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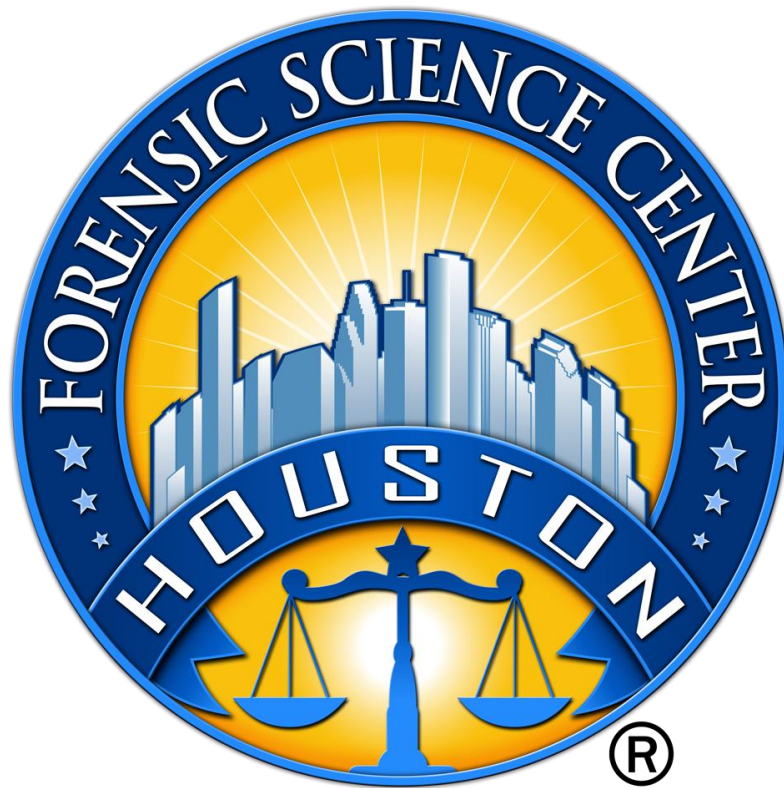
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Houston Forensic Science Center, Inc.

**Board of Directors Meeting**

***November 8, 2019: CANCELLED***



**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**

**Position 9 - Vacant, Vice Chair**

**Ex-Officio - Tracy Calabrese**

HOUSTON FORENSIC SCIENCE CENTER, INC.

**NOTICE OF PUBLIC MEETING**

**November 8, 2019**

Notice is hereby given that beginning at 9:00 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 of October 11, 2019 board 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. Discussion and possible selection of a board member to fill the vacant position of board vice chair, and possible related action.

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

7. Report from Dr. Stout, president and CEO, including technical updates, outreach efforts, staffing changes and other corporate business items.
8. Presentation from Dr. Stout regarding a proposed Interagency Cooperation Agreement between the Houston Police Department and the Corporation and related action.
  - a. Consider authorizing Dr. Stout to negotiate and enter into an Interagency Cooperation Agreement between the Houston Police Department and the Corporation.
9. Monthly operations report from Dr. Amy Castillo, vice president and COO, including a review of turnaround times and backlogs.
10. Presentation by Mr. David Leach, treasurer and CFO, regarding company financials and other fiscal updates.

11. Consider authorizing Dr. Stout to negotiate and enter into an agreement with a financial institution for the purpose of managing the corporate employee retirement fund, and possible related action.

Reports and presentations by staff

12. Report from Mr. Jerry Pena, director of CSU and digital multimedia evidence, on evidence collection, turnaround times and other updates.
13. Report from Ms. Robin Guidry, DNA technical lead, on HFSC's implementation of probabilistic genotyping, validation and training.
14. Report from Mr. Charles Evans, director of business development, regarding the status of the Corporation's facility project and move to 500 Jefferson.
15. Report from Ms. Erika Ziemak, quality director, regarding quality assurance, including review of testimony monitoring, proficiency tests and corrective actions.
16. 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 5th day of November, 2019 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 5th day of November 2019.

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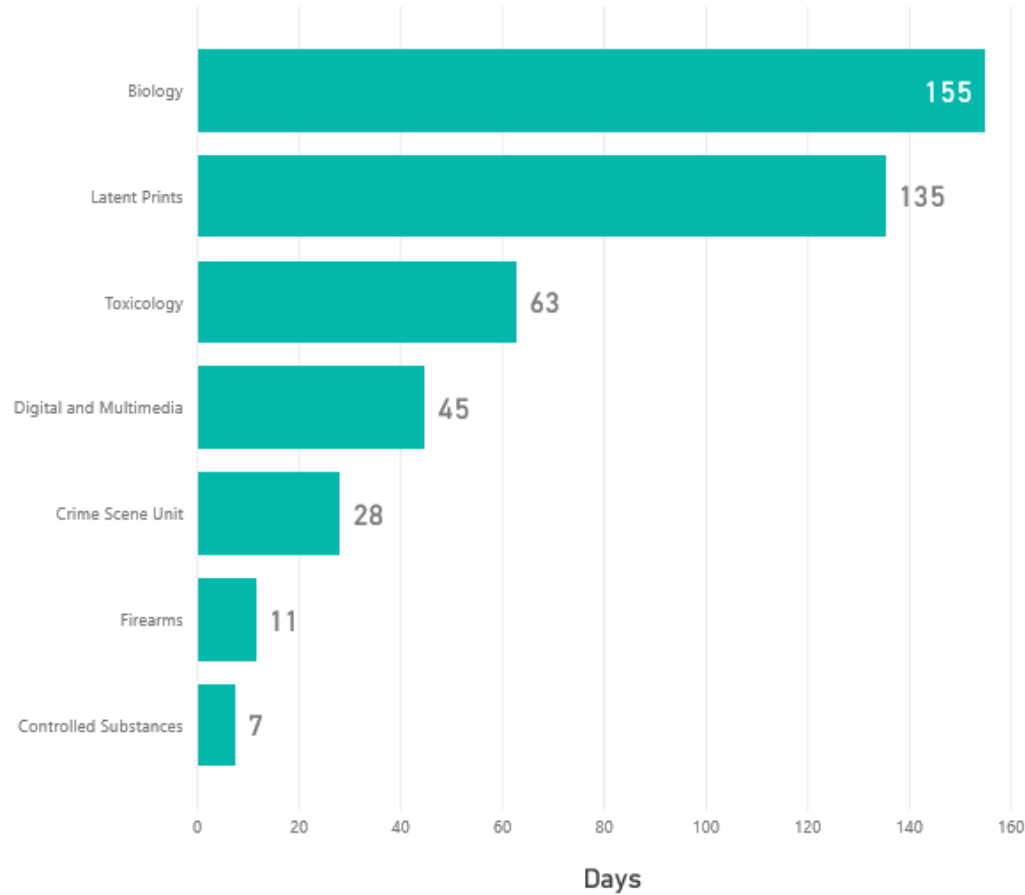
Jordan Benton

# President's Report

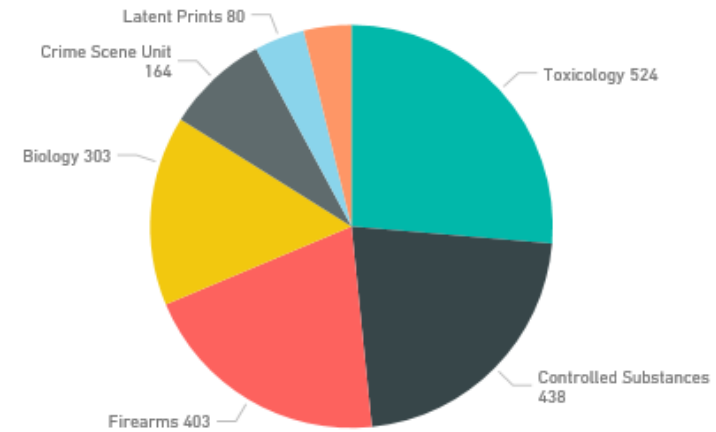
November 8, 2019



## Average Turnaround Time for October 2019



## Requests Completed by Section



Turnaround Time - Days

**54**

Completed Requests

**1988**

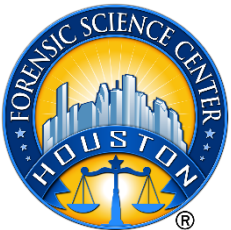
Month Comple...

- ☐ 01-January
- ☐ 02-February
- ☐ 03-March
- ☐ 04-April
- ☐ 05-May
- ☐ 06-June
- ☐ 07-July
- ☐ 08-August
- ☐ 09-September
- ☒ 10-October

Year Completed

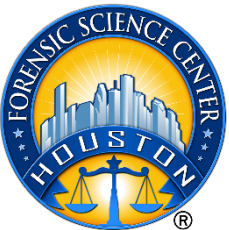
- ☐ 2014
- ☐ 2015
- ☐ 2016
- ☐ 2017
- ☐ 2018
- ☒ 2019

This data is current as of 10/25/2019.



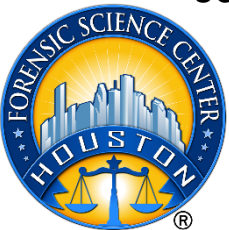
# Certifications

- Bo Amos – Cellebrite Certified Operator and Cellebrite Certified Physical Analyst
- Jeff Frye - Certified Quality Improvement Associate
  - American Society for Quality (ASQ)
- Spencer Ledesma - Certified Forensic Video Examiner
  - International Association for Identification (IAI)
- Mario Moreno - Cellebrite Certified Operator and Cellebrite Certified Physical Analyst
- Marissa Noel - Certified Quality Improvement Associate
  - American Society for Quality (ASQ)
- Kendall Pratt - Basic Property and Evidence Technician Certification
  - Texas Association of Property and Evidence Inventory Technicians (TAPEIT)
- Rita Sanchez - Advanced Property and Evidence Technician Certification
  - Texas Association of Property and Evidence Inventory Technicians (TAPEIT)



# Outreach

- Rice Career Crawl: Akilah Mance oversaw presentations and tour of HFSC facility
- Tour of HFSC with NIST staff, including OSAC deputy director and a standards development specialist
- Pearland High School: spoke to more than 300 students about opioids, vapes, CBD and other scary stuff
- Paper on PCP use and impaired driving in Houston written by Dr. Peter Stout and Dr. Dayong Lee, HFSC's toxicology manager, has been accepted for publication in the Journal of Analytical Toxicology
- Bay Area Drug and Alcohol Council: opioids, vapes, CBD
- Governor's office: hemp vs. marijuana
- Akilah Mance put together forensic training for prosecutors and defense attorneys
- Tour of HFSC with Rep. Nicole Collier, chairwoman of the Texas House Criminal Jurisprudence Committee
- American Academy of Forensic Sciences accepts CSI Kaitlin Main's presentation on transparency in the crime scene unit for the annual conference in February



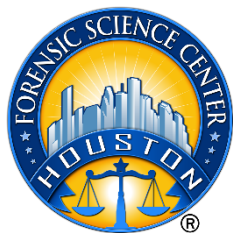
# The Big Move

November 8, 2019



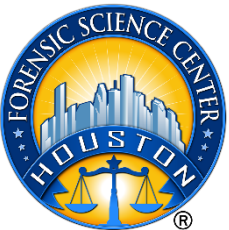


# HFSC's Grand Opening



# The labs

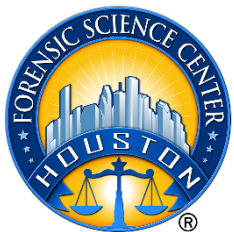
- Latent print processing: moved, unpacked, up and running (ahead of schedule)
- DNA: moved, unpacked, decontaminating, performance checking, shutdown until Thanksgiving
- Firearms: moved, setting up microscopes, operating at reduced capacity until November 18
- Seized drugs: moved, setting up lab and performance checking until November 15, operate at reduced capacity until Thanksgiving
- Toxicology (blood alcohol): moved, shutdown until January 1 when instruments and lab will be fully operational
- Toxicology (drugs): moved, performance checking instruments, lab will operate at reduced capacity while validating new instruments, expected to be fully operational by June 30, 2020





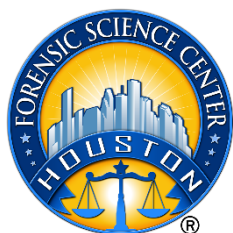
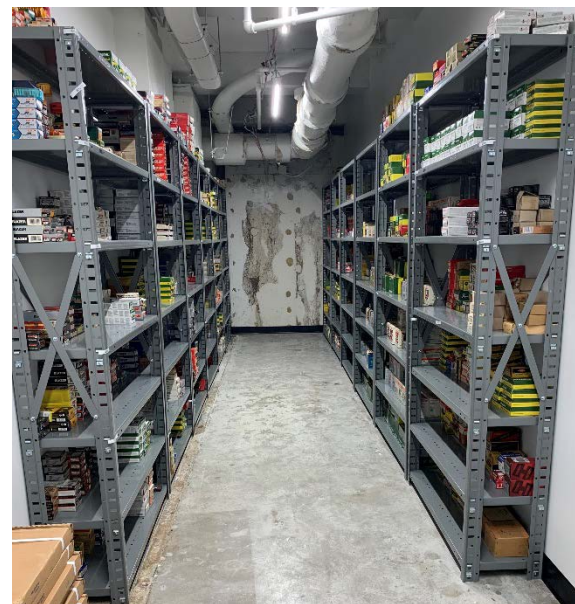


October 18, 2019



# October 31, 2019

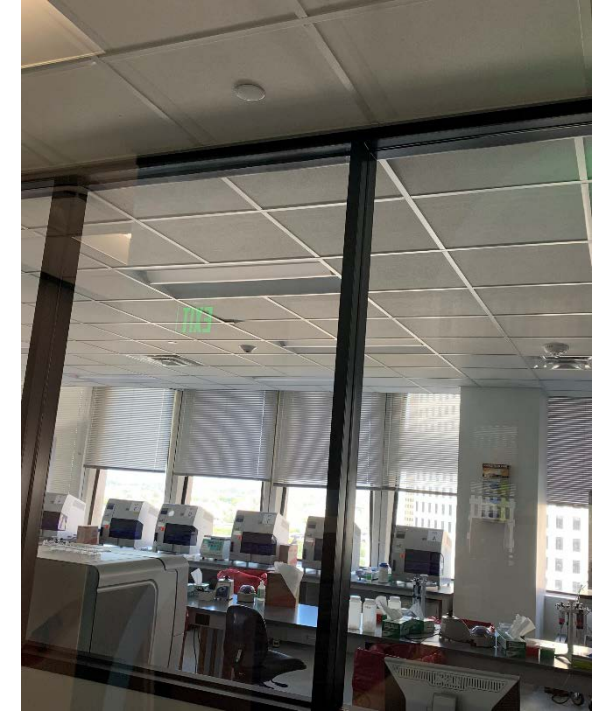
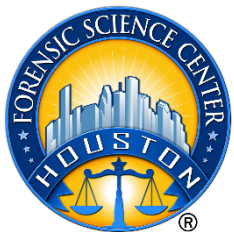
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# October 31, 2019

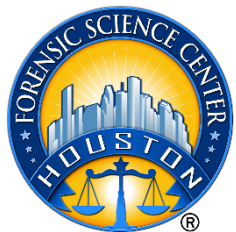
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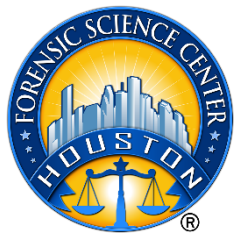


November 2, 2019





November  
5, 2019



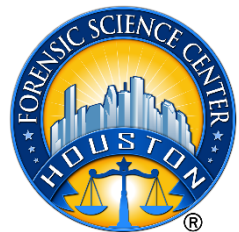
# Technology: Pros, cons, challenges

- HFSC has an obligation to keep up with changes in science and technology
- Currently focused on two main technologies:
  - Forensic biology/DNA: probabilistic genotyping
  - Toxicology: LCQQQ
- 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





# Happy Halloween from HFSC!



# Operations Report

November 8, 2019





# Highlights

- Forensic Biology/DNA update



# October 2019 Company Overview

## Open Quality Reports

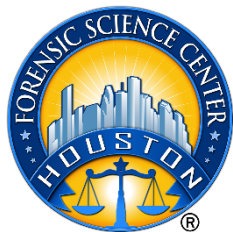
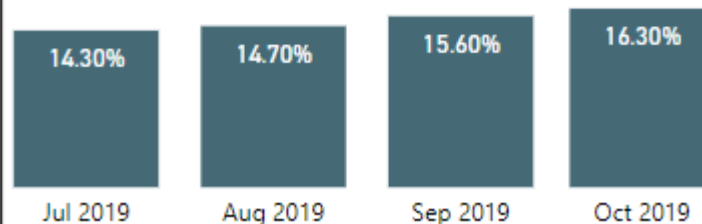
35

### Quality TAT

28✓

Goal: 35, 36

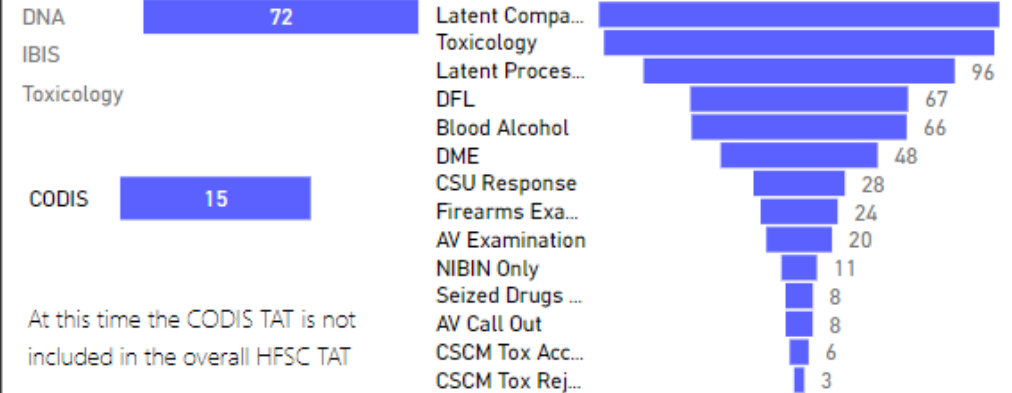
## % of Requests in Backlog



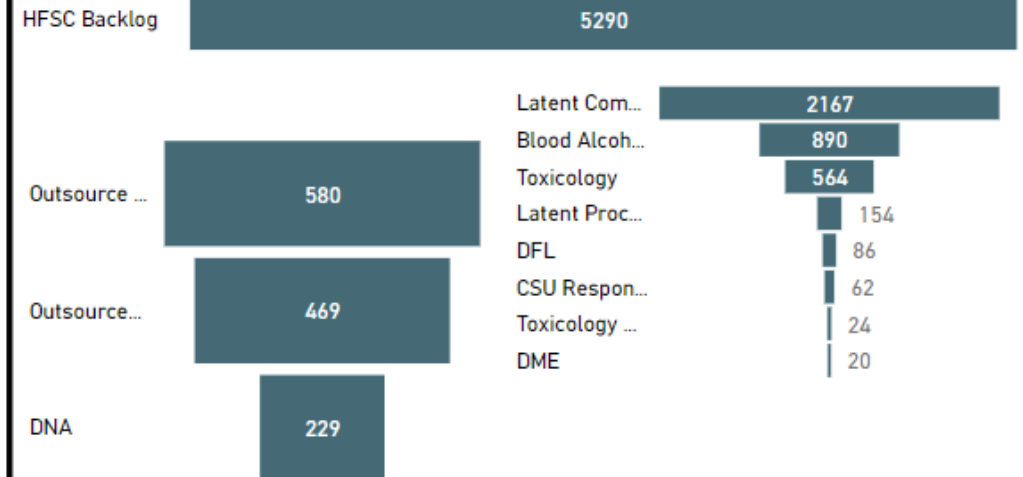
## HFSC Request Turnaround Time



## Section Request TAT (Past 30 Days)



## HFSC Request Backlog



Section/Service Backlog Present if >15 requests are in the Backlog

# Forensic Biology/DNA Update

## **Backlog/Outsourcing**

- Internal backlog: 229 (July 2018 internal backlog: 1,086)
- Backlogged outsourced cases: 469
- Backlogged cases awaiting CODIS review: 580
- Outsourced cases completed: 1,493

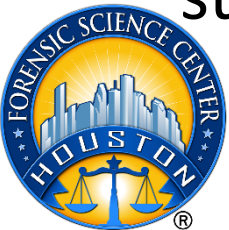
## **Training**

- Screeners that completed training: 4
- Technicians that completed training: 7
- Report writers that completed DNA training: 1 full, 2 experienced new hires completed shorter training program
- Report writers that had DNA training extended to include STRmix (probabilistic genotype) training: 6
- Report writers that completed STRmix training: 2
- Experienced report writers in STRmix training: 13
- 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 training is complete
- Final batch of sexual assault kits outsourced due to lab shutdown during move
- January board meeting: update on STRmix training and backlog status



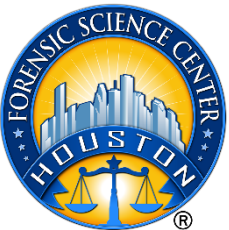
# Crime Scene and Multimedia

November 8, 2019



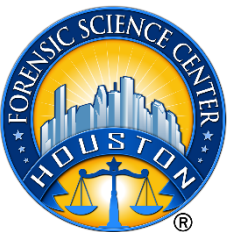
# Crime Scene Unit

- Historically, CSU only responded murders, questionable deaths, all child deaths and officer-involved shootings
- To improve public safety, HFSC sought, on a limited trial basis, to expand CSU services to include additional crimes
- Late 2017 early 2018, CSU began responding to other violent crimes and some high-profile property crimes
- CSU has improved quality, variety and volume of work, producing large numbers of useable latent print evidence
  - Good for investigators
  - Creates resource challenge for HFSC's latent print section



# Crime Scene Unit

- 2018-2019 (end of September) HFSC responded to more aggravated assaults and aggravated robberies. As a result, CSU responded to 295 additional scenes
- **Aggravated Assault**
  - 2018: 116 (9.7 avg/month)
  - January 2019-Sept. 30, 2019: 105 (11.7 avg/month)
- **Aggravated Robbery**
  - 2018: 10 (.8 avg/month)
  - January 2019-Sept. 30, 2019: 30 (2.5 avg/month)
- **Burglary**
  - 2018: 9 (0.75 avg/month)
  - January 2019-Sept. 30, 2019: 9 (1 avg/month)
- **Sexual Assault**
  - 2018: 11 (0.9 avg/ month)
  - January 2019-Sept. 30, 2019: 5 (0.6 avg/month)



# 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%)

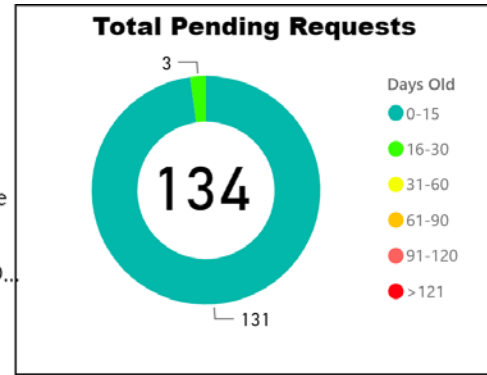
**# Pending Draft**  
24✓  
Goal: 100 (+76%)

**# 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)**

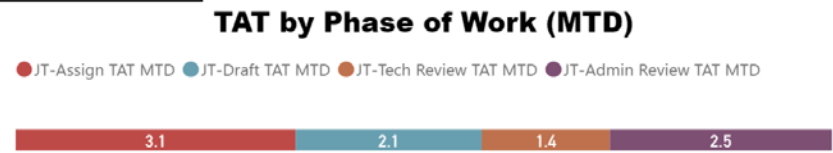
9.1✓

Goal: 14, 15

**Overall TAT (Past 90 Days)**

8.8✓

Goal: 14, 15



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**

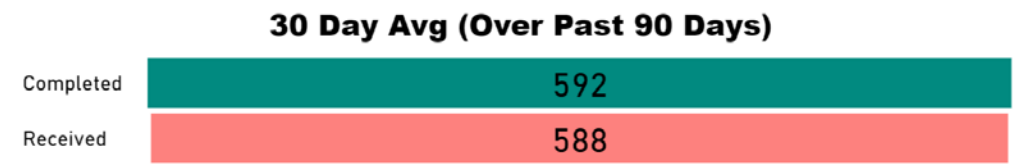
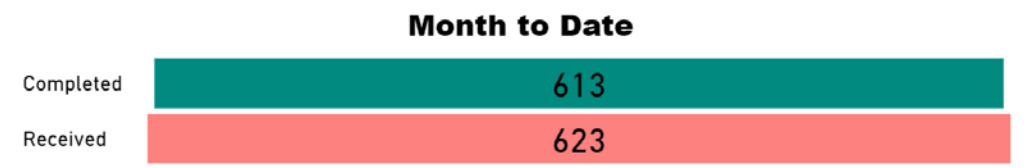
9✓

Goal: 30, 31

**Avg Age of Open Reports\***

17

Average time to close quality reports



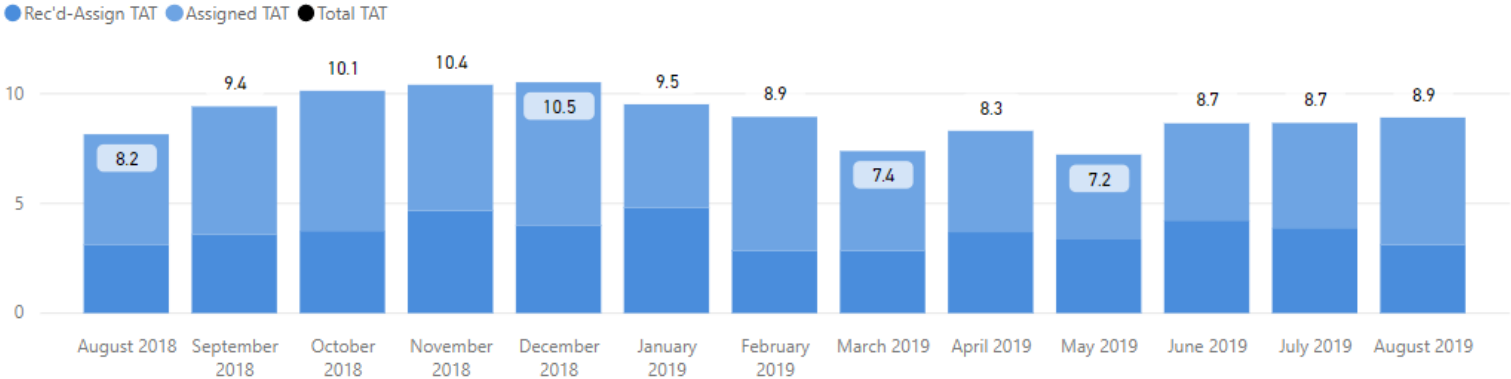
TAT= Turnaround Time   MTD= Month to date   Critical age=30 days   Critical pending=requests open over 30 days

# 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

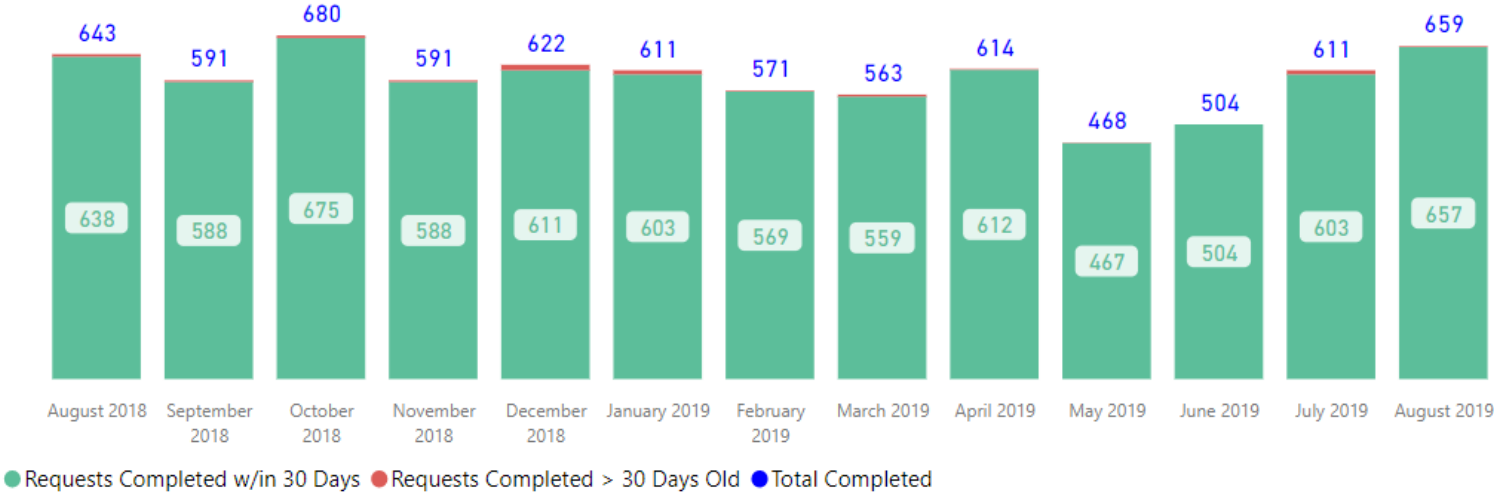
All

## Selected Time Frame Averages

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

5.31  
Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



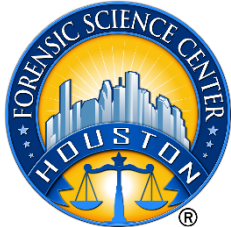
## Received to Complete

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

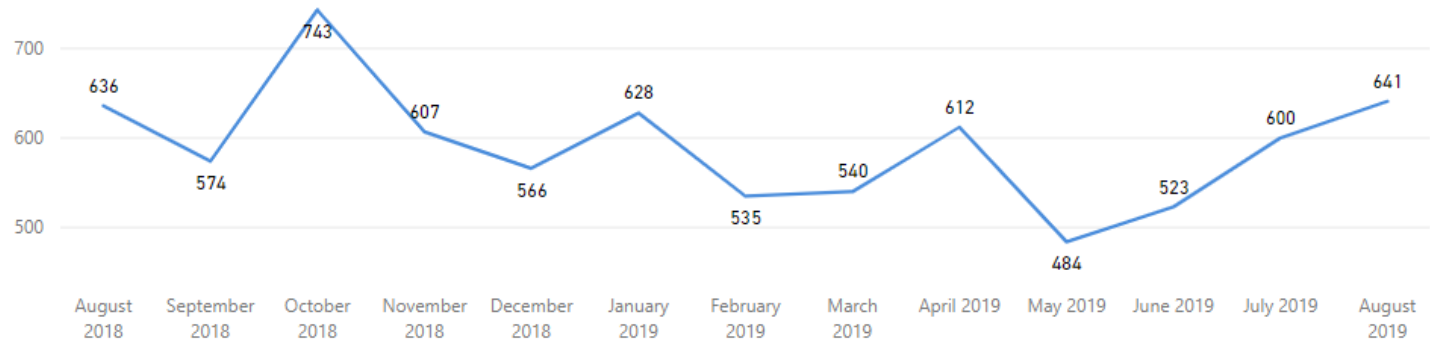
Seized Drugs Examination

All

Received Filter

8/1/20188/31/2019

Received by Month



Total Received

7,689

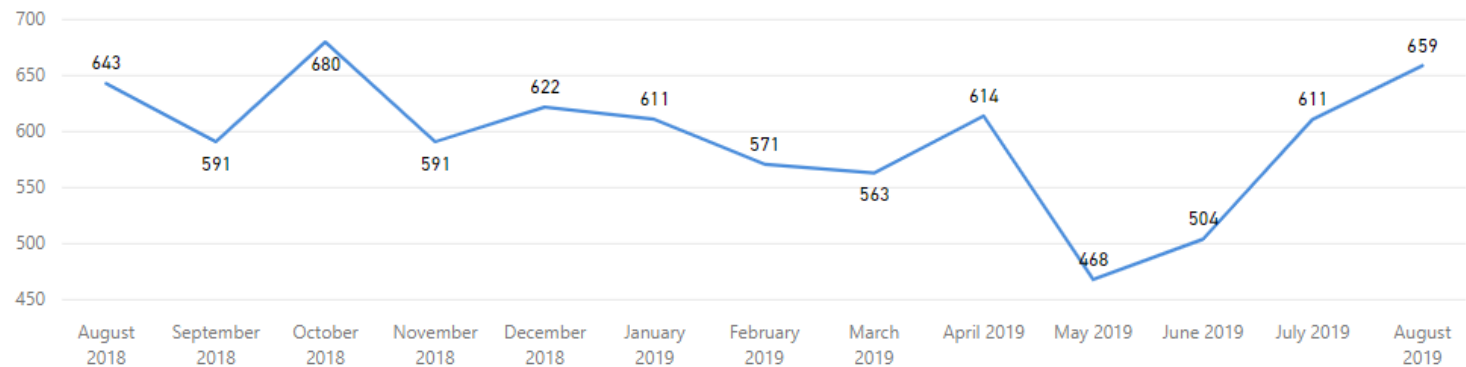
Received per Month (Avg)\*

591

Completed Filter

8/1/20188/31/2019

Completed by Month



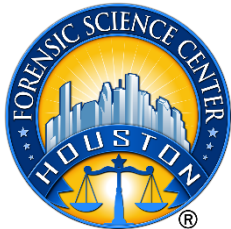
Total Completed

7,728

Completed per Month (Avg)\*

594

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

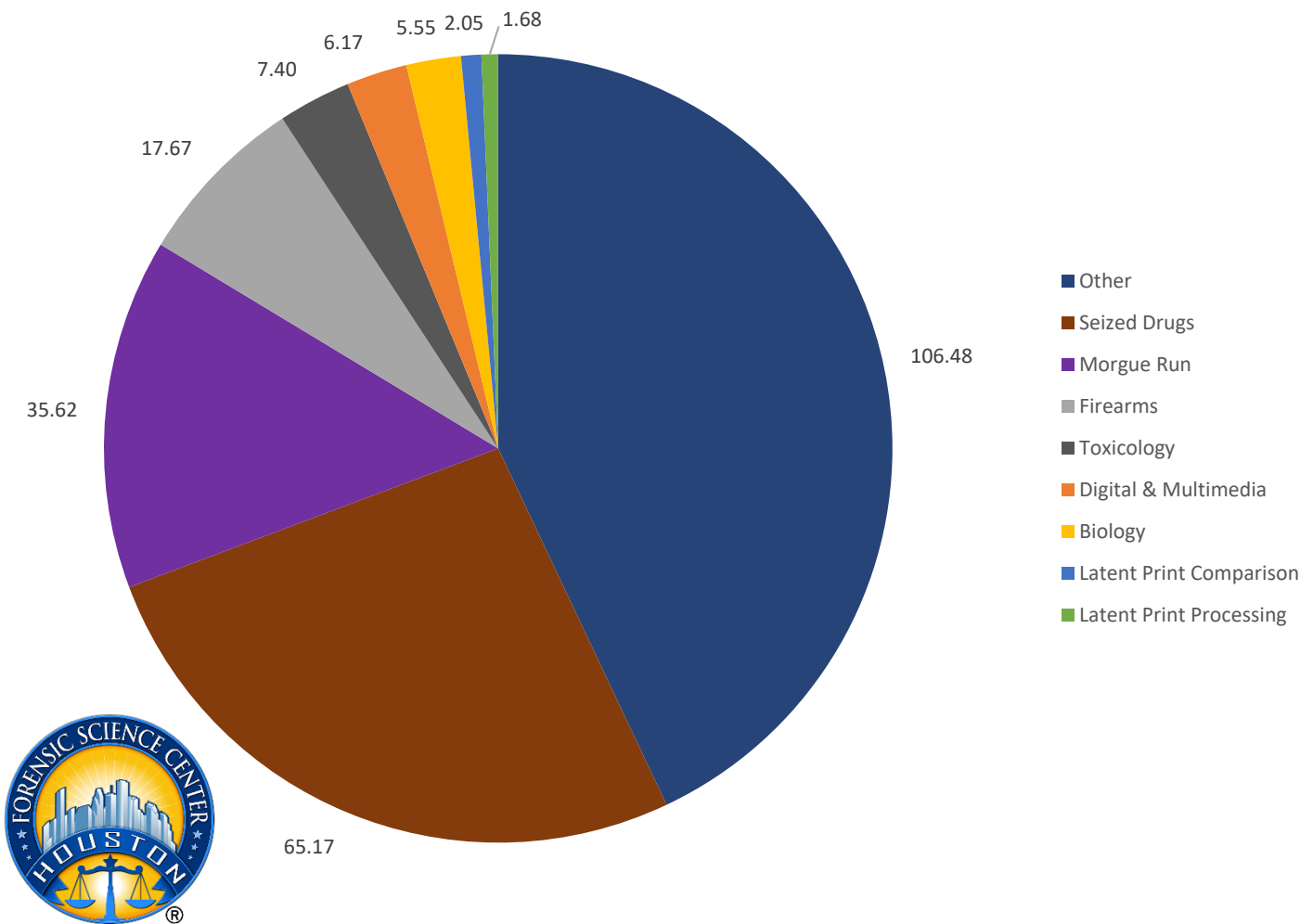


# Client Services and Case Management (CS/CM)



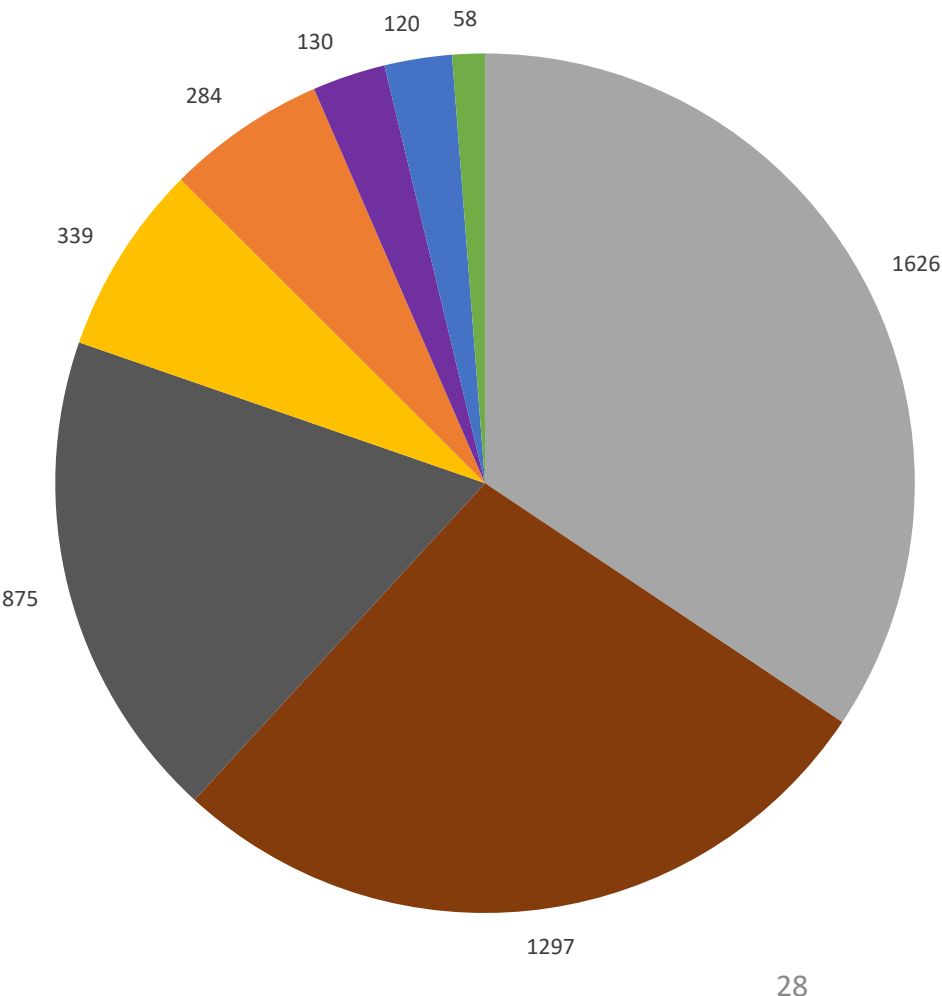
# CS/CM – October

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



# Evidence Handling

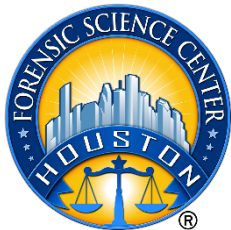
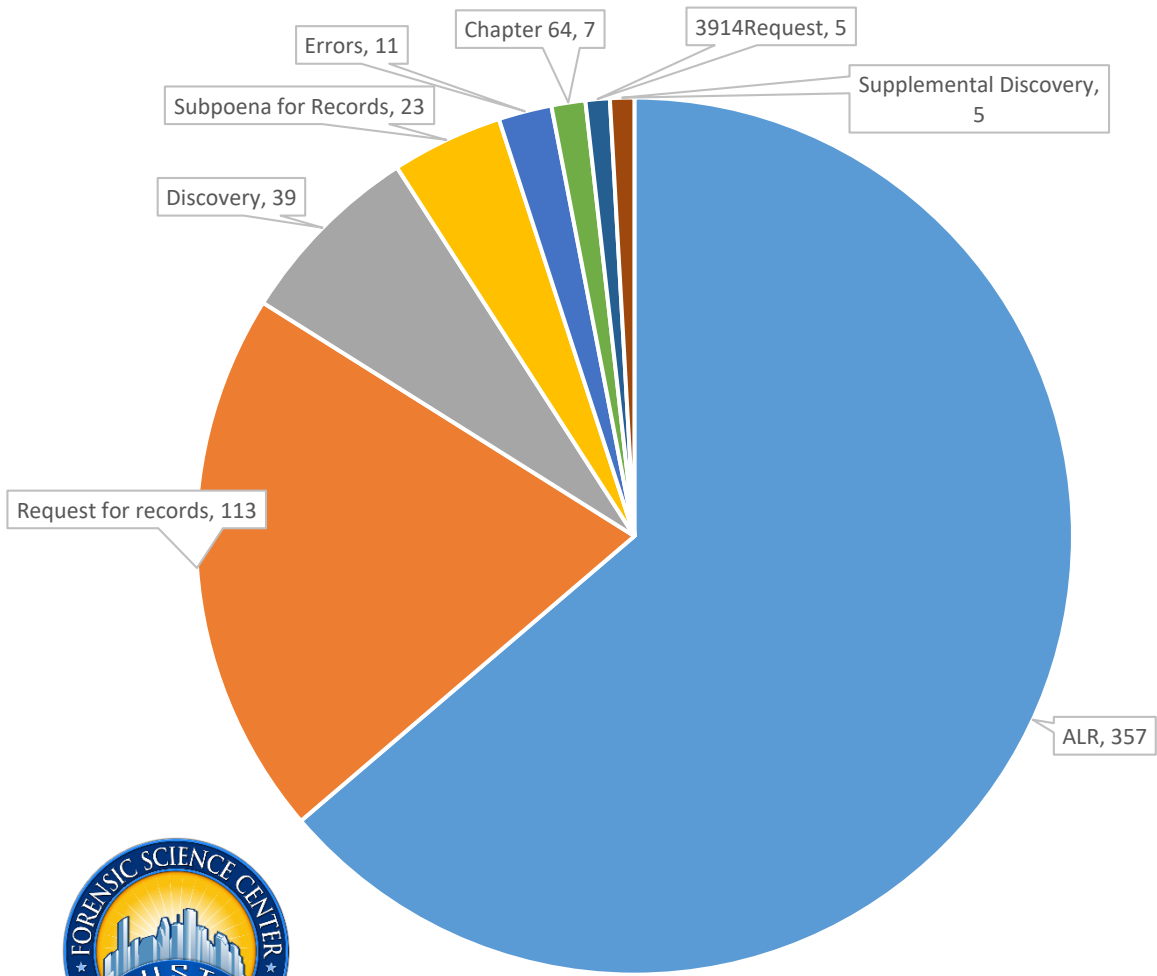
Total Items by Section



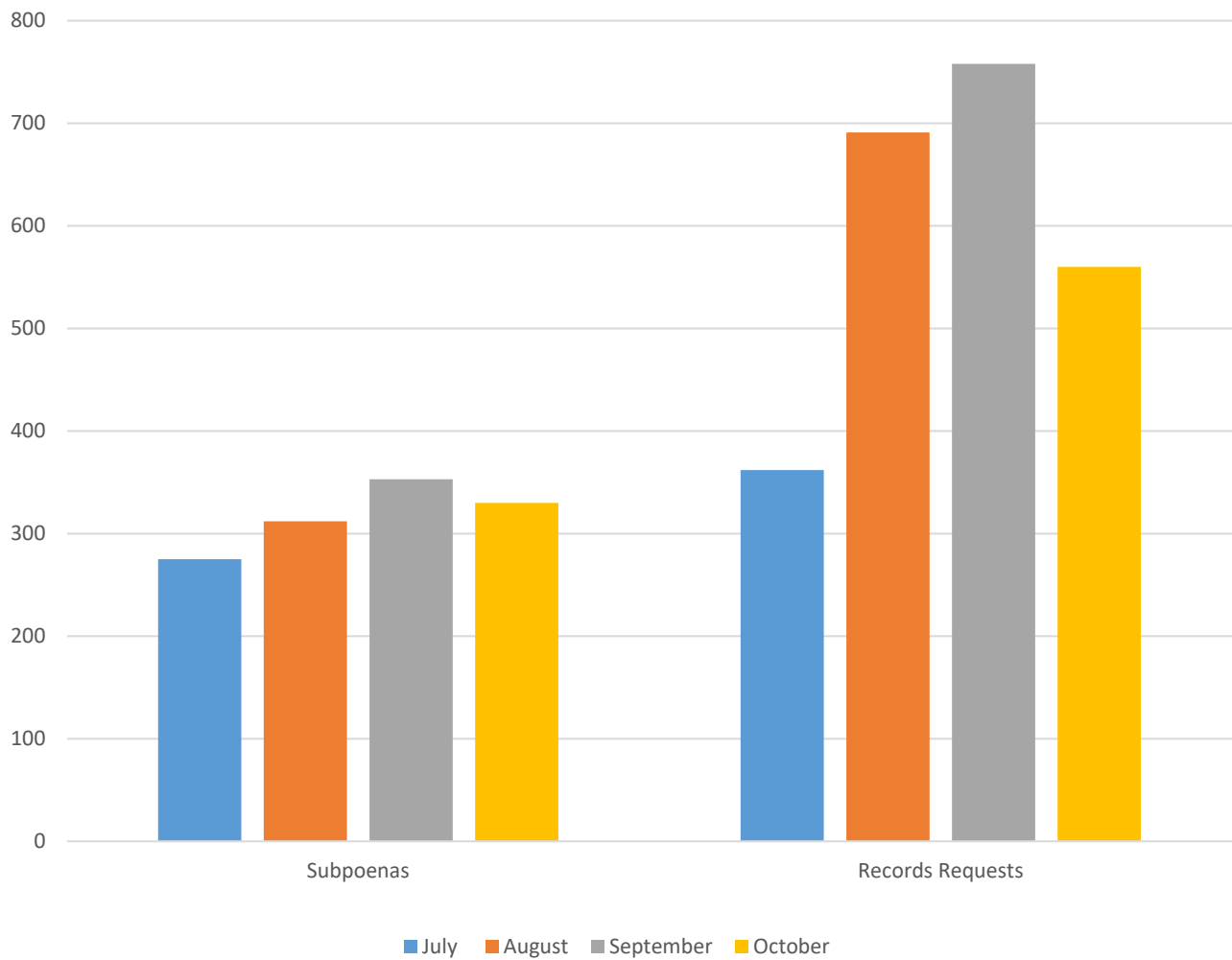
# CS/CM – October

# Administrative

Requests by Type

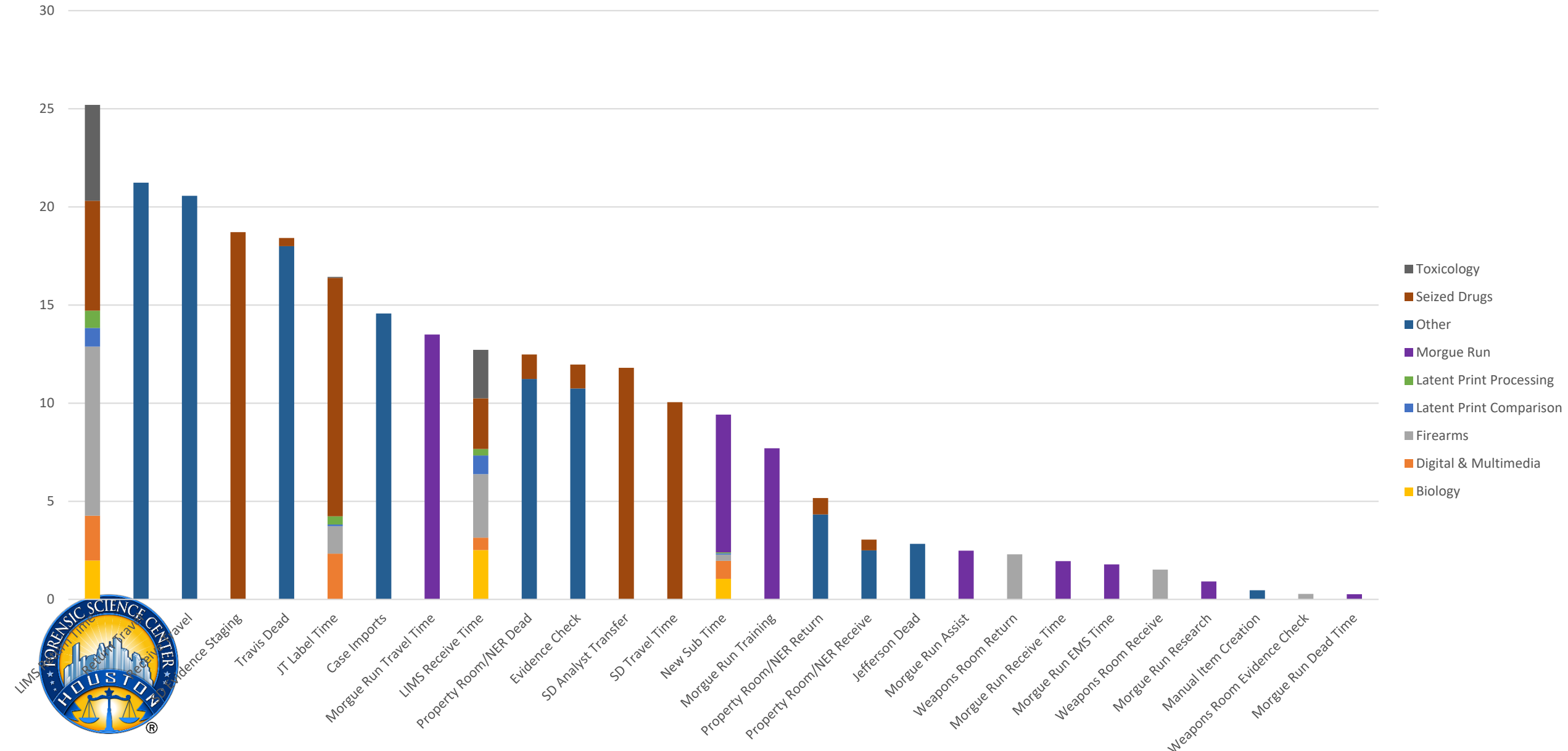


Subpoenas & Record Requests

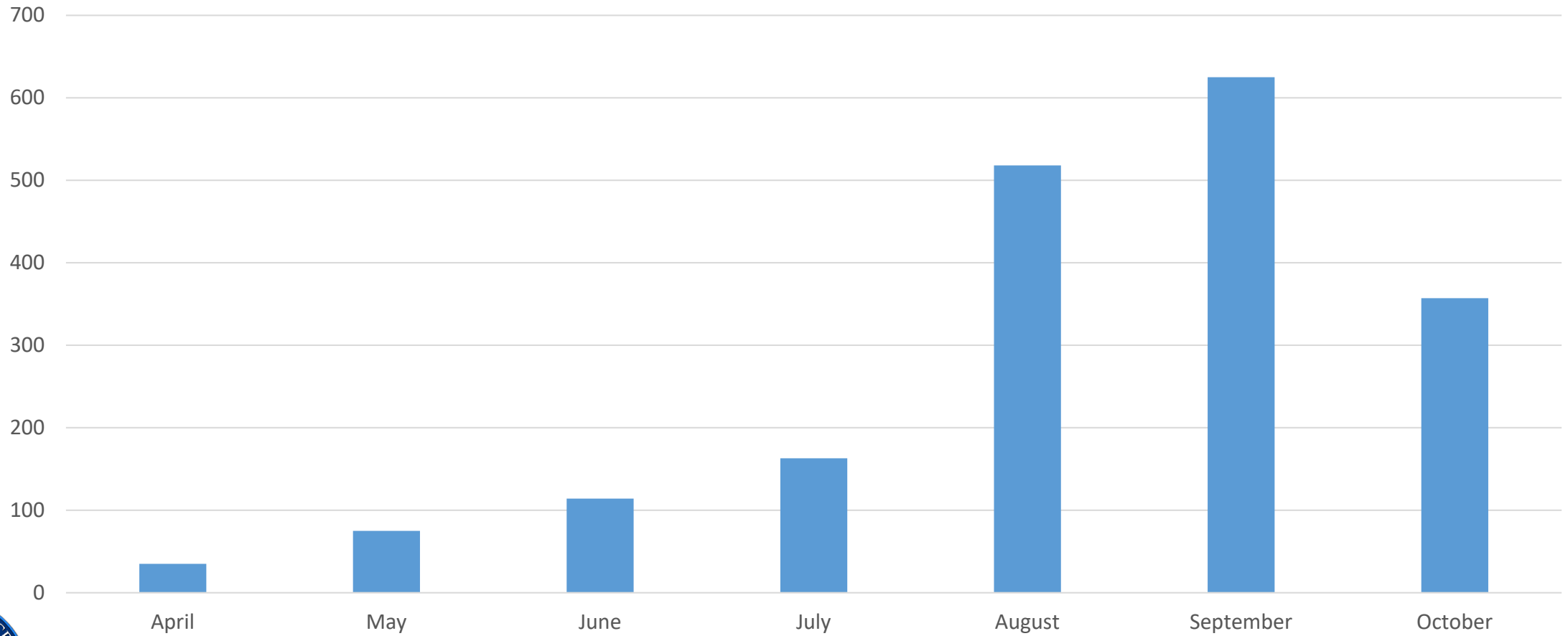


# Time Categories - October

# Evidence Handling



# Administrative License Revocation (ALR)





Service

CSCM Tax Accession

Priority Type

All

# of Unassigned

44✓

Goal: 150 (+70.67%)

# Pending Draft

0✓

Goal: 3 (+100%)

# Pending Admin

102!

Goal: 60 (-70%)

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

0

Justice Trax Past Critical Age

NaN

Avg Age of Requests &gt; 30 D..

10

Age-Oldest Unassigned

0

Age-Oldest Pending Draft

10

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)

4.4✓

Goal: 5, 10

Overall TAT  
(Past 90 Days)

3.5✓

Goal: 5, 10

## TAT by Phase of Work (MTD)

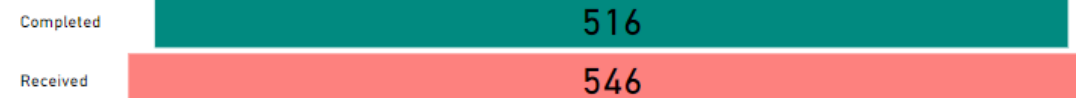
● JT-Assign TAT MTD ● JT-Draft TAT MTD ● CSCM-Admin Review TAT MTD



## 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
51632		26
52803		7
52871		6
52876	2019-083	6
52974		4
53076		3

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

## Quality TAT

21✓

Goal: 30, 31

## Avg Age of Open Reports\*

6

Quality Filter

Client Services/Case Manag...



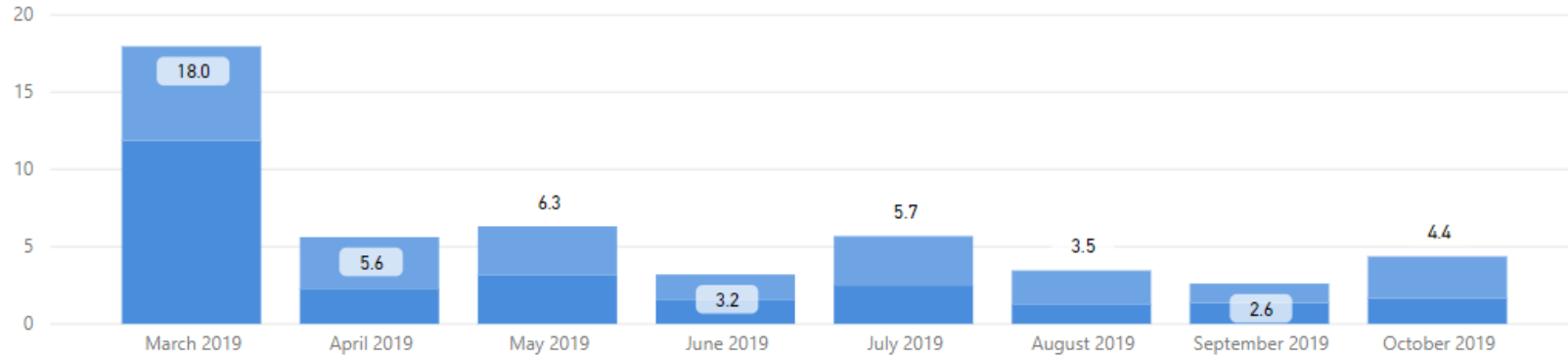
## Date Range

3/1/2019

10/31/2019

## Total TAT by Month

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



## Request Type

CSCM Tox Accession

Priority Type

All

## Selected Time Frame Averages

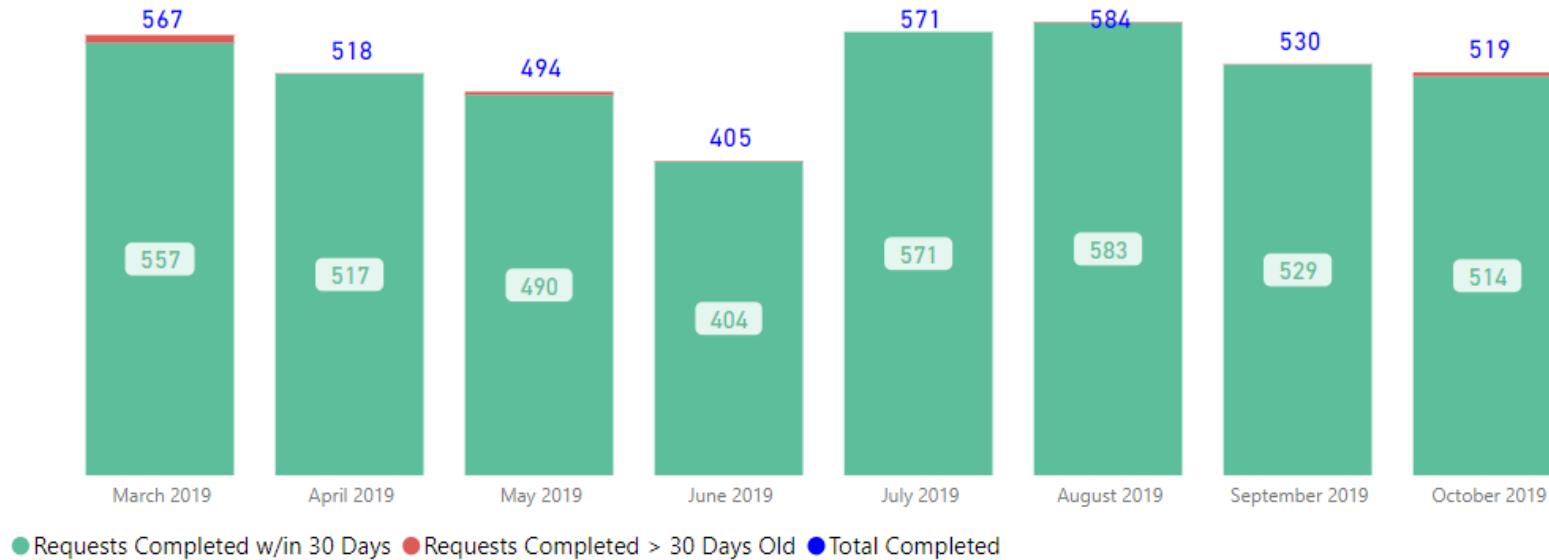
6.31

Total TAT (Rec'd-Compl.) Avg

3.00

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

4188

Requests Completed

23

Requests Completed > 30 Days Old

0.55 %

% Completed > 30 Days Old

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

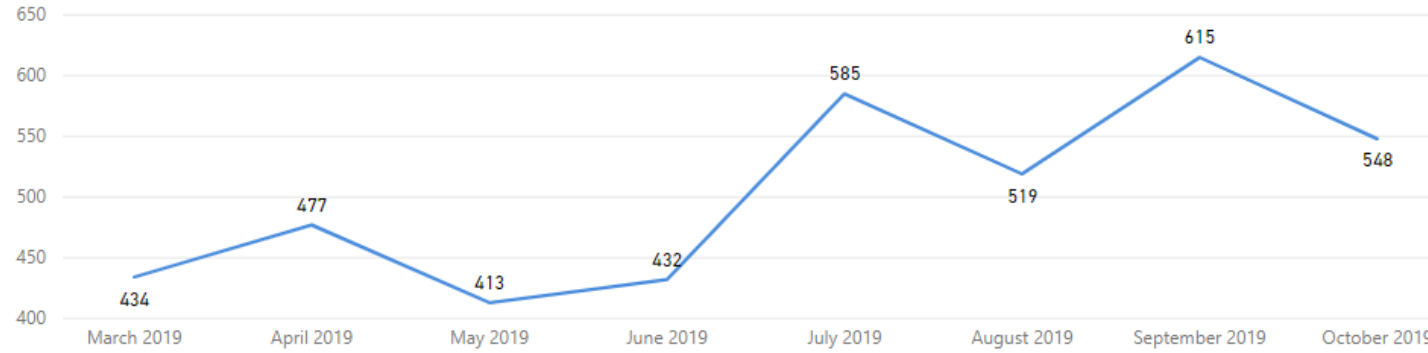


Service  Priority Type



**Received Filter**

### Received by Month



### Total Received

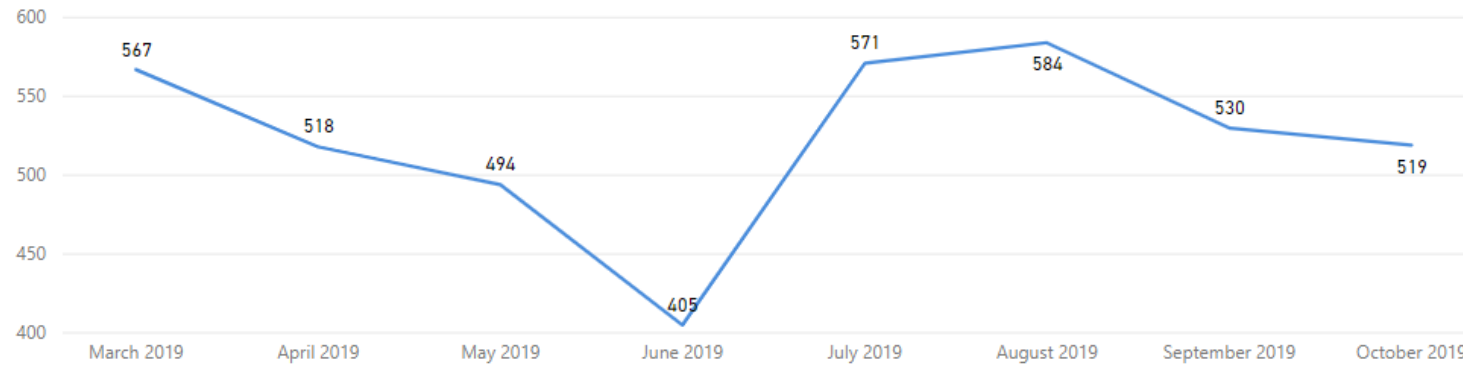
4,023

### Received per Month (Avg)\*

503

**Completed Filter**

### Completed by Month



### Total Completed

4,188

### Completed per Month (Avg)\*

524

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



Service

CSCM Tox Rejection

Priority Type

All

# of Unassigned

0✓

Goal: 3 (+100%)

# Pending Draft

0✓

Goal: 5 (+100%)

# Pending Admin

0✓

Goal: 10 (+100%)

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

0

Age-Oldest Pending Draft

0

Age-Oldest Pending Tech

0

Age-Oldest Pending Admin

## Total Pending Requests

0

Days Old

0-15

16-30

31-60

61-90

91-120

&gt;121

Overall TAT  
(Month to Date)

2.8✓

Goal: 5, 10

Overall TAT  
(Past 90 Days)

6.7•

Goal: 5, 10

## TAT by Phase of Work (MTD)

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

2.8

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

4.3

2.4

## Month to Date

Completed

12

Received

12

## 30 Day Avg (Over Past 90 Days)

Completed

11

Received

11

## Open Quality Reports

Qualtrax ID	Workflow #	Age
51632		26
52803		7
52871		6
52876	2019-083	6
52974		4
53076		3

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

## Quality TAT

21✓

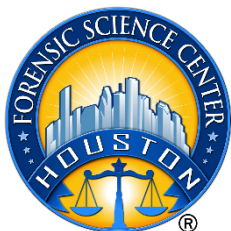
Goal: 30, 31

## Avg Age of Open Reports\*

6

Quality Filter

Client Services/Case Manag... ▾



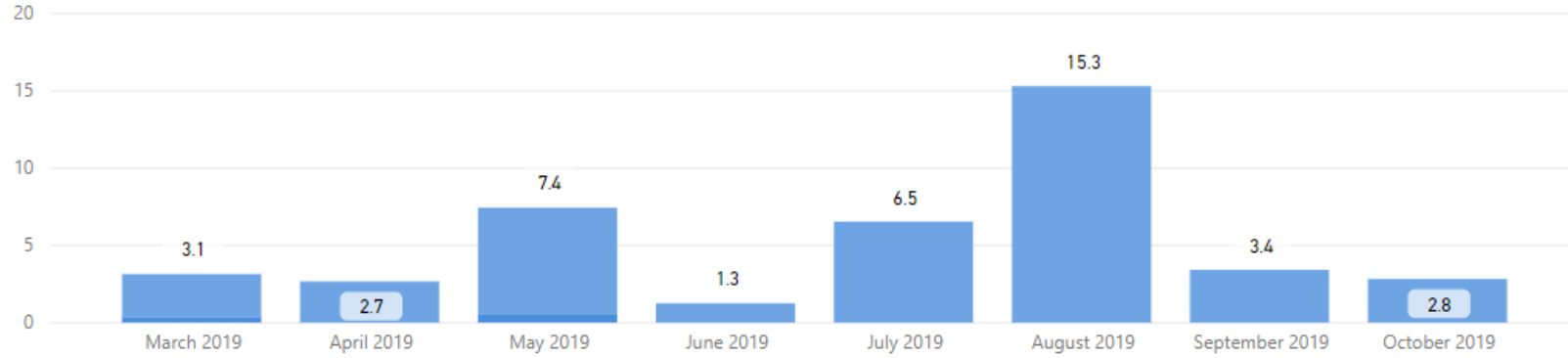
## Date Range

3/1/2019

10/31/2019

## Total TAT by Month

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



## Request Type

CSCM Tox Rejection

Priority Type

All

## Selected Time Frame Averages

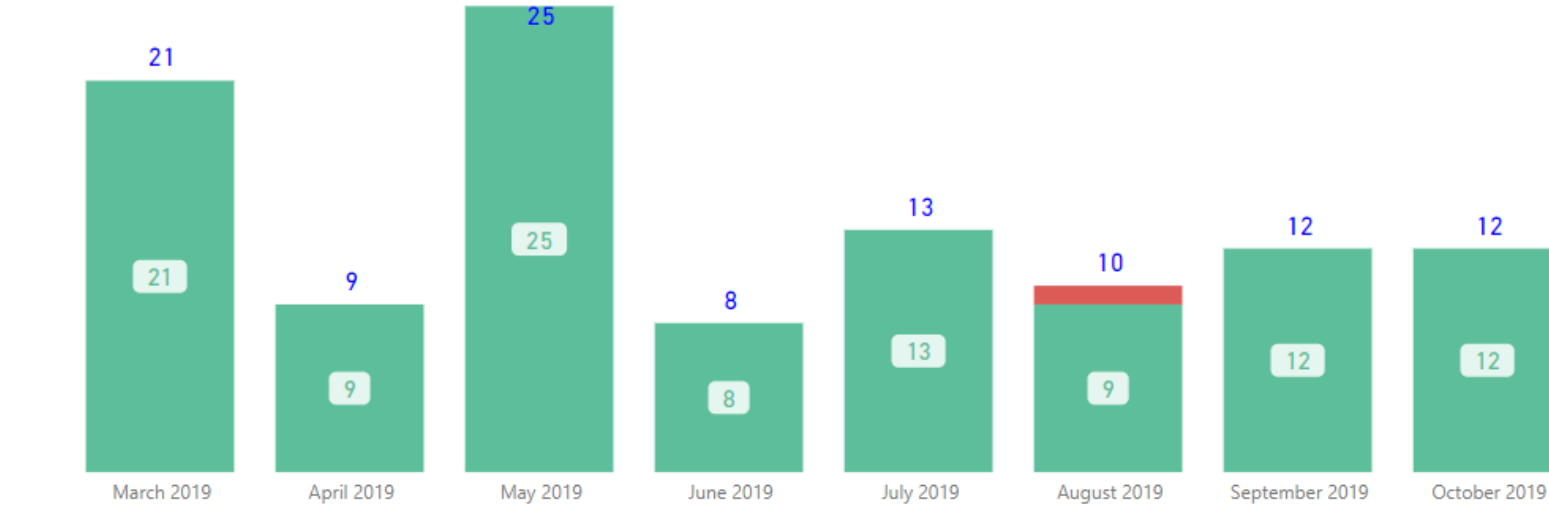
5.45

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

110

Requests Completed

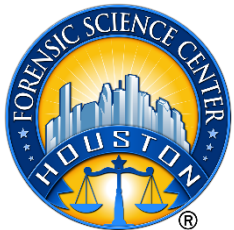
1

Requests Completed > 30 Days Old

0.91 %

% Completed > 30 Days Old

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



Service

CSCM Tox Rejection

Priority Type

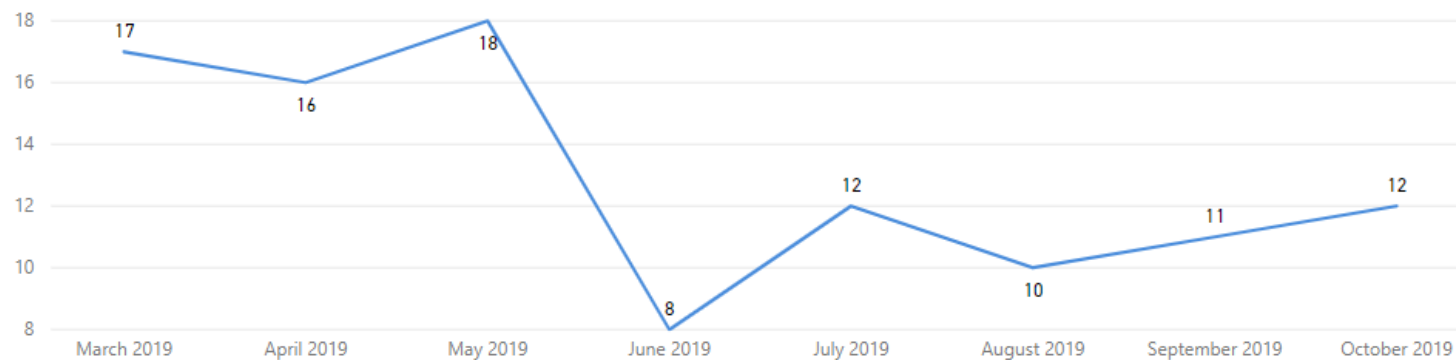
All

## Received Filter

3/1/2019

10/31/2019

## Received by Month



## Total Received

104

## Received per Month (Avg)\*

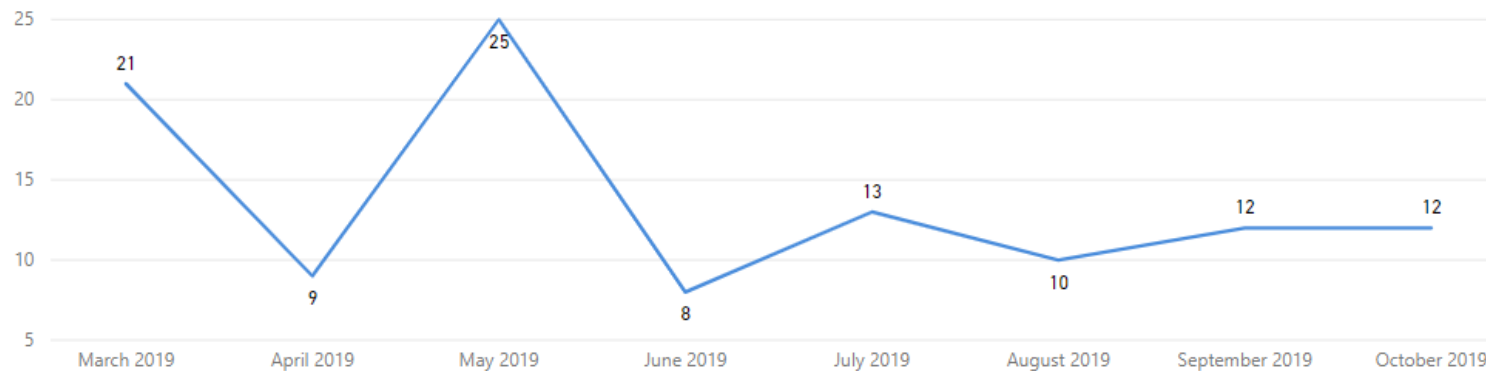
13

## Completed Filter

3/1/2019

10/31/2019

## Completed by Month



## Total Completed

110

## Completed per Month (Avg)\*

14

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



# Seized Drugs



Service: Seized Drugs Examination  
 Priority Type: All

**# of Unassigned**  

0✓

Goal: 100 (+100%)

**# Pending Draft**  

0✓

Goal: 100 (+100%)

**# Pending Tech**  

2✓

Goal: 50 (+96%)

**# Pending Admin**  

0✓

Goal: 50 (+100%)

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

0  
Justice Trax Past Critical Age

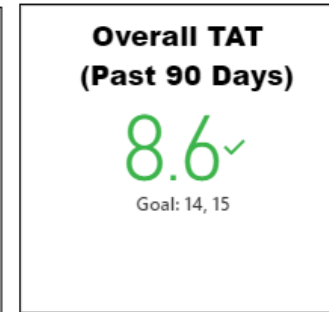
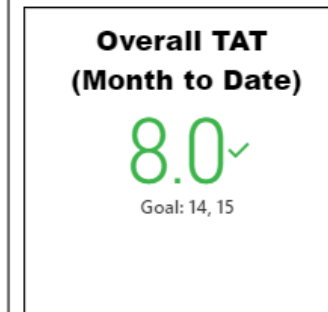
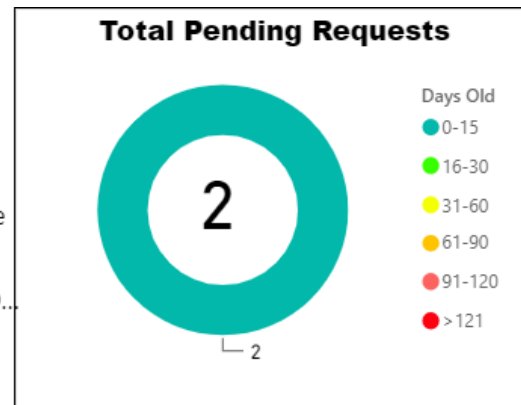
NaN  
Avg Age of Requests >30 D...

0  
Age-Oldest Unassigned

0  
Age-Oldest Pending Draft

15  
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
52406		14

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

### Quality TAT

21✓

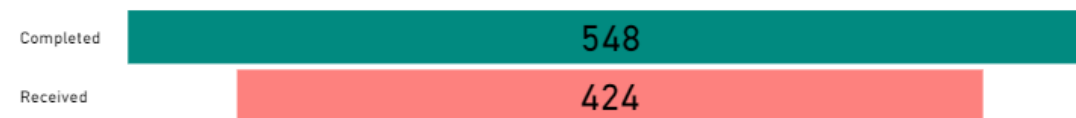
Goal: 30, 31

### Avg Age of Open Reports\*

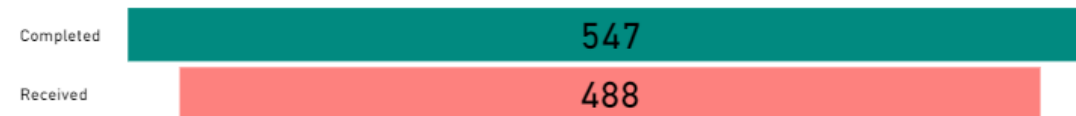
NaN

Quality Filter: Controlled Substances

### Month to Date



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



During the move, Seized Drugs is shut down and not receiving evidence therefore requests are in pre-acceptance, and do not show in LIMS. Requests will be accepted again beginning November 11, 2019. All pending testing was completed prior to shut down.



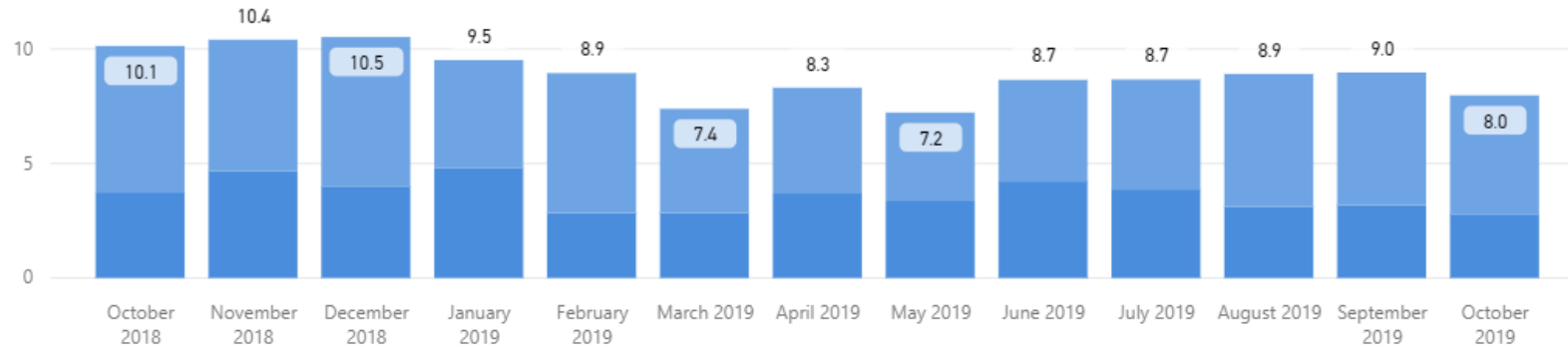
## Date Range

10/1/2018

10/31/2019

## Total TAT by Month

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



## Request Type

Seized Drugs Examination ▼

Priority Type

All ▼

## Selected Time Frame Averages

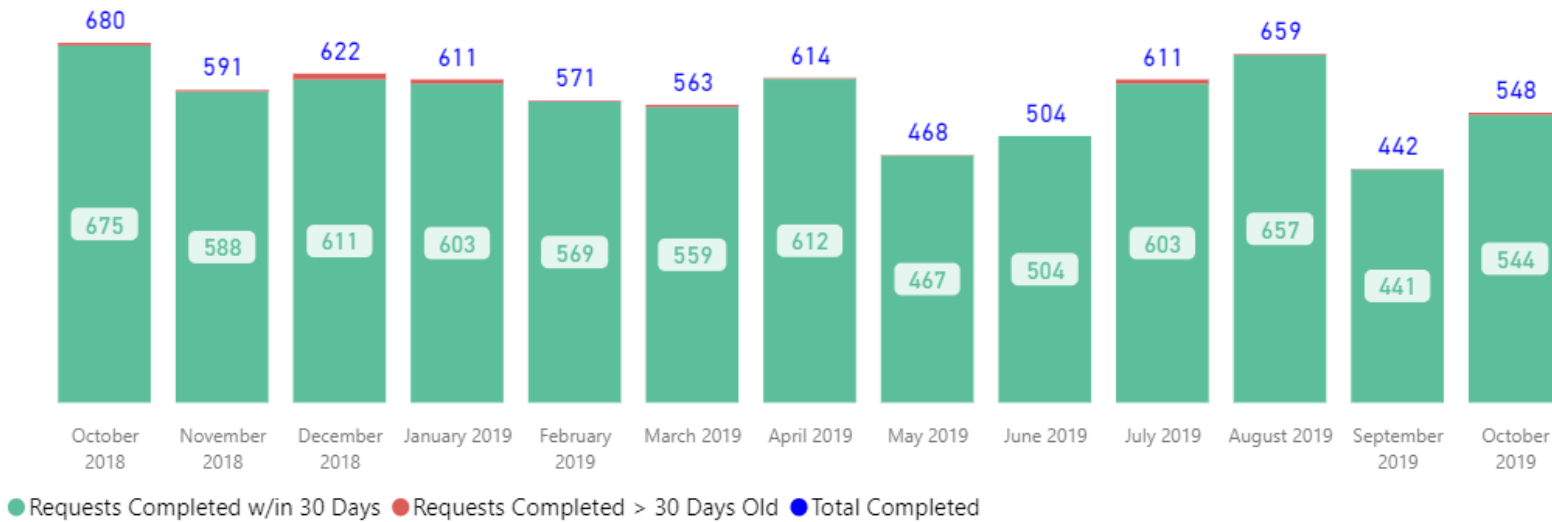
8.95

Total TAT (Rec'd-Compl.) Avg

5.31

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



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

## Received to Complete

7484

Requests Completed

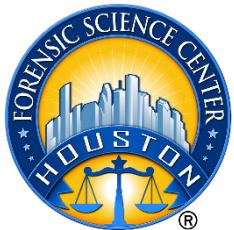
51

Requests Completed > 30 Days Old

0.68 %

% Completed > 30 Days Old

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



Service

Seized Drugs Examination

Priority Type

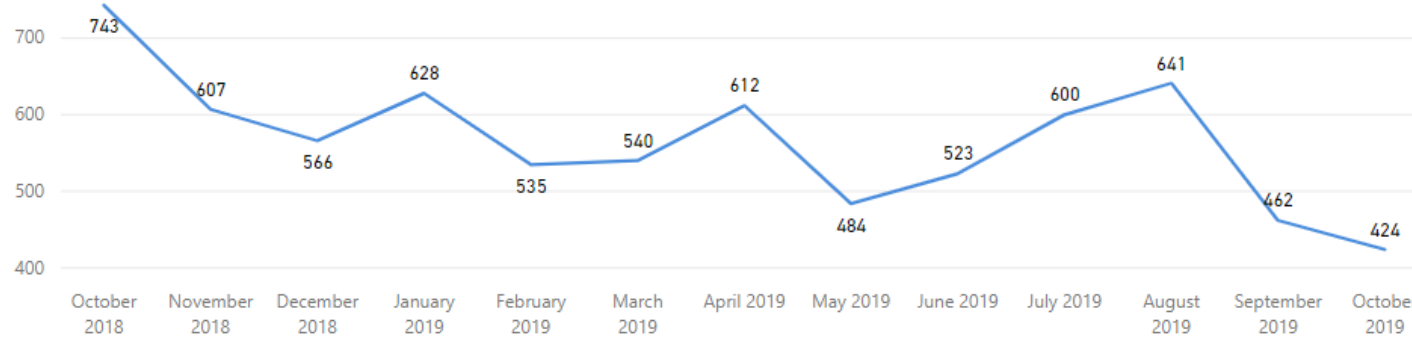
All

## Received Filter

10/1/2018

10/31/2019

## Received by Month



## Total Received

7,365

## Received per Month (Avg)\*

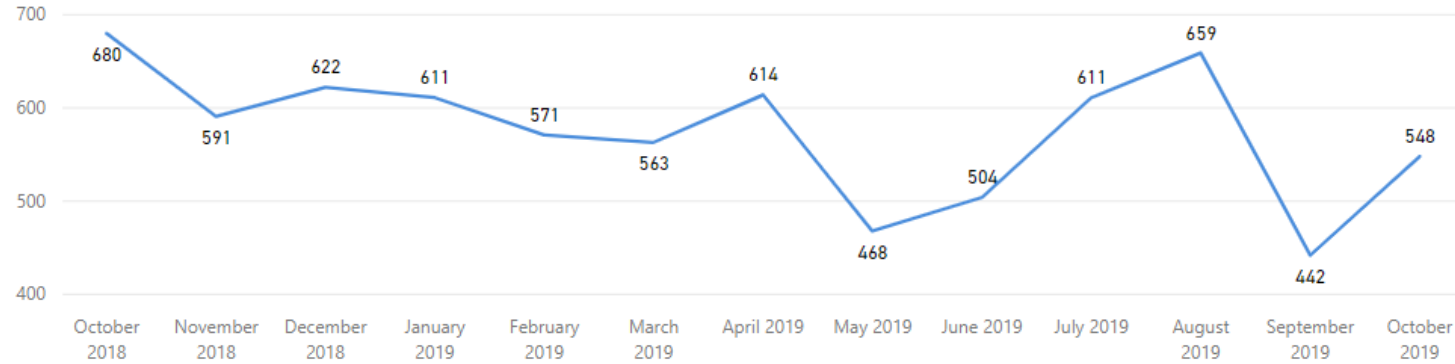
567

## Completed Filter

10/1/2018

10/31/2019

## Completed by Month



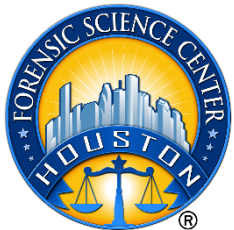
## Total Completed

7,484

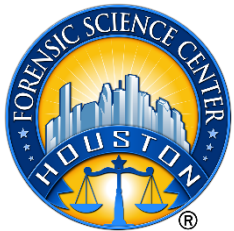
## Completed per Month (Avg)\*

576

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



# Toxicology



Service

Blood Alcohol

▼

Priority Type

All

▼

# of Unassigned

657!

Goal: 50 (-1214%)

# Pending Draft

570!

Goal: 120 (-375%)

# Pending Tech

0✓

Goal: 90 (+100%)

# Pending Admin

153!

Goal: 90 (-70%)

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

842

Justice Trax Past Critical Age

56

Avg Age of Requests >30 D..

38

Age-Oldest Unassigned

73

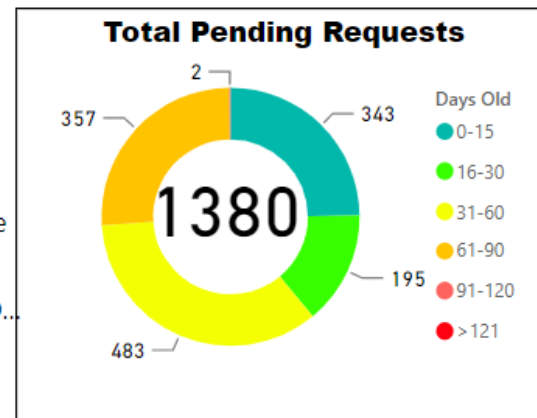
Age-Oldest Pending Draft

0

Age-Oldest Pending Tech

94

Age-Oldest Pending Admin



Overall TAT (Month to Date)

63.0!

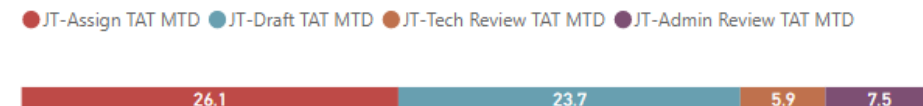
Goal: 30, 31

Overall TAT (Past 90 Days)

69.2!

Goal: 30, 31

### TAT by Phase of Work (MTD)



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



Open Quality Repo

Qualtrax ID	Workflow #	Age
52331	2019-081	15
47027		94
53214		1

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

Quality TAT

27✓

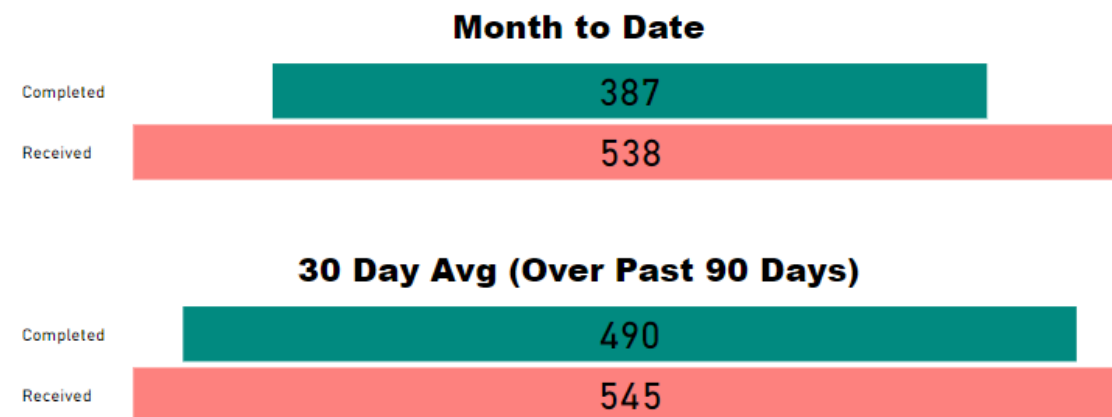
Goal: 30, 31

Avg Age of Open Reports\*

15

Quality Filter

Toxicology

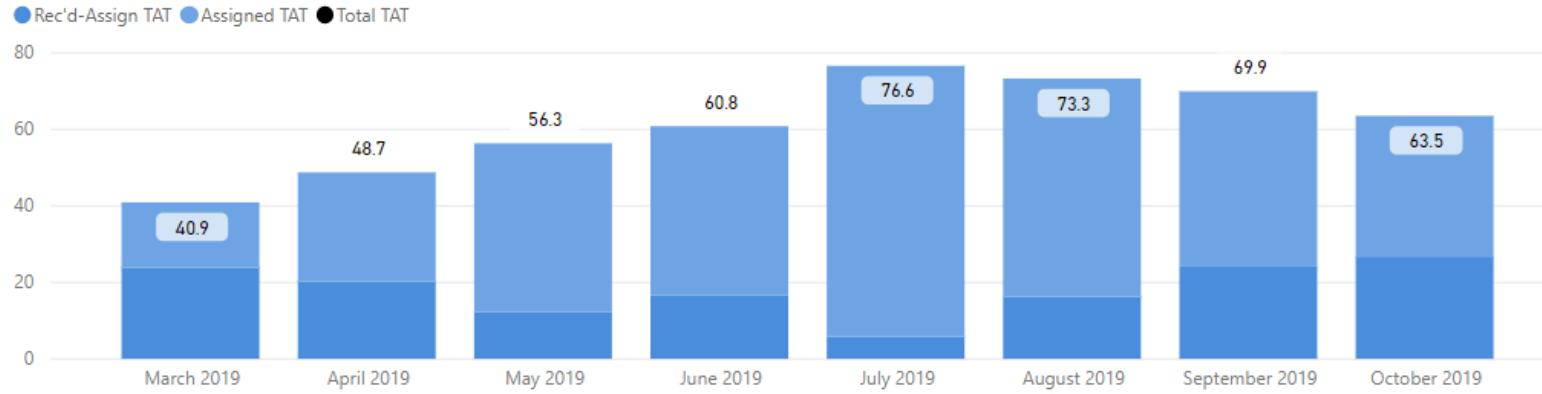


## Date Range

3/1/2019

10/31/2019

## Total TAT by Month



## Request Type

Blood Alcohol

Priority Type

All

## Selected Time Frame Averages

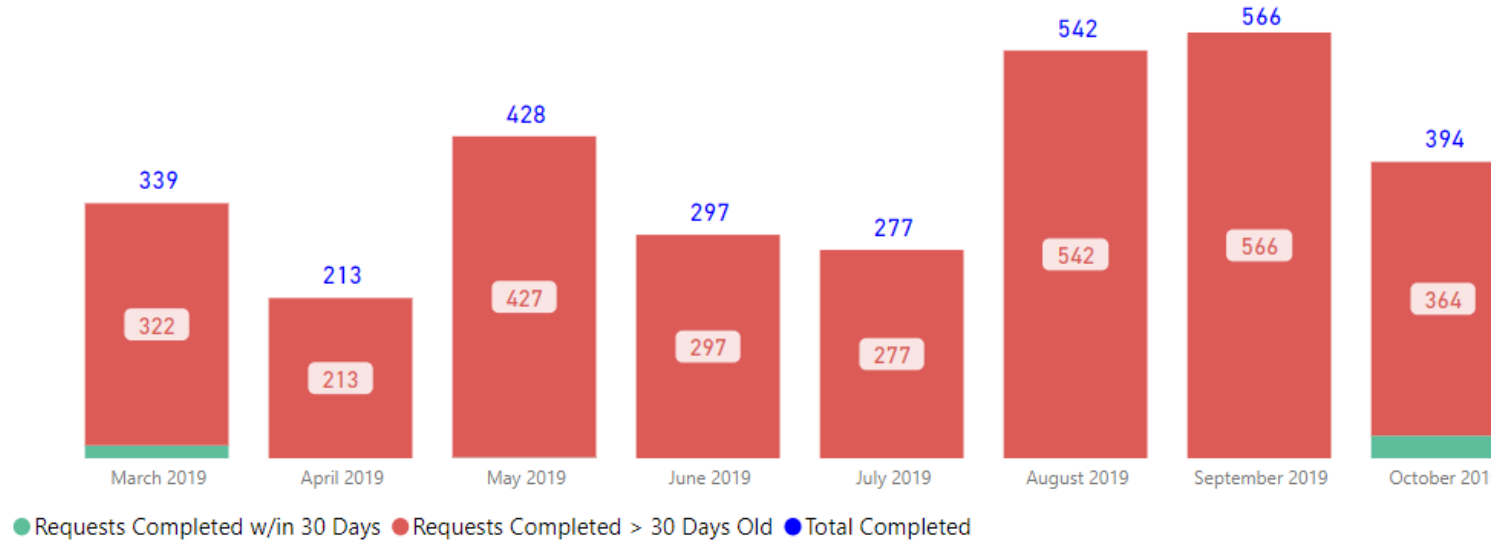
62.82

Total TAT (Rec'd-Compl.) Avg

44.11

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

3056

Requests Completed

3008

Requests Completed > 30 Days Old

98.43 %

% Completed > 30 Days Old

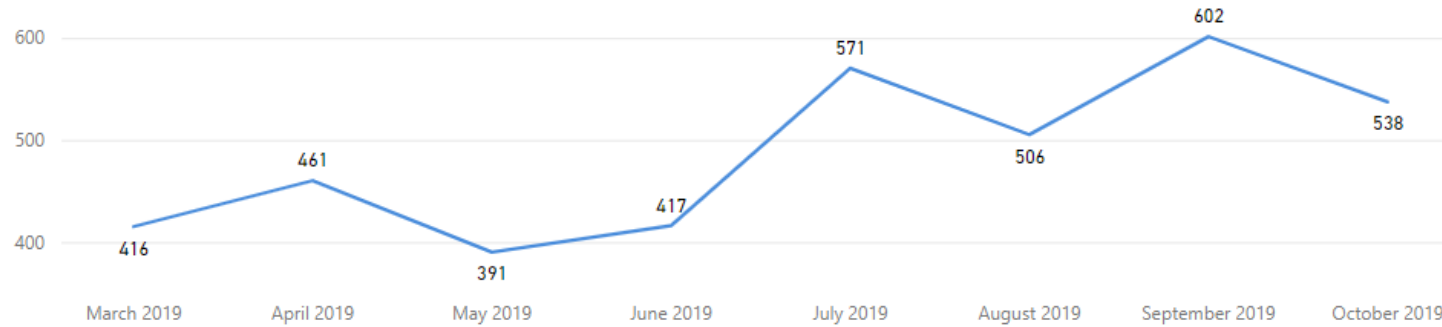
Requests more than 30 days old are considered to be backlogged requests



Service  Priority Type

**Received Filter**

### Received by Month



### Total Received

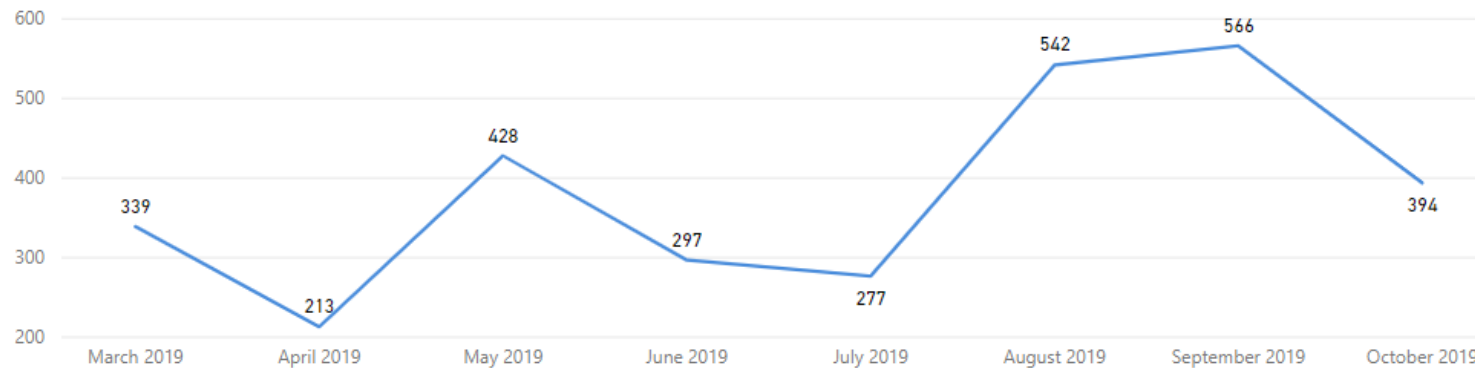
3,902

### Received per Month (Avg)\*

488

**Completed Filter**

### Completed by Month



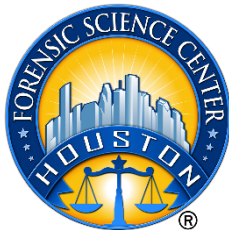
### Total Completed

3,056

### Completed per Month (Avg)\*

382

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



Service
Priority Type

Toxicology
All

# of Unassigned
221!
Goal: 120 (-84.17%)

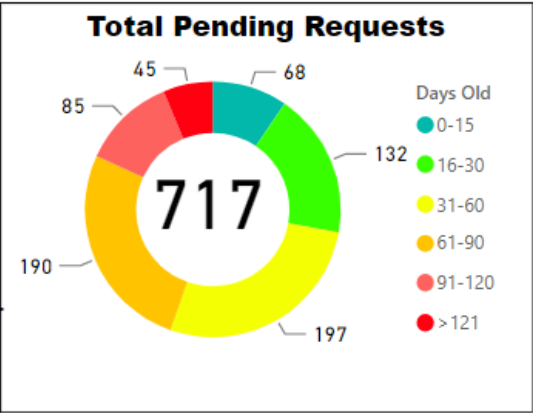
# Pending Draft
433!
Goal: 30 (-1343.33%)

# Pending Tech
29✓
Goal: 30 (+3.33%)

# Pending Admin
34!
Goal: 30 (-13.33%)

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

517
Justice Trax Past Critical Age
75
Avg Age of Requests >30 D..
84
Age-Oldest Unassigned
170
Age-Oldest Pending Draft
174
Age-Oldest Pending Tech
140
Age-Oldest Pending Admin



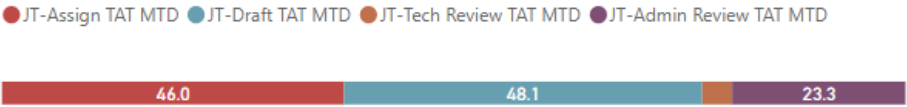
Overall TAT  
(Month to Date)

121.5!
Goal: 90, 91

Overall TAT  
(Past 90 Days)

130.4!
Goal: 90, 91

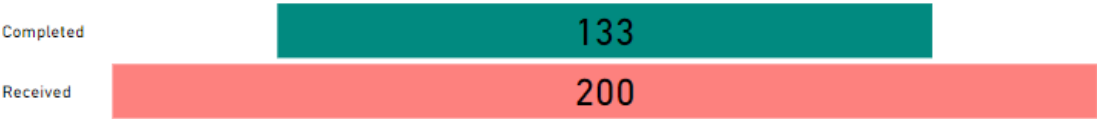
TAT by Phase of Work (MTD)



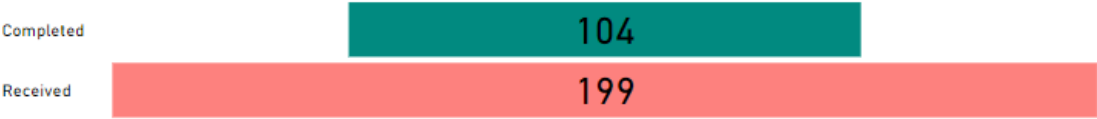
TAT by Phase of Work (Past 90 Days)



Month to Date



30 Day Avg (Over Past 90 Days)



Open Quality Reports

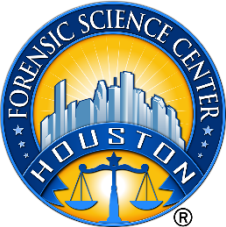
Qualtrax ID	Workflow #	Age
52331	2019-081	15
47027		94
53214		1

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

Quality TAT
27✓
Goal: 30, 31

Avg Age of Open Reports\*
15

Quality Filter
Toxicology



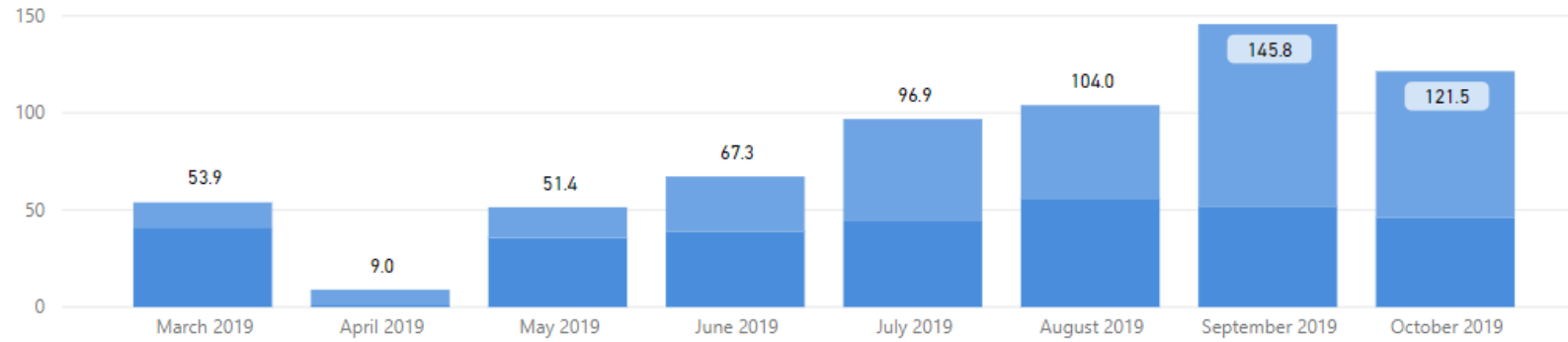
## Date Range

3/1/2019

10/31/2019

## Total TAT by Month

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



## Request Type

Toxicology

Priority Type

All

## Selected Time Frame Averages

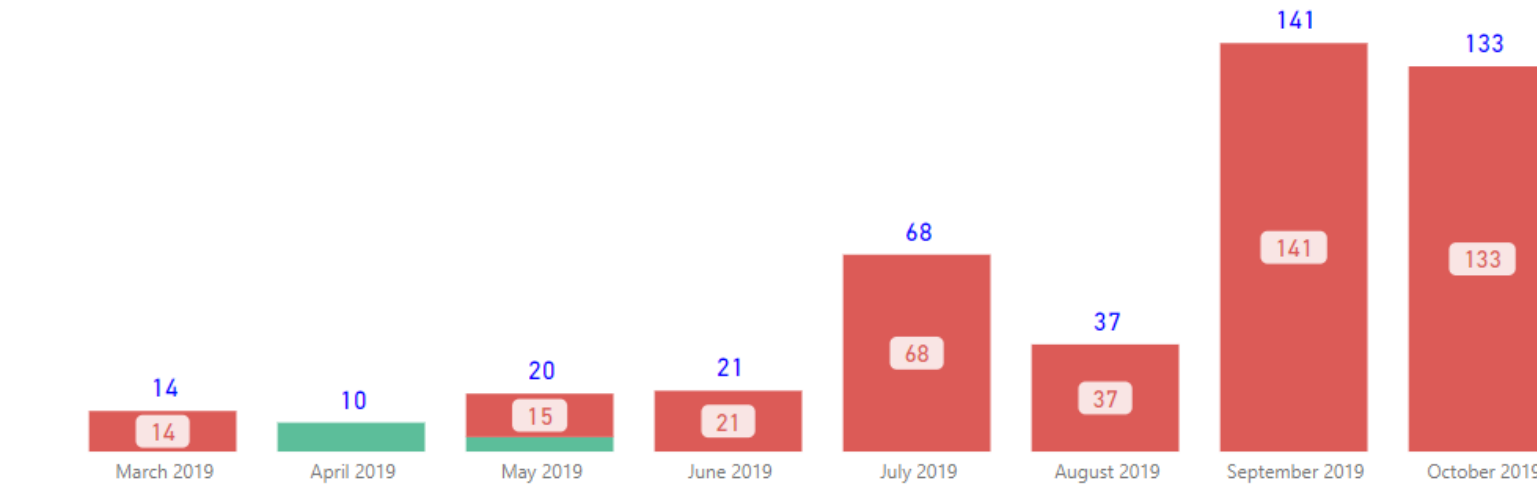
113.58

Total TAT (Rec'd-Compl.) Avg

67.16

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



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

## Received to Complete

444

Requests Completed

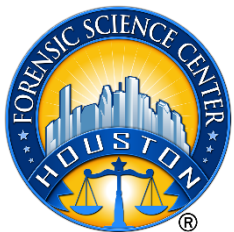
429

Requests Completed > 30 Days Old

96.62 %

% Completed > 30 Days Old

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





Service

Toxicology

Priority Type

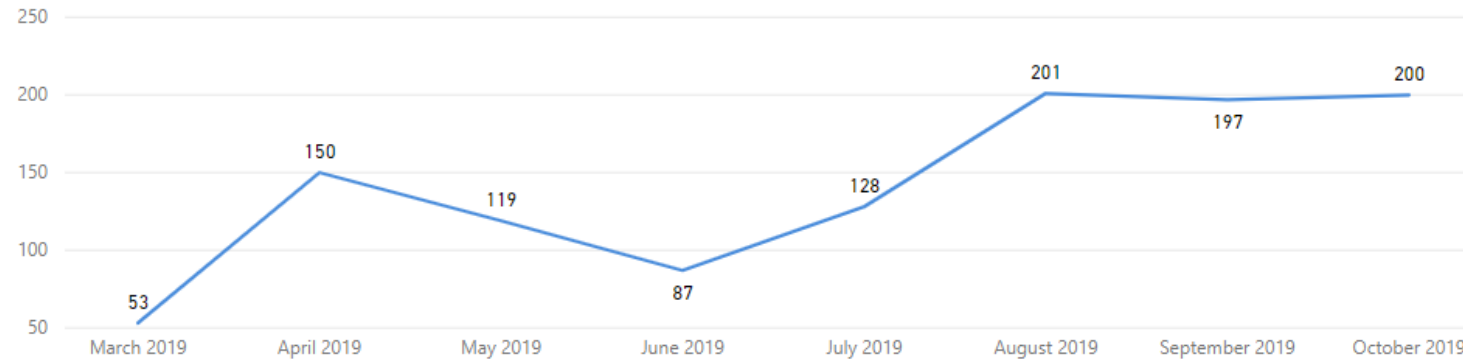
All

### Received Filter

3/1/2019

10/31/2019

### Received by Month



### Total Received

1,135

### Received per Month (Avg)\*

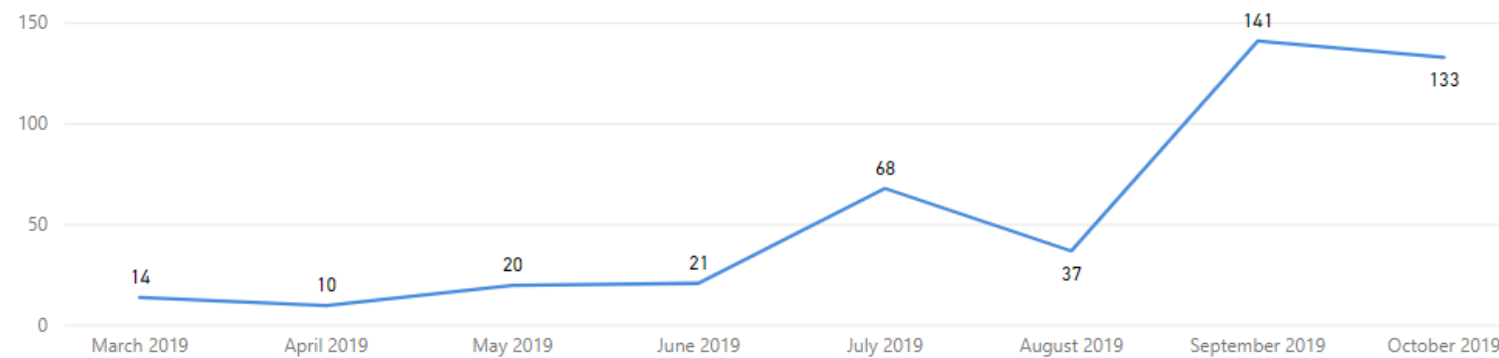
142

### Completed Filter

3/1/2019

10/31/2019

### Completed by Month



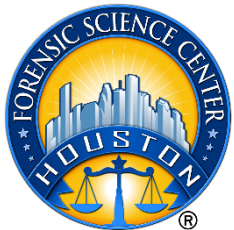
### Total Completed

444

### Completed per Month (Avg)\*

56

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



# Firearms



Service

Priority Type

Firearms Examination

All

# of Unassigned

23!

Goal: 10 (-130%)

# Pending Draft

0✓

Goal: 14 (+100%)

# Pending Tech

1✓

Goal: 9 (+88.89%)

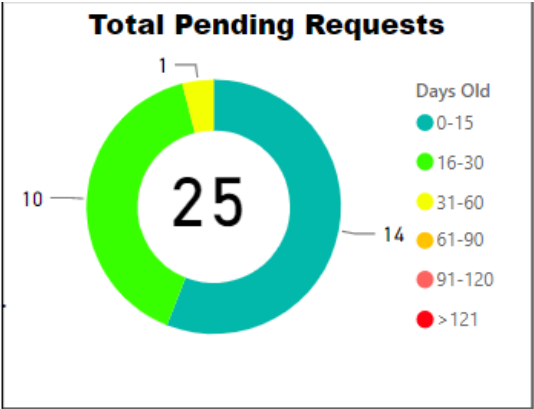
# Pending Admin

1✓

Goal: 5 (+80%)

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

- 1
- Justice Trax Past Critical Age
- 31
- Avg Age of Requests >30 D...
- 31
- Age-Oldest Unassigned
- 0
- Age-Oldest Pending Draft
- 10
- Age-Oldest Pending Tech
- 3
- Age-Oldest Pending Admin



Overall TAT  
(Month to Date)

24.8✓

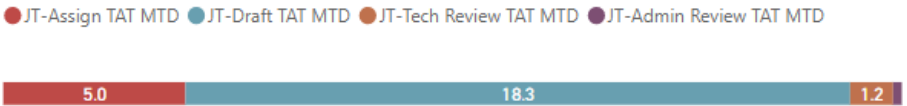
Goal: 40, 41

Overall TAT  
(Past 90 Days)

23.3✓

Goal: 40, 41

TAT by Phase of Work (MTD)



TAT by Phase of Work (Past 90 Days)



Open Quality Reports

Qualtrax ID	Workflow #	Age
50040	2019-IA-19	49
50002	2019-IA-18	49
48328	2019-048	73
48189		75
48434		71
48601		67
51853		22

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

Quality TAT

84!

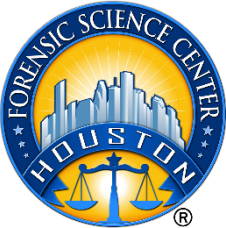
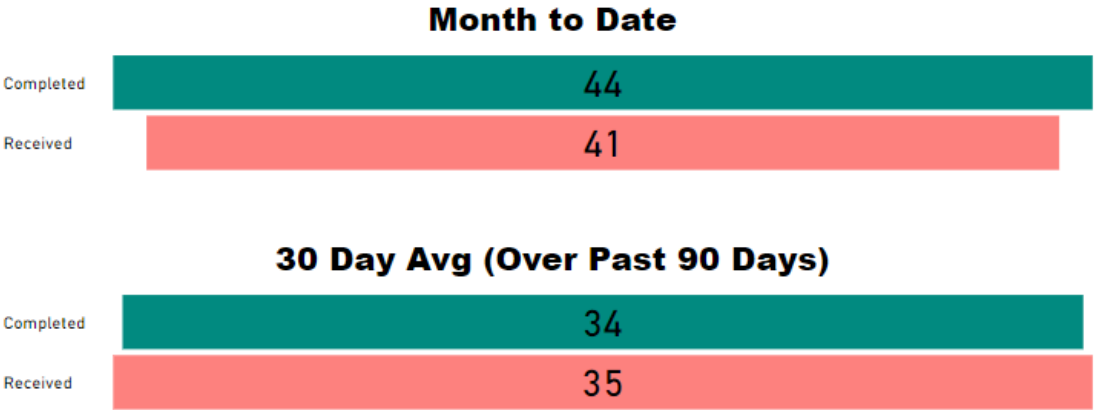
Goal: 30, 31

Avg Age of Open Reports\*

57

Quality Filter

Firearms



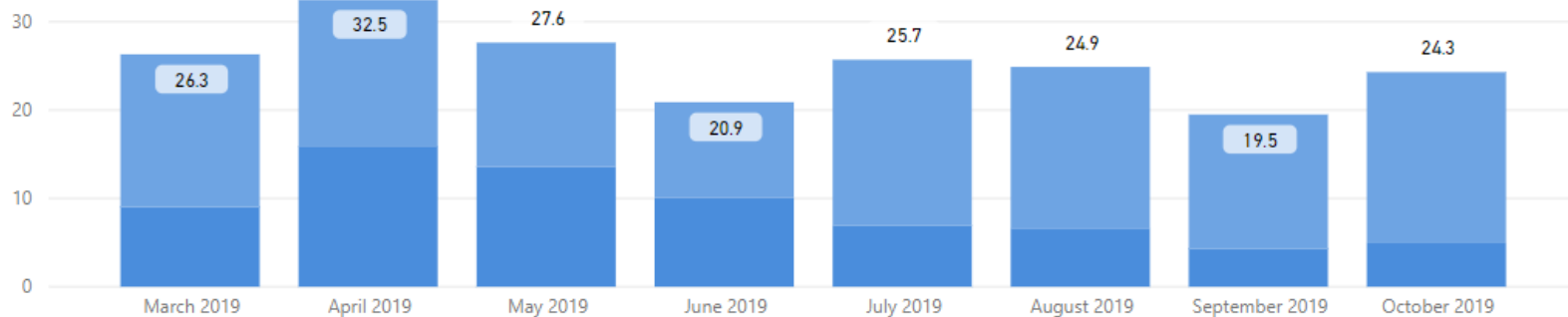
## Date Range

3/1/2019

10/31/2019

## Total TAT by Month

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



## Request Type

Firearms Examination

Priority Type

All

## Selected Time Frame Averages

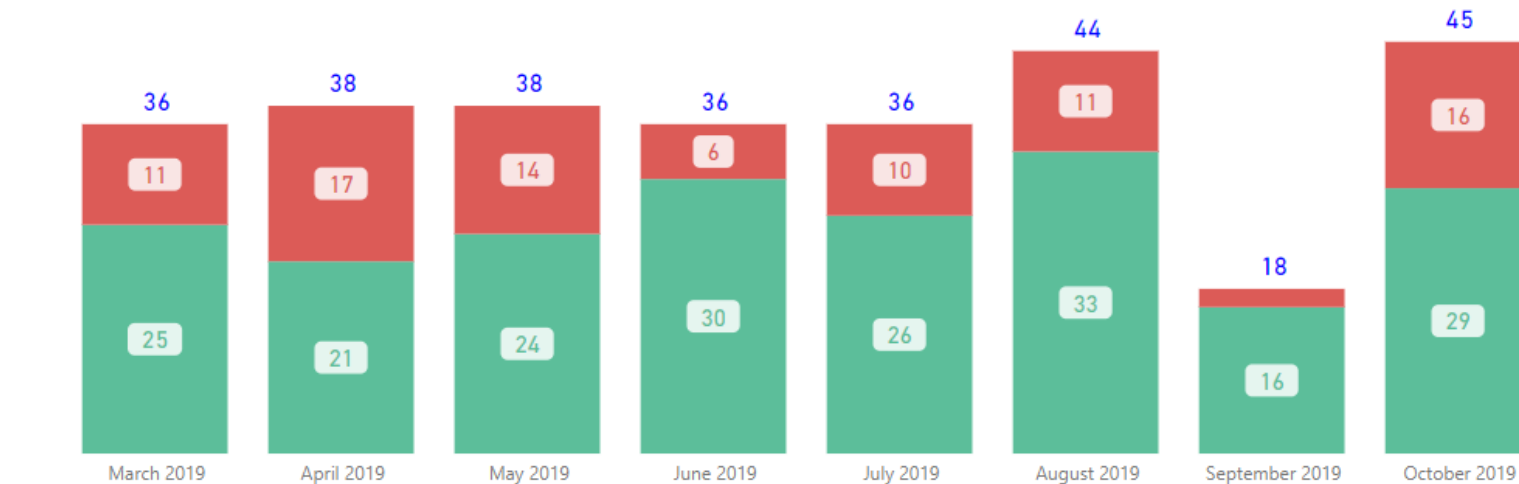
25.59

Total TAT (Rec'd-Compl.) Avg

16.50

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



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

## Received to Complete

291

Requests Completed

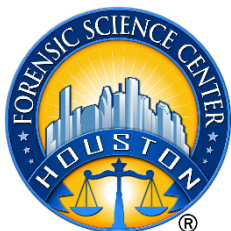
87

Requests Completed > 30 Days Old

29.90 %

% Completed > 30 Days Old

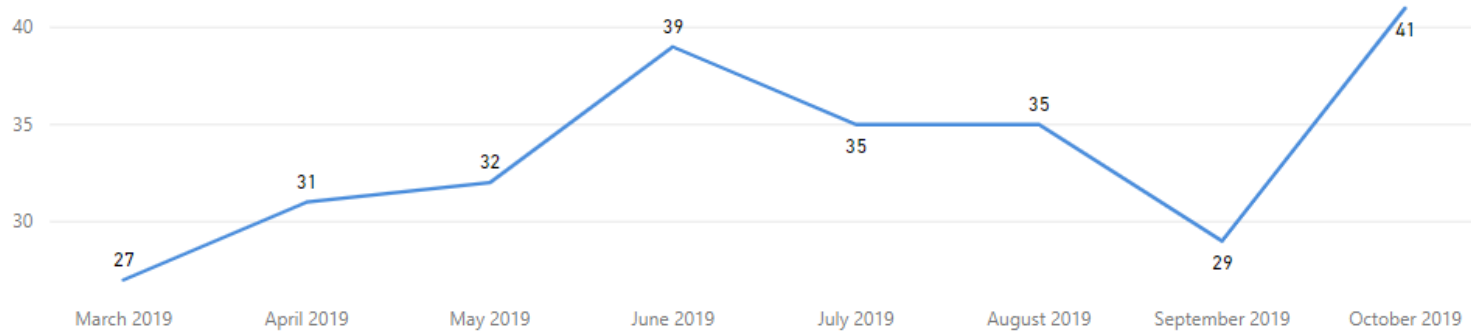
Requests more than 30 days old are considered to be backlogged requests



Service  Priority Type

**Received Filter**

### Received by Month



### Total Received

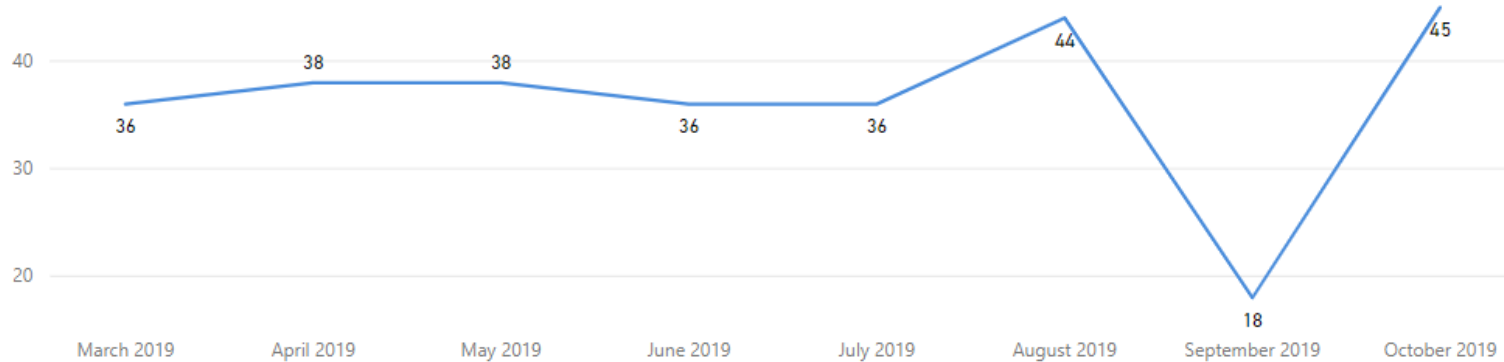
269

### Received per Month (Avg)\*

34

**Completed Filter**

### Completed by Month



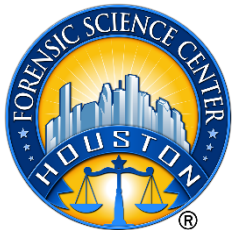
### Total Completed

291

### Completed per Month (Avg)\*

36

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



Service:  Priority Type:

**# of Unassigned**  

8✓

Goal: 20 (+60%)

**# Pending Draft**  

0✓

Goal: 35 (+100%)

**# Pending Tech**  

3✓

Goal: 20 (+85%)

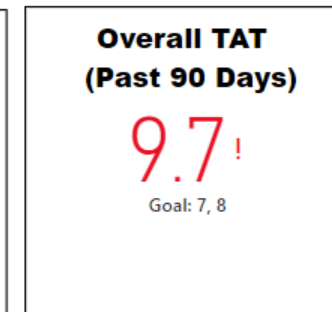
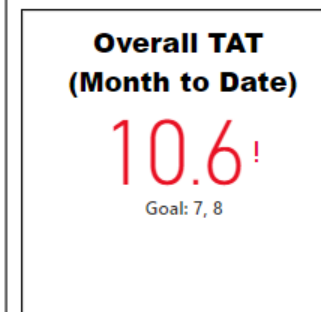
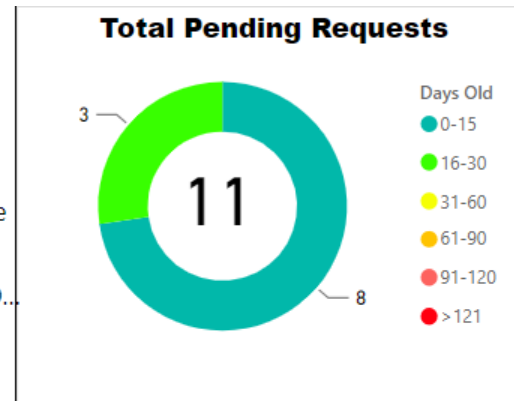
**# Pending Admin**  

0✓

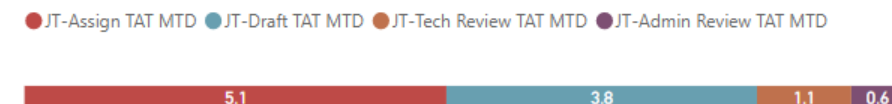
Goal: 20 (+100%)

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

0  
Justice Trax Past Critical Age  
NaN  
Avg Age of Requests >30 D..  
28  
Age-Oldest Unassigned  
0  
Age-Oldest Pending Draft  
7  
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
50040	2019-IA-19	49
50002	2019-IA-18	49
48328	2019-048	73
48189		75
48434		71
48601		67
51853		22

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

### Quality TAT

84!

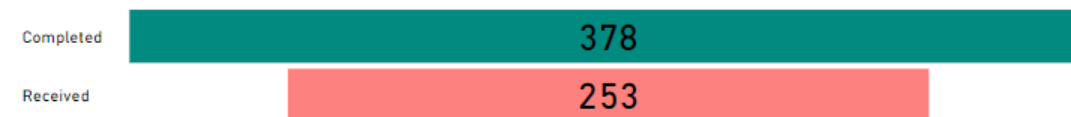
Goal: 30, 31

### Avg Age of Open Reports\*

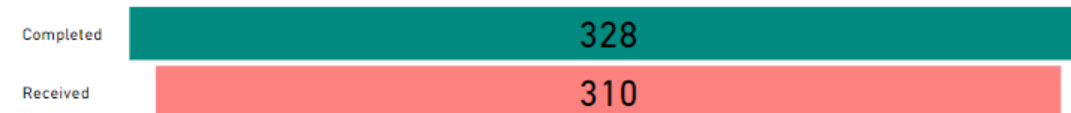
57

Quality Filter:

### Month to Date



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



During the move, NIBIN is shut down and not receiving evidence therefore do not show in LIMS. Requests will be accepted again beginning November 12, 2019.

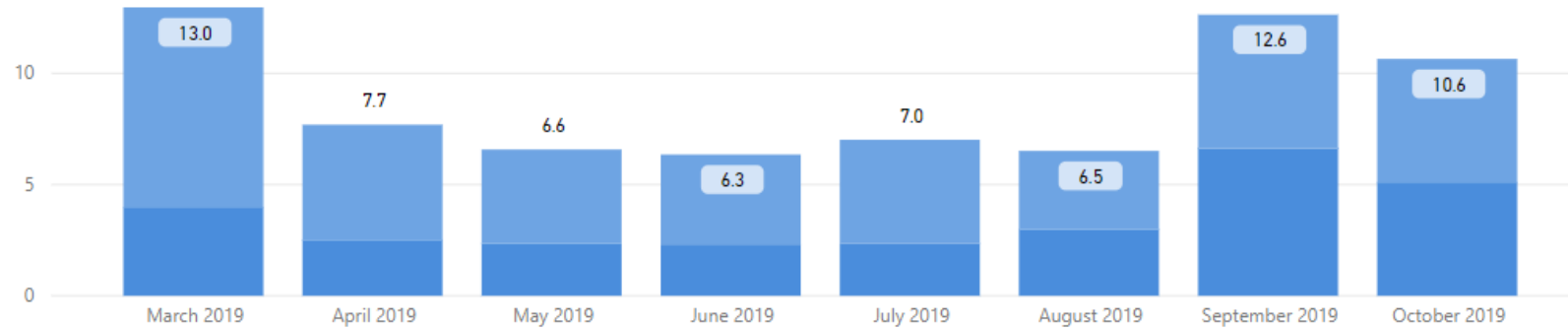
## Date Range

3/1/2019

10/31/2019

## Total TAT by Month

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



## Request Type

NIBIN Only

Priority Type

All

## Selected Time Frame Averages

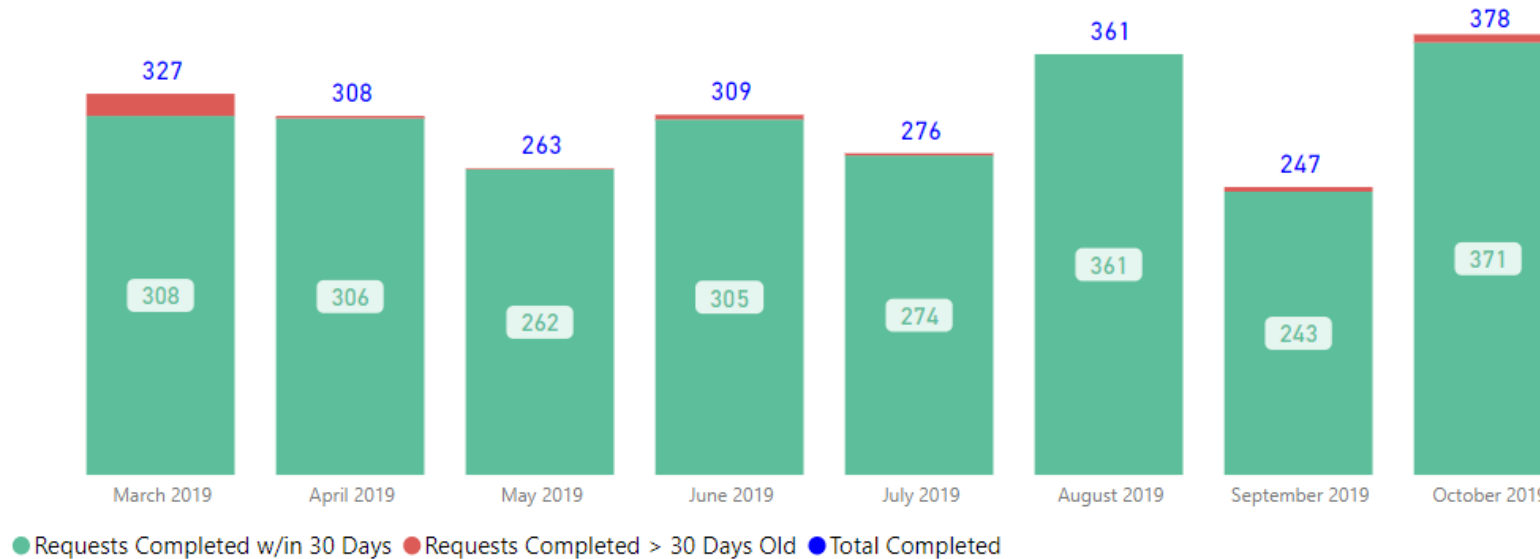
8.80

Total TAT (Rec'd-Compl.) Avg

5.28

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

2469

Requests Completed

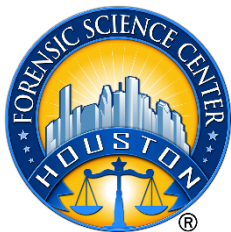
39

Requests Completed > 30 Days Old

1.58 %

% Completed > 30 Days Old

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



Service  Priority Type



#### Received Filter

3/1/2019 10/31/2019

#### Received by Month



#### Total Received

2,337

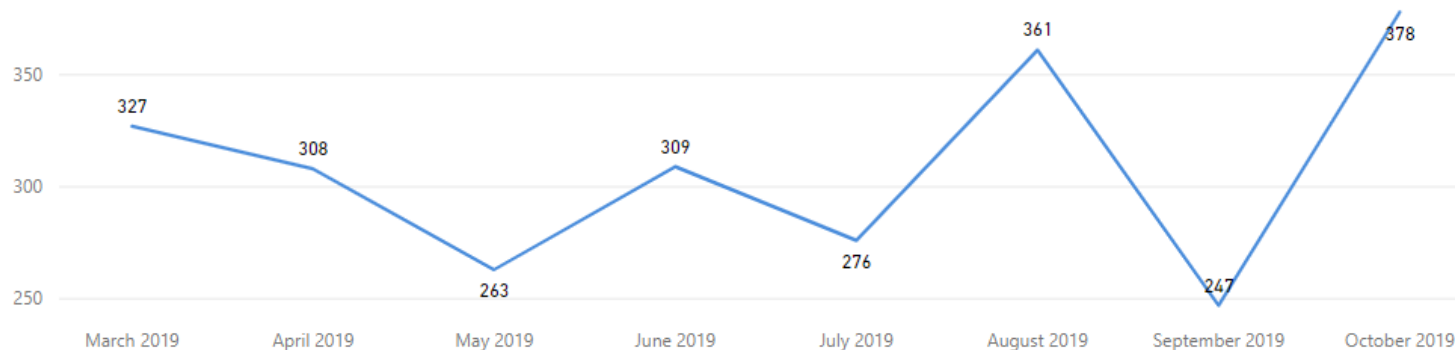
#### Received per Month (Avg)\*

292

#### Completed Filter

3/1/2019 10/31/2019

#### Completed by Month



#### Total Completed

2,469

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

309

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





# Forensic Biology



Section

DNA

Request Type

All

# of Unassigned

3✓

Goal: 20 (+85%)

# Pending Draft

108!

Goal: 24 (-350%)

# Pending Tech

39!

Goal: 24 (-62.5%)

# Pending Admin

9✓

Goal: 20 (+55%)

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

203

Past Critical Age

98

Avg Age of Requests &gt;30 ...

217

Age-Oldest Unassigned PL

932

Age-Oldest Pending Draft...

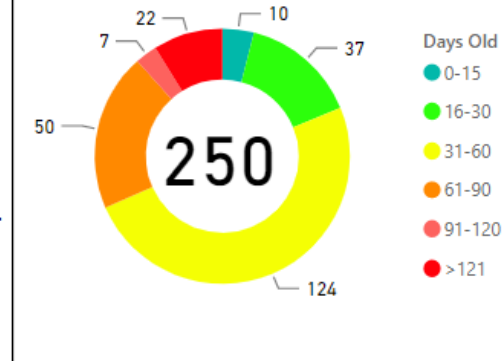
1995

Age-Oldest Pending Tech ...

174

Age-Oldest Pending Adm...

## Total Pending Requests

Overall TAT  
(Month to Date)

69.1!

Goal: 30, 31

Overall TAT  
(Past 90 Days)

57.4!

Goal: 30, 31

## TAT by Phase of Work (MTD)

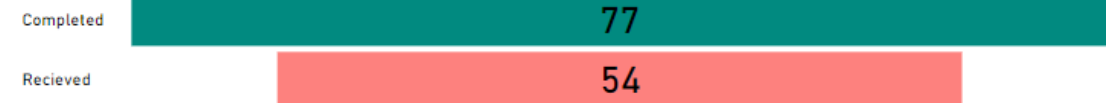
PL-Assign TAT MTD PL-Draft TAT MTD PL-Tech Review TAT MTD PL-Admin Review TAT MTD



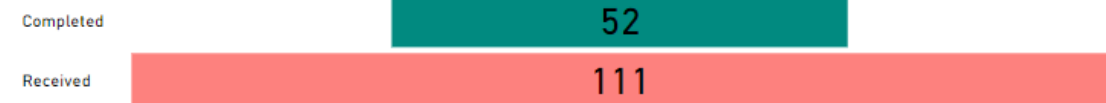
## TAT by Phase of Work (Past 90 Days)



## Month to Date



## 30 Day Avg (Over Past 90 Days)



## Open Quality Reports

Qualtrax ID	Workflow #	Age
33435	2018-085	293
34624	2018-094	275
45353	2019-029	117
46911	2019-034	95
47766	2019-043	82
48832	2019-057	64
49433	2019-IA-12	57

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

## Quality TAT

33✓

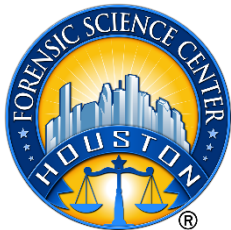
Goal: 40, 41

## Avg Age of Open Reports\*

100

Quality Filter

Biology/DNA



Section

DNA

Request Type

SAK

# of Unassigned

0✓

Goal: 20 (+100%)

# Pending Draft

61!

Goal: 24 (-154.17%)

# Pending Tech

11✓

Goal: 24 (+54.17%)

# Pending Admin

2✓

Goal: 20 (+90%)

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

72

Past Critical Age

88

Avg Age of Reqeusts >30 ...

0

Age-Oldest Unassigned PL

932

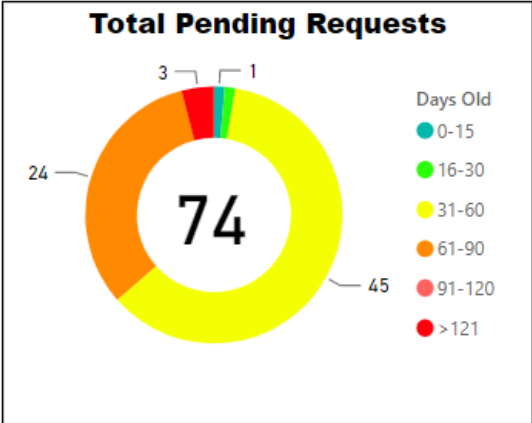
Age-Oldest Pending Draft...

72

Age-Oldest Pending Tech ...

72

Age-Oldest Pending Adm...



Overall TAT (Month to Date)

56.2!

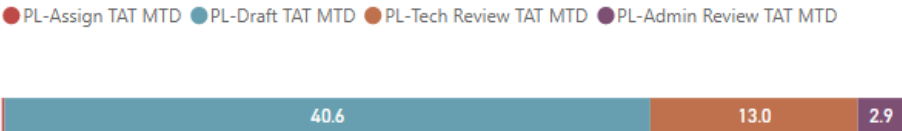
Goal: 30, 31

Overall TAT (Past 90 Days)

52.0!

Goal: 30, 31

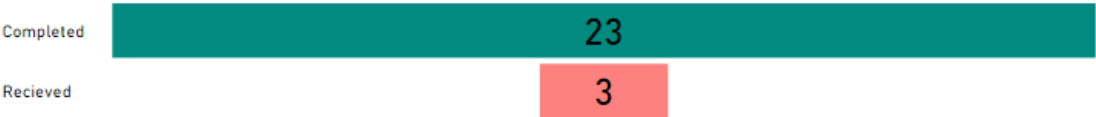
TAT by Phase of Work (MTD)



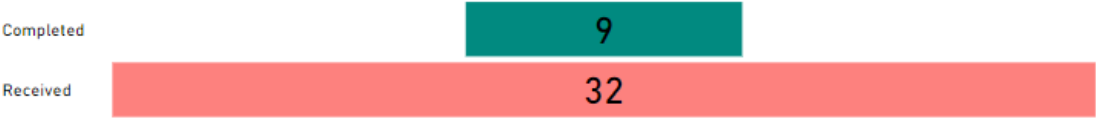
TAT by Phase of Work (Past 90 Days)



Month to Date



30 Day Avg (Over Past 90 Days)



Open Quality Reports

Qualtrax ID	Workflow #	Age
33435	2018-085	293
34624	2018-094	275
45353	2019-029	117
46911	2019-034	95
47766	2019-043	82
48832	2019-057	64
49433	2019-IA-12	57

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

Quality TAT

33✓

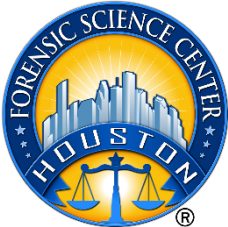
Goal: 40, 41

Avg Age of Open Reports\*

100

Quality Filter

Biology/DNA

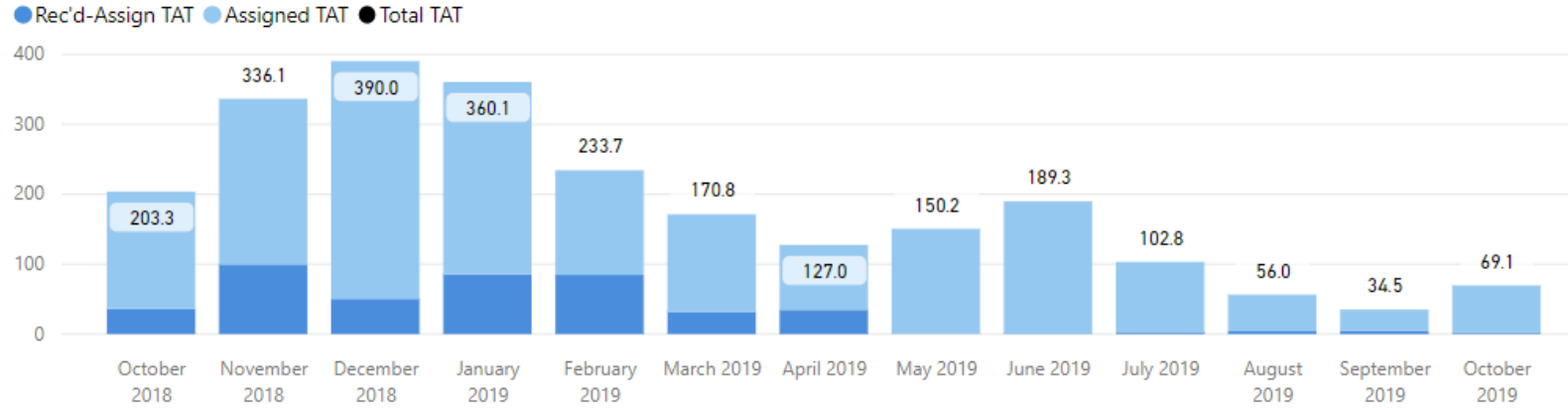


## Date Range

10/1/2018

10/31/2019

## Total TAT by Month



## Request Type

DNA

Request Type

All

## Selected Time Frame Averages

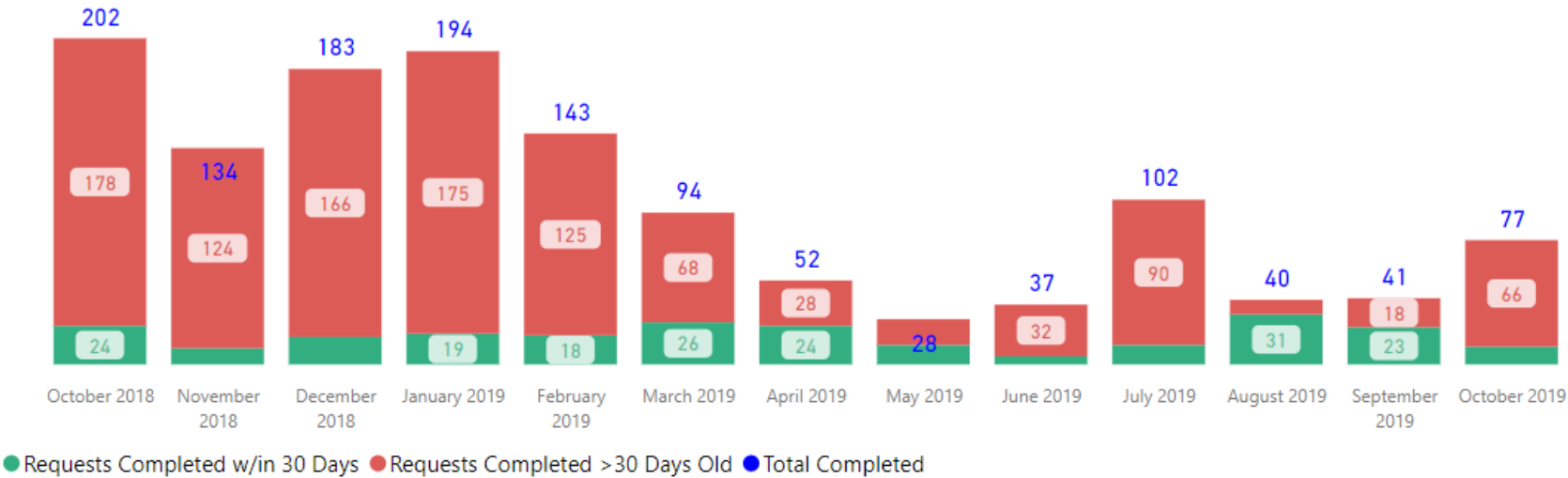
236.68

Total TAT (Rec'd-Compl.) Avg

188.87

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

1327

Requests Completed

1095

Requests Completed > 30 Days

82.52 %

% Completed > 30 Days

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



Section

DNA

Request Type

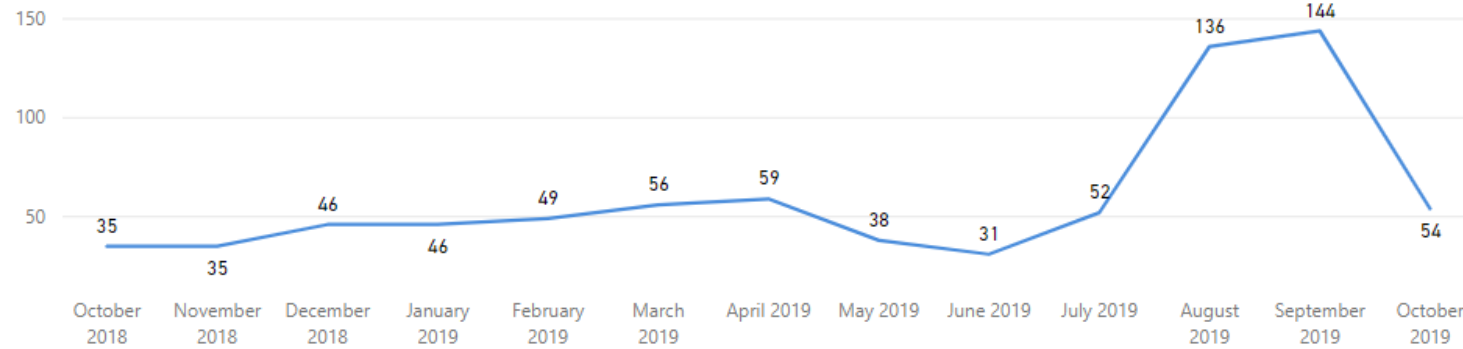
All

## Received Filter

10/1/2018

10/31/2019

## Received by Month



## Total Received

781

## Received per Month (Avg)\*

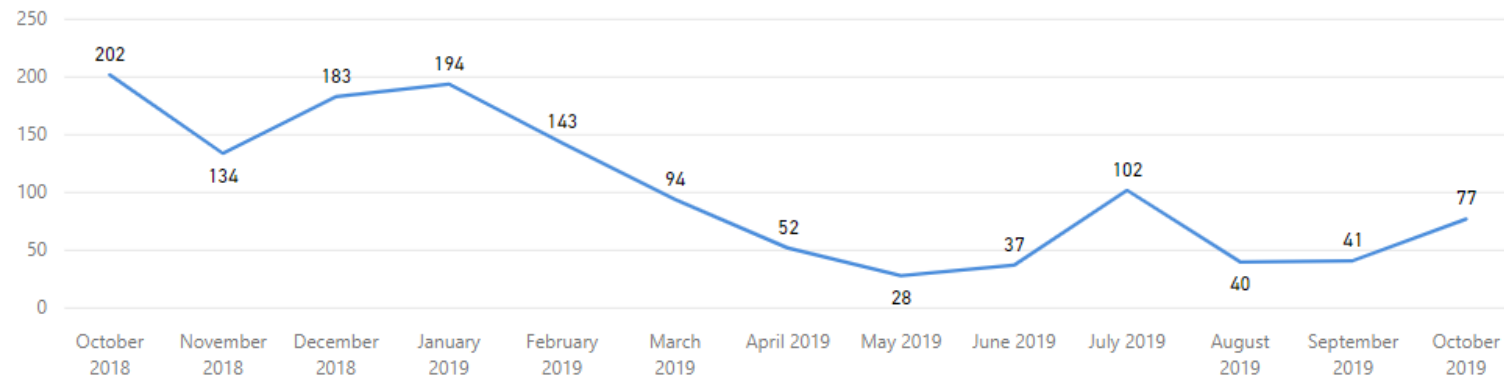
60

## Completed Filter

10/1/2018

10/31/2019

## Completed by Month



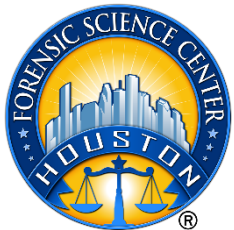
## Total Completed

1327

## Completed per Month (Avg)\*

102

\* 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**

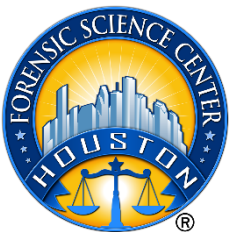
**Non-SAKs shipped: 661**

**Non-SAKs completed: 658**

## Critical issues

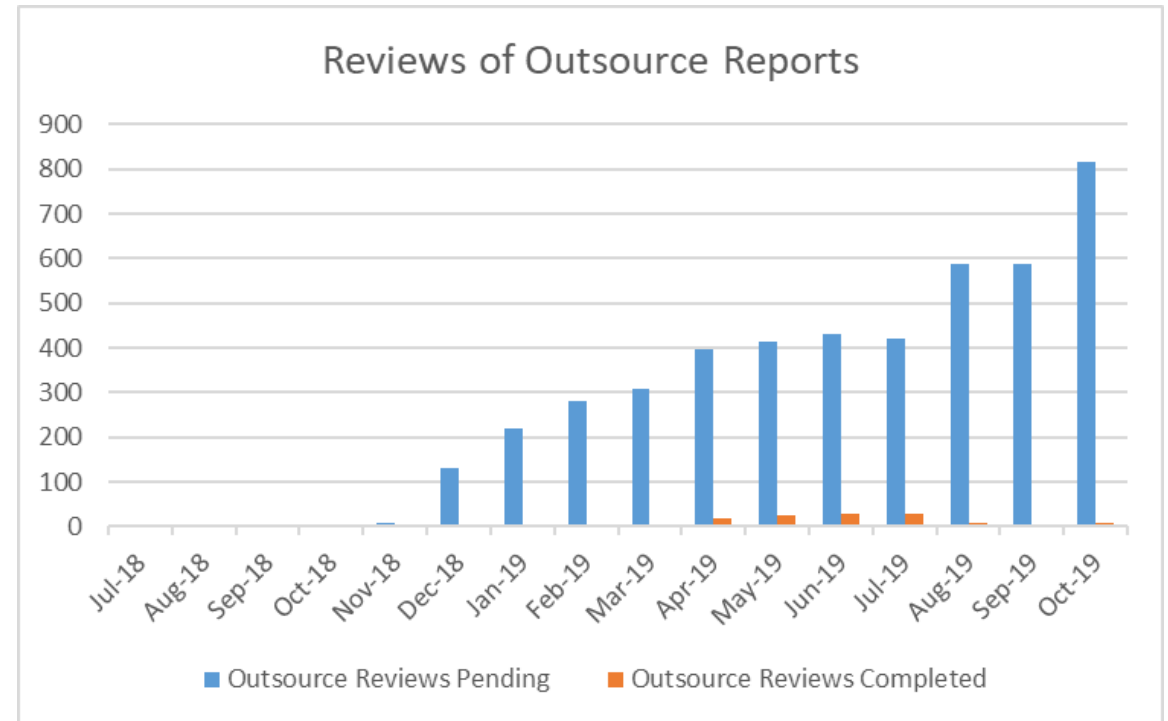
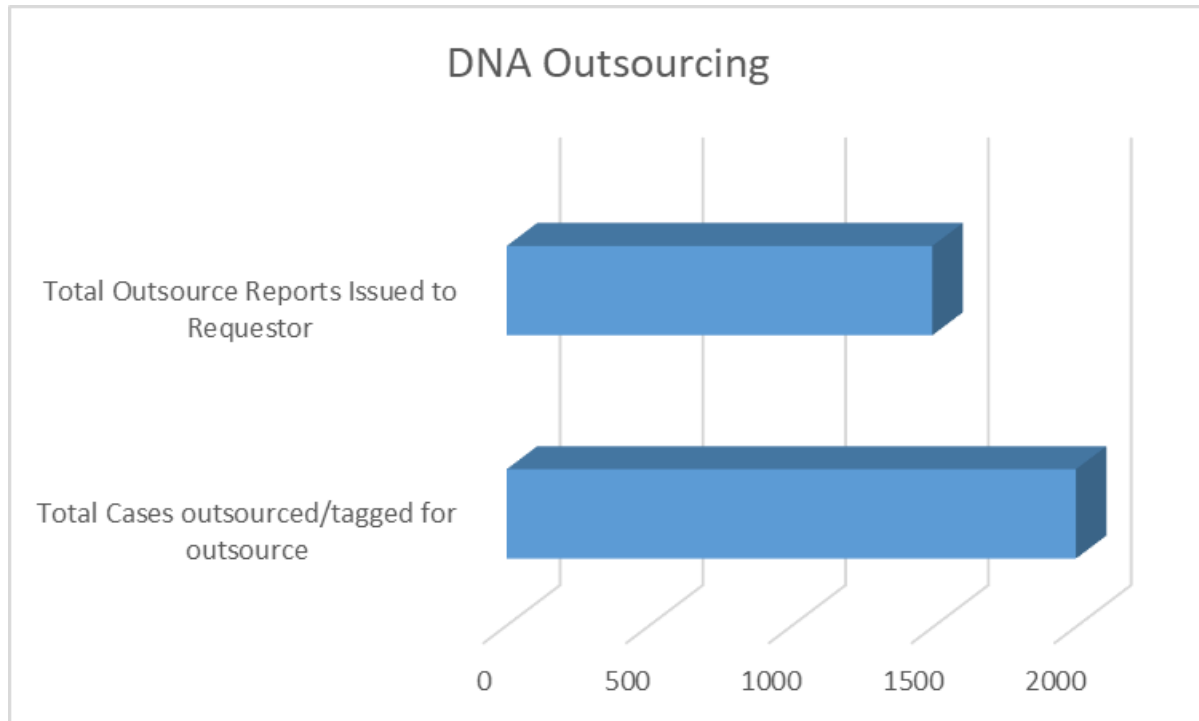
- The in-house review of all outsourced casework
- Bode delayed turnaround time for SAKs
- Current turnaround time ~120 days
- Outsource extension needed due to STRmix implementation and training

- 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

Screening

Request Type

All

# of Unassigned

0✓

Goal: 10 (+100%)

# Pending Draft

55!

Goal: 14 (-292.86%)

# Pending Tech

0✓

Goal: 16 (+100%)

# Pending Admin

0✓

Goal: 12 (+100%)

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

0

Past Critical Age

NaN

Avg Age of Reqeusts &gt;30 ...

0

Age-Oldest Unassigned PL

30

Age-Oldest Pending Draft...

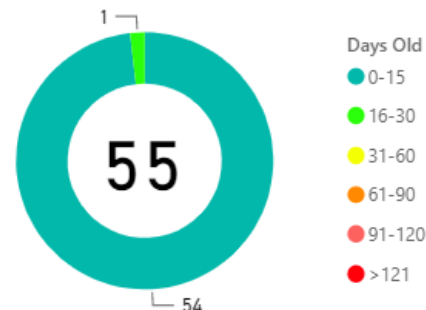
0

Age-Oldest Pending Tech ...

0

Age-Oldest Pending Adm...

## Total Pending Requests

Overall TAT  
(Month to Date)

12.4!

Goal: 10, 11

Overall TAT  
(Past 90 Days)

14.7!

Goal: 10, 11

## TAT by Phase of Work (MTD)

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

11.4

1.3

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

13.0

1.6

0.6

## Month to Date

Completed

36

Recieved

62

## 30 Day Avg (Over Past 90 Days)

Completed

70

Received

74

## Open Quality Reports

Qualtrax ID	Workflow #	Age
33435	2018-085	293
34624	2018-094	275
45353	2019-029	117
46911	2019-034	95
47766	2019-043	82
48832	2019-057	64
49433	2019-IA-12	57

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

## Quality TAT

33✓

Goal: 40, 41

## Avg Age of Open Reports\*

100

Quality Filter

Biology/DNA

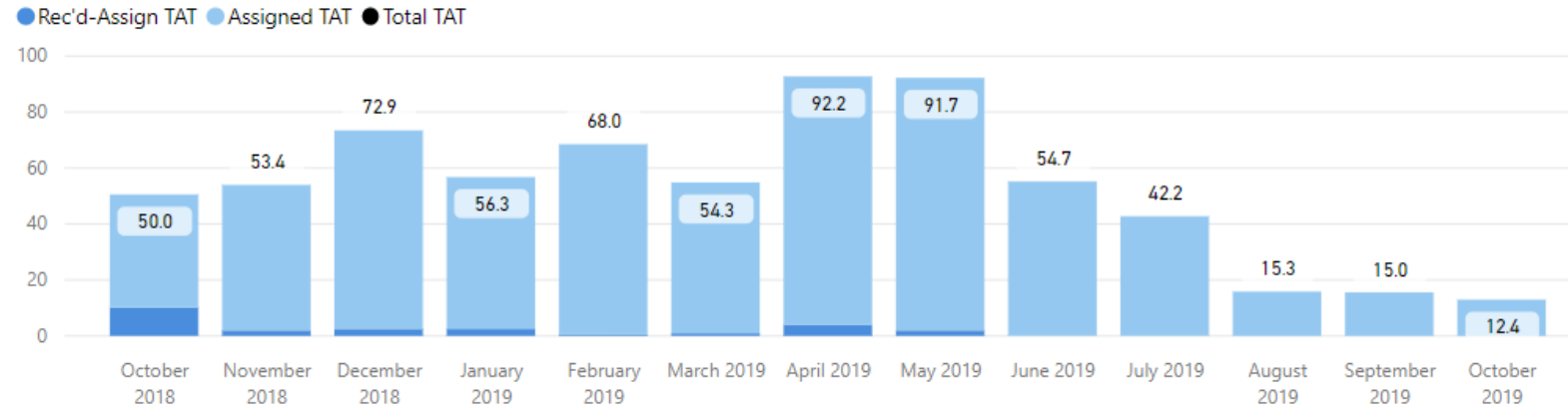


## Date Range

10/1/2018

10/31/2019

## Total TAT by Month



## Request Type

Screening

Request Type

All

## Selected Time Frame Averages

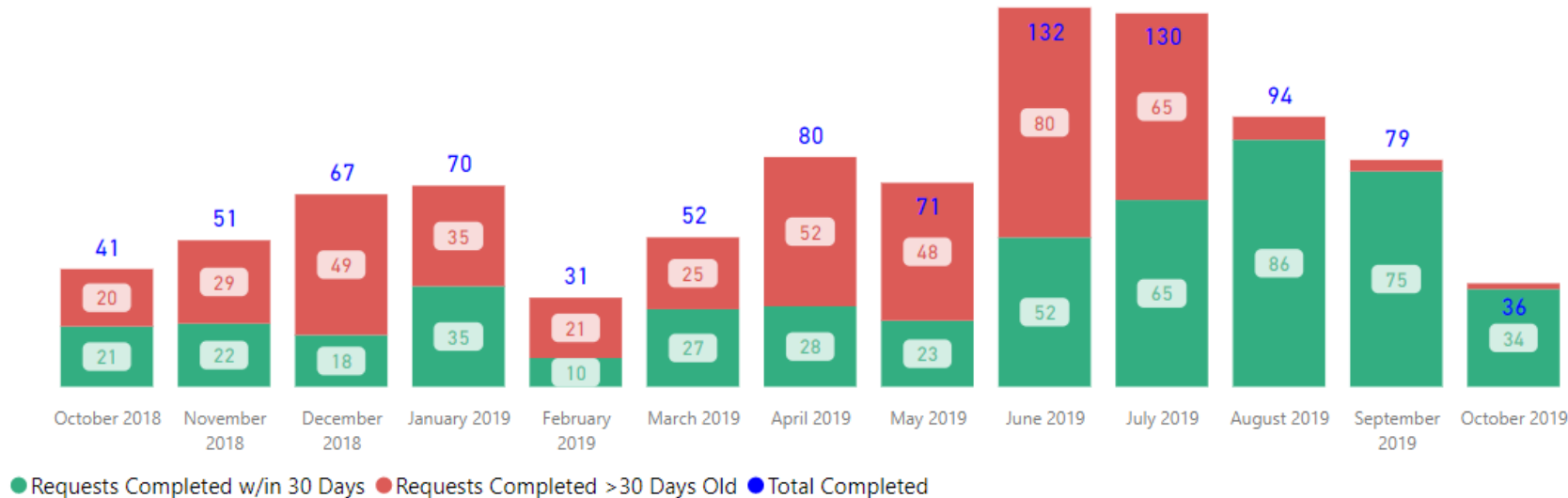
51.61

Total TAT (Rec'd-Compl.) Avg

50.63

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

934

Requests Completed

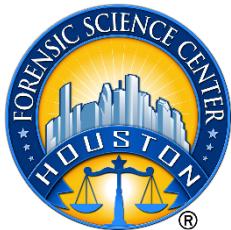
438

Requests Completed > 30 Days

46.90 %

% Completed > 30 Days

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



Section

Screening

Request Type

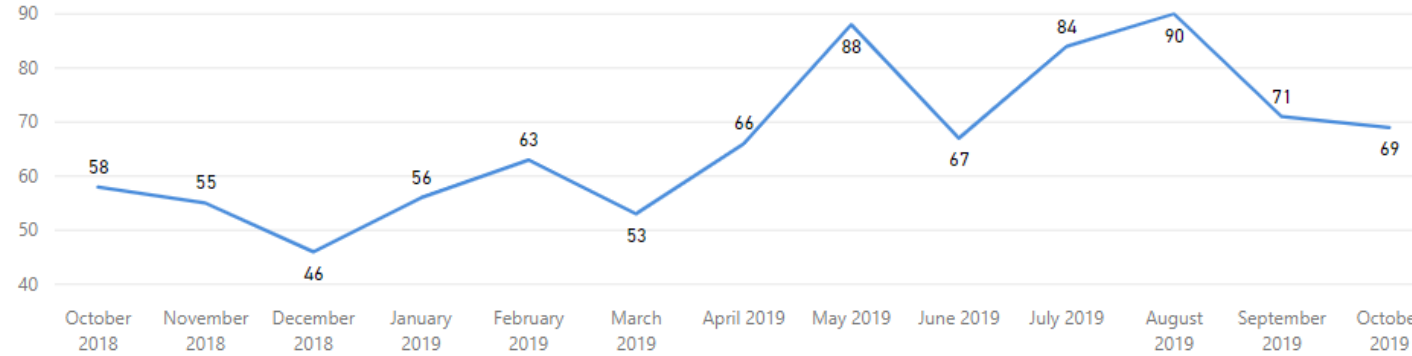
All

Received Filter

10/1/2018

10/31/2019

### Received by Month



Total Received

866

Received per Month (Avg)\*

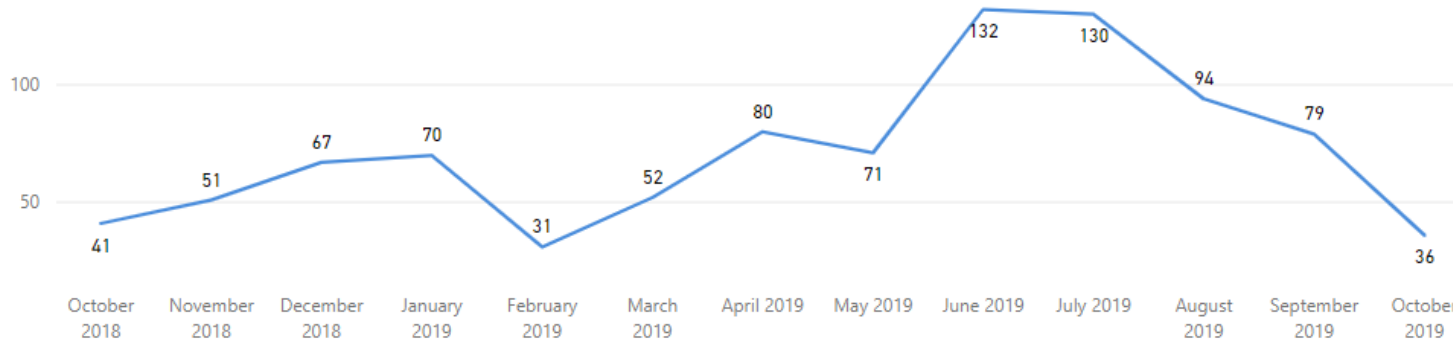
67

Completed Filter

10/1/2018

10/31/2019

### Completed by Month



Total Completed

934

Completed per Month (Avg)\*

72

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



Section

CODIS

# of Unassigned

20✓

Goal: 100 (+80%)

# Pending Draft

3✓

Goal: 20 (+85%)

# Pending Tech

2✓

Goal: 15 (+86.67%)

# Pending Admin

0✓

Goal: 0

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

4

Past Critical Age

41

Avg Age of Reqeusts >30 ...

44

Age-Oldest Unassigned PL

7

Age-Oldest Pending Draft...

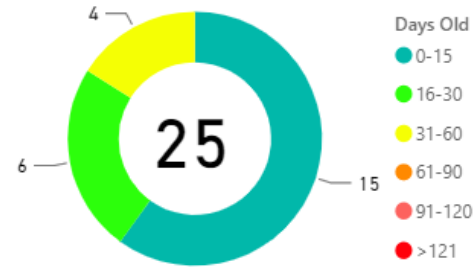
2

Age-Oldest Pending Tech ...

0

Age-Oldest Pending Adm...

### Total Pending Requests



Overall TAT  
(Month to Date)

18.0✓

Goal: 30, 31

Overall TAT  
(Past 90 Days)

21.4✓

Goal: 30, 31

### TAT by Phase of Work (MTD)

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

15.3

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

19.1

### Month to Date

Completed

69

Received

65

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

Completed

79

Received

66

### Open Quality Reports

Qualtrax ID	Workflow #	Age
33435	2018-085	293
34624	2018-094	275
45353	2019-029	117
46911	2019-034	95
47766	2019-043	82
48832	2019-057	64
49433	2019-IA-12	57

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

### Quality TAT

33✓

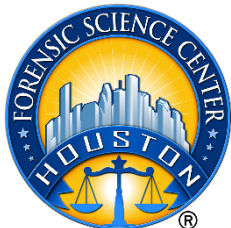
Goal: 40, 41

Avg Age of Open Reports\*

100

Quality Filter

Biology/DNA



## Date Range

10/1/2018

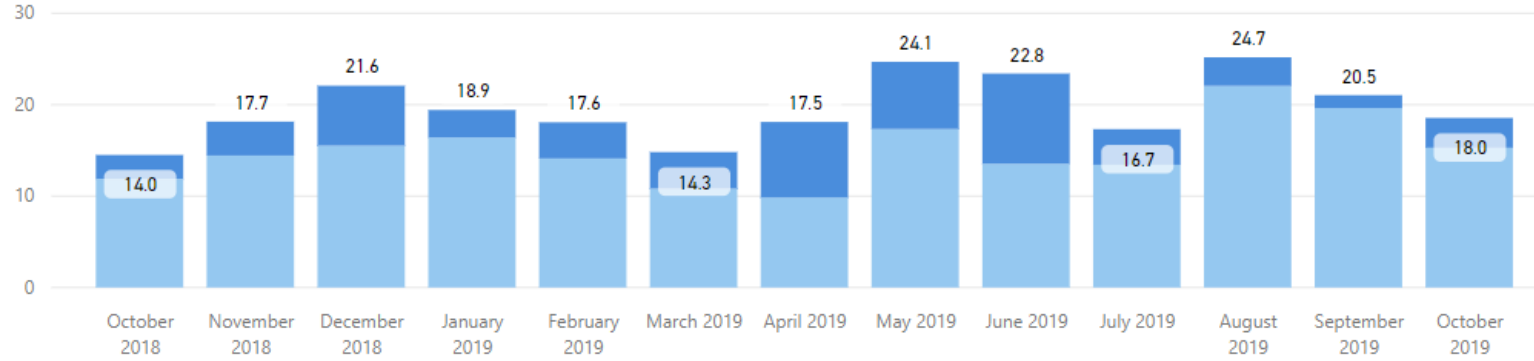
10/31/2019

## Request Type

CODIS

## Total TAT by Month

Rec'd-Assign TAT Assigned TAT Total TAT



## Selected Time Frame Averages

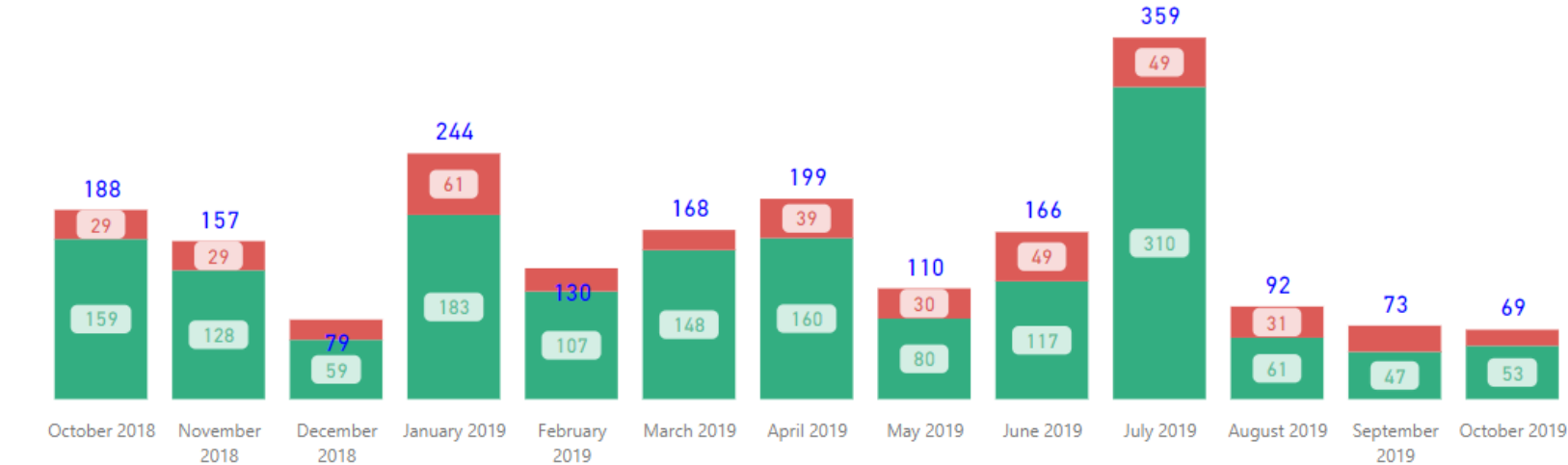
18.37

Total TAT (Rec'd-Compl.) Avg

4.73

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



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

## Received to Complete

2034

Requests Completed

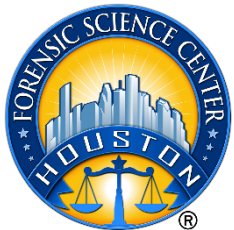
422

Requests Completed > 30 Days

20.75 %

% Completed > 30 Days

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





Section

CODIS

Hit Type

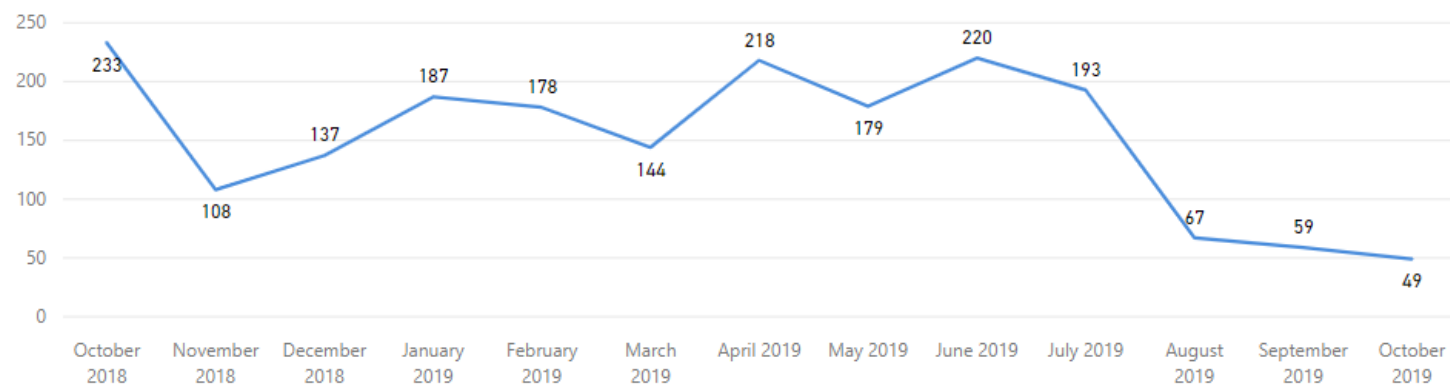
All

Received Filter

10/1/2018

10/31/2019

## Received by Month



Total Received

1972

Received per Month (Avg)\*

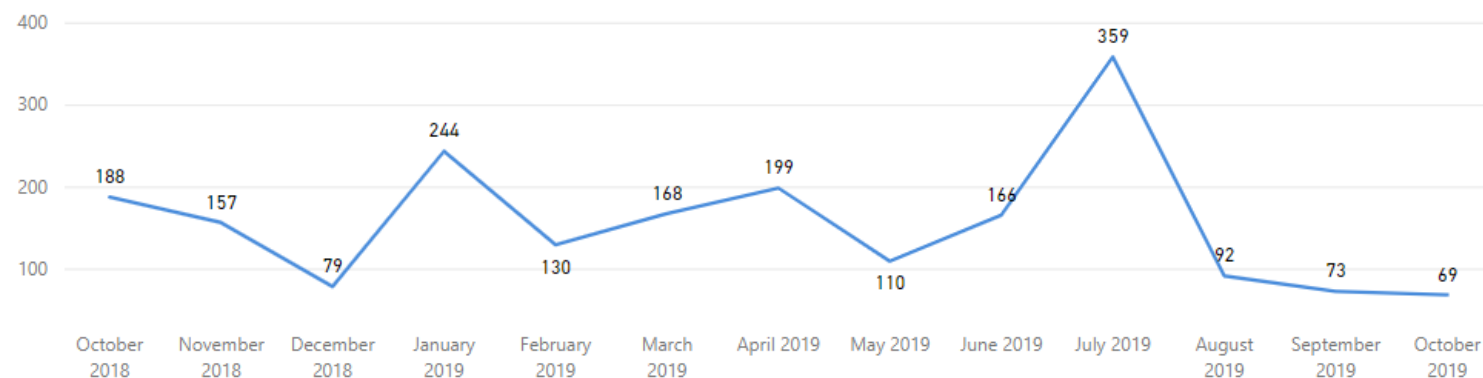
152

Completed Filter

10/1/2018

10/31/2019

## Completed by Month



Total Completed

2034

Completed per Month (Avg)\*

156

\* 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

Latent Comparison

Priority Type

All

# of Unassigned

943!

Goal: 230 (-310%)

# Pending Draft

95!

Goal: 50 (-90%)

# Pending Tech

24✓

Goal: 50 (+52%)

# Pending Admin

0✓

Goal: 50 (+100%)

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

855  
Justice Trax Past Critical Age

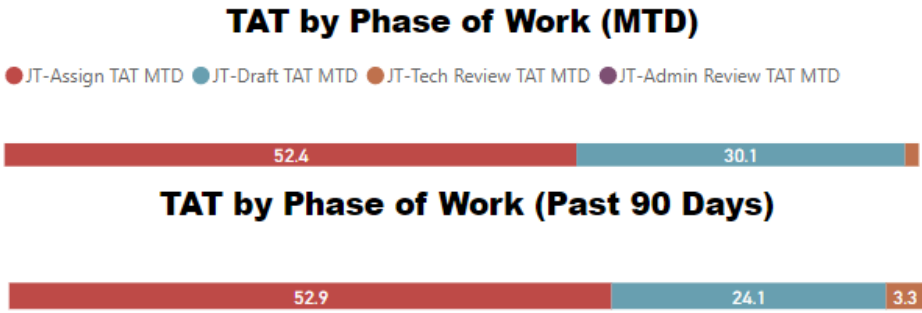
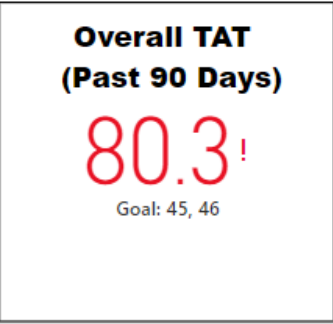
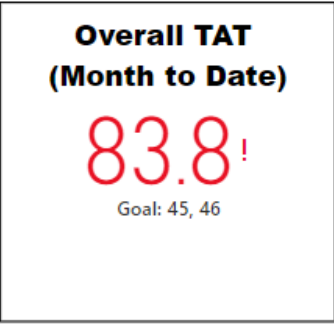
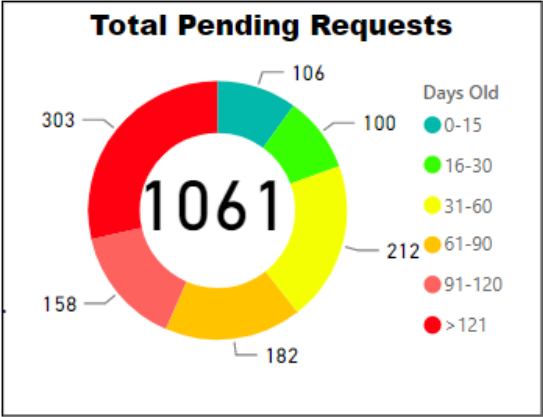
108  
Avg Age of Requests >30 D...

238  
Age-Oldest Unassigned

195  
Age-Oldest Pending Draft

199  
Age-Oldest Pending Tech

0  
Age-Oldest Pending Admin



### Open Quality Reports

Qualtrax ID	Workflow #	Age
44789	2019-028	124
51190	2019-069	34
52313		16
52325	2019-080	15
52586		10
52669	2019-082	9

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

Quality TAT

25✓

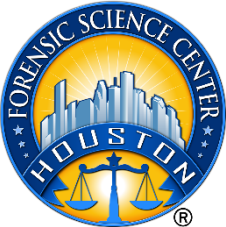
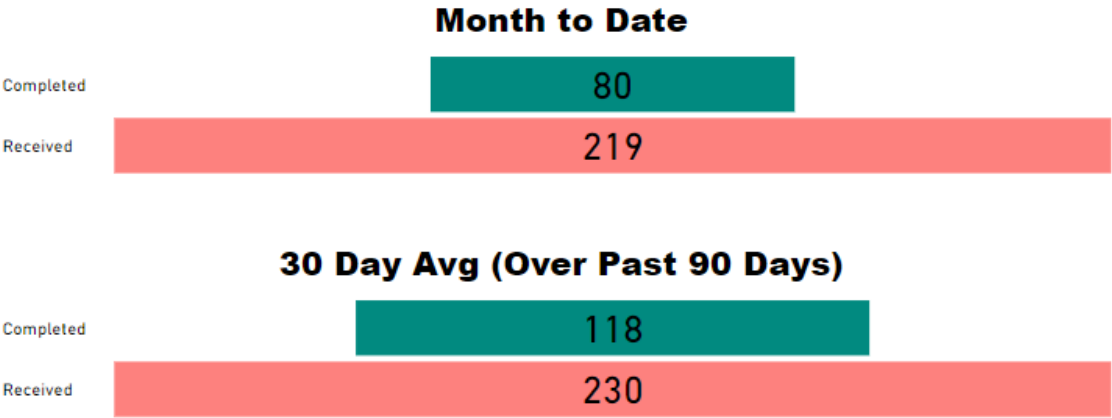
Goal: 40, 41

Avg Age of Open Reports\*

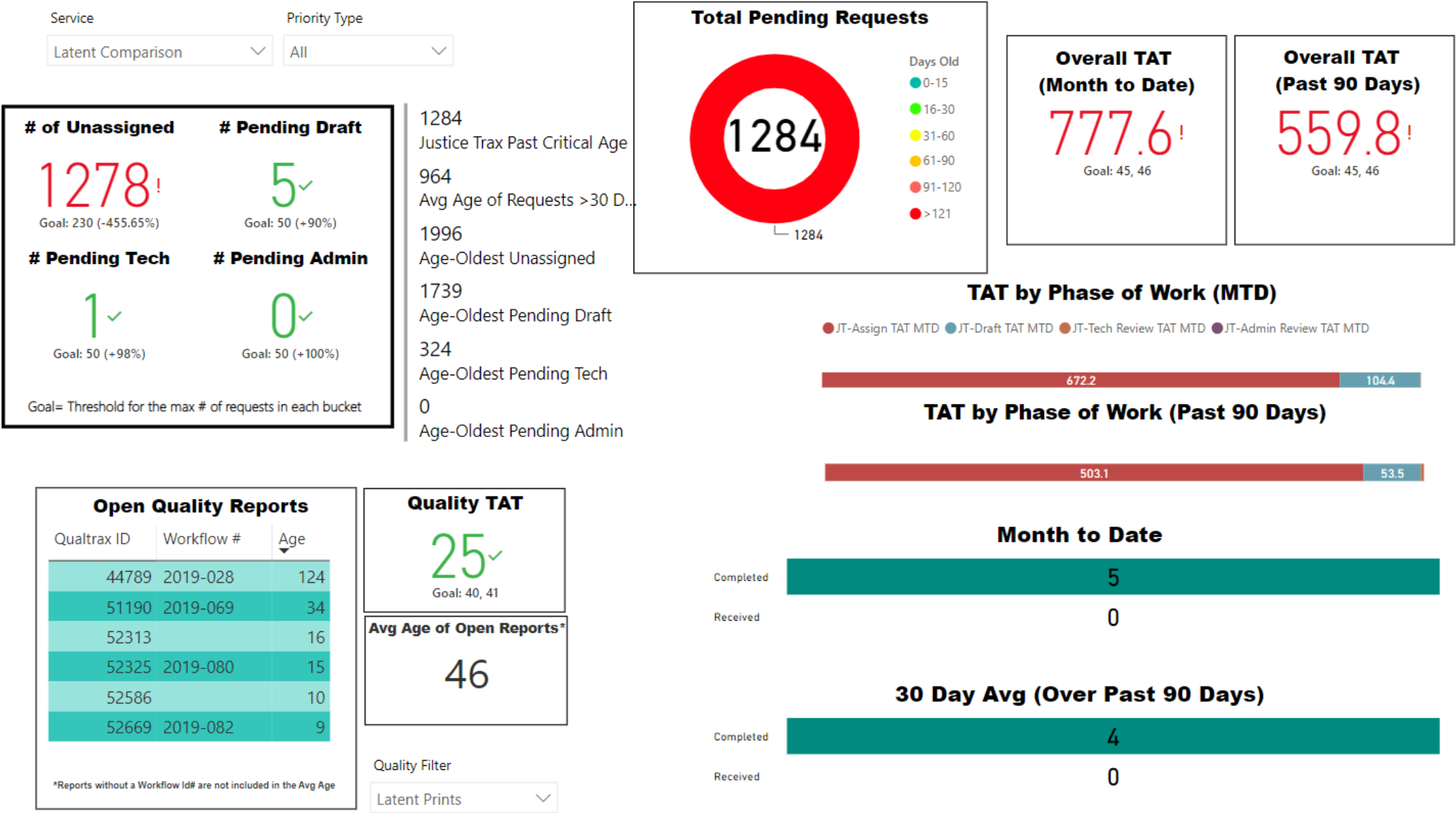
46

Quality Filter

Latent Prints



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



Month to Date

Completed

Received

5

0

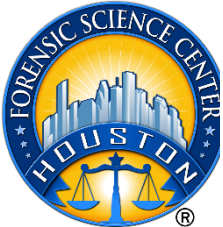
30 Day Avg (Over Past 90 Days)

Completed

Received

4

0



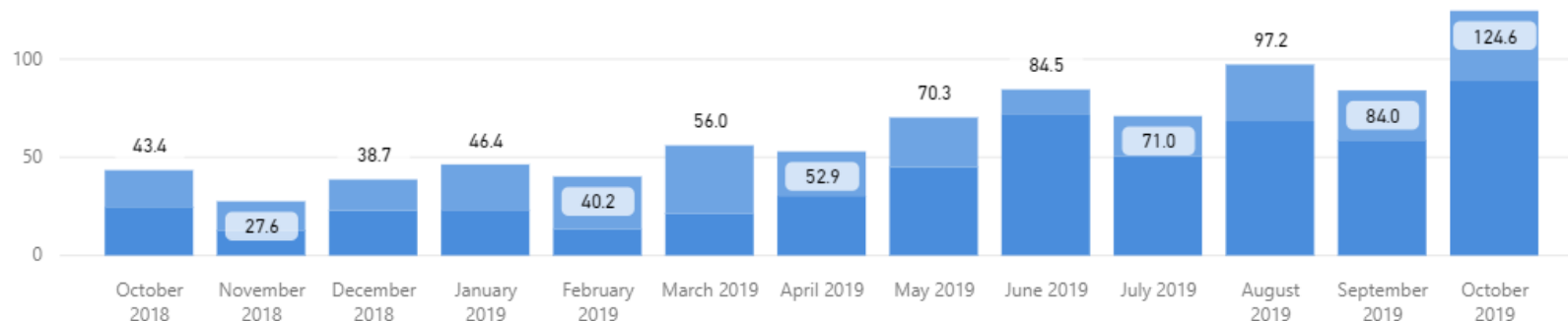
Date Range  

10/1/2018

10/31/2019

### Total TAT by Month

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



### Request Type

Latent Comparison 

Priority Type

All 

### Selected Time Frame Averages

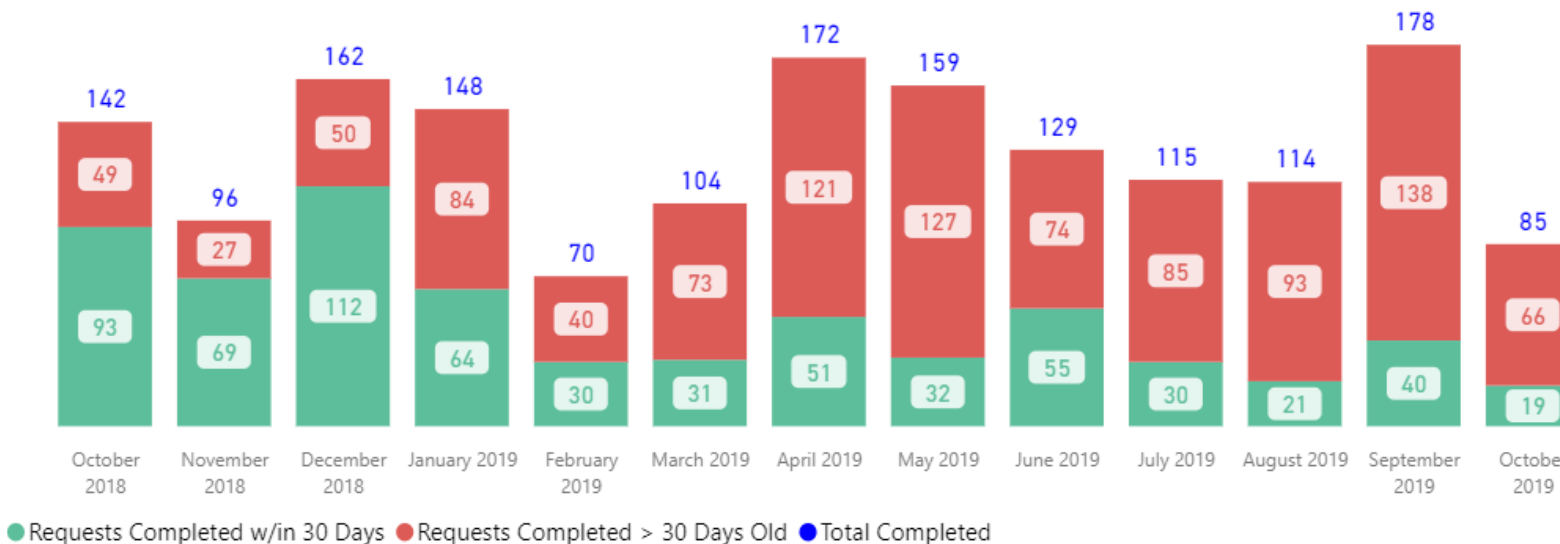
63.65

Total TAT (Rec'd-Compl.) Avg

22.93

Assigned TAT (Asgmt.-Compl.) Avg

### Requests Completed



### Received to Complete

1674

Requests Completed

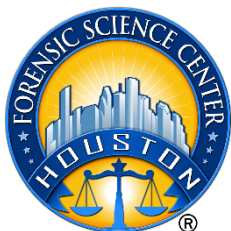
1027

Requests Completed > 30 Days Old


61.35 %

% Completed > 30 Days Old

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



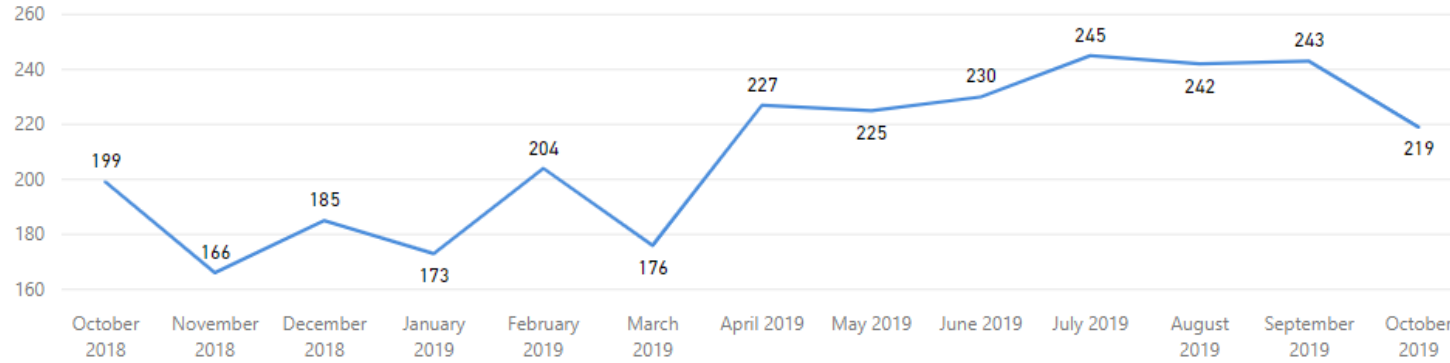
Service  Priority Type

 ...

**Received Filter**



### Received by Month




**Total Received**

**2,734**

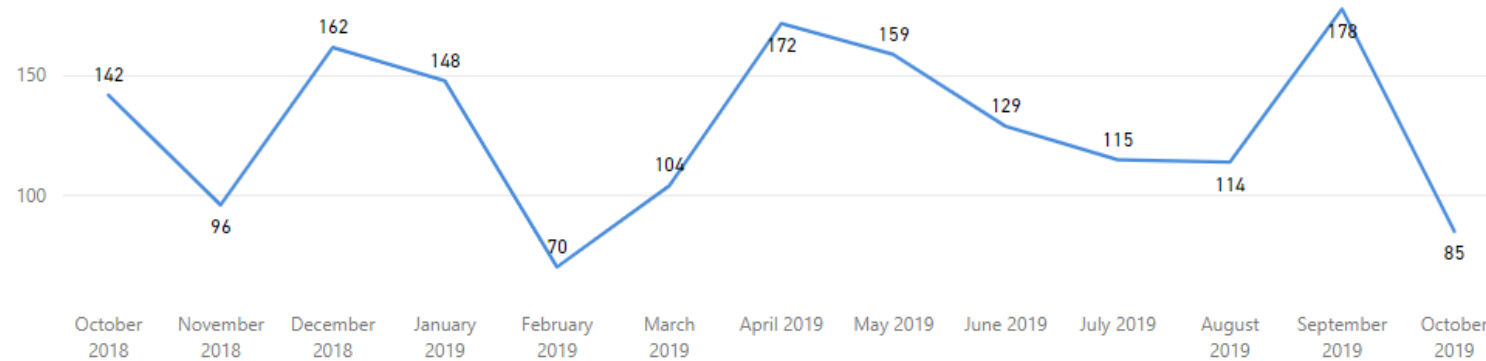
**Received per Month (Avg)\***

**210**

**Completed Filter**



### Completed by Month



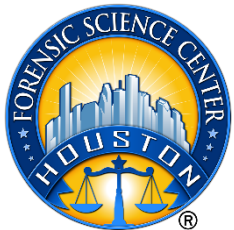
**Total Completed**

**1,674**

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

**129**

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





Service

Latent Processing

Priority Type

All

# of Unassigned

176!

Goal: 50 (-252%)

# Pending Draft

4✓

Goal: 30 (+86.67%)

# Pending Tech

5✓

Goal: 30 (+83.33%)

# Pending Admin

0✓

Goal: 30 (+100%)

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

145

Justice Trax Past Critical Age

107

Avg Age of Requests >30 D...

261

Age-Oldest Unassigned

293

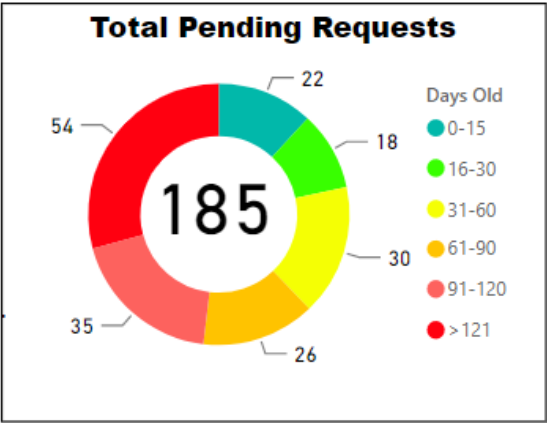
Age-Oldest Pending Draft

276

Age-Oldest Pending Tech

0

Age-Oldest Pending Admin



Overall TAT (Month to Date)

104.1!

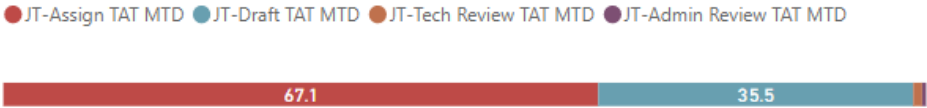
Goal: 30, 31

Overall TAT (Past 90 Days)

84.1!

Goal: 30, 31

TAT by Phase of Work (MTD)



TAT by Phase of Work (Past 90 Days)



Open Quality Reports

Qualtrax ID	Workflow #	Age
50040	2019-IA-19	49
50002	2019-IA-18	49
48328	2019-048	73
48189		75
48434		71
48601		67
51853		22

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

Quality TAT

84!

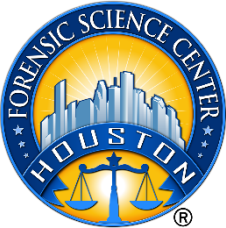
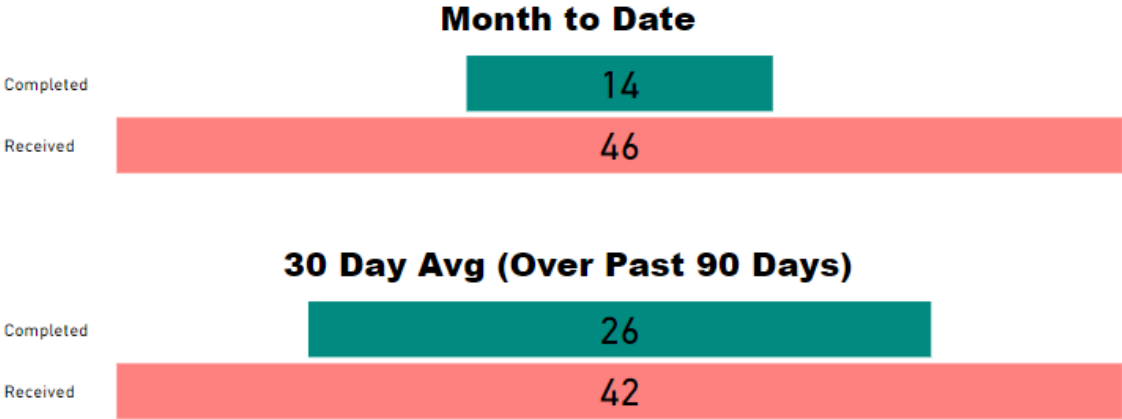
Goal: 30, 31

Avg Age of Open Reports\*

57

Quality Filter

Firearms



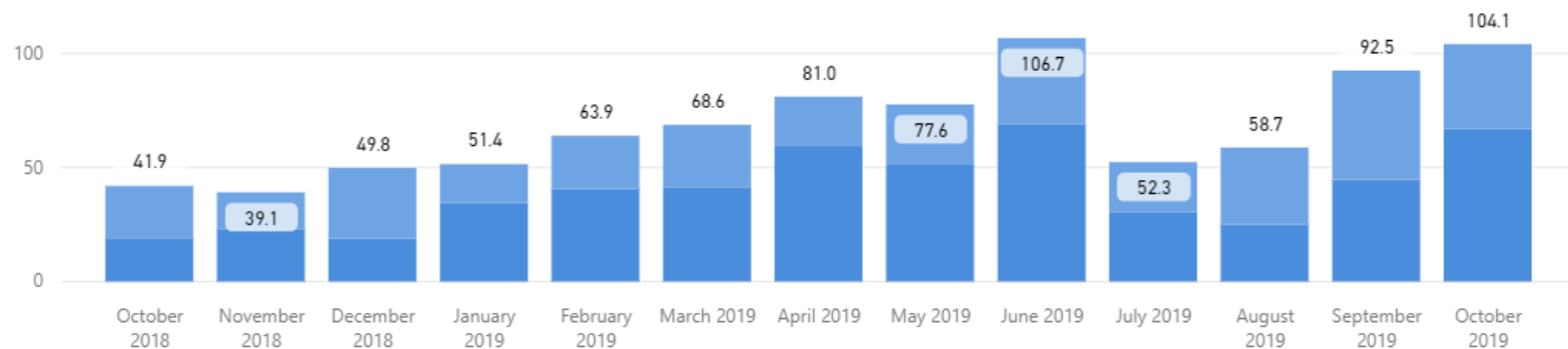
## Date Range

10/1/2018

10/31/2019

## Total TAT by Month

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



## Request Type

Latent Processing

Priority Type

All

## Selected Time Frame Averages

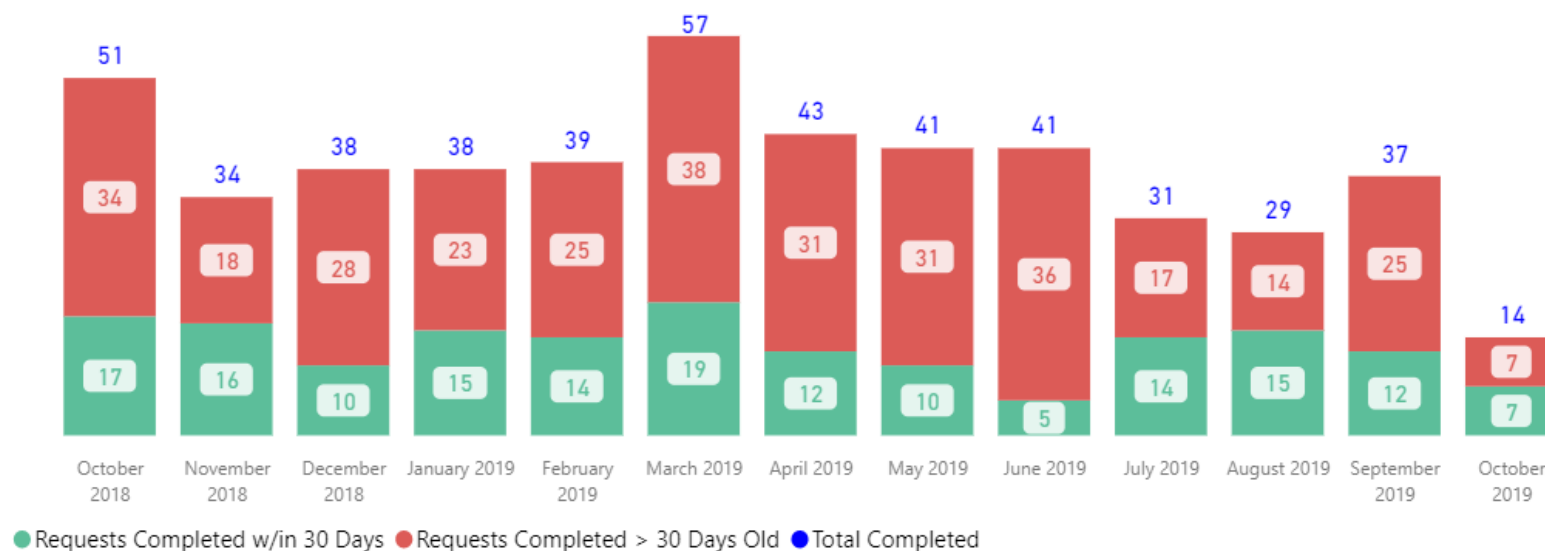
66.86

Total TAT (Rec'd-Compl.) Avg

27.39

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

493

Requests Completed

327

Requests Completed > 30 Days Old

66.33 %

% Completed > 30 Days Old



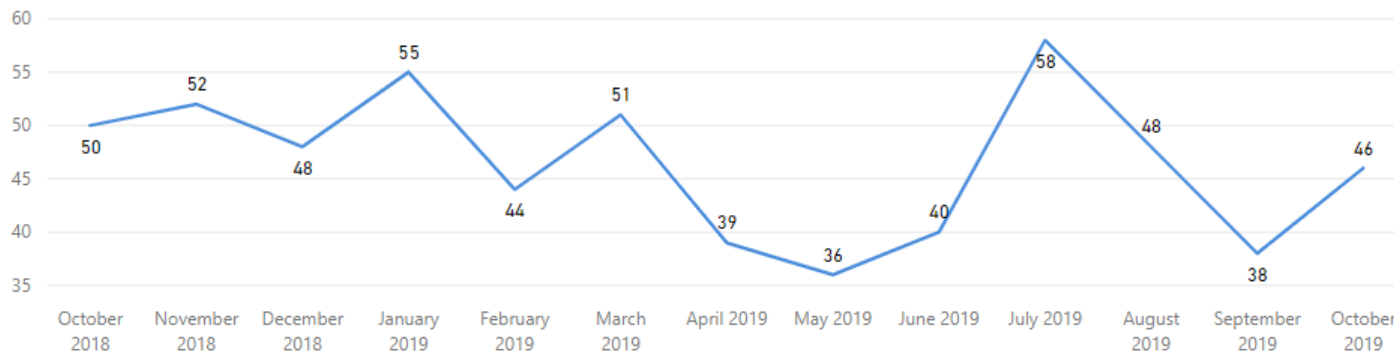
Requests more than 30 days old are considered to be backlogged requests

Service  Priority Type

...

### Received Filter

### Received by Month



### Total Received

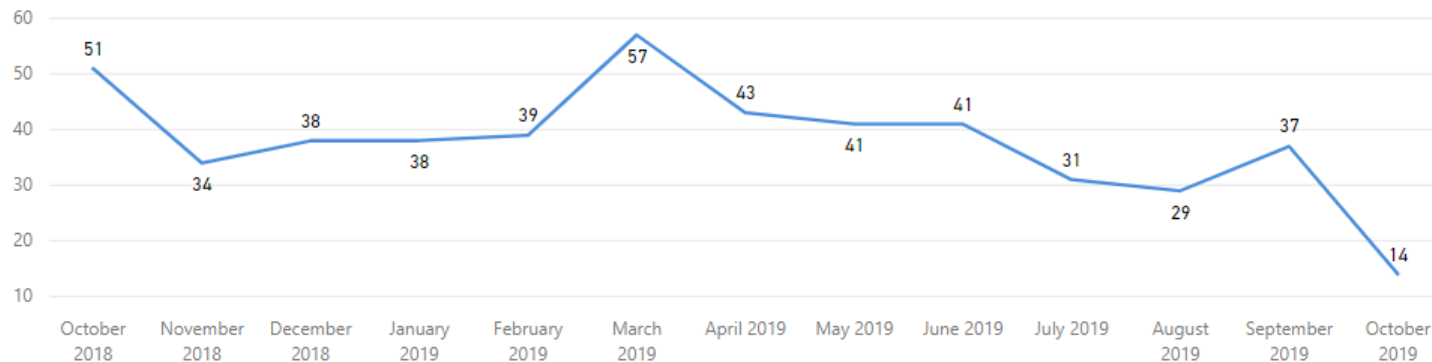
605

### Received per Month (Avg)\*

47

### Completed Filter

### Completed by Month



### Total Completed

493

### Completed per Month (Avg)\*

38

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



# Digital Multi-Media



Service

AV Call Out

Priority Type

All

# of Unassigned

0✓

Goal: 15 (+100%)

# Pending Draft

1✓

Goal: 5 (+80%)

# Pending Tech

1✓

Goal: 5 (+80%)

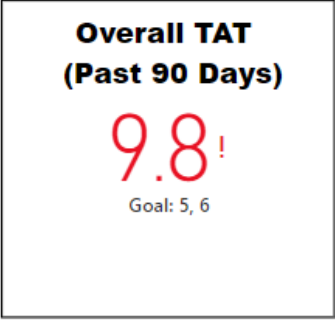
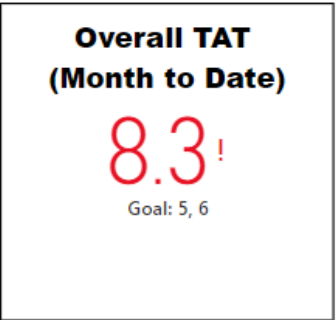
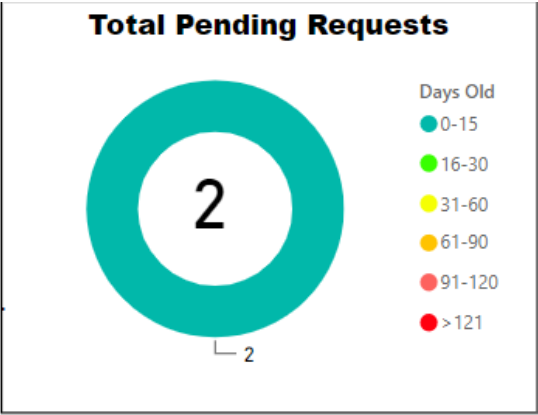
# Pending Admin

0✓

Goal: 5 (+100%)

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

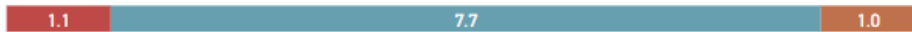
0  
Justice Trax Past Critical Age  
NaN  
Avg Age of Requests >30 D...  
0  
Age-Oldest Unassigned  
1  
Age-Oldest Pending Draft  
0  
Age-Oldest Pending Tech  
0  
Age-Oldest Pending Admin



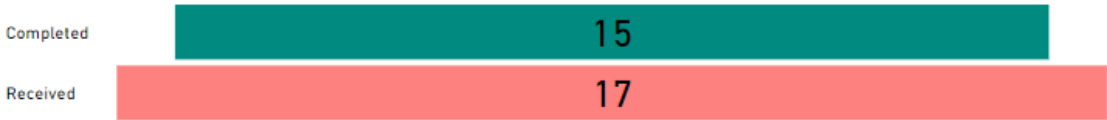
TAT by Phase of Work (MTD)



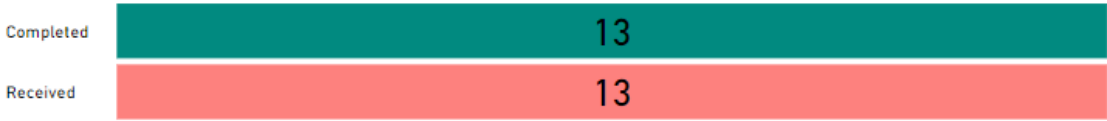
TAT by Phase of Work (Past 90 Days)



Month to Date



30 Day Avg (Over Past 90 Days)



Open Quality Reports

Qualtrax ID

Workflow #

Age

Quality TAT

17✓

Goal: 30, 31

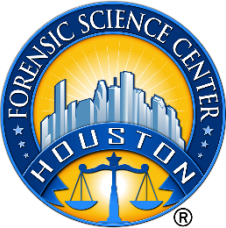
Avg Age of Open Reports\*

NaN

Quality Filter

Audio/Video

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



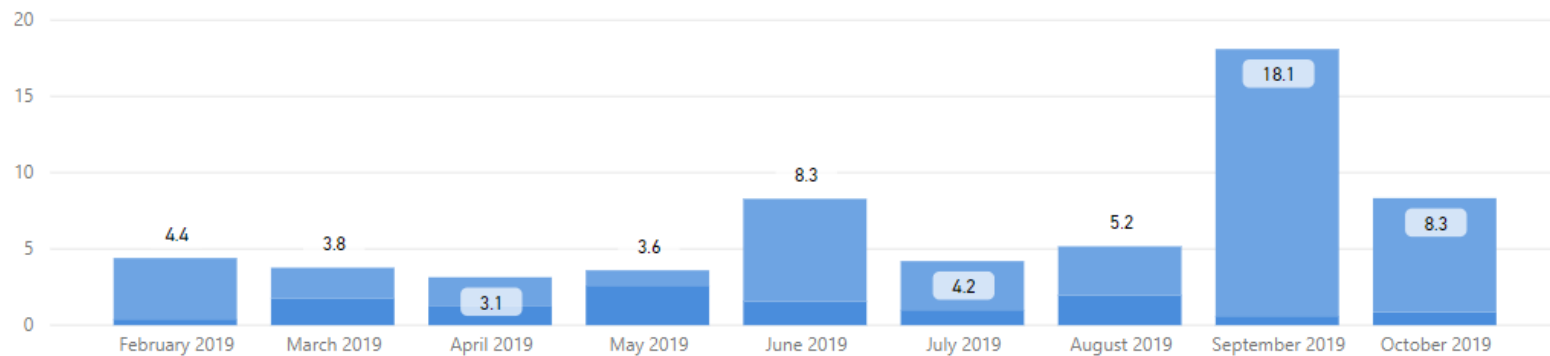
## Date Range

10/1/2018

10/31/2019

## Total TAT by Month

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



## Request Type

AV Call Out

Priority Type

All

## Selected Time Frame Averages

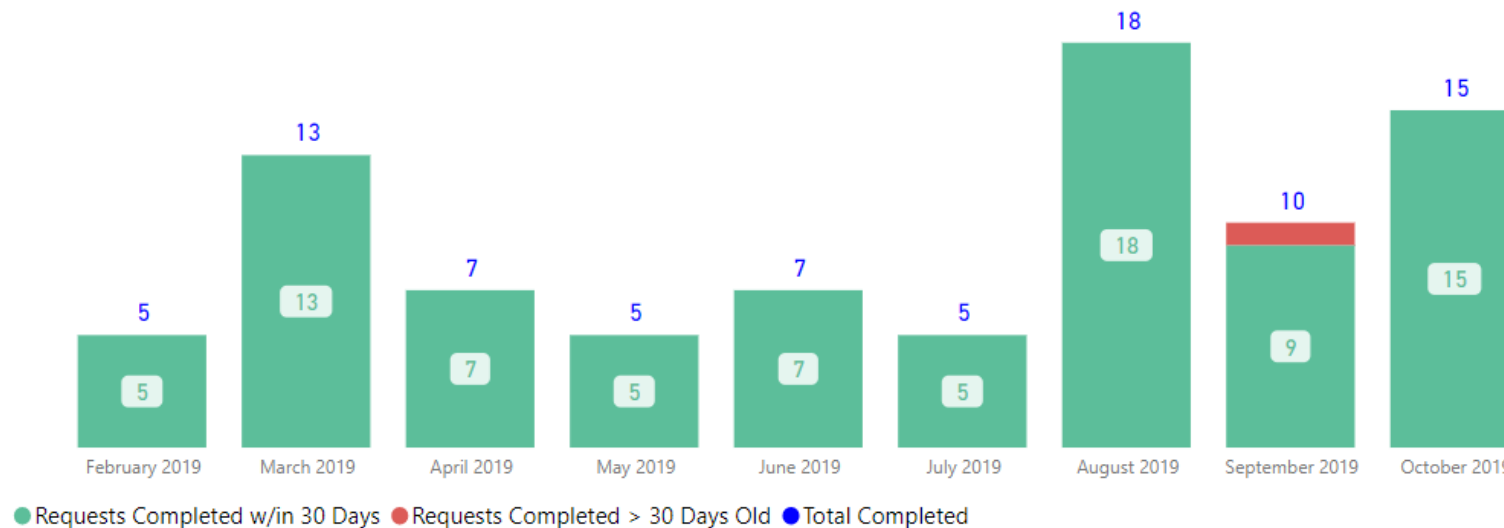
6.93

Total TAT (Rec'd-Compl.) Avg

5.55

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

85

Requests Completed

1

Requests Completed > 30 Days Old

1.18 %

% Completed > 30 Days Old

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

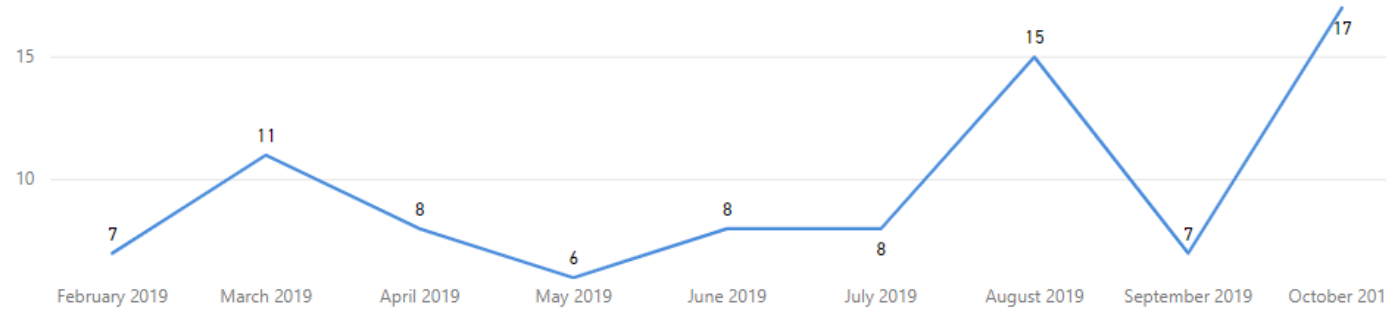


Service  Priority Type



**Received Filter**

### Received by Month



### Total Received

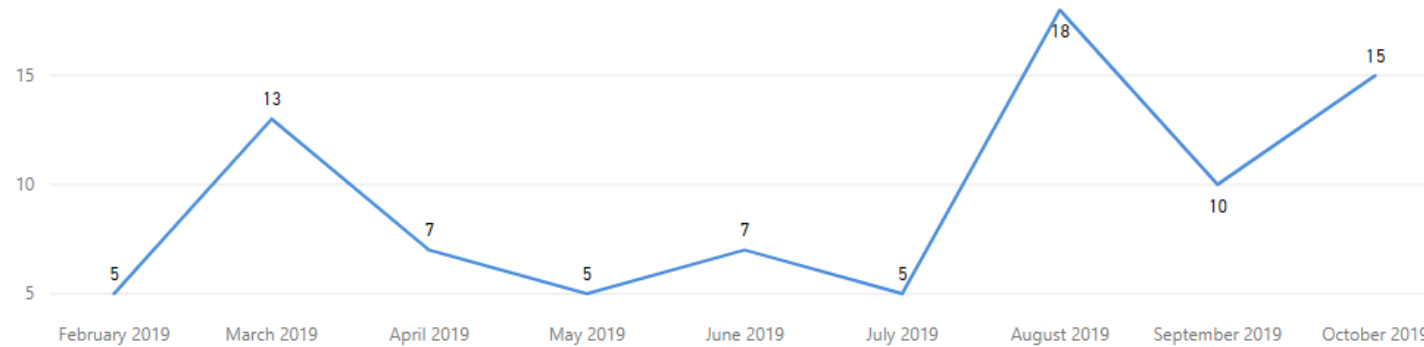
87

### Received per Month (Avg)\*

10

**Completed Filter**

### Completed by Month



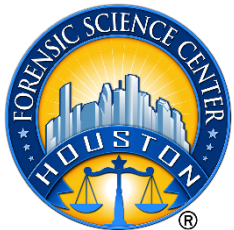
### Total Completed

85

### Completed per Month (Avg)\*

9

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





# of Unassigned	# Pending Draft
<p>9 ✓</p> <p>Goal: 15 (+40%)</p>	<p>1 ✓</p> <p>Goal: 5 (+80%)</p>
# Pending Tech	# Pending Admin
<p>1 ✓</p> <p>Goal: 5 (+80%)</p>	<p>1 ✓</p> <p>Goal: 5 (+80%)</p>

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

**Total Pending Requests**

Days Old

- 0-15
- 16-30
- 31-60
- 61-90
- 91-120
- >121

Days Old	Count
0-15	10
16-30	2
31-60	12

22.3✓  
Goal: 45, 46

Completed	16
Received	15

<p><b>Quality TAT</b></p> <p>17✓</p> <p>Goal: 30, 31</p>	<p><b>Avg Age of Open Reports</b></p> <p>NaN</p>
--	--

The logo of the Forensic Science Center Houston is a circular emblem. The outer ring contains the text "FORENSIC SCIENCE CENTER" at the top and "HOUSTON" at the bottom, separated by two stars on each side. The center of the logo features a stylized city skyline with a sunburst rising behind it, and a pair of scales of justice positioned in the foreground. A registered trademark symbol (®) is located at the bottom right of the logo.

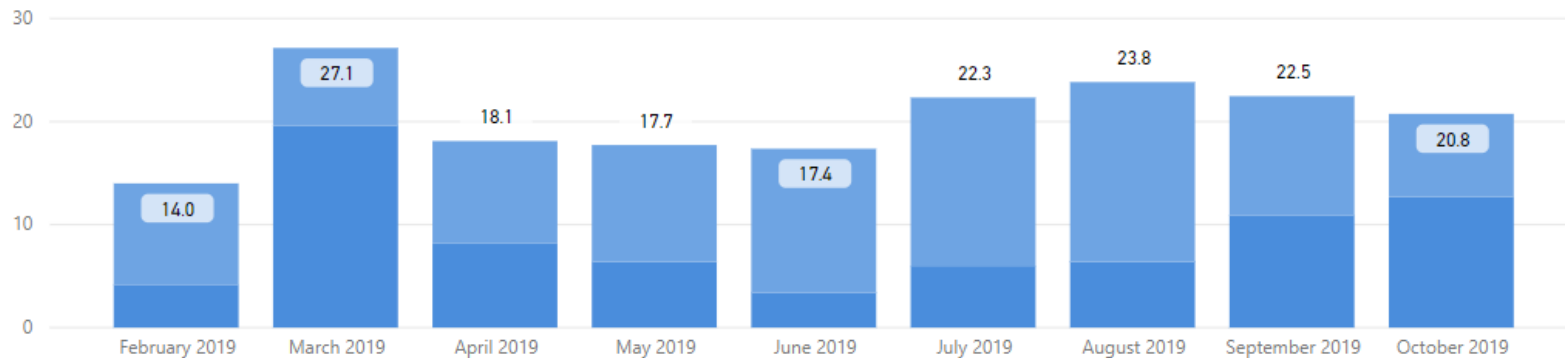
## Date Range

10/1/2018

10/31/2019

## Total TAT by Month

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



## Request Type

AV Examination

Priority Type

All

## Selected Time Frame Averages

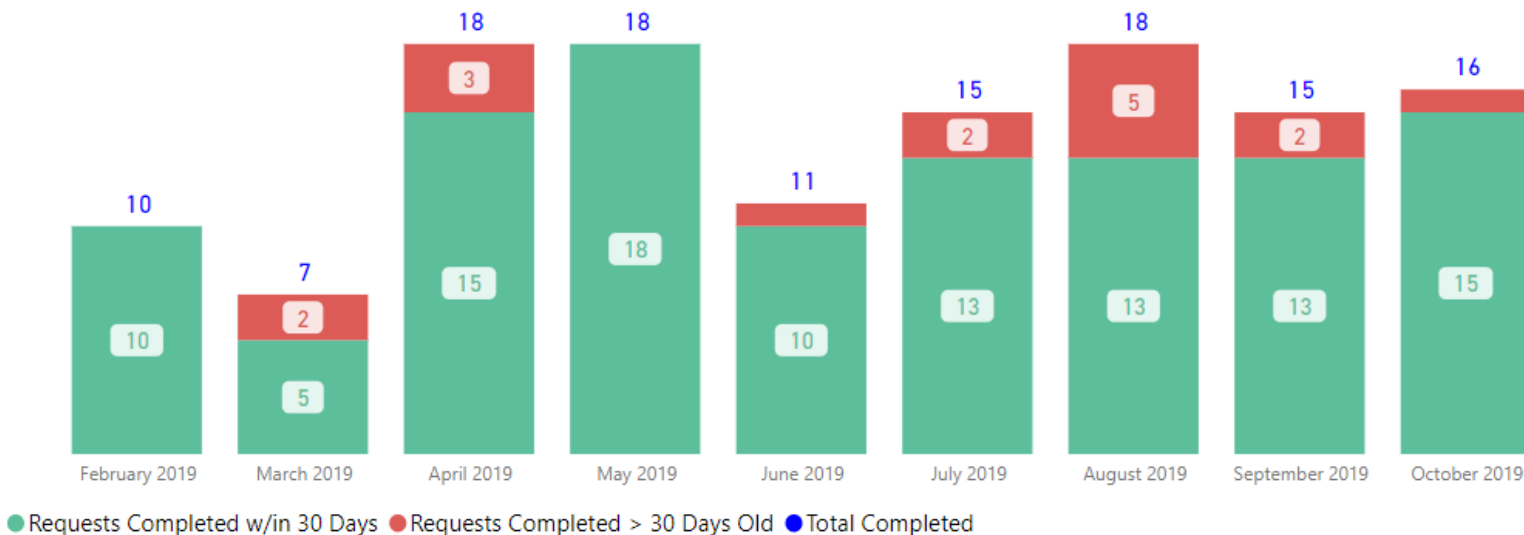
20.30

Total TAT (Rec'd-Compl.) Avg

12.12

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

128

Requests Completed

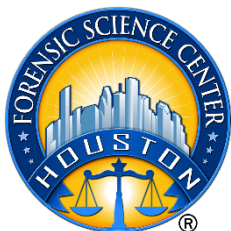
16

Requests Completed > 30 Days Old

12.50 %

% Completed > 30 Days Old

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

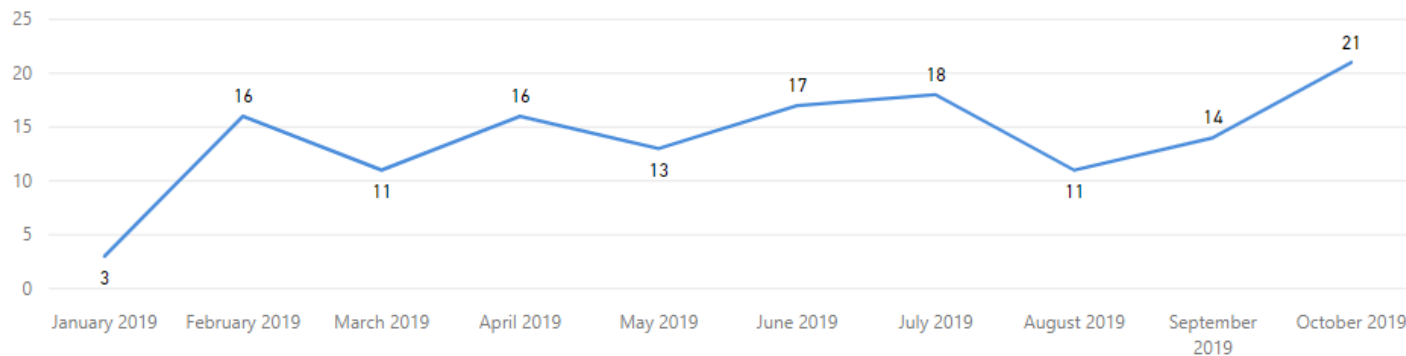


Service  Priority Type

...

### Received Filter

### Received by Month



### Total Received

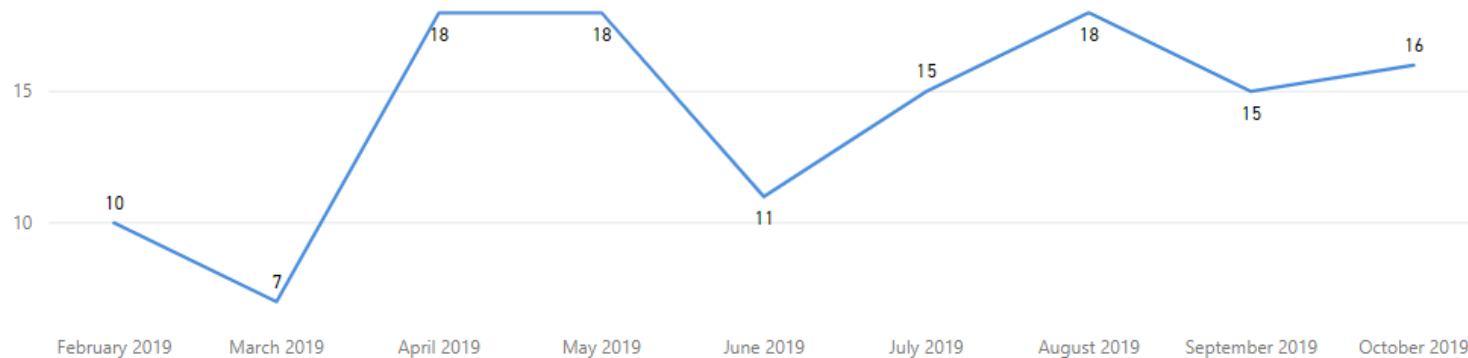
140

### Received per Month (Avg)\*

14

### Completed Filter

### Completed by Month



### Total Completed

128

### Completed per Month (Avg)\*

14

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



Service
Priority Type

DFL
All

# of Unassigned
114!
Goal: 50 (-128%)

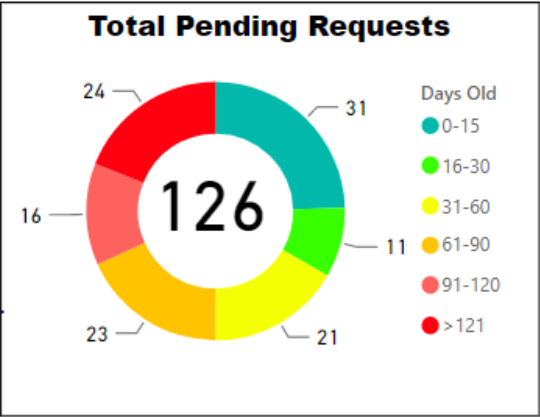
# Pending Draft
11!
Goal: 5 (-120%)

# Pending Tech
0✓
Goal: 5 (+100%)

# Pending Admin
1✓
Goal: 5 (+80%)

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

84
Justice Trax Past Critical Age
92
Avg Age of Requests >30 D..
178
Age-Oldest Unassigned
163
Age-Oldest Pending Draft
0
Age-Oldest Pending Tech
62
Age-Oldest Pending Admin



Overall TAT  
(Month to Date)

65.9!
Goal: 45, 46

Overall TAT  
(Past 90 Days)

77.6!
Goal: 45, 46

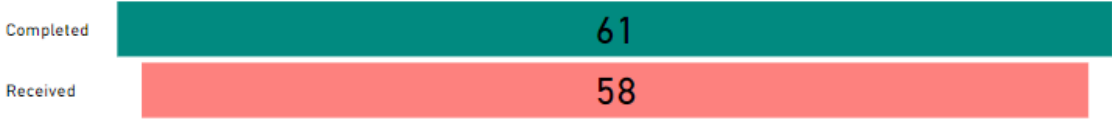
TAT by Phase of Work (MTD)



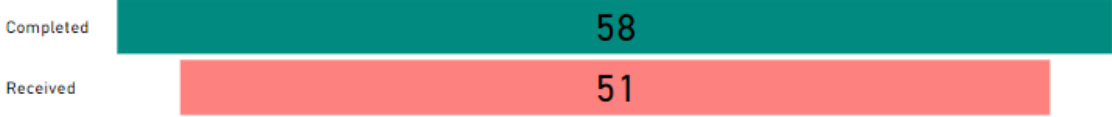
TAT by Phase of Work (Past 90 Days)



Month to Date



30 Day Avg (Over Past 90 Days)



Open Quality Reports

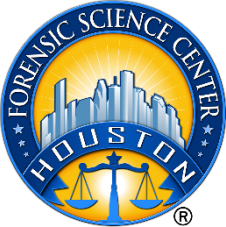
Qualtrax ID	Workflow #	Age
51117		34

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

Quality TAT
28✓
Goal: 30, 31

Avg Age of Open Reports\*
NaN

Quality Filter
Digital Forensics



Service
Priority Type

DME
All

# of Unassigned
23!
Goal: 0

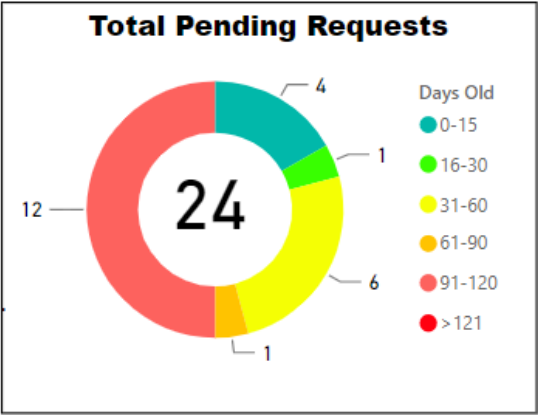
# Pending Draft
1✓
Goal: 30 (+96.67%)

# Pending Tech
0✓
Goal: 30 (+100%)

# Pending Admin
0✓
Goal: 30 (+100%)

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

19
Justice Trax Past Critical Age
82
Avg Age of Requests >30 D...
113
Age-Oldest Unassigned
113
Age-Oldest Pending Draft
0
Age-Oldest Pending Tech
0
Age-Oldest Pending Admin



Overall TAT  
(Month to Date)

48.4!

Goal: 30, 31

Overall TAT  
(Past 90 Days)

48.2!

Goal: 30, 31

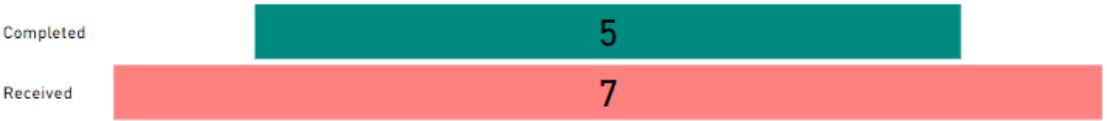
TAT by Phase of Work (MTD)



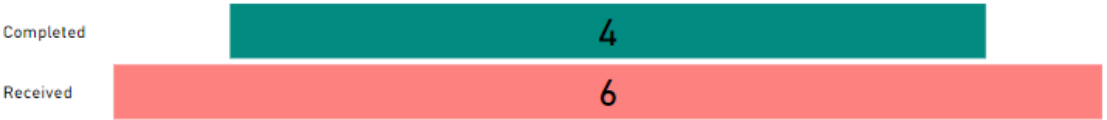
TAT by Phase of Work (Past 90 Days)



Month to Date



30 Day Avg (Over Past 90 Days)



Open Quality Reports

Qualtrax ID	Workflow #	Age
51117		34

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

Quality TAT

28✓

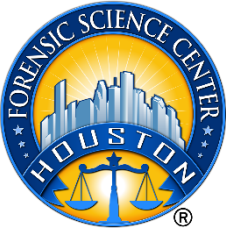
Goal: 30, 31

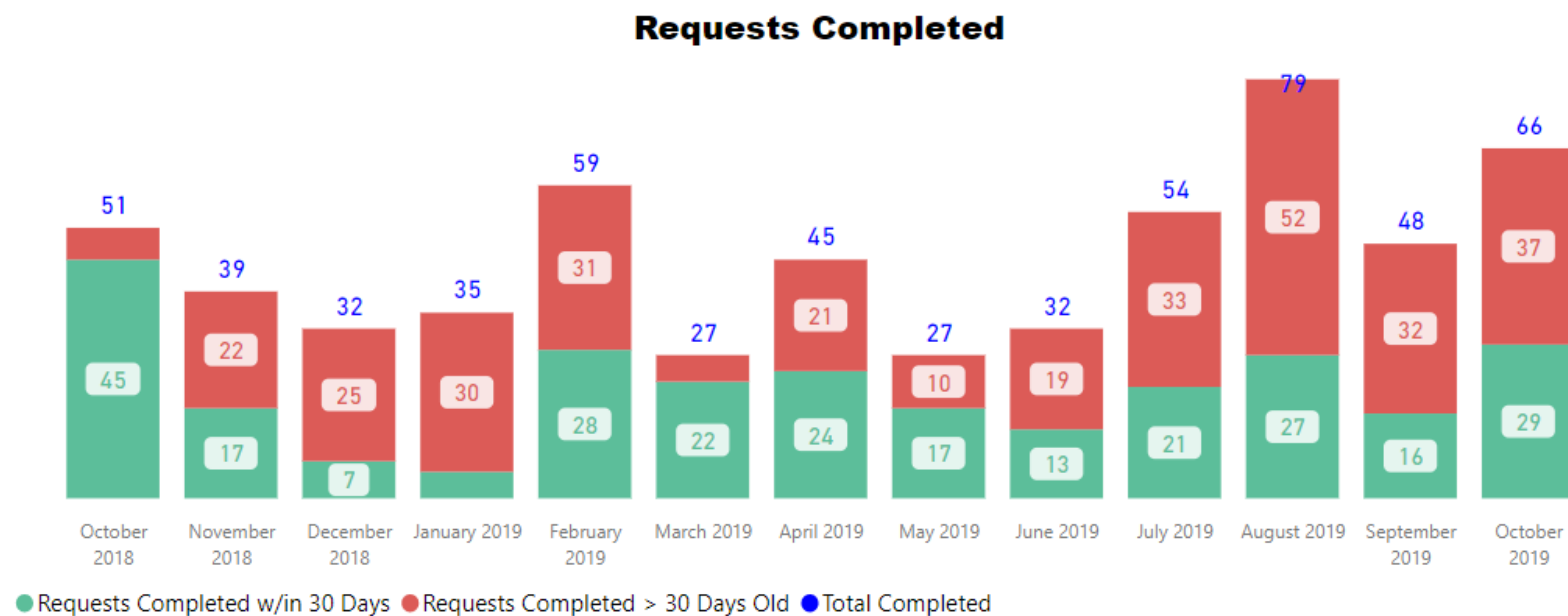
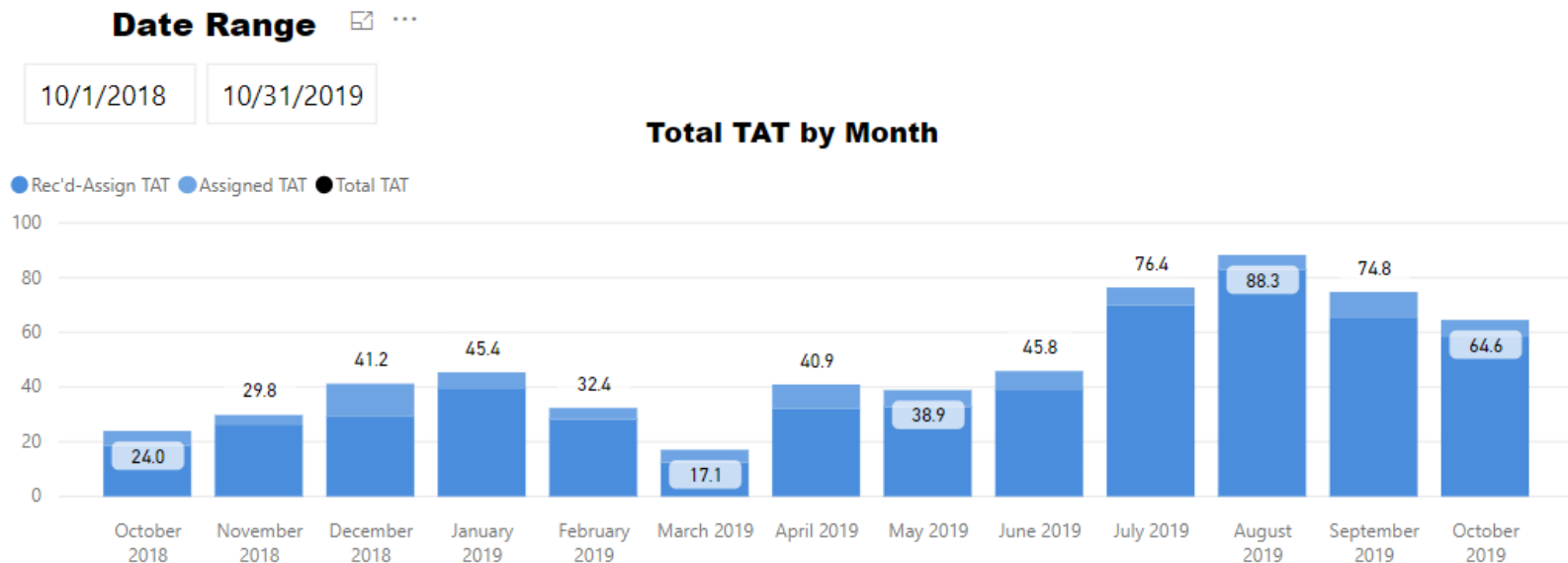
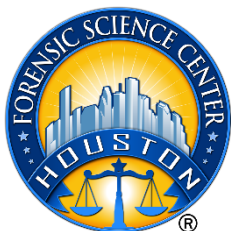
Avg Age of Open Reports\*

NaN

Quality Filter

Digital Forensics





DFL and DME

**Request Type**

Multiple selections

Priority Type

All

**Selected Time Frame Averages**

**52.14**  
Total TAT (Rec'd-Compl.) Avg

**6.39**  
Assigned TAT (Asgmt.-Compl.) Avg

**Received to Complete**

**594**  
Requests Completed

**323**  
Requests Completed > 30 Days Old

**54.38 %**  
% Completed > 30 Days Old

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

## DFL and DME

Service

Multiple selections

Priority Type

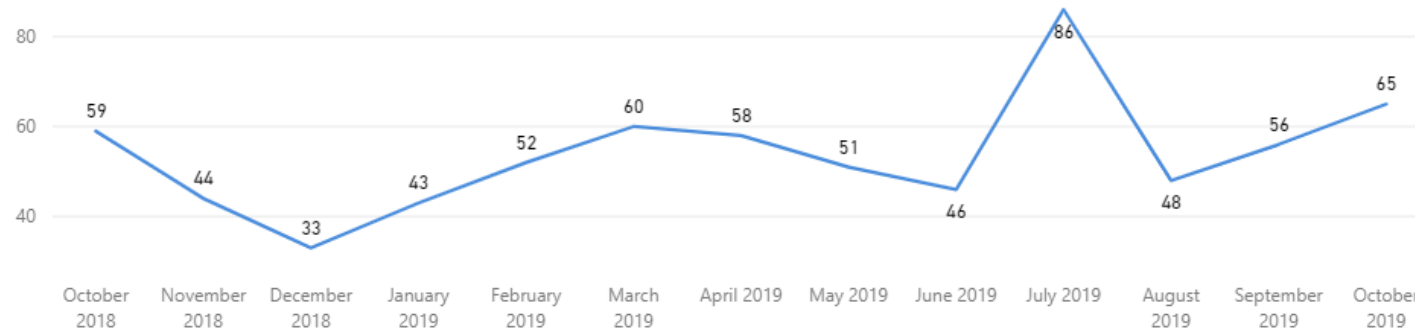
All

### Received Filter

10/1/2018

10/31/2019

### Received by Month



### Total Received

701

### Received per Month (Avg)\*

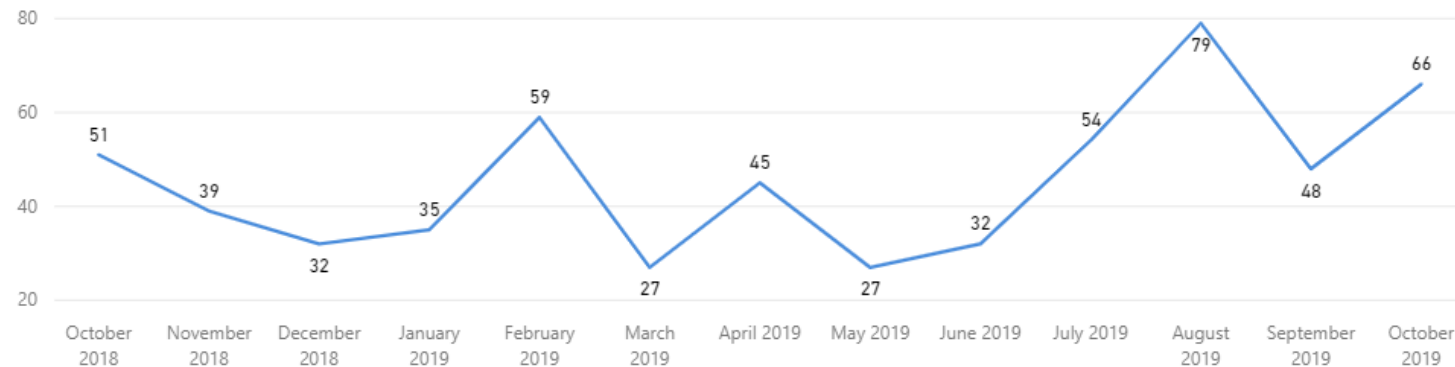
54

### Completed Filter

10/1/2018

10/31/2019

### Completed by Month



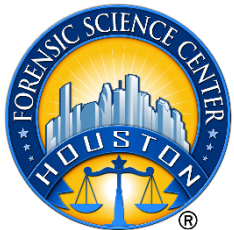
### Total Completed

594

### Completed per Month (Avg)\*

46

\* 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**  
65!  
Goal: 30 (-116.67%)

**# Pending Tech**  
95!  
Goal: 30 (-216.67%)

**# Pending Admin**  
0✓  
Goal: 0

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

59 Justice Trax Past Critical Age

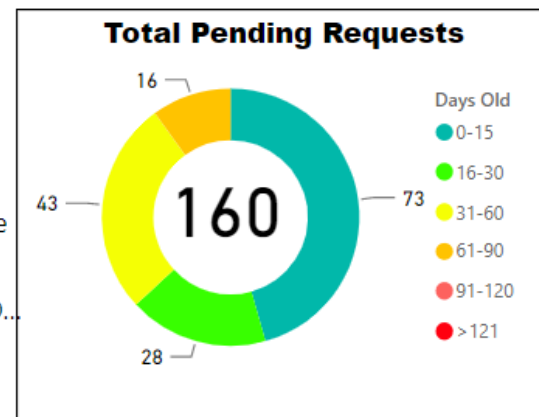
56 Avg Age of Requests >30 D..

0 Age-Oldest Unassigned

85 Age-Oldest Pending Draft

72 Age-Oldest Pending Tech

0 Age-Oldest Pending Admin



**Overall TAT (Month to Date)**

28.0✓

Goal: 30, 31

**Overall TAT (Past 90 Days)**

36.0!

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
44840	2019-039	123
45841	2019-033	110
48960	2019-066	62
49241	2019-077	59
51462	2019-073	29
51819	2019-078	23
52732	2019-084	8

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

**Quality TAT**

39!

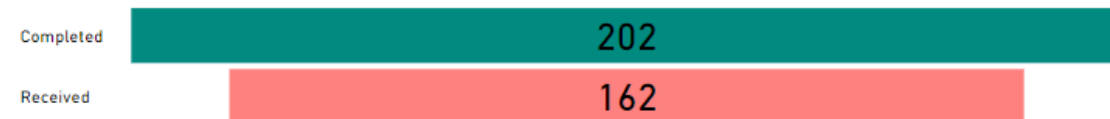
Goal: 30, 31

**Avg Age of Open Reports\***

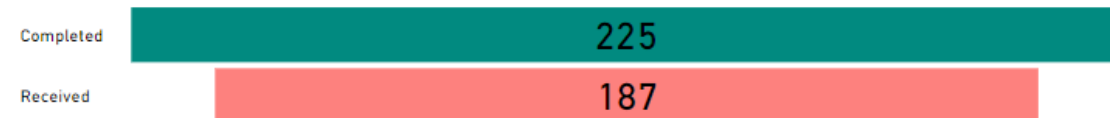
52

Quality Filter: Crime Scene

### Month to Date



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

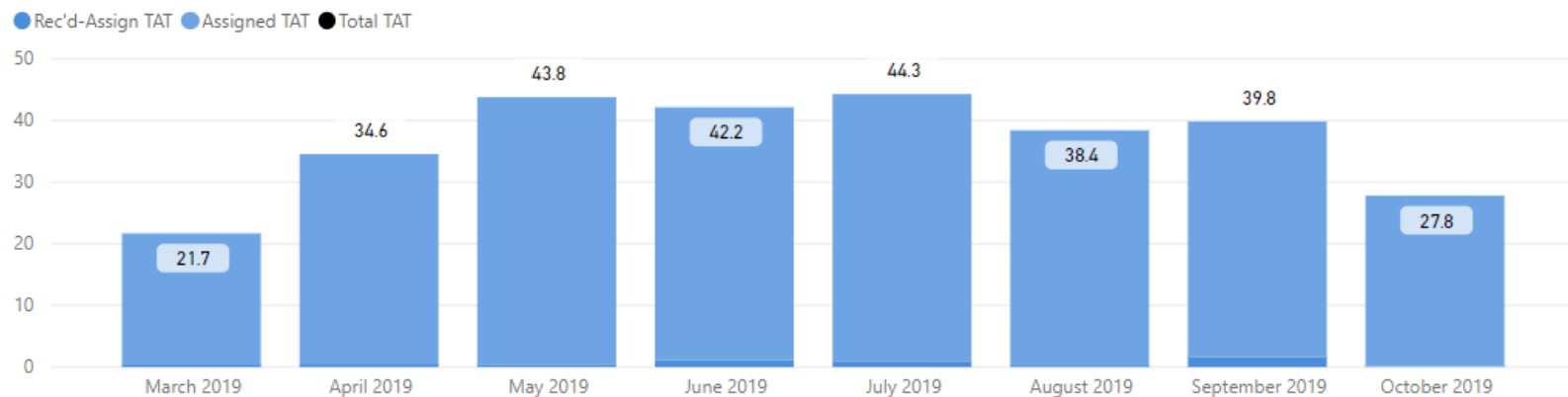


## Date Range

3/1/2019

10/31/2019

## Total TAT by Month



## Request Type

CSU Response

Priority Type

All

## Selected Time Frame Averages

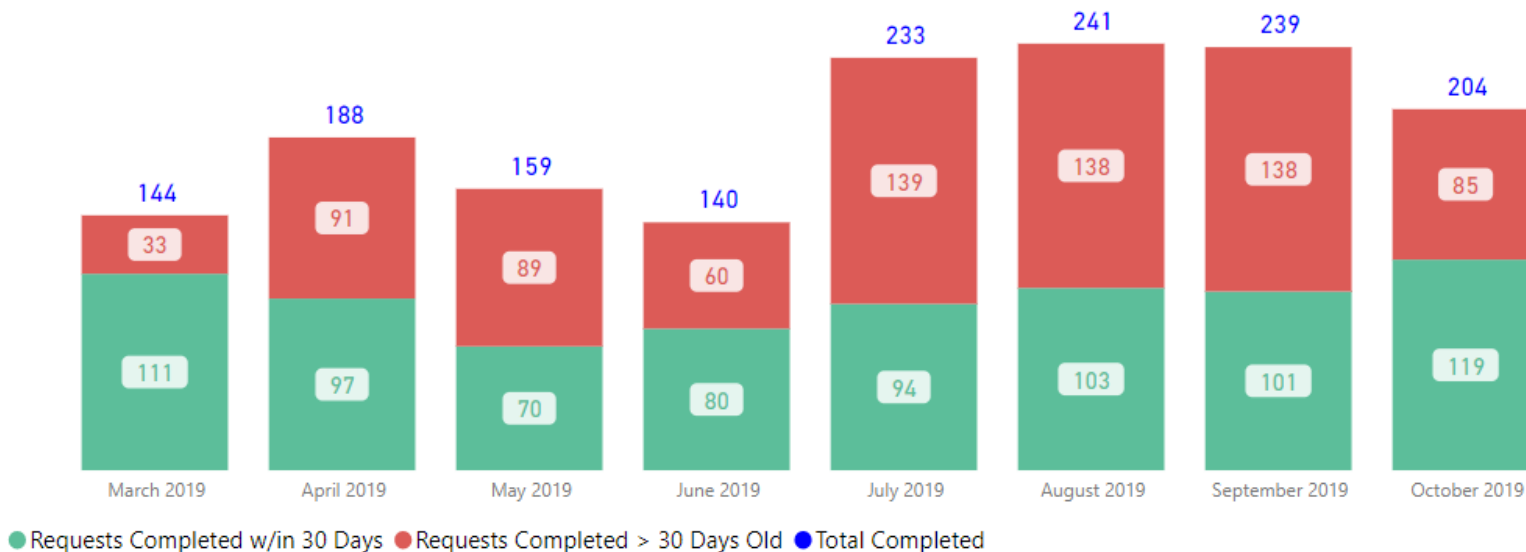
36.99

Total TAT (Rec'd-Compl.) Avg

36.29

Assigned TAT (Asgmt.-Compl.) Avg

## Requests Completed



## Received to Complete

1548

Requests Completed

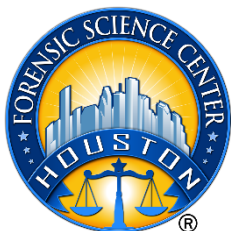
773

Requests Completed > 30 Days Old

49.94 %

% Completed > 30 Days Old

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



Service

CSU Response

Priority Type

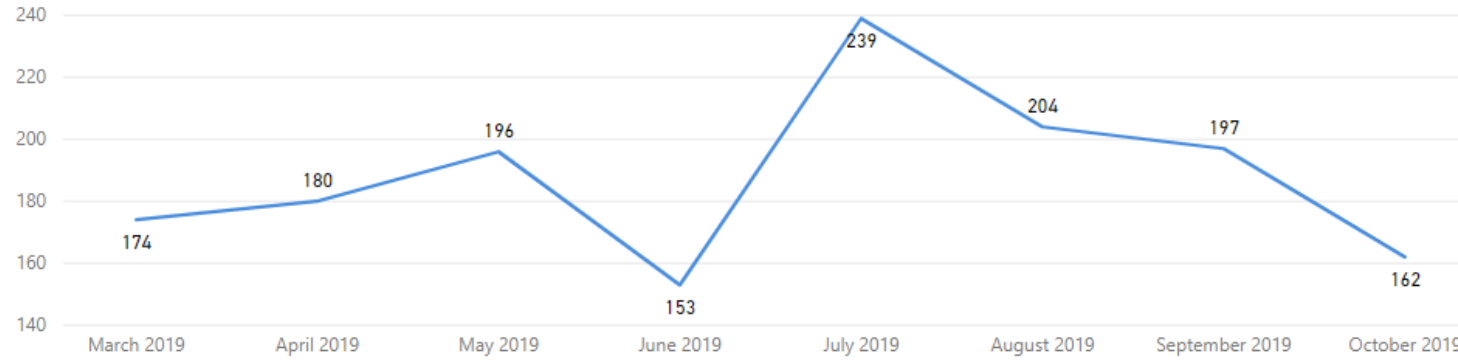
All

### Received Filter

3/2/2019

10/31/2019

### Received by Month



### Total Received

1,505

### Received per Month (Avg)\*

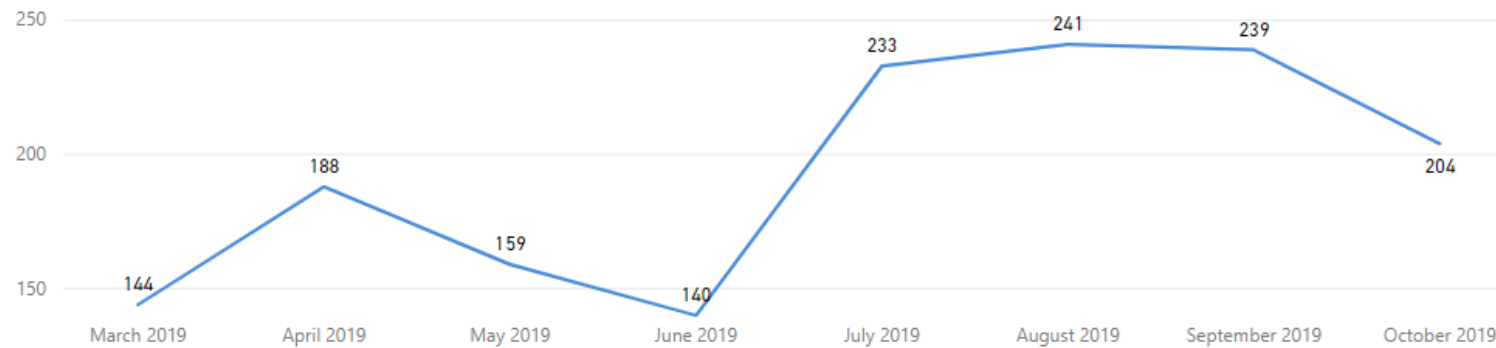
188

### Completed Filter

3/2/2019

10/31/2019

### Completed by Month



### Total Completed

1,548

### Completed per Month (Avg)\*

194

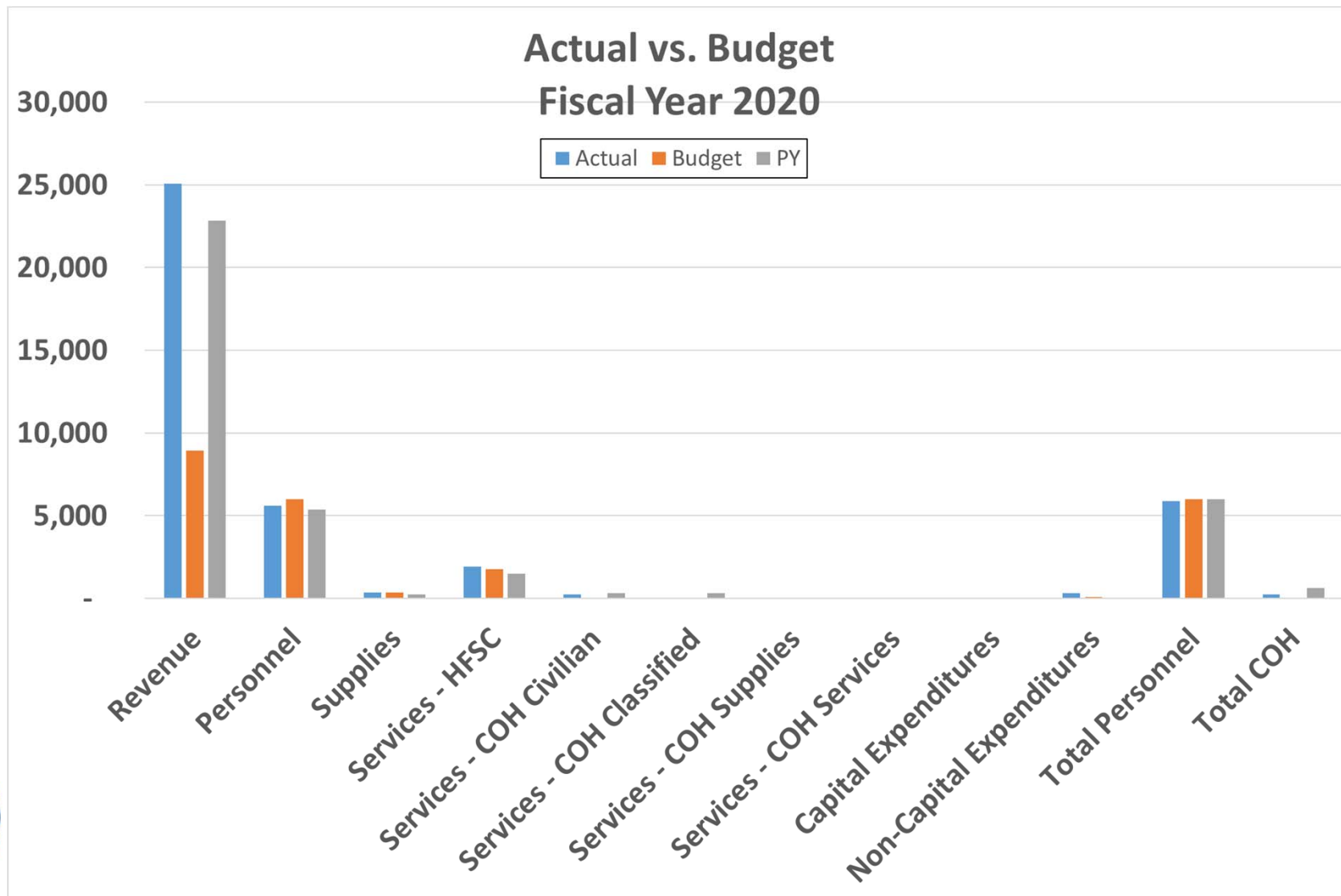
\* months with zero activity are not calculated into the average



# Treasurer's Report

November 8, 2019





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

		Current Month (Preliminary)							YTD							FY20	
		FY20	FY20	FY19	Variance				FY20	FY20	FY19	Variance				FY20	% Year
		Oct. 2019	Budget	Oct. 2018	Budget - Actual	%	FY20 - FY19	%	July 1-Oct 31, 2019	Budget	July 1- Oct 31, 2018	Vs. Budget	%	Vs. FY19	%	Budget V1	Completed
		# of Months							# of Months								
		1							4								
<b>Revenues:</b>																	
411000	City of Houston-Appropriations	\$ 236	\$ 2,013	\$ -	\$ (1,778)	-88%	\$ 236		\$ 23,689	\$ 8,053	\$ 22,168	\$ 15,636	194%	\$ 1,521	7%	\$ 24,160	98%
415000	City of Houston Direct OH-Appro	300	122	122	178	146%	178	146%	665	487	487	178	37%	178	37%	1,460	46%
416000	City of Houston - Safe funds	-	-	-	-	0%	-		-	-	-	-	0%	-	0%	-	0%
420000	Contributions	-	1	2	(1)	0%	(2)	-100%	1	4	2	(3)	-80%	(1)	-55%	11	7%
425000	In-Kind Donations	-	-	-	-	0%	-		-	-	-	-	0%	-	0%	-	0%
426000	Training Services	-	1	1	(1)	0%	(1)	-100%	-	3	4	(3)	-100%	(4)	-100%	9	0%
440000	Grants	619	92	169	527	575%	450	267%	623	367	174	256	70%	449	258%	1,100	57%
450000	Forensic Services	-	2	-	(2)	-100%	-		23	8	12	15	193%	11	98%	24	98%
443000	Other	1	-	-	1	0%	1		1	-	-	1	0%	1	0%	-	0%
450002	Interest Income	15	0	1	15	2977%	14	2046%	60	2	2	58	2980%	58	2458%	6	1027%
<b>Total Income</b>		1,170	2,231	294	(1,061)	-48%	876	299%	25,062	8,924	22,848	16,138	181%	2,214	10%	26,771	94%
<b>Expenses:</b>																	
<b>Personnel:</b>																	
500010	Salary Base - Civilian	1,135	1,227	1,106	92	7%	(28)	-3%	4,550	4,907	4,382	356	7%	(168)	-4%	14,720	31%
501070	Pension - Civilian	66	72	55	6	8%	(11)	-21%	266	286	217	20	7%	(50)	-23%	859	31%
502010	FICA - Civilian	81	89	79	8	9%	(2)	-2%	329	355	317	26	7%	(12)	-4%	1,066	31%
503010	Health Insurance - Active Civil	114	93	99	(21)	-23%	(15)	-15%	440	372	394	(68)	-18%	(46)	-12%	1,115	39%
503015	Basic Life Ins - Active Civil	3	10	10	7	74%	7	74%	12	40	41	28	70%	29	71%	121	10%
503060	Long Term Disability - Civilian	-	-	-	-	0%	-		-	-	-	-	0%	-	0%	-	0%
503090	Workers Comp - Civilian Adm	4	4	4	0	10%	(0)	-5%	16	18	18	2	10%	2	11%	53	30%
503100	Workers Comp - Civil Claims	-	0	-	0	100%	-		0	0	-	(0)	-184%	(0)	0%	0	0%
504030	Unemployment Claims - Admin	-	-	-	-		-		-	-	-	-	0%	-	0%	-	0%
504010	Pension - GASB 27 Accrual	-	-	-	-		-		-	-	-	-	0%	-	0%	-	0%
504031	Unemployment Taxes - Admin	1	1	0	1	50%	(0)	-35%	2	5	3	3	63%	1	45%	14	12%
		1,403	1,496	1,353	93	6%	(49)	-4%	5,615	5,982	5,372	367	6%	(243)	-5%	17,947	31%



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

		Current Month (Preliminary)							YTD							FY20		
		FY20	FY20	FY19	Variance				FY20	FY20	FY19	Variance				FY20	% Year	
		Oct. 2019	Budget	Oct. 2018	Budget - Actual	%	FY20 - FY19	%	July 1-Oct 31, 2019	Budget	July 1- Oct 31, 2018	Vs. Budget	%	Vs. FY19	%	Budget V1	Completed	
		# of Months							# of Months									
		1							4									
Supplies:																		
511010	Chemical Gases & Special Fluids	-	1	3	1	100%	3	100%	4	5	5	1	21%	1	22%	15	26%	
511040	Audio Visual Supplies	-	-	-	-		-		-	-	-	-	0%	-	0%	-	0%	
511045	Computer Supplies	-	3	5	3	100%	5	100%	(3)	11	5	13	125%	8	149%	32	-8%	
511050	Paper & Printing Supplies	(0)	2	5	2	104%	5	102%	1	9	14	8	89%	13	93%	28	4%	
511055	Publications & Printed Material	0	0	0	0	69%	(0)	-516%	3	2	0	(1)	-85%	(3)	-969%	5	62%	
511060	Postage	-	0	-	0	100%	-		0	0	0	0	55%	0	67%	0	15%	
511070	Miscellaneous Office Supplies	6	11	13	5	48%	8	58%	22	42	37	20	47%	15	40%	126	18%	
511080	General Laboratory Supply	37	71	42	34	47%	5	11%	314	284	155	(29)	-10%	(159)	-103%	853	37%	
511090	Medical & Surgical Supplies	-	-	-	-		-		-	-	-	-	0%	-	0%	-	-	
511095	Small Technical & Scientific Eq	-	1	-	1	100%	-		4	2	1	(2)	-105%	(3)	-277%	6	68%	
511110	Fuel	-	-	-	-		-		-	-	-	-	0%	-	0%	-	-	
511120	Clothing	-	1	-	1	100%	-		2	2	7	1	35%	5	78%	7	22%	
511125	Food/Event Supplies	0	1	0	1	88%	0	59%	5	4	5	(2)	-41%	(0)	-6%	11	47%	
511130	Weapons Munitions & Supplies	-	1	0	1	100%	0	100%	0	2	3	2	89%	3	92%	7	4%	
511145	Small Tools & Minor Equipment	-	0	-	0	100%	-		9	1	1	(8)	-713%	(8)	-983%	3	271%	
511150	Miscellaneous Parts & Supplies	-	2	0	2	100%	0	100%	3	6	3	3	46%	(1)	-21%	19	18%	
		43	93	69	50	54%	26	37%	366	371	236	6	2%	(130)	-55%	1,114	33%	
Services:																		
520100	Temporary Personnel Services	-	0	-	0	100%	-		-	1	2	1	0%	2	100%	2	0%	
520105	Accounting & Auditing Svcs	3	4	3	0	8%	0	0%	15	14	14	(0)	-3%	(0)	0%	42	34%	
520106	Architectural Svcs	-	-	-	-		-		-	-	-	-	0%	-	0%	-	0%	
520107	Computer Info/Contracting Svcs	-	3	-	3	100%	-		2	11	4	9	79%	2	45%	34	7%	
520109	Medical Dental & Laboratory Ser	-	7	5	7	100%	5	100%	534	28	12	(505)	-1784%	(521)	-4188%	85	628%	
520110	Management Consulting Services	9	8	32	(2)	-26%	23	71%	58	30	70	(28)	-94%	11	16%	90	65%	
520112	Banking Services	0	0	0	0	21%	0	13%	1	1	1	0	23%	0	17%	4	26%	
520113	Photographic Services	-	-	-	-		-		0	-	-	(0)	0%	(0)	0%	-	-	
520114	Misc Support Serv Recruit Relo	5	5	1	(0)	-9%	(4)	-590%	30	19	13	(11)	-59%	(17)	-125%	56	53%	
520115	Real Estate Rental	69	194	86	125	64%	17	20%	219	777	344	558	72%	125	36%	2,331	9%	

**HOUSTON FORENSIC SCIENCE CENTER, INC.**
**COMPARATIVE STATEMENT OF ACTIVITIES - ACCRUAL BASIS**

For the Period July 1, 2019 through Oct. 31, 2019

		Current Month (Preliminary)						YTD								FY20	
		FY20	FY20	FY19	Variance				FY20	FY20	FY19	Variance				FY20	% Year
		Oct. 2019	Budget	Oct. 2018	Budget - Actual	%	FY20 - FY19	%	July 1-Oct 31, 2019	Budget	July 1- Oct 31, 2018	Vs. Budget	%	Vs. FY19	%	Budget V1	Completed
		# of Months							# of Months								
		1							4								
Services:																	
520118	Refuse Disposal	8	2	-	(7)	-446%	(8)		13	6	3	(7)	-119%	(11)	-374%	18	73%
520119	Computer Equip/Software Maint	130	72	122	(59)	-82%	(8)	-7%	275	287	435	12	4%	160	37%	861	32%
520121	IT Application Services	5	11	12	6	56%	7	57%	5	46	42	41	90%	37	0%	137	3%
520123	Vehicle & Motor Equip. Services	-	-	-	-		-		-	-	-	-	0%	-		-	
520124	Other Equipment Services	18	24	6	6	25%	(12)	-200%	138	95	133	(43)	-46%	(5)	-4%	284	49%
520143	Credit/Bank Card Svcs	-	0	-	0	100%	-		0	0	-	(0)	-463%	(0)	0%	0	188%
520145	Criminal Intelligence Services	-	-	-	-		-		-	-	-	-	0%	-	0%	-	0%
520520	Printing & Reproduction Serv.	20	1	-	(19)	-2482%	(20)		26	3	2	(23)	-743%	(24)	-1621%	9	281%
520605	Public Information Svcs	-	1	1	1	100%	1	100%	0	6	2	5	97%	2	91%	17	1%
520705	Insurance (Non-Medical)	-	10	8	10	100%	8	100%	113	38	38	(75)	-195%	(76)	-200%	115	98%
520760	Contributions	-	-	-	-		-		-	-	-	-	0%	-	0%	-	0%
520765	Membership & Prof. Fees	1	2	2	1	52%	1	40%	6	8	5	3	32%	(1)	-15%	25	23%
520805	Education & Training	2	16	11	14	86%	9	81%	186	64	91	(122)	-191%	(95)	-104%	191	97%
520815	Tuition Reimbursement	-	3	-	3	100%	-		2	13	9	11	82%	7	75%	39	6%
520905	Travel - Training Related	10	16	23	6	39%	13	58%	55	63	68	8	13%	13	19%	188	29%
520910	Travel - Non-training Related	1	2	2	1	70%	1	71%	11	8	9	(4)	-47%	(2)	-22%	23	49%
521405	Building Maintenance Services	0	1	1	1	60%	0	31%	1	5	7	3	77%	6	85%	14	8%
521505	Utilities	1	0	0	(0)	-59%	(0)	-36%	3	2	2	(1)	-75%	(1)	-41%	5	58%
521605	Data Services	13	19	14	6	29%	1	6%	67	76	60	9	12%	(8)	-13%	229	29%
521610	Voice Services, Equip & Labor	0	3	8	3	96%	7	98%	6	13	16	8	58%	10	65%	40	14%
521705	Vehicle/Equipment Rental/Lease	-	0	-	0	100%	-		-	0	-	0	0%	-	0%	0	0%
521725	Other Rental Fees	3	3	1	(0)	-2%	(2)	-122%	18	11	8	(7)	-63%	(10)	-121%	34	54%
521730	Parking Space Rental	14	13	13	(1)	-9%	(2)	-14%	62	53	55	(9)	-18%	(7)	-12%	158	39%
521905	Legal Services	-	4	-	4	100%	-		10	14	-	4	30%	(10)	0%	43	23%
522205	Metro Commuter Passes	2	8	13	6	74%	11	84%	11	33	19	22	67%	9	45%	98	11%
522305	Shipping and Freight	6	1	1	(5)	-460%	(5)	-873%	15	4	3	(11)	-260%	(12)	-398%	12	120%
522430	Misc. Other Services & Chrgs	3	7	1	5	65%	(1)	-125%	38	28	23	(10)	-35%	(15)	-63%	85	45%
522720	Insurance - General & Profession	-	-	-	-		-		-	-	-	-	0%	-	0%	-	0%

# HOUSTON FORENSIC SCIENCE CENTER, INC.

## COMPARATIVE STATEMENT OF ACTIVITIES - ACCRUAL BASIS

For the Period July 1, 2019 through Oct. 31, 2019

			Current Month (Preliminary)						YTD						FY20			
			FY20	FY20	FY19	Variance				FY20	FY20	FY19	Variance				FY20	% Year
			Oct. 2019	Budget	Oct. 2018	Budget - Actual	%	FY20 - FY19	%	July 1-Oct 31, 2019	Budget	July 1- Oct 31, 2018	Vs. Budget	%	Vs. FY19	%	Budget V1	Completed
			# of Months							# of Months								
			1							4								
Services:																		
523100	Civilian Payroll		62	-	83	(62)		21	25%	245	-	319	(245)	0%	74	23%	-	
523200	Classified Payroll		0	-	80	(0)		80	99%	1	-	313	(1)	0%	312	100%	-	
523300	Supplies		-	-	-	-		-		-	-	-	-	0%	-	0%	-	
523400	Services		1	1	1	0	14%	(0)	-8%	5	6	6	1	21%	1	18%	18	26%
523000	Sub-Contractor (COH-HPD) Total		64	1	164	(63)	-4223%	100	61%	250	6	638	(244)	-4125%	387	61%	18	1408%
	Total Services		388	441	531	52	12%	143	27%	2,171	1,763	2,130	(408)	-23%	(41)	-2%	5,288	41%
Non-Capital Expenditures																		
551010	Furniture and Fixtures		194	4	(0)	(190)	-4329%	(194)		261	18	17	(244)	-1390%	(244)	-1447%	53	497%
551015	Computer Hardware/SW		-	14	13	14	100%	13	100%	64	56	18	(8)	-15%	(47)	-264%	168	38%
551025	Scientific/Foren Eqmt		0	2	-	2	99%	(0)		5	7	1	2	30%	(4)	-405%	20	23%
	Total Non-Capital Expenditures		194	20	13	(174)	-869%	(181)	-1370%	330	80	35	(250)	-312%	(295)	-831%	240	137%
Capital Expenditures																		
170230	Computer Hardware/SW		-	-	-	-		-		-	-	28	-	0%	28	100%	-	0%
170240	Scientific/Foren Eqmt		-	7	-	7	100%	-		(32)	28	8	60	214%	40	481%	84	-38%
170270	500 Jefferson - Intangible		-	-	-	-	0%	-		-	-	-	-	0%	-	0%		
170980	Const in Progress		13	-	-	(13)		(13)		(8)	-	(43)	8	0%	(36)	83%	-	
	Total Capital Expenditures		13	7	-	(6)	-85%	(13)		(40)	28	(7)	68	241%	33	-474%	84	-47%
Total Expense and Capital Before Depreciation			2,041	2,056	1,966	15	1%	(75)	-4%	8,442	8,224	7,766	(218)	-3%	(677)	-9%	24,673	34%
561230	Depreciation		143	42	42	(101)	-240%	(101)	-240%	571	168	168	(403)	-240%	(403)	-240%	504	113%
570505	FA Gain/Loss		90	-	-	(90)	0%			22	-	-	(22)	0%	-	0%	-	0%
531085	Interest Expense		-	-	-	-		-		362	-	-	(362)	-100%		46%		
610000	City of Houston Direct Overhead		65	33	122	(33)	-100%	56	46%	261	131	487	(131)	-100%	225	46%	392	67%
	Grant and Training Expense		-	-	-	-		-		-	-	-	-		-	0%	-	
Total Expense and Capital After Depreciation			2,339	2,131	2,130	(209)	-10%	(119)	-6%	9,658	8,523	8,420	(1,135)	-13%	(1,238)	-15%	25,569	38%
Net Ordinary Income less capital spendi			(1,169)	100	(1,836)	(852)	-851%	757	-41%	15,404	400	14,428	15,004	3747%	976	7%	1,201	1282%



HOUSTON FORENSIC SCIENCE CENTER, INC.					
COMPARATIVE STATEMENT OF NET POSITION					
By Quarter					
(in '000's)					
	Preliminary 10/31/19	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	\$ 16,894	\$ 18,538	\$ 1,124	\$ 6,670	\$ 12,657
<b>Total Current Assets</b>	16,894	18,538	1,124	6,670	12,657
<b>Accounts Receivable</b>					
Accounts Receivable	636	209	1,063	669	16
<b>Total Accounts Receivable</b>	636	209	1,063	669	16
<b>Capital Assets Net of Depreciation</b>					
Capital Assets	37,670	37,657	37,654	37,533	6,218
Accumulated Depreciation	(2,896)	(2,753)	(2,335)	(1,918)	(1,887)
<b>Total Net Capital Assets</b>	34,774	34,903	35,319	35,615	4,331
<b>Other Assets</b>					
Prepaid - HR	14	8	-	2	0
Prepaid - Insurance	46	50	54	61	88
Prepaid - Service Agreements	233	255	129	131	226
Prepaid - Other	3	3	2	145	61
<b>Total Other Assets</b>	296	317	184	339	375
<b>TOTAL ASSETS</b>	<b>\$ 52,599</b>	<b>\$ 53,966</b>	<b>\$ 37,690</b>	<b>\$ 43,292</b>	<b>\$ 17,379</b>
<b>LIABILITIES</b>					
Accounts Payables	\$ 571	\$ 752	\$ 388	\$ 3	\$ 152
Payroll Tax Liability	994	994	1,603	552	490
Other Liabilities, Including Fund 2213 Billing	128	128	127	63	260
500 Jefferson Lease Liability	31,899	31,928	31,920	31,911	
Deferred - Others	6	6	6	6	248
<b>Total Liabilities</b>	33,598	33,809	34,044	32,536	1,150
<b>NET POSITION/FUND BALANCE</b>					
Unrestricted/Unassigned	16,126	17,182	248	7,053	11,898
Net Investment in Capital Assets	2,875	2,975	3,399	3,703	4,331
<b>Total Net Position</b>	19,001	20,157	3,647	10,756	16,229
<b>TOTAL LIABILITIES AND NET POSITION</b>	<b>\$ 52,599</b>	<b>\$ 53,966</b>	<b>\$ 37,690</b>	<b>\$ 43,292</b>	<b>\$ 17,379</b>

# List of Grants as of Oct. 2019

<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>	\$ (756,865)	\$ 737,497	\$ 19,368
	<b>Grant Balance:</b>	\$ 110,890		
<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>	\$ (53,099)	\$ 53,099	\$ -
	<b>Grant Balance:</b>	5,901		
<b>Status:</b>	Sub Award			

<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>	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>	\$ (655,591.00)	\$ 654,057.00	\$ 1,534.00
	<b>Grant Balance:</b>	\$ 875,336		
<b>Status:</b>	Sub - Award			



# List of Grants as of Oct. 2019 cont'd

<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>	\$282,703			
		Award Bal.	Expenditure Reported	Current Receivable
	<b>HFSC Amount of Award:</b>	\$ 174,682		
	<b>Grant Inception to date:</b>	\$ (3,192)	\$ -	\$ 3,192
	<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>	\$ (3,864)	\$ 3,864	\$ -
	<b>Grant Balance:</b>			
<b>Status:</b>	Awarded			

<b>Awarding Agency:</b>	USDOJ-OJP-NIJ			
<b>Discipline:</b>	Latent Prints			
<b>Federal Program:</b>	2018 Applied Research and Development in Forensic Science for Criminal Justice Purpose			
<b>Solicitation Number:</b>	NIJ-2018-13600			
<b>Purpose:</b>	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 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.			
<b>Primary Recipient:</b>	RTI International			
<b>RTI Contract Administrator:</b>	Meghaan Hampton			
<b>Start and End Dates:</b>	06/15/2019 - 04/30/2020			
<b>Contact:</b>	Heidi Eldridge			
<b>Award Number:</b>	2018-DU-BX-0227			
<b>Contract Title:</b>	Selection, Detection, AFIS Teams			
<b>Contract Type:</b>	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>			
<b>Status:</b>	Awarded - Contract Service Agreement			





# 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



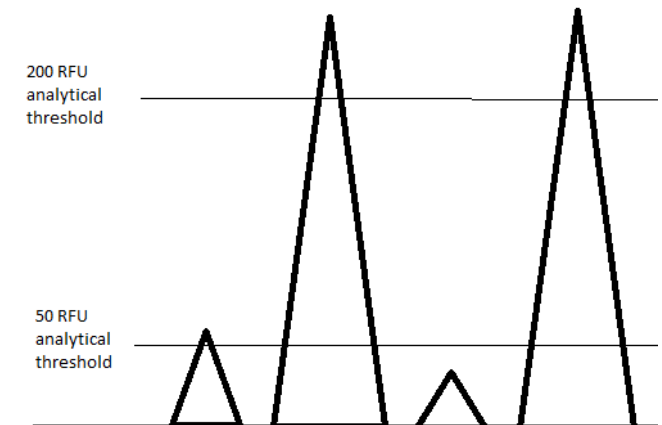
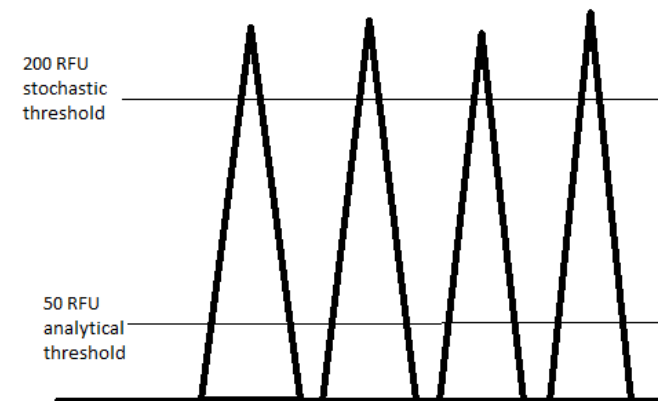
- Increased sensitivity to chemistries and instrumentation has lead to the detection of more “trace” contributors, more complex mixtures and more data that is subject to stochastic effects
- Significant push in the forensic genetic community to:
  - Do away with thresholds
  - Make the best use of the 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 weather predicting, 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
  - The user-defined propositions (Hypothesis 1 and 2)
  - 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 is exploring ways to gather and measure data around currently interpretable vs. uninterpretable data for comparison to data once we are fully online
- HFSC also anticipates requests to revisit previous data reported as unsuitable for comparison due to an excessive number of contributors or an indistinguishable number of contributors

# 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
- 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
- Planned training
  - Additional STRmix™ testimony training from external experts

# 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.





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713-929-6760

## **500 Jefferson Office/Lab Project, 11/8/19 HFSC Board Update**

### **Project Status**

- **Overall project on schedule, nearing completion. Heavy workload, through November completion**
- **Mayor Turner/Dr. Peter Stout Grand Opening ribbon cutting/reception conducted 10/22/19**
- **Significant activity over last 4 weeks, project/testing and balancing/commissioning now close to completion (lab looks good):**
  - Project now 17 months from HFSC first seeing 500 Jefferson building
  - Good team effort: HFSC, city, landlord, contractors, consultants
  - Project driven by: detailed plans, weekly HFSC/Landlord meetings, HFSC steering committee meetings, project core/extended teams, key focus on critical path
  - Key construction work status:
    - On Basement firing range down sprinklers, worked with Richard Vella, met with HFD Fire Inspectors 10/15/19, HFD/Inspectors have endorsed no firing range down sprinklers required
    - 18<sup>th</sup> floor and Basement inspections basically complete, awaiting final certificate of occupancy
    - Enhanced 18<sup>th</sup> floor airflow, resulting from testing and balancing consultant recommendation
    - Also modifying Firearms Basement air flow, install additional fans, sound damping
- **18<sup>th</sup> floor/Basement construction work remaining (need to complete):**
  - Final certificate of occupancy
  - Addressing Firearms Basement air flow, fans, sound damping

- Addressing remaining punch list items
- Minor additional furniture items ordered
- Firearms/CSU Basement noise reduction ceiling baffles ordered
- Complete testing and balancing, commissioning

### **HFSC lab moves progressing well (bring to completion)**

- Fume hood Toxicology nitrogen hook-ups completed, Chemicals pre-disposal completed, instrument piping installation completed, gas cylinders delivered, new LCQQQ venting connection unit installed
- **1<sup>st</sup> lab staff move 10/10/19 completed, very successful:** 27 staff (FBIO, CS/CM, Latent Print processing), plus lab equipment, cameras, refrigerators, freezers, glassware. Biology Mideo system camera/PC hardware installed. Installed lab fire extinguishers, first aid kits/AED temporarily placed
- **1<sup>st</sup> instrument move 10/14-17/19 completed, very successful:** 29 instruments, plus tables, etc. (FBIO, one Toxicology instrument for piping test). Chemicals, supply room moves completed. Instrument performance checks commenced
- HFSC Steering Committee meeting conducted 10/23/19, discussed lessons learned, upcoming actions, validated resources
- Hydrogen generators delivered 10/25/19, 2 new LCQQQs arrived 10/29/19, Firearms reference collection successfully moved 10/29-31/19
- **2nd instrument move 11/4-7/19 in progress:** 15 instruments, plus tables (Seized Drugs, Toxicology), plus chemicals. **17 Microscopes move 11/5-6/19**

- **2<sup>nd</sup> staff move 11/7/19:** 45 staff (Firearms, Seized Drugs, Toxicology), plus lab equipment, refrigerators, freezers, glassware. Install fire extinguishers, first aid kits/AEDs
- **Other November actions:** NIBIN ATF install 11/5-6/19, shooting tank install 11/11-14/19, 2 new LCQQs install 11/11-15/19
- **Hand-back remaining Travis space:** still targeted for 2<sup>nd</sup> half November

### **Project Budget Status**

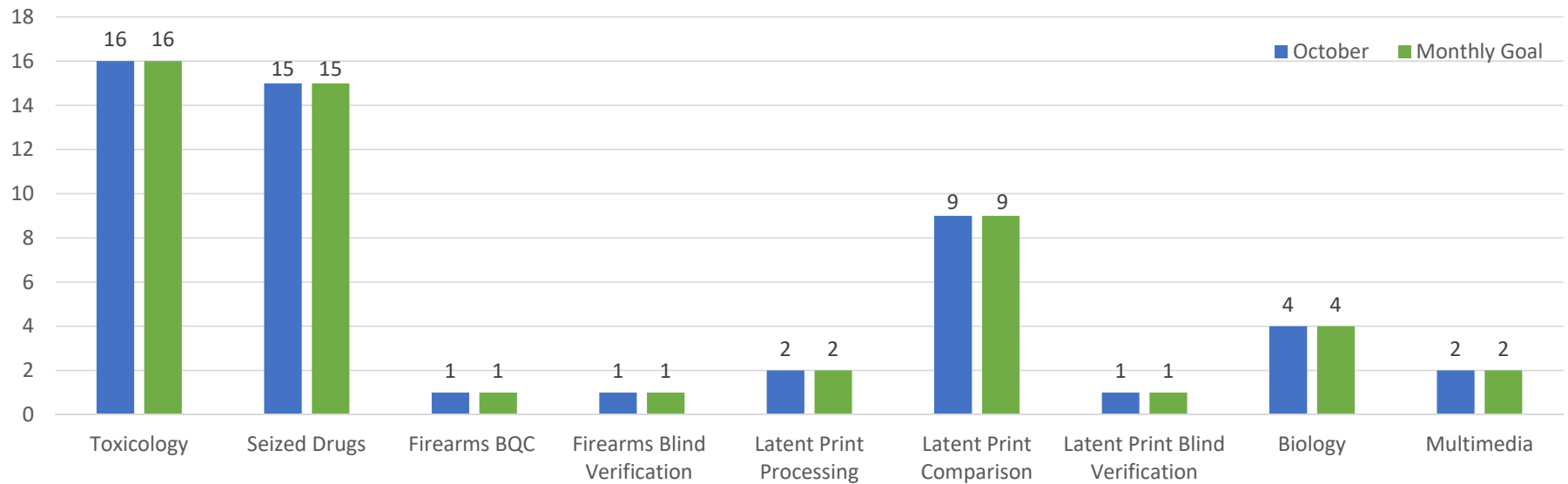
- Project budget \$1 million: moves, IT/security, shooting tank, project management, change orders, other
- To date: committed/estimates \$790,000, invoiced \$360,000
- Excludes lab furniture, committed \$335,000, invoiced \$335,000 (funded via grant/landlord). A few small furniture additions ordered, will be within HFSC Board endorsed lab furniture acquisition budget (not to exceed \$350,000)
- Landlord reimbursing 3 hydrogen generator purchase, \$47,000

# Quality Division Report

## November 8, 2019



# BQCs Submitted in October



# Blind Quality: Accomplishments and Challenges

- “Implementation of a Blind Quality Control Program in a Forensic Laboratory” manuscript was submitted for publication to the Journal of Forensic Sciences (JFS)
- Quality has met with HPD to find a way to submit blinds to firearms despite the limitations of uploading to NIBIN
  - Working together, found a way to mimic the workflow
  - October is the first month a blind has been submitted in this manner
- One firearms blind was discovered

Forensic Discipline	Cases Completed in September
Toxicology – BAC	10
Seized Drugs	18
Biology	2 (DNA) 1 (screening)
Firearms – Blind Verification (BV)	3
Firearms	2
Latent Print Processing	1
Latent Print Comparison	3
Latent Print – Blind Verification (BV)	1
Multimedia	2





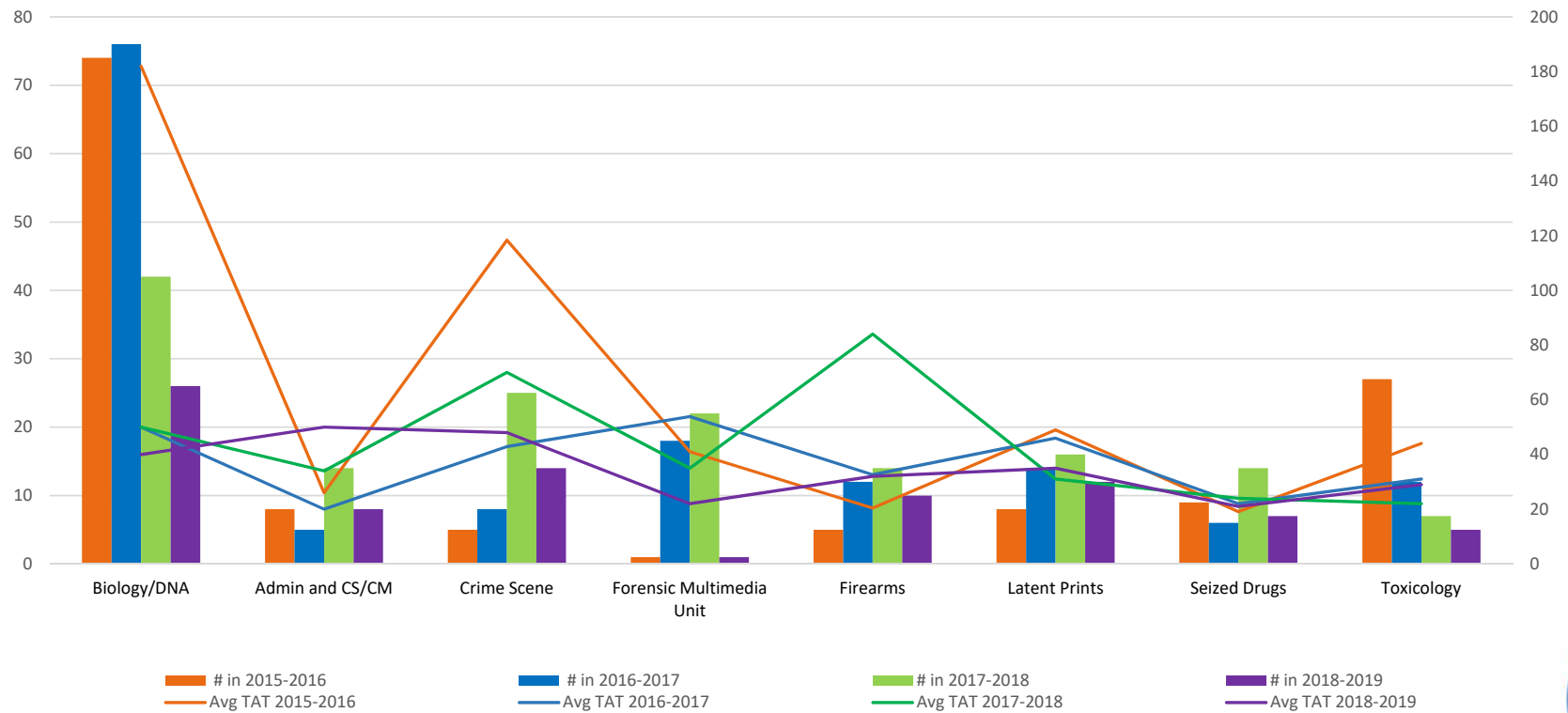
# Audits/Disclosures/Corrective Actions

- TFSC voted no further action needed on two self-disclosures
- Follow up on seized drugs proficiencies:
  - Cases were identified because of the blind spot in the seized drugs SOP
  - No controlled substances identified in the four cases after retesting
- Quality division completed October 2018-September 2019 review of HFSC's quality management system



# Management Review

## Four-Year Nonconformance and Turnaround Time Comparison



# Detailed Data



# 2019 Proficiency Testing

Discipline		Tests in Progress	Tests Completed	Comments
Seized Drugs		7	8	
Toxicology		7	7	
Firearms		4	17	
Crime Scene		22	1	
Latent Prints		12	6	
Multimedia	Audio/Video	7	-	
	Digital	4	-	
Forensic Biology		23	20	



# 2019 Testimony Data

- 51 analysts have testified this year
- 49 of 54 have been monitored
  - 1 analyst had a non-technical expert monitor him – analyst will be monitored by a technical expert at next testimony or transcript from this testimony will be requested
    - Quality division requested section to obtain transcript
  - 4 testified for work done prior to HFSC employment – no monitoring needed
- Transcript review project
  - 3 transcripts review completed



## Quality Division Notifications

Incidents, Corrective and Preventive Actions

Thursday, October 31, 2019

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Quality Notified	Summary of Notification	Comments
<b>Biology</b>		
2019-065 IR	9/4/2019	The outsource case review checklist and CODIS entry form had not been completed in a 2007 Forensic Biology case file.
2019-072 IR	9/12/2019	A Forensic Biology deduction was revised to be in accordance with the section's current interpretation guidelines. Two loci were revised to be more conservative, and new statistical calculations were generated.
2019-076 IR	9/10/2019	A Forensic Biology report was amended to revise the conclusions of two mixtures based on the results of additional testing.
<b>Client Services/Case Management</b>		
2019-075 IR	9/19/2019	A Client Services/Case Management (CS/CM) specialist mistakenly left three DWI kits out on the counter for approximately 2.5 hours while she was accessioning. The kits were placed back into the refrigerator upon discovery.
<b>Crime Scene</b>		
2019-073 CAR	9/19/2019	As part of HFSC's transcript review project, one of a Crime Scene Investigator's (CSI's) testimony transcripts was reviewed. It is HFSC's opinion that the CSI testified beyond the scope of his expertise by answering certain questions regarding footwear examination and comparison. While footwear comparison is an established forensic discipline, HFSC does not provide this service nor is it included in our scope of accreditation.
2019-077 CAR	9/29/2019	A CSI did not properly document a tire impression in possible blood while processing a crime scene.

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

Thursday, October 31, 2019

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	Quality Notified	Summary of Notification	Comments
2019-078 CAR	9/29/2019	The CSI worked a homicide scene alone and completed all necessary processing, including scene video. When the CSI got back to the office, the scene video could not be located on the SD card or video camera.	

### Forensic Multimedia Unit

2019-071 CAR	9/13/2019	While a Multimedia staff member was photographing a cellphone, a magnet accidentally fell onto it causing damage at the bottom of the screen.	
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### Latent Prints

2019-064 IR	9/3/2019	The Latent Print section discovered that latent prints were not being registered to the state AFIS system. Several reported cases stated that prints were registered before this issue was discovered. A memo was written to notify stakeholders.	
2019-069 CAR	9/12/2019	During a review of the case record, Latent Print management discovered that a comparison was reported as "inconclusive" however there was no documentation to support this comparison or its verification. This error should have been identified during the technical/administrative review process.	

### Management

2019-070 CAR	9/13/2019	Security footage was requested from one of the cameras located at 1200 Travis. Upon investigation it was determined that the cameras in 1200 Travis had been offline since March 2019.	
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### Seized Drugs

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

Thursday, October 31, 2019

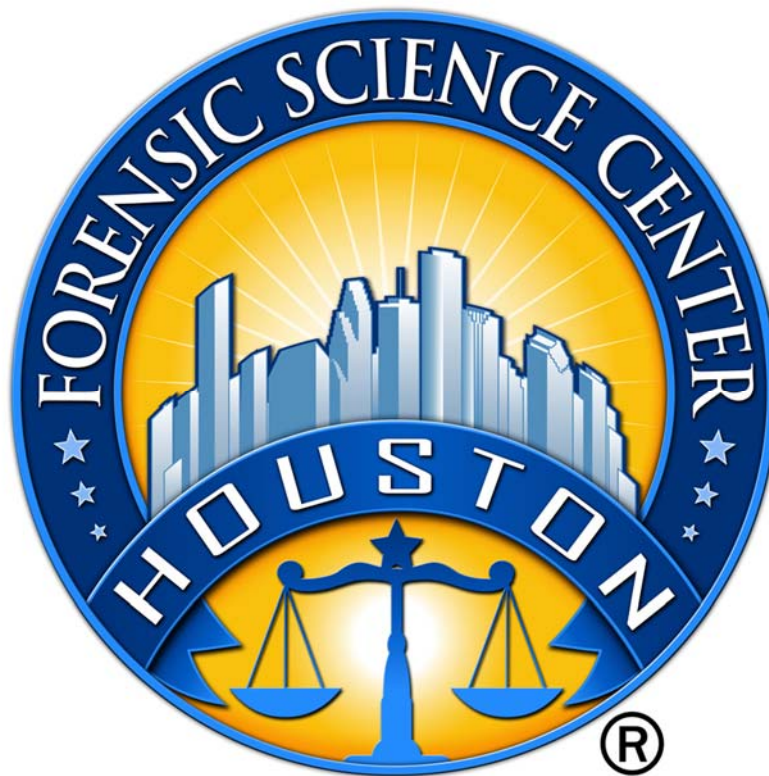
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	Quality Notified	Summary of Notification	Comments
2019-067 IR	9/5/2019	A laboratory report with preliminary testing results was amended to correct the reported units of an item from "grams" to "ounces". This case was discovered when a request for confirmatory analysis was received.	
2019-068 CAR	9/11/2019	While conducting reviews an analyst discovered datafiles on a gas chromatography mass spectrometer (GC/MS) computer that were not documented in the instrument's logbook nor in the corresponding case record. The datafiles clearly identified the analyst who ran the samples and have been included in the case record.	
Toxicology			
2019-074 CAR	9/23/2019	A Toxicology report incorrectly identified the drug name for an item as the active parent drug rather than the inactive metabolite of that drug. Both the concentration and uncertainty of measurement associated to this item were correctly reported.	

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.





## **Houston Forensic Science Center**

**Management Review 2019**

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## Purpose and Scope of the Management Review

The purpose of this review is to ensure the suitability and effectiveness of HFSC's quality management system and to assess potential opportunities for improvement of our current system. For the purposes of this review, *effective* refers to the degree to which HFSC's objectives are achieved and the extent to which problems are solved. *Management system* refers to the policies, procedures, and processes in place that allow us to meet objectives. The review was conducted by Quality Division staff members A. Harris, C. Hundl, C. Martinez, J. Moral, M. Neuman, M. Zamora-Pineda, and E. Ziemak.

## Overview

HFSC is comprised of the following technical disciplines:

- Crime Scene Unit
- Multimedia (Digital Forensics and Audio/Video)
- Firearms
- Forensic Biology
- Latent Prints
- Seized Drugs
- Toxicology

As of this review, all disciplines are accredited by ANAB to the ISO/IEC 17025 standard. The Firearms, Forensic Biology, Seized Drugs and Toxicology sections are also accredited by the Texas Forensic Science Commission in accordance with Texas state law.

This management system review was conducted during October 2019, in accordance with Management review clause 8.9 from the Houston Forensic Science Center (HFSC) Quality Manual, ISO/IEC 17025:2017, and ANAB supplemental document. This management review report reviewed HFSC's management system and technical activities conducted between October 2018 and September 2019.

The management system was found to be effective for the reasons stated throughout this report. However, recommendations for continuous improvement are listed in the [Recommendations for Improvement](#) section.

## External & Internal Issues relevant to HFSC

### External Issues

#### **Licensing**

The Texas Forensic Science Commission (TFSC) required all forensic analysts in the Toxicology, Seized Drugs, Forensic Biology and Firearms sections to be licensed by January 1, 2019. Licensure must be renewed every two years and part of that renewal process includes fulfilling the continuing education requirements (twenty-four continuing forensic education hours every two years). As of October 1<sup>st</sup>, licensing is not required for forensic analysts in the Crime Scene Unit, Latent Prints or Multimedia sections.

#### **Texas Legislation**

On June 10, 2019, the passage of Texas House Bill 1325 relating to the production and regulation of hemp changed the definition of marihuana in the Texas Health and Safety Code Section 481.002 (26). The definition of marihuana, although defined to mean the plant Cannabis Sativa L., excludes hemp as defined by the Texas Agriculture Code Section 121.001. The Agriculture Code and HB 1325 define hemp

as the plant Cannabis Sativa L. with a delta-9 tetrahydrocannabinol (delta-9-THC) of no more than 0.3%. Since the Seized Drugs section is not currently capable of quantitating the concentration of delta-9-THC in plant substance material, it is now being reported as Cannabis Sativa L. The section's procedure was updated to encompass the passage of this bill and a report statement is now included when reporting Cannabis Sativa L. to notify stakeholders that the laboratory does not currently perform testing that can distinguish between marijuana and hemp. The section is currently working on a contract to be able to outsource samples on a request basis for quantitative analysis. This is a temporary project until further instrumentation can be acquired and validated by the section.

#### Internal Issues

##### **OSAC implementation**

In December of 2018, the Board of Directors voted to voluntarily adopt and incorporate the Organization of Scientific Area Committees (OSAC) registry standards. The resolution gives the CEO authority to determine each standard's applicability (in full or in part) to HFSC's laboratory operations. The adoption of the OSAC registry standards was incorporated into the Quality Manual's February 11, 2019 revision. Once a standard is published on the registry, HFSC has one year to establish compliance. HFSC has nominated one or more points of contact (POCs) from each technical section to serve as the OSAC liaison. Each POC's responsibility includes communicating to each section regarding potential standards, utilizing any public comment periods to voice concerns about standards, assessing the applicability of standards and performing a gap assessment to determine how to designate section resources to achieve compliance. As of October 1<sup>st</sup>, no standards have been formally adopted by HFSC.

##### **Move to Jefferson**

HFSC is in the process of relocating to 500 Jefferson. The new facility provides the necessary infrastructure to allow for expansion of HFSC's forensic services and technologies. The 18<sup>th</sup> floor was specifically designed to allow for observation of laboratory activities without the need to physically enter. This will benefit section personnel by minimizing interruptions due to tours/visitors. In addition, more instrumentation/equipment can be connected to the building generator and the laboratory's physical space and electrical capacity was designed to meet and exceed HFSC's needs. This new location also allows for increased security and a consolidated IT network.

##### **Board of Director Changes**

Within the last year, there were three significant changes made to the HFSC Board of Directors. Nicole Bremner Cásarez retired from the Board of Directors after serving seven years on the board (during four of which she served as Chairwoman). Anthony Graves retired from the board after serving as a director since 2015. And, lastly, Vice Chairwoman Sandra Guerra Thompson retired from the board in October 2019 after serving on the board since 2012.

Dr. Stacey Mitchell was named Chairwoman in July 2019 after serving on the board for three years prior. Anna Vasquez was named as a director on the board in July 2019 and the Vice Chairwoman position has not yet been filled at the time of the management review.

##### **Quality Division Changes**

The Quality Division gained a new Specialist, Martha Zamora-Pineda, in July 2019. The previous Quality Director, Lori Wilson, retired in August 2019 and Quality Specialist Erika Ziemak was promoted to Quality Director upon her retirement.

### **JusticeTrax LIMS and “Where’s my Result” Portal**

All sections (except for Forensic Biology) have transitioned to JusticeTrax LIMS. The Crime Scene Unit, Firearms, Toxicology, and Audio/Video all transitioning from Porter Lee LIMS in January 2019. The portal “Where’s my Result”, which communicates with JusticeTrax, also went live in January. The portal allows stakeholders to submit requests for analyses as well as informs them of the status of their requests.

### **Suitability of Policies and Procedures**

The mission of HFSC is to receive, analyze, and preserve physical and digital evidence while adhering to the highest standards of quality, objectivity, and ethics. To meet these expectations, sectional policies and procedures are controlled, reviewed, and revised as necessary. Technical documents are maintained in Qualtrax and can also be viewed by the public through an eDiscovery link on HFSC’s website. Corporate policies and procedures are accessed through the HFSC intranet or directly through Qualtrax. This past year, all technical procedures were reviewed as part of the internal audits. Overall, the policies and procedures were determined to be suitable to the mission of HFSC and revisions were made as needed.

Many management system documents, including sectional SOPs, training manuals and worksheets, were revised during the timeframe of this management review. Please see Qualtrax for specific information regarding each revision. Revisions were made for various reasons, including, but not limited to, improving best practices, ensuring compliance with accreditation standards, ensuring clear understanding of the expectation of the document by staff, and in response to corrective and/or preventive actions. In instances when controlled documents were not revised, section management documented a review of the document in accordance with Quality Manual requirements. Documentation of these yearly reviews is also maintained in Qualtrax.

### **Manager and Supervisor Reports**

HFSC compiles manager and supervisory information that is shared monthly with the HFSC Board of Directors. This information includes, but is not limited to:

- Case metrics including requests received, requests completed, turnaround times, and backlogs per discipline
- Testimony metrics including the number of courtroom testimonies that have been monitored and the number of completed transcript reviews
- Audits and assessments
- Incidents/Corrective Actions/Preventive Actions
- Blind and proficiency programs
- Budget
- Relocation Information

The operations metrics and quality information are further discussed at bi-monthly company-wide meetings that are open to all HFSC staff.

Details pertaining to reports shared with or presented to the Board of Directors can be viewed by clicking <http://houstonforensicscience.org/meeting-archives.php> or viewed real time via live stream. Metrics are also posted on HFSC’s public website and are updated monthly.

## Internal Audits & Quality Assurance Activities

The Quality Division conducted internal audits of all technical sections. Audits were conducted in accordance with the calendar shown below. Also included on the calendar are this year's management review, the ANAB off-site assessment to ISO 17025:2017, relocation schedules, and training provided by the Quality Division.



## 2019 HFSC Quality Division Calendar

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

### JAN

QM Training to ISO/IEC 17025:2017 & ANAB 3125

S	M	T	W	T	F	S
				1	2	
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

### FEB

Fannin Move #1

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

### MAR

Fannin Move #2

Fannin Move #3

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

### APR

Testimony Training

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

### MAY

Travis Move #4 (10th & 20th floor)

Travis Move #5 (24th & 25th floor): Admin. Only

Testimony Training

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

### JUN

Internal Auditor Training

Internal Audit #1: LP, FA, DME & CSU

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

### JUL

Internal Audit #2: SD, TOX, BIO, FA

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

### AUG

ANAB Off-site Assessment - Accreditation Continued

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

### SEP

Ethics Training

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

### OCT

Travis Move #6: Biology and LPP

Travis Move #7: Storeroom

Management Review

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

### NOV

Travis Move #8: Tox, FA, SD, BQC Lab

Texas Forensic Science Commission Training

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

### DEC

All internal auditors were either trained assessors, certified quality auditors, or received internal audit training provided by the Quality Division prior to participating in the audit process.

Internal audits were conducted using the ISO/IEC 17025:2017 standard, ANAB supplemental requirements, the FBI Quality Assurance Standards (QAS) for DNA Testing Labs, and current policies and procedures including the Quality Manual. A total of 19 nonconformances were noted during these audits. As of October 1<sup>st</sup>, eight of these (six from Forensic Biology and two from Firearms) remain open.

#### 2018 Internal Audit Nonconformance Update

- One nonconformance from the 2018 CSU internal audit (2018-IA-41) remained open until October 9, 2019. The nonconformance documented the lack of an effective review process. During the 2018 internal audit, 36 case records (84 case packets) were audited; during the follow-up audit, conducted in August 2018, 18 case records (19 case packets) were audited; during the sustained follow-up audit, conducted between September 2018 and April 2019, 83 case records (190 case packets) were audited. While CSU implemented several improvements during this time frame which led to a significant improvement in their review process, HFSC recognized that there is variation in the effectiveness of case reviews company-wide. To address this issue, HFSC's Lean Six Sigma (LSS) Development Group has initiated an improvement project that is focused on the case file review process and a representative from CSU is participating in the project. The intent of this LSS project is to identify ways of improving the technical and administrative review processes across all technical sections, implement the changes, and then evaluate the effectiveness of the changes.
- The Forensic Biology section corrective action 2018-IA-09 is pending the conclusion of an audit in which approximately 1200 profiles are being evaluated to determine if they were entered into CODIS correctly. Thus far the Forensic Biology section has reviewed over 500 profiles or approximately 40% of the profiles that review.

#### 2019 Internal Audit Nonconformances Pending Closure

There are eight total nonconformances from the internal audit that are pending closure as of October 1<sup>st</sup>, 2019. For more detailed information please refer to the 2019 Internal Audit Report.

- The Forensic Biology section currently has six nonconformances pending closure:
  - Five incidents (2019-IA-12, 2019-IA-13, 2019-IA-14, 2019-IA-16 and 2019-IA-17)
  - One corrective action (2019-IA-15)
- The Firearms section currently has two nonconformances pending closure:
  - One incident (2019-IA-18)
  - One corrective action (2019-IA-19)

#### Quality Assurance Activities

The Quality Division is committed to the continuous improvement of the HFSC management system. To demonstrate this commitment, the Quality Division's 2019 sectional performance review goals included:

- Monthly walkthroughs of each section to increase interactions and build relationships with staff
- Quarterly training provided on quality-related topics
- Quarterly corrective action follow-ups to determine effectiveness of process improvements
- Four preventive actions



## External Assessments

An off-site assessment was completed on August 20, 2019 by ANAB. HFSC was assessed to ISO/IEC 17025:2017. There were no nonconformances identified during the assessment and our accreditation was continued.

## Incidents, Corrective Actions, and Preventive Actions

Incidents, corrective actions and preventive actions are tracked by the Quality Division using an Access database and Qualtrax. During the time frame covered within this review, the following were documented by the Division:

- 36 Corrective Actions
  - 3 were related to the 2018 internal audits
- 84 Incidents
  - 16 were related to the 2018 internal audits
- 4 Preventive Actions

One of the above corrective actions involved HFSC's proficiency testing program. The reported results for two Seized Drugs proficiency tests were inconsistent with the proficiency test provider's consensus report. Please refer to corrective action report 2019-056 for more information.

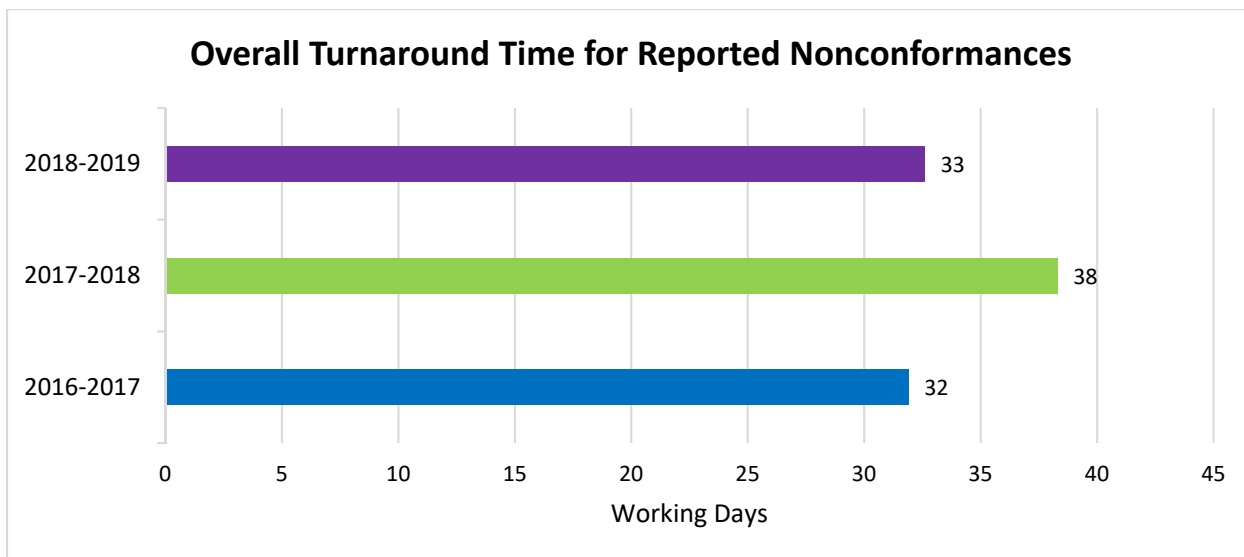
Completed incident, corrective action and preventative action reports are added to LIMS as case reports viewable by stakeholders authorized to access LIMS when they are affiliated with specific cases.

Completed incident, corrective action and preventative action reports are also available for review through HFSC's public eDiscovery website (<http://www.hfscdiscovery.org/>).

### Turnaround Time

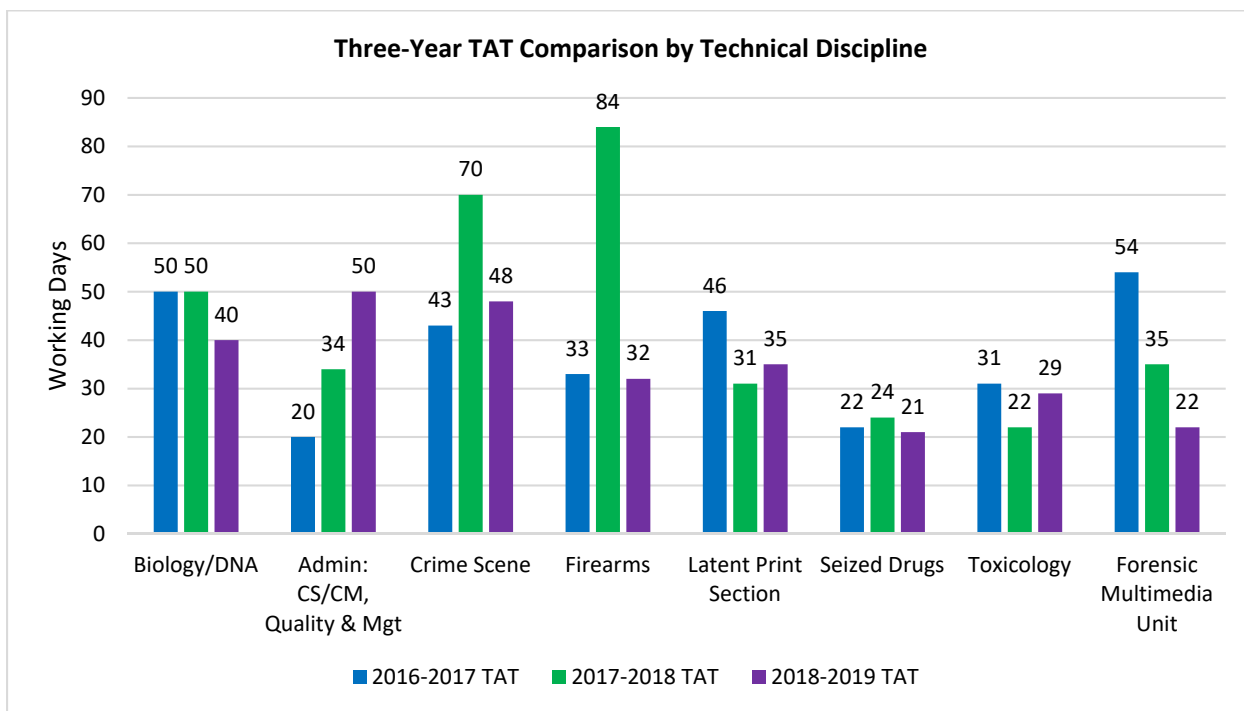
The HFSC nonconformance turnaround time (TAT) goal between notification to the Quality Division and close out is 40-working days for the Forensic Biology and Latent Prints sections and 30-working days for all other disciplines. The overall TAT for this management review period and the last two years are depicted in Figure 1. The TAT for the 2018-2019 and 2017-2018 timeframes was calculated using only nonconformances that had been closed out at the time this review was conducted. The TAT has significantly improved for this review period, but additional improvements are still needed to obtain and maintain HFSC's target TAT.





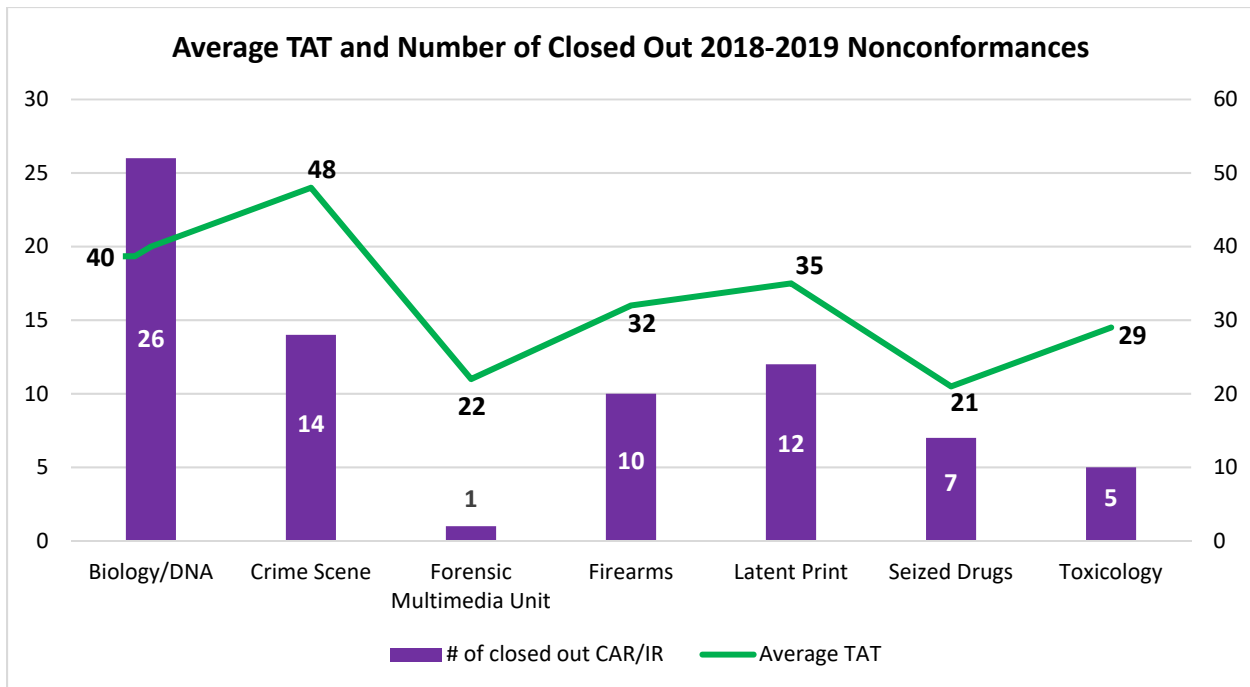
**Figure 1.** Overall combined turnaround time for all reported nonconformances over the last three years (Oct through Sept).

Refer to Figure 2 for the overall TAT for closed-out nonconformances over the last three years listed by technical discipline.



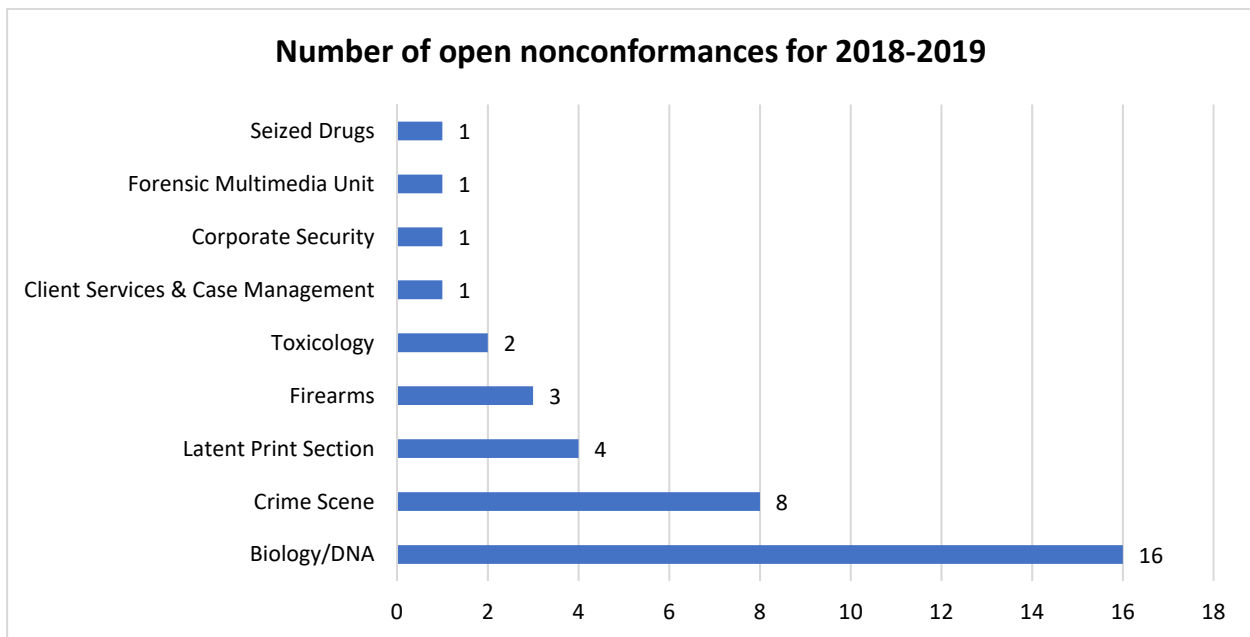
**Figure 2.** Turnaround comparison by technical section.

Figure 3 is a more detailed comparison for each technical section's TAT compared to the number of nonconformances closed out for this review period. (**Note:** The TAT and the number of nonconformances for this review timeframe were calculated from closed out nonconformances using network days.)



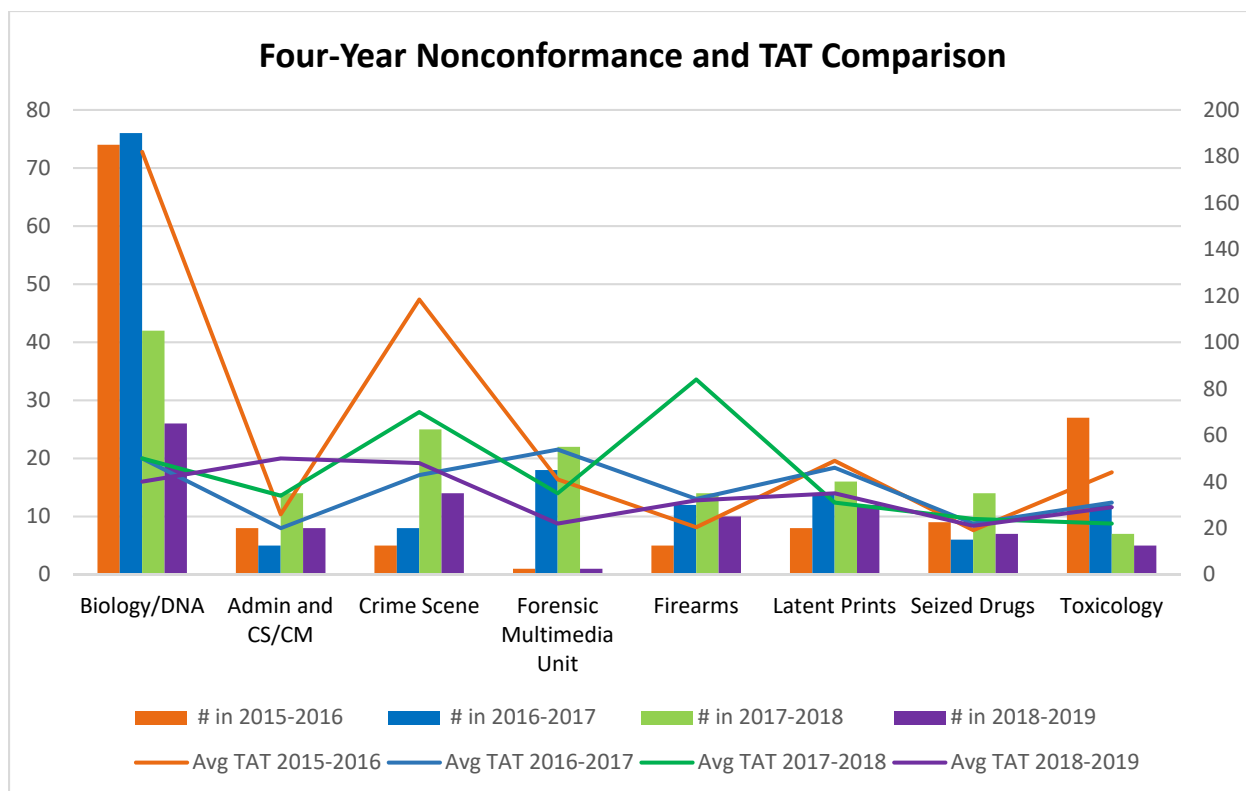
**Figure 3.** Average TAT and number for closed out for 2018-2019 nonconformances.

At the time of this review, a total of 37 open nonconformances were in the process of being closed out; refer to Figure 4 for a breakdown of these nonconformances listed by technical section.



**Figure 4.** Number of open nonconformances for 2018-2019 management review period per technical section.

The following graph (Figure 5) shows a four-year trend of the overall number of nonconformances and turnaround times listed by section. (**Note:** The TAT and the number of nonconformances for the 2018-2019 timeframe were calculated from closed out nonconformances using network days.)



**Figure 5.** Four-year nonconformance and TAT comparison listed by technical section.

#### Source of Nonconformance Review

Corrective actions and incidents tracked by the Quality Division are categorized by nonconformance type. It was noted in last year's management review that the third most common classification type was "Other". As such, one of the recommendations for improvement was for the Quality Division to review the nonconformances that were categorized as "Other" and expand the classification types appropriately. Upon review, several category types were created. This expansion allows the Quality Division to more accurately analyze nonconformance data and identify potential trends.

The most common nonconformances category type during this management review period was "failure to follow policy" as depicted in Figure 6. The Quality Division conducted further research to determine if the failure to follow policy was more commonly attributed to a failure to follow sectional procedures, failure to the Quality Manual (QM) or a failure to follow other HFSC policies, such as those listed in the HFSC Health and Safety Manual or the Security Manual. Each nonconformance was reviewed and re-categorized as either "failure to follow QM" if the requirement was only listed in the Quality Manual or "failure to follow SOP" if the requirement was section-specific or if the policy further expanded on a Quality Manual requirement. Lastly, nonconformances remained as "failure to follow policy" if they failed to follow another HFSC policy. It was determined that the majority of these nonconformances were attributed to not following sectional procedures as depicted in Figure 7.

Please refer to [Recommendations for Improvements](#) for recommended actions to address this nonconformance type.

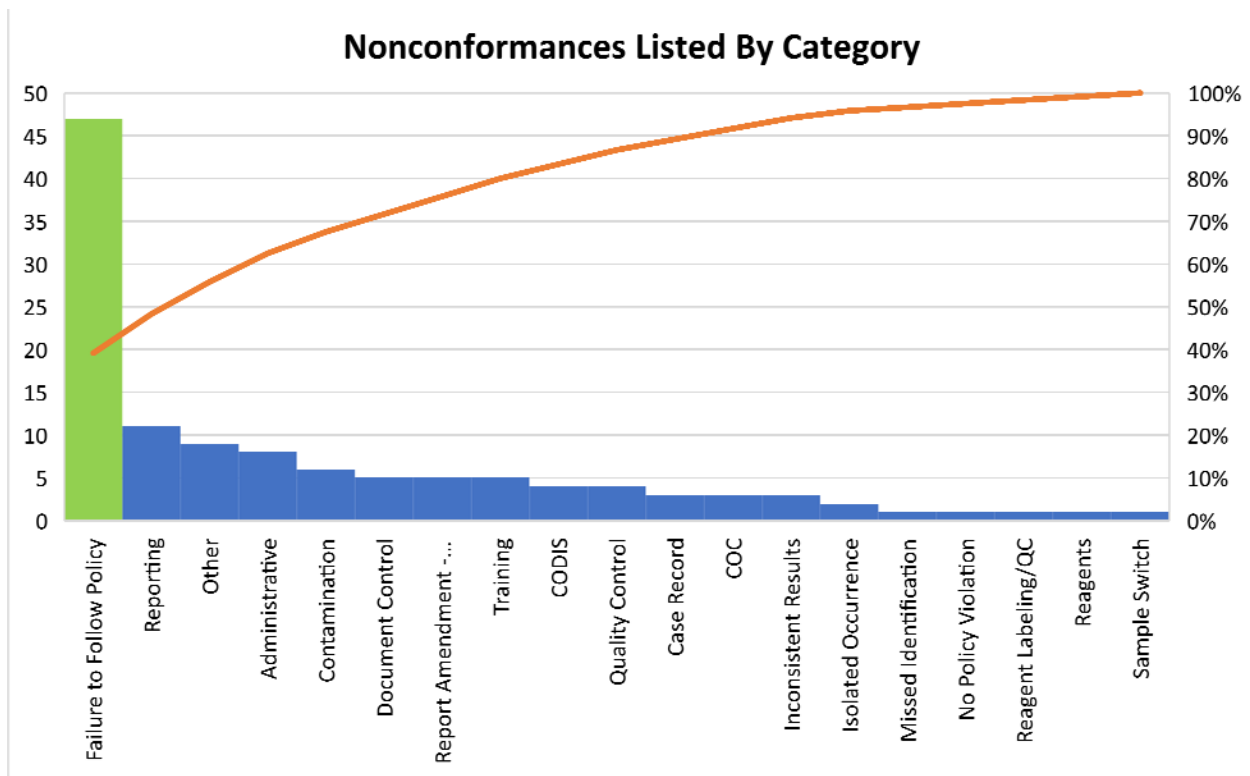


Figure 6. Nonconformances for 2018-2019 management review period listed by category.

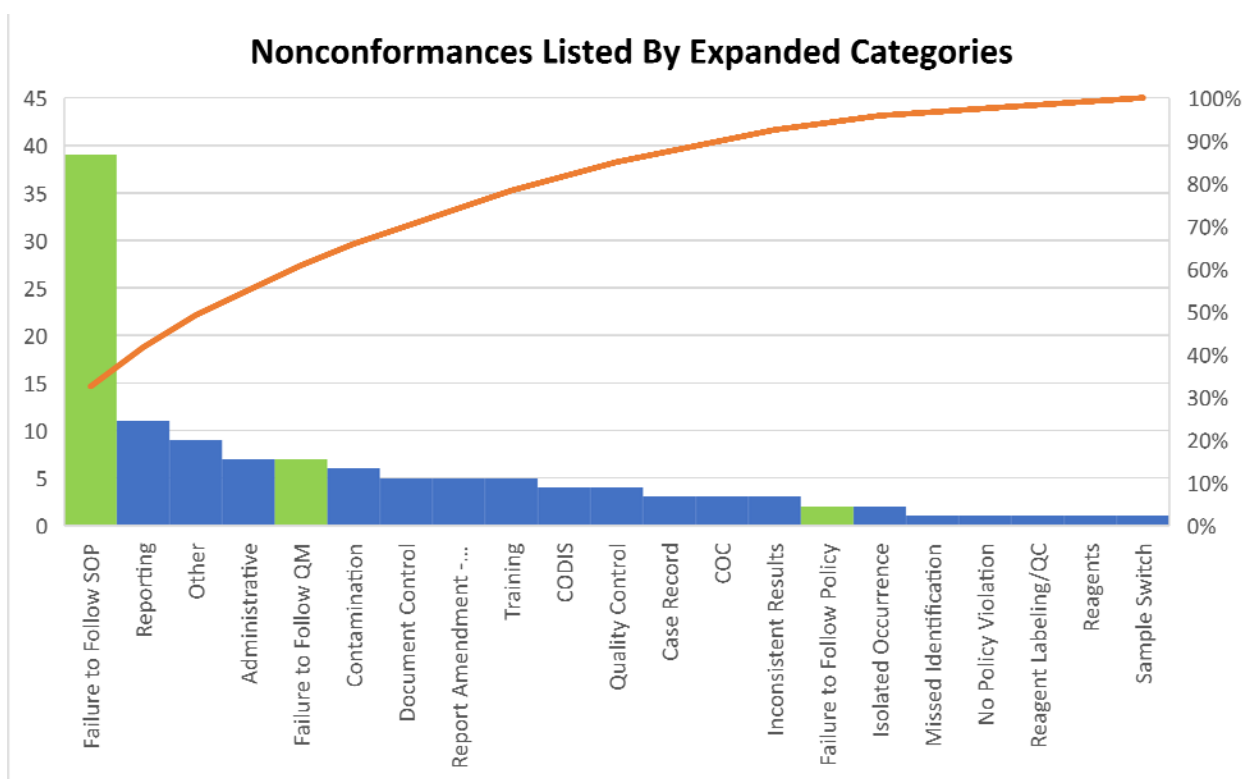


Figure 7. Nonconformances for 2018-2019 management review period listed by expanded categories.

### [Improvements to the Nonconformance Process](#)

The latest ISO/IEC 17025 revision focuses on risk-based thinking. Because of this change, the Quality Division uses risk assessment when evaluating nonconforming work to determine the technical impact to casework. Risk-based thinking has allowed for more effective differentiation of nonconformance levels. This may be a contributing factor to the overall decrease in the number of nonconformances and/or turnaround times for this review period as depicted in Figures 1 through 5.

The Quality Division created the Follow Up workflow and initiated it seven times during this review period. The workflows were used to determine the effectiveness of previous process improvements for the following sections: Biology, Crime Scene Unit, Seized Drugs, Firearms and Latent Prints.

To increase awareness and to effectively communicate about nonconforming work, the Quality Director now emails a report to all managers monthly summarizing the nonconformance notifications received during the previous month.

### Results of Risk Identification

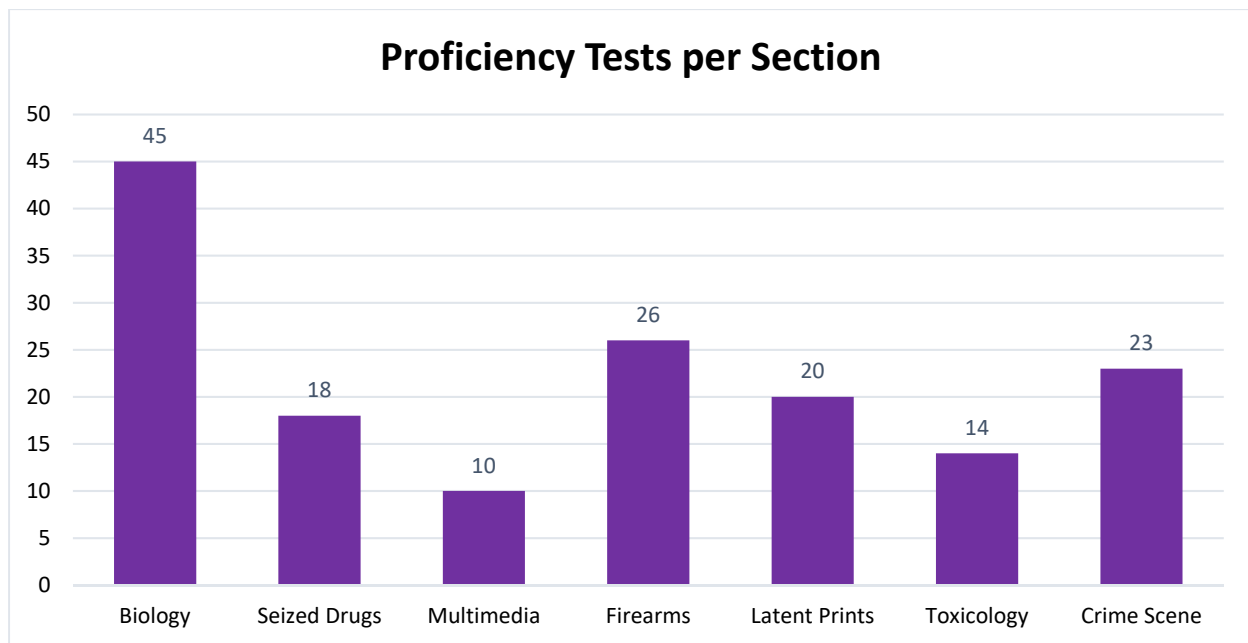
A risk assessment was conducted for all technical sections by the Quality Division in conjunction with the Lean Six Sigma Development Group. The purpose of this assessment was to identify existing risks associated to analytical processes, and to implement safeguards and/or quality controls to mitigate the identified risks. The tools used to complete this assessment were: high level process mapping, SIPOC analysis, stakeholder analysis and failure mode and effects analysis (FMEA). At the time of this management review, no significant risks were identified as a direct result of these assessments.

### Assurance of the Validity of Results

#### [Proficiency Testing](#)

Analysts completed proficiency tests in accordance with accreditation standards, QAS requirements, and HFSC policies. Tests were obtained from ISO/IEC 17043 accredited vendors Collaborative Testing Services, Inc. (CTS), Forensic Assurance (FA), and the International Society of Forensic Computer Examiners (ISFCE). The following non-accredited vendors were also used: College of American Pathologists (CAP) and Resolution Video. ANAB previously approved the use of the Resolution Video proficiency tests for Multimedia and an internal proficiency program for the Crime Scene Unit. ANAB approved external proficiency test providers for Crime Scene late in 2018. The tests are specific to body fluid identification and latent print processing.

Please see the chart below for the number of tests distributed for each discipline between October 1, 2018 and September 30, 2019. All proficiency tests were completed satisfactorily. Please refer to the [Incidents, Corrective Actions, and Preventive Actions](#) section, for more information regarding to Seized Drug proficiency tests that were involved in corrective action report 2019-056.

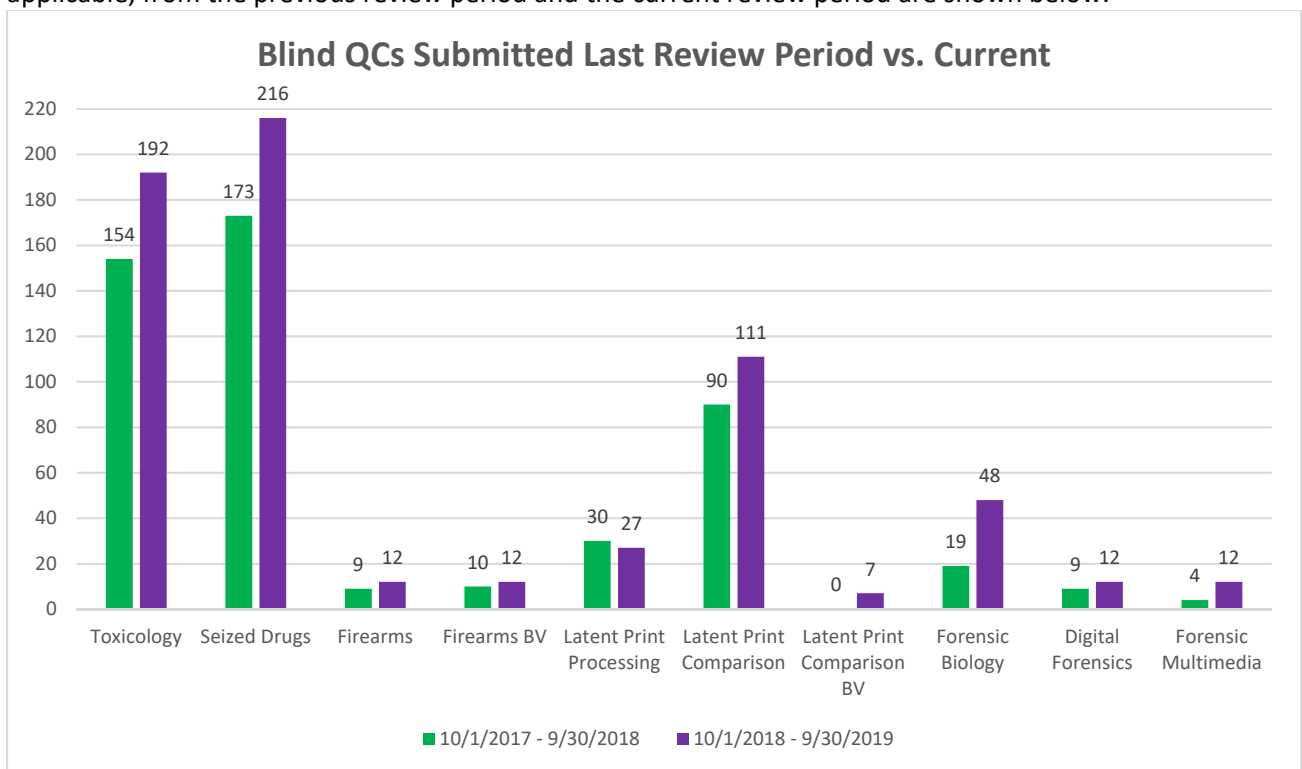


**Figure 8.** Proficiency tests assigned for all technical sections between October 2018 through September 2019.

For calendar year 2019, the Crime Scene Unit completed two external body fluid identification proficiency tests. This is the first time CSU participated in external proficiency tests.

#### Blind Quality Control Testing

Blind quality control (QC) cases added to sectional workflows and blind verifications (BV), where applicable, from the previous review period and the current review period are shown below.



**Figure 9.** Blind QCs Submitted Comparison.

To date, there have been no unsatisfactory results in a blind QC case. This information shows that our policies and procedures are reliable for the work being done and that analysts are competent and proficient in their work. The Quality Division prepares a report on a quarterly basis to notify the participating sections of the importance of blind QCs, the number of blind QCs each staff member has completed, results, instruments used and other information that may be used to track trends within the section.

The Quality Division submits blinds at a rate equivalent to 5% of casework output from the previous year in each section with the exception of Forensic Biology and CSU. Due to limited evidence and case scenario options, as well as the outsource project, the Quality Division submits 4 blinds a month for Forensic Biology. CSU does not participate in the blind program. In addition, the Seized Drugs monthly goal was reduced by 50% in February 2019. This decrease allowed for the Quality Division to submit more complex cases in order to better mimic real casework and prevent discovery.

The chart below shows the 5% of casework goals for each section for 2018 and 2019. The change in section output per month from 2018 to 2019 accounts for the change in the monthly goal.

Section	Target Cases Assigned 2018	Target Cases Assigned 2019
Toxicology	14/month	16/month
Seized Drugs	30/month	15/month
Firearms	1/month	1/month
Firearms Blind Verification	1/month	1/month
Latent Print Processing	3/month	2/month
Latent Print Comparison	10/month	9/month
Latent Print Blind Verification	N/A	1/month
Forensic Biology	4/month	4/month
Digital Forensics	1/month	1/month
Audio/Video	1/month	1/month

Some obstacles associated with the blind QC program were addressed during the review period. These include:

- Blind verifications were implemented in Latent Print Comparison.
- HFSC obtained forfeited mobile devices from HPD to allow us to submit digital forensics blind cases that more appropriately mimic casework. This also supplies the Quality Division with sufficient samples to meet the 5% monthly goal.
- The LIMS request portal allows the Quality Division to submit requests on behalf of HPD officers. This removes the burden from the officers and provides the Quality Division the flexibility to submit requests at any time.
- A latent print processing request was voided on an item because it was previously worked by the digital forensics section and therefore not handled appropriately. This issue was already the topic of an ongoing Lean Six Sigma project regarding multi-disciplinary requests on one item. The result of this project improved the process of handling multi-disciplinary requests and should prevent this from recurring in blinds and normal casework.

The following issues either have not been addressed since the 2018 management review or arose during the review period:

- Obtaining and creating evidence for Multimedia blinds continues to be difficult. Because the section receives actual crime footage from dashboard cameras and businesses with multiple camera angles, obtaining video and/or audio that mimics these scenarios is challenging. Obtaining video in general is problematic because we are limited to home security cameras from a few employees, thus our samples are not completely indicative of normal casework. The Quality Division has solicited help from HFSC employees asking for volunteers to help with videos from home security cameras but has not received any responses to date.
- Continued learning process on keeping cases completely blind from analysts as new red flags arise for the analysts.
- In December 2018, HPD began their own National Integrated Ballistic Information Network (NIBIN) unit. The implementation of this unit affected the workflow of the HFSC Firearms section which impacted the submission of blinds into the section. HFSC has attempted several work arounds with little success; therefore, the submission of firearms blind QCs is challenging and there is frequent discovery by examiners.

Notable achievements related to the blind QC program include:

- Hiring a Quality/Research Associate whose position is grant-funded. The associate works heavily in the blind QC program to generate statistical data and collaborate with academic researchers on research projects related to the blind program.
- Collaborating with members of the Toxicology section and an external statistician to publish an article entitled “Implementation of a Blind Quality Control Program in Blood Alcohol Analysis” in the SOFT special edition of the Journal of Analytical Toxicology.
- Working with members of Research and Development to prepare a manuscript outlining the processes that HFSC and the Quality Division had to overcome to implement the blind program.
- Working with the members of the Seized Drugs OSAC Sub-committee to draft a guideline document that outlines the necessary steps to be considered when implementing a blind program focused in Seized Drugs analysis.
- In November 2018, a Quality Specialist, Lean Six Sigma Project Engineer (former Quality Specialist), and the CEO attended the “Blinding in Forensic Science” workshop in Pittsburgh, Pennsylvania hosted by CSAFE. HFSC staff presented on the blind program and participated in discussions with members from other forensic laboratories that are interested in implementing their own blind program. HFSC built relationships with these labs, offered to assist them with their programs, and even shared blind QC toxicology evidence with them.

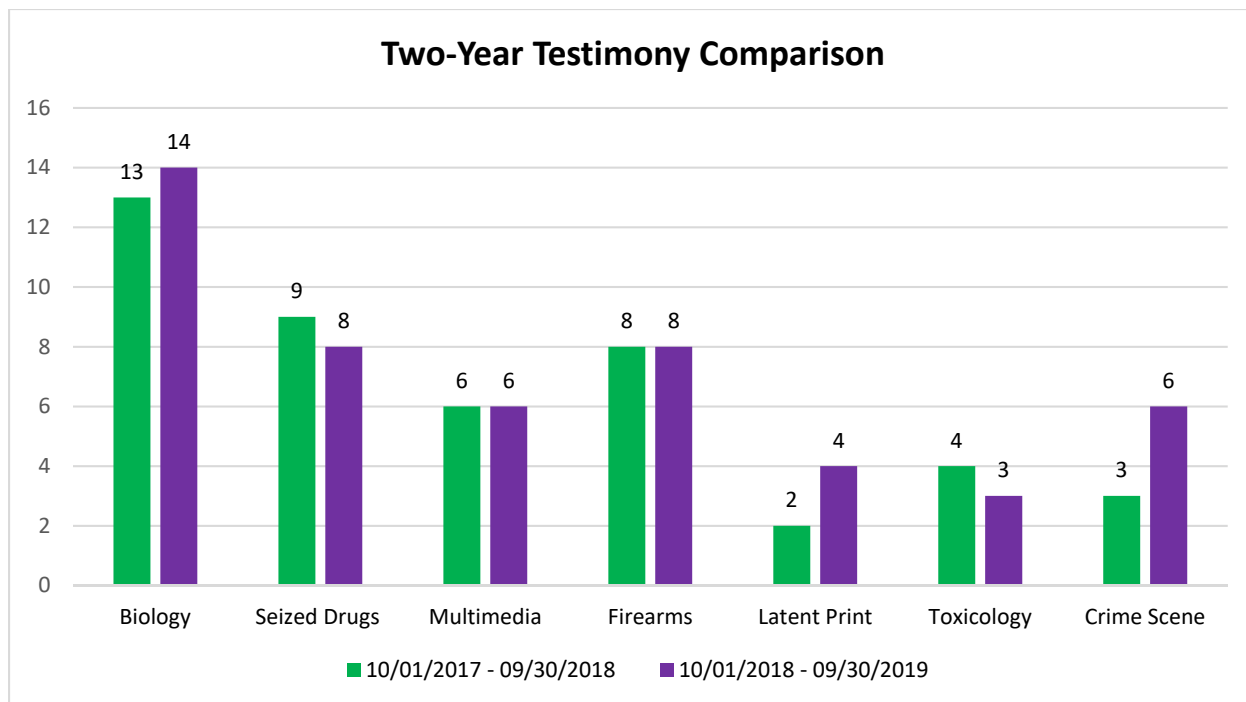
#### Courtroom Testimony Review

Technical staff testimony is monitored at least once a year. If a technical staff does not testify in a given year, they receive a non-testifying memo to document that they did not testify. Forty-nine analysts testified and were monitored between October 1, 2018 and September 30, 2019.

The testimony of three analysts was not monitored during 2018. The transcripts were requested and reviewed by section management at the beginning of 2019, please refer to nonconformance 2019-012 for additional information. To help prevent a recurrence, the Quality Division began sending quarterly emails to section management with a list of staff members who testified during each quarter.

Figure 10 shows technical staff that testified in the last two years listed by section.



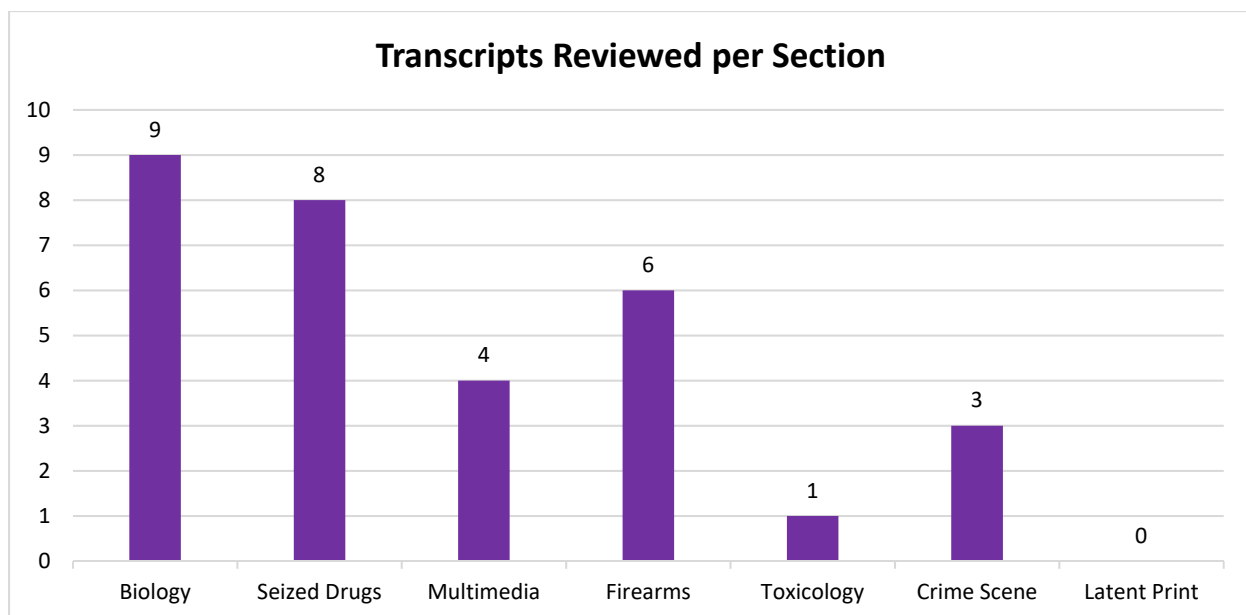


**Figure 10.** Testimony comparison over the last two years listed by technical section.

#### Transcript Review Project

HFSC started the Transcript Review Project in 2018 with the objective to identify areas of improvement and provide staff with tools and training to achieve improvement. The transcripts are requested from the Harris County District Attorney's Office (HCD AO) and/or the Harris County Public Defender's Office (HCPDO). The review process is completed by a committee composed of a technical staff member, Quality Division member and lay person.

As of September 30, 2019, thirty-one transcripts have been received and reviewed. The following graph (Figure 11) shows the number of transcripts reviewed per section.



**Figure 11.** The number of transcripts reviewed listed by technical section.

Improvements were made to the transcript review process during this management period. Information that could identify the analyst or case was redacted from transcripts starting in 2019. This allows for unbiased reviews by the committee. A self-evaluation form was also created with the intention of providing staff the opportunity to review their own transcript and self-identify areas of improvement prior to receiving the final evaluation from the committee.

The HFSC Board of Directors created a Transcript Review Working Group during the October 2018 meeting. However, as of the time of this review, the Quality Division has not had the opportunity to work with this group.

A recommendation was made during the last management review period to provide staff with testimony training based on observations made during the transcript review project. To address this recommendation, training was provided to all staff in the second quarter of 2019. The training included the history of HFSC, accreditation, discovery orders, subpoenas, courtroom etiquette, qualifying as an expert witness, voir dire, and effectively answering qualifying questions. The training was well-received by staff and the Quality Division plans to provide similar training to new technical staff members on an annual basis.

The transcript review project still faces some challenges. Transcripts are received from the HCDAO or HCPDO when cases are appealed. These transcripts are provided to HFSC at no cost. Unfortunately, the number of cases being appealed fluctuates, and HFSC saw a decrease in the number of transcripts received from these sources in 2019. Additionally, HFSC's current budget does not include transcript transcription service fees.

#### Consultation and Conflict Resolution

Between October 1, 2018 and September 30, 2019, the Latent Prints section documented 91 consultations in accordance with the Latent Print Conflict Resolution and Consultation Procedures, which was revised in March 2019 to include a revised definition of a consultation and revised again in July 2019 to include an updated procedure for consultations and conflict resolution. In May 2019, a

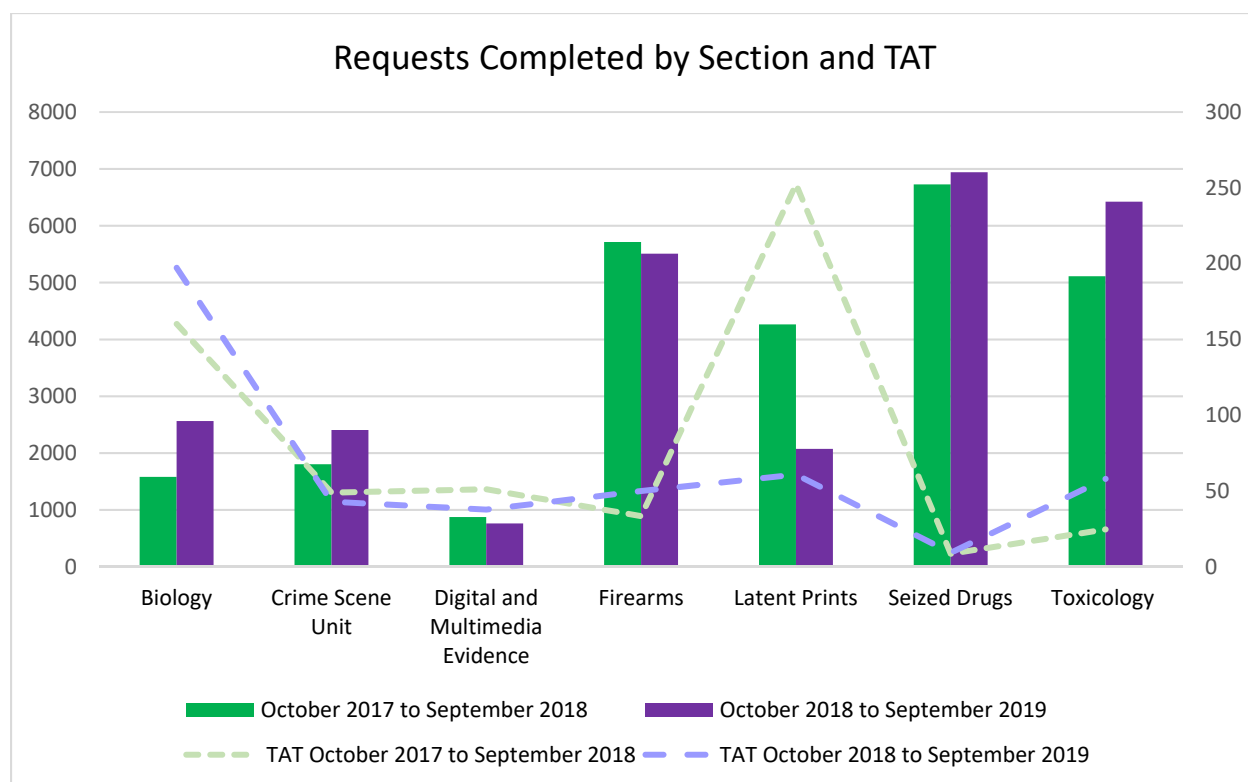
corrective action (2019-017) led the Latent Prints section to implement suitability verification, which resulted in all conclusions, except preliminary AFIS associations (PAAs), being verified by a separate examiner. These events produced an increase in consultations for 2019. One of the consultations rose to the level of a conflict during this timeframe.

The Firearms Section Consultation and Conflict Resolution Policy has been in effect since May 2018. Since implementation there have been 21 consultations and one conflict resolution. Section management finds the policy an effective means of resolving and documenting differences of opinions among analysts.

## Adequacy of Resources

### Casework Requests

Detailed information related to requests for analysis, turnaround times and average in-process analytical times are reported monthly to the Board of Directors. The monthly operations report is posted on the HFSC website at <http://houstonforensicscience.org>. Overall, the volume of requests completed by section has increased for this review period. With HFSC's upcoming relocation to 500 Jefferson, the impact to the turnaround time for cases and number of requests completed is depicted in Figure 12. The number of requests completed, and turnaround time data used for Figure 12 were compiled from HFSC's website.



**Figure 12.** Requests completed, and average turnaround time listed by section for 2018 and 2019 management review period.

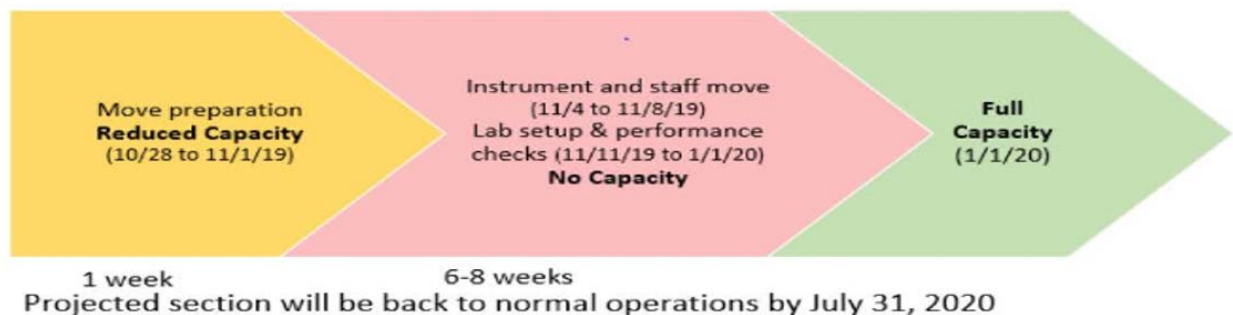
The impact to the turnaround time for cases and backlog of requests were taken into consideration by sections when planning the timeframe needed to reinstate their services following the move. Refer to the diagrams below for a summary for each technical section:

## Toxicology: Drugs



HFSC is outsourcing drug confirmations. This will continue until new instruments (LC-QQQ) are validated, projected to be completed 6/30/20

## Toxicology: Blood Alcohol



Projected section will be back to normal operations by July 31, 2020

## Forensic Biology



HFSC will outsource sexual assault kits while lab is at no capacity. Projected section will be fully operational on non-sexual assault kits by January 1, 2020

## Firearms



Projected section will be back to normal operations by March 1, 2020

## Latent Print Processing



## Seized Drugs



To be able to maintain a workable backlog through this relocation process, the following were implemented:

- The Biology and Toxicology sections will continue outsourcing cases to allow each section to focus on the performance checks required to re-establish their services.
- The Quality Division committed to working with technical sections to ensure all instrumentation is performing as expected and remains in compliance with accreditation standards.
- Professional moving companies were hired to ensure instrumentation is transported in accordance with manufacturers specifications and to ensure applicable warranties are not affected.
- Calibration services were scheduled to be conducted after each section move for applicable equipment.

### Scope of Accreditation

During this review period, there were no changes made to the services provided by HFSC that required an expansion/modification of ANAB's scope of accreditation.

### Calibration and Traceability

All critical equipment was calibrated by an external vendor accredited to ISO/IEC 17025. Instrumentation was performance checked or serviced as required per sectional SOPs. These services were verified as part of the internal audits. These services and checks were taken into consideration when planning the move to 500 Jefferson.

## Personnel

HFSC Human Resources Division ensured that positions were filled in a timely fashion.

Two leads were hired for the Multimedia section in February 2019 to assist the supervisor with the assignment and review of digital and audio/video cases.

The Forensic Biology section hired an Assistant Technical Leader (ATL) in January 2019. The ATL has been incorporated into the process for nonconforming work so she has knowledge of the current process and can assist the Technical Leader. Although her training program was modified based on her previous casework experience, as of Oct 1<sup>st</sup>, the ATL was not authorized to perform casework. And, although the Forensic Biology section's turnaround time for nonconformances has decreased in comparison to last year, it cannot be determined to what extent the ATL's involvement played a role in that decrease.

In the Latent Prints section, a Technical Leader position was created and filled internally, and three supervisors were promoted from latent print examiners. A latent print processor transitioned to latent print examiner trainee, and an additional latent print processor and three latent print examiners trainees were hired. These four latent print examiner trainees are attending off-site training that began in September.

The Technical Leader position for the Toxicology section was filled during this timeframe, and the employee is currently completing the training track to be able to perform technical reviews and method development and validations, as well as testify as an expert witness in courts of law.

## Stakeholder and Personnel Feedback

### Stakeholder Feedback

HFSC seeks stakeholder feedback in several ways. These include, but are not limited to:

- Website survey and Contact Us link: <http://houstonforensicscience.org/contact-us.php>
- Evaluations of training provided, and seminars hosted by HFSC
- Meetings between HFSC top management and high-ranking officials of the Houston Police Department
- In-person communications with stakeholders such as San Jacinto County Sheriff's Office
- Business development meetings and tours with numerous agencies in the surrounding area
- HFSC internal and external newsletters
- Community outreach opportunities

The website survey has been ineffective in capturing stakeholder feedback. To date, no surveys have been completed. The Quality Division is exploring more effective methods of soliciting feedback. Adding the survey link to the signature area of every email sent by HFSC is currently under consideration.

### Personnel Feedback

HFSC utilized the services of Workify to administer an Employee Engagement Survey to HFSC staff members in 2018 and 2019. Workify also administered a survey to employees participating in HFSC employee benefits programs seeking their input prior to the annual health insurance renewal in early 2019. HFSC plans to continue the Employee Engagement Survey process on at least an annual basis going forward.

Employee engagement is about the relationship between an organization and its employees. An “engaged employee” is one who is fully absorbed by and enthusiastic about the work and, because of his/her commitment, takes positive action to further the organization's reputation and interests.

By measuring employee engagement, HFSC gains a better understanding of its staff members. That understanding allows HFSC to enhance workplace conditions to foster committed, enthusiastic staff members who provide quality services to HFSC stakeholders.

HFSC has also established company-wide goals, one of which is regularly scheduled one-on-one meetings between staff members and their supervisors. These meetings allow for discussion and feedback on job performance. Additionally, HFSC’s annual employee performance review provides staff the opportunity to perform a self-review and offer feedback on their final performance review.

## Complaints and Self-Disclosures

There were no complaints received by the Quality Division during this review period.

Three complaints were filed with the Texas Forensic Science Commission (TFSC) during this year’s management review period. Two complaints involved the Forensic Biology section (TFSC case number 18.46 and 19.13) and one complaint involved the Latent Prints section (TFSC case number 18.57). Per the TFSC website, these three complaints were dismissed. Additional information can be found at <https://txcourts.gov/fsc/case-status/complaints/>.

Two self-disclosures were filed with TFSC involving the Firearms and Toxicology sections:

- One disclosure involved two nonconformances regarding the National Integrated Ballistic Information Network (NIBIN) process. A lead notification report incorrectly linked fired evidence from two separate cases. While researching the cases involved in that nonconformance, it was discovered that another examiner had imaged a cartridge case in the database under an incorrect case number. A comprehensive audit was completed for this process with the primary focus of determining an error rate for incorrect NIBIN uploads prior to the review process changes implemented as a result of these nonconformances. These nonconformances were reported to the Quality Division in 2018, however were disclosed in 2019 once the audit was completed. Refer to Corrective action report 2018-057 and 2018-082 for more information.
- One disclosure involved the Toxicology section where a 2015 report was released with an incorrect blood alcohol concentration result due to a typographical error. This was discovered while researching and collecting data for a manuscript in 2019. As a result of this nonconformance, an audit was completed by the Quality Division to determine if there were other instances where blood alcohol results were transcribed incorrectly to the report. Refer to corrective action report 2019-062 for more information.

See the TFSC website at <https://txcourts.gov/> for more details.

## Effectiveness of Implemented Improvements

HFSC’s LSS Development Group continues to focus on process improvements projects. The following are descriptions of projects initiated and completed during this review period:

- The Multi-Disciplinary Requests team focused on improving evidence processing when multiple requests are received from stakeholders for different types of analysis on a given item of



evidence (for example, a firearm may have requests for DNA, latent print processing, and firearms examination). The project involved working directly with stakeholders as well as HFSC technical staff to develop a more efficient workflow that effectively addresses all requests in a timely manner.

- The Dashboard Project was completed, and the Dashboard is now available to all staff. It provides real time metrics to staff and management regarding company goals, including the number of requests received, turnaround times, and backlogs. The Dashboard has been well received company-wide and it being utilized by management to help detect trends as well as prevent and solve issues as they arise.
- The Technical Review Project, which is currently slated to be completed in June 2020, is focused on improving the technical and administrative review processes across all technical sections, implement the changes, and then evaluate the effectiveness of the changes.
- The purpose of the Quality Score project is to design a way to measure quality across all technical sections in a consistent manner based on validated data. This is not a process improvement project but a process development DMADV (Define, Measure, Analyze, Design, Verify) project since “quality” is not currently measured at HFSC.
- The Work Product Evidence Return process development phase was completed in February 2019. The project focused on developing a process to return items of evidence created by the Firearms and Biology sections that had been historically retained by HFSC. The return process implemented for the Firearms section was completed and evidence items (test fires) are in the process of being returned to the HPD property room. It was determined that the Biology evidence items (extracts) would be retained by HFSC and not returned to HPD at this time. An inventory process was implemented to track the retained biology items, and this is still in the process of being completed.

## Update for 2018 Management Review Recommendations for Improvement

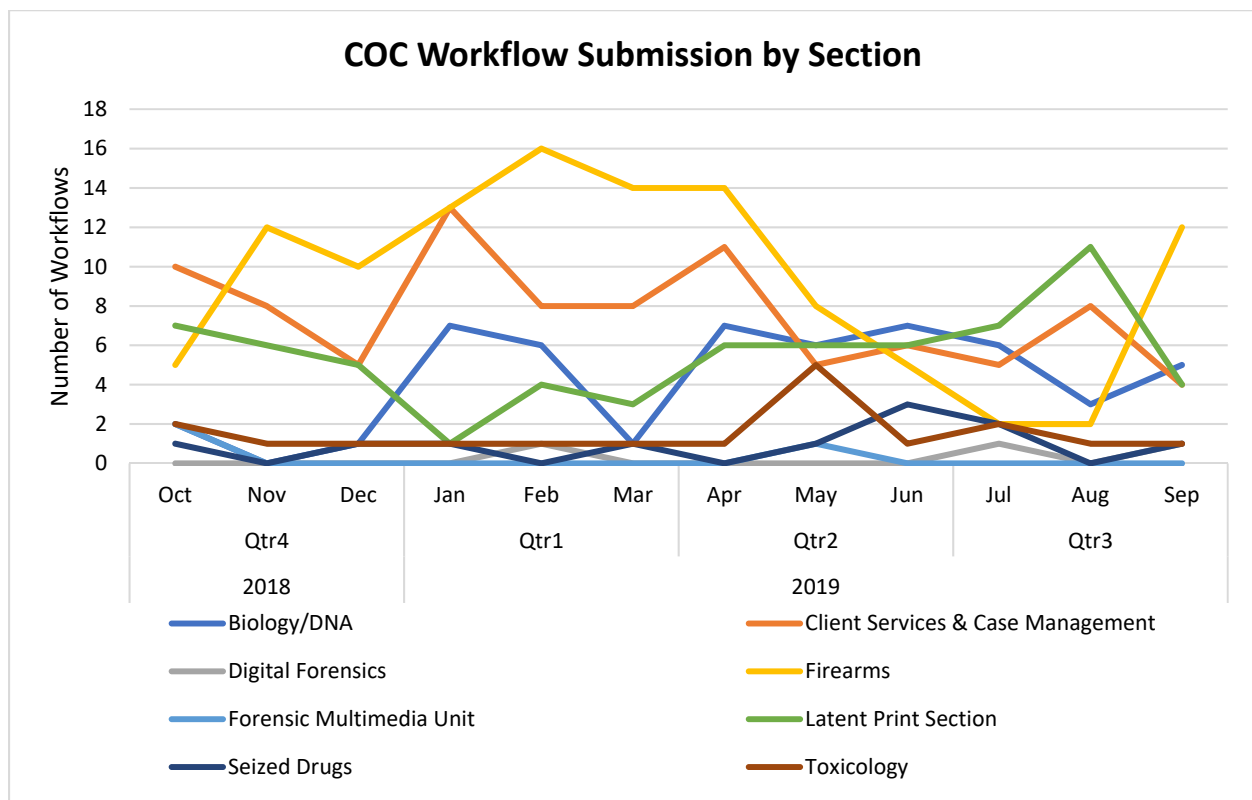
The following are recommendations from the 2018 management review have not been previously addressed above:

- Although the time between notification and close out of quality workflows has significantly improved from last year’s management review, the Quality Division is still not meeting the HFSC goal of 30 working days (40 working days for Biology and Latent Print section). The Quality Division is currently generating metrics to determine the average turnaround time for incidents as compared to corrective actions. Measurable data will allow the Quality Division to implement more appropriate turnaround times that consider the complexities of factors involved.
- While the Biology section purchased SmallPond software to help them to identify potential contamination events, the section has not approved its use in casework. At this time the section is dedicating its resources to training, validation of STRmix software and backlog reduction. Training has been completed for four screeners, eight technicians and two report writers. Six new report writers are currently undergoing training with an anticipated completion date of December 2019 and seven current report writers are currently undergoing probabilistic genotyping training and have an anticipated completion date of January 2020.
- As part of the accrediting body requirements, in 2018 HFSC began documenting case record defects discovered during the technical review (TR) and administrative review (AR) process. The HFSC LSS Development Group also has a project underway that focuses on improving the TR/AR process company wide. As part of this project, a dynamic user interface (DUI) was developed in JusticeTrax to track case record defects as well as case record recommendations resulting from



the review process. A TR/AR dashboard is also being developed that tracks, sorts and organizes data from the DUI and presents it to management and staff in summarized and meaningful format.

- The Client Services/Case Management (CS/CM) section has developed an effective and standardized process for transferring evidence between Porter Lee and JusticeTrax LIMS. However, technical staff, who are also responsible for reviewing chains of custody for their evidence, must also be cognizant when evidence is transferred between PL and JT LIMS. The Quality Division gave a presentation at a company meeting on how to properly document transfers between the two systems based on CS/CM's process.
- The Quality Division met on a regular basis to discuss workflows to ensure consistency. The 500 Jefferson facility has an open-concept layout that lends itself to more open dialogue among Quality Division staff. The Quality Division has also participated in several team-building activities that have helped to improve team dynamics and strengthen communication. Lastly, the Quality Director has been incorporated into the IR/CAR process at the initial phases of the majority of nonconformances. This initial involvement also encourages consistency across all workflows.
- Accurately capturing electronic chain of custody (COC) transfer in real time continues to present challenges to HFSC staff. COC issues in Porter Lee and JusticeTrax LIMS are now tracked through Qualtrax workflows and the process has been simplified to aid staff in documenting issues in a timely and effective manner. Data was provided to section managers regarding the number of COC workflows. Figure 13 outlines COC workflow submission by section during the timeframe of this review.



**Figure 13.** COC workflow submission by section.

## 2019 Management Review Recommendations for Improvement

Overall, the management system was found to be suitable and effective in meeting the needs and mission of HFSC. However, there are opportunities to continuously improve our current management system. The following are recommendations for continuous improvement:

- 2019.1** As of this management review no *Stakeholder Feedback Surveys* have been received by the Quality Division. In efforts to improve customer input, the Quality Division is exploring more effective methods of soliciting feedback. One possibility being considered is adding the link to the *Stakeholder Feedback Survey* in the signature area of HFSC staff email. The addition of this link will allow for more visibility. Another possibility being considered is to create an interactive Outlook version of the *Stakeholder Feedback Survey* that could be proactively distributed monthly to selected stakeholders.
- 2019.2** Several sections discuss with staff details regarding nonconformances when applicable to their work. Quality recommends that this practice be adopted by all technical sections. Sharing relevant information regarding nonconformances with all staff will help to raise awareness of potential risks, provide better understanding of what happened, and explain what actions were taken to improve work processes and prevent recurrence. Sections should establish a documented and effective way to disseminate this information.
- 2019.3** Sections should conduct review sessions either as a whole or in small groups to go over changes in their sectional SOPs and the Quality Manual. This practice should improve the understanding and the knowledge of SOP language and requirements. The sections should conduct similar group sessions when revising SOPs in order to incorporate feedback from more sectional staff into the revision process.
- 2019.4** The Quality Division should provide training to applicable staff on how to best utilize the IR/CAR Reporting Workflow. The purpose of the workflow, each step, and who is responsible for each portion should be explained and made clear to staff. This will increase the efficiency of the workflow process and ensure that the appropriate workflow steps are taken by staff.
- 2019.5** HFSC should collaborate with HCDAO and HCPDO to offer training regarding HFSC's forensic services including information specific to technical sections. A portion of this training is scheduled to take place in November 2019; however, this training needs to be offered on a continuous basis in order to be truly effective. In addition, HFSC should also offer in-house training for technical staff focusing on both courtroom demeanor and responses for qualifying and technical questions.
- 2019.6** eDiscovery is still not being utilized consistently across all sections. The Quality Manual is being revised to require sections to upload the most current versions of standard operating procedures and training manuals. Sections should establish a consistent process for uploading procedures and training manuals to eDiscovery as they are revised.