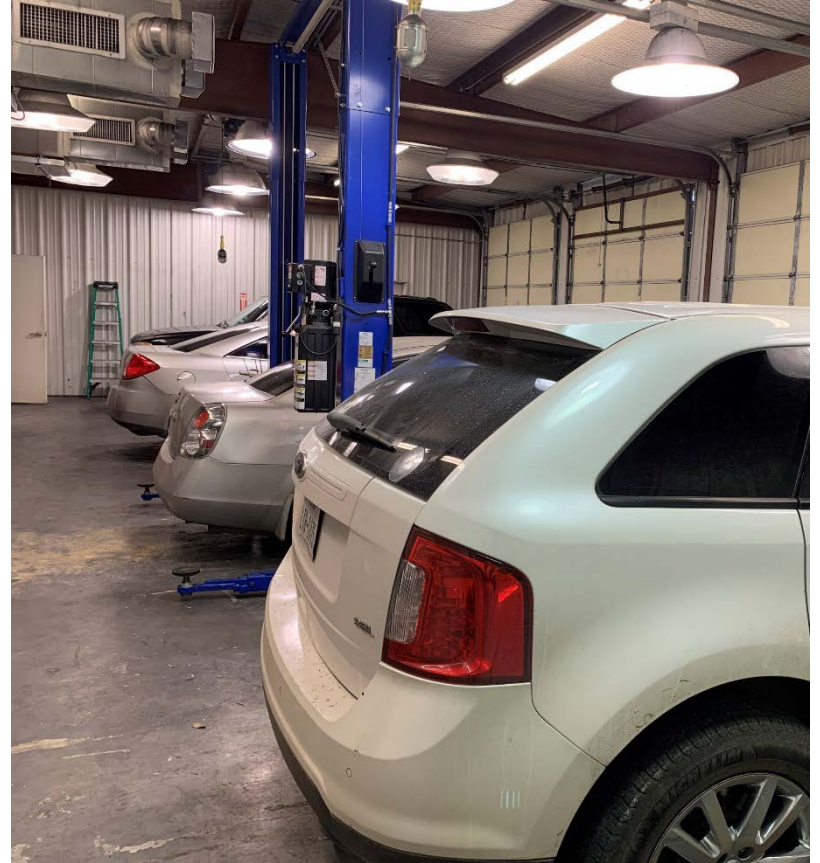
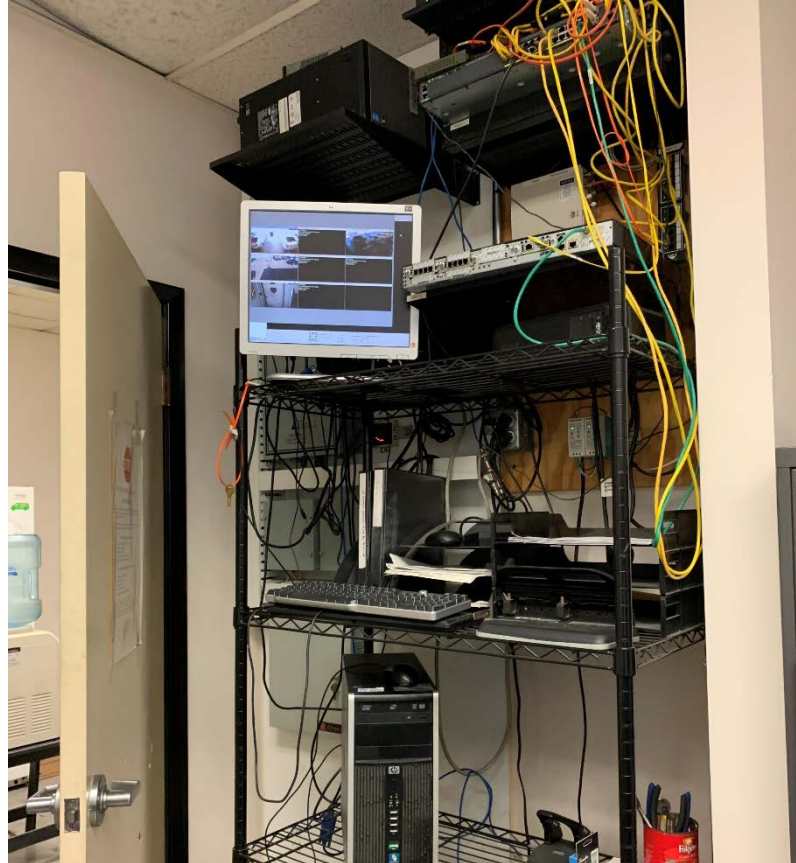
- Two supervisors have resigned
- Posted internally, provides opportunity for growth for CSIs
- Will leave two vacancies among the investigators



# New cars



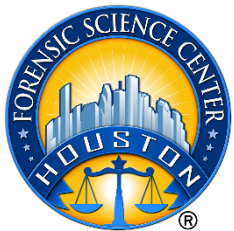




# Vehicle Examination Bay (VEB)

---

# Detail data



# Key for Dashboard Section Pages

Center of ring=total pending cases  
Ring=breakdown of age for all pending cases

Report type

Service: Seized Drugs Examination  
Priority Type: All

Pending work

**# of Unassi...**  
28✓  
Goal: 100 (+72%)

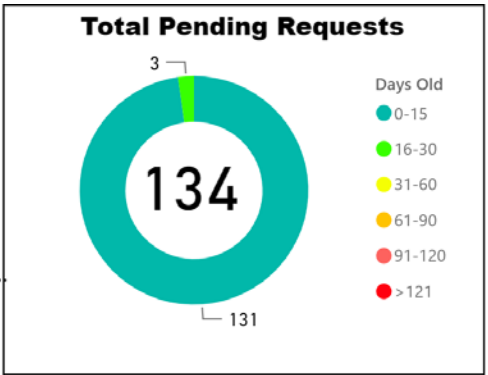
**# Pending Draft**  
24✓  
Goal: 100 (+76%)

**# Pending Tech**  
55!  
Goal: 50 (-10%)

**# Pending Admin**  
27✓  
Goal: 50 (+46%)

Goal= Threshold for the max # of requests in each bucket

- 0 Justice Trax Past Critical Age
- NaN Avg Age of Requests >30 D...
- 24 Age-Oldest Unassigned
- 15 Age-Oldest Pending Draft
- 21 Age-Oldest Pending Tech
- 15 Age-Oldest Pending Admin



**Overall TAT (Month to Date)**  
9.1✓  
Goal: 14, 15

**Overall TAT (Past 90 Days)**  
8.8✓  
Goal: 14, 15

TAT by Phase of Work (MTD)



TAT by Phase of Work (Past 90 Days)



Pending quality reports

Open Quality Reports		
Qualtrax ID	Workflow #	Age
48504		26
48533		26
48621		24
49147	2019-056	17

\*Reports without a Workflow Id# are not included in the Avg Age

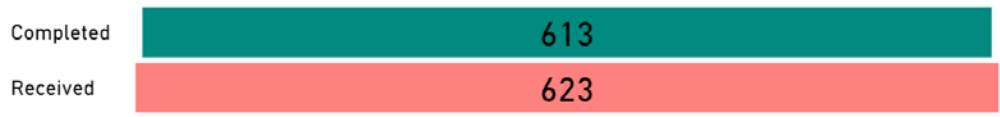
**Quality TAT**  
9✓  
Goal: 30, 31

**Avg Age of Open Reports\***  
17

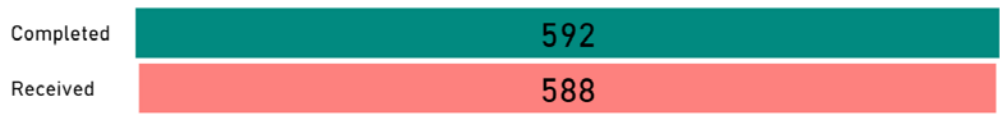
Average time to close quality reports

Quality Filter: Controlled Substances

Month to Date



30 Day Avg (Over Past 90 Days)



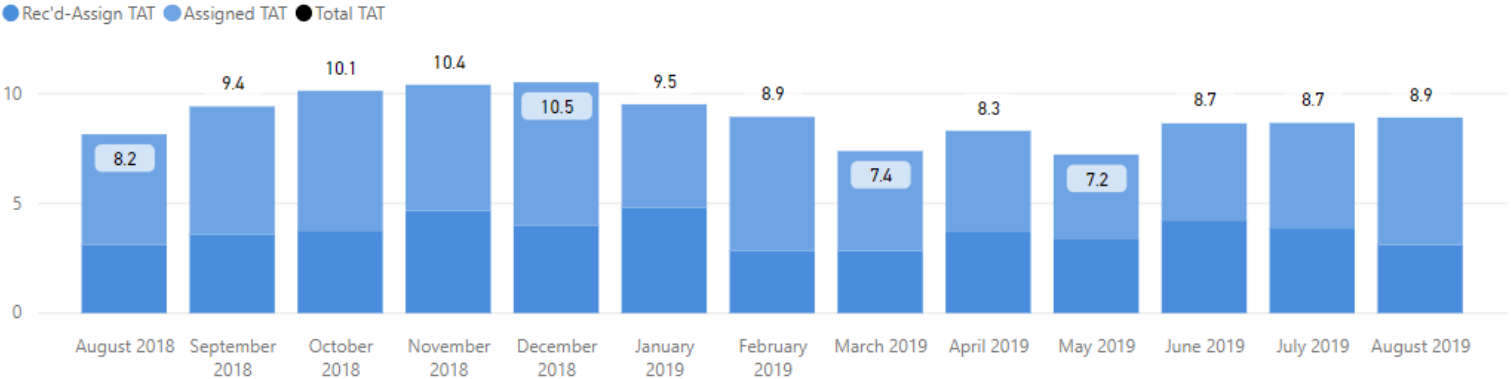
TAT= Turnaround Time   MTD= Month to date   Critical age=30 days   Critical pending=requests open over 30 days

# Key for Dashboard Historical Pages 1/2

## Date Range

8/1/2018 8/31/2019

## Total TAT by Month



## Request Type

Seized Drugs Examination

Priority Type

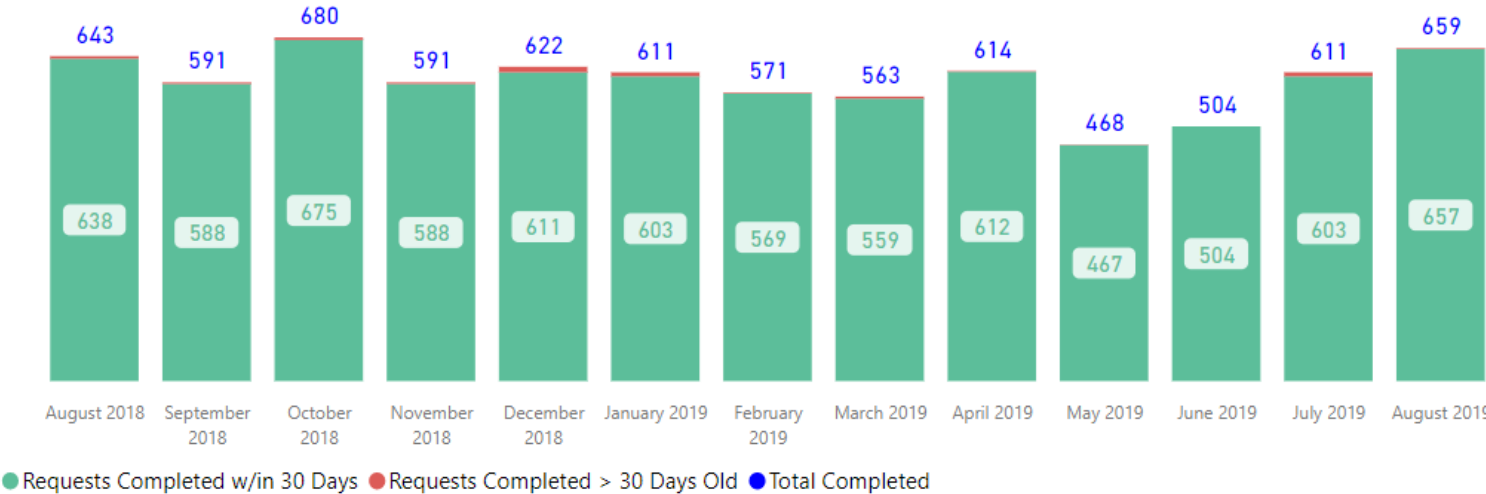
All

## Selected Time Frame Averages

8.99  
Total TAT (Rec'd-Compl.) Avg

5.31  
Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



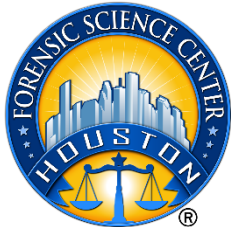
## Received to Complete

7728  
Requests Completed

54  
Requests Completed > 30 Days Old

0.70 %  
% Completed > 30 Days Old

Requests more than 30 days old are considered to be backlogged requests





# Key for Dashboard Historical Pages 2/2

Service

Priority Type

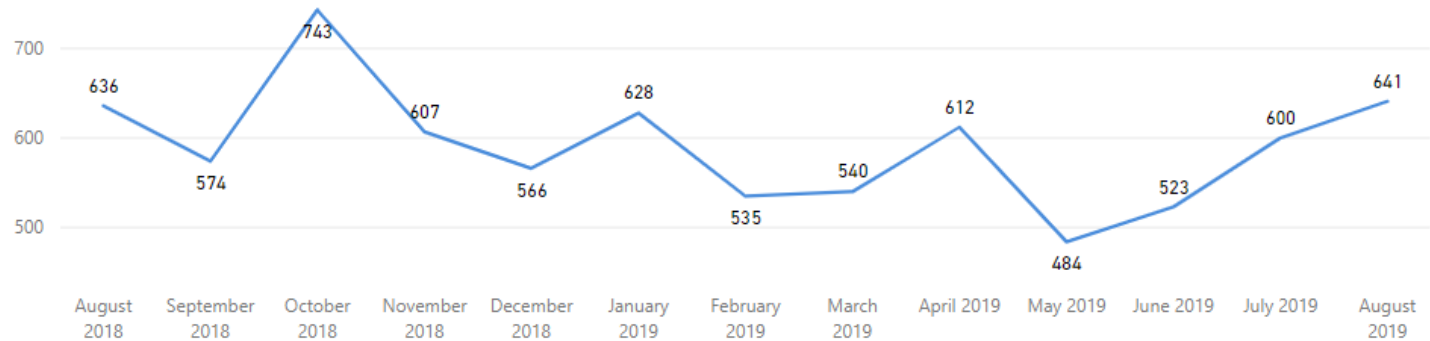
Seized Drugs Examination

All

Received Filter

8/1/20188/31/2019

Received by Month



Total Received

7,689

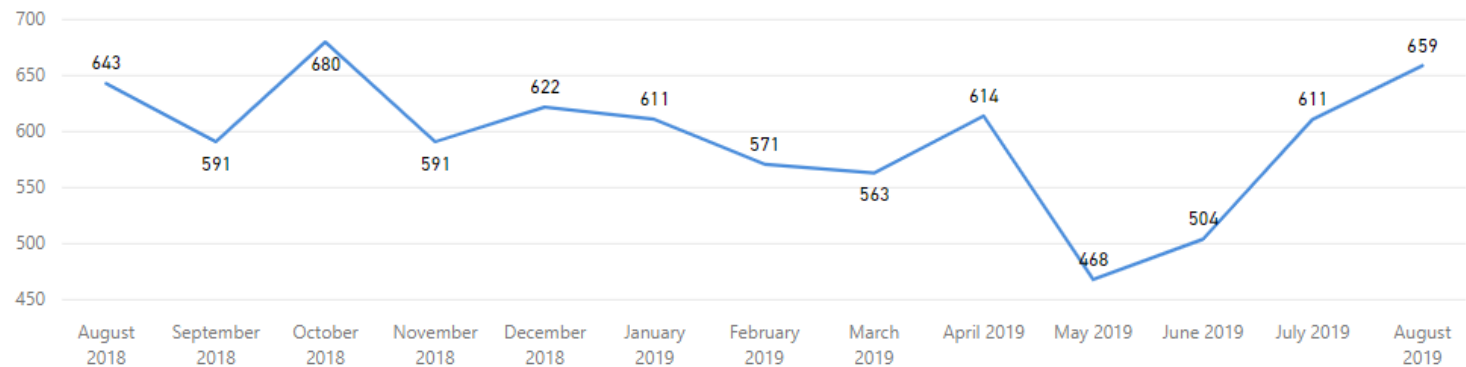
Received per Month (Avg)\*

591

Completed Filter

8/1/20188/31/2019

Completed by Month



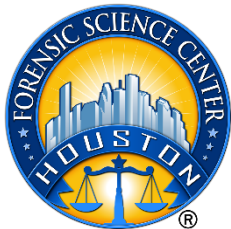
Total Completed

7,728

Completed per Month (Avg)\*

594

\* months with zero activity are not calculated into the average

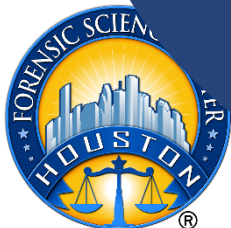
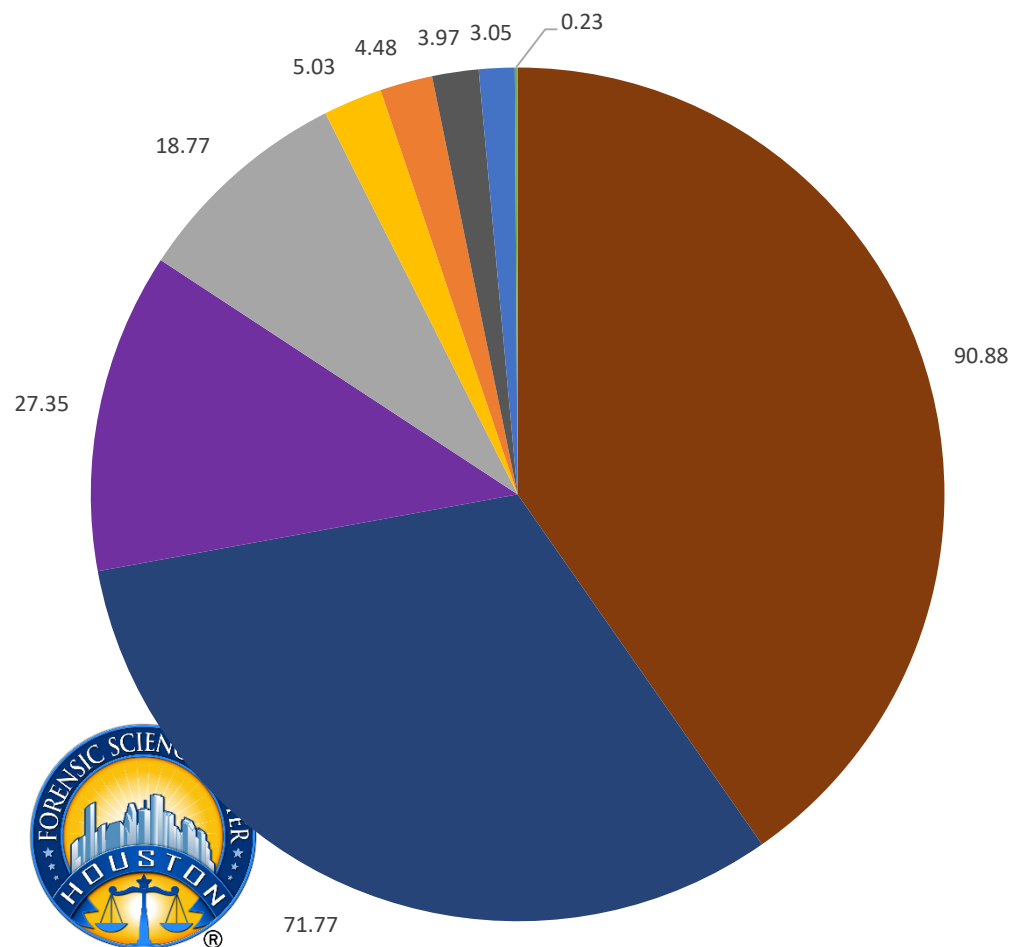


# Client Services and Case Management (CS/CM)



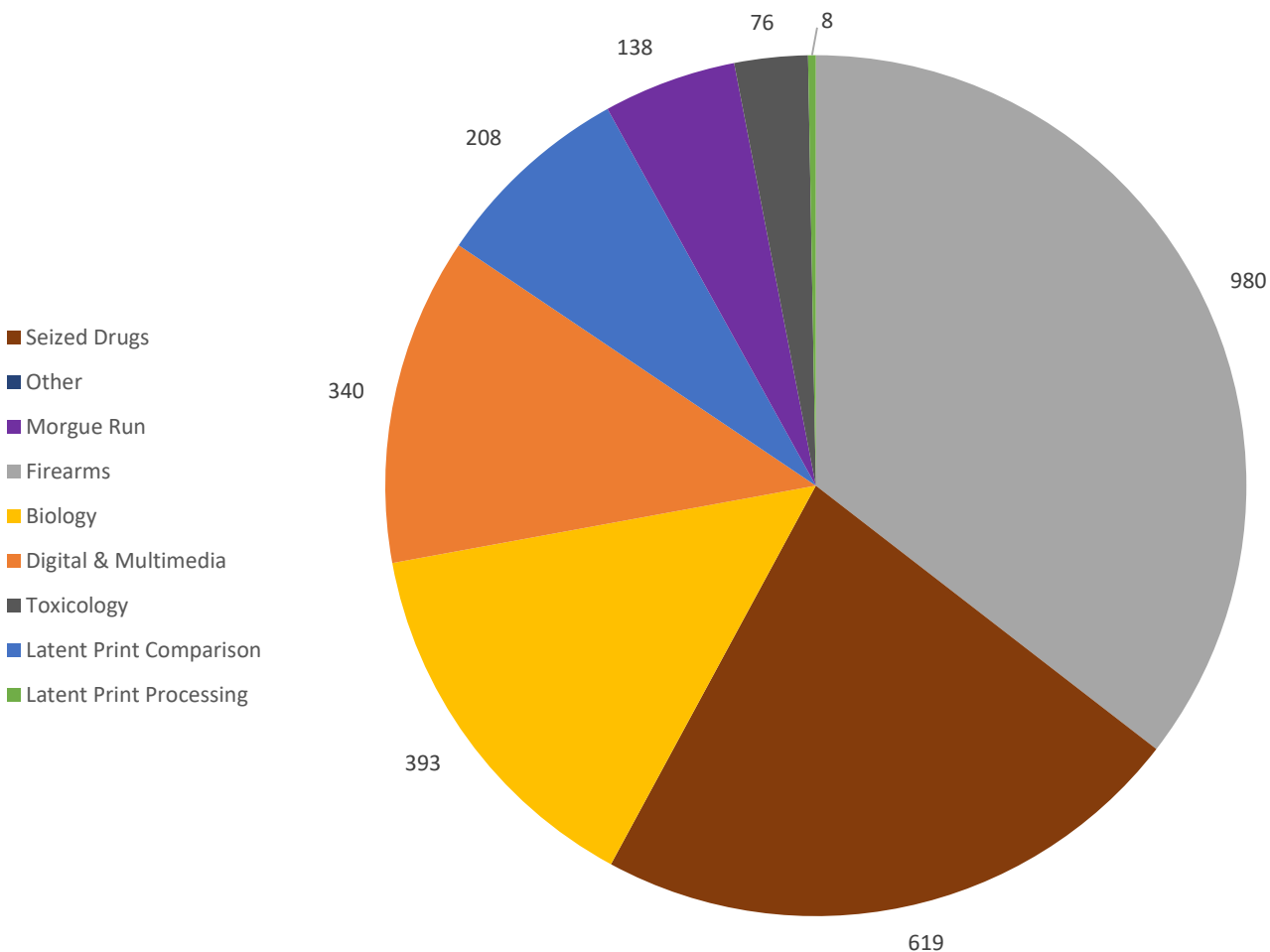
# CS/CM – December

Total Time by Section (Hours)  
See Time Categories by Section slide for breakdown



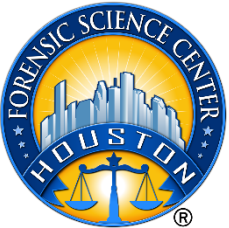
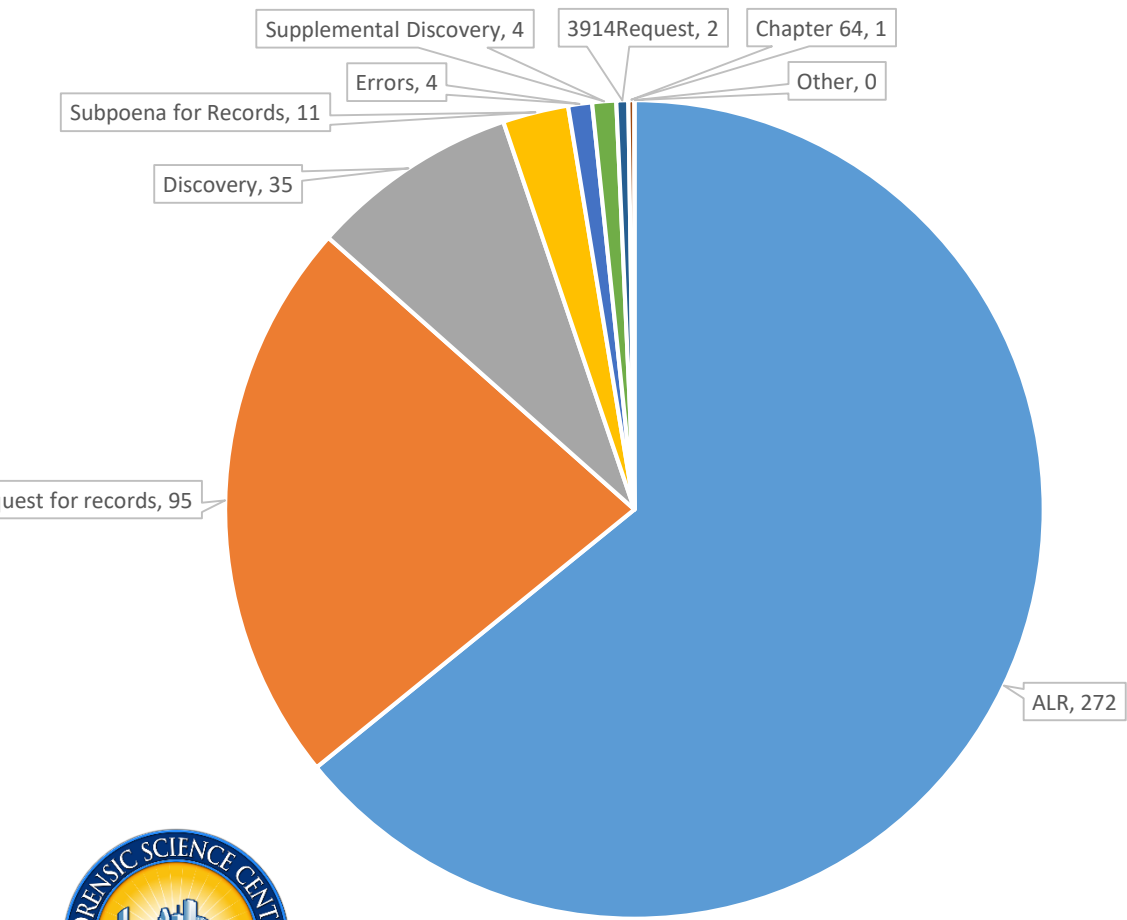
# Evidence Handling

Total Items by Section



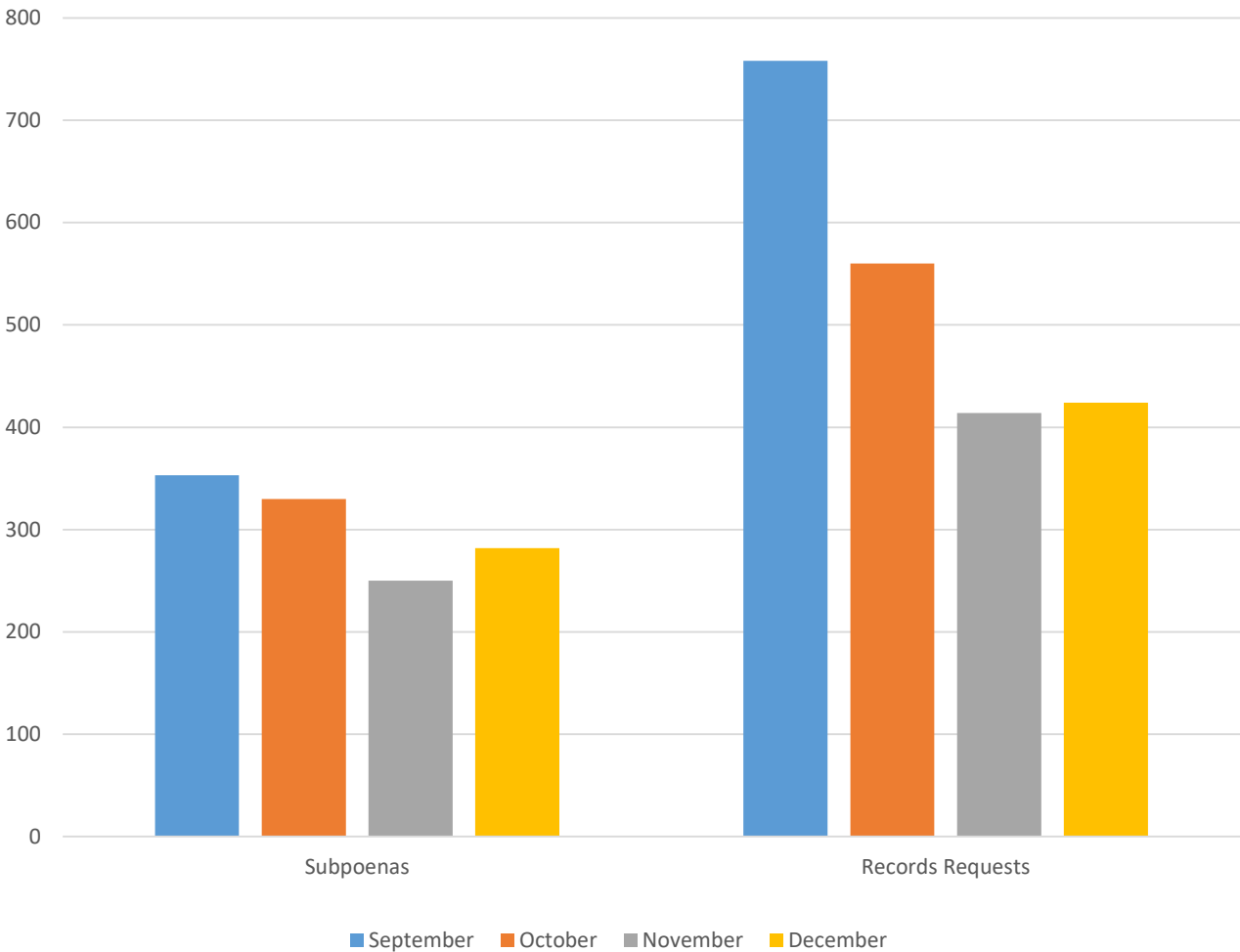
# CS/CM – December

Requests by Type



# Administrative

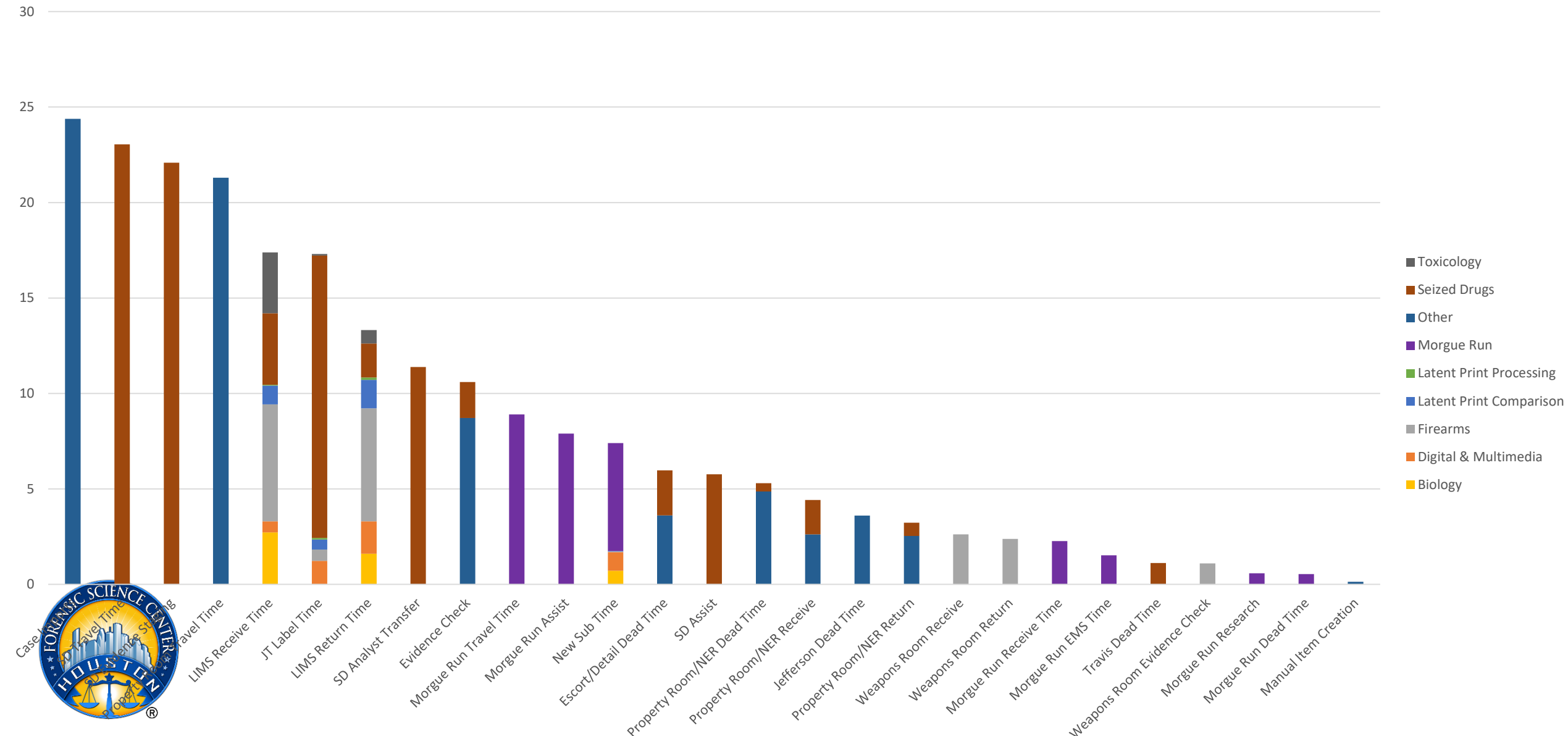
Subpoenas & Record Requests





# Time Categories - December

# Evidence Handling



Service
Priority Type

CSCM Tox Accession
All

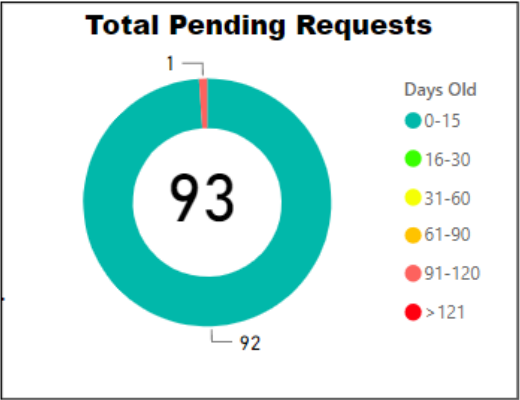
# of Unassigned
25✓
Goal: 150 (+83.33%)

# Pending Draft
2✓
Goal: 3 (+33.33%)

# Pending Admin
67!
Goal: 60 (-11.67%)

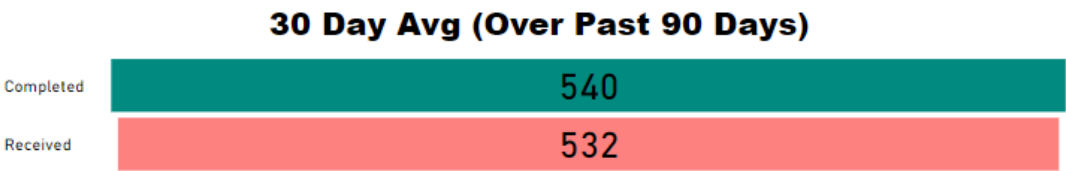
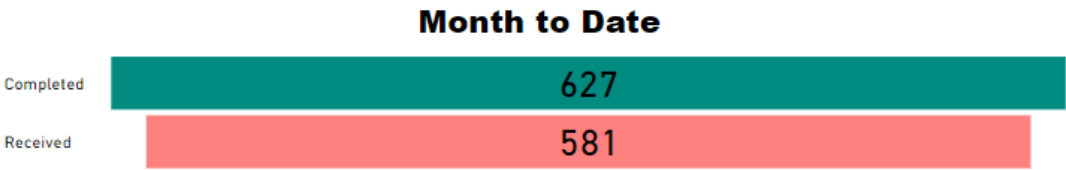
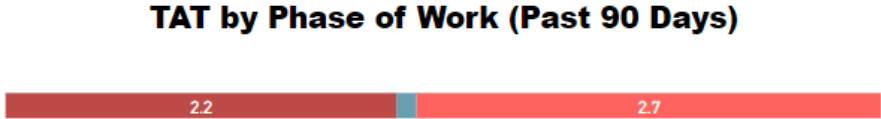
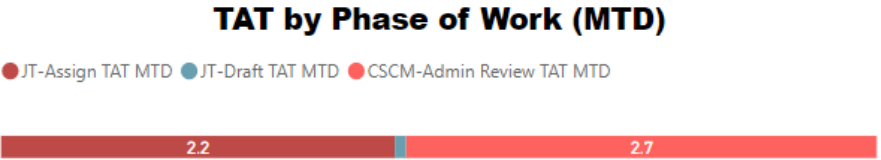
Goal= Threshold for the max # of requests in each bucket

- 1
- Justice Trax Past Critical Age
- 118
- Avg Age of Requests >30 D...
- 1
- Age-Oldest Unassigned
- 8
- Age-Oldest Pending Draft
- 118
- Age-Oldest Pending Tech
- 0
- Age-Oldest Pending Admin



Overall TAT (Month to Date)
5.0✓
Goal: 5, 10

Overall TAT (Past 90 Days)
5.0•
Goal: 5, 10



Open Quality Reports

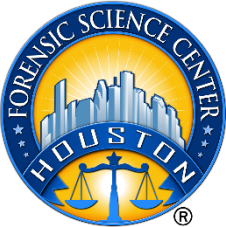
Qualtrax ID	Workflow #	Age
52876		45
55888		1
55940		1

\*Reports without a Workflow Id# are not included in the Avg Age

Quality TAT
25✓
Goal: 30, 31

Avg Age of Open Reports\*
NaN

Quality Filter
Client Services/Case Manag...

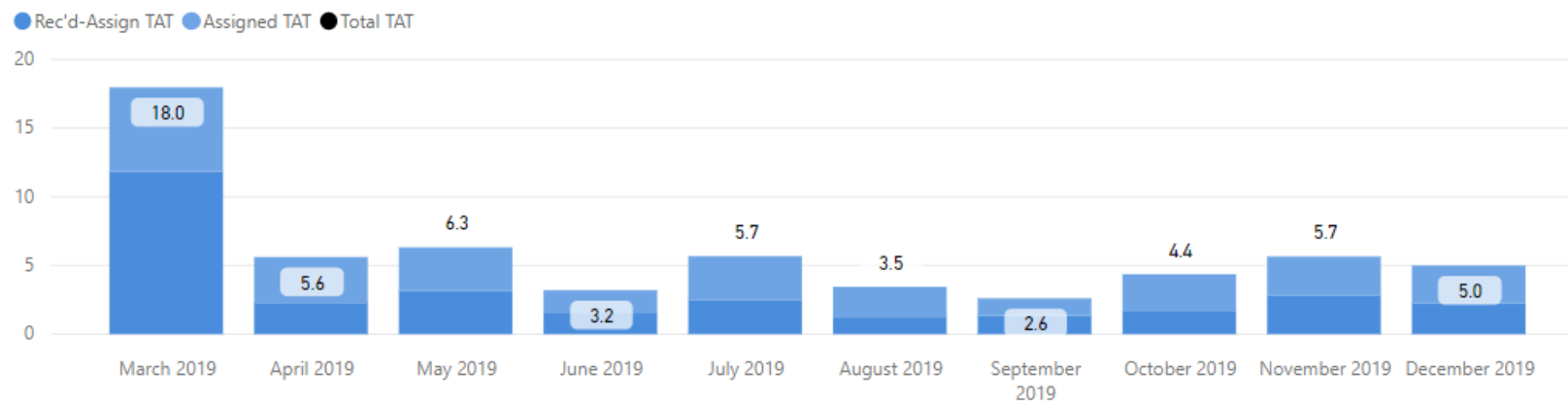


## Date Range

3/1/2019

12/31/2019

## Total TAT by Month



## Request Type

CSCM Tox Accession

Priority Type

All

## Selected Time Frame Averages

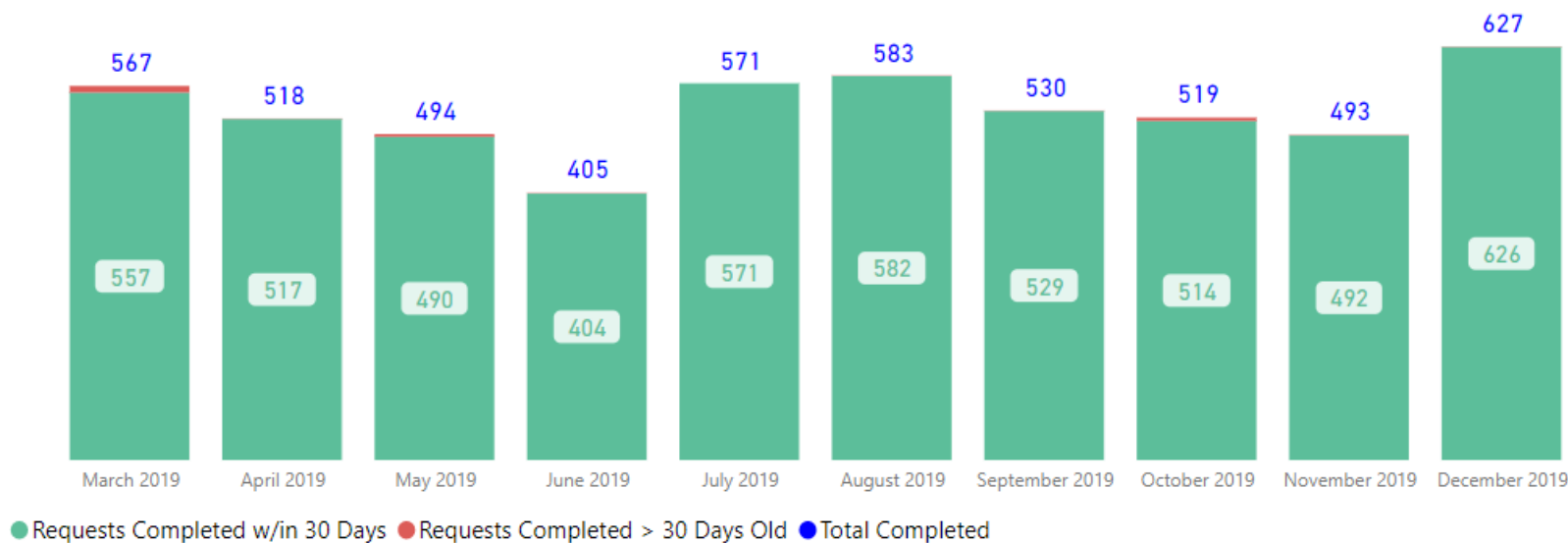
6.09

Total TAT (Rec'd-Compl.) Avg

2.96

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

5307

Requests Completed

25

Requests Completed > 30 Days Old

0.47 %

% Completed > 30 Days Old

Requests more than 30 days old are considered to be backlogged requests

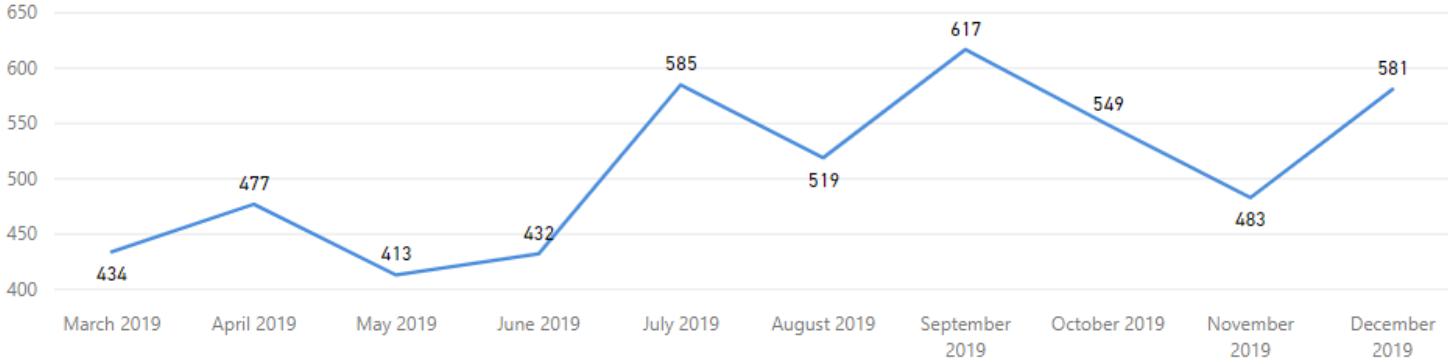


Service  Priority Type



**Received Filter**

**Received by Month**



**Total Received**

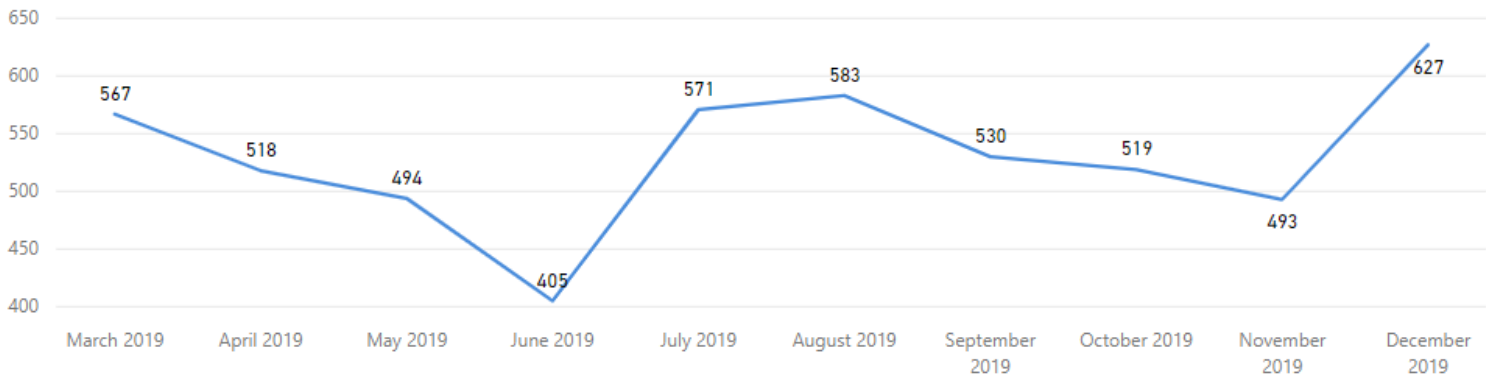
5,090

**Received per Month (Avg)\***

509

**Completed Filter**

**Completed by Month**



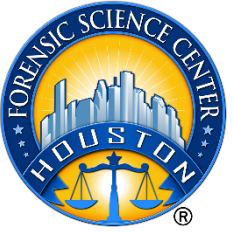
**Total Completed**

5,307

**Completed per Month (Avg)\***

531

\* months with zero activity are not calculated into the average



Service

CSCM Tox Rejection

Priority Type

All

# of Unassigned  # Pending Draft

0✓

Goal: 3 (+100%)

1✓

Goal: 5 (+80%)

# Pending Admin

1✓

Goal: 10 (+90%)

Goal= Threshold for the max # of requests in each bucket

0

Justice Trax Past Critical Age

NaN

Avg Age of Requests &gt;30 D...

0

Age-Oldest Unassigned

8

Age-Oldest Pending Draft

0

Age-Oldest Pending Tech

0

Age-Oldest Pending Admin

## Total Pending Requests



Days Old

0-15

16-30

31-60

61-90

91-120

&gt;121

Overall TAT  
(Month to Date)

2.5✓

Goal: 5, 10

Overall TAT  
(Past 90 Days)

3.3✓

Goal: 5, 10

## TAT by Phase of Work (MTD)

● JT-Assign TAT MTD ● JT-Draft TAT MTD ● CSCM-Admin Review TAT MTD

1.0

1.5

## TAT by Phase of Work (Past 90 Days)

0.6

2.7

## Month to Date

Completed

13

Received

14

## 30 Day Avg (Over Past 90 Days)

Completed

15

Received

15

## Open Quality Reports

Qualtrax ID	Workflow #	Age
52876		45
55888		1
55940		1

\*Reports without a Workflow Id# are not included in the Avg Age

## Quality TAT

25✓

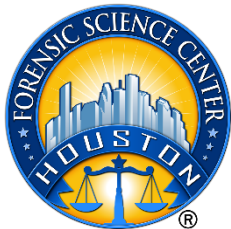
Goal: 30, 31

## Avg Age of Open Reports\*

NaN

Quality Filter

Client Services/Case Manag...



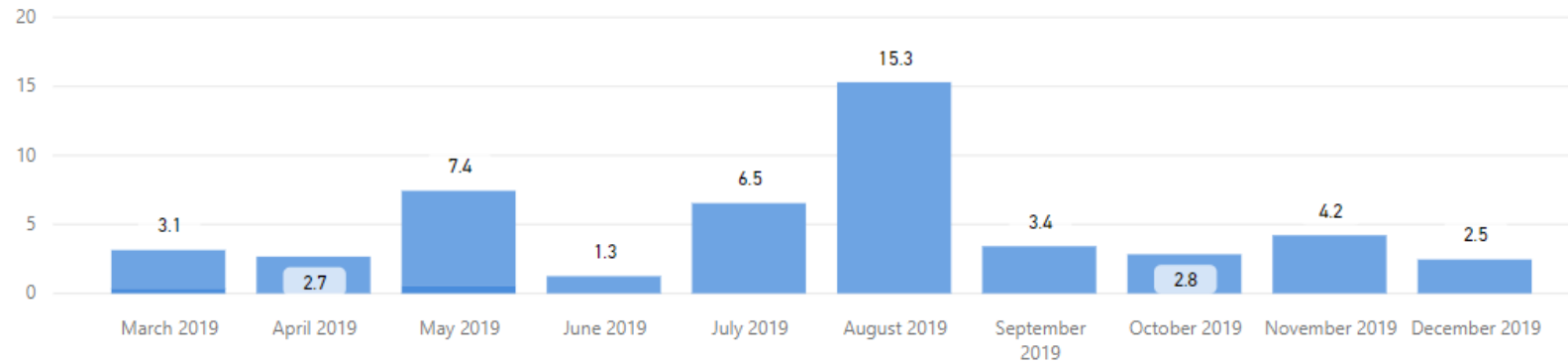
## Date Range

3/1/2019

12/31/2019

## Total TAT by Month

● Rec'd-Assign TAT ● Assigned TAT ● Total TAT



## Request Type

CSCM Tox Rejection

Priority Type

All

## Selected Time Frame Averages

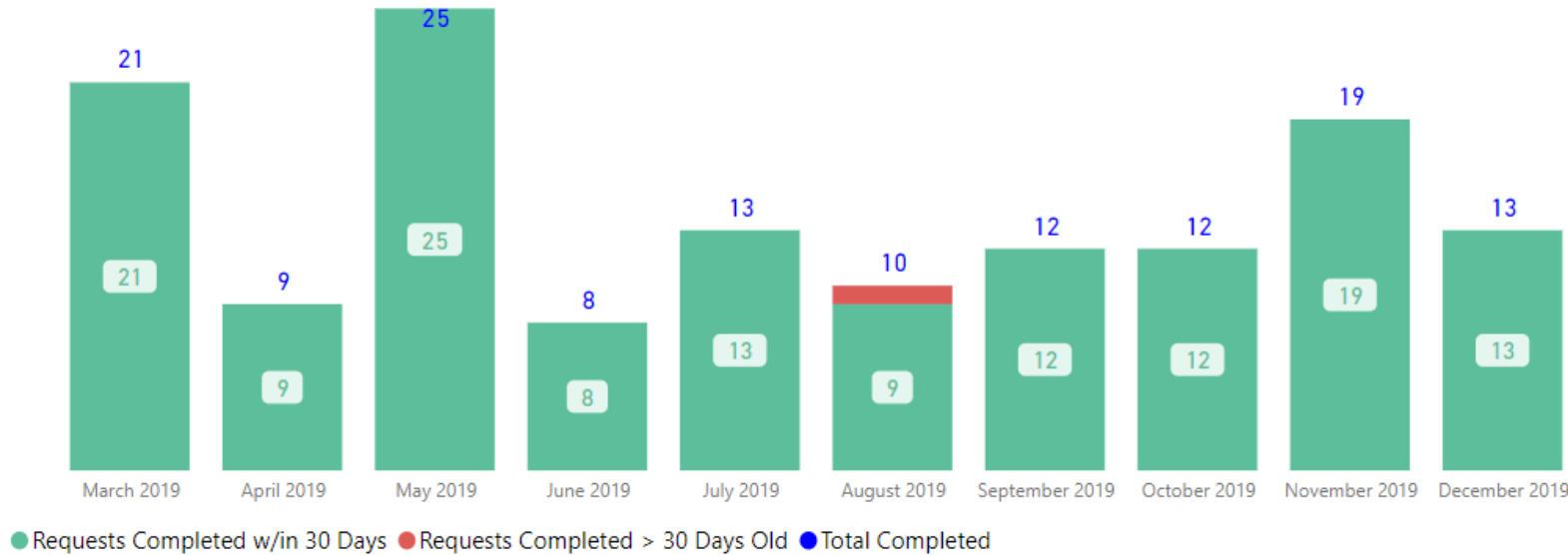
5.01

Total TAT (Rec'd-Compl.) Avg

4.86

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

142

Requests Completed

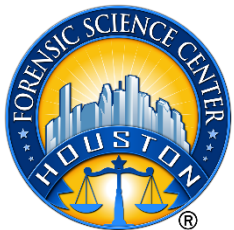
1

Requests Completed > 30 Days Old

0.70 %

% Completed > 30 Days Old

Requests more than 30 days old are considered to be backlogged requests



Service

CSCM Tox Rejection

Priority Type

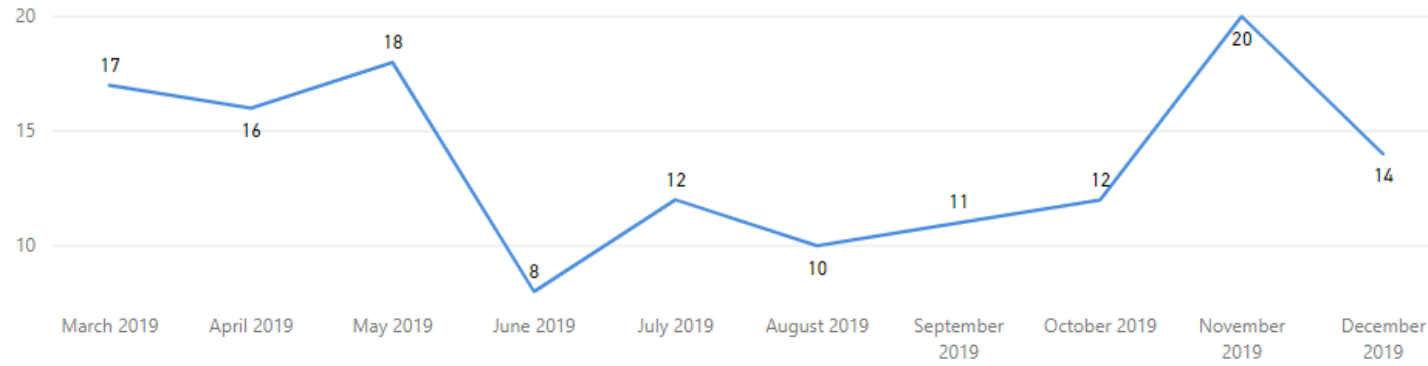
All

### Received Filter

3/1/2019

12/31/2019

### Received by Month



### Total Received

138

### Received per Month (Avg)\*

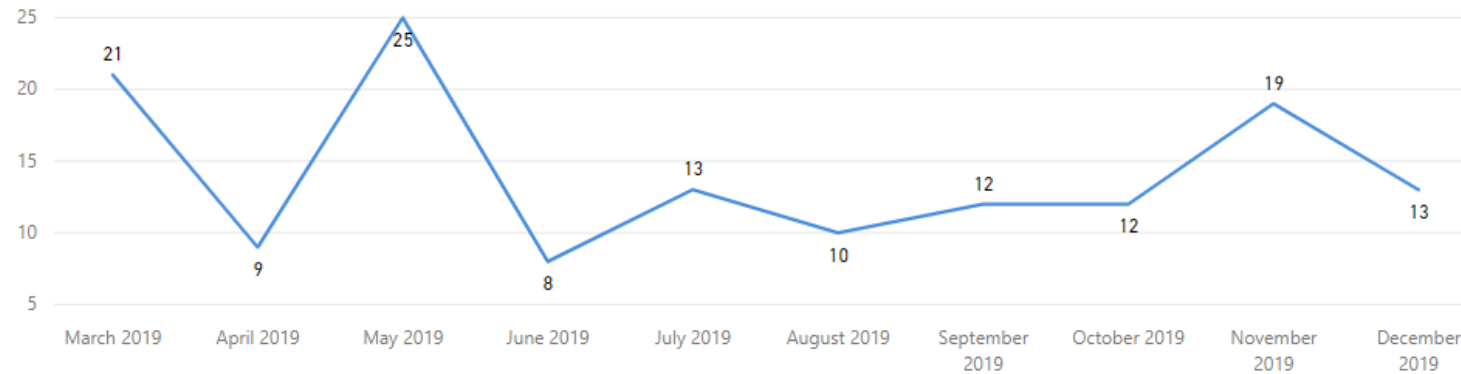
14

### Completed Filter

3/1/2019

12/31/2019

### Completed by Month



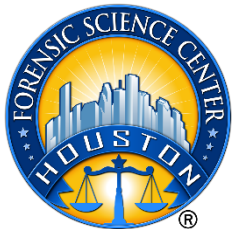
### Total Completed

142

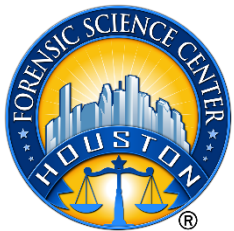
### Completed per Month (Avg)\*

14

\* months with zero activity are not calculated into the average

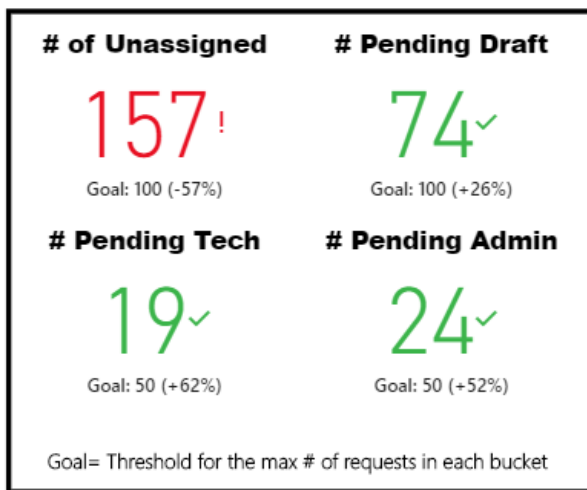


# Seized Drugs

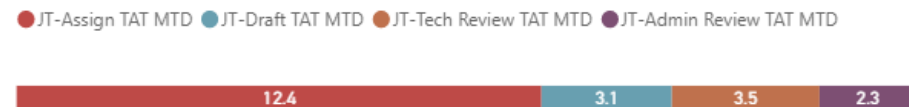
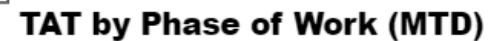
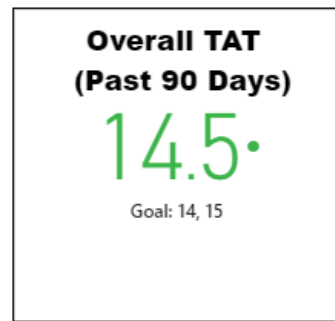
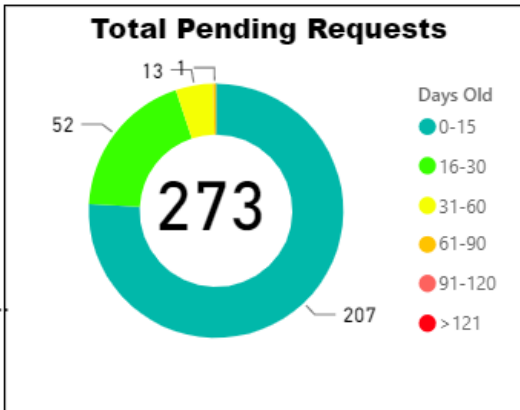




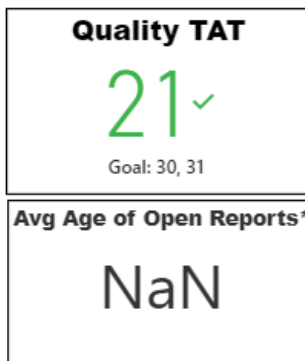
Service: Seized Drugs Examination      Priority Type: All




14	Justice Trax Past Critical Age
44	Avg Age of Requests >30 D...
55	Age-Oldest Unassigned
39	Age-Oldest Pending Draft
76	Age-Oldest Pending Tech
41	Age-Oldest Pending Admin

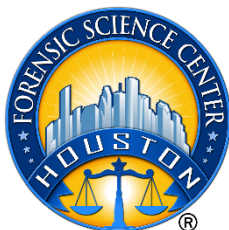
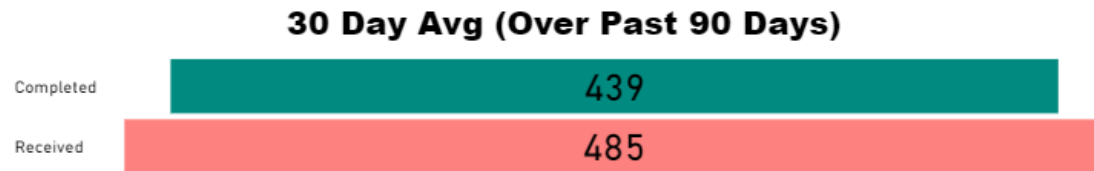
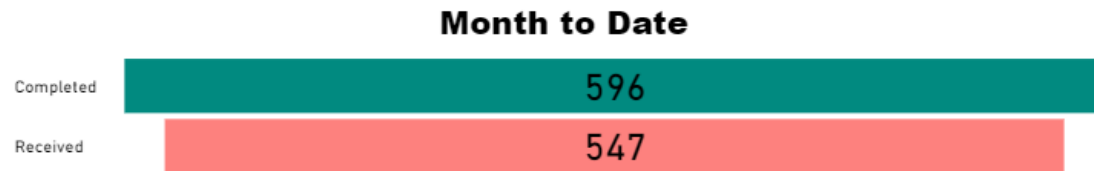


Open Quality Reports		
Qualtrax ID	Workflow #	Age
<p>*Reports without a Workflow Id# are not included in the Avg Age</p>		



Quality Filter

Controlled Substances 

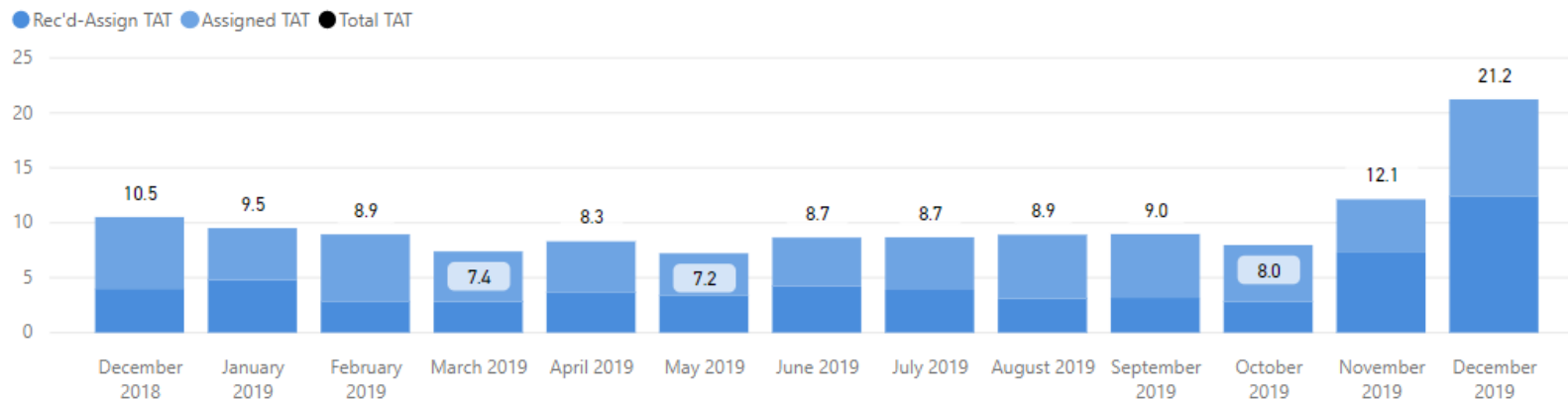


## Date Range

12/1/2018

12/31/2019

## Total TAT by Month



## Request Type

Seized Drugs Examination

Priority Type

All

## Selected Time Frame Averages

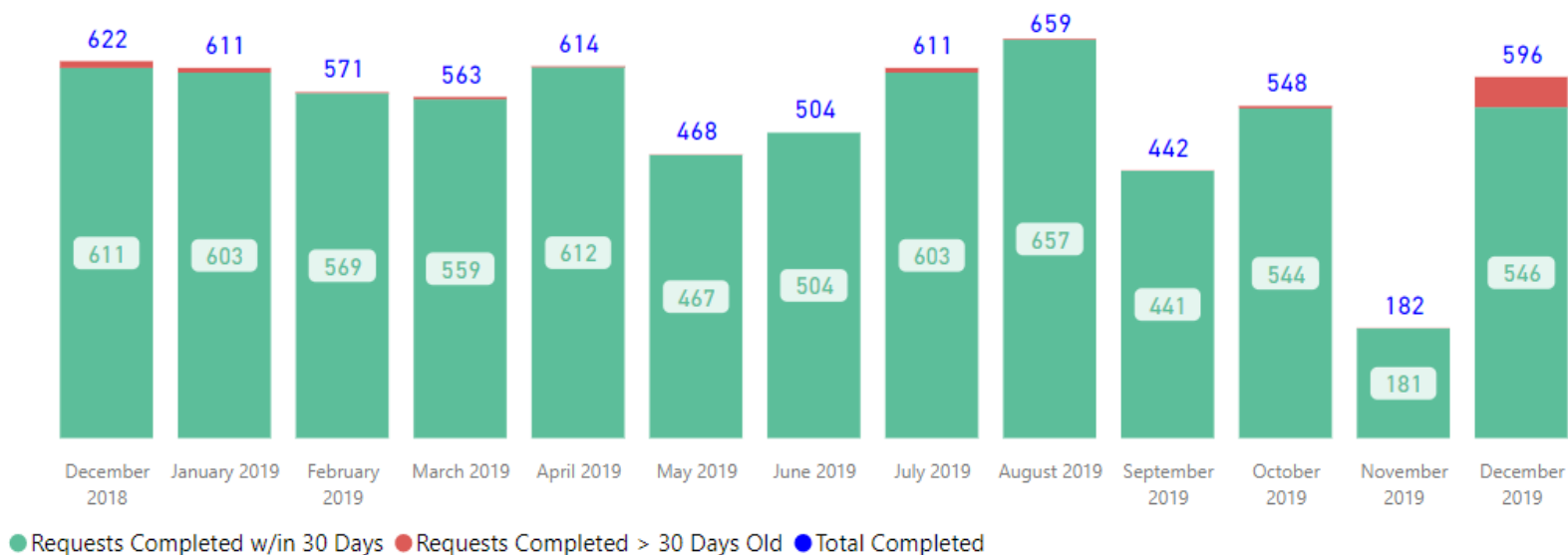
9.85

Total TAT (Rec'd-Compl.) Avg

5.46

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

6991

Requests Completed

94

Requests Completed > 30 Days Old

1.34 %

% Completed > 30 Days Old

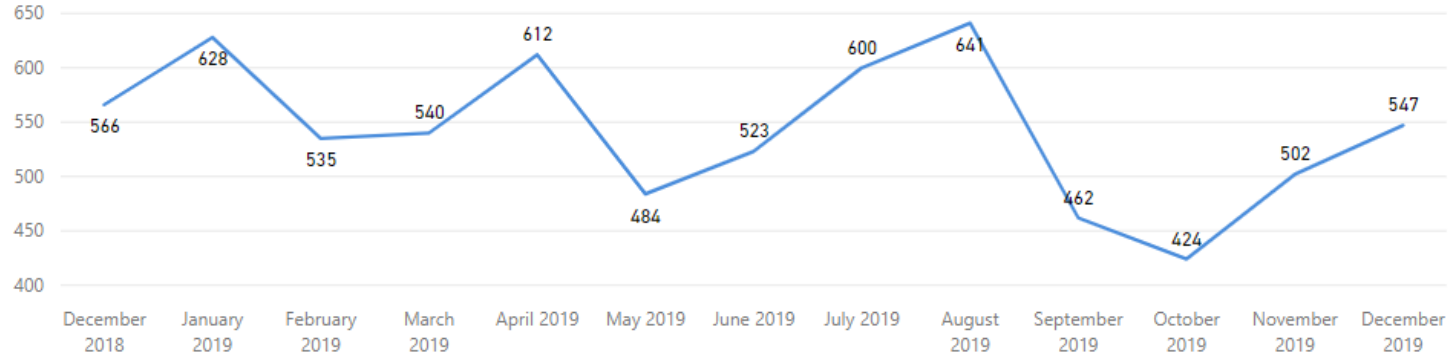
Requests more than 30 days old are considered to be backlogged requests



Service  Priority Type

**Received Filter**

### Received by Month



**Total Received**

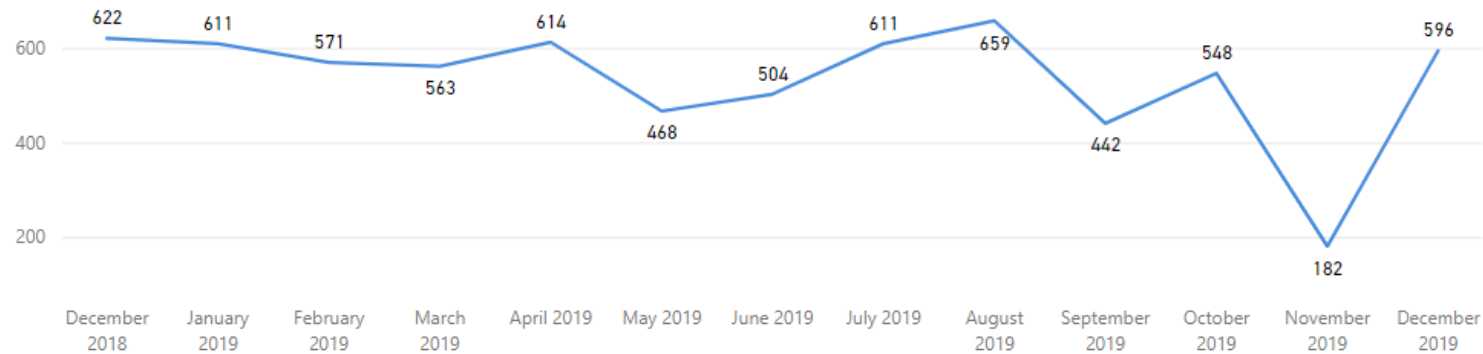
**7,064**

**Received per Month (Avg)\***

**543**

**Completed Filter**

### Completed by Month



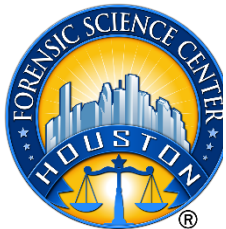
**Total Completed**

**6,991**

**Completed per Month (Avg)\***

**538**

**\* months with zero activity are not calculated into the average**



# Toxicology



Service

Blood Alcohol

Priority Type

All

# of Unassigned

1680!

Goal: 50 (-3260%)

# Pending Draft

79✓

Goal: 120 (+34.17%)

# Pending Tech

73✓

Goal: 90 (+18.89%)

# Pending Admin

80✓

Goal: 90 (+11.11%)

Goal= Threshold for the max # of requests in each bucket

1345

Justice Trax Past Critical Age

72

Avg Age of Requests >30 D...

99

Age-Oldest Unassigned

126

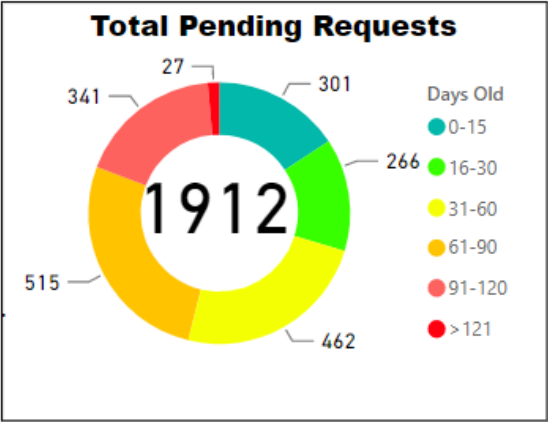
Age-Oldest Pending Draft

126

Age-Oldest Pending Tech

106

Age-Oldest Pending Admin



Overall TAT (Month to Date)

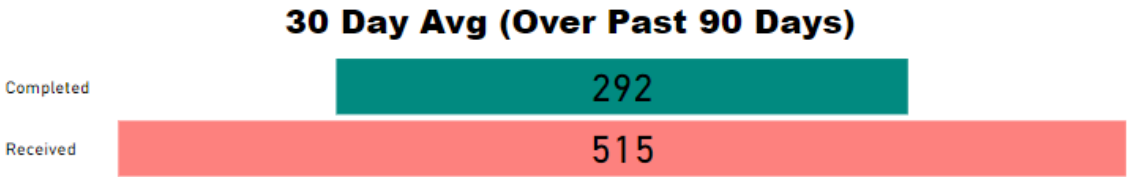
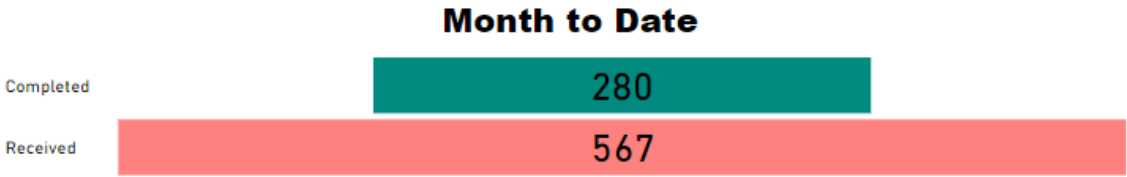
104.7!

Goal: 30, 31

Overall TAT (Past 90 Days)

82.4!

Goal: 30, 31



Open Quality Reports

Qualtrax ID

Workflow #

Age

\*Reports without a Workflow Id# are not included in the Avg Age

Quality TAT

32!

Goal: 30, 31

Avg Age of Open Reports\*

NaN

Quality Filter

Toxicology



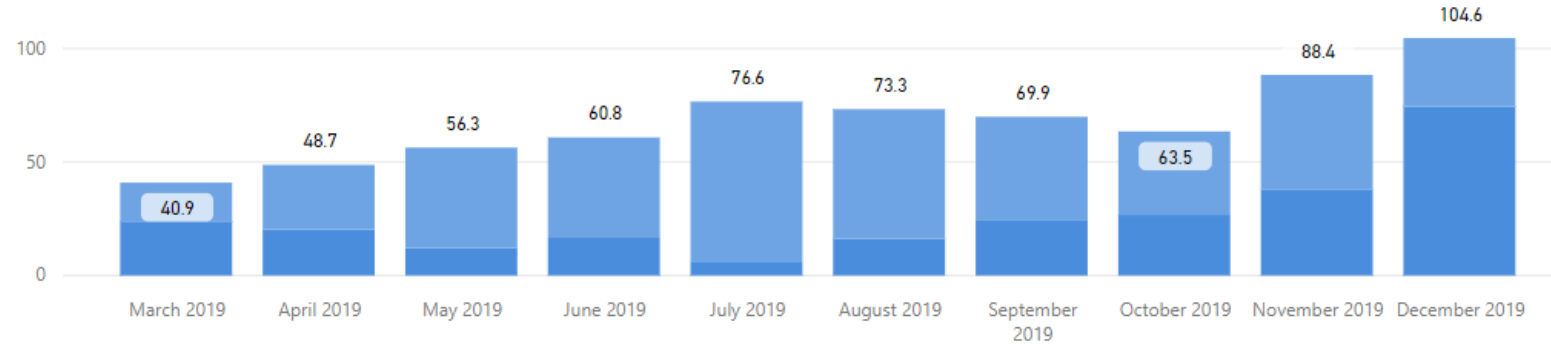
## Date Range

3/1/2019

12/31/2019

## Total TAT by Month

● Rec'd-Assign TAT ● Assigned TAT ● Total TAT



## Request Type

Blood Alcohol

Priority Type

All

## Selected Time Frame Averages

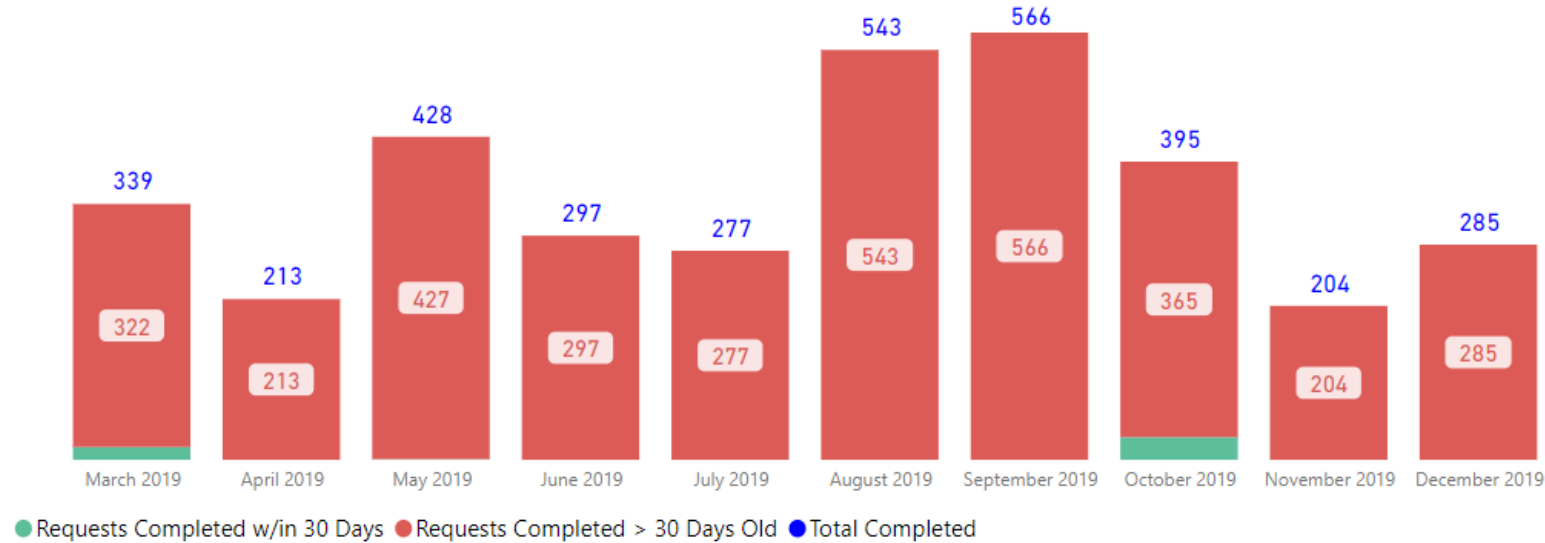
67.64

Total TAT (Rec'd-Compl.) Avg

43.36

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

3547

Requests Completed

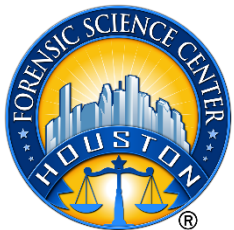
3499

Requests Completed > 30 Days Old

98.65 %

% Completed > 30 Days Old

Requests more than 30 days old are considered to be backlogged requests



Service

Blood Alcohol

Priority Type

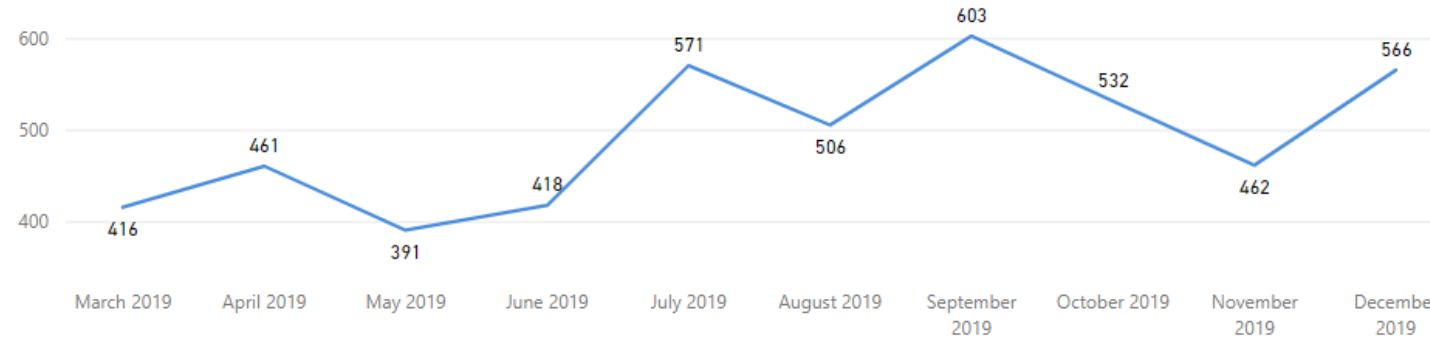
All

### Received Filter

3/1/2019

12/31/2019

### Received by Month



### Total Received

4,926

### Received per Month (Avg)\*

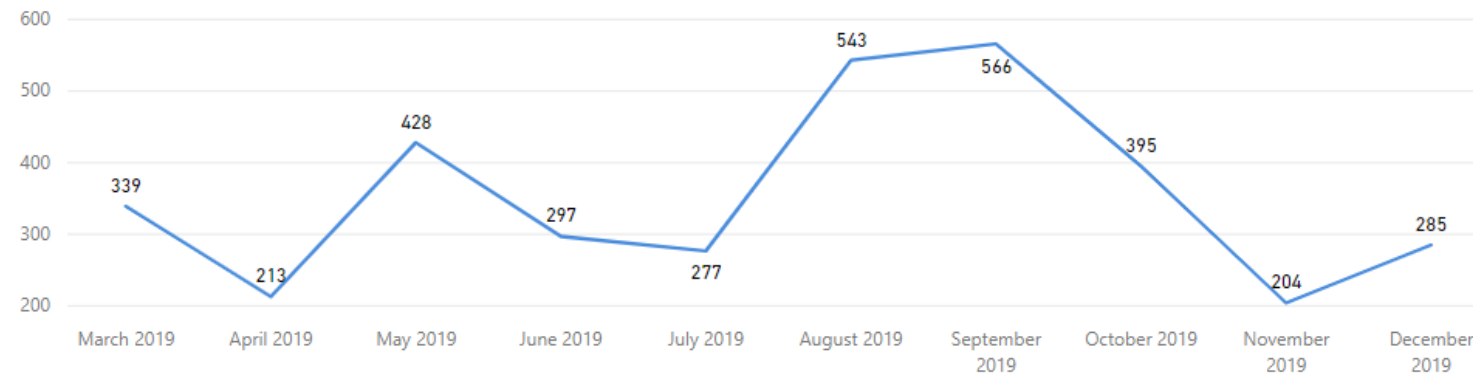
493

### Completed Filter

3/1/2019

12/31/2019

### Completed by Month



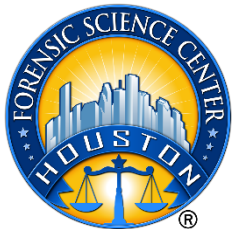
### Total Completed

3,547

### Completed per Month (Avg)\*

355

\* months with zero activity are not calculated into the average



Service

Toxicology

Priority Type

All

# of Unassigned

405!

Goal: 120 (-237.5%)

# Pending Draft

311!

Goal: 30 (-936.67%)

# Pending Tech

12✓

Goal: 30 (+60%)

# Pending Admin

5✓

Goal: 30 (+83.33%)

Goal= Threshold for the max # of requests in each bucket

627

Justice Trax Past Critical Age

101

Avg Age of Requests >30 D...

145

Age-Oldest Unassigned

187

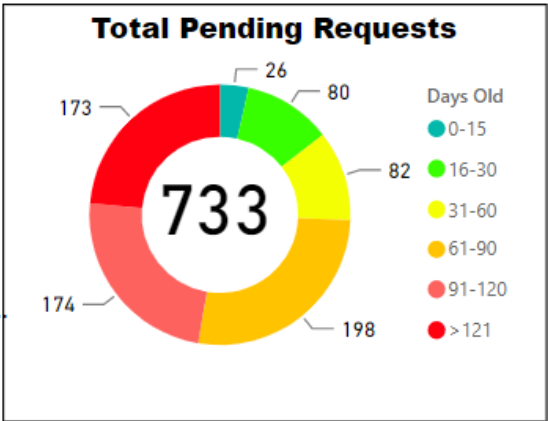
Age-Oldest Pending Draft

117

Age-Oldest Pending Tech

112

Age-Oldest Pending Admin



Overall TAT (Month to Date)

115.8!

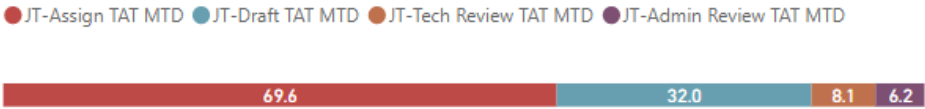
Goal: 90, 91

Overall TAT (Past 90 Days)

119.6!

Goal: 90, 91

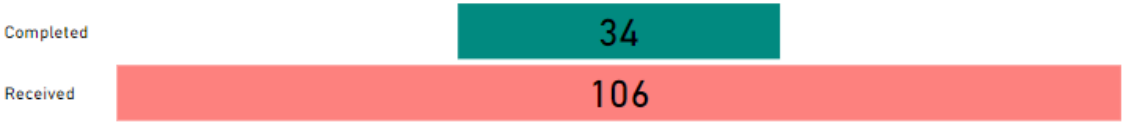
TAT by Phase of Work (MTD)



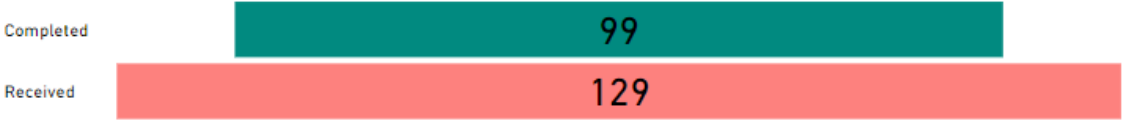
TAT by Phase of Work (Past 90 Days)



Month to Date



30 Day Avg (Over Past 90 Days)



Open Quality Reports

Qualtrax ID

Workflow #

Age

\*Reports without a Workflow Id# are not included in the Avg Age

Quality TAT

32!

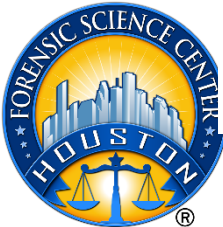
Goal: 30, 31

Avg Age of Open Reports\*

NaN

Quality Filter

Toxicology





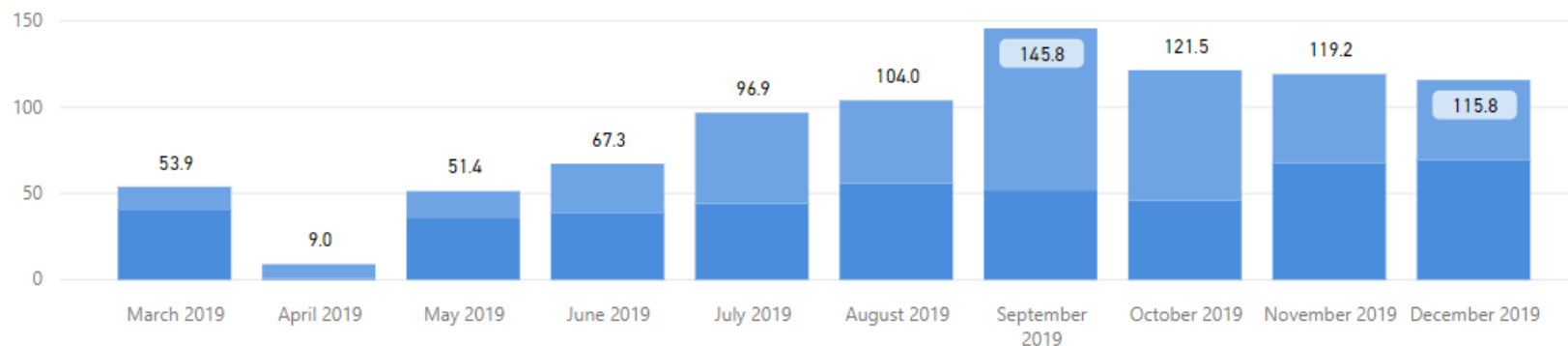
## Date Range

3/1/2019

12/31/2019

## Total TAT by Month

● Rec'd-Assign TAT ● Assigned TAT ● Total TAT



## Request Type

Toxicology

Priority Type

All

## Selected Time Frame Averages

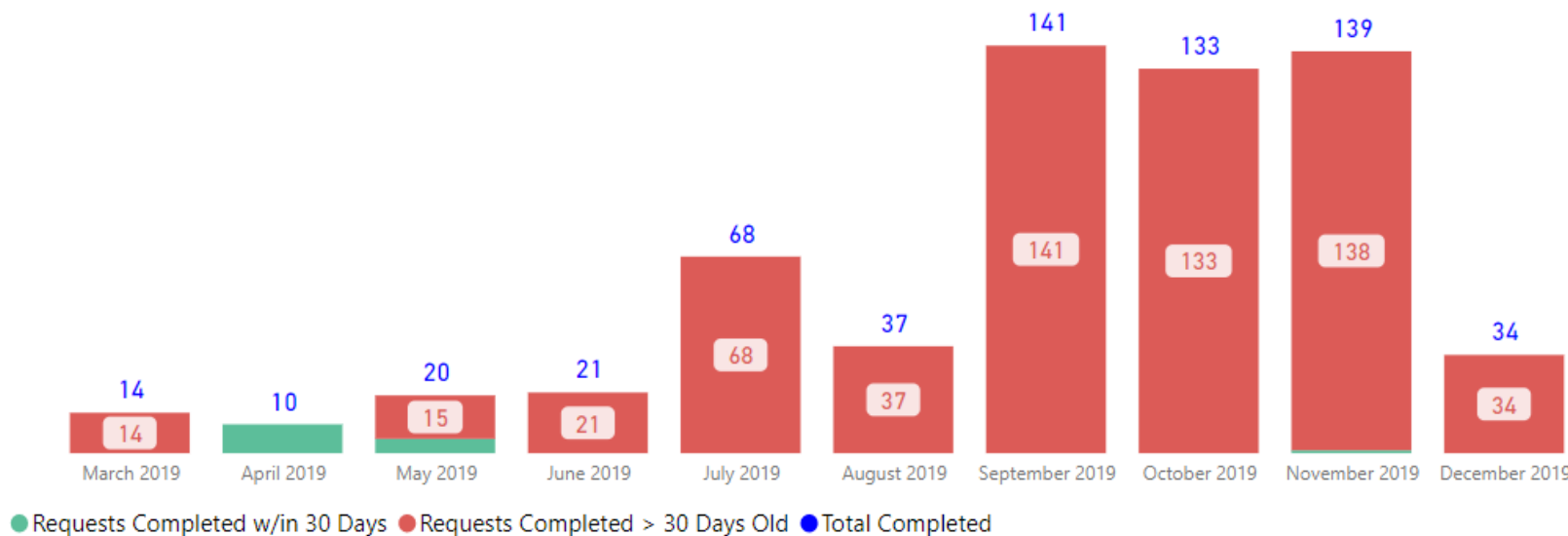
114.98

Total TAT (Rec'd-Compl.) Avg

62.53

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

617

Requests Completed

601

Requests Completed > 30 Days Old

97.41 %

% Completed > 30 Days Old

Requests more than 30 days old are considered to be backlogged requests



Service

Toxicology

Priority Type

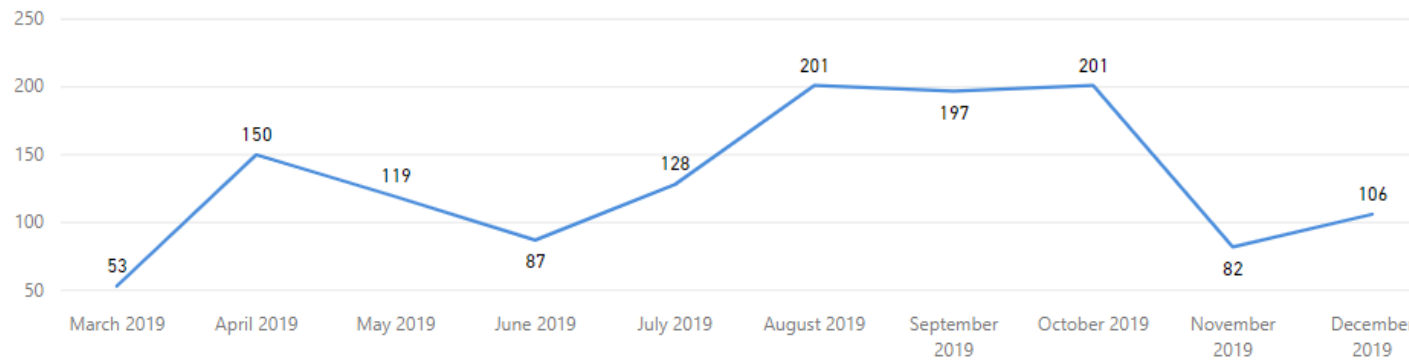
All

## Received Filter

3/1/2019

12/31/2019

## Received by Month



## Total Received

1,324

## Received per Month (Avg)\*

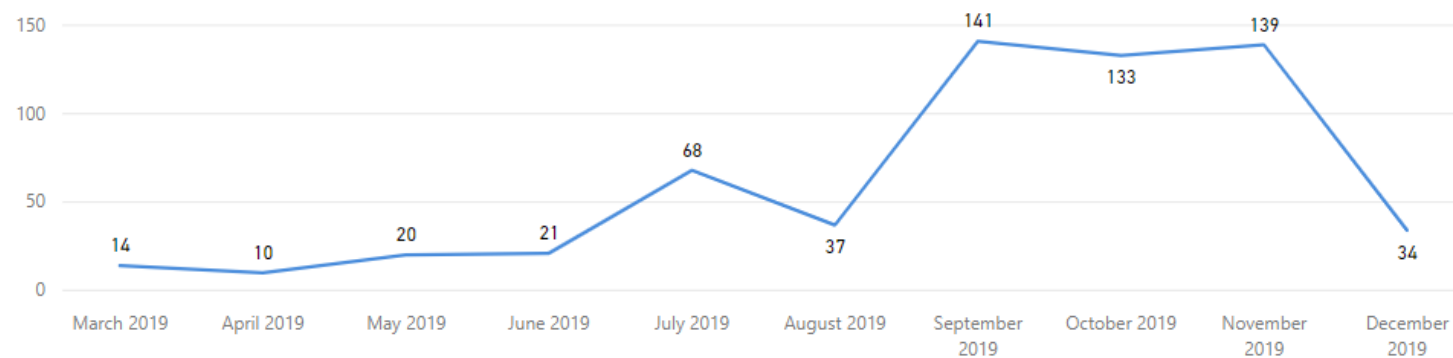
132

## Completed Filter

3/1/2019

12/31/2019

## Completed by Month



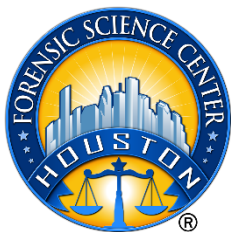
## Total Completed

617

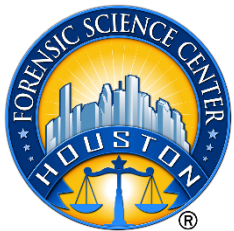
## Completed per Month (Avg)\*

62

\* months with zero activity are not calculated into the average



# Firearms



Service

Firearms Examination

Priority Type

All

# of Unassigned

30!

Goal: 10 (-200%)

# Pending Draft

19!

Goal: 14 (-35.71%)

# Pending Tech

4✓

Goal: 9 (+55.56%)

# Pending Admin

1✓

Goal: 5 (+80%)

Goal= Threshold for the max # of requests in each bucket

21

Justice Trax Past Critical Age

56

Avg Age of Requests &gt;30 D...

47

Age-Oldest Unassigned

84

Age-Oldest Pending Draft

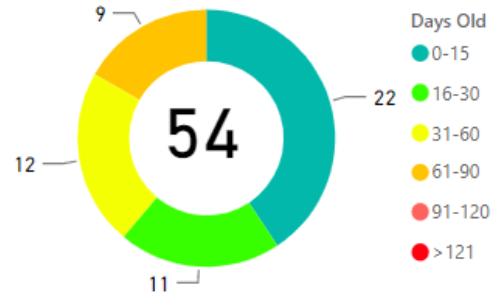
74

Age-Oldest Pending Tech

1

Age-Oldest Pending Admin

## Total Pending Requests

Overall TAT  
(Month to Date)

36.5✓

Goal: 40, 41

Overall TAT  
(Past 90 Days)

28.6✓

Goal: 40, 41

## TAT by Phase of Work (MTD)

● JT-Assign TAT MTD ● JT-Draft TAT MTD ● JT-Tech Review TAT MTD ● JT-Admin Review TAT MTD



## TAT by Phase of Work (Past 90 Days)



## Open Quality Reports

Qualtrax ID	Workflow #	Age
48189		114
53341	2019-086	38
55076	2019-091	13
55662		7
55720		6
55721		6
55764		5

\*Reports without a Workflow Id# are not included in the Avg Age

## Quality TAT

64!

Goal: 30, 31

## Avg Age of Open Reports\*

26

Quality Filter

Firearms

## Month to Date

Completed

27

Received

40

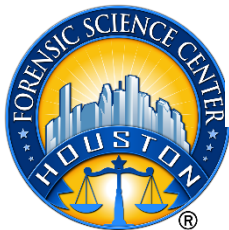
## 30 Day Avg (Over Past 90 Days)

Completed

25

Received

34

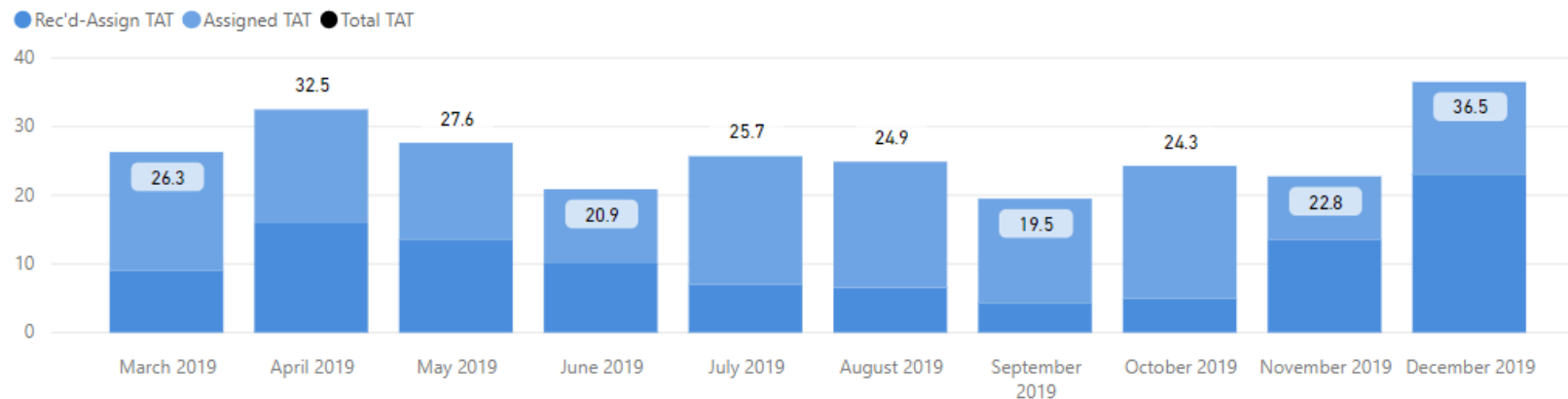


## Date Range

3/1/2019

12/31/2019

## Total TAT by Month



## Request Type

Firearms Examination

Priority Type

All

## Selected Time Frame Averages

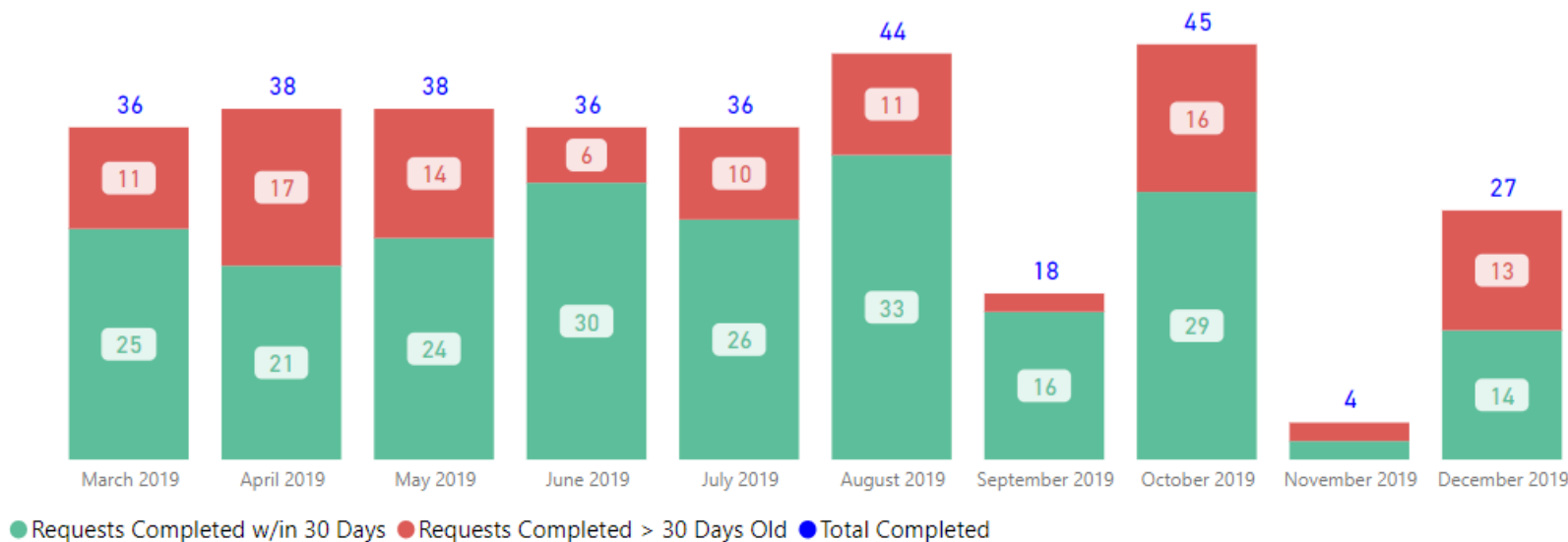
26.48

Total TAT (Rec'd-Compl.) Avg

16.16

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

322

Requests Completed

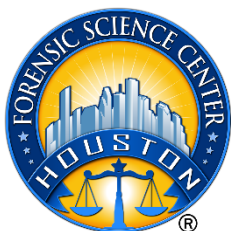
102

Requests Completed > 30 Days Old

31.68 %

% Completed > 30 Days Old

Requests more than 30 days old are considered to be backlogged requests



Service

Firearms Examination

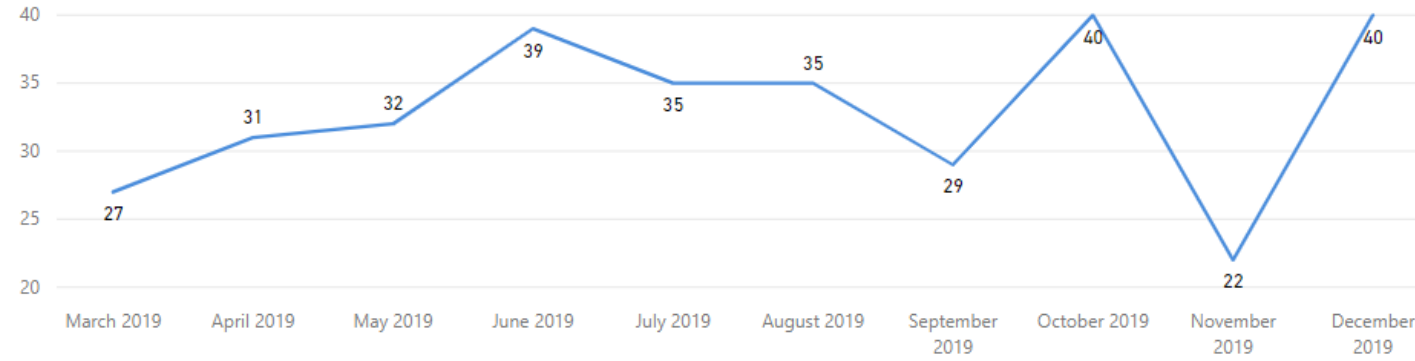
Priority Type

All

### Received Filter

3/1/2019 12/31/2019

### Received by Month



Total Received

330

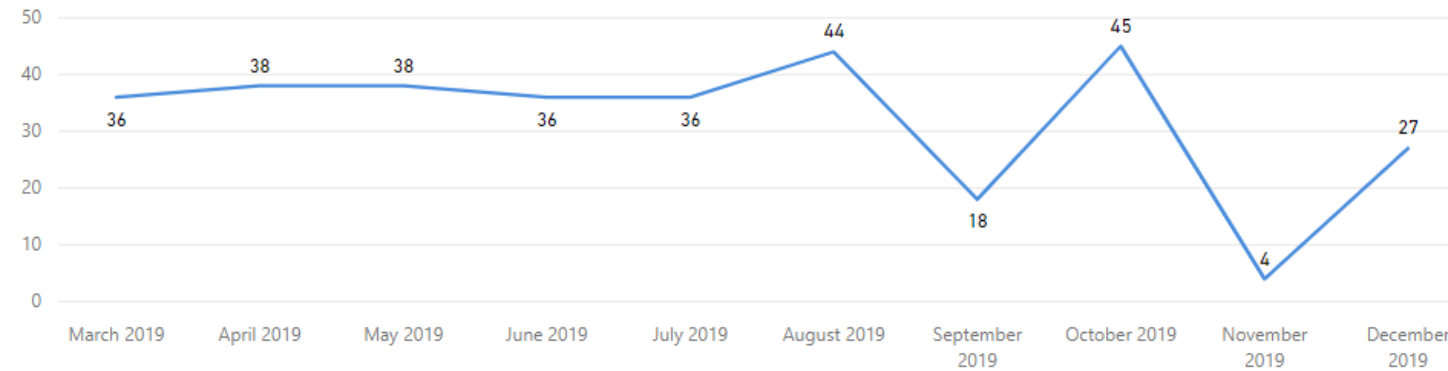
Received per Month (Avg)\*

33

### Completed Filter

3/1/2019 12/31/2019

### Completed by Month



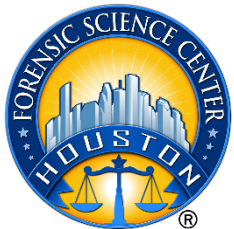
Total Completed

322

Completed per Month (Avg)\*

32

\* months with zero activity are not calculated into the average



Service
Priority Type

NIBIN Only
All

# of Unassigned
78!
Goal: 20 (-290%)

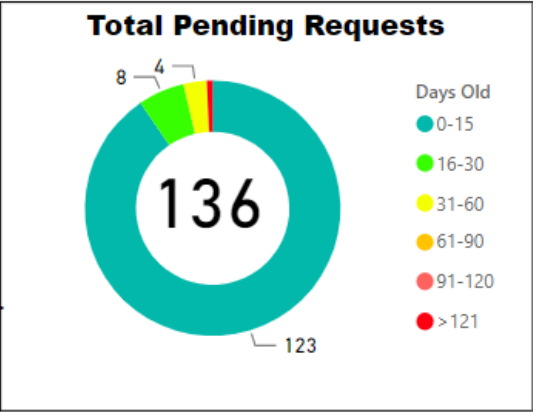
# Pending Draft
28✓
Goal: 35 (+20%)

# Pending Tech
22!
Goal: 20 (-10%)

# Pending Admin
8✓
Goal: 20 (+60%)

Goal= Threshold for the max # of requests in each bucket

- 5
- Justice Trax Past Critical Age
- 62
- Avg Age of Requests >30 D...
- 47
- Age-Oldest Unassigned
- 43
- Age-Oldest Pending Draft
- 28
- Age-Oldest Pending Tech
- 139
- Age-Oldest Pending Admin



Overall TAT (Month to Date)

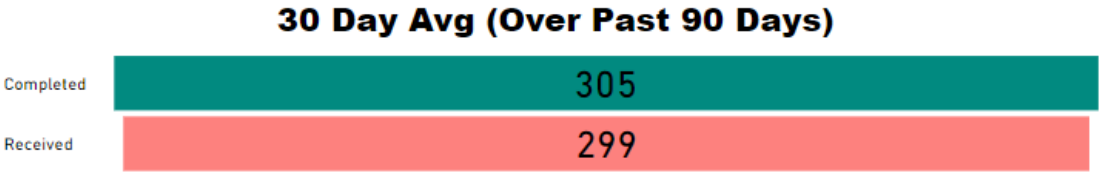
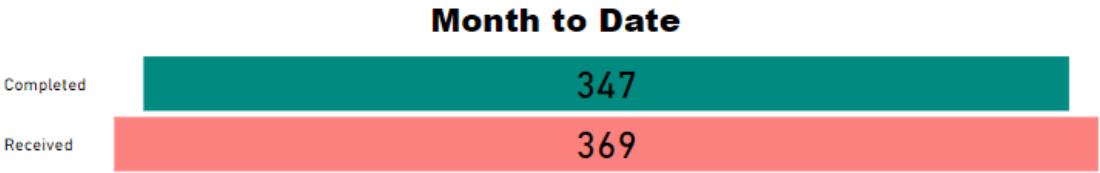
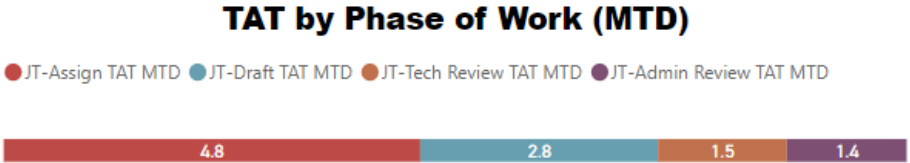
10.5!

Goal: 7, 8

Overall TAT (Past 90 Days)

9.7!

Goal: 7, 8



Open Quality Reports

Qualtrax ID	Workflow #	Age
48189		114
53341	2019-086	38
55076	2019-091	13
55662		7
55720		6
55721		6
55764		5

\*Reports without a Workflow Id# are not included in the Avg Age

Quality TAT

64!

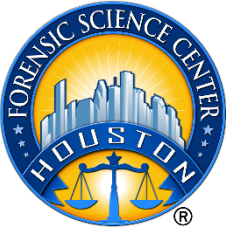
Goal: 30, 31

Avg Age of Open Reports\*

26

Quality Filter

Firearms



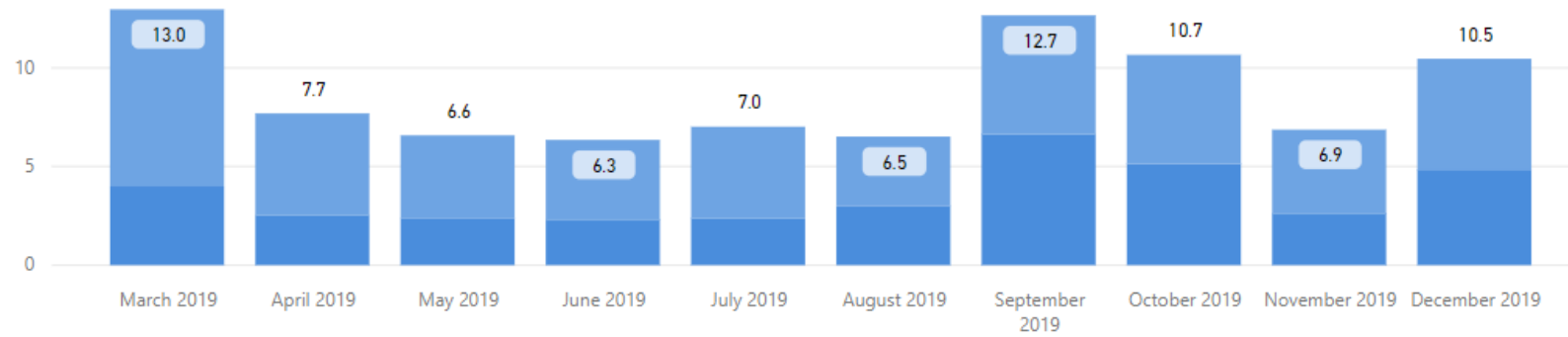
## Date Range

3/1/2019

12/31/2019

## Total TAT by Month

● Rec'd-Assign TAT ● Assigned TAT ● Total TAT



## Request Type

NIBIN Only

Priority Type

All

## Selected Time Frame Averages

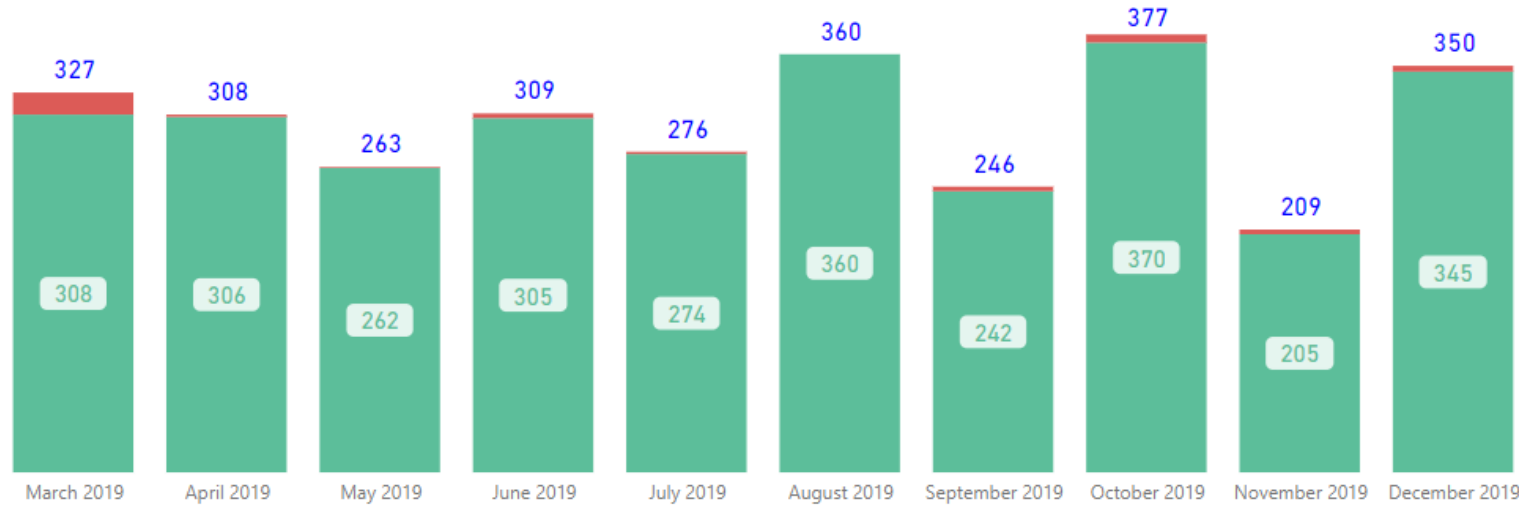
8.86

Total TAT (Rec'd-Compl.) Avg

5.25

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



● Requests Completed w/in 30 Days ● Requests Completed > 30 Days Old ● Total Completed

## Received to Complete

3025

Requests Completed

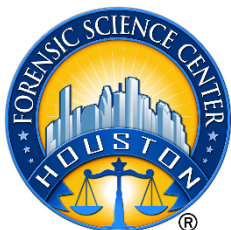
48

Requests Completed > 30 Days Old

1.59 %

% Completed > 30 Days Old

Requests more than 30 days old are considered to be backlogged requests





Service

NIBIN Only

Priority Type

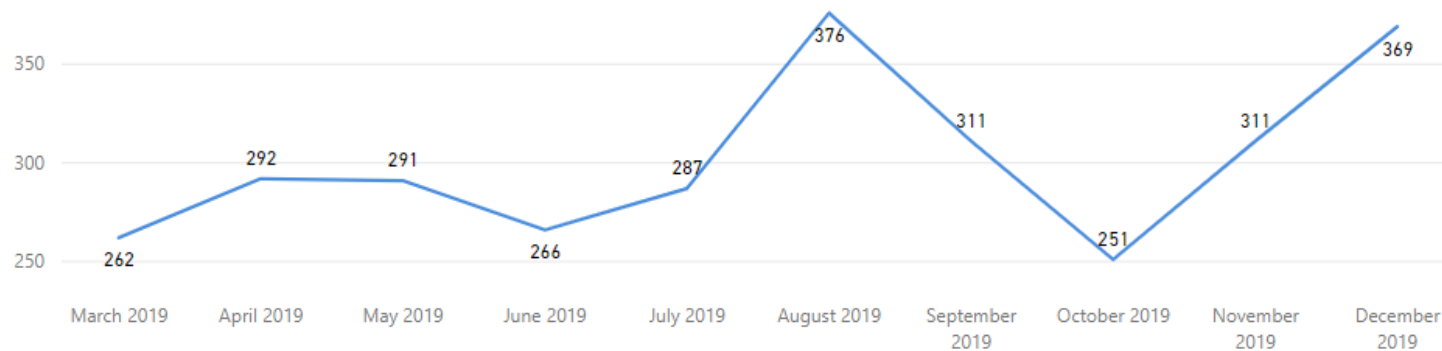
All

## Received Filter

3/1/2019

12/31/2019

## Received by Month



## Total Received

3,016

## Received per Month (Avg)\*

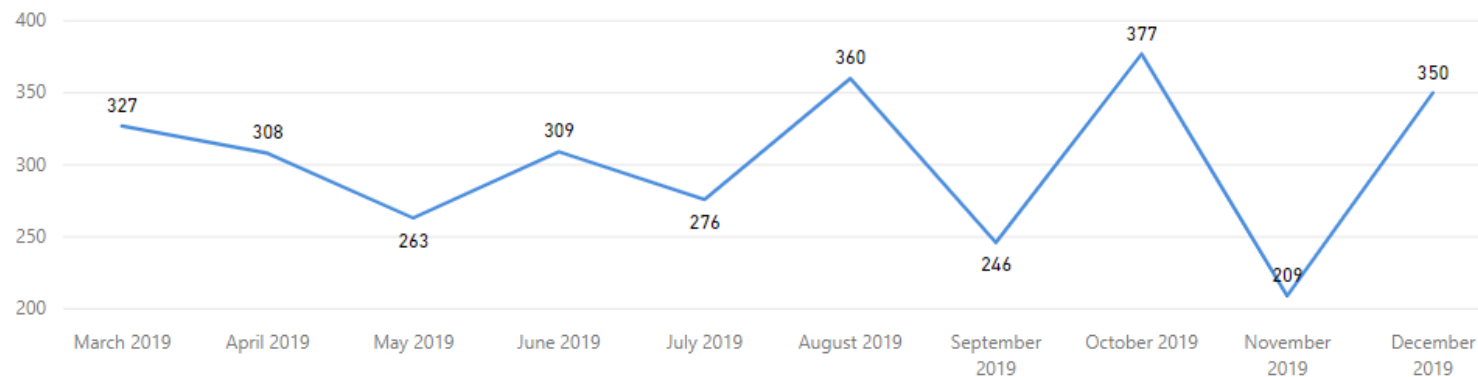
302

## Completed Filter

3/1/2019

12/31/2019

## Completed by Month



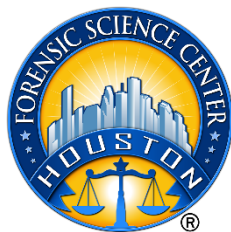
## Total Completed

3,025

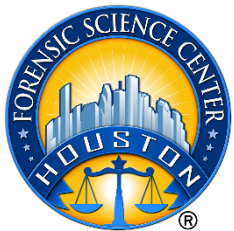
## Completed per Month (Avg)\*

303

\* months with zero activity are not calculated into the average



# Forensic Biology



Section

DNA

Request Type

All

# of Unassigned

2✓

Goal: 20 (+90%)

# Pending Draft

170!

Goal: 24 (-608.33%)

# Pending Tech

36!

Goal: 24 (-50%)

# Pending Admin

11✓

Goal: 20 (+45%)

Goal= Threshold for the max # of requests in each bucket

247

Past Critical Age

131

Avg Age of Reqeusts >30 ...

278

Age-Oldest Unassigned PL

993

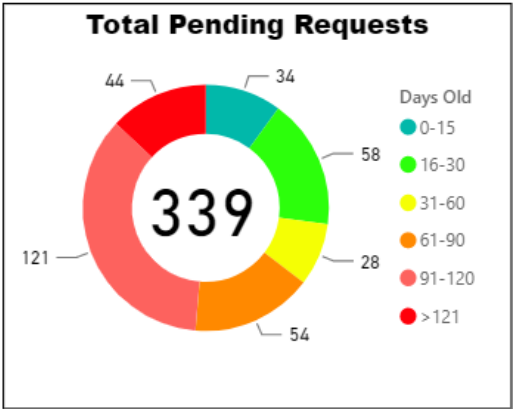
Age-Oldest Pending Draft...

2056

Age-Oldest Pending Tech ...

235

Age-Oldest Pending Adm...



Overall TAT  
(Month to Date)

98.3!

Goal: 30, 31

Overall TAT  
(Past 90 Days)

81.7!

Goal: 30, 31

TAT by Phase of Work (MTD)

PL-Assign TAT MTD

PL-Draft TAT MTD

PL-Tech Review TAT MTD

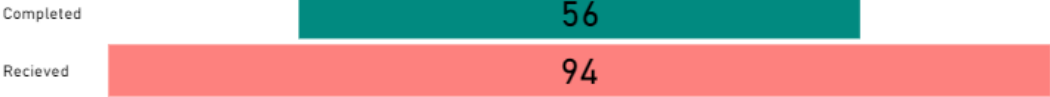
PL-Admin Review TAT MTD



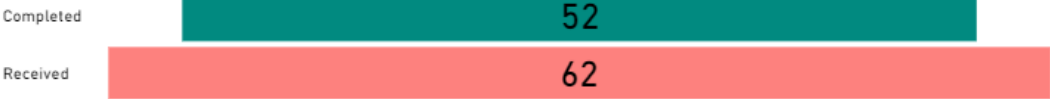
TAT by Phase of Work (Past 90 Days)



Month to Date



30 Day Avg (Over Past 90 Days)



Open Quality Reports

Qualtrax ID	Workflow #	Age
33435	2018-085	332
34624	2018-094	314
47766	2019-043	121
48832	2019-057	103
49434	2019-IA-13	96
49435	2019-IA-14	96
49436	2019-IA-15	96

\*Reports without a Workflow Id# are not included in the Avg Age

Quality TAT

44!

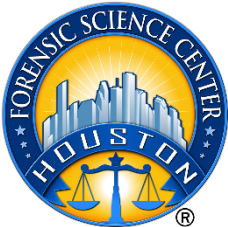
Goal: 40, 41

Avg Age of Open Reports\*

119

Quality Filter

Biology/DNA



Section

DNA

Request Type

SAK

# of Unassigned

0✓

Goal: 20 (+100%)

# Pending Draft

82!

Goal: 24 (-241.67%)

# Pending Tech

12✓

Goal: 24 (+50%)

# Pending Admin

2✓

Goal: 20 (+90%)

Goal= Threshold for the max # of requests in each bucket

94

Past Critical Age

123

Avg Age of Reqeusts &gt;30 ...

0

Age-Oldest Unassigned PL

993

Age-Oldest Pending Draft...

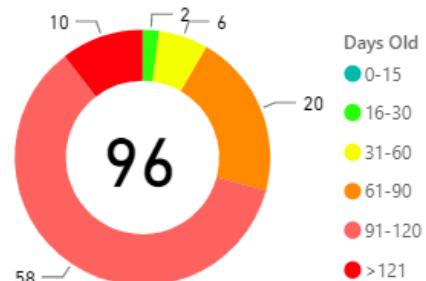
137

Age-Oldest Pending Tech ...

133

Age-Oldest Pending Adm...

## Total Pending Requests

Overall TAT  
(Month to Date)

106.9!

Goal: 30, 31

Overall TAT  
(Past 90 Days)

82.2!

Goal: 30, 31

## TAT by Phase of Work (MTD)

● PL-Assign TAT MTD ● PL-Draft TAT MTD ● PL-Tech Review TAT MTD ● PL-Admin Review TAT MTD

79.8

13.3

14.3

## TAT by Phase of Work (Past 90 Days)

61.3

12.7

8.8

## Month to Date

Completed

26

Recieved

2

## 30 Day Avg (Over Past 90 Days)

Completed

18

Received

10

## Open Quality Reports

Qualtrax ID	Workflow #	Age
33435	2018-085	332
34624	2018-094	314
47766	2019-043	121
48832	2019-057	103
49434	2019-IA-13	96
49435	2019-IA-14	96
49436	2019-IA-15	96

\*Reports without a Workflow Id# are not included in the Avg Age

## Quality TAT

44!

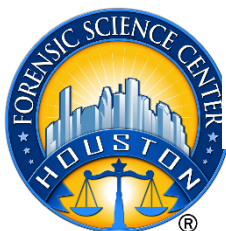
Goal: 40, 41

## Avg Age of Open Reports\*

119

Quality Filter

Biology/DNA



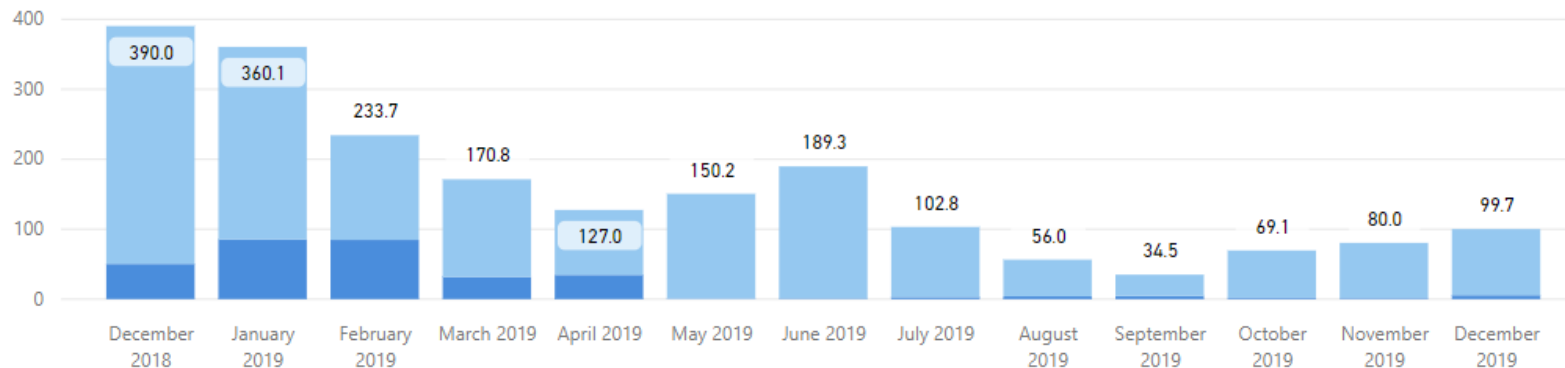
## Date Range

12/1/2018

12/31/2019

## Total TAT by Month

● Rec'd-Assign TAT ● Assigned TAT ● Total TAT



## Request Type

DNA

Request Type

All

## Selected Time Frame Averages

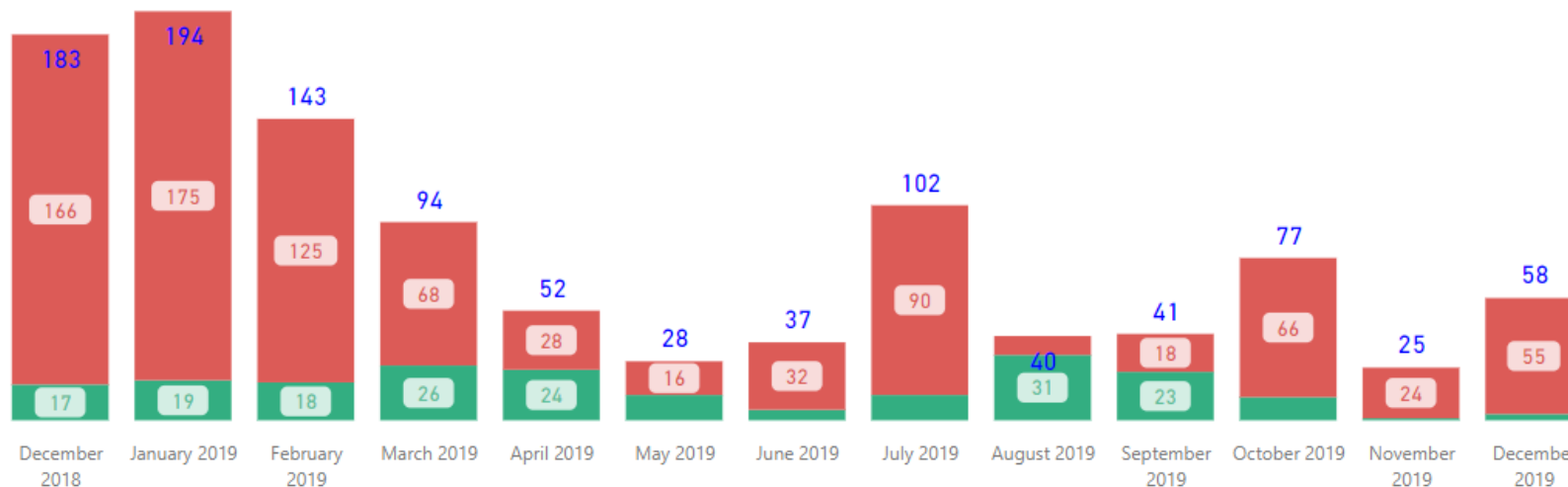
219.51

Total TAT (Rec'd-Compl.) Avg

179.12

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



● Requests Completed w/in 30 Days ● Requests Completed >30 Days Old ● Total Completed

## Received to Complete

1074

Requests Completed

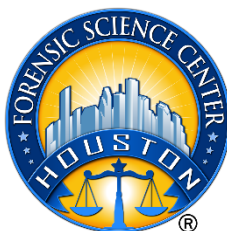
872

Requests Completed > 30 Days

81.19 %

% Completed > 30 Days

Requests more than 30 days old are considered to be backlogged requests



Section

DNA

Request Type

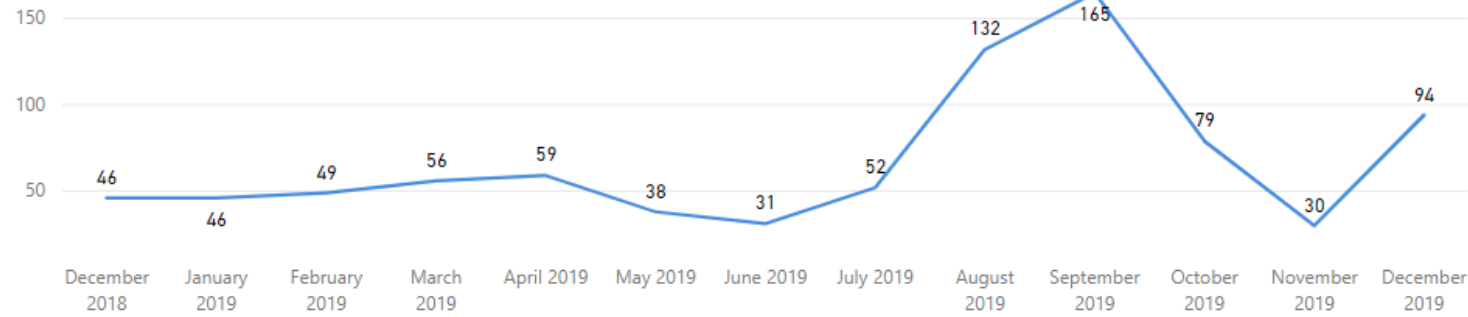
All

## Received Filter

12/1/2018

12/31/2019

## Received by Month



## Total Received

877

## Received per Month (Avg)\*

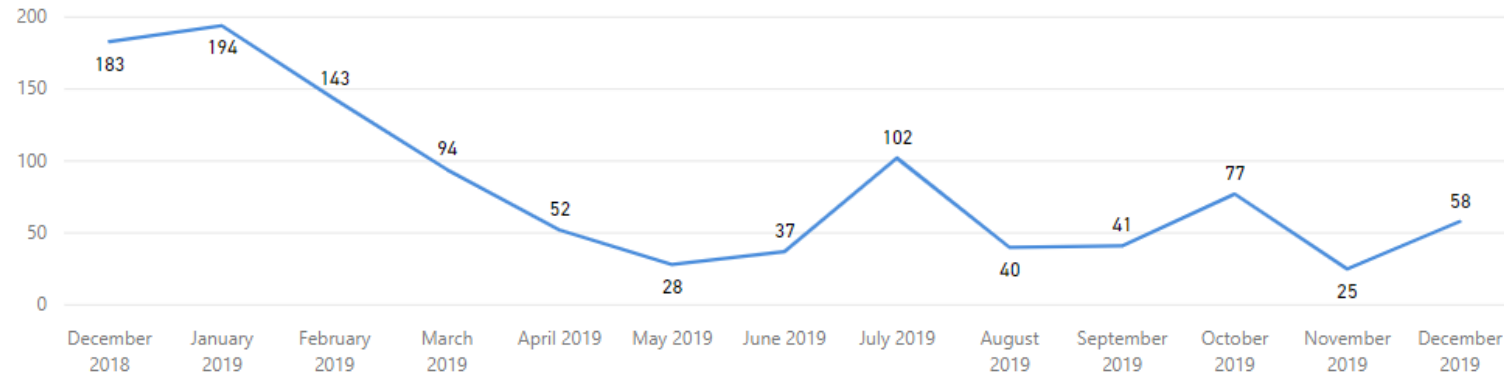
67

## Completed Filter

12/1/2018

12/31/2019

## Completed by Month



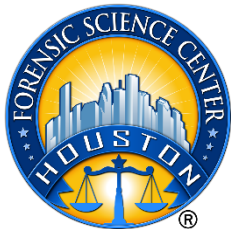
## Total Completed

1074

## Completed per Month (Avg)\*

83

\* months with zero activity are not calculated into the average



# Forensic Biology-Outsourcing

Total Cases Shipped

**1741**

Cases Returned

**1537**

Cases Reviewed

**158**

**SAKs shipped: 1080**

**SAKs completed: 879**

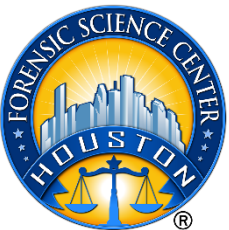
**Non-SAKs shipped: 661**

**Non-SAKs completed: 658**

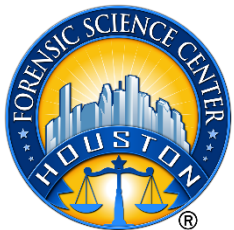
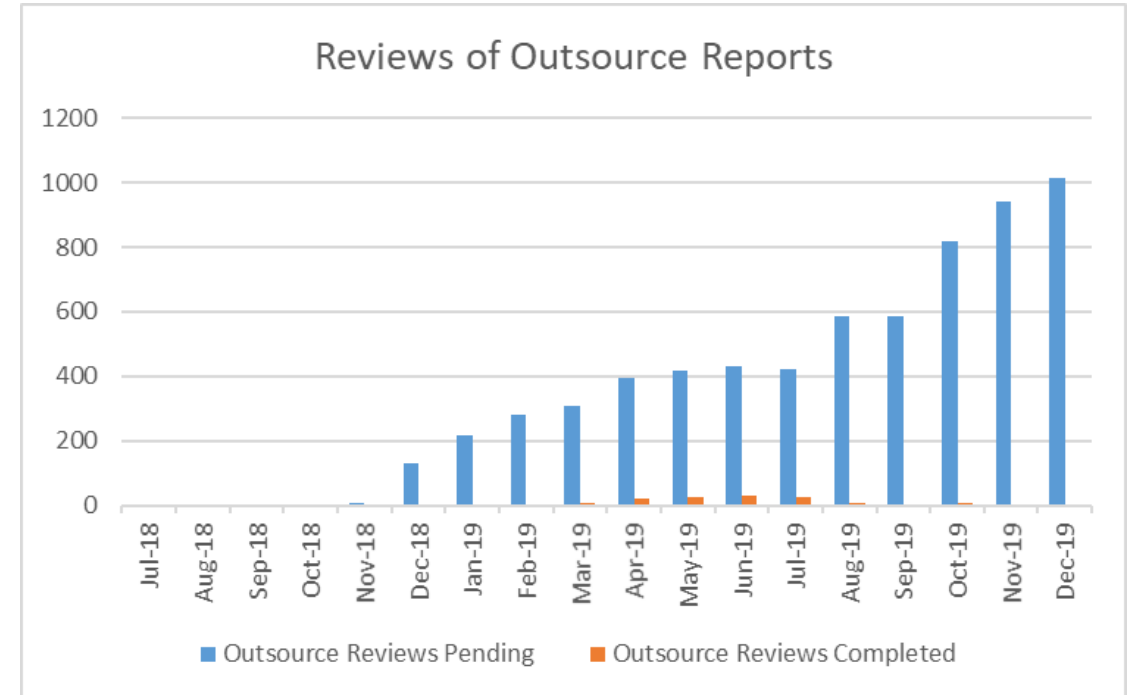
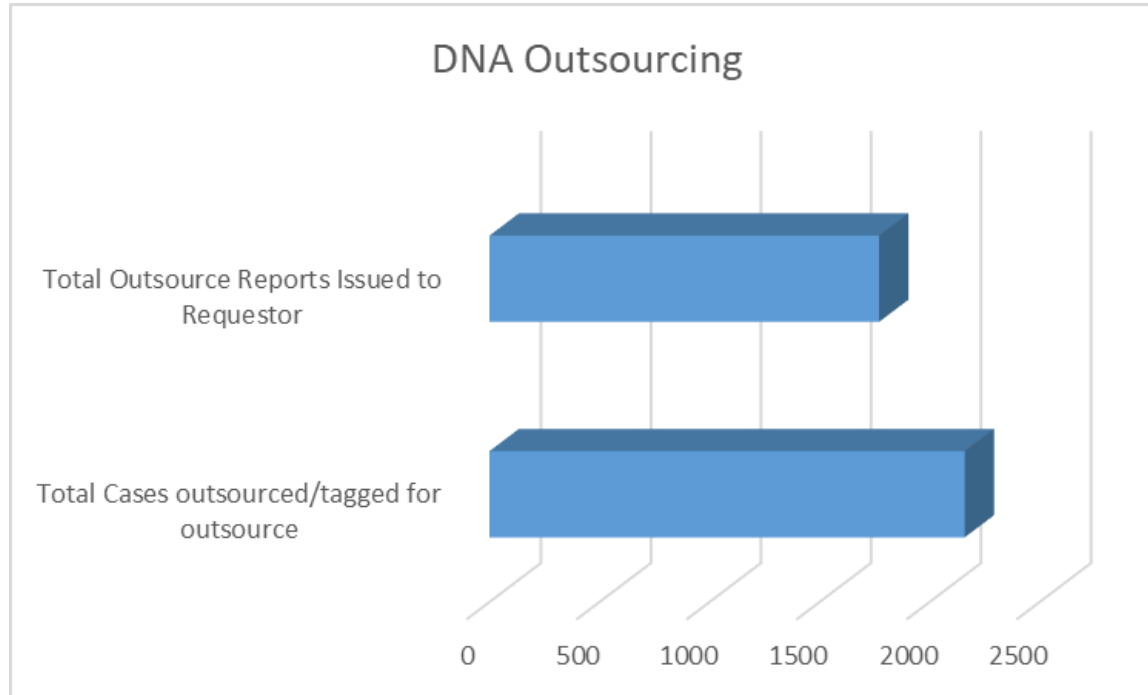
## Critical issues

- The in-house review of all outsourced casework
- Bode delayed turnaround time for SAKs
- Current turnaround time ~120 days
- Outsource extension needed due to STRmix implementation and training

- Original project timeline: August 2018 to September 2019
- 845 outsourced cases pending CODIS review (170 in process)
- 204 outsourced cases pending @ Bode
- Bode plans to have all testing completed by October 31, 2019
- Next focus: STRmix training and outsource reviews



# Forensic Biology -- Outsourcing





Section
Request Type

Screening
All

# of Unassigned
0✓

Goal: 10 (+100%)

# Pending Draft
113!

Goal: 14 (-707.14%)

# Pending Tech
7✓

Goal: 16 (+56.25%)

# Pending Admin
3✓

Goal: 12 (+75%)

Goal= Threshold for the max # of requests in each bucket

65

Past Critical Age

50

Avg Age of Reqeusts >30 ...

0

Age-Oldest Unassigned PL

76

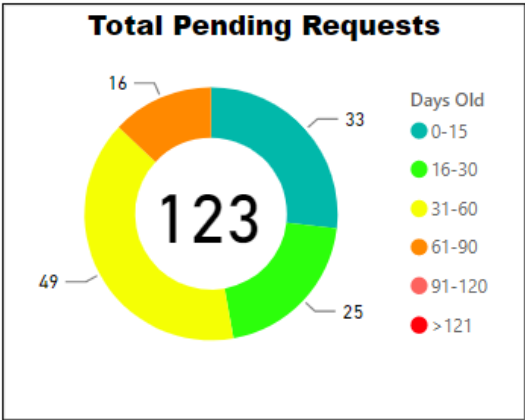
Age-Oldest Pending Draft...

70

Age-Oldest Pending Tech ...

48

Age-Oldest Pending Adm...



Overall TAT  
(Month to Date)
40.1!

Goal: 10, 11

Overall TAT  
(Past 90 Days)
32.6!

Goal: 10, 11

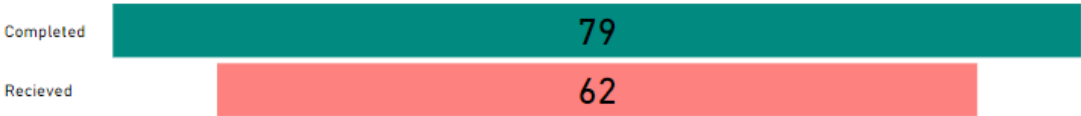
TAT by Phase of Work (MTD)



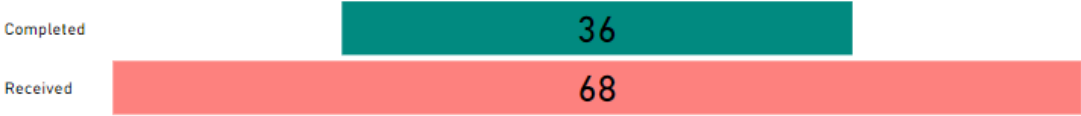
TAT by Phase of Work (Past 90 Days)



Month to Date



30 Day Avg (Over Past 90 Days)



Open Quality Reports

Qualtrax ID	Workflow #	Age
33435	2018-085	332
34624	2018-094	314
47766	2019-043	121
48832	2019-057	103
49434	2019-IA-13	96
49435	2019-IA-14	96
49436	2019-IA-15	96

\*Reports without a Workflow Id# are not included in the Avg Age

Quality TAT

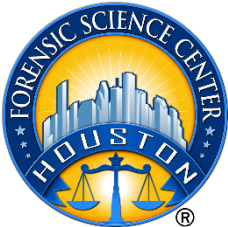
44!

Goal: 40, 41

Avg Age of Open Reports\*

119

Quality Filter
Biology/DNA

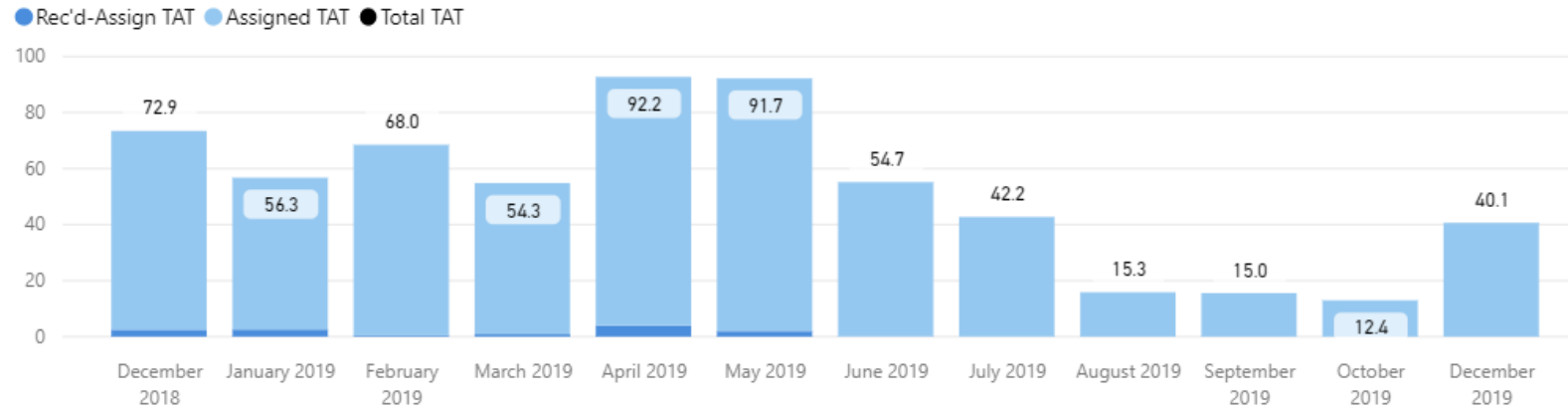


Date Range  ...

12/1/2018

12/31/2019

### Total TAT by Month



### Request Type

Screening

Request Type

All

### Selected Time Frame Averages

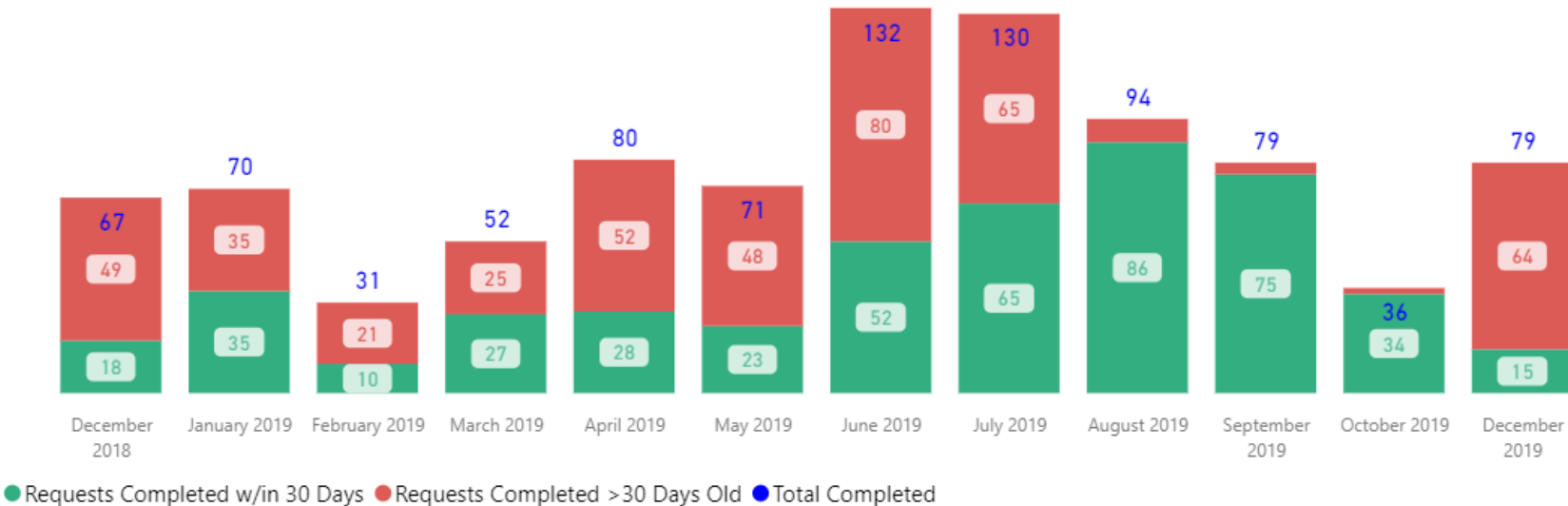
50.59

Total TAT (Rec'd-Compl.) Avg

50.16

Assigned TAT (Asgmt.-Compl.) Avg

### Requests Completed



### Received to Complete

921

Requests Completed

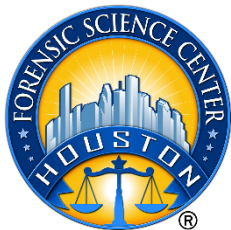
453

Requests Completed > 30 Days

49.19 %

% Completed > 30 Days

Requests more than 30 days old are considered to be backlogged requests



Section



Request Type

Screening



All

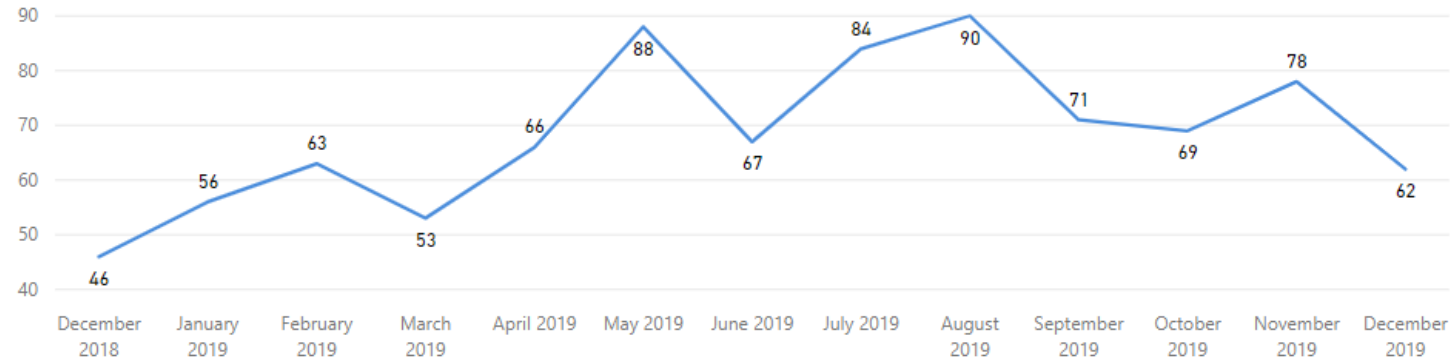


## Received Filter

12/1/2018

12/31/2019

## Received by Month



## Total Received

893

## Received per Month (Avg)\*

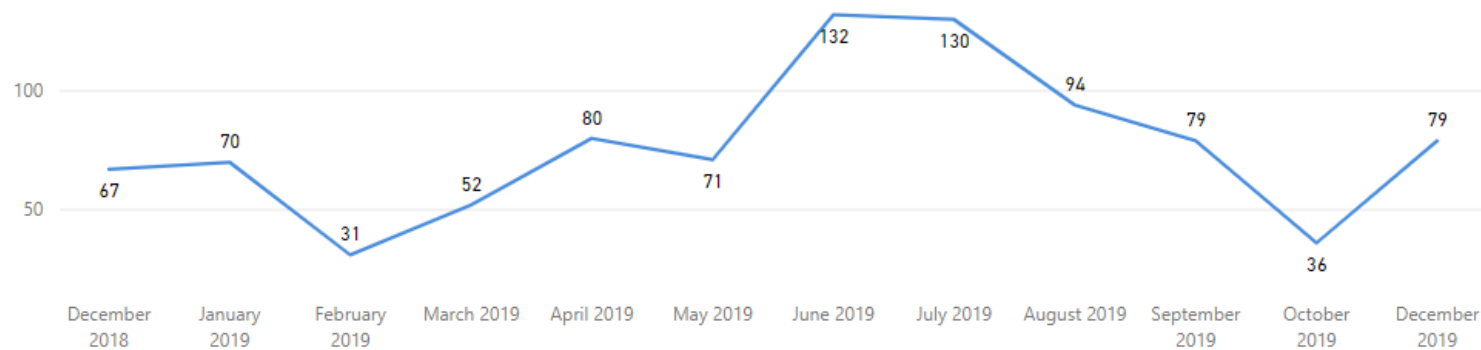
69

## Completed Filter

12/1/2018

12/31/2019

## Completed by Month



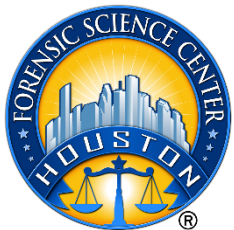
## Total Completed

921

## Completed per Month (Avg)\*

77

\* months with zero activity are not calculated into the average



Section

CODIS

CODIS Hit Type

All

# of Unassigned

28✓

Goal: 100 (+72%)

# Pending Draft

1✓

Goal: 20 (+95%)

# Pending Tech

1✓

Goal: 15 (+93.33%)

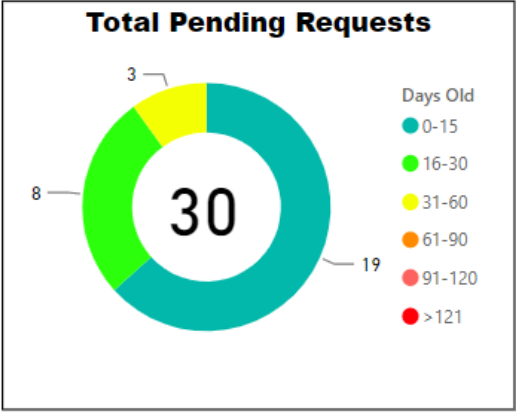
# Pending Admin

0✓

Goal: 0

Goal= Threshold for the max # of requests in each bucket

- 3
- Past Critical Age
- 35
- Avg Age of Reqeusts >30 ...
- 35
- Age-Oldest Unassigned PL
- 35
- Age-Oldest Pending Draft...
- 11
- Age-Oldest Pending Tech ...
- 0
- Age-Oldest Pending Adm...



Overall TAT (Month to Date)

17.9✓

Goal: 30, 31

Overall TAT (Past 90 Days)

17.4✓

Goal: 30, 31

TAT by Phase of Work (MTD)

PL-Assign TAT MTD

PL-Draft TAT MTD

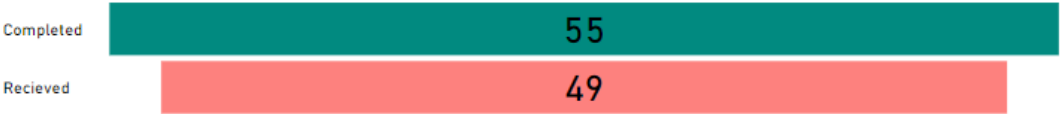
PL-Tech Review TAT MTD



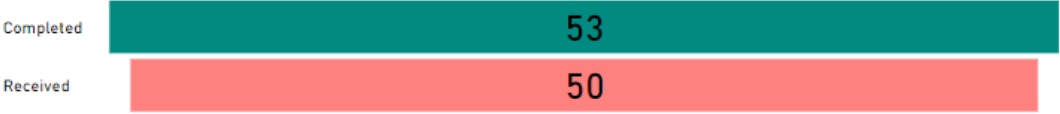
TAT by Phase of Work (Past 90 Days)



Month to Date



30 Day Avg (Over Past 90 Days)



Open Quality Reports

Qualtrax ID	Workflow #	Age
33435	2018-085	332
34624	2018-094	314
47766	2019-043	121
48832	2019-057	103
49434	2019-IA-13	96
49435	2019-IA-14	96
49436	2019-IA-15	96

\*Reports without a Workflow Id# are not included in the Avg Age

Quality TAT

44!

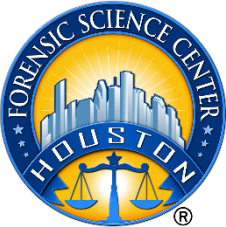
Goal: 40, 41

Avg Age of Open Reports\*

119

Quality Filter

Biology/DNA



## Date Range

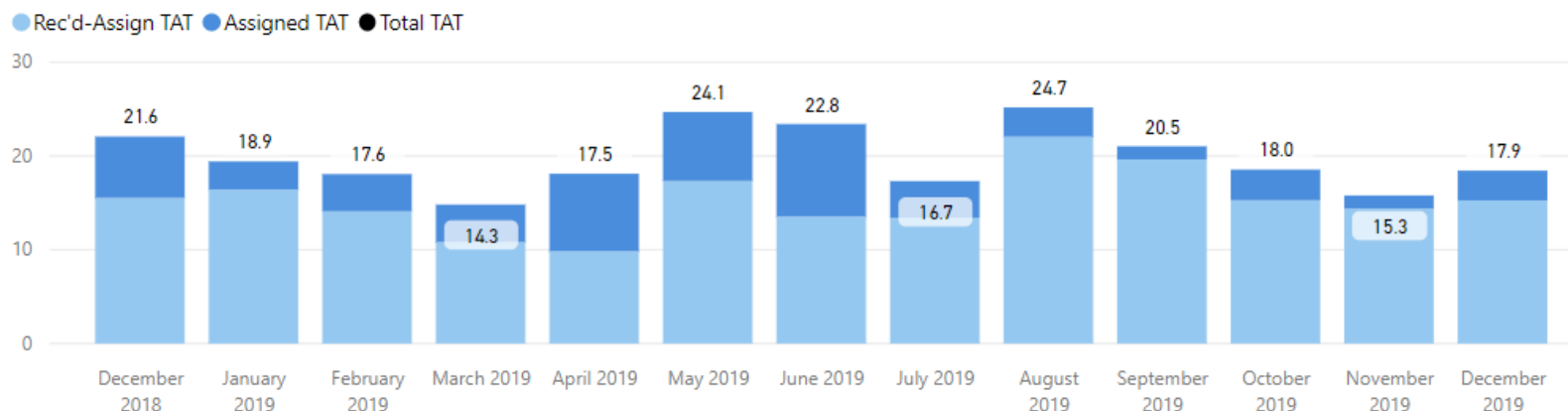
12/1/2018

12/31/2019

## Request Type

CODIS

### Total TAT by Month



### Selected Time Frame Averages

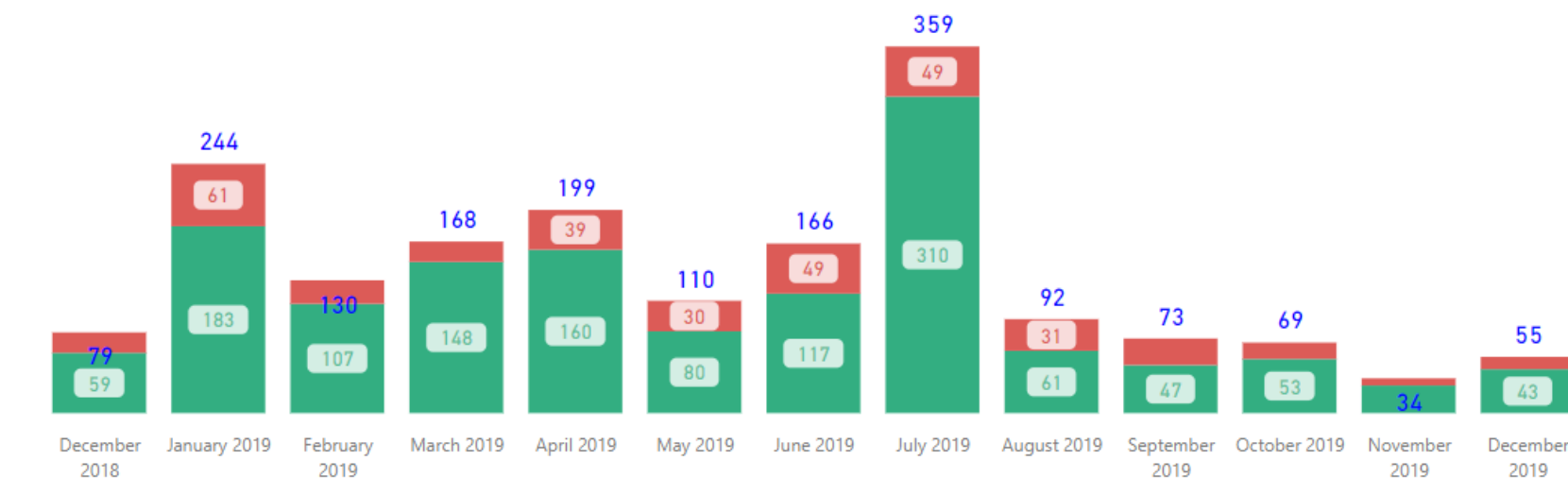
18.82

Total TAT (Rec'd-Compl.) Avg

4.93

Assigned TAT (Asgmt.-Compl.) Avg

### Requests Completed



● Requests Completed w/in 30 Days ● Requests Completed >30 Days Old ● Total Completed

### Received to Complete

1778

Requests Completed

383

Requests Completed > 30 Days

21.54 %

% Completed > 30 Days

Requests more than 30 days old are considered to be backlogged requests



Section

CODIS

Hit Type

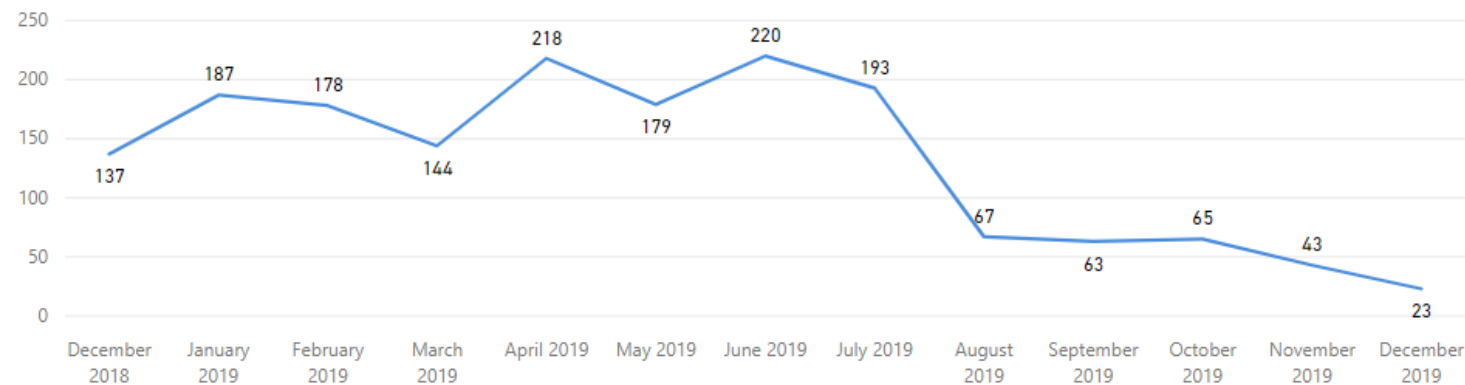
All

Received Filter

12/1/2018

12/31/2019

## Received by Month



Total Received

1717

Received per Month (Avg)\*

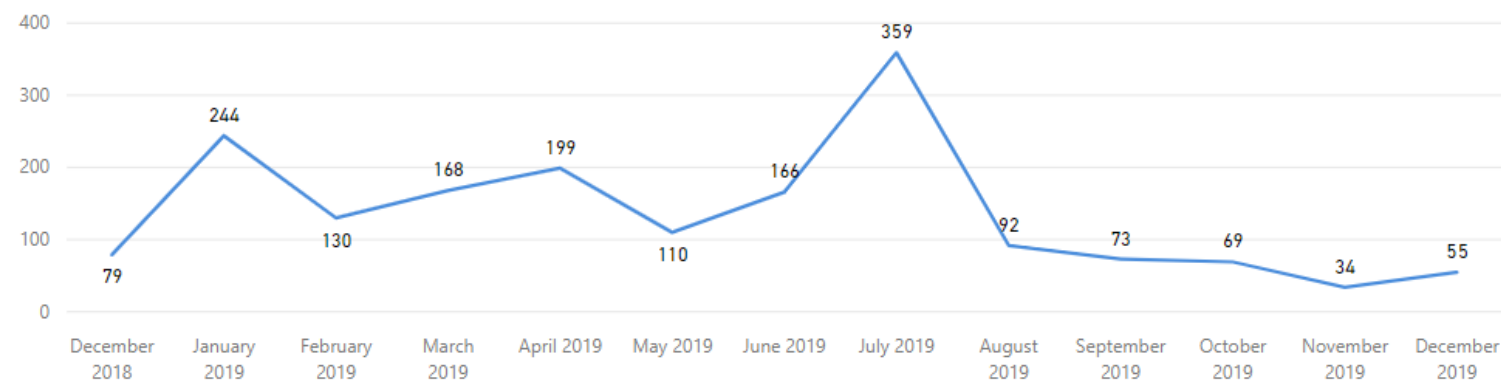
132

Completed Filter

12/1/2018

12/31/2019

## Completed by Month



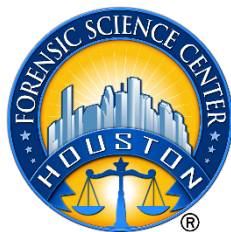
Total Completed

1778

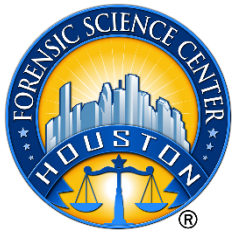
Completed per Month (Avg)\*

137

\* months with zero activity are not calculated into the average



# Latent Prints



# Requests Received after 2/1/2019 (to allow for targets on incoming requests vs historical backlog)

Service

Priority Type

Latent Comparison

All

# of Unassigned

1082!

Goal: 230 (-370.43%)

# Pending Draft

54!

Goal: 50 (-8%)

# Pending Tech

17✓

Goal: 50 (+66%)

# Pending Admin

0✓

Goal: 50 (+100%)

Goal= Threshold for the max # of requests in each bucket

988  
Justice Trax Past Critical Age

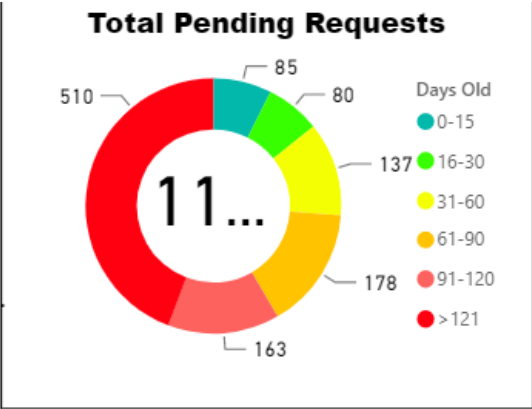
140  
Avg Age of Requests >30 D...

299  
Age-Oldest Unassigned

228  
Age-Oldest Pending Draft

210  
Age-Oldest Pending Tech

0  
Age-Oldest Pending Admin



Overall TAT  
(Month to Date)

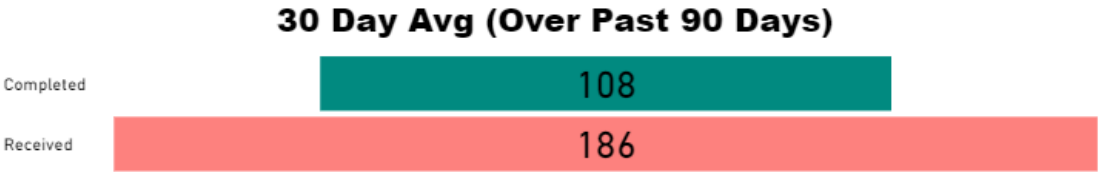
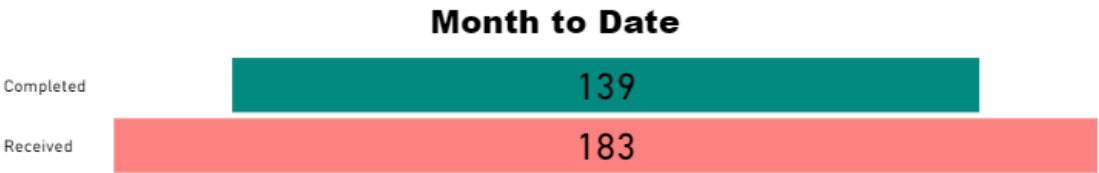
96.3!

Goal: 45, 46

Overall TAT  
(Past 90 Days)

86.6!

Goal: 45, 46



Open Quality Reports

Qualtrax ID	Workflow #	Age
44789	2019-028	163
52313		55
54587	2019-092	19
54909		15
55214		12
55617		7
55637		7

\*Reports without a Workflow Id# are not included in the Avg Age

Quality TAT

30✓

Goal: 40, 41

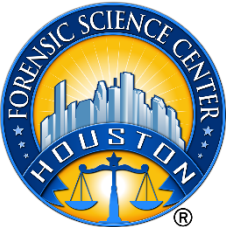
Avg Age of Open Reports\*

91

Quality Filter

Latent Prints

Latent Prints





# Requests Received prior to 2/1/2019 (to allow for targets on incoming requests vs historical backlog)

Service

Latent Comparison

Priority Type

All

# of Unassigned

1263!

Goal: 230 (-449.13%)

# Pending Draft

5✓

Goal: 50 (+90%)

# Pending Tech

6✓

Goal: 50 (+88%)

# Pending Admin

0✓

Goal: 50 (+100%)

Goal= Threshold for the max # of requests in each bucket

1272

Justice Trax Past Critical Age

1026

Avg Age of Requests >30 D...

2057

Age-Oldest Unassigned

1077

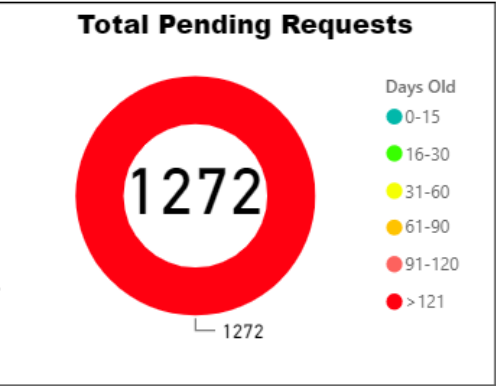
Age-Oldest Pending Draft

967

Age-Oldest Pending Tech

0

Age-Oldest Pending Admin



Overall TAT  
(Month to Date)

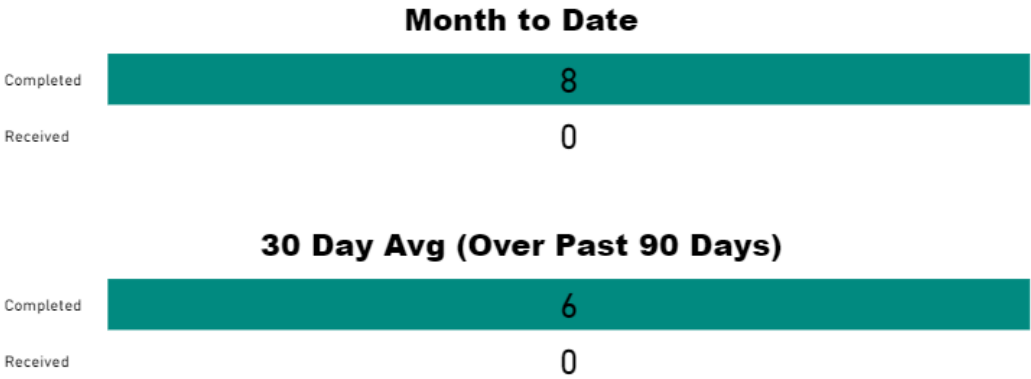
904.9!

Goal: 45, 46

Overall TAT  
(Past 90 Days)

823.4!

Goal: 45, 46



### Open Quality Reports

Qualtrax ID	Workflow #	Age
44789	2019-028	163
52313		55
54587	2019-092	19
54909		15
55214		12
55617		7
55637		7

\*Reports without a Workflow Id# are not included in the Avg Age

Quality TAT

30✓

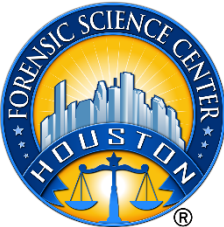
Goal: 40, 41

Avg Age of Open Reports\*

91

Quality Filter

Latent Prints



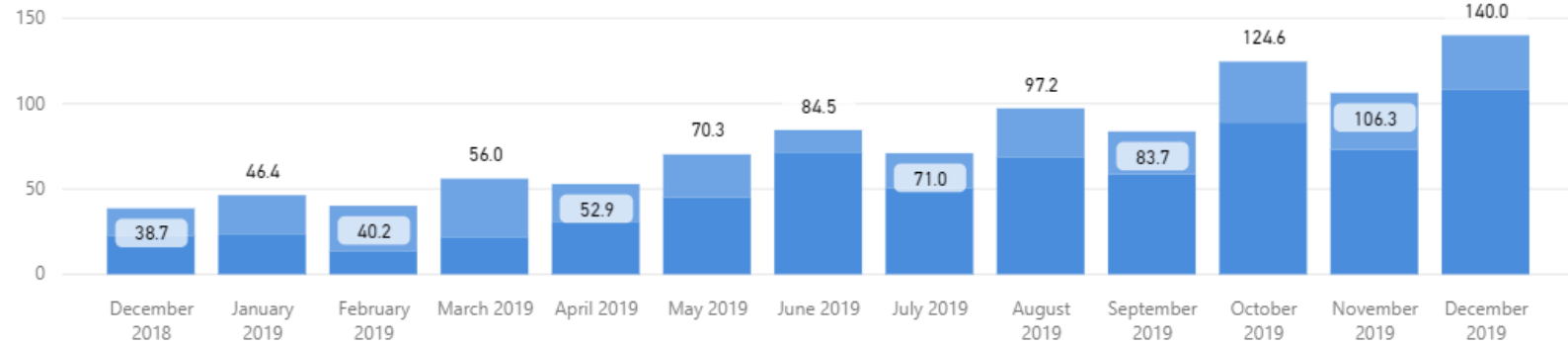
## Date Range

12/1/2018

12/31/2019

## Total TAT by Month

● Rec'd-Assign TAT ● Assigned TAT ● Total TAT



## Request Type

Latent Comparison

Priority Type

All

## Selected Time Frame Averages

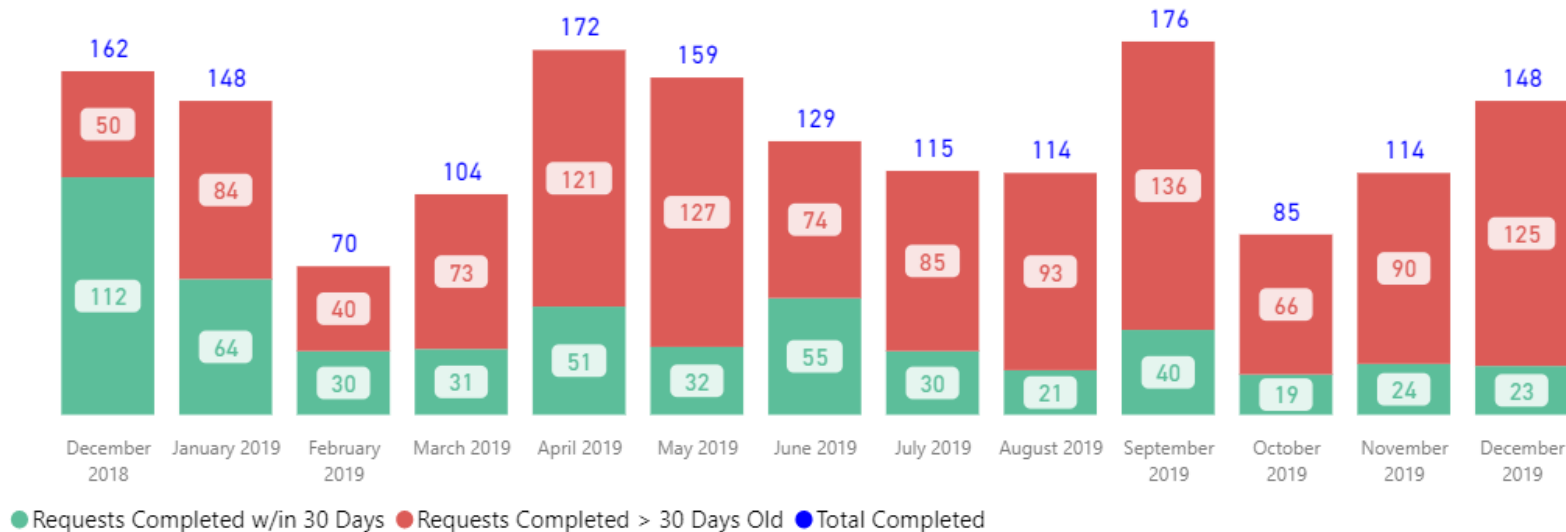
76.87

Total TAT (Rec'd-Compl.) Avg

25.15

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

1696

Requests Completed

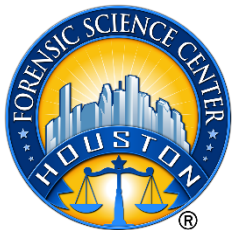
1164

Requests Completed > 30 Days Old

68.63 %

% Completed > 30 Days Old

Requests more than 30 days old are considered to be backlogged requests



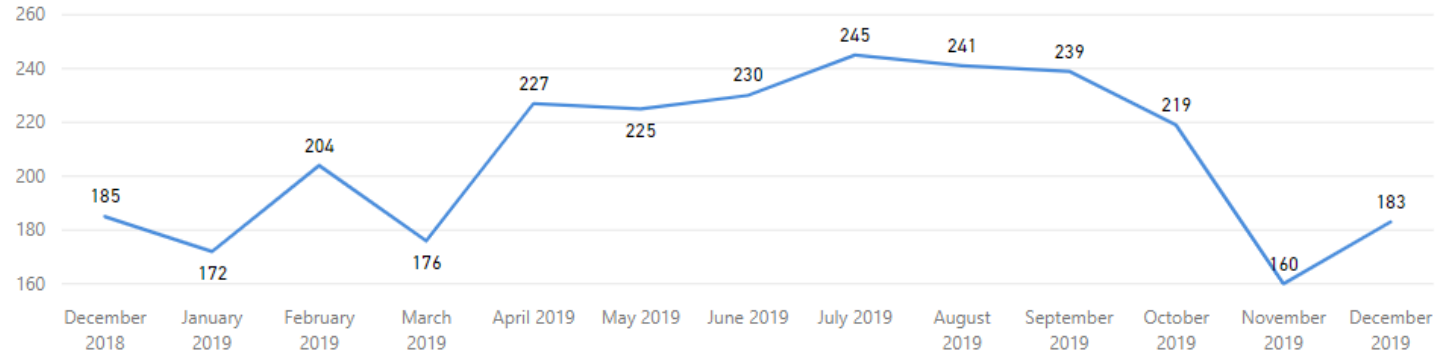
Service  Priority Type



### Received Filter

12/1/2018 12/31/2019

### Received by Month



### Total Received

2,706

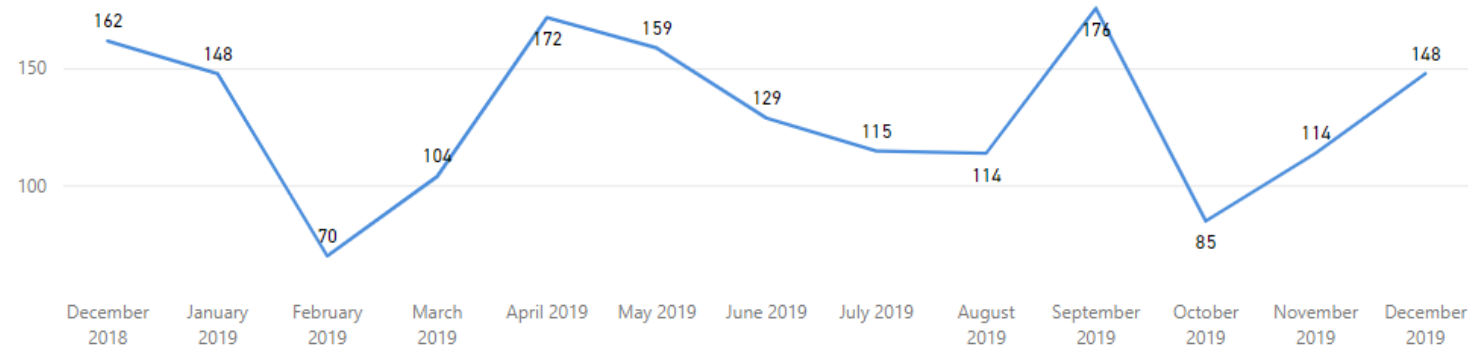
### Received per Month (Avg)\*

208

### Completed Filter

12/1/2018 12/31/2019

### Completed by Month



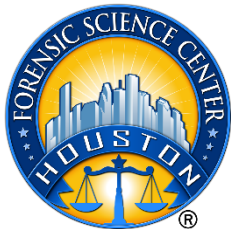
### Total Completed

1,696

### Completed per Month (Avg)\*

130

\* months with zero activity are not calculated into the average



Service
Priority Type

Latent Processing
All

# of Unassigned
218!
Goal: 50 (-336%)

# Pending Draft
10✓
Goal: 30 (+66.67%)

# Pending Tech
2✓
Goal: 30 (+93.33%)

# Pending Admin
3✓
Goal: 30 (+90%)

Goal= Threshold for the max # of requests in each bucket

193

Justice Trax Past Critical Age

132

Avg Age of Requests >30 D...

322

Age-Oldest Unassigned

287

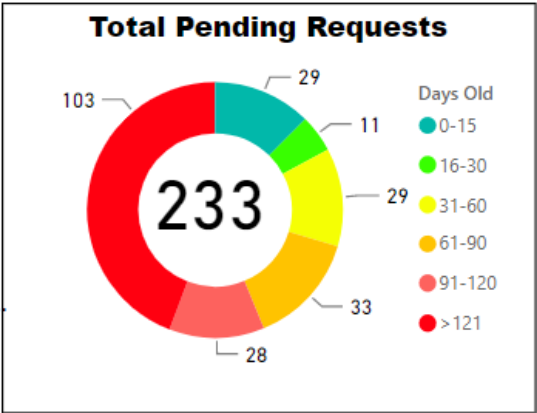
Age-Oldest Pending Draft

354

Age-Oldest Pending Tech

210

Age-Oldest Pending Admin



Overall TAT (Month to Date)

40.0!

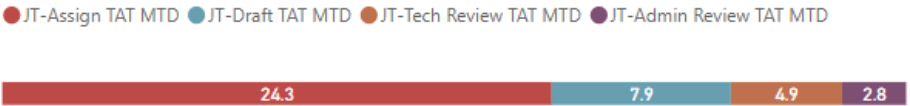
Goal: 30, 31

Overall TAT (Past 90 Days)

80.8!

Goal: 30, 31

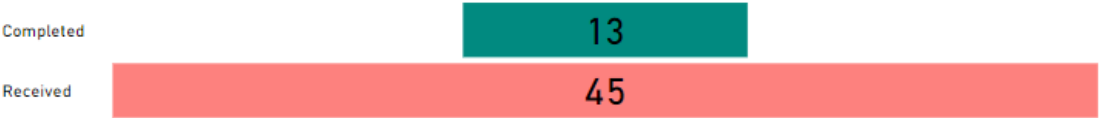
TAT by Phase of Work (MTD)



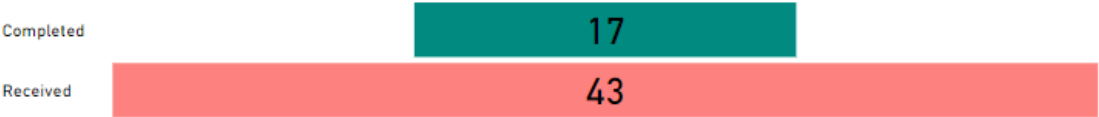
TAT by Phase of Work (Past 90 Days)



Month to Date



30 Day Avg (Over Past 90 Days)



Open Quality Reports

Qualtrax ID	Workflow #	Age
44789	2019-028	163
52313		55
54587	2019-092	19
54909		15
55214		12
55617		7
55637		7

\*Reports without a Workflow Id# are not included in the Avg Age

Quality TAT

30✓

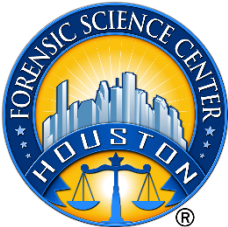
Goal: 40, 41

Avg Age of Open Reports\*

91

Quality Filter

Latent Prints



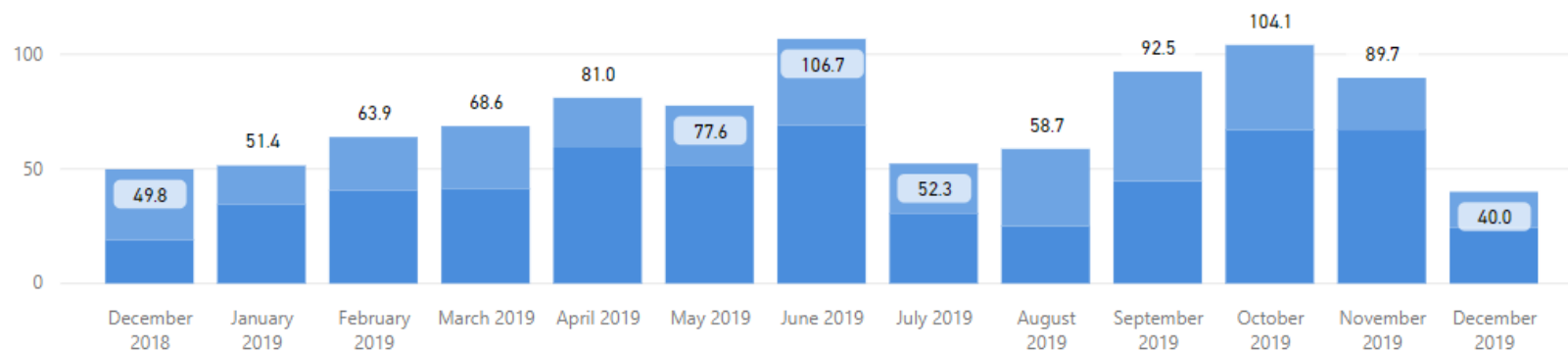
## Date Range

12/1/2018

12/31/2019

## Total TAT by Month

● Rec'd-Assign TAT ● Assigned TAT ● Total TAT



## Request Type

Latent Processing

Priority Type

All

## Selected Time Frame Averages

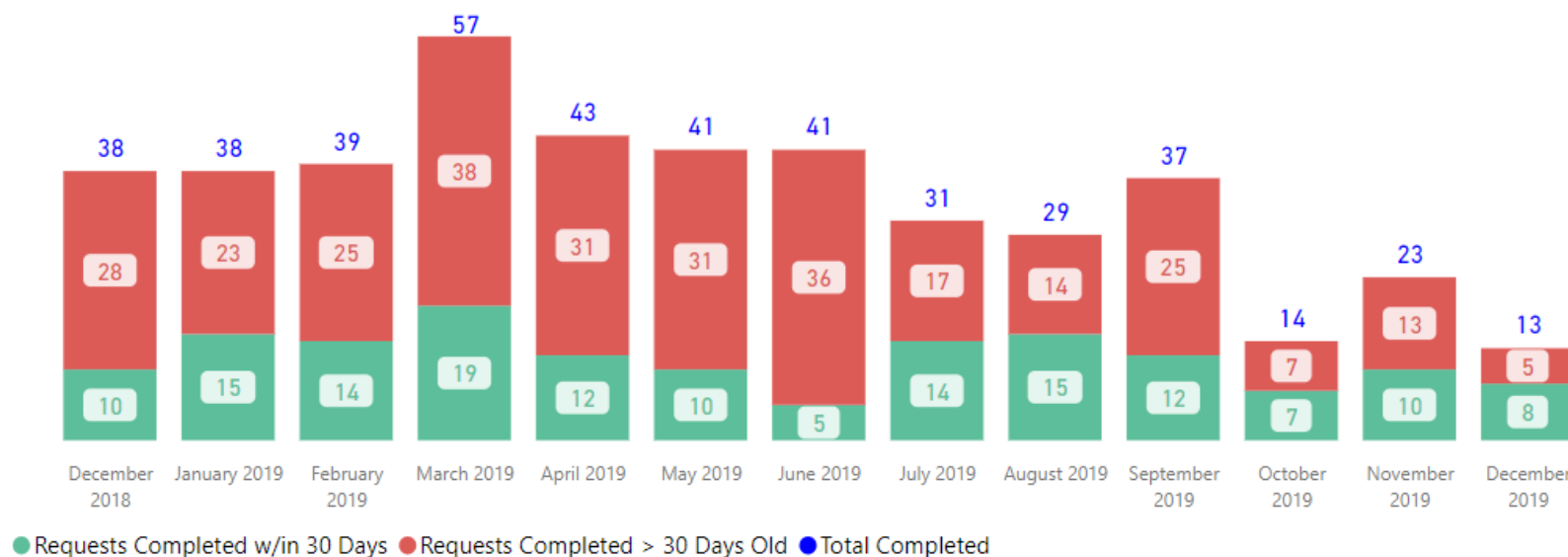
72.25

Total TAT (Rec'd-Compl.) Avg

28.18

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

444

Requests Completed

293

Requests Completed > 30 Days Old

65.99 %

% Completed > 30 Days Old



Requests more than 30 days old are considered to be backlogged requests

Service

Priority Type

Latent Processing

▼

All

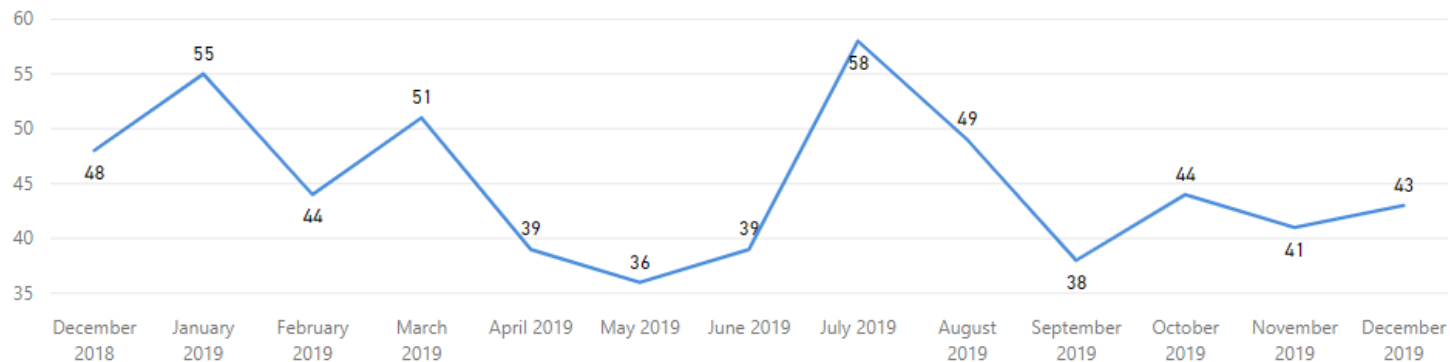
▼

## Received Filter

12/1/2018

12/31/2019

## Received by Month



## Total Received

585

## Received per Month (Avg)\*

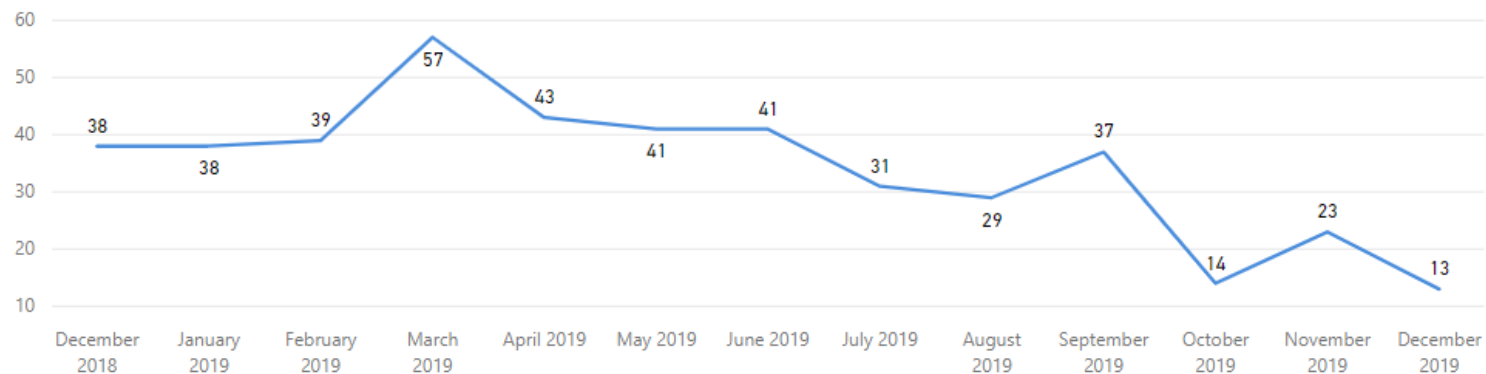
45

## Completed Filter

12/1/2018

12/31/2019

## Completed by Month



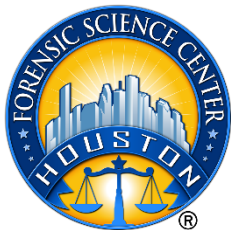
## Total Completed

444

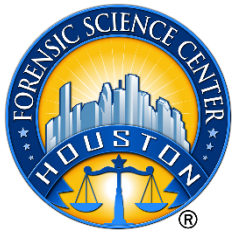
## Completed per Month (Avg)\*

34

\* months with zero activity are not calculated into the average



# Digital Multi-Media



Service
Priority Type

AV Call Out
All

# of Unassigned
0✓
Goal: 15 (+100%)

# Pending Draft
3✓
Goal: 5 (+40%)

# Pending Tech
1✓
Goal: 5 (+80%)

# Pending Admin
0✓
Goal: 5 (+100%)

Goal= Threshold for the max # of requests in each bucket

0

Justice Trax Past Critical Age

NaN

Avg Age of Requests >30 D...

0

Age-Oldest Unassigned

13

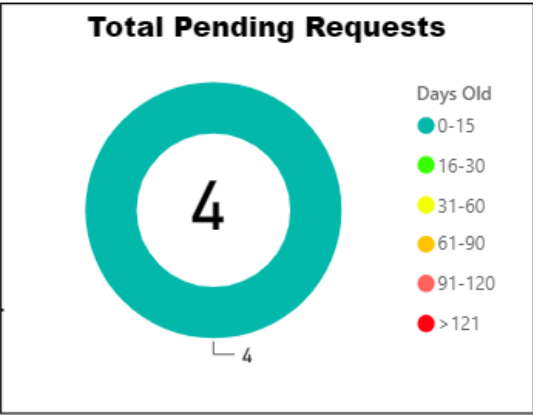
Age-Oldest Pending Draft

11

Age-Oldest Pending Tech

0

Age-Oldest Pending Admin



TAT by Phase of Work (MTD)



TAT by Phase of Work (Past 90 Days)



Open Quality Reports

Qualtrax ID
Workflow #
Age

\*Reports without a Workflow Id# are not included in the Avg Age

Quality TAT

(Blank)✓

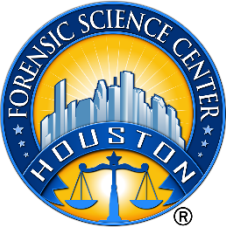
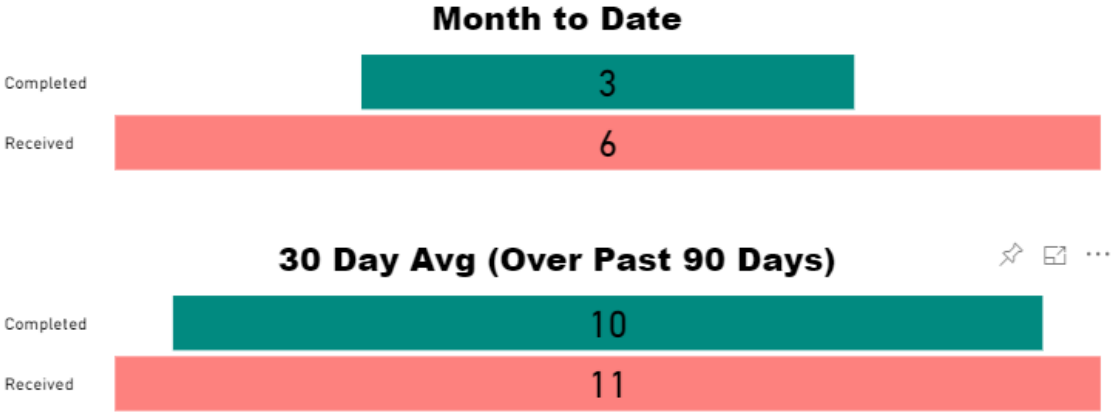
Goal: 30, 31

Avg Age of Open Reports\*

NaN

Quality Filter

Audio/Video



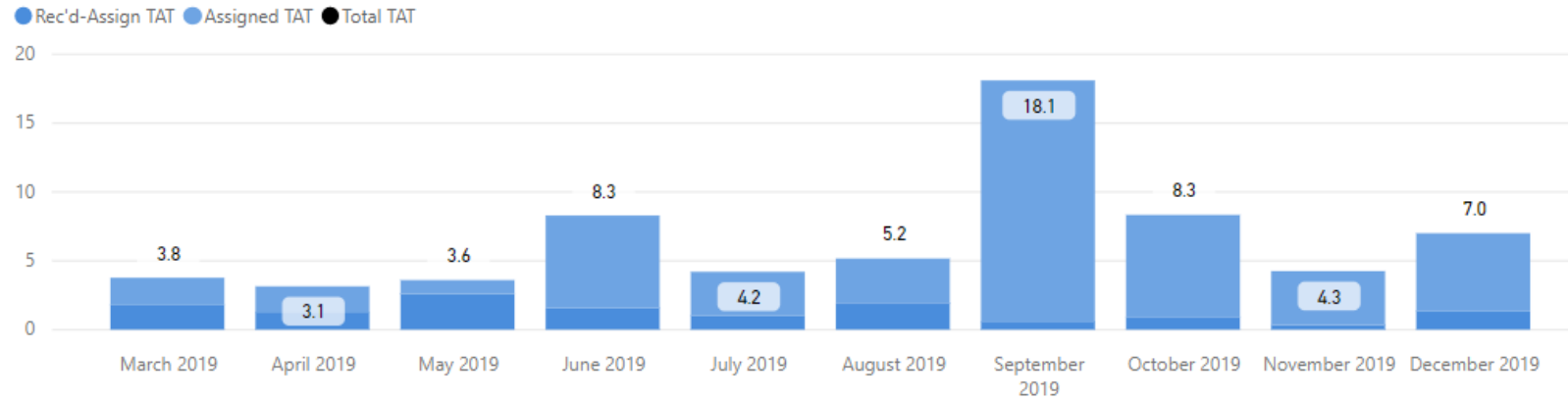


## Date Range

3/1/2019

12/31/2019

## Total TAT by Month



## Request Type

AV Call Out

Priority Type

All

## Selected Time Frame Averages

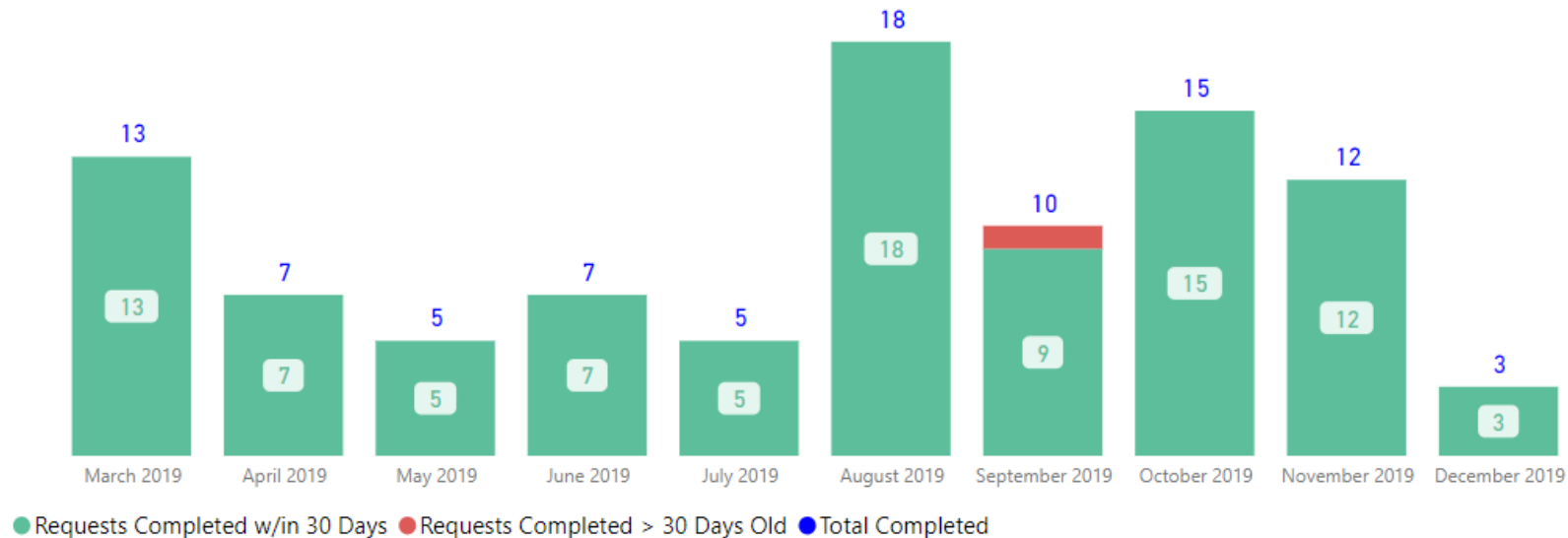
6.73

Total TAT (Rec'd-Compl.) Avg

5.43

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

95

Requests Completed

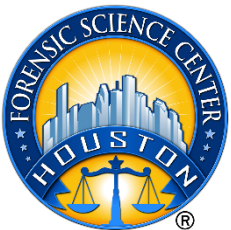
1

Requests Completed > 30 Days Old

1.05 %

% Completed > 30 Days Old

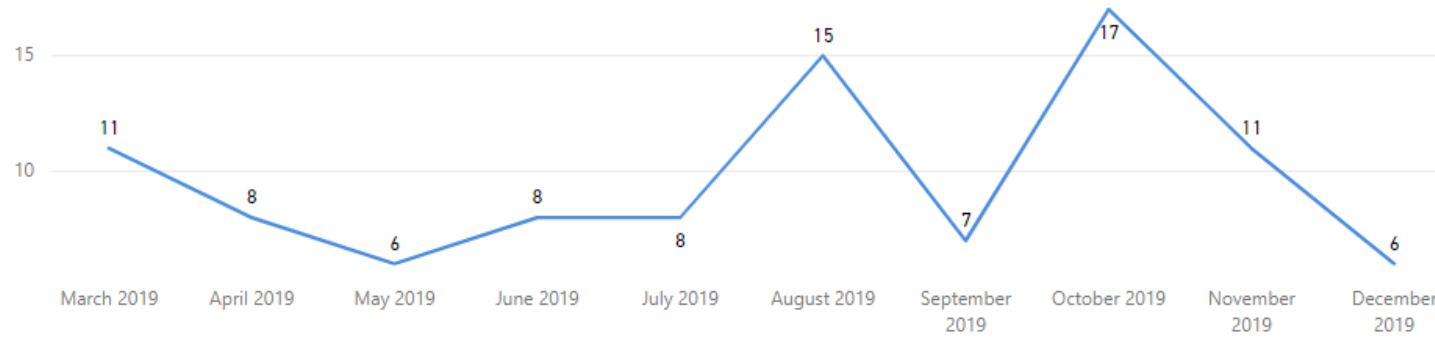
Requests more than 30 days old are considered to be backlogged requests



Service  Priority Type

**Received Filter**

### Received by Month



### Total Received

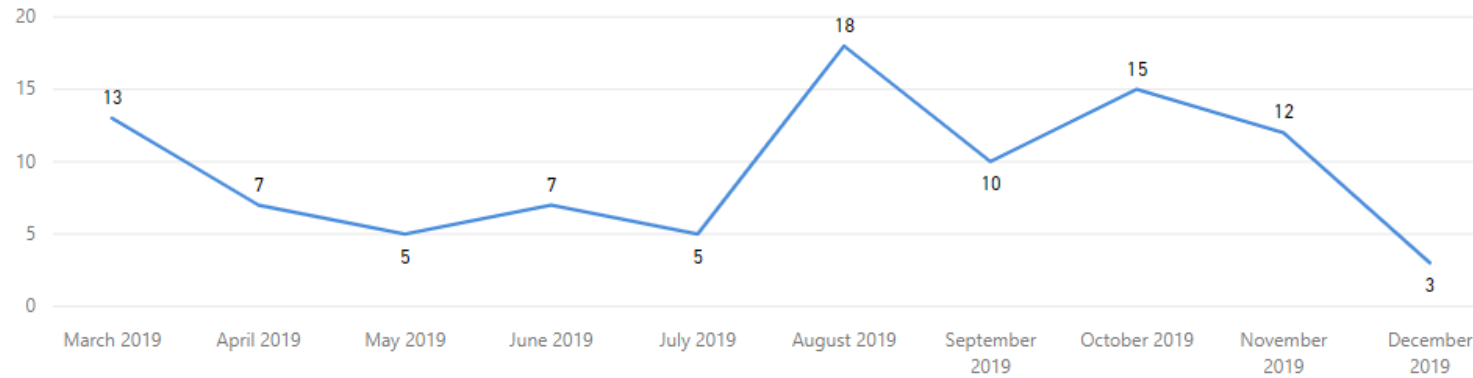
97

### Received per Month (Avg)\*

10

**Completed Filter**

### Completed by Month



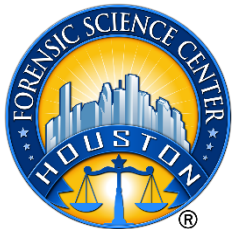
### Total Completed

95

### Completed per Month (Avg)\*

10

\* months with zero activity are not calculated into the average



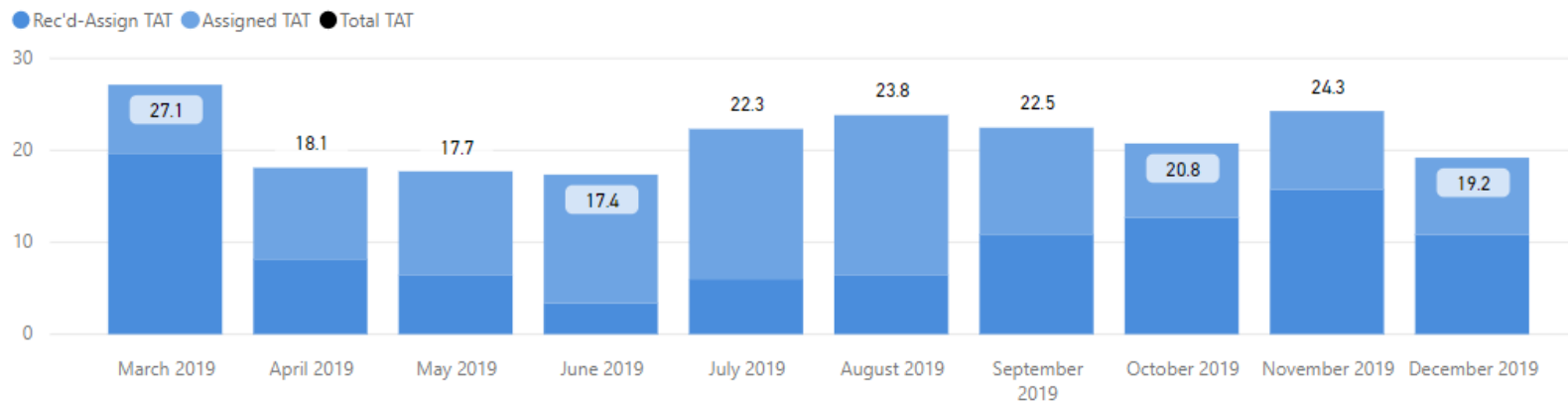


## Date Range

3/1/2019

12/31/2019

## Total TAT by Month



## Request Type

AV Examination

Priority Type

All

## Selected Time Frame Averages

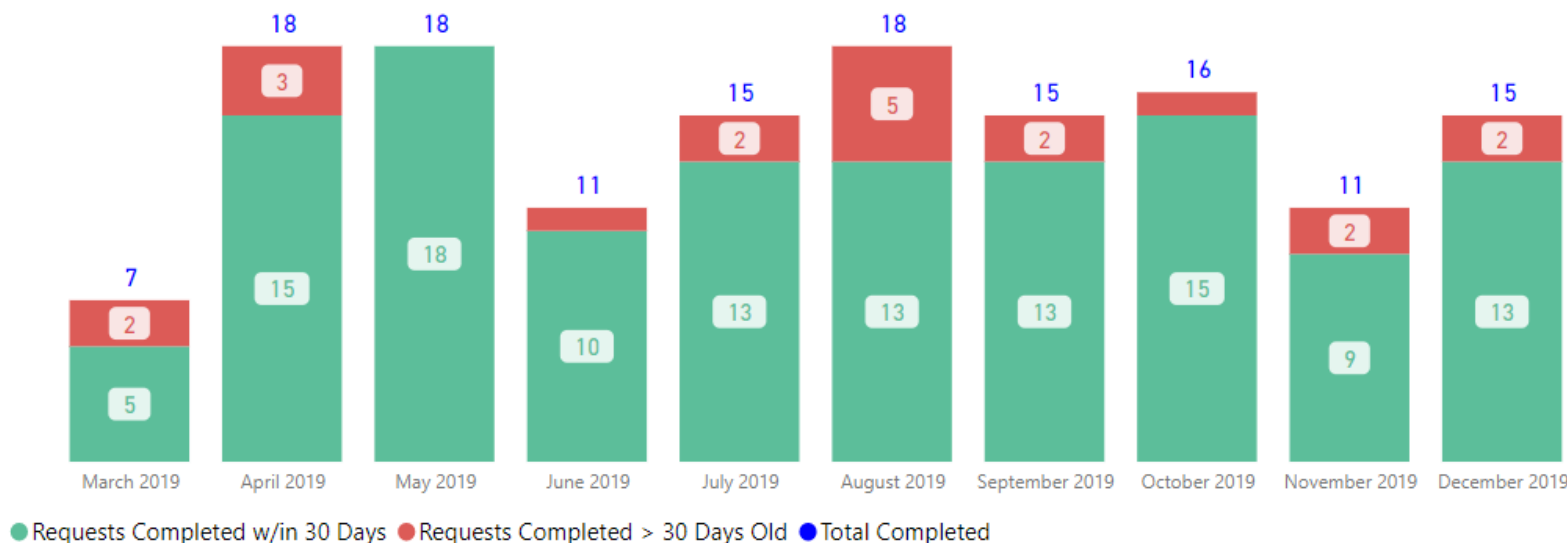
20.93

Total TAT (Rec'd-Compl.) Avg

11.61

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

144

Requests Completed

20

Requests Completed > 30 Days Old

13.89 %

% Completed > 30 Days Old

Requests more than 30 days old are considered to be backlogged requests



Service

AV Examination

Priority Type

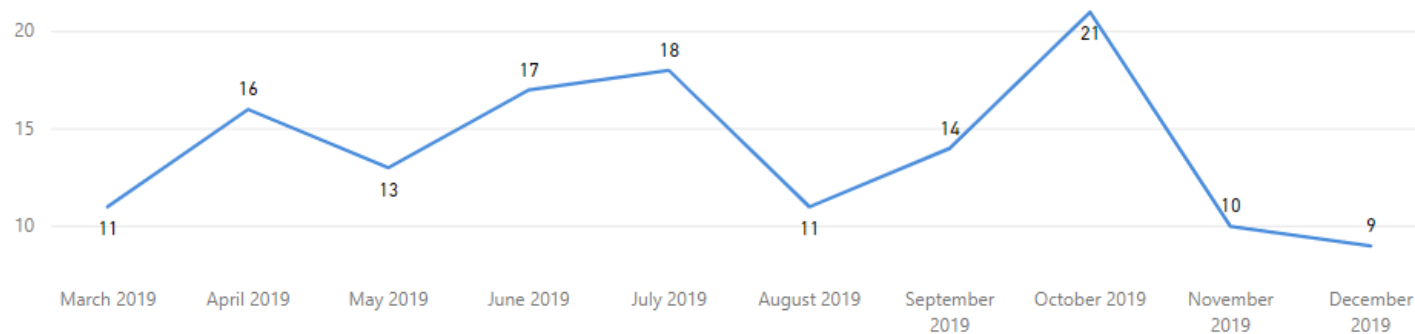
All

### Received Filter

3/1/2019

12/31/2019

### Received by Month



### Total Received

140

### Received per Month (Avg)\*

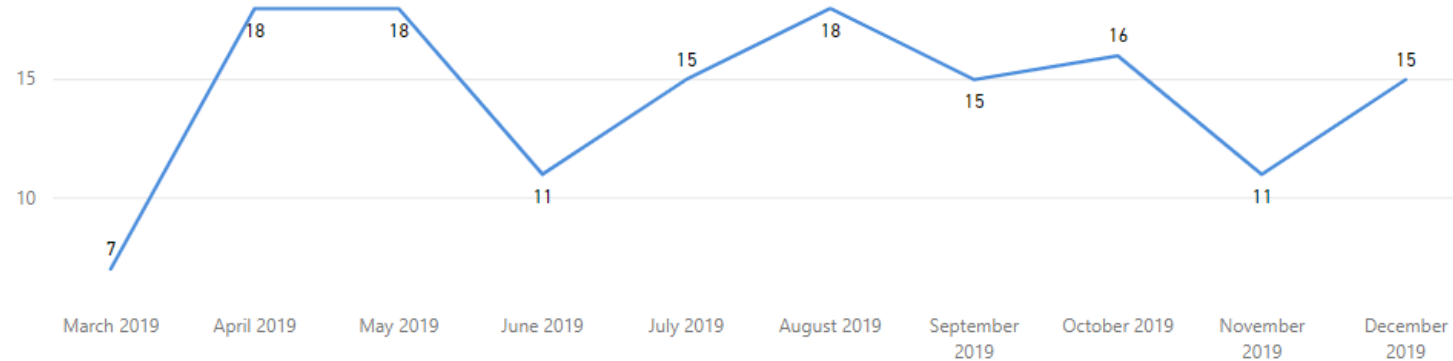
14

### Completed Filter

3/1/2019

12/31/2019

### Completed by Month



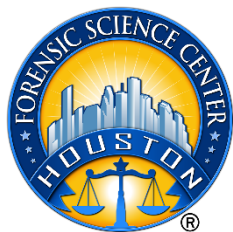
### Total Completed

144

### Completed per Month (Avg)\*

14

\* months with zero activity are not calculated into the average



Service:  Priority Type:

**# of Unassigned**  

50✓

Goal: 50 (+0%)

**# Pending Draft**  

8!

Goal: 5 (-60%)

**# Pending Tech**  

1✓

Goal: 5 (+80%)

**# Pending Admin**  

1✓

Goal: 5 (+80%)

Goal= Threshold for the max # of requests in each bucket

36  
Justice Trax Past Critical Age

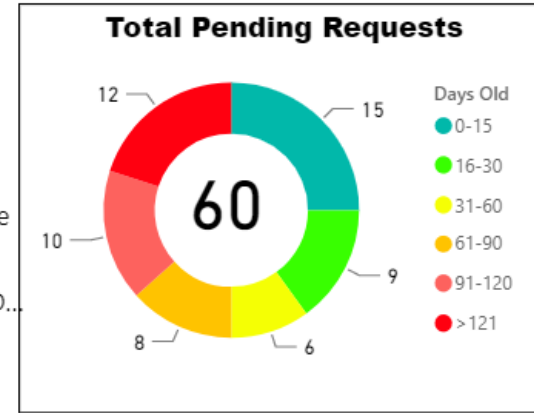
105  
Avg Age of Requests >30 D...

173  
Age-Oldest Unassigned

139  
Age-Oldest Pending Draft

106  
Age-Oldest Pending Tech

25  
Age-Oldest Pending Admin



**Overall TAT (Month to Date)**

57.7!

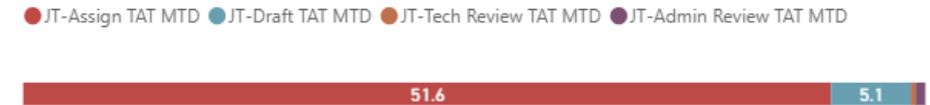
Goal: 45, 46

**Overall TAT (Past 90 Days)**

61.8!

Goal: 45, 46

### TAT by Phase of Work (MTD)



### TAT by Phase of Work (Past 90 Days)



### Open Quality Reports

Qualtrax ID	Workflow #	Age
54037	2019-088	28
55649		7

\*Reports without a Workflow Id# are not included in the Avg Age

**Quality TAT**

14✓

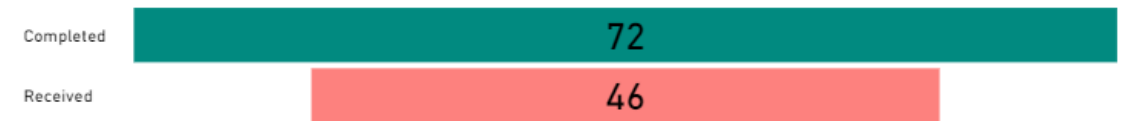
Goal: 30, 31

**Avg Age of Open Reports\***

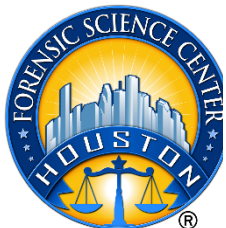
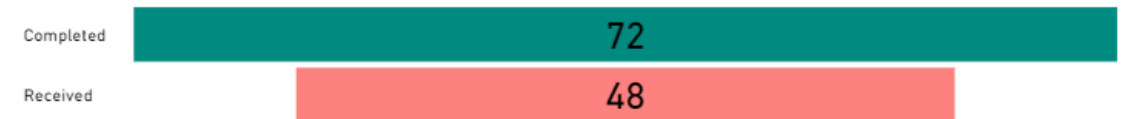
28

Quality Filter:

### Month to Date



### 30 Day Avg (Over Past 90 Days)



Service:  Priority Type:

**# of Unassigned**  

21!

Goal: 0

**# Pending Draft**  

2✓

Goal: 30 (+93.33%)

**# Pending Tech**  

0✓

Goal: 30 (+100%)

**# Pending Admin**  

0✓

Goal: 30 (+100%)

Goal= Threshold for the max # of requests in each bucket

23  
Justice Trax Past Critical Age

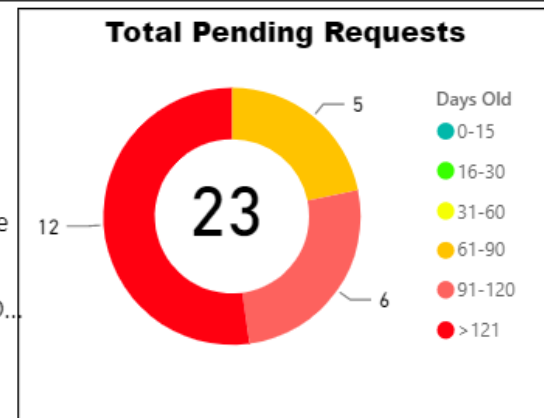
128  
Avg Age of Requests >30 D...

174  
Age-Oldest Unassigned

169  
Age-Oldest Pending Draft

0  
Age-Oldest Pending Tech

0  
Age-Oldest Pending Admin



**Overall TAT (Month to Date)**

NaN✓

Goal: 30, 31

**Overall TAT (Past 90 Days)**

52.9!

Goal: 30, 31

### TAT by Phase of Work (MTD)

● JT-Assign TAT MTD ● JT-Draft TAT MTD ● JT-Tech Review TAT MTD ● JT-Admin Review TAT MTD

### TAT by Phase of Work (Past 90 Days)



### Open Quality Reports

Qualtrax ID	Workflow #	Age
54037	2019-088	28
55649		7

\*Reports without a Workflow Id# are not included in the Avg Age

**Quality TAT**

14✓

Goal: 30, 31

**Avg Age of Open Reports\***

28

Quality Filter:

### Month to Date

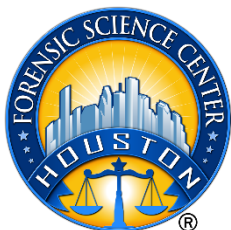
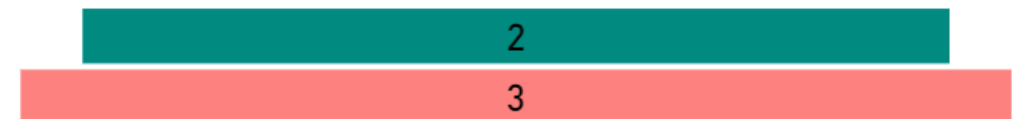
Completed

Received

### 30 Day Avg (Over Past 90 Days)

Completed

Received

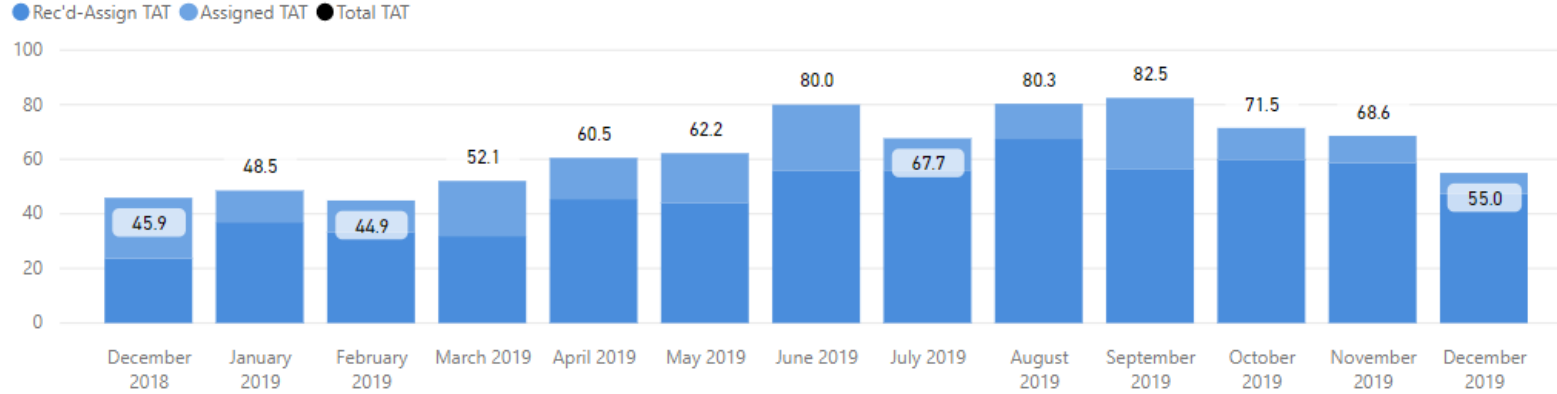


## Date Range

12/1/2018

12/31/2019

## Total TAT by Month



## Request Type

Multiple selections

Priority Type

All

## Selected Time Frame Averages

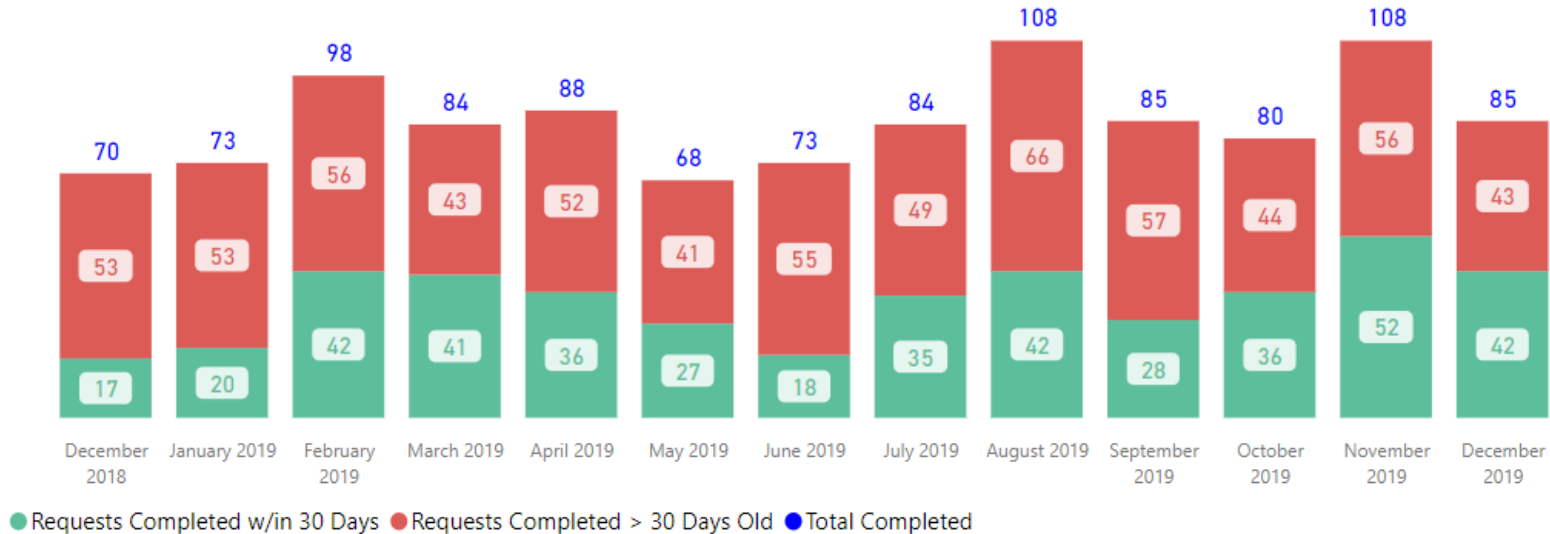
63.50

Total TAT (Rec'd-Compl.) Avg

15.28

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

1104

Requests Completed

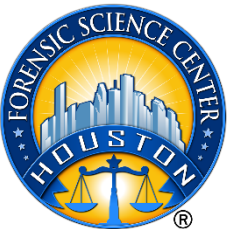
668

Requests Completed > 30 Days Old

60.51 %

% Completed > 30 Days Old

Requests more than 30 days old are considered to be backlogged requests





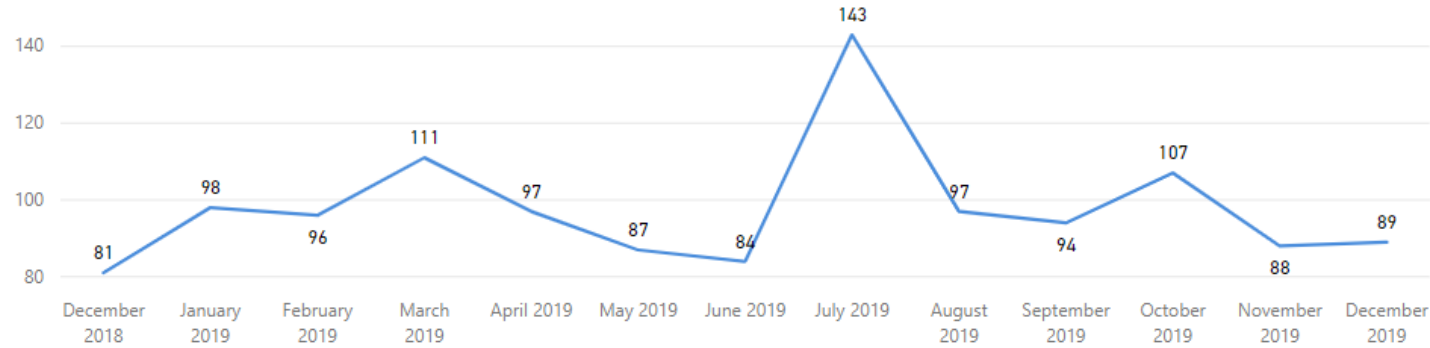
## DFL and DME

Service  Priority Type

☐ ...

**Received Filter**

### Received by Month



### Total Received

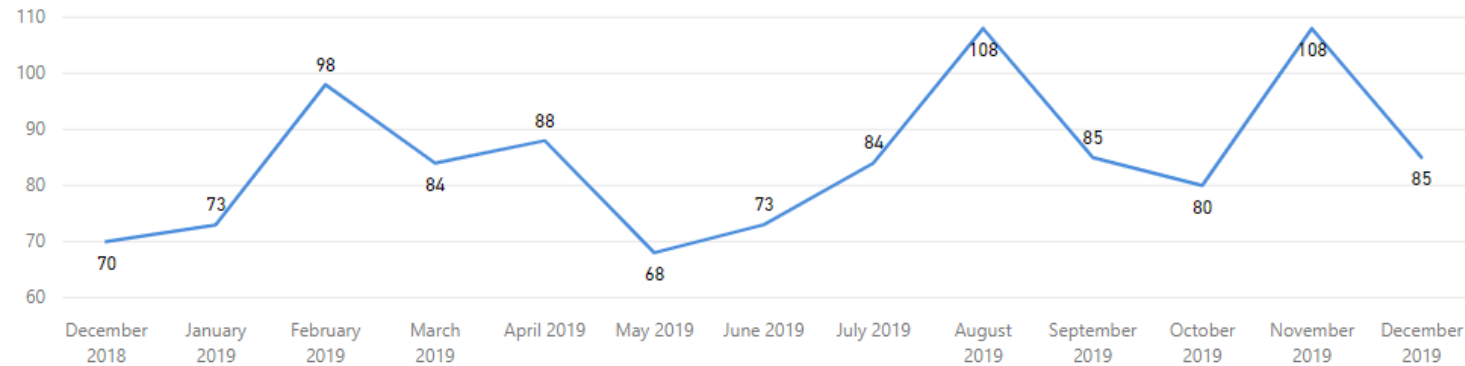
1,272

### Received per Month (Avg)\*

98

**Completed Filter**

### Completed by Month



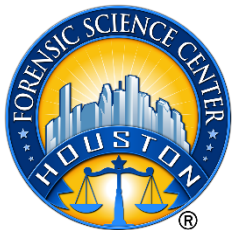
### Total Completed

1,104

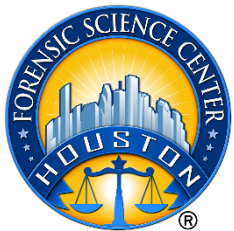
### Completed per Month (Avg)\*

85

\* months with zero activity are not calculated into the average



# Crime Scene Unit



Service: CSU Response  
 Priority Type: All

**# of Unassigned**

0✓

Goal: 0

**# Pending Draft**

69!

Goal: 30 (-130%)

**# Pending Tech**

73!

Goal: 30 (-143.33%)

**# Pending Admin**

1!

Goal: 0

Goal= Threshold for the max # of requests in each bucket

23  
Justice Trax Past Critical Age

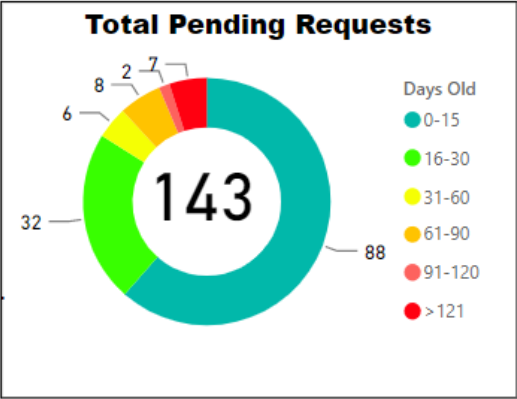
85  
Avg Age of Requests >30 D..

0  
Age-Oldest Unassigned

127  
Age-Oldest Pending Draft

133  
Age-Oldest Pending Tech

15  
Age-Oldest Pending Admin



**Overall TAT (Month to Date)**

32.2!

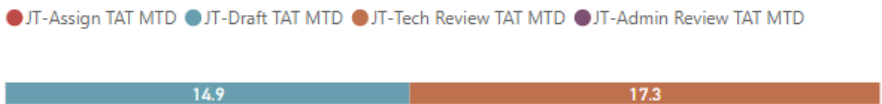
Goal: 30, 31

**Overall TAT (Past 90 Days)**

29.9✓

Goal: 30, 31

### TAT by Phase of Work (MTD)



### TAT by Phase of Work (Past 90 Days)



### Open Quality Reports

Qualtrax ID	Workflow #	Age
51462	2019-073	68
51819	51819	62
55860		2
55847	2019-094	2
55886	2019-095	2
55890		1

\*Reports without a Workflow Id# are not included in the Avg Age

**Quality TAT**

58!

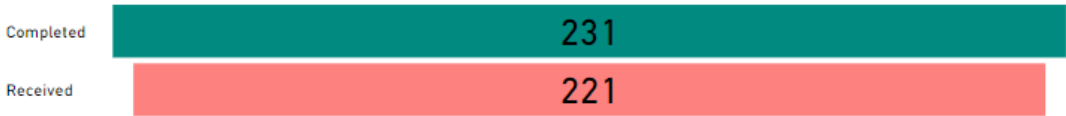
Goal: 30, 31

**Avg Age of Open Reports\***

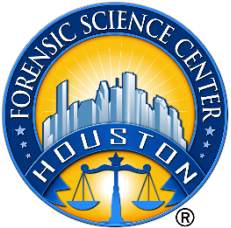
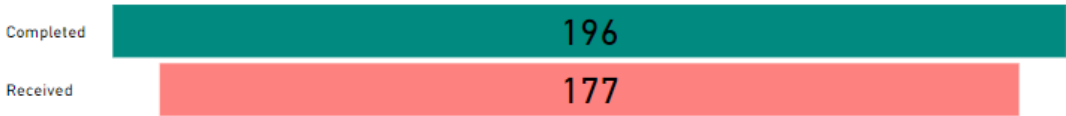
34

Quality Filter: Crime Scene

### Month to Date



### 30 Day Avg (Over Past 90 Days)

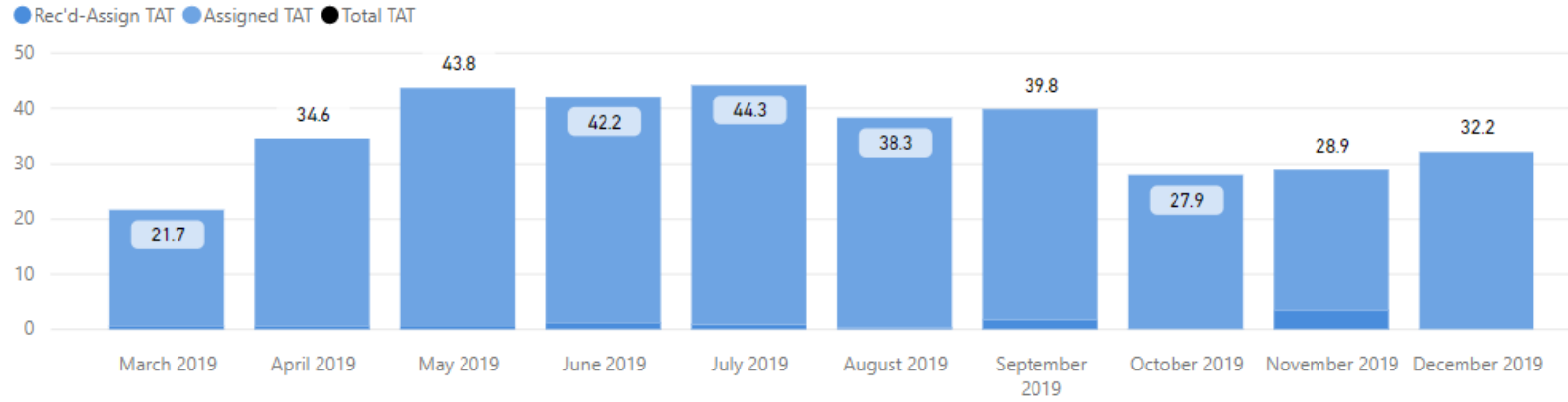


## Date Range

3/1/2019

12/31/2019

## Total TAT by Month



## Request Type

CSU Response

Priority Type

All

## Selected Time Frame Averages

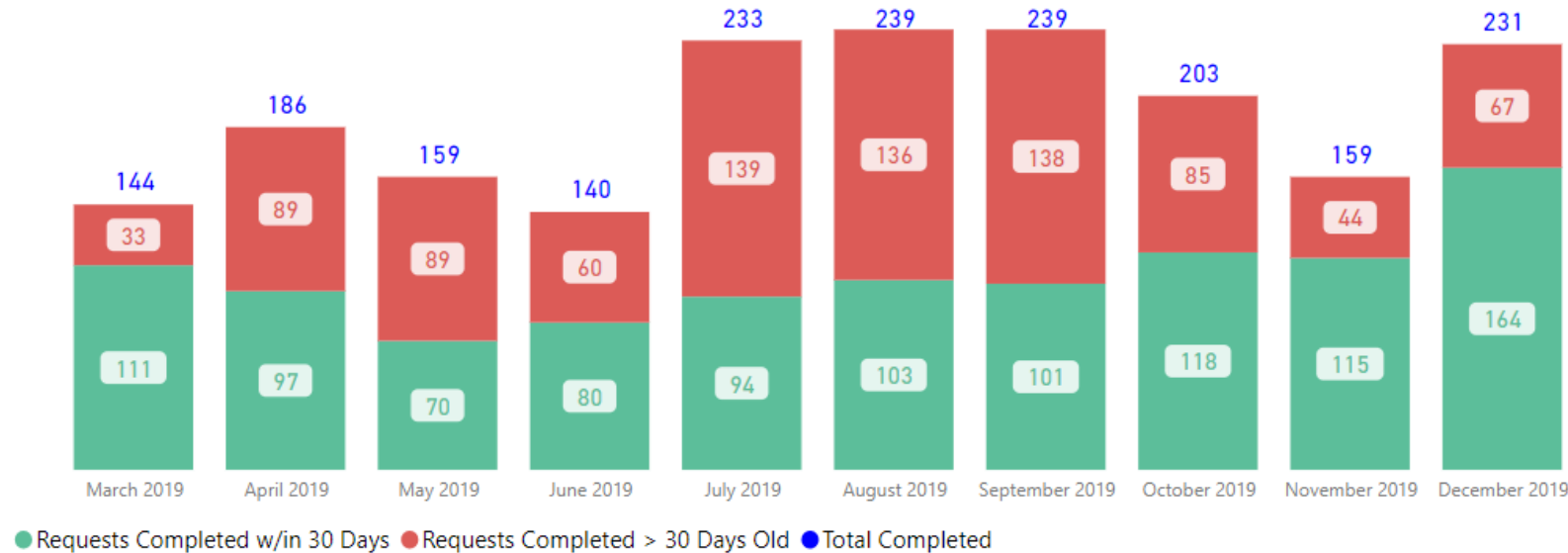
35.75

Total TAT (Rec'd-Compl.) Avg

34.91

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

1933

Requests Completed

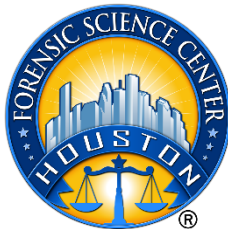
880

Requests Completed > 30 Days Old

45.53 %

% Completed > 30 Days Old

Requests more than 30 days old are considered to be backlogged requests



Service

CSU Response

Priority Type

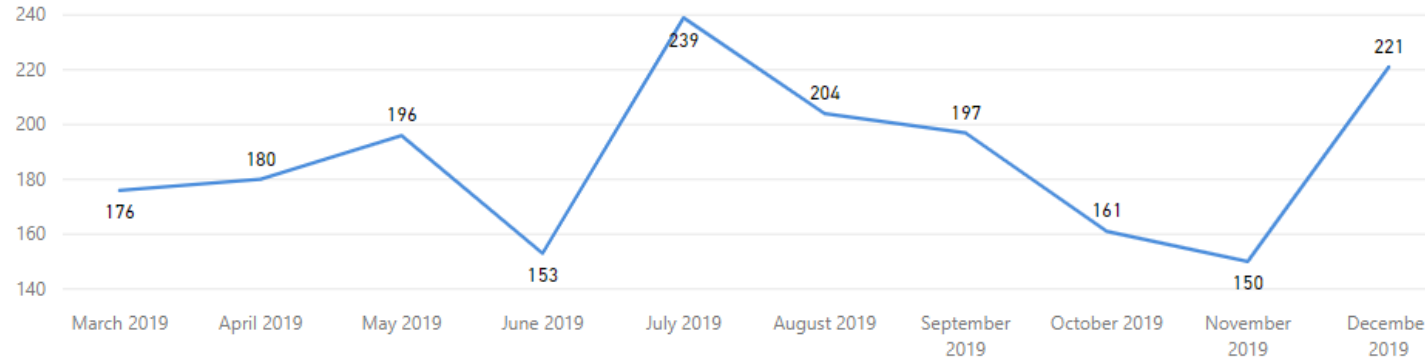
All

## Received Filter

3/1/2019

12/31/2019

## Received by Month



Total Received

1,877

Received per Month (Avg)\*

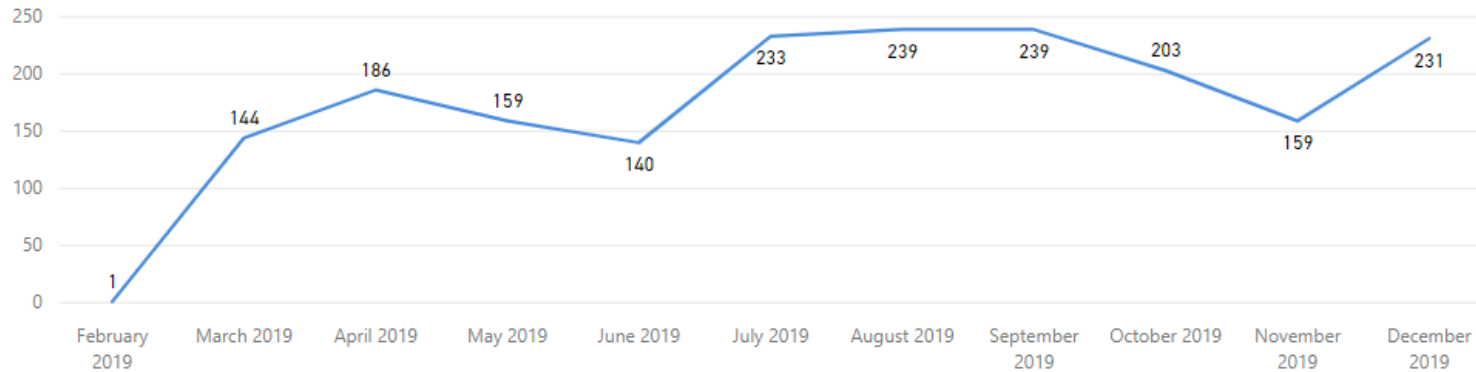
188

## Completed Filter

3/1/2019

12/31/2019

## Completed by Month



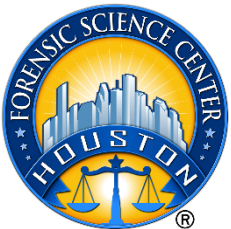
Total Completed

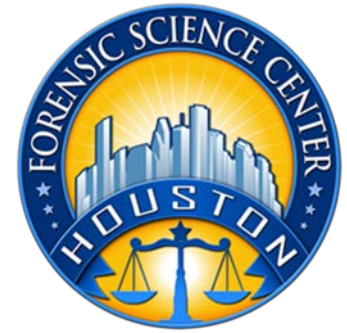
1,934

Completed per Month (Avg)\*

176

\* months with zero activity are not calculated into the average





# PROBABILISTIC GENOTYPING

Houston Forensic Science Center  
Forensic Biology

Robin Guidry, M.S., F-ABC  
DNA Technical Leader



# Presentation Outline

1. Introduction to probabilistic genotyping
2. Houston Forensic Science Center's probabilistic genotyping workflow
3. Anticipated challenges
4. Legal developments
5. Texas Forensic Science Commission
6. Training



# Introduction to Probabilistic Genotyping: Motivation to Change

- Increased sensitivity to chemistries and instrumentation has lead to the detection of more “trace” contributors, more complex mixtures and more data that is subject to stochastic effects
- Significant push in the forensic genetic community to:
  - Do away with thresholds
  - Make the best use of the available information
    - Model drop out and drop in
  - Treat the data probabilistically
    - Consider everything on a continuum instead of in a binary fashion
- Advantages
  - Removes weaknesses in current approaches
  - Removes bias and enhances scientific credibility
  - Recovers wasted evidential strength
  - Models drop-out and drop-in better

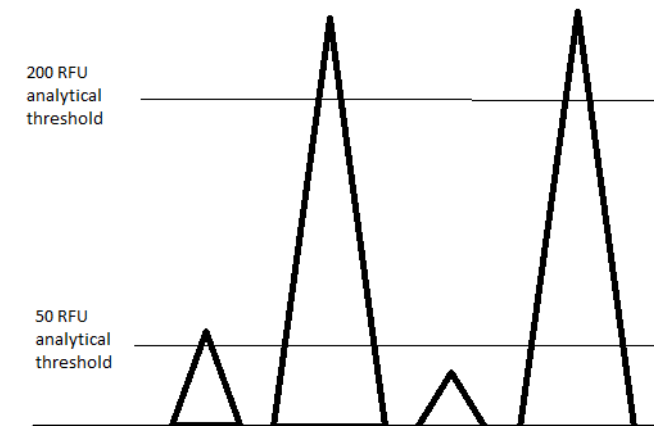
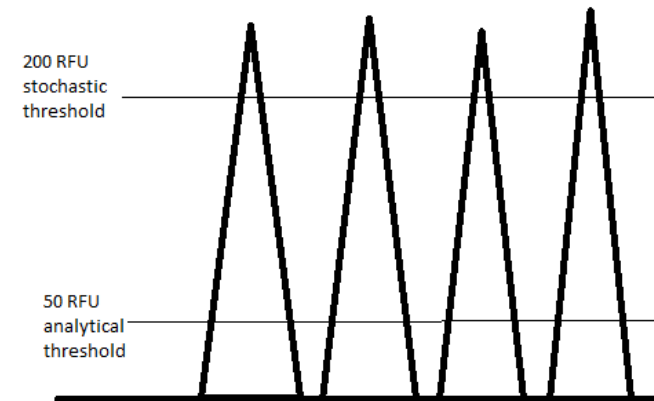


# Introduction to Probabilistic Genotyping:

## Binary v. Probabilistic

### Binary vs. Probabilistic Approach:

- **Binary Approach:** using thresholds, data is evaluated for the possibility of drop out or not → the data is either interpretable or it's not
  - Much of the data is discarded
  - Probability of 1 or 0, included or excluded
- **Probabilistic Approach:** using biological modeling, statistical theory, algorithms and probability distributions, genotypes are inferred and likelihood ratios are generated
  - It does not operate with stochastic thresholds and can take drop out into consideration, allowing better use of the DNA data
  - Considers everything on a sliding scale of probability



# Introduction to Probabilistic Genotyping: STRmix™ Software



- Fully continuous method to aid interpretation of low-level DNA profiles and complex DNA mixtures
- Uses peak height information from the data and biological modeling:
  - To describe the data
  - To consider many possible genotype combinations and generate a list of plausible single-source genotypes that may have contributed to that profile/mixture (also known as deconvolution)
  - To give weight to these possible genotypes which describes how well or not the proposed genotypes explain the data
- The concepts used by STRmix™ have been used in code breaking, aeronautics and the stock market

# Introduction to Probabilistic Genotyping: Likelihood Ratios



- Using the weights generated in the deconvolution process, a likelihood ratio (LR) can be calculated
- A likelihood ratio compares the probability of obtaining the evidence (the DNA profile) under two competing propositions based upon relevant case information
  - Hypothesis 1 (prosecution): the DNA was donated by the complainant and the defendant
  - Hypothesis 2 (defense): the DNA was donated by the complainant and an unknown individual
- Likelihood ratio can have any value 0 or greater
  - A value  $>1$  favors the prosecution
  - A value  $<1$  favors the defense (a decimal)
  - A value  $= 1$  is neutral (uninformative, equal support for both propositions)
  - A value  $= 0$  means an exclusion

# HFSC's Probabilistic Genotyping Workflow



- The DNA analysis process is the same until data interpretation
- STRmix™ is NOT a black box!
  - It is intended to assist the DNA analyst in interpretation, **NOT** to replace the human evaluation of the data
  - The analyst assigns the number of contributors that the software uses in the deconvolution process
- Prior to submission to STRmix™, two qualified analysts have to agree:
  - The quality of the sample is sufficient for interpretation
  - The number of contributors assigned
  - Any edits to the input data (e.g., removal of artifacts)

# HFSC's Probabilistic Genotyping Workflow



- After STRmix™ analysis, the analyst and technical reviewer will review the diagnostics to determine how well the interpretation has performed in accordance with underlying models and theory and to ensure the results are suitable to report
  - *Are the diagnostics intuitive?*
  - *Do they support the analyst's interpretation of the data?*

# Anticipated Challenges



- Laboratories who have transitioned before us are seeing 30 percent to 50 percent more interpretable profiles, creating more labor per case
  - HFSC hopes to gather data that will help establish the time difference between analyzing a case under the previous process compared to using probabilistic genotyping
- HFSC also anticipates requests to revisit previous data reported as unsuitable for comparison due to an excessive number of contributors or insufficient data

# TFSC Panel Report: DPS Self-Disclosure in State v. Criner



- The TFSC panel found the analyst's behavior constituted professional negligence (Aug. 16, 2019)
- The DNA evidence was excluded as a result of the *Daubert* testimony because the "technique or theory in question was not properly applied"
- The panel identified three major areas of concern
  - Data interpretation
  - Testimony performance
    - Inadequate preparation for testimony
    - Inaccurate testimony regarding results and conclusions of the DNA analysis
    - Testimony that the STRmix™ results and the underlying data were not concordant
    - Testimony that the analyst did not follow protocol
    - Apparent lack of understanding of STRmix™ concepts at the time of trial
  - Response to the TFSC panel investigation

# Daubert Opinion: US v. Daniel Gissantaner



- Judge granted defense's motion to exclude STRmix™ evidence (Oct. 16, 2019)
- Judge considered testimony from state and defense witnesses, as well as two court-appointed experts
  - Dr. Michael Coble, University of North Texas Health Science Center
  - Dr. Dan Krane, Wright State University
- It was not an indictment of probabilistic genotyping or the STRmix™ software
- Concerns raised in the legal opinion include:
  - A lack of standards for the development of use of probabilistic genotyping software
    - There are nationally recognized guidelines that mirror the standards being reviewed by the American Academy of Forensic Sciences Standards Board
  - Concern the limitations established by the validation were exceeded in this particular case
  - The 2016 report issued by the President's Council of Advisors on Science and Technology (PCAST) was cited
    - Most studies have been undertaken by the developers
      - A response paper with internal validation data from 31 labs published to address the deficiencies described in the PCAST report
    - "...these methods appear to be reliable for three-person mixtures in which the minor contributor constitutes at least 20 percent of the intact DNA in the mixture and in which the DNA amount exceeds the minimum level required for the method."



# Texas Forensic Science Commission



- Inaugural meeting of the STRmix Working Group, July 29, 2019
- Three Subcommittees
  - Validation
  - Education and training
  - Reporting and testimony
- Goal of subcommittees is to provide work products for statewide use, such as:
  - Checklists for validation and software upgrade performance checks
  - Statewide data sharing/comparison
  - Web-based training for analysts, lawyers and judges
  - Tools to anticipate and respond to challenges regarding probabilistic genotyping

# HFSC Training



- External training
  - 12 hours of likelihood ratio training from Dr. Michael Coble
  - Over 28 hours of training from three senior scientists from the Institute of Environmental Science and Research Limited (ESR), the home laboratory of a co-developer of STRmix™, Dr. John Buckleton
  - Over 28 hours of training from NicheVision, the US distributor of the STRmix™ software
  - 14 hours of testimony training from DNA Labs International
- Internal training
  - Extensive reading of manuals, publications and testimony transcripts
  - Oral exams to promote strong testimony performance
  - Exposure to the TFSC panel report and the Michigan *Daubert* decision
  - Practice sets and competency testing on the theory and the application of the STRmix™ software

# Training HFSC Stakeholders Is Critical

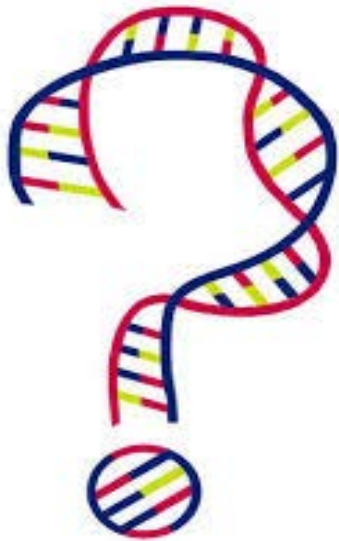


- HFSC believes it is critical to train stakeholders during the transition to probabilistic genotyping
  - Oct. 28, 2019: Collaboration with the Harris County Institute of Forensic Science at the Children's Assessment Center
    - HPD, HCSO and other local sexual assault investigators
  - Nov. 7, 2019: HFSC's forensic training for prosecutors, defense attorneys
  - HFSC will continue to seek opportunities to train stakeholders and collaborate with local laboratory partners when possible



# Glossary

- Drop out: Activity below the analytical threshold. This occurs when DNA is present but fails to amplify.
- Drop in: Low-level DNA that appears in a profile but is not associated with the crime sample and cannot be explained by the contributors. As chemistries increase in sensitivity the likelihood of drop in increases.
- Analytical threshold: A point at or above which true data can be distinguished from background noise.
- Stochastic threshold: A point at or above which analysts can be confident data has not dropped out.
- Stochastic effects: The random selection of alleles in the amplification of low-level DNA samples that results in drop out.



Robin Guidry  
DNA Technical Leader  
[rguidry@houstonforensicscience.org](mailto:rguidry@houstonforensicscience.org)  
713-929-6760

## **500 Jefferson Office/Lab Project Close-Out, 2020 VEB Project Discussion**

### **1/10/20 HFSC Board Update**

#### **500 Jefferson Project**

- **In summary: project delivered on schedule, required functionality, below project cost estimate, good team effort. Fannin and Travis buildings exited ahead of schedule, minimizing duplicate rent. Completing items in a few areas**
- **HFSC 500 Jefferson occupancy permit received from City of Houston for each floor, original retained by landlord (HFSC has copies)**
- **Excellent staff feedback on office/lab space**
- **Achieved 500 Jefferson lease cost same as original Fannin/Travis opex, Andy Icken cost directive**
- **Project delivered on aggressive schedule, completed 17 months after first seeing 500 Jefferson building:**
  - **Moved 200 staff (7 moves), 44 instruments (2 moves), 17 microscopes (1 move), applied lessons learned to each move**
  - **13<sup>th</sup>, 14<sup>th</sup>, 15<sup>th</sup> floors, moved-in to essentially as is space. 18<sup>th</sup> floor and basement, purpose-built labs, requiring once-through air/power/etc.**
  - **Testing and balancing, commissioning basically complete**
  - **All labs up and running, still progressing Toxicology drug confirmations as planned. All labs in casework catch-up mode**
  - **Of particular note: basically flawless moves, shooting tank install, CODIS/NIBIN moves, instrument piping install, lab start-ups, etc.**

- **Project under budget, relentless cost/value focus:**
  - Original project budget, \$1 million: moves, IT/security, shooting tank, project management, change orders, other. Excludes lab furniture (grant/landlord), hydrogen generators (landlord)
  - Project invoiced to date: \$763,000. Final cost around \$800,000, project will be \$200,000 below \$1 million budget
  - Instrument move cost \$199,000, no additional costs/change orders. Board approved not to exceed \$250,000
  - Accommodated \$114,000 of change orders (included in \$763,000), including upgrades: epoxy floor, medical grade ceiling tiles, additional firearms armortex wall protection – provides longevity, easy clean, safety. Shared upgrade cost 50/50 with landlord
  - Lab furniture: \$336,000 (including minimal \$1,735 additional table/shelve needs). Board approved not to exceed \$350,000
  - Landlord invoiced, reimburse \$48,000 for 3 hydrogen generators
- **Good project team effort:**
  - HFSC, Board, City, landlord, contractors, consultants
  - Detailed plans, weekly HFSC/landlord meetings, HFSC steering committee meetings, project core/extended teams, critical path attention, relentless focus on decision making/project progression
- **Few remaining items:**
  - Firearms basement exhaust fans, not delivering required air flow. Landlord/HFSC reviewing
  - Latent Prints glue chamber damaged in move, repairs in progress, testing system, working to restore 100% functionality
  - Landlord/HFSC training on lab systems, protocols, documentation
  - Landlord CSU 24/7 HVAC delivery, more cost-effective option
- **Overall successful project, maximize HFSC benefit, now focus on VEB**

## **Vehicle Examination Bay (VEB) Renovation Project, 1305 Dart Street**

- **Part grant funded, tight budget/schedule, periodic HFSC Board updates:**
  - \$114,000 federal funding, HFSC “match” \$38,000 (25% of project estimate). HFSC also funds all costs above \$152,000, if applicable
  - Complete project by end 2020, prioritize, maximize cost/value
  - Tight timeline: develop scope, RFIs/RFPs, bidding, contractor/consultant selection, permits, construction, completion
- **Background:**
  - CSU work scope at VEB, vehicle evidence capture/protection: photography, fingerprints, DNA collection
  - HFSC to remain at VEB medium/long term, need to renovate to enhance evidence protection, capture, scale
- **Project scope (work-in-progress):**
  - Validate existing building structure/condition, conduct repairs as/if necessary, some outside clean-up, potentially extend privacy fence
  - Enclose current four open bays (to provide total of 8 enclosed vehicle examination bays), add double doors, insulation, HVAC
  - For all 8 bays: epoxy floor, HVAC, electrical, plumbing, validate compressed air unit/venting, additional lighting, photography overhead viewing gantry, tool benches
  - Office: HVAC, new bathroom, small galley kitchenette, vinyl floor, 2 workstations
  - IT/security
  - Prioritize, complete/phase project in line with budget/schedule
- **Conducting 1/9/20 Project Workshop/Kick-Off:**
  - HFSC, City Design and Construction attendance
  - Workshop/follow-up deliverables: project cost estimate/scope, priority, project timeline, approved contractors, action plans

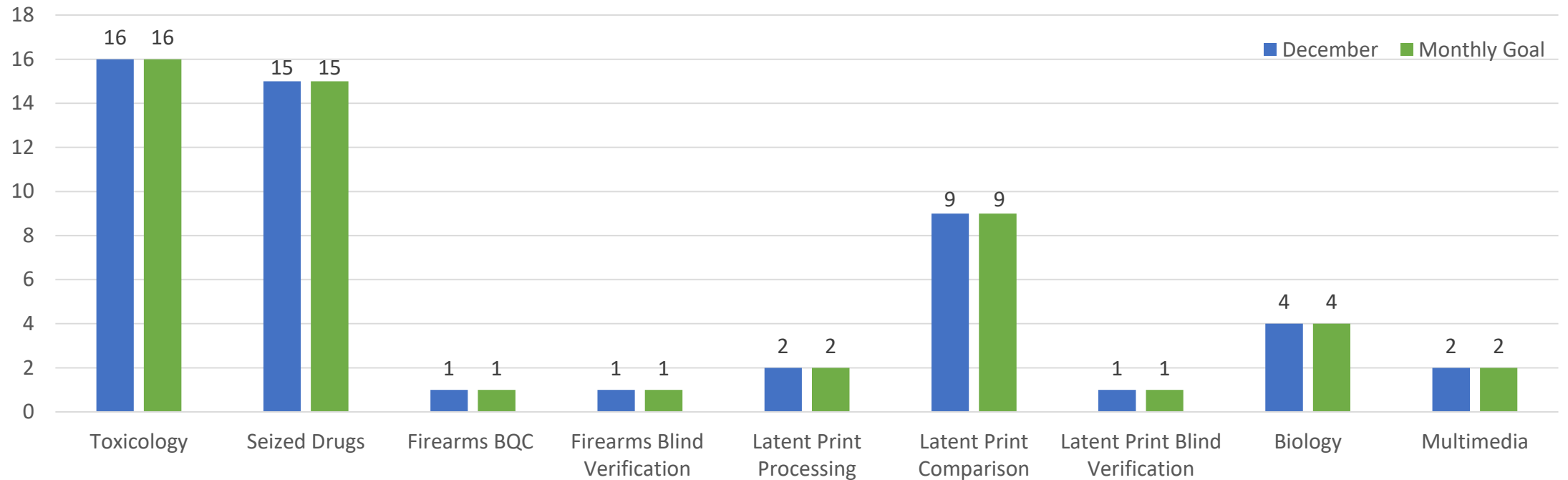


# Quality Division Report

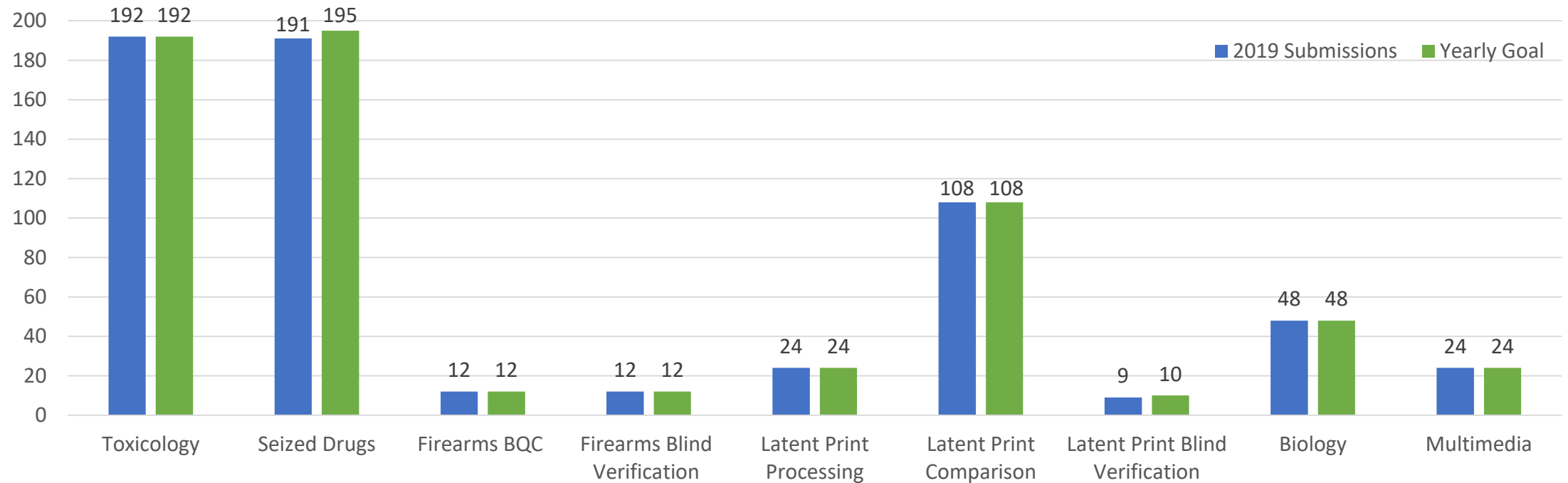
January 10, 2020



# BQCs Submitted in December



# BQCs 2019: Year in Review



# Blind Quality: Accomplishments and Challenges

- Monthly submission goals for 2020 calculated: ~5% of each section's output in 2019
- “Implementation of a Blind Quality Control Program in a Forensic Laboratory” manuscript published by the Journal of Forensic Sciences (JFS) as open access
- HFSC to present on blind proficiency program during Center for Statistics and Applications in Forensic Evidence (CSAFE) webinar
- Multimedia analyst incorrectly identified a case as a blind

Forensic Discipline	Cases Completed in December
Toxicology – BAC	8
Seized Drugs	18
Biology	2 (DNA) 5 (screening)
Firearms – Blind Verification (BV)	0
Firearms	1
Latent Print Processing	0
Latent Print Comparison	14
Latent Print – Blind Verification (BV)	1
Multimedia	3

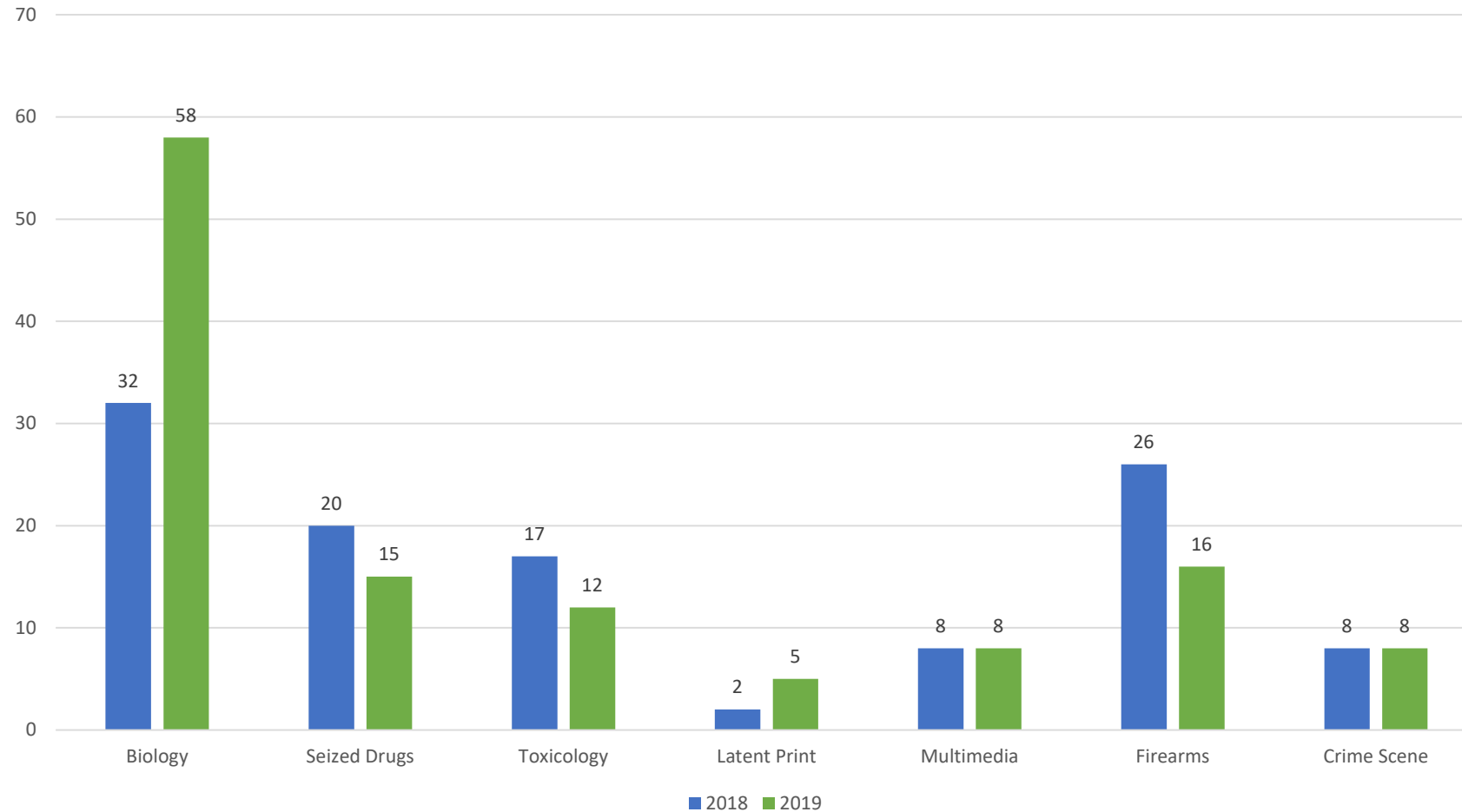


# 2019 Testimony Data

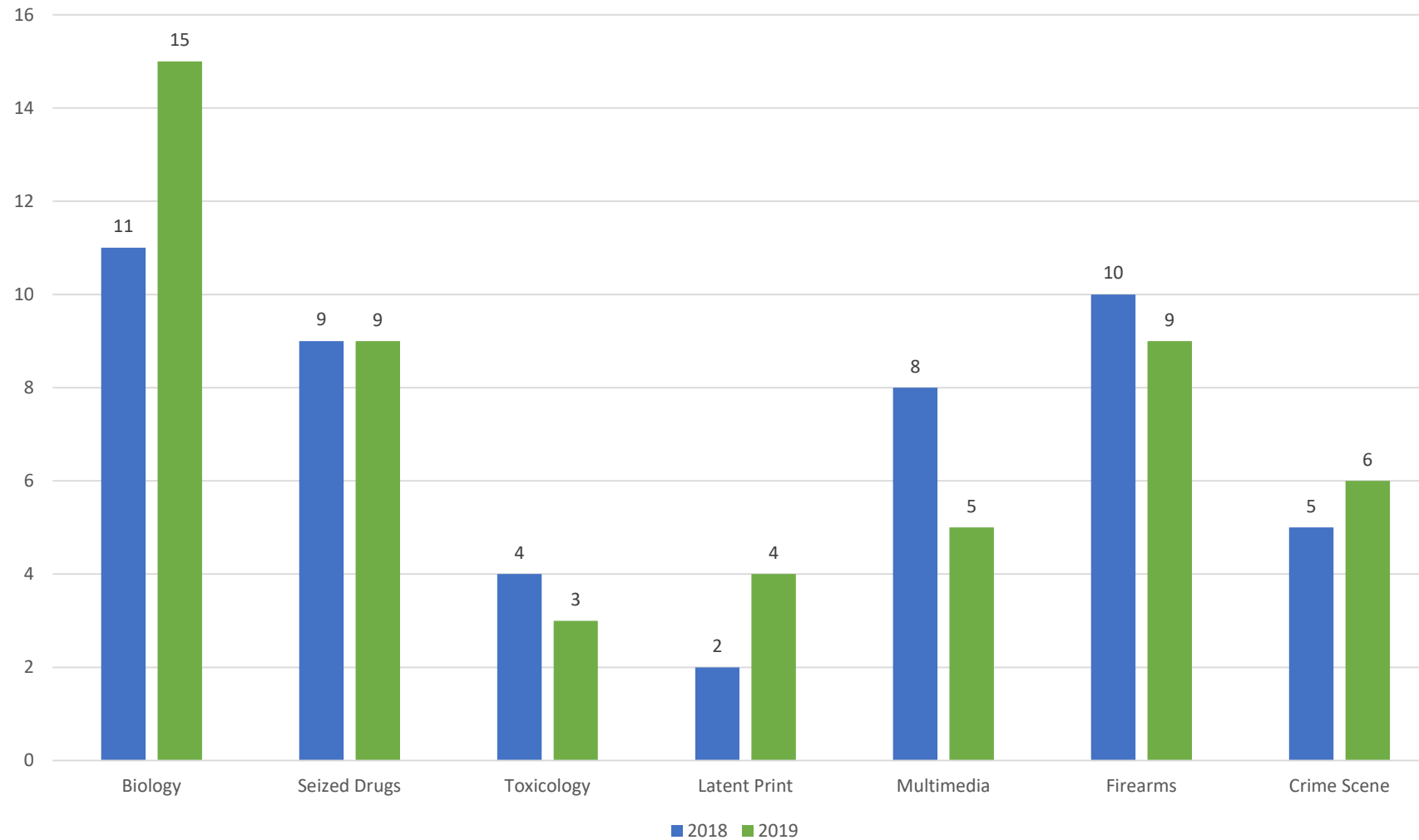
- 51 analysts testified last year. A technical expert monitored each testimony
- Transcript review project
  - 12 transcripts will be completed for 2019
  - 5 of those received in December and currently being reviewed



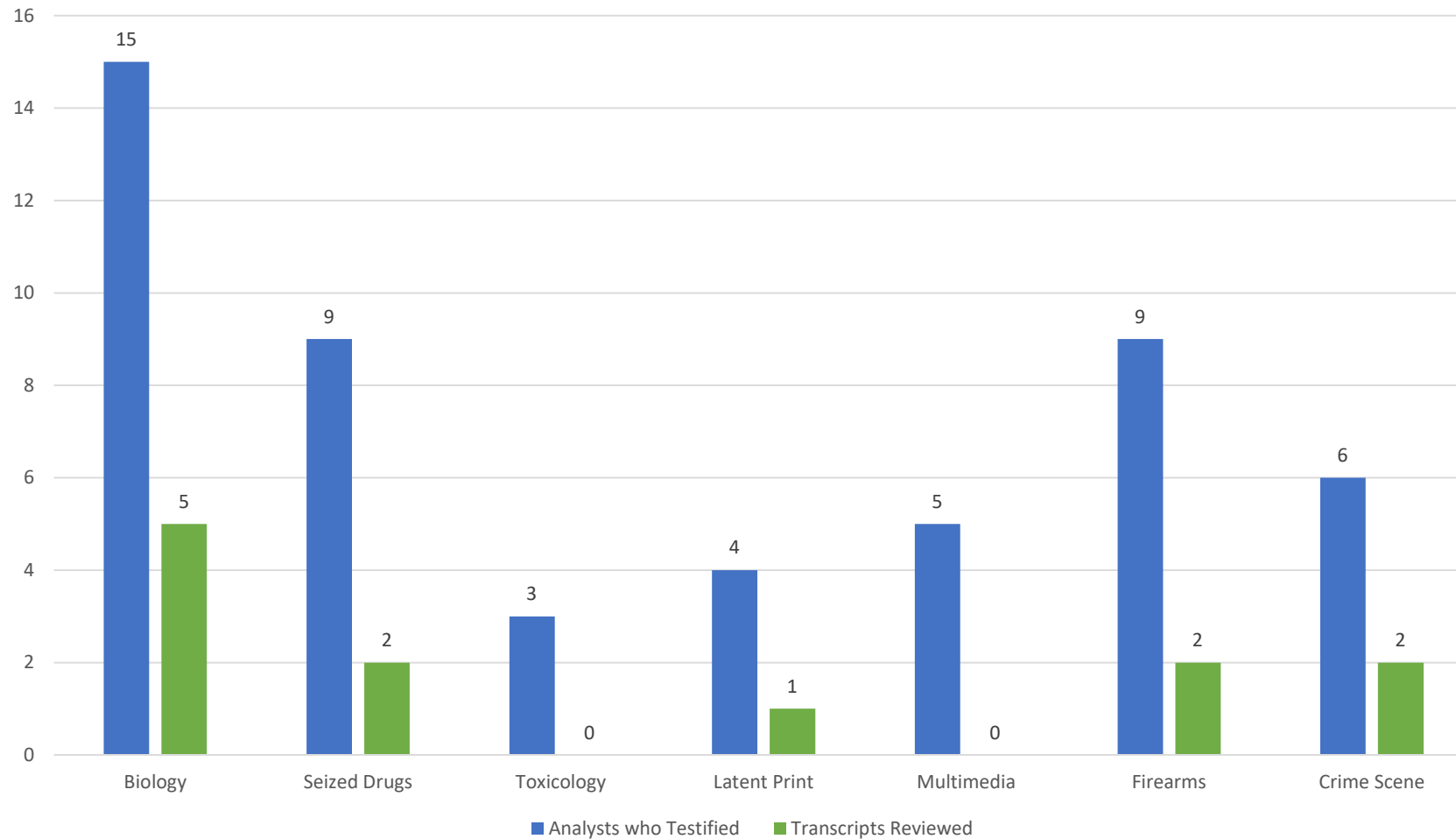
# Number of Testimonies: 2018 vs 2019



# Number of Analysts Testified: 2018 vs 2019



# Analysts Testified vs Transcripts Reviewed





# Audits/Disclosures/Corrective Actions

On-site assessment on January 13 following lab relocation

- HFSC has been communicating with its accrediting bodies throughout the relocation
- HFSC has provided necessary documentation to ANAB, one accrediting body
- Assessor will focus on calibrations, performance checks and security



# Detailed Data



# 2019 Proficiency Testing

Discipline		Tests in Progress	Tests Completed	Comments
Seized Drugs		-	15	
Toxicology		7	7	
Firearms		6	19	
Crime Scene		2	23	
Latent Prints		1	17	
Multimedia	Audio/Video	2	5	
	Digital	1	3	
Forensic Biology		25	20	



## Quality Division Notifications

Incidents, Corrective and Preventive Actions

Monday, January 6, 2020

12:39:15 PM

Page 1 of 2

	Quality Notified	Summary of Notification	Comments
<b>Biology</b>			
2019-078 IR	12/12/2019	An incorrect sample was selected while preparing for an extraction procedure. This resulted in the sample being extracted with an unintended extraction procedure.	
2019-083 IR	12/16/2019	A sample was accidentally dropped into the biohazard trash bin during an extraction procedure and is, therefore, unrecoverable.	
2019-093 CAR	12/19/2019	An expired reagent was used during three Forensic Biology extraction procedures. The reagent was one day beyond its expiration date.	
<b>Crime Scene</b>			
2019-092 IR	12/27/2019	A crime scene investigator (CSI) was requested by the Firearms Section to photograph and collect DNA swabs from a firearm that had possible blood. While later reviewing the photographs, the CSI observed what appeared to be a patent print in the possible blood. The CSI and a supervisor contacted the Firearms Section to see if the firearm was available for comparison quality photographs but were informed that the firearm had been already been decontaminated.	
2019-094 IR	12/27/2019	A crime scene investigator (CSI) did not collect a ski mask during vehicle processing from a robbery vehicle at the Vehicle Examination Building (VEB).	
2019-095 IR	12/28/2019	Two crime scene investigators (CSIs) failed to properly document a crime scene. Possible blood on a vehicle and projectile underneath a separate vehicle were not properly documented through photography, videography or their scene notes.	
<b>Firearms</b>			

HFSC's Quality Division investigates nonconforming work and helps develop solutions in compliance with accreditation and legal standards. With regard to the items listed above, the Division has not detected any use of inaccurate results in a criminal proceeding.

## Quality Division Notifications

Incidents, Corrective and Preventive Actions

Monday, January 6, 2020

12:39:35 PM

Page 2 of 2

	Quality Notified	Summary of Notification	Comments
2019-090 IR	12/2/2019	The second examiner accidentally signed electronically as the technical reviewer (as opposed to signing as the second examiner) in JusticeTrax LIMS.	
2019-091 IR	12/10/2019	Two cases that had handguns that did not have magazines were processed for NIBIN prior to latent print processing being performed on them. Neither case had a latent print request, however it is Firearms section policy to ensure that latent print processing is performed prior to NIBIN processing when there is no magazine present.	

HFSC's Quality Division investigates nonconforming work and helps develop solutions in compliance with accreditation and legal standards. With regard to the items listed above, the Division has not detected any use of inaccurate results in a criminal proceeding.