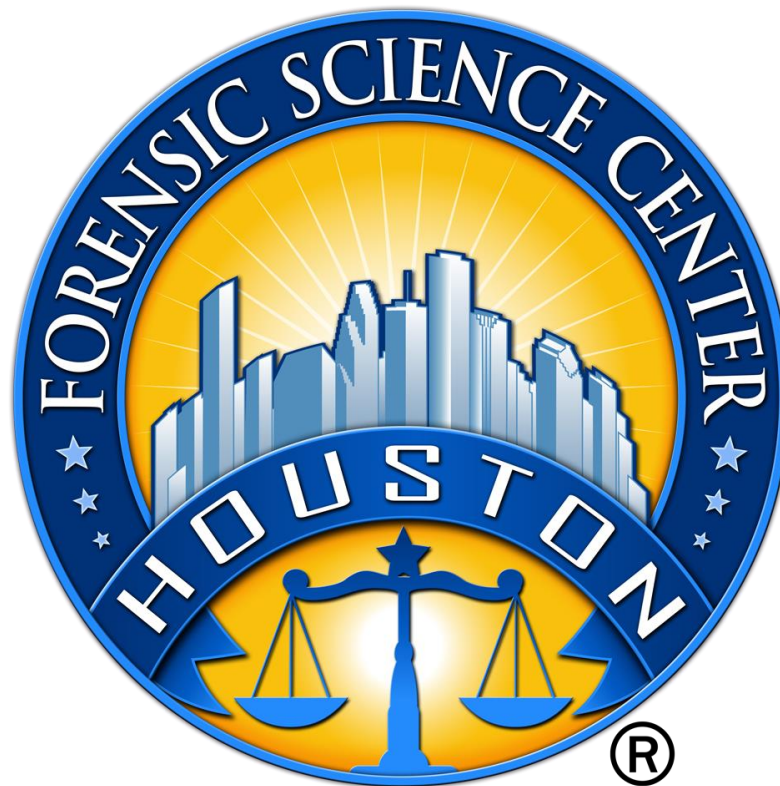


Houston Forensic Science Center, Inc.

Board of Directors Meeting

May 12, 2023



Position 1 - Dr. Stacey Mitchell, Board Chair

Position 2 - Anna Vasquez

Position 3 - Philip Hilder

Position 4 - Francisco Medina

Position 5 - Vanessa Goodwin

Position 6 - Ellen Cohen

Position 7 - Lois J. Moore

Position 8 - Mary Lentschke, Vice Chair

Position 9 - Vicki Huff

Ex-Officio - Tracy Calabrese



Table of Contents

- Agenda **Page 3**
- March 10, 2023 Draft Meeting Minutes..... **Page 6**
- Annual Appointment of Corporate Officers **Page 12**
- Annual Selection of Vice Chair **Page 13**
- Appointment of Technical Advisory Group Members **Page 14**
- President’s Report..... **Page 69**
- Operations: Detailed Data..... **Page 86**
- Proposal for Property & Evidence Management Services **Page 156**
- Quality Report..... **Page 158**



Houston Forensic Science Center, Inc.

Board of Directors Public Meeting

Friday, May 12, 2023

www.hfsctx.gov

NOTICE OF PUBLIC MEETING

Notice is hereby given that beginning at 9:00 a.m. on the date set out above, a quorum of the board of directors (the "board") of the Houston Forensic Science Center, Inc. ("HFSC" and / or the "corporation") will meet in the City Hall Council Annex Chamber, 900 Bagby Street (public level), Houston, Texas 77002.

In accordance with Chapter 552 of the Texas Government Code (Texas Open Meetings Act) the agenda is posted for public information, at all times, for at least 72 hours preceding the scheduled time of the meeting on the bulletin board located on the exterior wall of the City Hall building at 901 Bagby Street. The notice of this meeting, the agenda and the meeting packet are also posted [online](http://www.hfsctx.gov/meeting-archives) at www.hfsctx.gov/meeting-archives.

The items listed below may be taken out of order at the discretion of the chair. After the meeting concludes, a recording of the meeting will be posted to HFSC [website](http://www.hfsctx.gov) at www.hfsctx.gov.

PARTICIPATING IN THE PUBLIC MEETING:

Members of the public may attend the meeting in person or view the meeting through a live stream broadcast on the internet. To view the live stream meeting online please visit www.houstontx.gov/htv.

NOTICE OF PUBLIC COMMENT:

The public is permitted to speak in-person during the public comment agenda item and as permitted by the chair. A speaker may address any subject relevant to the purpose of the corporation. Each speaker should limit his or her comments to three minutes. The chair 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. If you have questions regarding attending this meeting, please contact Board Secretary Sandra Ham at (281) 377-8772.

AGENDA

1. Call to order.
2. Roll call; confirmation of presence of quorum.
3. Public Comment.
4. Reading of draft minutes from March 10, 2023 board meeting. Consideration of proposed corrections, if any. Approval of minutes.
5. Consider annual appointment of corporate officers: Dr. Peter Stout as president, Dr. Amy Castillo as vice president, Mr. David Leach as treasurer, and Ms. Sandra Ham as secretary, and possible related action.

6. Report from Dr. Stacey Mitchell, board chair, including a monthly update of activities, and other announcements.
 - a. Recognition of Mary Lentschke, board vice chair and Francisco Medina, director, upon conclusion of their appointed terms of board service as of June 30, 2023.
7. Consider annual selection of the vice chair of the board, and possible related action.
8. Consider appointment of Technical Advisory Group members, and possible related action:
 - a. Dr. Adele Quigely McBride
 - b. Dr. Mike Swartz
9. Final status report from the board working group on crime scene unit findings, recommendations and improvements, and possible related action.
10. Report from Dr. Peter Stout, president and CEO, including an update on the 88th legislative session, overview of operations, technical updates, and other corporate business items.
11. Presentation by Dr. Stout regarding a proposal to add property and evidence management services to the corporation's operations.
 - a. Consider approval of a proposal to add property and evidence management services to the corporation and authorize Dr. Stout to negotiate all necessary agreements to expand operations, and possible related action.
12. Report from Mrs. Jackeline Moral, quality director, including an overview of the blind quality control program, Texas Forensic Science Commission disclosures, and testimony metrics.
13. Adjournment.

NOTICE REGARDING SPECIAL NEEDS:

Persons requiring accommodations for special needs may contact HFSC at 713-929-6760.

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 meeting or session of the board should be held or is required in relation to any items included in this notice, then such closed or executive meeting or session as authorized by Section 551.001 et seq. of the Texas Government Code will be held by the board at that date, hour and place given in this notice or as soon after the commencement of the meeting covered by the notice as the board may conveniently meet in such closed or executive meeting or session concerning any and all subjects and for any and all purposes permitted by Section 551.071-551.089, inclusive, of the Open Meetings Act, including, but not limited to:

551.071 - Consultation with Attorney
551.072 - Deliberation Regarding Real Property
551.073 - Deliberation Regarding Prospective Gift Section
551.074 - Personnel Matters
551.076 - Deliberation Regarding Security Devices
551.084 - Exclusion of Witness

551.087 - Economic Development Negotiations

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 referred to 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, final decision, or final vote be required in the opinion of the board with regard to any matter considered in such closed or executive meeting or session, then such final action, final decision, or final vote shall be at either:

- | |
|--|
| A. The open meeting covered by this notice upon the reconvening of the public meeting, or |
| B. At a subsequent public meeting of the board upon notice thereof, as the board shall determine |

Certification of Posting of Notice of the Board of Directors, Houston Forensic Science Center, Inc.

I, Sandra V. Ham, do hereby certify that a notice of this meeting was posted on Tuesday, the 9th day of May 2023, in a place convenient to the public on the bulletin board located on the exterior wall of the City Hall building at 901 Bagby Street, 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 9th day of May 2023.

Sandra V. Ham
Board Secretary



Houston Forensic Science Center, Inc.

Board of Directors

Public Meeting

~ Minutes ~

Friday, March 10, 2023

www.hfsctx.gov

1. **CALL TO ORDER:**

At 9:00am, Board Chairwoman Stacey Mitchell called the meeting to order.

The Houston Forensic Science Center, Inc. (“HFSC” and/or the “corporation”) board of directors (the “board”) convened this in-person meeting on Friday, March 10, 2023, in the City Hall Council Annex Chamber, 900 Bagby Street (public level), Houston, Texas 77002. In a manner permitted by the corporation’s bylaws, the meeting was called by providing all directors with notice of the date, time and purpose of the meeting at least three days before the scheduled date.

In accordance with Chapter 551 of the Texas Government Code (Texas Open Meetings Act) a notice of this meeting was posted on the bulletin board located on the exterior wall of the City Hall building at 901 Bagby Street on March 10, 2023.

2. **ROLL CALL:**

The following board members were present in-person:

Chairwoman Stacey Mitchell
Vice-chairwoman Mary Lentschke
Philip Hilder
Francisco Medina
Vanessa Goodwin
Ellen Cohen
Lois Moore
Vicki Huff
Tracy Calabrese

The following board members were absent:

Anna Vasquez

Chairwoman Mitchell declared a quorum was present.

3. **APPOINTMENT OF BOARD SECRETARY:**

Chairwoman Mitchell expressed appreciation to interim corporation secretary Ashley Henry for her service to the board, specifically Mrs. Henry’s willingness to assist with board preparation and meeting coordination.

Chairwoman Mitchell introduced Ms. Sandra V. Ham, who was recently hired to serve as the HFSC Public Information Officer. In addition to that role, she was employed with the intent of being considered by the board for appointment as the corporate secretary. The chairwoman provided a brief

overview of Ms. Ham’s resume and previous experience as a City Secretary with a Houston-area municipality.

Director Philip Hilder made a motion to appoint Ms. Ham as secretary of the corporation. Director Vanessa Goodwin seconded the motion, and the board unanimously approved the motion.

4. **PUBLIC COMMENT:**

Chairwoman Mitchell invited members of the public to address the board and make public comments. No members of the public addressed the board.

5. **REVIEW AND APPROVAL OF MINUTES FROM PRIOR MEETING:**

Following a motion by Director Ellen Cohen and seconded by Director Lois Moore, the board unanimously approved the January 13, 2023 meeting minutes as presented.

6. **CHAIRWOMAN STACEY MITCHELL’S REPORT:**

The chairwoman highlighted items of interest, including an update on matters for consideration by the City of Houston. The board previously approved an agreement for fleet services with the City which received final approval by Council. Dr. Peter Stout will proceed with fully executing the document on the corporation’s behalf. Additionally, the previously approved amendment to the corporation’s certificate of formation was also approved by City Council, and HFSC is in the process of finalizing the document with the Secretary of State. Chairwoman Mitchell recognized the City for their support of the organization.

Lastly, Chairwoman Mitchell acknowledged March as Women’s History month and March 8, 2023 as International Women’s Day. The chairwoman highlighted the large percentage of female personnel and leadership within the HFSC organization. She also recognized Director Moore, Director Cohen, and Vice Chair Lentschke for their significant service to Houston and Harris County.

7. **PRESIDENT AND CEO DR. PETER STOUT’S REPORT:**

Dr. Peter Stout began his presentation with an overview of the organization’s operational highlights, which include a reduction in the backlog requests for seized drugs, latent print comparison, and digital multimedia. Of the seized drug requests, 85% of those were marijuana testing requests, overall reducing the marijuana backlog by approximately 40%. Director Francisco Medina requested additional details on the current backlog, with Dr. Stout indicating that HFSC will continue to utilize American Rescue Plan Act (ARPA) funds for backlog reduction.

Continuing, Dr. Stout discussed the potential impacts of the 88th Legislative Session, on account of Governor Greg Abbott’s declaration of the fentanyl crisis as an emergency item. With increased attention on fentanyl, several bills have been introduced related to the requirement of fentanyl testing on all substances, and increased penalties for fentanyl related deaths. Both proposals could have a significant impact on the lab, resulting in additional support for testing, testimony, and documentation.

Vice Chair Mary Lentschke requested additional details on the practicality of testing large quantities of drugs for fentanyl. Dr. Stout clarified that HFSC’s current process is to test a received substance to the highest sentencing threshold. Current proposed bill language stipulates testing of all substances received, even after thresholds have been met for prosecutorial purposes. Dr. Stout indicated first responder safety to be the motivation behind the bill’s current language.

Dr. Stout continued with an overview of a potential bill mandating that law enforcement submit all drug materials seized to the lab for testing. He emphasized that the bill provides for the dismissal of charges if the required testing is not completed within 30 days from seizure. This timeline requirement could provide for an overall increased demand on crime labs state-wide.

Dr. Stout summarized the various bills related to medical cannabis, legalization, and decriminalization, with several bills attempting to better define hemp and marijuana from “intoxicating hemp” products. Dr. Stout recognized Delta 8 to be a significant driver of the regulation, as the drug maintains a highly complex chemistry which creates difficulties in defining the legality of the substance.

Dr. Stout ended his overview on the 88th Legislative Session with an update on additional bills that could have a potential impact on the organization, specifically those relating to the prioritization of homicide cases in the courts; declassification of fentanyl test strips as paraphernalia; post-conviction DNA testing; tracking of evidence, rights to information for victims, and the processing and sale of kratom and kratom products.

Additionally, there was a brief discussion amongst board members on the support by the House and Senate for each of the proposed bills. Clarification was requested on whether those Senate or House members consult with HFSC prior to bill introduction, with Dr. Stout responding that no prior considerations were given to HFSC.

Introducing the budget strategy discussion, Dr. Stout recognized that HFSC has received approximately \$5 million in ARPA funding and detailed the restrictions on the utilization of funds. In general, HFSC can employ temporary personnel, but cannot utilize funds for analysts and examiners.

In anticipation of the upcoming budget discussion, Dr. Stout provided a summary of the organization’s budget priorities. Recognizing all items to be essential, he detailed the requests from most important to important. Dr. Stout designated the most essential request to be funding for additional DNA outsourcing. Currently, the DOJ prevents HFSC from utilizing ARPA funds for DNA outsourcing, as the DOJ believes it to be a conflict in the use of federal funds already received by the organization.

Continuing with the budget priorities, Dr. Stout emphasized the need for additional staff, with the budget proposal including an increased number of firearms analysts, crime scene unit investigators, toxicologists, and a quality specialist. He also highlighted a need for equipment for the seized drugs, toxicology, and firearms sections.

8. **TREASURER AND CFO DAVID LEACH’S REPORT:**

Treasurer and CFO David Leach began by summarizing the most significant highlights regarding the proposed FY24 budget, which includes a \$3 million-dollar funding increase. This increase would allow for much needed resources in Forensic Biology, Firearms, Crime Scene Unit, Seized Drugs, Toxicology, Information Technology and Quality. Additionally, this budget proposal allocates funds to continue the outsourcing of cases to reduce the Forensic Biology backlog, as well as new equipment leases for various forensic sections.

Mr. Leach provided an overall glimpse into HFSC’s expenditures, highlighting HFSC’s significant expenditures for FY23 to be personnel and services. Personnel costs account for 65 percent of the organization’s total business spending. Services include outsourcing, which dramatically help reduce backlog among forensic sections.

Mr. Leach detailed HFSC's spending priorities, presenting the various allocations within the \$3 million proposed funding increase. The proposed \$33.458 million funding request to the City of Houston for FY24, inclusive of additional ARPA funding, provides for an 11% increase in revenue over the prior year.

Mr. Leach continued the presentation with an overview of spending and summarized the FY23 forecasted expenditures versus FY24 proposed expenditures. The change in expenditures from year to year is a 22% increase in spending. The presented forecast accounts for approximately \$31 million for personnel costs, which includes an additional 13 staff members and provides for a fully staffed organization. The increase in expenditures also provides for approximately \$2 million in funds for outsourcing and training services.

In reviewing the full HFSC FY24 budget, Mr. Leach provided the FY15 through FY24 total revenue and total expenditures, specifying that HFSC would be requesting \$31.5 million from the City of Houston. This request is presented as three separate budget lines on the budget proposal. Additional significant revenue includes \$1.95 million in ARPA funding, and \$1.6 million in federal grants.

Overlooking the changes for the FY24 budget, Mr. Leach highlighted the additional \$3 million funding increase request to the City of Houston. He also noted the FY24 budget accounts for a \$1 million decrease in ARPA funding, as HFSC received \$3 million in funds in FY23. Ending his overview, Mr. Leach indicated that total expenses after depreciation is forecasted at approximately \$39.5 million, for a total increase in expenses of \$6.8 million.

Director Medina requested additional details on the distribution of ARPA funds, with Mr. Leach noting ARPA funding will conclude in FY24. Dr. Stout clarified that ARPA funding needs to be obligated by June 2024 and expended by 2025.

Mr. Leach presented the organization's average annual personnel count, with 232 total number staff members proposed for FY24. The budget includes almost \$23 million in "people costs," an increase of \$2.7 million from the previous year and inclusive of an additional 13 staff members. This personnel count is based on no vacancies within the organization. Mr. Leach detailed employee costs from FY19 through the proposed FY24 budget. A brief discussion was held on recruitment, retention, as well as training difficulties. Overall, Mr. Leach emphasized that the funding increase will provide for new work and services to be completed.

Mr. Leach ended his presentation with a description of capital expenditures, with a large component of spending related to technology and access to information. Dr. Stout clarified that there is an increase in documentation demand, and this funding will improve automation. Mr. Leach detailed the remaining capital items, including CSU vehicles, LCMS leases, microscopes, and data storage, totaling approximately \$1.3 million in capital spending.

8a. **CONSIDER APPROVAL OF HFSC'S FY24 BUDGET PROPOSAL:**

Mr. Leach requested the board's consideration to approve HFSC's FY24 budget as presented, inclusive of the \$31.508 million funding request from the City of Houston for total revenue of \$35.115 million, and total expenditures after depreciation of \$39.543 million.

Director Francisco Medina made a motion to approve the proposed FY24 budget, and Director Lois Moore seconded the motion. The board unanimously approved the motion.

9. **INTERIM QUALITY DIRECTOR JACKELINE MORAL'S REPORT:**

Interim Quality Director Jackeline Moral began the discussion by thanking the board for the opportunity to serve in the interim position, and anticipates a seamless transition from the former director.

Mrs. Moral continued by discussing the corporation's blind quality control metrics, reporting HFSC met all submission goals for January and February. In addition, she highlighted the recent publication of two articles related to latent print examination by Quality Associate Maddisen Neuman.

Next, Mrs. Moral provided an update on the recent Texas Forensic Science Commission disclosure related to the misidentification of an un-controlled isomer of alprazolam (xanax). She indicated that this isomer is an emerging designer benzodiazepine that has the exact molecular weight of alprazolam but with a differing chemical structure. In conclusion, TFSC voted "no further action" on this misidentification.

Director Medina inquired whether there were any adverse consequences with the misidentification, as related to the judicial process. General Counsel Akilah Mance indicated that she was in communication with the Harris County District Attorney's Office on the potential consequences, as the misidentification affected one known case.

Interim Quality Director Moral proceeded with an overview of the 2023 internal audit program. The internal audit will demonstrate HFSC's compliance to all accreditation standards, the HFSC quality manual, OSAC registry standards, and section specific standard operating procedures. Additionally, the organization will undergo the ANAB Surveillance Document Review process, which will focus on a subset of accreditation requirements.

Mrs. Moral concluded her presentation with the 2023 testimony data year-to-date. For January and February, HFSC had 32 analysts testify, with approximately 50% of those testimonies monitored. She continued by overviewing the testimony hours, specifically detailing the hours spent on the stand versus hours waiting to testify. Mrs. Moral also detailed the waiting hours by section, with the crime scene unit spending the largest amount of waiting hours to testify. Mrs. Moral recognized that with the requirement for testimony to be monitored, there is also uncounted waiting hours by monitors.

Chairwoman Mitchell emphasized a need for the organization to maintain open communication with the District Attorney's Office and judges to ensure the full impact of testimony is recognized. Director Hilder requested a comparison of time spent waiting versus previous years, with Mrs. Moral responding that data had not been captured prior to 2018, and additionally the pandemic would provide for abnormal data points.

Chairwoman Mitchell thanked Mrs. Moral for her willingness to serve in the interim role, and commended her for her first official board meeting in the interim director capacity.

10. CLOSED MEETING/EXECUTIVE SESSION:

The board convened in a closed meeting, also referred to as executive session. The executive session was held in accordance with Texas Government Code Sections 551.071, consultation with attorney and 551.072, deliberation regarding real property, for the potential lease of a facility to house expansion of HFSC operations to include management of property and evidence. Chairwoman Mitchell closed the open meeting at 10:33am and convened the executive session, at 10:35am.

11. RECONVENE INTO OPEN MEETING:

At 11:10am., Chairwoman Mitchell reconvened the open meeting. She announced a quorum was present.

12. **ADJOURNMENT:**

Chairwoman Mitchell requested a motion to adjourn the meeting. Director Ellen Cohen made a motion to adjourn. Director Philip Hilder seconded the motion. The meeting adjourned at 11:11 am.

The undersigned secretary of the board hereby certifies the following are true and correct minutes of the March 10, 2023 public meeting of the board.

By: _____
Sandra V. Ham
Board Secretary

HOUSTON FORENSIC SCIENCE CENTER, INC.

Regular Meeting of the Board of Directors

May 12, 2023 at 9:00 a.m.

Agenda Action Item No.:	5. Consider annual appointment of corporate officers: Dr. Peter Stout as president, Dr. Amy Castillo as vice president, Mr. David Leach as treasurer, and Ms. Sandra Ham as secretary, and possible related action.
Subject:	Annual appointment of HFSC corporate officers by the Board, as required pursuant to HFSC's bylaws.
Background:	During the May 2022 meeting of the Board, HFSC's corporate officers (president, vice president, and treasurer) were appointed to a one-year term, by unanimous vote. During the March 2023 regular meeting, the Board approved the appointment of HFSC's new board secretary, pursuant to the corporation's bylaws. The appointed officers are, as follows: Dr. Peter Stout as president, Dr. Amy Castillo as vice president, Mr. David Leach as treasurer and Ms. Sandra Ham as secretary.
Executive Summary:	Pursuant to the Corporation's Bylaws Section 5.01, the Board shall appoint a President, a Vice President, a Secretary, and a Treasurer. The persons appointed shall hold office until the next annual Board meeting, at which time the Board shall appoint or reappoint each officer. Sections 5.03 - 5.06 of the Bylaws also provides a description of each officer's duties. The Board may appoint any person who is not a director of the Board, to serve as a corporate officer.
Fiscal Impact:	No anticipated additional fiscal impact.
Staff Recommendation:	Staff recommends approval.
By:	Dr. Stacey Mitchell, Board Chair Legal review by General Counsel

HOUSTON FORENSIC SCIENCE CENTER, INC.

Regular Meeting of the Board of Directors

May 12, 2023 at 9:00 a.m.

Agenda Action Item No.:	7. Consider annual selection of the vice chair of the Board of Directors, and possible related action.
Subject:	Annual selection of the vice chair of the Board.
Background:	<p>Pursuant to Board Resolution 2020-001, the Board designated the selection of the Vice Chair of the Board, to occur on an annual basis, during the meeting of the Board at which the annual appointment of corporate officers also occurs.</p> <p>During the May 2022 meeting of the Board, Director Mary Lentschke was unanimously selected as the vice chair of the Board. Director Lentschke will conclude her appointed term in June 2023, and thus will not be reappointed.</p>
Executive Summary:	<p>Pursuant to the Corporation's Bylaws Section 2.04, the Vice Chairman of the Board shall be selected from among the directors of the Board. The Vice Chair shall perform the duties and exercise the powers of the Chairman upon the Chairman's death, absence, disability, resignation, or inability to perform the duties of the office. Pursuant to Board Resolution 2020-001, the Vice Chair shall hold said position until the next annual meeting of the Board, at which meeting the Corporate Officers are appointed.</p>
Fiscal Impact:	No anticipated additional fiscal impact.
Staff Recommendation:	No recommendation.
By:	Dr. Stacey Mitchell, Board Chair Legal review by General Counsel

HOUSTON FORENSIC SCIENCE CENTER, INC.

Regular Meeting of the Board of Directors

May 12, 2023 at 9:00 a.m.

Agenda Action Item No.:	8. Consider appointment of Technical Advisory Group members, and possible related action. a. Dr. Adele Quigely McBride b. b. Dr. Mike Swartz
Subject:	Appointment of Dr. Adele Quigely McBride and Dr. Mike Swartz to the Technical Advisory Group.
Background:	Pursuant to the certificate of formation and board resolution 2015-003, the board appoints persons to the corporation's Technical Advisory Group (TAG). TAG's purpose is to advise the organization on best practices, particularly in management and operations, including issues related to accreditation. The board may appoint persons to the TAG at such times and under such circumstances as the Board deems necessary, under such terms as may be determined by the Board. The TAG shall consist of up to nine members appointed by a majority vote of the Board, which vote shall be taken at a properly noticed meeting of the Board. The TAG currently consists of four appointed members.
Executive Summary:	<p>At the September 9 and November 18, 2022 board meetings the board discussed the need to re-engage the Technical Advisory Group. Chairwoman Mitchell acknowledged that the corporation could benefit from the TAG members' expertise and skills to navigate HFSC's new and evolving challenges. The Chairwoman also asked board members to provide names of potential qualified candidates for consideration.</p> <p>HFSC has received Dr. Adele Quigely McBride's and Dr. Mike Swartz's curricula vitae for board consideration of appointment to the TAG. Dr. McBride currently serves as Assistant Professor of Psychology at Simon Fraser University. Dr. Swartz currently serves as an Associate Professor and Vice Chairman for the Department of Biostatistics, School of Public Health, University of Texas Health Science Center at Houston.</p>
Fiscal Impact:	No anticipated additional fiscal impact.
Staff Recommendation:	Staff recommends approval.
By:	Dr. Stacey Mitchell, Board Chair Legal review by General Counsel

Adele Quigley-McBride

www.researchgate.net/profile/Adele_Quigley-Mcbride2

EDUCATION

- Ph.D. in Psychology**, Iowa State University, Ames, IA **2017 - 2020**
Major: Psychology
Dissertation: “The Repeated-Suspect Effect: What is the effect of repeated identification attempts on eyewitness accuracy and the original memory for the culprit?”
Major Professor: Dr. Gary L. Wells, Department of Psychology
- Quantitative Certificate**, Iowa State University, Ames, IA **2015 - 2019**
Concentrations: Research Methods in Psychology and associated analyses.
- M.S. in Psychology**, Iowa State University, Ames, IA **2015 - 2017**
Major: Psychology
Dissertation: “The use of filler samples moderates the effect of contextual information on forensic match decisions.”
Major Professor: Dr. Gary L. Wells, Department of Psychology
- B.Sc. (Hons. 1st class)**, Victoria University of Wellington, Wellington, NZ **2009-2014**
Major: Psychology
Honors thesis: “In the real world, people prefer their last whisky when tasting options in a long sequence.”
- LLB.**, Victoria University of Wellington, Wellington, New Zealand **2009-2013**
Major: Law (Undergraduate Law Degree)

RESEARCH FOCUS

My research focuses on using empirical methods and social-cognitive psychological theories to answer theoretical and practical questions about judgment and decision-making in legal contexts. I have investigated how to improve forensic testing procedures and reduce bias in forensic analyses, how to reduce eyewitness memory errors and misidentifications, and how jurors evaluate eyewitness and forensic expert testimony. I also created and implemented the first example of a Plea Bargaining Tracker tool in a US District Attorney’s Office to determine how prosecutors use their discretion and the mechanisms through which the information and strategies used by prosecutors affects the charges and sentences that appear in the final plea deal.

WORK EXPERIENCE

Assistant Professor of Psychology **2023-present**

Simon Fraser University, Vancouver, BC, Canada

- Manage a research laboratory and mentor PhD students.
- Teach advanced Psych and Law and Statistics classes.

Postdoctoral Associate for Brandon L. Garrett **2020-2023**

Duke Law, Wilson Center for Science and Justice, Durham, NC, USA

- Design, program, run, analyze and publish data obtained from research studies in collaboration with others at the Center and independently.
- The topics that I am contributing my experience and skills to at the Center include, but are not limited to, eyewitness identification issues and policy, improving fingerprint examination procedures, lawyer's knowledge of forensic science, juror decision-making, and tracking patterns in and the development of plea offers.

Graduate Research Assistant for Dr. Gary L. Wells **2015-2020**

Department of Psychology, Iowa State University, Ames, IA, USA

- Laboratory management for Dr. Wells, and manage/mentor the research assistants.
- Design, program, and run in-person and online experiments to answer research questions relevant to psychological phenomenon in the legal system.
- Write up projects for publication or presentation at conferences, assist with chapter writing, and other tasks relevant to research publication as needed.

Research Affiliate for Dr. Christian A. Meissner **2016-2020**

Department of Psychology, Iowa State University, Ames, IA

- Contribute to the design, programming, and publication of experiments.
- Assisted Dr. Meissner with the multilevel modeling analyses for some projects, interpreted the results, and helped to write the manuscripts.

Undergraduate Research Assistant for Dr. Maryanne Garry **2011-2014**

School of Psychology, Victoria University of Wellington, Wellington, NZ

- Administrative support for the laboratory and Dr. Garry.
- Participated in the design, programming, and administration of experiments related to memory errors and decision-making in applied contexts.
- Completed manuscripts for publication and presented at conferences.
- Completed an independent project in 2013 and an Honors project in 2014.

TEACHING EXPERIENCE

Introduction to Psychology Lecturer (PSYCH101)

Spring and Fall 2019

Iowa State University, Ames, IA

Student evaluations for:

Section A - 3.88 / 5

Section B - 4.04 / 5

- Instructor of record for ~400 undergraduate students in 2 sections (partial semester).
- Prepared lectures, class activities, class notes, and exam questions for the topics of “Social Influence”, “Stereotyping and Prejudice”, “Nature/Nurture”, “Social Development/Attachment”, “Aggression”, “Applying Psychology to Real World Contexts,” and “Mental Illness and Therapy”.
- Held office hours for students who were experiencing issues with the material.

Dialogues on Diversity (HSCI150) Instructor, Supervising Facilitator

2016 - 2020

Iowa State University, Ames, IA

Average student evaluation: 4.24 / 5

- Dialogues on Diversity is a conversation and discussion-based class designed to help students become more aware of diversity issues in the USA.
- Instructor for 1 section per semester, which is ~20 undergraduates for a 1 credit.
- Prepared lectures, chose or created class activities, directed class discussion, created homework assignments, and completed grading.
- Topics include identity, race, gender, sexuality, disability/ability, poverty/socioeconomic status, and other issues that are appearing in the news.
- I assisted the course coordinator (Ms. Marcia Purdy) in reviewing the course each semester, trained new facilitators, and set up the online course resources each semester.

Psychometrics Instructor (PSYCH440)

Summer 2018

Iowa State University, Ames, IA

Student evaluations: 4.25 / 5

- Instructor for the first half of the summer course, which was ~30 undergraduate students and met everyday for 90 minutes.
- Created the online course material and syllabus, prepared all class material lectures and activities, and prepared the homework assignments and exams.
- Delivered lectures and created activities that ensured students learned and understood the basics of psychological measurement and statistical analysis.
- Held office hours for students who were experiencing issues with the material.

Laboratory Instructor

2012 - 2014

Victoria University of Wellington, Wellington, NZ

- PSYCH122 (Introductory Psychology), PSYCH232 (Research Methods), and PSYCH325 (Advanced Research Methods).
- Prepared material for the two-hour, weekly laboratory sessions, lectured and created class activities to encourage learning, proctored exams, and marked assignments and exams.

PUBLICATIONS

JOURNAL ARTICLES (Total: 16) * indicates students Dr. Quigley-McBride mentored.

1. **Quigley-McBride, A.,** & Wells, G.L. (2022). Eyewitness confidence and decision time reflects identification accuracy in actual police lineups. *In press at Law and Human Behavior*.
2. Sweet, D., **Quigley-McBride, A.,** & Meissner, C.A. (2022). Perceptions of movement patterns and concealment detection in naïve observers and law enforcement officers: A Lens Model Analysis. *In press at Criminal Justice and Behavior*.
3. Marcon Zabecki, J., **Quigley-McBride, A.,** & Meissner, C. A. (2022) Information loss, contextual information, and distinctiveness influence how well novice analysts discriminate fingerprints. *Applied Cognitive Psychology, 36(6)*, 1325-1338. <https://doi.org/10.1002/acp.4016>
4. **Quigley-McBride, A.,** Crozier, W., Dodson, C.S., Teitcher, J., & Garrett, B.L. (2022, July 11). Face value? How jurors evaluate eyewitness face recognition ability. *Journal of Applied Research in Memory and Cognition*, Advance online publication. <http://dx.doi.org/10.1037/mac0000049>
5. Garrett, B.L., Crozier, W., Gifford, E.J., Grodensky, C., **Quigley-McBride, A.,** & Teitcher, J. (2023). Open Prosecution. *Accepted to appear in Stanford Law Review in the June 2023 issue*.
6. *Hudacheck, L. & **Quigley-McBride, A.** (2022). Juror perceptions of opposing expert forensic psychologists: Pre-existing attitudes confirmation bias, and belief perseverance. *Psychology, Public Policy and Law, 28(2)*, 213-225. <https://doi.org/10.1037/law0000334>
7. **Quigley-McBride, A.,** Dror, I.E., Roy, T., Garrett, B.L., & Kukucka, J. (2022). A practical tool for information management in forensic decisions: Using Linear Sequential Unmasking-Expanded (LSU-E) in casework. *Forensic Science International: Synergy, 4*, 100216. <https://doi.org/10.1016/j.fsisyn.2022.100216>
8. Growsns, B., Dunn, J.D., Mattijssen, E., **Quigley-McBride, A.,** & Towler, A. (2021) Match me if you can: Evidence for a domain-general visual comparison ability. *Psychonomic Bulletin & Review, 29*, 866-881. <https://doi.org/10.3758/s13423-021-02044-2>
9. **Quigley-McBride, A.** (2020). Practical solutions to forensic contextual bias. *Zeitschrift fur Psychologie, 228(3)*, 162-174. <https://doi.org/10.1027/2151-2604/a000409>
10. Smith, A., Wilford, M.M., **Quigley-McBride, A.,** & Wells, G.L. (2019). Mistaken eyewitness identification rates increase when either witnessing or testing condition get worse. *Law and Human Behavior, 43*, 358-368. doi:10.1037/lhb0000334
11. More, K.R., **Quigley-McBride, A.,** Clerke, A.S., & More, C. (2019). Do measures of country-level safety predict individual-level health outcomes? *Social Science and Medicine, 225*, 128-138. doi:10.1016/j.socscimed.2019.02.022
12. Anderson, C. A., Allen, J. J., Plante, C., **Quigley-McBride, A.,** Lovett, A., & Rokkum, J. N. (2018). The MTurkification of Social and Personality Psychology. *Personality and Social Psychology Bulletin, 1* -9. <https://doi.org/10.1177/0146167218798821>

13. **Quigley-McBride, A.** & Wells, G.L. (2018). Fillers can help control for contextual bias in forensic comparison tasks. *Law and Human Behavior*, 42, 295-305. doi:10.1037/lhb0000295
14. **Quigley-McBride, A.**, Franco, G., Mantonakis, A., & Garry, M. (2018). In the real world, people prefer their last whisky when tasting options in a long sequence. *PLoSOne*, <https://doi.org/10.1371/journal.pone.0202732>
15. Wells, G.L., & **Quigley-McBride, A.** (2016). Applying eyewitness identification research to the legal system: A glance at where we have been and where we could go. *Journal of Applied Research in Memory and Cognition*, 5, 290-294. <https://doi.org/10.1016/j.jarmac.2016.07.007>
16. Newman, E. J., Sanson, M., Miller, E. K., **Quigley-McBride, A.**, Foster, J. L., et al. (2014). People with Easier to Pronounce Names Promote Truthiness of Claims. *PLoS ONE*, 9(2), e88671. <https://doi.org/10.1371/journal.pone.0088671>

JOURNAL ARTICLES IN PREPARATION (Total: 6) * indicates students Dr. Quigley-McBride mentored.

1. **Quigley-McBride, A.**, & Wells, G.L. (2023). The effect of a biased lineup cannot be undone by a fair, pristine lineup procedure. *Manuscript in preparation*.
2. **Quigley-McBride, A.**, & Wells, G.L. (2023). Police behave differently when administering a lineup blind versus non-blind. *Manuscript in preparation*.
3. *Huang, J., **Quigley-McBride, A.**, & Banks, D. (2023). A study on the feasibility and generation of fingerprint lineups. *Manuscript in preparation*.
4. Greenspan, R., **Quigley-McBride, A.**, Bluestine, M., & Garrett, B.L. (2023). A critical analysis of actual eyewitness identification policies among police agencies in Pennsylvania. *Manuscript in Preparation*.
5. Greenspan, R., **Quigley-McBride, A.**, Bluestine, M., & Garrett, B.L. (2023). Interrogations and interview policies among police agencies in Pennsylvania: What practices are actually used and how can they be improved? *Manuscript in Preparation*.
6. Greenspan, R., **Quigley-McBride, A.**, Bluestine, M., & Garrett, B.L. (2023). An analysis of Miranda policies among police agencies in Pennsylvania. *Manuscript in Preparation*.
7. **Quigley-McBride, A.**, Eldridge, H., Gardner, B., & Garrett, B. (2023). Perceptions of Minutiae Base Rates among Fingerprint Analysts. *Manuscript in Preparation*.
8. **Quigley-McBride, A.**, Eldridge, H., Gardner, B., & Garrett, B. (2023). Fingerprint Analyst's Beliefs about the Frequency of Minutia Types within Pattern Type and Location within the Fingerprint. *Manuscript in Preparation*.

CHAPTERS (Total: 3)

1. Spellman, B.A., & **Quigley-McBride, A.** (2022). Reasoning about forensic science evidence. To appear in *Handbook of Legal Reasoning and Cognitive Science* in 2023.
2. **Quigley-McBride, A.**, & Wells, G. L. (2021). Methodological considerations in eyewitness identification experiments. In A.M. Smith, M.P. Togli, & J.M. Lampinen (eds.), *Methods, Measures, and Theories in Eyewitness Identification Tasks* (pp. 85-112). Routledge. <https://doi.org/10.4324/9781003138105>

3. **Quigley-McBride, A.**, Smalarz, L., & Wells, G.L. (2018). Eyewitness Testimony. In *Oxford Bibliographies in Psychology*. Dunn, D.S. NY: Oxford University Press.

CONFERENCE PRESENTATIONS

ORAL PRESENTATIONS (Total: 11)

1. Quigley-McBride, A., Eldridge, H.,
2. **Quigley-McBride, A.**, Crozier, W., Dodson, C., Teitcher, J., & Garrett, B. (March, 2022). Face value? How jurors evaluate eyewitness face recognition ability. Spoken presentation by the first author at the AP-LS Annual Convention, Denver, CO.
3. Garrett, B.L., **Quigley-McBride, A.**, & Redlich, A. (March, 2022). Legal Scholars Committee: Using research to inform law reform. Spoken presentations by all authors at the AP-LS Annual Convention, Denver, CO
4. Greenspan, R., **Quigley-McBride, A.**, Bluestine, M., & Garrett, B.L. (March, 2022). A critical analysis of actual eyewitness identification policies among police agencies in Pennsylvania. Spoken presentation by the first author at the AP-LS Annual Convention, Denver, CO.
5. **Quigley-McBride, A.**, Crozier, W., Dodson, C., Teitcher, J., & Garrett, B. (July, 2021). Face value? The in-court value of an eyewitness that is a good race recognizer. Spoken presentation by the first author at the 14th SARMAC Convention. Virtual Conference.
6. **Quigley-McBride, A.**, & Wells, G.L. (March, 2020). Allowing novice participants to “opt out” of fingerprint decisions negatively affects applied outcomes. Spoken presentation by the first author at AP-LS Convention. New Orleans, USA.
7. **Quigley-McBride, A.**, & Wells, G.L. (March, 2019). Non-blind administrators behave differently to blind administrators when conducting field lineups. Spoken presentation by the first author at AP-LS Convention. Portland, USA.
8. **Quigley-McBride, A.**, & Wells, G.L. (March, 2019). Can the filler-control procedure reduce bias in the verification of forensic match decisions? Spoken presentation by the first author at AP-LS Annual Convention. Portland, USA.
9. **Quigley-McBride, A.**, & Wells, G.L. (2018, March). Fillers can help control for contextual bias in forensic match testing. Spoken presentation by the first author at AP-LS Annual Convention. Memphis, USA.
10. **Quigley-McBride, A.**, & Wells, G.L. (2017, March). Knowledge about whether the eyewitness picked a suspect or a filler influences perceptions of eyewitness confidence. Spoken presentation by first author at AP-LS Annual Convention. Seattle, USA.
11. **Quigley-McBride, A.**, & Wells, G. L. (2017, January). Contextual bias influences forensic testing procedures. Spoken presentation by first author at the 12th SARMAC Convention. Sydney, Australia.

12. **Quigley-McBride, A.,** Franco, G., & Garry, M. (2014, August). Order of presentation influences preferences in whisky tasting. Spoken presentation by first author at the 3rd KiwiCAM (Cognition and Memory) Conference. Auckland, New Zealand.

POSTER PRESENTATIONS (Total: 8) * indicates students Dr. Quigley-McBride mentored.

1. **Quigley-McBride, A.,** & Wells, G.L. (March, 2021). The repeated-suspect effect: Why do eyewitnesses make identification errors after viewing multiple identification procedures? Poster presentation by first author at the APLS Annual Convention (Virtual).
2. *Hudachek, L., **Quigley-McBride, A.,** & Wells, G.L. (March 2020). How do mental health attitudes interact with biased expert testimony to affect mock juror decisions? Poster presentation by first author at the APLS Annual Convention. New Orleans, USA.
3. **Quigley-McBride, A.** & Wells, G.L. (June, 2019). Can the filler-control procedure act as a “gatekeeper” in the verification of forensic match decisions? Poster presentation by first author at the 13th SARMAC Convention. Cape Cod, USA.
4. **Quigley-McBride, A.,** & Wells, G.L. (2017, May). Contextual bias influences forensic testing procedures. Poster presented by the first author at the 29th APS Annual Convention. Boston, USA.
5. **Quigley-McBride, A.,** & Wells, G. L. (2016, May). Contextual bias influences forensic testing procedures. Poster presented by first author at the 28th APS Annual Convention. Chicago, USA.
6. **Quigley-McBride, A.,** Michael, R., & Garry, M. (2013, August). First impressions of eyewitness confidence anchor juror’s beliefs about eyewitness accuracy. Poster presented by first author at the 2nd KiwiCAM (Cognition and Memory) Conference. Dunedin, New Zealand.
7. **Quigley-McBride, A.,** Newman, E. J., Sanson, M., Foster, J. L., Bernstein, D., & Garry, M. (2012, April). Candidates with easier to pronounce names win elections more often than candidates with more difficult to pronounce names. Poster presented by first author at the 29th Australasian Experimental Psychology Conference. Sydney, Australia.
8. **Quigley-McBride, A.,** Foster, J., & Grimshaw, G. (2011). Schizotypy in semantic priming: A meta-analysis. Poster presented by first author at the 28th Australasian Experimental Psychology Conference. Auckland, New Zealand.

WEBINARS AND PRESS CONFERENCES

1. Meissner, C.A., Wells, G.L., & **Quigley-McBride, A.** (moderator) (2017). “How to communicate experimental psychological research to legal professionals,” webinar presentation for American Psychology-Law Society Student Committee’s Webinar Series, November 13. <https://www.apls-students.org/webinars.html>
2. Wilson Center for Science and Justice (2021, July 15). Unprecedented research looks are pleas in two DA’s Offices [Press Conference]. Quigley-McBride, A. was a presenter.

PODCASTS

Quigley-McBride, A. (interviewee), & Cheng, E. (interviewer) (2019, March 25). Fillers, Contextual Bias, and Forensic Comparisons. *Excited Utterance Podcast*. Podcast retrieved from <https://www.excitedutterancepodcast.com/>

Quigley-McBride, A. (interviewee), O’Grady, Cathleen, & Crespi, Sarah (interviewers) (2023, January 19). Bad stats overturn ‘medical murders’. *Science*. Podcast retrieved from <https://science.org/content/podcast/bad-stats-overturn-medical-murders-and-linking-allergies-climate-change>. Associated article retrieved from <https://science.org/content/article/unlucky-numbers-fighting-murder-convictions-rest-shoddy-states>

REPORTS

1. **Quigley-McBride, A.,** Garrett, B., Crozier, W., & Teitcher, J. (2022, March 11). Plea Tracking in the Berkshire County District Attorney’s Office: Six-Month Report. *Interim Report Produced for the Berkshire DAs Office by the Wilson Center for Science and Justice at Duke University School of Law*.
 2. **Quigley-McBride, A.** & Garrett, B. (2022, December 10). Plea Tracking in the Berkshire County District Attorney’s Office: One-Year Report, Part One. *Report Produced for the Berkshire DAs Office by the Wilson Center for Science and Justice at Duke University School of Law*.
-

INVITED TALKS (Total: 11)

1. FBI Forensic Laboratory, *All Hands Meeting 2023*, FBI Forensic Lab, Quantico, VA, USA (March 20th, 2023). Title of workshop: “Human Factors Considerations in Forensic Science and Tools to Improve Forensic Decisions”.
2. The Association of Forensic Quality Assurance Managers (AFQAM), *Annual Conference 2022*, Lake Tahoe, CA, USA (October 13th, 2022). Title of talk: A Simple and Practical Tool for Mitigating Cognitive Bias in Forensic Decisions.
3. The American Society of Crime Laboratory Directors (ASCLD), *Lightening Talks*, Virtual Presentation (October 13th, 2022). Title of talk: “An Ounce of Prevention: A Simple and Practical Tool for Mitigating Cognitive Bias in Forensic Decisions.”
4. International Symposium on Human Identification, *Annual Meeting 2022*, Washington D.C., USA (November 3rd, 2022). Title of workshop: “Implementation of Information Management Tools in DNA Casework”.

5. Scientific Association of Forensic Examiners, *Annual Conference 2022*, Virtual Conference (September 30th, 2022). Title of talk: “An Ounce of Prevention: A Simple and Practical Tool for Mitigating Cognitive Bias in Forensic Decisions.”
6. Midwestern Association of Forensic Scientists, *Annual Meeting 2022*, Des Moines, IA, USA (September 14th, 2022). Title of workshop: “Forensic Examinations of Physical Fits—Past, Present, and Future”; Dr. Quigley-McBride was responsible for preparing and presenting a “Human Factors Considerations” section for this workshop.
7. Department of Psychology, *University of Waikato*, Hamilton, NZ (August 10, 2022). Title of talk: “Face Value? How Jurors Evaluate Eyewitness Face Recognition Ability.”
8. National Forensic College, *Cardozo School of Law*, New York City, NY, USA (June 12th, 2022). Title of talk: “Cognitive Bias and Forensic Science”.
9. School of Psychology, *University of Northern Iowa*, Cedar Falls, IA, USA (March 27th, 2020). Title of talk: “Can the filler-control procedure act as a “gatekeeper” in the verification of forensic match decisions?”
10. School of Psychology, *Victoria University of Wellington*, Wellington, NZ (July 26th, 2019). Title of Talk: “How can evidence lineups be used in practice to prevent contextual bias in forensic comparisons?”
11. Department of Psychology, *University of Waikato*, Hamilton, NZ (July 19th, 2019). Title of Talk: “How can evidence lineups be used in practice to prevent contextual bias in forensic comparisons?”

GRANTS

1. **Project Title**: “Examination of forensic experts’ perceptions of how common features of fingerprints are and how these perceptions affect fingerprint analyses”, obtained 2022 by Adele Quigley-McBride (PI), with collaborators Dr. Heidi Eldridge, Dr. Brett Gardner, and Prof. Brandon Garrett.
Sponsor: National Institute for Standards and Technology (NIST), USA, through the Center for the Statistics and Applications in Forensic Evidence.
Funding Awarded: Unspecified, but includes partial salary for Quigley-McBride, and funding for materials, personnel, data collection, and research dissemination for PI and co-collaborators, projected to continue for a minimum of 3 years.
Role: Principal Investigator.
2. **Project Title**: “Proposal for a Student Run, Student Focused Psychology Conference in New Zealand”, obtained 2012 by Adele Quigley-McBride & Dr. Maryanne Garry.
Sponsor: Psi Chi
Funding Awarded: **\$1,500 USD**
Role: Contributed to idea development, and writing the project proposal. I also organized the conference proper, which still runs annually in New Zealand to this day called Kiwi Cognition and Memory/KiwiCAM.

HONORS AND AWARDS

American Psychology-Law Society Dissertation Award, 2020 – An award recognizing excellent in dissertation research relevant to psychology and the legal system. Dr. Quigley-McBride placed 3rd (**\$500 USD**).

Ph.D. tuition scholarship and assistantship, Iowa State University (Masters-on-track to PhD program) along with a monthly stipend of **\$2000 USD p/m** (2015 – 2020)

Psychology Department, Social Area Service Excellence Award, Spring 2020. Award recognizing extraordinary service contributions to the Psychology Department during Graduate School, valued at **\$100 USD**.

Psychology Department Outstanding Article Award, Spring 2020. Award recognizing the quality and impact of my publication, Quigley-McBride & Wells (2018) in *Law and Human Behavior*, valued at **\$100 USD**.

Teaching Excellence Award, Fall 2019. Award recognizing my contributions to teaching in psychology, and my effectiveness as a teacher, valued at **\$100 USD**.

Center for the Integration of Research, Teaching and Learning Practitioner's Certificate, September 2019. Certificate for completion of additional teaching training focused on diversity in the classroom.

Fulbright Science and Innovation Award. Funded one year of graduate study in the United States, plus return flights from New Zealand, total of **\$29,000 USD** (2014).

Summer Scholarship Award from Victoria University of Wellington to do research in Prof. Maryanne Garry's lab for the summer, **\$5000 NZD**, (2012).

Highly commended poster presentation at the 2nd annual KiwiCAM (Cognition and Memory) Conference at Otago University, Dunedin, NZ (2013).

Trimester Three Psychology Scholarship from Victoria University of Wellington to do research in Dr. Maryanne Garry's lab, **\$5000 NZD** (2011).

Joined Psi Chi (an international psychology honours society) in 2011 and became President of the Psi Chi Chapter at Victoria University in 2012.

Summer Scholarship Award from Victoria University of Wellington to work in Dr. Gina Grimshaw's lab for the summer, **\$5000 NZD** (2010).

School Leavers Scholarship for Academic Excellence to attend Victoria University, covered **tuition and fees** for one year (2009).

SERVICES AND LEADERSHIPS

PROFESSIONAL SERVICES

Vice-Chair, Human Factors Task group - Organization of Scientific Area Committees (OSAC) for Forensic Science (2020 – present). Human Factors Representative for Forensic Anthropology (2020-2022) and Dogs and Sensors (2022 – present). Vice-Chair of HFTG and reviewer for Scientific and Technical Review Panels (STRPs).

Member of the Expert Working Group on Human Factors in Forensic DNA Interpretation (2020 – present). Dr. Quigley-McBride is on the testimony and reporting subcommittee providing human factors advice and recommendations for the effective and accurate communication of DNA evidence.

Reviewer for Scholarly Journals and Awards

Regular Reviewer for: Law & Human Behavior, Applied Cognitive Psychology, Journal of Criminal Justice, Forensic Science International: Synergy, Psychology, Crime & Law. *Awards:* National Fellows for Graduate Women in Science (2018), AP-LS Dissertation Award Committee (2021-present).

External Dissertation Committee Member

Montclair State University, Ryan Schneider: Discretion in Prosecutorial Decision-Making and its Effects on Sentencing Recommendations. Proposal date: Oct 19th, 2022.

Student Committees

Experimental Liaison for APLS Student Committee (2017 -2018)

INSTITUTIONAL SERVICES

Student Committees

President of Graduate Students in Social Psychology (GSSP) organization at Iowa State University (2017 to 2020).

- As part of this role, I have organized bringing in one visiting speaker each semester since becoming President (total of six speakers to date). This includes organizing travel, accommodation, advertising and organizing the colloquia, and any other tasks required to make their visit enjoyable.
- In addition, whenever a visiting speaker is brought in, I hold a data blitz where graduate students can give a quick 5-10 minute presentation to the visiting scholar about a current piece of research.

Graduate Students in Psychology (GSP) at Iowa State University: Secretary (2016-2017) and Social Events Coordinator (2017-2018).

- Took meeting minutes and helped to organize events, formal and informal, to allow students to socialize or learn professional development skills.

Departmental Service

Volunteer mentor for school-aged children who visit the University.

Volunteer aid for managing and setting up events.

Community Service

Outreach Committee presenter – present psychological theory on topics relevant to the community in an easy to understand way. Example: Panel/Presentation on “Fake News”.

MENTORSHIP AND MANAGEMENT EXPERIENCE

UNDERGRADUATE RESEARCH ASSISTANTS

Laboratory Management:

- Held workshops on various topics, including applying for graduate school and broad psychology and law based issues to further their understanding of our work.
- Held individual training sessions for research assistants.
- Provided individualized references for students upon request.
- Presented the results of studies they helped to collect the following semester.
- Had approximately 8-10 students in the laboratory each semester at Iowa State University, and approximately at least 10 students working with me each semester at Duke University.

Students who have completed independent projects:

- *Laura Shambaugh* (2016): Completed an independent honors project with Dr. Wells and I; presented the results in poster form.
- *Ann-Marie Huet* (2017): Completed an independent honors project with Dr. Wells and I; presented the results in poster form.
- *McKenzie Berquam* (Spring, 2019): Completed an independent project for a 3-credit course. She designed and ran a study with me, and wrote a paper. McKenzie had already left the university, so I used distance learning and teaching techniques to mentor her.
 - *A testimonial about my mentoring during this time available upon request.*
- *Erin Izer and Lauren Hudacheck* (Spring, 2019): Completed a project together with me and created a poster that won 3rd place in a competition.
- *Lauren Hudacheck* (Fall, 2019): Lauren worked closely with me to apply for an undergraduate research grant, which she was awarded and allowed her to complete a research project in my laboratory and get paid in the Fall 2019 semester. We wrote up that study in 2020 and 2021 and it was published in 2022.
 - *A testimonial about my mentoring during this time available upon request.*
- *Jerry Huang* (2021): Completed an undergraduate thesis at Duke University on the use of algorithms to create fingerprint evidence lineups that could be used in the field.

RELEVANT SKILLS

- Proficient with R, MPLUS, SAS, and SPSS; familiar with JMP, LISREL, and HLM.
- Quantitative/Statistics skills using the software listed above. Examples include, but are not limited to, multivariate statistics, mediation/moderation, categorical data analysis, multilevel modeling, factor analysis, meta-analysis, and structural equation modeling.
- MediaLab, Superlab, Qualtrics, SurveyMonkey, and Amazon’s Mechanical Turk.
- Microsoft Word, Excel, and PowerPoint, and Pages and Numbers for Mac.
- Blackboard, Sakai, and Canvas.

PROFESSIONAL MEMBERSHIPS

- | | |
|--|-----------------------|
| • Psi Chi member | 2011 - present |
| • American Psychological Society | 2015 - present |
| • American Psychology-Law Society | 2015 - present |
| • Society for Applied Research in Memory and Cognition | 2016 - present |

LANGUAGES

English – Native.

French – proficient in conversation, writing, and understanding.

REFERENCES

Prof. Brandon L. Garrett, L. Neil Williams Professor of Law

School of Law

Duke University, Durham, NC, 27708

(919)-613-7090; bgarrett@law.duke.edu

Dr. Gary L. Wells, Professor of Psychology

Department of Psychology

Iowa State University, Ames, IA 50011

(515)-294-6033; glwells@iastate.edu

Dr. Christian A. Meissner, Professor of Psychology

Department of Psychology

Iowa State University, Ames, IA 50011

(515)-294-2119; cameissner@iastate.edu

Dr. Maryanne Garry, Professor of Psychology

School of Psychology

University of Waikato, Hamilton, New Zealand

+64-(07)-838-4080; maryanne.garry@waikato.ac.nz

MICHAEL D. SWARTZ, PhD

ADDRESS: [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

EMAIL: [REDACTED]

PHONE: [REDACTED]

FAX: [REDACTED]

A. BACKGROUND

1. Education:

PhD	Statistics	2004	Rice University, Houston, TX
MA	Statistics	2002	Rice University, Houston, TX
BA	Psychology	1997	Trinity University, San Antonio, TX
BS	Mathematics	1997	Trinity University, San Antonio, TX

a. Post Doctoral Fellowships:

Cancer Prevention	Mentor: Sanjay Shete	2006-2007	U.T. M. D. Anderson Cancer Center
Biostatistics, Bioinformatics and Nutrition	Mentor: Marina Vannucci	2004-2006	Texas A&M University

2. Honors and Awards:

- 2021 UTSPH Annual Award for Excellence in Teaching
- 2016 Teaching Statistics For the Health Sciences Section of the American Statistical Association Outstanding Teaching Award
- 2016 UTSPH Annual Award for Excellence in Teaching
- 2015 Student Marshal\Finalist up for John P. McGovern Award for Outstanding Teaching (student elected)
- 2015 UTSPH nominee for Regents of Texas Outstanding Teacher Award
- 2014 UTSPH nominee for the Regents of Texas Outstanding Teacher Award
- 2013 Student Marshall\Finalist for John P. McGovern Award for Outstanding Teaching (Student elected)
- 2013 American Statistical Association Chapter service award.
- 2006 Biometrics Showcase for outstanding publication in Biometrics 2004-2006
- 2003 Chairman's award to Graduate Students for Service to Department of Statistics, Rice University

3. Professional Experience:

2021-present Associate Professor and Vice Chairman, Department of

September 20, 2022

	Biostatistics, School of Public Health, The University of Texas Health Science Center at Houston
2016-present	Associate Professor, Department of Biostatistics, School of Public Health, The University of Texas Health Science Center at Houston
2010-2016	Assistant Professor, Department of Biostatistics, School of Public Health, The University of Texas Health Science Center at Houston
2009-2010	Assistant Professor, Department of Epidemiology, Division of Cancer Prevention and Population Sciences, The University of Texas M. D. Anderson Cancer Center
2007-2009	Instructor, Department of Epidemiology, Division of Cancer Prevention and Population Sciences, The University of Texas M. D. Anderson Cancer Center

4. Adjunct Appointments:

2009-2012	Department of Epidemiology, U.T. MD Anderson Cancer Center
-----------	--

B. RESEARCH#: My methodology work relates to three main areas: 1) developing Bayesian and hierarchical models for multi-factorial traits or outcomes 2) novel methodology for observational data/causal analysis and 3) statistical genetics. I have substantial expertise in applying statistical models to analyze/identify genetic, environmental, nutritional, and/or behavioral factors associated with cancer/cancer related outcomes, birth defects and other birth outcomes, smoking addiction, health services, trauma care and survival and infectious disease through both observational studies and randomized trials.

1. Publications (* indicates a student or post-doc I mentored or directed (includes as a committee member), # indicates my contribution is directly related to my research initiative [Statistical genetics or Bayesian hierarchical models or observational data/causal analysis], + indicates equal contribution with the first author.):

a. Articles in Refereed Journals (in chronological order)

2003

1. Costello TJ, **Swartz MD#**, Sabripour M, Gu X, Sharma R, Etzel CJ. (2003) Use of tree-based models to identify subgroups and increase power to detect linkage to cardiovascular disease traits. *BMC Genet*, 4 Suppl 1:S66. PMID: PMC1866504.

2005

2. Huang Q, Shete S, **Swartz MD#**, Amos CI. (2005) Examining the effect of linkage disequilibrium on multipoint linkage analysis. *BMC Genetics*, 6(Suppl 1):S83-S88. PMID: PMC1866697.
3. **Swartz MD#**, Minard CG, Amos CI. (2005) The relative efficiency of penetrance estimators for sib pairs, *Hum Hered* 59(1):61-6.

2006

September 20, 2022

2

4. **Swartz MD[#]**, Kimmel M, Mueller P, Amos, CI. (2006) Stochastic Search Gene Suggestion: A Bayesian hierarchical model for gene mapping. *Biometrics*, 62 (2): 495-503.
- 2007**
5. Zhou X, Chen W, **Swartz MD[#]**, Lu Y, Yu R, Amos CI, Wu CC, Shete S. (2007) Joint linkage and imprinting analyses of GAW15 rheumatoid arthritis and gene expression data. *BMC Proc*, 1 Suppl 1:S53. e-Pub 12/2007. PMID: PMC2367552.
 6. **Swartz MD[#]**, Thomas DC, Daw EW, Albers K, Charlesworth JC, Dyer TC, Fridley BL, Govil M, Kraft P, Kwon S, Logue MW, Oh C, Pique-Regi R, Saba L, Schumacher FR, Uh HW. (2007) Model selection and Bayesian methods in statistical genetics: summary of group 11 contributions to Genetic Analysis Workshop 15. *Genet Epidemiol*, 31 Suppl 1:S96-102.
 7. **Swartz MD[#]**, Shete S. (2007) The null distribution of stochastic search gene suggestion: a Bayesian approach to gene mapping. *BMC Proc*, 1 Suppl 1:S113. e-Pub 12/2007. PMID: PMC2367497.
- 2008**
8. **Swartz MD[#]**, Yu RK, Shete S. (2008) Finding factors influencing risk: comparing Bayesian stochastic search and standard variable selection methods applied to logistic regression models of cases and controls. *Stat Med* 27(29):6158-6174. PMID: PMC3044475.
 9. **Swartz MD[#]**, MO Q, Murphy ME, Hong MY, Vannucci M. (2008) Bayesian variable selection in clustering high dimensional data with substructure. *Journal of Agricultural, Biological and Environmental Statistics*, 13(4) pp.407-423.
- 2009**
10. Reyes-Gibby CC, Spitz MR, Yennurajalingam S, **Swartz M[#]**, Gu J, Wu X, Bruera E, Shete S. (2009) The role of inflammation gene polymorphisms on pain severity in lung cancer patients. *Cancer Epidemiology Biomarkers & Prevention*, 18(10):2636-42. PMID: PMC2759856.
- 2010**
11. **Swartz MD[#]**, Forman MR, Mahabir S, Etzel CJ. (2010) Pooling dietary data using questionnaires with open-ended and predefined responses: Implications for comparing mean intake or estimating odd ratios. *Am J Epidemiol*, 171(6):682-90. e-Pub 2/2010. PMID: PMC2842226.
- 2011**
12. **Swartz MD[#]**, Peng B, Reyes-Gibby CC, Shete S. (2011) Using Ascertainment for Targeted Resequencing to Increase Power to Identify Causal Variants. *Statistics and Its Interface*, 4(3):267-272. PMID: PMC3316326.
 13. Yi JK, **Swartz MD**, Reyes-Gibby CC. (2011) English proficiency, symptoms, and quality of life in vietnamese- and chinese-american breast cancer survivors. *J Pain Symptom Manage*, 42(1):83-92.
- 2012**

14. Cheng L*, **Swartz MD**, Zhao H, Kapadia AS, Lai D, Rowan PJ, Buchholz TA, Giodano SH. (2012) Hazard of recurrence among women after primary breast cancer treatment – a 10-year follow-up using data from SEER-Medicare. *Cancer Epidemiology, Biomarkers and Prevention*, 21(5): 800-809. PMID: 22426147

2013

15. Winston CP*, Sallis JF, **Swartz MD**, Hoelscher DM, Peskin MF. (2013) Consumer Nutrition Environments of Hospitals: An Exploratory Analysis Using the Healthy Hospital Environment Scan for Cafeterias, Vending Machines and Gift Shops, 2012. *Preventing Chronic Disease*. PMID: PMC3702231.
16. **Swartz MD**[#], Peterson CB*, Lupo PJ, Wu X, Forman MR, Spitz MR, Hernandez LM, Vannucci M, Shete S. (2013) Investigating multiple candidate genes and nutrients in the folate metabolism pathway to detect genetic and nutritional risk factors for lung cancer. *PLoS ONE*, 8(1): e53475 PMID: PMC3553105.
17. Wilkinson AV, **Swartz MD**^{##}, Yu X*, Spitz MR, Shete S. (2013) Cigarette experimentation and the population attributable fraction for associated genetic and non-genetic risk factors. *PLoS ONE*, 8(1): e53868 1/2013. PMID: PMC3547034.
18. Winston CP*, Sallis JF, **Swartz MD**, Hoelscher DM, Peskin MF. (2013) Reliability of the Healthy Hospital Environment Scan for Cafeterias, Vending Machines and Gift Shops. *J Acad Nutr Diet*, 113(8): 1069-1075. PMID: PMC3702231.
19. Reyes-Gibby CC, **Swartz MD**[#], Yu X*, Spitz MR, Anderson KO, Yennurajalingam S, Wu X, Shete S. (2013) Symptom Clusters of Pain, Depressed mood and Fatigue in Lung Cancer: Assessing the Role of Cytokine Genes. *Supportive Care in Cancer*, 21(11): 3117-3125. PMID: PMC3923575.
20. Langlois PH, Canfield MA, **Swartz MD**. (2013) Poisson vs. Logistic Regression in a Descriptive Epidemiologic Analysis of Data from a Birth Defects Registry. *Birth Defects Research Part A: Clinical and Molecular Teratology*, 97(10) 702-707. PMID 23996970.
21. Cao Y*, Lupo PJ, **Swartz MD**[#], Noursome D, Scheurer M. (2013) Using a Bayesian Hierarchical Model for Identifying Single Nucleotide Polymorphisms Associated with Childhood Acute Lymphoblastic Leukemia Risk in Case-Parent Triads. *PLoS One*, 8(12). PMID: PMC3868670.

2014

22. Hui D, dos Santos R, Chisholm G, Dev R, Paiva C, Yennu S, Seriacco F, Reddy S, Nascimento, MSA, Leite RA, Cruz PP, **Swartz MD**, Yu X*, et al. (2014) Clinical Signs of Impending Death in Cancer Patients. *Oncologist* (epub, 4/2014), 19(6): 681-687. PMID: PMC4041673.
23. Beyda R*, Benjaminis LJ, Symanski E, **Swartz M**, Eissa M. (2014) Azithromycin Efficacy in the Treatment of Chlamydia trachomatis among Detained Youth. *Sexually Transmitted Disease*, 41(10):592-594.

24. **Swartz MD[#]**, Kim T*, Niu J*, Yu R, Shete S, Ionita-Laza I. (2014) Small Sample Properties of Rare Variant Analysis Methods. *BMC proceedings*, 8(Supp1) S27. PMID: PMC4143716.
 25. Huang J*, Chen Y, **Swartz MD[#]**, Ionita-Laza I. (2014) Family-Based Association Test for Sequence Data with Applications in the GAW 18 Simulated data. *BMC proceedings*, 8(Supp1) S27. PMID: PMC4143708.
 26. Sung YJ, Korthauer KD, **Swartz MD[#]**, Engelman CD. (2014) Methods for Collapsing Multiple Rare Variants in Whole Genome Sequence Data. *Genetic Epidemiology*, 38(Supp1): S13-S20. PMID: PMC4558905.
- 2015**
27. Mitchell LE, Agopian AJ, Bhalla A, Glessner JT, Kim CE, **Swartz MD[#]**, Hakonarson H, Goldmuntz E. (2015) Genome-wide Association Study of Maternal and Inherited Effects on Left-Sided Cardiac Malformations. *Human Molecular Genetics*. 24(1):265-273. PMID: PMC4326325 PMID 25138779.
 28. Stingo F, **Swartz MD[#]**, Vannucci M. (2015) A Bayesian Approach to Identify Genes and Gene-Level SNP Aggregates in a Genetic Analysis of Cancer Data. *Statistics and Its Interface*, 8(2):137-151. PMID: PMC5630184.
 29. Tran LT*, Tran LT, Bui TC, Le DT, Nyitray AG, Markham CM, **Swartz MD**, Vu CBT, Hwang L. (2015) Risk factors for high-risk and multi-type Human Papillomavirus infections among women in Ho Chi Minh City, Vietnam: a cross-sectional study. *BMC Women's Health*. 15:16. PMID: PMC4339249.
 30. **Swartz MD[#]**, Cai Y*, Chan W, Symanski E, Mitchell LE, Danysh HE, Langlois PH, Lupo PJ. (2015) Air toxics and birth defects: a Bayesian hierarchical approach to evaluate multiple pollutants and spina bifida. *Environmental Health*, Feb9; 14:16. PMID: PMC4429479.
 31. Nguyen NT*, Tran BX, Hwang LY, Markham CM, **Swartz MD**, Phan HT, Nguyen A, Latkin CA, Vidrine DJ. (2015) Prevalence of cigarette smoking associated factors among HIV patients on antiretroviral treatment in Vietnam. *PLoS One*, 10(2) e0118185. PMID: PMC4344328.
 32. Nguyen NT*, Tran BX, Hwang LY, Markham CM, **Swartz MD**, Phan HT, Nguyen A, Latkin CA, Vidrine DJ. (2015) Motivation to quit smoking among HIV-positive smokers in Vietnam, a Cross Sectional Study. *BMC Public Health*, 15:326. PMID: PMC4392856.
 33. Tran LT*, Bui TC, Pham TV, Markham CM, Nyitray AG, **Swartz MD**, Tran LT, Huang L. (2015) Perception of primary male sexual partners' characteristics and women's history of sexually transmissible infections in Ho Chi Minh City, Vietnam. *Sexual Health*, Aug 12(4): 328-225. PMID: 26005058.
 34. Crews, JD*, Anderson LR, Waller, DK, **Swartz, MD**, DuPont, HL, Starke, JR. Risk Factors for Community Associated Clostridium difficile Associated Diarrhea in Children. (2015) *The Pediatric Infectious Disease Journal*. 34 (9):919-923. PMID: PMC4575237.

35. Deshmukh AA*, Zhao H, Franzini L, Lairson DR, Chiao EY, **Swartz MD**, Das P, Giordano SH, Cantor SB. (2015) Total lifetime and cancer-related costs for the elderly patients diagnosed with anal cancer in the United States. *American Journal of Clinical Oncology*. Epub. PMID: PMC5592145.
36. Lupo PJ, Danysh HE, Symanski E, Langlois PH, Cai Y*, **Swartz MD**. Neighborhood-based socioeconomic position and risk of oral clefts among offspring. (2015) *American Journal of Public Health*. 105(12):2518-2525. PMID: PMC4638238.

2016

37. Nguyen NT*, Tran BX, Hwang LY, Markham CM, **Swartz MD**, Phan HT, Nguyen A, Latkin CA, Vidrine DJ. (2016) Effects of cigarette smoking and nicotine dependence on adherence to antiretroviral therapy among HIV patients in Vietnam. *AIDS Care*. 28(3):359-364. PMID: PMC6691494.
38. Kendzor, DE, Shuval, K, Gabriel, KP, Businelle, MS, Ma, P, High, RR, Cuate, EL, Poonawalla, IB, Rios, DM, Demark-Wahnefried, W, **Swartz MD**, Wetter, DW. (2016) Impact of a smartphone intervention to reduce sedentary behavior in a community sample of adults. *Journal of Medical Internet Research*. 18(1): e19. PMID: PMC4746437.
39. Tran LT*, Bui, TC, Markham, CM, **Swartz MD**, Tran, QM, Nyitray, AG, Huynh, TT, Lu-Yu, H. (2016) Women's communication self-efficacy and expectations of primary male partners' cooperation in sexually transmitted infection treatment in Ho Chi Minh City, Vietnam: a cross-sectional study. *BMC Public Health*. 16:28 PMID: PMC4710979.
40. Cardenas, JC*, Cap, AP, **Swartz MD**, Huby, MdP, Baer, LA, Matjevic, N, Cotton, BA, Holcomb, JB, Wade, CE. (2016) Plasma resuscitation promotes coagulation homeostasis following shock-induced hypercoagulability. *Shock*. 45(2): 166-173. PMID: 26529664.
41. Bahl J, Pham TT, Hill NJ, Hussein ITM, Ma EJ, Easterday BC, Halpin RA, Stockwell TB, Wentworth DE, Kayali G, Krauss S, Schultz-Cherry S, Webster RG, Webby RJ, **Swartz MD**, Smith GJD, Runstadler, JA. (2016) Ecosystem Interactions Underlie the Spread of Avian Influenza A Viruses with Pandemic Potential. *PLOS Pathogens* 12(5): e1005620. PMID: PMC4864295.
42. Revere FL, Delgado RI, Donderici EY*, Krause TM, **Swartz MD**. (2016) Price Transparency and Healthcare Cost: An Evaluation of Commercial Price Variation for Obstetrical Services. *Journal of Healthcare Finance* 43(1) online.
43. Liu Z*, Nyitray AG, Hang LY, **Swartz MD**, Abrahamsen M, Lazcano-Ponce E, Salmeron J, Quiterio M, Villa LL, Baggio ML, Silva RJ, Giuliano AR. (2016) Human Papillomavirus Prevalence Among 88 Male Virgins Residing in Brazil, Mexico and the United States. *Journal of Infectious Disease* 214(8): 1188-91 (Epub aug 3) PMID: PMC5034958.

44. Deshmukh AA*, Zhao H, Das P, Chiao EY, You YN, Franzini L, Lairson DR, **Swartz MD**, Giordano SH, Cantor SB. (2016) Clinical and Economic Evaluation of Treatment Strategies for T1N0 Anal Canal Cancer. *American Journal of Clinical Oncology*. PMID: PMC5393969.

2017

45. Balogun T*, Troisi C, **Swartz MD**, Lloyd L, Beyda R. (2017) “For Drug and Alcohol Use I Would Talk to Mom”: A Mixed Methods Study of Detained Youth. *Journal of Adolescent Health*, 60(2), S122.
46. Holcomb JB, **Swartz MD**, DeSantis SM, Green JT*, Fox EE, Stein D, Bulger E, Kerby J, Goodman M, Schreiber M, Zielinski M, O’Keeffe T, Inaba K, Tomasek J, Podbielski J, Appana S, Yi M, Wade C, (2017, accepted 1/10/2017) Multicenter Observational Prehospital Resuscitation on Helicopter Study (PROHS). *Journal of Trauma and Acute Care Surgery*. PMID: PMC5562146.
47. Jude K.A. des Bordes*, Lopes David S, **Swartz MD**, Volk, R. (2017) Sociodemographic Disparities in Cure-Intended Treatment in Localized Prostate Cancer. *Journal of Racial and Ethnic Health Disparities* DOI: 10.1007/s40615-017-0348-y. PMID: 28205153.
48. Archer NP*, Perez-Andreu V, Stoltze U, Scheurer ME, Wilkinson AV, Lin T-N, Qian M, Goodings C, **Swartz MD**, Ranajit N, Rabin KR, Peckham-Gregory EC, Plon SE, de Alarcon PA, Zabriskie RC, Najera CR, Yang JJ, Lupo PJ. (2017) Family-based exome-wide association study of childhood acute lymphoblastic leukemia among Hispanics confirms role of *ARID5B* in susceptibility. *PLOS One*. 12(8):e0180488 PMID: PMC5560704.
49. Kim J*, **Swartz MD**, Langlois PH, Romiti PA, Weyer P, Mitchell LE, Luben TJ, Ramakrishnan A, Malik S, Lupo PJ, Feldkamp ML, Meyer RE, Winston JJ, Reefhuis J, Blossom SJ, Bell E, Agopian AJ, and the National Birth Prevention Study (2017) Estimated maternal pesticide exposure from drinking water and heart defects in offspring. *International Journal of Environmental Research in Public Health* 14(8). Pii: E889 PMID: PMC5580593.
50. Koslovsky MD*, **Swartz MD**[#], Chan W, Leon-Novelo, L, Wilkinson AV, Kendzor DE, Businelle MS. (2018) Bayesian variable selection for multistate Markov models with interval-censored data in an ecological momentary assessment study of smoking cessation. *Biometrics*. 74(2) 636-644 PMID: PMC5895542.
51. Koslovsky, MD*, Hebert E, **Swartz MD**, Chan W, Leon-Novelo L, Wilkinson AV, Kendzor DD, Businelle, MS. (2018) The time-varying relations between risk factors and smoking before and after a quit attempt. *Nicotine & Tobacco Research*. 20(10): 1231-1236. PMID: PMC6121909
52. Koslovsky MD*, **Swartz MD**[#], Chan W, Leon-Novelo, L, Wilkinson A, Kendzor D, Businelle M. (2018) Deterministic variable selection for logistic regression models. *Journal of Statistical Computation and Simulation* 88(3) 575-596. PMID: PMC5935273.

53. Chang R, Fox EE, Greene TJ*, **Swartz MD**, DeSantis SM, Stein DM, Bulger EM, Goodman, MD, Schreiber MA, Zielinski MD, O'keefe T, Inaba K, Tomasek JS, Podbielski JM, Appana S, Yi M, Johansson PI, Henriksen HH, Stensballe J, Steinmetz J, Wade CE, Holcomb JB; PROHS Study Group. Abnormalities of laboratory coagulation tests versus clinically evident coagulopathic bleeding: results from the prehospital resuscitation on helicopters study (PROHS). *Surgery*. Dec 27 doi: 10.1016/j.surg.2017.10.050. [Epub ahead of print] PMID: PMC5903880.

2018

54. Liu Z*, Nyitray AG, Huang L-Y, **Swartz MD**, Abrahamsen M, Lazcano-Ponce E, Villa LL, Guiliano AR (2018) Acquisition, persistence and clearance of Human Papillomavirus infection among male virgins residing in Brazil, Mexico and the United States. *Journal of Infectious Disease*. (217) 767-776. PMID: PMC5853496
55. Greene TJ*, DeSantis SM, Fox EE, Holcomb JB, **Swartz MD**# (2018). Utilizing propensity score analyses in prehospital blood product transfusion studies: Lessons learned and moving towards best practice. *Journal of Military Medicine* 183(suppl_1):124-133 PMID: PMC6020820.
56. Yu X*, Chan W, **Swartz M**, Piller, LB. (2018) “Joint models of dynamics of mothers’ stress and children’s disease” *Communications in Statistics – Simulation and Computation* 48:2775-2790.
57. Balogun T*, Troisi C, **Swartz MD**, Lloyd L, Beyda R. (2018) Does Juvenile Detention Impact Health? *Journal of Correctional Health Care*. Jan 1, doi: 10.1177/1078345818763174. [Epub ahead of print] PMID 29544377.
58. Reingle JM⁺, Businelle, MS⁺, Kendzor DE, Staton M, North CS, **Swartz MD**. (2018) mHealth to increase treatment utilization among recently incarcerated homeless adults (Link2Care): Protocol for a randomized controlled trial. *JMR Research Protocols* 7, e151. PMID: PMC6008513
59. Yunxi Zhang, Soeun Kim, Ye Lin, George Baum, Karen M. Basen-Engquist & Michael D. Swartz (2019) Comparisons of imputation methods with application to assess factors associated with self efficacy of physical activity in breast cancer survivors, *Communications in Statistics - Simulation and Computation*, 48:8, 2523-2537, DOI: 10.1080/03610918.2018.1458132.
60. Cantle PM, Hurley MJ*, **Swartz MD**, Holcomb JB. (2018) Methods for early control of abdominal hemorrhage: An assessment of potential benefit. *Journal of Special Operations Medicine*, 18 (2):98-104 PMID 29889964.
61. Aggarwal P*, Zaveri JS, Goepfert RP, Shi Q, Du XL, **Swartz M**, Gunn GB, Lai SY, Fuller CD, Hanna EY, Rosenthal DI, Lewin JS, Piller LB, Hutcheson KA. (2018) Symptom Burden Associated with Late Lower Cranial Neuropathy in Long-Term Oropharyngeal Cancer Survivors. *JAMA Otolaryngology-Head & Neck Surgery*. 144(11):1066-1076. PMID: PMC6248190.

62. Advani SM*, Advani P, DeSantis SM, Brown D, VonVille, H, Lam M, Loree J, Sarhekeh AM, Bressler J, Lopez DS, Daniel-MacDougall CR, **Swartz MD**, Kopetz S. (2018) Clinical, Pathological and Molecular Characteristics of CpG island methylator phenotype in colorectal Cancer: A systematic Review and Meta-analysis. *Translational Oncology*. 11(5): 1188-1201. PMID: PMC6080640.
63. Nguyen C*, Lairson DR, **Swartz MD**, Du XL. (2018) Risks of major long-term side effects associated with androgen-deprivation therapy in men with prostate cancer. *Pharmacotherapy*. 38 (10): 999-1009 PMID 30080934.

2019

64. Swartz MC, Lewis ZH, **Swartz MD**, Martinez E, Lyons EJ. (2019) Brief Report: Active ingredients for adherence to activity monitor-based physical activity intervention in older adults. *Journal of Applied Gerontology*. PMID: PMC8100986.
65. Song J*, **Swartz MD**, Gabriel KP, Basen-Engquist K. (2019) A semiparametric model for wearable sensor-based physical activity monitoring data with informative device wear. *Biostatistics* Feb 5 doi: 10.1093/biostatistics/kxx073. PMID: PMC6409419.
66. Nguyen C*, Lairson DR, Swartz MD, Du XL. (2019) Cost-effectiveness of adding androgen deprivation therapy to radiation therapy for men with advanced prostate cancer from the US payer's perspective. *Journal of Managed Care and Specialty Pharmacy*. PMID: 30698095 (funded by CPRIT).
67. Hoang TT*, Lei Y, Mitchell LE, Sharma SV, **Swartz MD**, Waller K, Finnell RH, Benjamin RH, Bowne ML, Canfield M, Lupo PJ, Shaw G, Agopian AJ, The National Birth Defects Prevention Study. (2019) Maternal lactase polymorphism (rs4988235) is associated with neural tube defects in offspring in the National Birth Defects Prevention Study. *Journal of Nutrition*. PMID 30689919.
68. Patel CN*, **Swartz MD**, Tomasek, JS, Vincent, LE, Hallum WE, Hocomb JB. (2019) The Effects of Missed Doses of Antibiotics on Hospitalized Patient Outcomes. *Journal of Surgical Research* 223: 276-283. PMID 30502260.
69. Lei R*, **Swartz MD**, Harvin J, Cotton B, Holcomb J, Wade C, Adams S. (2019) Stop the Bleed training empowers learners to act to prevent unnecessary hemorrhagic death. *The American Journal of Surgery*. 217 (2): 368-372. PMID 30292328.
70. Nguyen C*, Lairson DR, **Swartz MD**, Du, XL. (2019) Racial, Socioeconomic and geographic disparities in the receipt, timing to initiation and duration of adjuvant androgen deprivation therapy in men with prostate cancer. *Journal of Racial and Ethnic Health Disparities*. 6(1): 133-142. PMID 29959759 (Funded by CPRIT).

71. John J*, **Swartz MD**, Hoelscher D, Huber C, Sharma S. (2019) Measures of physical activity and body mass index in hospital workers: a multisite cross-sectional study. *Journal of Occupational and Environmental Medicine*. Epub. PMID 30817379.
72. Balogun T*, Troisi C, **Swartz MD**, Lloyd L, Beyda R. (2019) Factors associated with knowledge of where to access health care among youth in juvenile detention: a mixed methods study. *International Journal of Adolescent Medical Health*. Epub. PMID 30888964.
73. Aggarwal P*, Zaveri JS, Goepfert RP, Shi Q, Du XL, **Swartz M**, Lai Sy, Fuller CD, Lewin JS, Piller LB, Hutcheson KA. Swallowing-Related outcomes associated with late lower cranial neuropathy in long-term oropharyngeal cancer survivors: cross-sectional survey analysis. (2019) *Head and Neck*. Epub. PMCID: PMC4326325.
74. Hoang TT*, Lei Y, Mitchell LE, Sharma SV, **Swartz MD#**, Waller, DK, Finnell RH, Benjamin RH, Browne ML, Canfield MA, Lupo PJ, McKenzie P, Shaw GM, Agopian AJ, National Birth Defects Prevention Study. (2019) Maternal genetic markers for risk of celiac disease and their potential association with neural tube defects in offspring. *Molecular Genetics and Genomic Medicine*. Epub. PMCID: PMC6565562.
75. Lopez A*, Benjamin RH, Raut JR, Ramakrishnan A, Mitchell LE, Tsao K, Johnson A, Langlois PH, **Swartz MD**, Agopian AJ. (2019) Mode of delivery and mortality among neonates with gastroschisis: a population-based cohort in Texas. *Paediatric Perinatal Epidemiology*. 33 (3): 204-212. PMCID: PMC7028334.
76. Huang TT*, Manso PH, Edman S, Mercer-Rosa L, Mitchell LE, Sewda A, **Swartz MD#**, Fogel MA, Agopian AJ, Goldmuntz E. (2019). Genetic variants of HIF1 α are associated with right ventricular fibrotic load in repaired tetralogy of Fallot patients: a cardiovascular magnetic resonance study. *Journal of Cardiovascular Magnetic Resonance*. 21(1): 51-60. PMCID: PMC6699069.
77. Benjamin RH, Yu X, Navarro Sanchez ML, Chen H, Mitchell LE, Langlois PH, Canfield MA, **Swartz MD#**, Scheuerle AE, Scott DA, Northrup H, Schaaf CP, Ray JW, McLean SD, Lupo PJ, Agopian AJ. (2019) Co-occurring defect analysis: A platform for analyzing birth defect co-occurrence in registries. *Birth defects Research*. Epub. Ahead of print doi.org/10.1002/bdr2.1549. PMCID: PMC7814855.
78. Advani S*, Advani P, Brown D, DeSantis SM, Korphaisarn K, VonVille HM, Bressler J, Lopes DS, Davis JS, Daniel CR, Sarshekeh AM, Braithwaite D, **Swartz MD**, Kopetz, S. (2019) Global differences in the prevalence of the CpG island methylator phenotype of colorectal cancer. *BMC Cancer* 19(1):964 PMCID: PMC6796359.
79. Benjamin RH, Lopez A*, Mitchel LE, Tsao K, Johnson A, Langlois PH, **Swartz MD**, Agopian AJ. (2019) Mortality by mode of delivery among infants with spina bifida in Texas. *Birth Defects Research*. 111(19):1543-1550. PMCID: PMC7741424.

80. Swartz MC, Allen K, Deer RR, Lyons EJ, **Swartz MD**, Clifford T. (2019) A narrative review on the potential of red beetroot as an adjuvant strategy to counter fatigue in children with cancer. *Nutrients*. 11(12). Pii:E3003. PMID: PMC6949985.
81. Sonawane K, Nyitray AG, Nemutlu GS, **Swartz MD**, Chhatwal J, Deshmukh AA. (2019) Prevalence of human papillomavirus infection by number of vaccine doses among US women. *JAMA Network Open*. 2(12): e1918571. PMID: PMC6986697.
- 2020**
82. DeSantis SM, **Swartz MD**[#], Greene TJ^{*}, Fox EE, Holcomb JB, Wade CE; PROHS Study Group. (2020) Interim monitoring of nonrandomized prospective studies that invoke propensity scoring for decision making. *Journal of Trauma Acute Care Surgery*. 88(2) e46-e52. PMID: PMC7001616.
83. Allicock M, Kendzor D, Sedory A^{*}, Gabriel KP, **Swartz MD**, Thomas P, Yudkin JS, Rivers A. A Pilot and Feasibility Mobile Health Intervention to Support Healthy Behaviors in African American Breast Cancer Survivors. *J Racial Ethn Health Disparities*. 2021 Feb;8(1):157-165. doi: 10.1007/s40615-020-00767-x. Epub 2020 May 8. PMID: 32385847
84. Li C^{*}, Mou C, **Swartz MD**, Yu B, Bai Y, Tu Y, Liu X;(2020) dbMTS: a comprehensive database of putative human microRNA target site SNVs and their functional predictions, *Human Mutation*,41(6)1123-1130. PMID: PMC7251985.
85. John JC^{*}, Sharma SV, Hoelscher D, **Swartz MD**, Huber C. (2020) Self-Efficacy, Social-Support, and Physical Activity Measures Among Hospital Employees: A Multisite Cross-Sectional Study. *Journal of Physical Activity and Health*. 17(5)548-556. PMID: 32272452.
86. Brown DW^{*}, DeSantis SM, Greene TJ^{*}, Maroufy V, Yaseen A, Wu H, Williams G, **Swartz MD**[#]. (2020) A novel approach for propensity score matching and stratification for multiple treatments: Application to an electronic health record–derived study. *Statistics in Medicine*. Epub. PMID: PMC7334100.
87. Gallardo KR^{*}, Santa Maria D, Narendorf S, Markham CM, **Swartz MD**, 9/1/ Hsu H, Barman-Adhikari A, Bender K, Shelton J, Ferguson K. (2020) 2020 Human Papillomavirus Vaccination Initiation and Completion among Youth Experiencing Homelessness in Seven US Cities. *Prevention Science: The Official Journal of the Society for Prevention Research*. Epub. PMID: 32405808.
88. Gallardo KR^{*}, Santa Maria D, Narendorf S, Markham CM, **Swartz MD**, Batiste CM. (2020) Access to healthcare among youth experiencing homelessness: Perspectives from healthcare and social service providers. *Children and Youth Services Review*. 115(C). DOI: 10.1016/j.chilyouth.2020.105094

89. Oluwafemi OO*, Benjamin RH, Navarro Sanchez ML*, Scheuerle AE, Schaaf CP, Mitchell LE, Langlois PH, Canfield MA, **Swartz MD**[#], Scott DA, Northrup H, Ray JW, McLean SD, Ludorf KL, Chen H, Lupo PJ, Agopian AJ. (2020) Birth defects that co-occur with non-syndromic gastroschisis and omphalocele. *American Journal of Medical Genetics Part A*, epub. PMID: PMC8259712
90. Miao H, Gao Q, Feng H, Zhong C, Zhu P, Wu L, **Swartz MD**, Luo X, DeSantis SM, Lai D, Bauer C, Pérez A, Rong L, Lairson D. (2020) Mathematical Modeling of Business Reopening When Facing SARS-CoV-2 Pandemic: Protection, Cost, and Risk. *Frontiers in Applied Mathematics and Statistics*. <https://doi.org/10.3389/fams.2020.00035>.
91. Schraw JM*, Benjamin RH, Scott AD, Brooks BP, Hufnagel RB, McLean SD, Hope N, Langlois PH, Canfield MA, Scheuerle AE, Schaaf CP, Ray JW, Chen H, **Swartz MD**[#], Mitchell LE, Agopian AJ, Lupo PJ. (2020) A Comprehensive Assessment of Co-occurring Birth Defects Among Infants With Non-Syndromic Anophthalmia or Microphthalmia. *Ophthalmic Epidemiology*. PMID: PMC8214631.

2021

92. Advani SM*, **Swartz MD**, Loree J, et al. (2021) Epidemiology and Molecular-Pathologic Characteristics of CpG Island Methylator Phenotype (CIMP) in Colorectal Cancer. *Clinical Colorectal Cancer*. 20(2):137-147.e1. PMID: 33229221.
93. Jost GB, Podbielski JM, **Swartz MD**, et al. (2021) Evaluation of Noninvasive Hemoglobin Measurements in Trauma Patients: A Repeat Study. *Journal of Surgical Research*. 266:213-221. PMID: 34023577
94. Christopherson U, Wells SJ, Parker N, Lyons EJ, **Swartz MD**, et al. (2021) Use of active video games with or without videoconferencing on health outcomes in adolescent and young adult cancer survivors: a systematic review. *Journal of Cancer Survivorship*. 1-14. PMID: PMC8175926
95. Sanchez MLN*, Benjamin RH, Mitchell LE, Langlois PH, Canfield MA, **Swartz MD**[#], et al. (2021) Birth Defect Co-Occurrence Patterns Among Infants With Cleft Lip and/or Palate. *The Cleft Palate-Craniofacial Journal*. PMID: 33906455
96. Diaz D, Benjamin RH, Sanchez MLN, Mitchell LE, Langlois PH, Canfield MA, Chen H, Scheuerle AE, Schaaf CP, Scott DA, Northrup H, Ray JW, McLean SD, **Swartz MD**[#], Ludorf KL, Lupo PJ, Agopian AJ (2021) Patterns of congenital anomalies among individuals with trisomy 13 in Texas. *Am J Med Genet A*. 185(6):1787-1793. PMID: PMC8193718
97. Aggarwal P*, Goepfert RP, Garden AS, Garg N, Zaveri JS, Xianglin L, **Swartz MD**, et al. (2021) Risk and Clinical Risk Factors Associated With Late Lower Cranial Neuropathy in Long-term Oropharyngeal Squamous Cell Carcinoma Survivors. *JAMA Otolaryngol Head Neck Surg*. 147(5):469-478. PMID: PMC7863016

98. Nyitray AG, Schick V, **Swartz MD**, Guiliano AR, Fernandez ME, Deshmukh AA, Ridolfi TJ, Ajala C, Brzezinski B, Sandoval M, Nedjai B, Smith JS, Chiao EY. (2021) Rationale and design of the Prevent Anal Cancer Self-Swab Study: a protocol for a randomized clinical trial of home-based self-collection of cells for anal cancer screening. *BMJ Open* 11(6): e051118. PMID: PMC8245463
99. Tai H*, **Swartz MD**, Marsden D, Perry CL. (2021) The Future of Substance Abuse Now: Relationships among Adolescent Use of Vaping Devices, Marijuana, and Synthetic Cannabinoids. *Subst Use Misuse*. 56(2):192-204. PMID: 33412950
100. Greene TJ*, DeSantis SM, Brown DW, Wilkinson AV, **Swartz MD**#. (2021) A machine learning compatible method for ordinal propensity score stratification and matching. *Stat Med*. 40(6):1383-1399. PMID: 33352615
101. Brown DW*, Greene TJ*, **Swartz MD**#, Wilkinson AV, DeSantis SM. (2021) Propensity score stratification methods for continuous treatments. *Stat Med*. 40(5):1189-1203. PMID: 33305367
102. Ludorf KL*, Benjamin RH, Sanchez MLN, McLean SD, Northrup H, Mitchell LE, Langlois PH, Canfield MA, Scheuerle AE, Scott DA, Schaaf CP, Ray JW, Oluwafemi O, Chen H, **Swartz MD**#, Lupo PJ, Agopian AJ. (2021) Patterns of co-occurring birth defects among infants with hypospadias. *J Pediatr Urol*. 17(1):64.e1-64.e8. PMID: PMC7935759
103. Valerio-Shewmaker MA, DeSantis SM, **Swartz MD**, Yaseen AS, et al. 9/1/2021 Strategies to estimate prevalence of SARS-CoV-2 antibodies in a Texas vulnerable population: results from phase I of the Texas Coronavirus Antibody REsponse Survey (TX CARES). *Frontiers of Public Health*, Accepted November 2021. (Also on medRxiv [Preprint].doi: <https://doi.org/10.1101/2021.08.04.21261613> PMID: PMC8712464
- 2022**
104. Navarro Sanchez ML*, **Swartz MD**, Langlois PH, Canfield MA, Agopian AJ. Epidemiology of Non-syndromic, Orofacial Clefts in Texas: Differences by Cleft Type and Presence of Additional Defects. *The Cleft Palate Craniofacial Journal*. Accepted Jan 2022.
105. Whitworth KW, Rector A*, Ish J*, Chuhan SPJ, Ibarluzea J, Guxens M, **Swartz MD**, Symanski E, Iniguez C. (2022) Identifying sensitive windows of exposure to NO₂ and fetal growth trajectories in a Spanish Birth Cohort. *Epidemiology*, doi: 10.1097/EDE. 0000000000001468. PMID 35213509.
106. Messiah SE, DeSantis S, Leon-Novelo L, Yashar T, Brito F, Kohl III, HW, Valerio-Shewmaker, Ross J, **Swartz MD**, Yaseen A, Kelder SH, Zhang S*, Omega-Njemnobi OS, Gonzalez MO, Wu L, Boerwinkle E, Lakey D, Shuford JA, Pont SJ. (2022) Durability of SARS-CoV-2 Antibodies from Natural Infection in Children and Adolescents. *Pediatrics*. DOI:10.1542/peds.2021-055505.

107. Ish J, Gimeno Ruiz de Porras D, Symanski E, Ballester F, Casas M, Delclos GL, Guzems M, Ibarluzea J, Iniguez C, Loreto, S, **Swartz MD**, Whitworth KW. (2022) Maternal occupational exposures and fetal growth in a Spanish birth cohort. PLoS One. doi: 10.1371/journal.pone.0264530. PMID: PMC8989310.
108. Benjamin RH, Navarro Sanchez ML, Mitchell LE, Langlois PH, Canfield MA, Chen H, Scheuerle AE, Schaaf CP, Scott DA, Northrup H, Ray JW, **Swartz MD**, Lupo PJ, Agopian AJ. (2022) Birth defect co-occurrence patterns in the Texas Birth Defects Registry. Pediatric Research. 91 (5) 1278-1285. 10.1038/s41390-021-01629-w. PMID: PMC8716666
109. Ish J, Symanski E, Gimeno Ruis de Porras D, Casas M, Delclos GL, Guxens M, Ibarluzea JM, Iniguez C, Lertxundi A, Rebagliato M, **Swartz MD**, Whitworth KW. (2022) Maternal occupational exposure to chemicals and child cognitive function. Pediatric Research doi: 10.1038/s41390-022-02089-6.
110. **Swartz MD**, DeSantis SM, Yassen A, Brito FA, Valerio-Shewmaker MA, Messiah SE, Leon-Novelo LG, Kohl HW, Pinzon-Gomez CL, Hao T*, Zhang S*, Talebi Y*, Yoo J*, Ross JR, Gonzalez MO, Wu L, Kelder SH, Silberman M, Tuzo S, Pont SJ, Shuford JA, Lakey D, Boerwinkle E. 2022, in press). Antibody duration after infection from SARS-CoV-2 in the Texas Coronavirus Antibody Response Survey. Journal of Infectious Disease.
111. Messiah SE, Hao T, DeSantis SM, **Swartz MD**, Talebi Y, Kohl HW, Zhang S, Valerio-Shewmaker M, Yaseen A, Kelder SH, Ross J, Gonzalez MO, Wu L, Padilla LN, Lopez KR, Lakey D, Shuford JA, Pont SJ, Boerwinkle E. (2022, in press). Comparison of Persistent Symptoms following SARS-CoV-2 Infection by Antibody Status in Non-hospitalized Children and Adolescents. The Pediatric Infectious Disease Journal.
112. Gallardo KR*, Narendorf SC, Markham CM, **Swartz MD**, & Santa Maria D (2022, in press). Hidden champions: Exploring supportive family relationships of youth experiencing homelessness. Child & Family Social Work.
113. Swartz MC, Lewis ZH, Deer RR, Stahl AL*, **Swartz MD**, Christopherson U, Basen-Engquist K, Wells SJ, Silva, HC, Lyons EJ. (2022, in press) Feasibility and acceptability of an active video game-based physical activity support group (Pink Warrior) for breast cancer survivors: a randomized controlled pilot trial. JMIR Cancer.
114. Dharia P, **Swartz MD**, Bernhardt MB, Chen H, Gramatges MM, Lupo PJ, Brown AL, Scheurer ME. (2022, in press). Clinical and demographic factors contributing to asparaginase-associated toxicities in children with acute lymphoblastic leukemia. Leukemia & Lymphoma (ILAL).
115. DeSantis SM, Leon-Novelo LG, **Swartz MD**, Yassen AS, Valerio-Shewmaker MA, Talebi Y, Brito FA, Ross JA, Kohl HW, Messiah SE, Kelder SH, Wu L, Zhang S, Aguillard KA, Gonzalez MO, Omega-Njemnob OS, Lakey D, Shuford JA, Pont S, Boerwinkle E. (2022, in press) Methodology to estimate natural- and vaccine-induced antibodies to SARS-CoV-2 in a large geographic region. PLOS ONE.

b. Book Chapters in Edited Volumes

1. Kwon DW, Kim S, Dahl D, **Swartz M[#]**, Tadesse MG, Vannucci M. Identification of DNA regulatory Motifs and regulators by integrating gene expression and sequence data. In: Bayesian Inference for Gene Expression and Proteomics. Ed(s) Kim-Anh Do, Peter Mueller, Marina Vannucci. Cambridge University Press, 2006
2. Peterson C*, **Swartz MD[#]**, Shete S, and Vannucci M. Bayesian model averaging for genetic association studies. In *Advances in Statistical Bioinformatics: Models and Integrative Inference for High-Throughput Data*, Ed(s) K. Do, Z.Qin, and M. Vannucci. Cambridge University Press, 2013

2. Grants and Contract Awards

a. Current Funding:

Role: Co-Investigator (PI: Boerwinkle) 09/21/2021-09/20/2025 1.20 CM
DHHS/ONC 90PH0003/01-00 \$9,754,247

The Public Health Informatics & Technology (PHIT) Workforce Development Program

The goal of this project is to focus on reducing the nation’s health disparities and inequities by expanding the number of public health professionals trained in public health informatics and technology.

Role: Co-Investigator (PI: Boerwinkle) 08/07/2020 – 02/28/2024 3.0 CM
TDSHS (New) HHS000866600001 \$6,702,047

Texas Coronavirus Antibody Response Surveillance

This project will track how SARS-CoV-2 infections progress through the population over time in order to plan for future health care needs and understand risk factors for clinical disease, such as age, social exposures, or underlying health outcomes.

Role: Co-Investigator (PI: Agopian) 08/25/2018 - 06/30/2023 1.20 CM
NIH 1R01HD093660-02 \$339,901

A multidisciplinary approach for identifying and characterizing novel congenital malformation syndromes

Over 50% of children with multiple malformations seen in medical genetics clinics for a suspected genetic syndrome never receive a diagnosis, which leaves unanswered questions about prognosis and medical/reproductive planning. Our study is relevant to public health because we will identify new multiple malformation syndromes (MMS), characterize these MMS in a clinical population, and explore the genetic underpinnings of these syndromes. These results would lead to: 1) expectations for disease progression and improved medical

management and reproductive planning and 2) the foundation needed for the development of therapies that could improve the health of affected patients and/or prevent the occurrence of these MMS.

Role: Co-Investigator\subcontract PI 03/01/2019 - 02/29/2024 2.16 CM
(PI: Whitworth)
NIH 1R01ES028842-01A1 \$258,466

Fine Particulate Matter, Fetal Growth & Neurodevelopment: Examining Critical Windows of Susceptibility

Both pre- and post-natal exposure to particulate matter have been associated with adverse child neurodevelopmental outcomes, though important questions regarding critical windows of exposure remain unanswered. The primary goal of the proposed study is to evaluate critical windows of exposure to PM with aerodynamic diameter <2.5 microns (PM2.5) on child cognitive and behavioral outcomes at ages four and seven, and a secondary goal is to examine whether these associations are moderated by (or in the case of prenatal exposures moderated by and mediated through) fetal growth. Given rapid development during fetal development, infancy and early childhood, a more complete understanding of the mechanism through which pre- and postnatal air pollution exposures affect child neurodevelopment, as well as the important windows of susceptibility, could inform interventions aimed at reducing early exposures and ultimately decreasing disease burden.

Role: PI of DCC (Clinical PI: Cox) 03/08/2018 - 02/28/2021 2.40 CM
MEDICAL TECHNOLOGY \$84,787
ENTERPRISE W81XWH-15-9-0001

Agreement between the Medical Technology Enterprise Consortium "MTEC" and its members

Split agreement with McGovern Medical School, Center for Translational Injury research, Department of Surgery to investigate the use of Stem cells to improve\reduce complications from trauma.

Role: Co-investigator (PI: Zheng) 9/1/2017-08/31/2022 Effort: 5%
CPRIT RP1706688 \$1,549,315

Data Science and Informatics Core for Cancer Research

The goals of this project are to establish a Data Science and Informatics Core to support cancer prevention and research in Texas by data science and informatics infrastructure and methodologies for data analysis and mining.

Role: PI of Subcontract (PI: Kendzor) 07/08/2015-06/30/2022 Effort: 5%
Ohio University Health Science Ctr. \$1,619,450
(NIH/NCI 1R01CA197314)

Small Financial Incentives to Promote Smoking Cessation in Safety Net

September 20, 2022

16

Hospital Patients

To evaluate the effectiveness (relative to usual care) of an adjunctive CM intervention to improve smoking abstinence rates among socioeconomically disadvantaged individuals participating in a smoking cessation program. My role will be to direct and conduct the analysis using hierarchical models.

b. Completed Funding:

Role: Co-investigator (PI: Nyitray) 09/17/2018-08/31/2021 Effort: 5%
Med. College of Wisconsin/NIH \$350,868

Determining the Accuracy of Self- and Partner Anal Exams for Detecting Anal Abnormalities

The long-term goal of this study is to decrease morbidity and mortality from anal cancer by increasing detection of anal canal tumors through self- or partner-palpation of the anal canal. Our overall objective is to determine the viability of the ASE and ACE by assessing exam accuracy and consistency of results in two clinic sites.

Note: Nyitray, the PI for the Prevent anal cancer palpation study changed institutions to the Medical College of Wisconsin, and transitioned statistical support, so the study is ongoing, but I am no longer funded on it. I designed the study in collaboration with Nyitray, helped set up the study and facilitated transition to a statistician at MCOW.

Role: Co-investigator (PI: Nyitray) 9/15/2017-08/31/2021 Effort: 15%
NIH/NCI 1R01CA215403 \$594,607

Annual anal sampling using DNA screening to identify men who have sex with men at increased risk for anal cancer

The purpose of this research study is to find ways to screen for anal cancer among gay, bisexual, and other men who have sex with men (MSM) and transgender persons. This study will try to find out if persons will do annual anal cancer screening, what factors are associated with repeated screening, and how this affects a person's decision to have high-resolution anoscopy.

Role: Co-Investigator (PI: 09/26/2017-05/31/2021 Effort: 10%
Gonzalez)
NIH 5R01MD010733-03 \$542,318

M-Health to Increase Service Utilization Among Recently Incarcerated Homeless Adults

Case management and crisis counseling services reduce mental health and substance abuse problems, homelessness, and re-incarceration among recently incarcerated homeless adults, a disproportionately high minority population with substantial health disparities. There are many barriers (e.g., limited transportation, inability to schedule and keep appointments, limited knowledge of available services) that prevent recently incarcerated homeless adults from obtaining these needed services and few studies have identified predictors of re-

arrest and continued homelessness. The goals of this research are to: 1) assess the impact of an innovative smart phone application that will prompt and directly link recently incarcerated homeless adults to community-based case management services and resources, and 2) utilize in-person and smart phone based assessments to identify key variables (e.g., alcohol/drug use, social support, psychological distress, quality of life) that predict continued homelessness and re-arrest.

Role: Co-investigator (PI: Agopian) 12/1/2016-08/31/2018 Effort: 10%
NIH NICHD 1R01HD086120 \$300,000

Do Cesarean Deliveries Reduce Mortality in Infants with Birth Defects?

The goal of this study is to identify labor and delivery characteristics that are associated with improved survival of infants with open birth defects.

Role: Principal Investigator 06/1/2016-05/31/2018 Effort: 16%
NIH/NICHD R03HD083674 \$100,000

A Novel Trio-based Bayesian Method to Identify Rare Variants for Birth Defects

Goal: To develop a Bayesian hierarchical modeling approach to assess the rare variants associated with disease using a trio design (genotypes from the father, mother and child).

Role: Principal Investigator 1/16/2015-12/31/2017 Effort: 26%
Subcontract to Center for Trauma \$7,103,193
Injury Research (PI John Holcombe)

Prehospital Resuscitation on Helicopter Study (PROHS)

The objective of this study is to compare the effectiveness of two different existing prehospital resuscitation approaches in severely injured trauma patients transported by air ambulance in a pragmatic, multicenter, prospective observational study. The statistical analysis of this study will involve applying propensity scores, and developing a Bayesian model averaging approach to improve propensity score estimation.

Role: Collaborator (PI: John
Holcombe) Effort: 20%
Center for Translational Injury 6/1/2015-
Research 5/1/2015-
5/30/2018

Collaborations within The Center for Translational Injury Research. The Center for Trauma Injury Research is a research center within UT Health, responsible for research on the treatment and prognosis for patients with traumatic injury. The center sponsored 20% of my salary for collaborations with the center's faculty and students.

Role: Co-investigator (PI: Agopian) 1/1/2015-11/30/2016 Effort: 10%

September 20, 2022

18

NIH/NICHD 1R21Hd080805-01 \$430,525

Pesticides in tap water and congenital heart defects

Goal: To evaluate the relationship between atrazine exposure through home tap water and CHDs using existing data from two of the largest population-based studies of birth defects: the Texas Birth Defects Registry. My role will be directing the analysis using hierarchical models for clustered data.

Role: Co-Investigator (PI: Allicock) 2015-2016 Effort: 5% (In kind)

American Cancer Society IRG \$30,000

Using Smartphones to promote healthy behaviors among breast cancer survivors: A pilot study

This feasibility study for an 8 week intervention will recruit for 4 months and analyze preliminary data assessing a smart phone intervention for increasing healthy behaviors in breast cancer survivors. Hierarchical models for ecological momentary assessment will be used for the analysis.

Role: Co-Investigator (PI: Revere) 10/16/2014-09/30/2015 Effort: 10%

CMS PRPPR140058-01-00, \$2,078, 000

Center for Medicare & Medicaid

Services

Grants to states to support health insurance rate review and increase transparency in health care.

The overall goal of this project is to assist the Texas Department of Insurance in establishing a consumer based website for healthcare price transparency in Texas. Secondary goals include the on-going development of a comprehensive claims database which can be used by researchers to investigate trends are variations in healthcare prices and the continued research in the area of price transparency and variation

Role: PI of Subcontract (PI: Lupo) 9/11/2012-8/31/2014 Effort: 20%

Baylor College of Medicine \$132,411

(NIH/NIDCR R03DE012739)

Air Toxics, Neighborhood Environment and Risk of Oral Clefts

Goal: To investigate the association between hazardous air pollutant levels in neighborhood areas and the risk of Oral Clefts birth defects.

Role: Co-Investigator (PI: Mitchell) 8/1/2011-6/30/2013 Effort: 15%

NIH/NHLBI 5R21HL098844-02 \$436,011

Genomewide Association Study of Conotruncal Heart Disease

Goal: Identify genetic variants associated with the risk of conotruncal heart defects

Role: Principal Investigator 08/01/2009-07/31/2011 Effort: 10%

NIH/NCI R03CA141998 \$100,000

September 20, 2022

19

A Novel Bayesian Model Averaging Approach for Genome Wide Association Studies.

This project focuses on developing Bayesian model averaging approach for identifying risk genes using Genome wide association data.

Role: Principal Investigator 06/1/2007-05/31/2012 Effort: 75%
NIH/NCI K07CA123109 \$630,000

Bayesian Hierarchical Models: Nutrition, Genes & Environment

The main objectives of this grant were to first develop a hierarchical Bayesian modeling approach to incorporate nutrition, genetic and environmental information, and then to assess the associations between nutrition, genetic and environmental variables and lung cancer risk.

Role: Consultant (PI: Reyes-Gibby) 07/01/2008-06/30/2010 Effort: 10%
NIH/NCI R03CA128069 \$100,000

Cytokine Polymorphisms and Cancer Related Pain

To identify associations between key polymorphisms in cytokine genes and pain symptoms in cancer patients.

c. Pending Applications:

R01 (Swartz) 02/01/2022 – 01/31/2027 0.60
MD Anderson Cancer Center / \$255,457 calendar
NIH

Using wearables with personalized inference models to objectively evaluate the performance status of AYAs with cancer in real-life conditions

The subcontract responds to two aims: to develop ML models to objectively stratify AYAs with cancer by functional status using wearable sensors and to establish a protocol to monitor performance changes and administer functional capacity tests remotely, to aid clinical decision-making.

Role: Subcontract PI, Co-Investigator

R01 (Swartz) 12/01/2021 – 11/30/2026 1.44
MD Anderson Cancer Center / \$1,945,146 calendar
NIH

Impact of COVID-19 on Racial Disparities, Primary Care Utilization, Health Care Cost, and Health Outcomes among Racial/Ethnic Minority Groups Treated at FQHC

The overarching goal of the project is to leverage large-scale longitudinal EMR data to identify COVID-related health disparities, then integrate self-reported and objective measures to characterize the disparities. This will inform the implementation of a coordination of care and self-management intervention to address minority health disparities.

Role: Co-Investigator

R01HD104829 (Ganduliglia 12/01/2021 – 11/30/2026 1.20
Cazaban) \$3,877,950 calendar
NIH

Identifying Hospital Factors Associated with Improved Outcomes among Infants with Birth Defects

The goal of the project is to identify modifiable factors to improve survival and outcomes among infants with birth defects. By identifying delivery center characteristics that improve outcomes, this project is expected to facilitate improved delivery planning and have a direct and sustained impact on the field.

Role: Co-Investigator

R01 (Roberts)	04/01/2022 – 03/31/2026	0.60
NIH	\$1,560,000	calendar

Big Data for Small Disease: NLP-based transfer learning for low-prevalence phenotypes

This proposal seeks to identify generalizable principles for robust transfer learning for NLP-based phenotyping.

d. Training Grants (As a mentor)

1. 2011-present Mentor for T32 Training Grant Program In Biostatistics at UTHSC-SPH (Funded by National Institute of General Medicine Sciences, DeSantis, PI)
2. 2012-2014 mentor for R25 Training Grant on Innovative Multidisciplinary Education: The Statistical Genetics of Addiction (Funded by National Institute of Drug Addiction, Shete and Chang PI)
3. 2014-present Mentor for R25 Training Grant for Behavioral Science Education – Cancer Prevention and Control
4. Summer mentor for CPRIT training grant for undergraduate education

C. INVITED TALKS, PRESENTATIONS AND POSTERS

1. Invited Presentations (*=student, +=presenter)

1. **Swartz MD⁺** “Variable Selection in Genetics from Stochastic Search Gene Suggestion to TRIO_RVEMVS”, at Department of Statistics, National Cheng Kung University, Tainan Taiwan, October 29, 2021 (Virtual)
2. **Swartz MD⁺** “Selecting Important Variables and/or Genes across a variety of outcomes” Invited presentation at the Department of Biostatistics, at The University of Texas Medical Branch, Galveston, April 24, 2018
3. **Invited Panelist** (in a panel of 6) for ASPO Junior Members Session: “A Roadmap to Academic and Research Environments: Identifying and Choosing the Best Fit for your Career Goals.” American Society of Preventive Oncology meetings, 2017, Seattle, Washington (Organized by Scherezade Mama, DrPH and Maria Swartz, PhD, MPH, RD)
4. Stingo F, **Swartz MD⁺**, Vannucci M. “A Bayesian Approach to Identify Genes and Gene-level SNP Aggregates in a Genetic Analysis of Cancer Data” Special Invited Session on Modern Bayesian Statistics II, 2015 Joint ICSA and Graybill Conference, Fort Collins, Colorado, 6/2015

September 20, 2022

21

5. **Swartz MD⁺**. “Identifying Risk Factors for Disease with Bayesian Model Selection”, Department of Environmental and Occupational Health, College of Medicine, National Cheng Kung University, Tainan, Taiwan, 12/2014
6. **Swartz MD⁺**. “A Not So Random Walk Through Stochastic Search Variable Selection and Applications”, University of Southern California, Keck School of Medicine, Division of Biostatistics, Los Angeles, California, 9/2014
7. **Swartz MD⁺**. “Stochastic Search Gene Suggestion and Applications to Cancer” Houston Area Statistical Association, Houston, TX, 9/2013
8. **Swartz MD⁺**. “Using Ascertainment for Targeted Resequencing to Increase Power to Identify Causal Variants” presented at International Indian Statistical Association Meetings, (Invited Session) Raleigh, NC, 4/2011
9. **Swartz MD⁺**. “Bayesian Variable Selection in Practice” presented at University of Southern California, Keck School of Medicine, Division of Biostatistics, Los Angeles California, 6/2010
10. **Swartz MD⁺**. “Developing Bayesian Variable Selection Methods for Genetics and Epidemiology” presented at City of Hope, Division of Cancer Etiology, Duarte, CA, 6/2010
11. **Swartz MD⁺**. “Bayesian Variable Selection in Practice” Presented at Rice University, Department of Statistics, Houston, TX 4/2010
12. **Swartz MD⁺**. “Comparing Bayesian Variable Selection and Stepwise Selection Methods for Logistic Regression Models of Cases and Controls, (Invited Session) Bi-Annual Workshop on Nutrition, Biostatistics and Bioinformatics, College Station, TX, 10/4/2008
13. **Swartz MD⁺**. “Stochastic Search Gene Suggestion: Bayesians and Biology Meet again!” (*Biometrics* editor-invited session) Joint Statistical Meetings Salt Lake City, UT 8/2007
14. **Swartz MD⁺**. “Stochastic Search Gene Suggestion: A Bayesian Hierarchical Model for Gene Mapping” (Invited Session) International Biometrics Conference, Montreal, Canada 7/2006
15. **Swartz, MD⁺**. “Submitting a K07” Invited presentation for the U.T. M. D. Anderson post-doctoral association, 7/2006
16. **Swartz MD⁺**. “Stochastic Search Gene Selection: Trials and Tribulations” presented at University of Southern California, Keck School of Medicine, Division of Biostatistics, Los Angeles California, 7/2003

2. Contributed Abstracts and Conference Presentations (reverse chronological order; *=student, +=presenter)

1. Rector, AM⁺, Whitworth, KW, Iniguez, C., Chauhan, SP, Monica, G, Ibarluzea, J, Ish, J, Symanski, E and **Swartz, MD** (2021). Knot placement in the distributed lag nonlinear models framework. In 33rd annual conference of the international society for environmental epidemiology.

1. Wells SJ⁺, Brown BD, Mahadeo KM, Schadler KL, Chandra J, **Swartz MD**. Pre-COVID-19 food insecurity prevalence and risk factors in caregivers of pediatric cancer patients at a children's cancer hospital. American Society of Clinical Oncology, October 2020 (Virtual).
2. Gallardo K^{*+}, Santa DM, Narendorf S, Markham C, **Swartz MD**. Exploring supportive familial relationships among youth experiencing homelessness: A mixed-methods study. APHA Virtual Annual Meeting and Expo, October 2020.
3. Ish J^{*+}, Rector A^{*}, Iñiguez C, **Swartz MD**, Guxens M, Ibarluzea J, Symanski E, Chauhan SP, Whitworth KW. Identifying sensitive windows of exposure to NO₂ and fetal growth trajectories in a Spanish population-based birth cohort. ISEE Virtual Conference, August 2020.
4. Patt DA^{*+}, He B, Garey JS, Rowan P, **Swartz MD**, Linder S, Brooks BD, Neubauer MA. Driving quality improvement: How clinical decision support can facilitate compliance with evidence-based pathways. American Society of Clinical Oncology, May 2020 (Virtual).
5. Langabeer DM^{*+}, Krause T, Ganduglia C, Cecilia M, **Swartz MD**, Lopez DS, Bodurka DC. Are symptoms distinguishable in ovarian cancer? A nested case control study of insurance claims. American Society of Clinical Oncology, May 2020 (Virtual).
6. Swartz MC, Chou LN, **Swartz MD**, Lyons EJ, Mehta H, Karmarkar A, Middleton A, Basen-Engquist K, Giordano SH, Goodwin J. A Retrospective Study of Administrative Data to Identify Factors Associated with Future Disability Status among Older Colorectal Cancer Survivors. American Society of Preventive Oncology Annual Meetings, March 2020 (Virtual).
7. Aggarwal P^{*+}, Goepfert RP, Garden AS, Garg N, Zaveri J, Du XL, **Swartz MD**, Lai S, Fuller CD, Ferrarotto R. Risk and Predictors of Late Lower Cranial Neuropathy in Long-term Oropharyngeal Cancer Survivors Treated with Definitive Radiotherapy: A Retrospective Cohort Study among 1,988 Survivors. American Society for Radiation Oncology meetings October 2020 (Virtual).
8. Christopherson U⁺, Wells S, Parker N, Lyons E, **Swartz MD**, Blozinski A^{*}, Basen-Engquist K, Peterson S, Swartz M. The use of Videoconferencing and Active Video Games to Improve Physical Function and Health Outcomes Among Adolescent and Young Adult Cancer Survivors: A Systematic Review, American Congress of Rehabilitation Medicine, October 2020 (Virtual).
9. Langabeer DM^{*+}, Cazaban CG, **Swartz MD**, Lopez D, Alagappan K, Krause TM. Do Women Present to the Emergency Department (ED) with Symptoms Prior to Diagnosis of Ovarian Cancer? A Secondary Analysis of a Retrospective Study of Symptoms Experienced Prior to Diagnosis of Ovarian Cancer. American Academy of Emergency Medicine Annual Scientific Assembly, April 2020 (Virtual).
10. Swartz MD⁺, Candid Insights on Becoming Tenured Faculty at a State Institution. Joint Statistical Meetings 2020 (Virtual)

September 20, 2022

23

11. Swartz MD*, Rubrics and Flipped Classrooms: What are They and How Do They Work in Biostatistics Classes? Joint Statistical Meetings 2020 (Virtual)
12. **Swartz MD***, Rubrics and Flipped Classrooms: What are They and How Do They Work in Biostatistics Classes? Joint Statistical Meetings 2020 (Virtual)
13. Balogun T^{*+}, **Swartz MD**, Troisi CL, Beyda R. Regional Variation in Costs of Major Congenital Heart Defects Among Infants in Texas. APHA's Annual Meeting and Expo, November 2019
14. Gallardo KR^{*+}, Maria DS, Markham CM, Narendorf S, **Swartz MD**, Barman-Adhikari A, Hsu HT. Human Papillomavirus Vaccination Uptake Among Homeless Young Adults. Annals of Behavioral Medicine, 2019.
15. Swartz MC⁺, Chou LN, **Swartz MD**, Mehta H, Lyons EJ, Giordano S, Goodwin J. A Retrospective Study to Identify Factors Associated with Disability Status Among Older Breast Cancer Survivors. American Congress of Rehabilitation Medicine, November 2019
16. Nguyen L^{*+}, Franzini L, Cazaban CG, **Swartz MD**, Le P, Gardiner H, Averiss I, Lairson D. Regional Variation in Costs of Major Congenital Heart Defects Among Infants in Texas. AcademyHealth Annual Research Meeting, Washington D.C., June 2019
17. Nguyen L^{*+}, Averiss I, Cazaban CG, Franzini L, Lairson D, **Swartz MD**. Identification of Major Congenital Heart Defects in Infants in a Linked Data Set of Public Administrative Data and Vital Records. AcademyHealth Annual Research Meeting, Washington D.C., June 2019
18. Nguyen L^{*+}, Franzini L, Cazaban CG, **Swartz MD**, Le P, Gardiner H, Averiss I, Lairson D. Temporal and Regional Variation in the Prevalence of Major Congenital Heart Defects Among Texas Medicaid Insured Infants. AcademyHealth Annual Research Meeting, Washington D.C., June 2019
19. Yu D^{*} Sedory AC^{*}, Mohammadi K^{*}, Koslovsky MD, **Swartz MD**⁺ TRIO_RVEMVS: a fast Bayesian variable selection method for trios that identifies individual rare variants. International Genetic Epidemiology Society Meetings, San Diego CA October 2018
20. **Swartz MD**⁺, Greene TJ^{*}, Fox EE, Appana SN, Yi M, Kim S, Garcia E, Johnson JM, Podbielski J, Tomasek JS, Wade CE, Holcomb JB, DeSantis SM. Proposed Guidelines for interim monitoring of prospective observational studies planning to invoke propensity scoring as the primary analysis. Joint Statistical Meetings, Baltimore MD August 2017
21. Song J^{*+}, **Swartz MD**, Cox MG, Basen-Engquist K. Acc: an r package to process, visualize and analyze accelerometer data. Joint Statistical Meetings, Baltimore MD August 2017.
22. Greene TJ^{*+}, DeSantis SM, **Swartz, MD** Propensity Scoring Methods for Ordinal Treatments. Joint Statistical Meetings, Chicago IL, August 2016
23. Koslovsky, M^{*+}. **Swartz MD**, Deterministic Bayesian Variable Selection for Binary Outcomes. Joint Statistical Meetings, Seattle WA, August 2015

24. Song, J^{*+}, **Swartz MD**, Johnson J, Fujii T, Yamal J-M. High-dimensional variable selection models to predict occurrence of prostate cancer from gene expression profiles. Poster presentation at University of Texas School of Public Health Student Research Day, Houston, TX. April 9, 2015 (Won best poster award (1st place).
25. **Swartz MD⁺**, Cai Y^{*}, Chan W, Symanski E, Mitchell, LE, Danysh H, Langlois P, Lupo PJ. Using Bayesian Hierarchical models to simultaneously evaluate multiple pollutants associated with Spina Bifida. Joint Statistical Meetings, Seattle WA, August 2015.
26. **Swartz, MD⁺**, Koslovsky, MD^{*}, Vandewater, EA, and Wilkinson AV. A stochastic search through smoking images in movies, genetic and psychosocial factors associated with smoking initiation in Mexican American youths. Poster presented at the international Genetic epidemiology society meetings in Vienna, Austria, August 2014.
27. Cai Y^{+*}, **Swartz MD**, Chan W, Lupo P. A Bayesian model with shrinkage prior to solve the uncertainty of modeled hazard air pollutant concentrations. Poster presented at the Joint Statistical Meetings in Boston, MA, August 2014.
28. Song J^{+*}, **Swartz MD**. Comparison of variable selection methods for high dimensional data in applications to genetic association studies with gene-environment interactions. Poster presented at the Joint Statistical meetings in Boston, MA, August 2014
29. Beyda RM^{+*}, Benjamins LJ, Symanski E, **Swartz M**, Risser WL, Eissna M. Assessing Azithromycin Efficacy in Treatment of Chlamydia Trachomatis Presented in NASPAG, April 2013
30. **Swartz MD⁺**, Kim T^{*}, Niu J^{*}, Yu R, Shete S, Ionita-Laza, I. “Small Sample Properties of Rare Variant Analysis Methods” Talk presented at Genetic Analysis Workshop 18, Stevenson, WA, in 10/2012.
31. **Swartz MD⁺**, Peterson CB^{*}, Lupo PJ, Wu X, Forman MR, Spitz MR, Hernandez LM, Vannucci M, Shete S. Identifying Genetic and Nutritional Risk Factors for Lung Cancer Related to Folate Metabolism poster presented at American Institute for Cancer Research, Washington DC, 11/2011
32. **Swartz MD⁺**, Peterson, CB^{*}, Lupo PJ, Wu X, Forman MR, Spitz MR, Hernandez LM, Vannucci M, Shete S. “Searching through the Folate Metabolism Pathway and Nutritional Risk Factors for Lung Cancer Risk” poster presented at International Genetic Epidemiology Society Meetings in Heidelberg Germany 9/2011
33. **Swartz MD⁺**, Peng B, Reyes-Gibby CC, Shete S. “Increasing Power to Identify Causal Variants Using Ascertainment for Targeted Resequencing” talk presented at the Joint Statistical meetings Miami Beach, FL, 8/2011
34. **Swartz MD⁺**, Forman MR, Mahabir S, Etzel CJ. “Pooling Dietary Data Using Questionnaires with Open-ended and Predefined responses: Implications for comparing Mean Intake or Estimating Odds Ratios” poster presented at Cancer Prevention Research Institute of Texas, Innovations in Cancer Prevention and Research Conference, Austin, TX 11/2010

September 20, 2022

25

35. **Swartz MD⁺**, Peng B, Reyes-Gibby CC, Shete S. “Ascertained Samples for Targeted Resequencing Increases Power when Identifying Causal Variants” Poster presented at the International Genetic Epidemiology Society Meetings, Boston MA 10/2010
36. **Swartz MD⁺**, Peng B, Reyes-Gibby CC, Shete S. “Reducing Costs of Two Stage Genome Wide Association Studies, talk presented at Eastern North American Region of the International Biometrics Society, San Antonio, TX 3/2009
37. **Swartz MD⁺**, Yu RK, Shete S. “Finding Factors Influencing Risk: Comparing Variable Selection Methods Applied to Logistic Regression Models of Cases and Controls” talk presented at the Joint Statistical Meetings, Denver CO, 8/2008
38. **Swartz MD⁺**, Yu RK, Shete S. “Comparing Variable Selection Methods for Genetic Association Methods” Poster presented at the International Genetic Epidemiology Society Meetings, York, UK 9/2007
39. **Swartz MD⁺**, Barrera SL, Mahabir S, Etzel CJ, Eastham CA, Spitz MR, Forman MR. “Ethnic and Gender – Differences in USDA Pyramid Servings of Fruit and Vegetables Using a Modified Block FFQ.” Poster presented at the American Society for Preventive Oncology Houston, TX 3/2007
40. Schendel K⁺, Mahabir S, **Swartz M**, Barrera S, Dong Y, Spitz MR, Forman MR. “Dietary Intake of gamma and alpha Tocopherol Reduces Lung Cancer Risk” poster presented at the American Society for Preventive Oncology Houston, TX 3/2007
41. **Swartz MD⁺** and group 11 from GAW 15. “Group 11: Model Selection and Bayesian Methods” Talk Presented at the Genetic Analysis Workshop 15, St. Pete Beach FL, 11/2006
42. **Swartz MD⁺**, Shete S. “The null Distribution of Stochastic Search Gene Suggestion: A Bayesian Approach to Gene Mapping” Poster presented at the Genetic Analysis Workshop 15, St. Pete Beach, FL 11/2006
43. **Swartz MD⁺**, Mueller P, Kimmel M, Amos C. “Gene Mapping Meets Bayesian Model Selection in Stochastic Search Gene Suggestion” poster presented at the International Genetic Epidemiology Society Meetings, Netherlands, 9/2004
44. **Swartz MD⁺**, Mueller P, Kimmel M, Amos, C. “Stochastic Search Gene Suggestion: A Bayesian Hierarchical Model for Gene Mapping” talk presented at the Joint Statistical Meetings, Toronto, Canada 8/2004
45. **Swartz MD⁺**, Mueller P, Kimmel M, Amos C. “Approximating Linkage Disequilibrium Patterns as a Covariance Function”. Talk presented at the International Genetic Epidemiology Society Meetings, New Orleans LA, 11/2002
46. **Swartz MD⁺**, Mueller P, Kimmel M, Amos, C. “A Bayesian Model for Gene Mapping of a Complex Disease, talk presented at the Joint Statistical Meetings, New York, NY, 8/2002

47. **Swartz MD⁺**, Mueller P, Kimmel M, Amos C. “A Bayesian Model for Mapping a Complex Disease in the HLA Region of Chromosome 6,” Poster presented at the Valencia International Meeting on Bayesian Statistics 7, Tenerife, Spain 6/2002
48. **Swartz MD⁺**, Amos C. “Obtaining the Information for Estimating Disease Penetrance Using Sib Pairs” Talk presented at the Conference of Texas Statisticians, San Antonio TX, 4/2001
49. **Swartz MD⁺**, Amos, C. “Efficiencies of Various Methodologies for Estimating Penetrance” poster presented at The American Society for Human Genetics Meetings, San Francisco, CA, 10/1999

D. TEACHING and MENTORING

- **Classes Taught at UT School of Public Health**

Course	Cr.	Effort	Semester	Mean Overall Effectiveness Score	# students
PH1700: Intermediate Biostatistics	4	100%	Spring 2011	4.28	42
PH1700: Intermediate Biostatistics	4	100%	Summer 2012	4.71	8
PH1820: Applied Statistical Analysis 1	3	100%	Fall 2012	4.77	47
PH1820: Applied Statistical Analysis 1	3	100%	Spring 2013	5.00	36
PH1820: Applied Statistical Analysis 1	3	100%	Fall 2013	4.78	47
PH1820: Applied Statistical Analysis 1	3	100%	Spring 2014	4.88	17
PH1820: Applied Statistical Analysis 1	3	100%	Fall 2014	4.85	36
PH1820: Applied Statistical Analysis 1	3	100%	Spring 2015	4.80	27
PH1820: Applied Statistical Analysis 1	3	100%	Fall 2015	4.88	42
PH1820: Applied Statistical Analysis 1	3	100%	Spring 2016	5.00	19
PH 9996 Capstone	3	33.3%	Spring 2017	3.88	30 (10)
PH1820: Applied Statistical Analysis 1	3	100%	Fall 2017	4.89	28
PH 9996 Capstone (online)	3	11%	Spring 2018	3.6	139 (14)
PHM1690: Introduction to Biostatistics in Public Health	4	50%	Fall 2018	4.04	88

PHM 1700: Intermediate Biostatistics	4	100%	Spring 2019	4.36	49
PHM 1820: Regression Techniques	3	100%	Fall 2019	4.78	43
PH 1820L Applied Linear Regression	3	100%	Spring 2020	4.76	25
PHW 1700 Intermediate Biostatistics (Online, NEW format)	3	100%	Fall 2020	4.46	42
PHW 1820 Applied Linear Regression (Online, NEW format)	3	100%	Spring 2021	4.58	38
PHW 1700 Intermediate Biostatistics (Online)	3	100%	Fall 2021	3.77	34

- **Partial Classes**

- Teacher to teacher series: 1 lecture (invited) fall 2013 and spring 2014: “Effective Teaching for Biostatistics and Other Quantitative Topics”
- Visiting Panel Speaker for PH1997 Teaching and Learning for Biostatistics (1 class session)

- **Webinars**

- “Rubrics and Flipped Classrooms: What are they and how do they work in biostatistics classes?” Webinar for Teaching Statistics in Health Sciences section of American Statistical Association June 11, 2021 2pm ET (invited).

- **Thesis/ Dissertation Supervisor**

	Student’s Name	Degree Program	Study Period	Status or month/year of graduation
1.	Brown, Derek	PhD Biostatistics (co-directing with DeSantis).	May 2018- May 2019	Graduated May 2019; Dissertation: Novel Propensity Score Methods for multiple and Continuous Treatments: applications to EHR Data
2.	Cao, Ying	MS Biostatistics	Aug 2011- Aug 2012	Graduated Aug 2012; Thesis: “Detecting Genetic and Nutritional Lung Cancer Risk factors Related to Folate Metabolism using Bayesian Generalized Linear Models”
3.	Cheng, Lee	PhD Biostatistics	Oct 2010- Dec 2013	Graduated Dec 2013; Dissertation: “Developing

September 20, 2022

28

4.	Cho, Sungjin (Elin)	MS Biostatistics	Jan 2021-present	the follow-up Schedules for Women with Breast Cancer” Preparing Proposal
5.	Gambrie, Dhiraj D.	MPH Biostatistics	Jan 2014-May 2014	Graduated May 2014; Thesis: “Identifying Patient Characteristics associated with different Phenotypic Presentations of Lipodystrophy among Subjects with HIV”
6.	Greene, Thomas J.	PhD Biostatistics (Co-directing with DeSantis)	Aug 2015-Dec 2017	Graduated December 2017; dissertation: Utilizing Propensity Score Methods for Ordinal Treatments and Prehospital Trauma Studies
7.	Harish, Joshi	MS Biostatistics	Aug 2012-Dec 2013	Graduated Dec 2013; Thesis: Accessing the Power of Conditional Logistic Regression to Detect Gene-Gene Interactions in Case-Parent Trios with Application to Conotruncal Heart Defects
8.	Johnson, Jada	PhD Biostatistics (co-directing with Dr. DeSantis)	January 2018-Dec 2020	Graduated December 2020: An Integrated Genetic Propensity Score Approach to Adjust for Population Stratification in Genetic Association Studies
9.	Koslovsky, Matthew D.	PhD Biostatistics	Aug 2013-Dec 2016	Graduated December 2016: Deterministic Variable Selection Developments for Binary Outcomes
10.	Kovyrshina, Tatiana A.	MS Biostatistics	Jan 2013-Aug 2014	Graduated Aug 2014; Thesis “Molecular Pathway Activation in Cancer and Tissue Following Space

September 20, 2022

29

11.	Lin, Ye	MS Biostatistics	Aug 2012- May 2015	Radiation Exposure” Graduated May 2015: Comparing quantile imputation with other selected imputation methods for missing data with application to assess factors associated with self efficacy of physical activity in breast cancer survivors
12.	Manandhar, Pratik	MS Biostatistics	May 2014- Aug 2015	Graduated Aug 2015; Thesis: Investigating Work Place Intervention and Change in Metabolic Equivalence of Task Using Multilevel Data
13.	Niu, Jiangong	MS Biostatistics	Jan 2011- Dec 2011	Graduated Dec 2011; Thesis: “Comparison for Two Statistical Methods for Rare Variant Association Analysis”
14.	Ordonez, Adriana L.	PhD Biostatistics	Aug 2010- May 2019	Graduated May 2019 Dissertation: Stochastic Search Variable Selection Applied to a Bayesian Hierarchical Generalized Linear Model for Dyads
15.	Pan, Meiling	MS Biostatistics	May 2014- May 2016	Graduated May 2016 Thesis: Assessing Factors Associated with clusters of DNA Index Distribution in Patients with Cervical Neoplasia
16.	Pal, Navdeep	MS Biostatistics	Aug 2015- Dec 2015	Thesis: Factors Prognostic of Survival in Advanced Stage Uterine Papillary Serous Carcinoma
17.	Ramesh, Naveen	MS Biostatistics	Aug 2012- Aug 2014	Graduated Aug 2014; Thesis: “Theoretical investigation of the feasibility and accuracy of SNP discovery in extremely low coverage NGS-based cohort

September 20, 2022

30

18.	Rector, Alison	PhD Biostatistics	August 2018-present	studies.” Completing proposal
19.	Sedory, Abigail	MS Biostatistics	August 2014-Dec 2016	Thesis: Let’s Talk about Sex: A Dyadic Analysis Using Baseline Data from “The Secret of Seven Stones” Program on Communication Between Parent and Adolescent Youth about Initiation of Sex
20.	Yue Shi	MS Biostatistics	Jan 2021-May 2021	Graduated; Thesis: Assessing the relationship between temperature and Covid-19 daily cases.
21.	Song, Jaejoon	PhD Biostatistics	Aug 2013-Aug 2017	Graduated Aug 2017 Dissertation: Statistical methods for wearable sensor data.
22.	Zhao, Yang	MS Biostatistics	Aug 2011-Aug 2013	Graduated Aug 2013; Thesis: “Evaluation of Clinical Trial Designs for the Development of Targeted Agents”
23.	Zheng, Yefei	PhD Biostatistics	Jan 2013-Present	Preparing proposal

• **Academic Advisor**

	Student’s Name	Degree Program	Study Period	Status or month/year of graduation
1.	Cai, Yi	PhD Biostatistics	Aug 2013-May 2014	Formed dissertation committee (shifted to breadth advisor)
2.	Cao, Ying	PhD Biostatistics	Aug 2012-Dec 2013	Passed qualifiers, Chose a different research supervisor for dissertation, I became Bioinformatics breadth member of committee.
3.	Chan, Winston J.	MPH Biostatistics	Aug 2012-Dec 2014	Graduated Dec 2014
4.	Gao, Qianmiao	PhD Biostatistics	Fall 2015-Spring	Changed to another academic advisor for

September 20, 2022

31

			2017	dissertation
5.	Huang, Melin	PhD Biostatistics	Aug 2013- August 2016	Chose different advisor, Kept as member
6.	Jiang, Xinyang	PhD Biostatistics	Aug 2019- May 2021	Chose different advisor
7.	Kim, Ju Yeong	MS Biostatistics	Aug 2014- present	Developing proposal under Dr. Kayo Fujimoto
8.	Kaur, Kimenpreen	MS Biostatistics	Aug 2021- present	Completing Coursework
9.	Kwok, Daisy Z.	MS Biostatistics	Aug. 2021- present	Completing coursework
10.	Lin, Ye	MS Biostatistics	Aug 2012- May 2015	Graduated May 2015
11.	Liu, Lizhong	PhD Biostatistics	Aug 2019- present	Completing Coursework
12.	Liu, Yuanyuan	PhD Biostatistics	2015-2018	Completed qualifying exams established committee
13.	Liao, Yunqi (Vicky)	MS Biostatistics	Jan 2016- August 2017	Graduated August 2017
14.	Lopez-gamundi, Paula	MS Biostatistics	Aug 2016- May 2019	Graduated May 2019; co directed thesis.
15.	Maity, Suman	MPH Biostatistics	Aug 2017- Dec 2018	Graduated Dec 2018
16.	Makashir, Sumit B.	MPH Biostatistics	Aug 2011- Aug 2013	Graduated Aug 2013, Capstone.
17.	Qiao, Min	PhD Biostatistics	Jan 2014- Aug 2020	Graduated August 2020
18.	Khajeh-Sharafabadi, Mobin	MS Biostatistics	Aug 2021- present	Coursework
19.	Rector, Alison	PhD Biostatistics	Aug 2018- present	Studying for qualifying exam
20.	Retamoza, Cristina Olivia	MS Biostatistics	Fall 2015- Spring 2016	Left program for personal reasons
21.	Samarakoon, Lassana	MPH Biostatistics	Fall 2016- May 2018	Graduated May 2018
22.	Sedory, Abigail	PhD Biostatistics	Jan 2017- May 2020	Graduated May 2020
23.	Shi, Yue	MS Biostatistics	Aug 2019- 2021	Graduated May 2021
24.	Wu, Yiling	MPH Biostatistics	Aug 2014- May 2015	Graduated Capstone

September 20, 2022

32

25.	Zhang, Jun	PhD Biostatistics	Aug 2013- Dec 2016	Formed Dissertation committee with different advisor:
26.	Zhang, Wen	PhD Biostatistics	Aug 2018- present	Preparing proposal
27.	Zhang, Shiming	PhD Biostatistics	Aug 2020- Present	Coursework
28.	Zhu, Huirong	PhD Biostatistics	Aug 2011- May 2013	Passed Preliminary Exams; Chose a different advisor

• **Member of the Academic/Thesis/Dissertation Committees for Student**

	Student's Name	Degree Program	Study Period	Status or month/year of graduation
1.	Aggarwal, Puja	PhD Epidemiology	Jan 2017-Dec 2019	Graduated Dec 2019
2.	Archer, Natalie P.	PhD Epidemiology (Biostatistics minor)	Aug 2012-July 2015	Graduated Dec 2016
3.	Azadeh, Shabnam	PhD Biostatistics (Bioinformatics breadth)	Apr 2014-Dec 2015	Graduated Dec 2015
4.	Balogun, Titilola B.	DrPH MPACH	Oct 2015-Aug 2016	Graduated August 2016
5.	Bell, Cynthia S.	PhD Epidemiology	Aug 2015-May 2020	Graduated May 2020
6.	Beyda, Rebecca M.	MS Epidemiology (Biostatistics minor)	Apr 2012-2013	Graduated May 2013
7.	Bluethman, Shirley	PhD Behavioral Science (biostatistics minor)	May 2012- Dec 2012 (qualifying exam committee)	Graduated May 2014
8.	Cao, Ying	PhD Biostatistics (Bioinformatics breadth)	Dec 2014-Aug 2015	Graduated May 2015
9.	Carey, Felicia R.	PhD Epidemiology	Jun 2016- present	Graduated May 2017
10.	Chen, Naomi	PhD Behavioral Science (Biostatistics minor)	May 2011-Jul 2012 (qualifying exam committee)	Graduated May 2014

11.	Chen, Ting-yu	PhD Boistatistics	Aug 2018-Aug 2019	Graduated Aug 2019
12.	Crews, Jonathan	MS Epidemiology (Biostatistics Minor)	Nov 2013-May 2014	Graduated May 2014
13.	Dharia, Priyadarshani	PhD Epi (Biostatistics minor)	August 2017-Dec 2019	Graduated Dec 2019
14.	Dacruz, Jina	PHD Behavioral Science (Biostatistics Minor)	Jan 2012-Dec2012 (qualifying exam committee)	Passed Qualifying Exam
15.	Des Bordes, Jude K. A.	DrPh Community Health (Biostatistics minor)	Nov 2011-Dec 2014	Graduated Dec 2014
16.	Deshmukh, Ashish A.	PhD Management (Biostatistics minor)	Oct 2011-June 2014	Graduated Aug 2014
17.	Dong, Zhe	MPH Biostatistics	Aug 2016-May 2017	Graduated May 2017
18.	Elsayem, Ahmed	MPH MPACH	Jan 2015-May 2015	Graduated May 2015
19.	Fowler, Sharon	PhD Epidemiology	July 2017-Aug 2019	Graduated Aug 2019
20.	Gallardo, Kathryn	PHD Behavioral Science	March 2017-May 2020	Graduated May 2020
21.	Garcia, Elysia A.	PhD Biostatistics	Aug 2018-May 2020	Graduated May 2020
22.	Goddu, Sumana	MPH Epidemiology	Jan 2013-May 2013	Graduated May 2013
23.	Haddock, Nicole M.	PhD Behavioral Science	Jan 2011-Dec 2013	Graduated May 2014
24.	Hale, Jennifer	PhD Epidemiology	Jan 2021-present	Proposed May 2021
25.	Hoang, Thanh T.	PhD Epidemiology	Jan 2016-May 2018	Graduated May 2018
26.	Huong, Melin	PhD Biostatistics (Breadth advisor)	Aug 2016-Dec 2017	Graduated December 2017
27.	Hale, Jennifer	PhD Epidemiology	Jan 2021-present	Successfully proposed.
28.	Ish, Jennifer	PhD Epidemiology	May 2019-May 2021	Graduated may 2021
29.	Jackson, Nsikak Monday	PhD MPACH	Summer 2020-present	Proposal Sep 2020

September 20, 2022

34

30.	Jemima John	PhD Epidemiology	Nov 2016-present	Graduated August 2017
31.	Kaipust, Christopher	MPH Epidemiology	Jan 2014-Aug 2014	Graduated Aug 2014
32.	Kanywa Jacqueline B.	MPH Epidemiology	Aug 2012-Aug 2013	Graduated Aug 2013
33.	Kimmel, Barbara	DRPH Behavioral Science	May 2014-May 2019	Graduated May 2019
34.	Langabeer, Denise	PhD Management	April 2015-May 2019	Graduated May 2019
35.	Lawler (Morales), Sylvia M.	PhD Behavioral Science	Jan 2013-Jan 2015	Passed Preliminary Exam Graduated May 2019
36.	Li, Chang	PhD Epidemiology	Jan 2017-Aug 2018	Graduated Aug 2018
37.	Liang, Fu-Wen	PhD Biostatistics	Jan 2012-Aug 2012	Graduated Aug 2012
38.	Liu, Zhiyue	PhD Epidemiology	Aug 2014-Dec 2016	Graduated Dec 2016
39.	Varuna Manthena	MS Epidemiology	Feb 2015-Dec 2015	Graduated Dec 2015
40.	McMillan, Jermaine	PhD Management and Policy Sciences	Aug 2019-May 2020	Graduated May 2020
41.	Mohammadi, Kusha Alexander	PhD Biostatistics	Aug 2019-May 2020	Graduated May 2020
42.	Navarro Sanchez, Maria Luisa	MS Epidemiology	Jan 2020-Aug 2020	Graduated August 2020
43.	Nguyen, Chi H.	PhD Epidemiology	May 2014-Dec 2017	Graduated December 2017
44.	Nguyen, Linh	PhD Management and Policy Sciences	Aug 2015-Dec 2018	Graduated Dec 2018
45.	Nguyen, Nga T. H.	PhD Epidemiology	May 2014-May 2016	Graduated May 2016
46.	Nguyen, Nhung	PhD Epidemiology	Dec 2013-May 2015	Graduated May 2015
47.	Patt, Debra	PhD Management and Policy Sciences	Aug 2019-May 2020	Graduated May 2020
48.	Prasad, Sapna	PhD Management	May 2014-Aug 2017	Graduated August 2017
49.	Priyanka,	MPH	May 2014-Dec	Graduated Dec

September 20, 2022

35

	Priyanka	Epidemiology	2014	2014, MPH Thesis.
50.	Qi, Xinyue	PhD Biostatistics	Aug 2019-Aug 2020	Graduated August 2020
51.	Qiu, Xueting	MS Epidemiology	August 2014-August 2015	Graduated August 2015
52.	Rao, Xiayu	MS Biostatistics	Aug 2012-Dec 2012	Graduated December 2012
53.	Rednam, Surya P. R.	MS Epidemiology	Jan 2011-May 2013	Graduated May 2013
54.	Rios, Debra	DrPH Behavioral Science	Aug2014-Dec 2016	Graduated December 2016
55.	Sabella, Theresa	PhD Management and Policy Sciences	Sum 2020-present	Graduated Spring 2021
56.	Sauceda, Viridiana I.	MS Epidemiology	Aug 2011-Dec 2015	Committee Discontinued
57.	Shailesh, Advani	PhD. Epidemiology	Jan 2014-Dec 2017	Graduated Dec 2017
58.	Christine Spencer	PhD Epidemiology	Fall 2015-Dec 2017	Graduated December 2017
59.	Tai, Hsiangyi	DrPH Health Promotion/Health Education	Aug 2017-Aug 2018	Graduated Aug 2018
60.	Tran, Ly	PhD Epidemiology	Dec 2013-August 2014	Graduated Aug 2014
61.	Truong, Van T.T.	MS Epidemiology	Jan 2014 - August 2014	Graduated Aug 2014
62.	Ukhanova, Maria A.	PhD Health Services Research	May 2014-Dec 2017	Graduated December 2017
63.	Wang, Zhe	PhD Epidemiology (minor advisor)	August 2016-Dec 2018	Graduated December 2018
64.	Winston, Courtney	DrPH Health Promotion/Health Education	Aug 2012-Dec 2012	Graduated Dec 2012
65.	Yang, Christine	MS Epidemiology	May 2014-May 2015	Graduated May 2015
66.	Yang, Yunju	PhD Epidemiology	Jan 2019-May 2020	Graduated May 2020
67.	Yay Donderici, Elifnur	PhD Management and Policy Sciences	Jan 2018-Aug 2020	Graduated August 2020
68.	Yu, Duo	PhD Biostatistics	Aug 2020-Summer 2021	Graduated Summer 2021
69.	Yu, Xiaoying	PhD. Biostatistics	November 2014-May	Graduated May 2015.

September 20, 2022

36

- **Junior Faculty Mentoring at UT HEALTH**
 - a. Soeun Kim, PhD, Assistant Professor, Department of Biostatistics School of Public Health, February 2017-September 2018 (left for family reasons.)
 - b. MinJae Lee, Assistant Professor, Department of Biostatistics, Epidemiology and Research design, McGovern School of Medicine, June 2017-Aug 2020
 - c. Luis Leon-Novelo, Assistant Professor, Department of Biostatistics and Data Science, School of Public Health, April 2018-present
 - d. Cici Bauer, Assistant Professor, Department of Biostatistics and Data Science, School of Public Health, November 2020-present
 - e. Abigail Sedory, Assistant Professor, Non-tenure teaching track, Department of Biostatistics and Data Science, School of Public Health, August 2019-present

E. TEACHING RELATED SERVICE

- f. **Within the Department of Biostatistics**
 - Chair of the PH1700: Intermediate Biostatistics Curriculum Committee, Division of Biostatistics, School of Public Health, University of Texas-Houston, 2010-2014
 - Member of the qualifying exam committee, Division of Biostatistics, School of Public Health, University of Texas-Houston, 2010-present
 - Co-Chair of Committee for Education for the Department September 2017-present
 - Chair of Education subcommittee for Teaching Quality and Efficiency for the department. September 2017-present
 - Chair of Biostatistics Introductory course Development Committee September 2017-Present
 - Alternate for department curriculum coordinator September 2017-present
 - Chair of Online teaching/new education program development 2019-present
- g. **Within U.T. School of Public Health**
 - Alternate Member of the School Wide Curriculum Committee, School of Public Health, University of Texas-Houston, 2010-2014
 - Member of the Practice Council, School of Public Health, University of Texas-Houston, 2011-2017
 - Member of Departmental Admissions committee for Biostatistics graduate program 2012-2015
 - Chair of Departmental Admissions committee for Biostatistics graduate program 2014-2015
 - Representative of the Department of Biostatistics to the Schoolwide admissions committee 2014- 2015
 - Alternate Member for Academic Council 2017-present
 - Undergraduate mentor for CPRIT training grant, student: Margaret Steiner Summer 2016

- Faculty Lead Quantitative & Biostatistical Tutoring Services 2021-Present
- h. Within U.T. Health Science Center**
 - 10% effort devoted to the UT System Institute of Transformational Learning to develop a Biostatistics Critical Thinking Course. November 2014-2016 (Lead of committee to develop modules 3 and 4).
 - UTHHealth-MD Anderson Joint working group to establish a School of Population health (Co-covener of sub-committee on data science curriculum) 2019-present
- i. Serving the Greater Houston Area**
 - Facilitated Enrichment group
 - ASA Traveling short course: Applied Mixed Models taught by Dr. Linda Young, Houston, Texas, **Co-chair** of Organizing Committee, course date: April 28, 2012
 - ASA Traveling Short Course: Applied Logistic Regression, Taught by Dr. Rod Sturdivant, Houston, Texas, **Member** of Organizing Committee, course date: January 9, 2015
- j. Serving at the National Level**
 - Leading a Round table discussion at the Joint statistical meetings: **Swartz, MD** and Yamal JM, "Technology in the Classroom: New levels of teaching and learning statistics", Round table discussion at the Joint Statistical Meetings, in Boston, MA, August 2014
 - Leading a Round table discussion at the Joint Statistical Meetings: **Swartz, MD**, "Rubrics and flipped classrooms: What are they and how do they work in biostatistics classes?" Round table discussion at the Joint Statistical Meetings, in Philadelphia, Pennsylvania, August 2020.

F. OTHER SERVICE

- **Within the Department of Biostatistics and Data Science**
 - a) Chair of the Junior Faculty Quality of Academic Life Committee, Division of Biostatistics, School of Public Health, University of Texas-Houston, 2010-2011, reprise 2013-2014.
 - b) Member of ad hoc committee for academic misconduct Spring, 2014
- **School Wide Service**
 - a) Member of the AIP review committee, School of Public Health, University of Texas-Houston 2012
 - b) Internal Reviewer for the Front of the Envelope applications, internal funding mechanism for the school of public Health, University of Texas-Houston, 2012
 - c) Member of Faculty Search Committee for NTT assistant professor of Biostatistics School of Public Health, University of Texas-Houston, July-September 2013
 - d) Representative of the Department of Biostatistics to the Practice Council 9-1-2013-December 2017
 - e) Member of Interfaculty Council June 1, 2017-August 31, 2021
 - f) Department of Biostatistics and Data Sciences representative for CEPH

September 20, 2022

38

accreditation\ self study (2018-2019 accreditation cycle; as alternate for curriculum coordinator).

- g) Member of Faculty Search Committee for Open Rank Tenure Track Position with the Center for Community Health Impact El Paso Campus 2020-Present
- h) Building Planning Committee Summe2 2022-present

- **Professional Service**

- a. Collaborating Statistician for the Birth Defects Epidemiology and Surveillance Branch of Texas Department of State Health Services 2013-PRESENT
- b. Grant Review Study Section
 - Ad hoc reviewer for CASE-EPIC section 10 ZRG1 PSE K(90) June 20-23, 2015
 - Ad hoc reviewer for CASE-EPIC section 10 ZRG1 PSE K(90) October 29-30, 2015
 - Ad hoc reviewer for CHSA study section June 27-28, 2016
 - Ad hoc reviewer for CHSA study section October 26-27, 2016
 - Ad hoc reviewer for SEP ZEB1 OSR-C review November 2, 2017
- c. Organization of Conferences/Symposia (Include Chairing Session)
 - Joint Statistical Meetings, Boston, MA, Session 210288 Bayesian Biostatistics **Session Chair**, Conference date August 2014
 - 3rd Bi-annual workshop on Nutrition, Biostatistics and Bioinformatics, Texas A&M, College Station, TX, **Organizing committee**, conference date 2/2012,
 - Eastern North American Region of the International Biometric Society, Contributed Papers: Genetic Studies with Related Individuals (last minute substitution), San Antonio, TX, **Session Chair**, conference date 3/2009
 - Eastern North American Region of the International Biometric Society, Contributed Papers: Variable Selection Methods, San Antonio, TX, **Session Chair**, conference date 3/2009
 - Eastern North American Region of the International Biometrics Society Meetings, Contributed session: Current Advances in Modeling Time Course Gene Expression Data, Austin, TX, **Session Chair**, conference date 3/2005
 - Joint Statistical Meeting, Topic contributed session: From Genotypes to Expression Arrays: Complex Analysis of Genetic Data, Toronto, Canada, **Organizer**, conference date 8/2004
 - Eastern North American Region of the International Biometrics Society, Contributed session: Bayesian Designs and Nonparametric Bayesian Methods, Charlotte, NC, **Session Chair**, conference date 3/2001
- d. Reviewer for Professional Journals (Chronological Order)
 - Reviewer, Genetic Analysis Workshop Summary Paper, Genetic

September 20, 2022

39

Epidemiology 2007

- Reviewer, Computational Statistics and Data Analysis 2007, 2013
 - Reviewer, Computational Chemistry: Advances and Applications, 2008
 - Reviewer, International Journal of Obesity, 2008, 2012
 - Reviewer Computational Statistics 2012
 - Reviewer, Annals of Human Genetics, 2009
 - Reviewer, Genetic Analysis Workshop 17, BMC proceedings 2011.
 - Reviewer, Genetics Research, 2011
 - Reviewer Genetic Epidemiology 2011-2015
 - Reviewer PLOS Genetics 2011, 2012,
 - Reviewer PLOS One 2012, 2013
 - Reviewer BMC Bioinformatics 2013
 - Reviewer Tumor Biology 2014
 - Reviewer Statistical Applications in Genetics and Molecular Biology 2014-2015
 - Reviewer Biometrics 2020
- e. General Service to Statistics
- Secretary of the Houston Area Chapter of the American Statistical Association 2006-2015
 - Judge for student poster competition at the Conference of Texas Statisticians, Houston, TX, 2013
 - Judge for the Special Award in Statistics for the Houston Science Fair 2012

G. Continuing Education

- Introduction to Data Mining; August 8, 2004, (Toronto, Canada; offered by American Statistical Association)
- NIEHS SNPs workshop, August 14-15, 2007 (Galveston, Texas; offered by NIEHS)
- Design and Analysis of Epidemiologic Studies of Gene-Environment Interactions, August 3, 2008 (Denver, Colorado; offered by American Statistical Association)
- Generalized Linear Mixed Models: Theory and Applications, August 2, 2008 Denver Colorado; offered by American Statistical Association)
- Bayesian Adaptive Methods for Clinical Trials, August 2, 2010 (Miami Beach, Florida; offered by American Statistical Association)
- Practical Bayesian Computation, August 4, 2013 (Montreal, Canada; offered by American Statistical Association)
- Multilevel Modeling, June 1-5, 2015 (Chapel Hill, North Carolina; offered by Curran-Bauer Analytics)
- Guidelines for Using State-of-the-Art Methods to Estimate Propensity Score and Inverse Probability of Treatment Weights When Drawing Causal Inferences, August 10, 2015 (Seattle, Washington; offered by American Statistical Association)
- Institute for Teaching and Learning, August 19-22, 2019 (Houston, Texas, offered by AAL consulting)

September 20, 2022

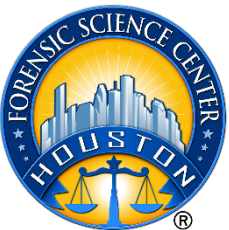
40

President's Report

Friday, May 12, 2023

Operational Highlights

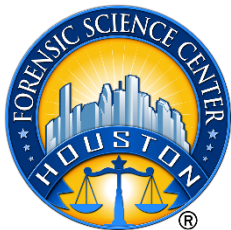
- **Seized Drugs**
 - HCDAO policy change on <4g drug cases went into effect 4/19/2023
 - The section is monitoring request data to measure impacts
- **DNA**
 - Transitioning back to only outsourcing SAKs to stretch grant funding further
 - Balancing backlog, re-work, training, and incoming priority requests
- **Firearms**
 - Two examiners in training to re-build capacity
 - Number of court priority requests creating issues in balancing incoming work, backlog management, and meeting court dates



Operational Highlights

- **Backlog Reduction**

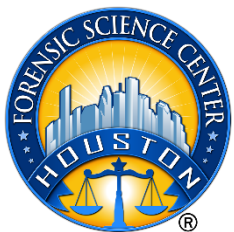
- **Digital Multimedia backlog has been reduced by 52%. Current backlog is 187, the high was 392 in August 2022.**
- **Toxicology backlog has been reduced by 61%. Current backlog is 548, the high was 1430 in February 2022.**
- **Latent Print Comparisons has been reduced by 88% . Current backlog is 282, the high was 2516 in July 2021.**
- **Latent Print Processing has been reduced by 23%. Current backlog is 584, the high was 759 in November 2022.**



88th Legislative Session

Day 116

Day 119 (Monday) Last day to report bills from committee to the House



HB178
Representative
Murr

- Relating to testing possible controlled substances for fentanyl
- Passed the House
- Has not been set for a hearing in the Senate
- Looking more and more like it will not go anywhere

HB3354

Jolanda Jones

Creates a mandate for law enforcement to submit all drug materials they seize and for the lab to test it.

Not been set for a committee hearing. Probably not going anywhere.

Multiple bills increasing charge and penalty for fentanyl

- SB645 and HB6 look to be the bills that will ultimately advance to the Governor
- Potential lab impact:
 - Increased consequence of prosecution likely means increased need of lab result support
 - Test more items
 - More testimony support
 - More documentation support
- Language has changed to make it less problematic for postmortem toxicology.
- The language now dictates to ME's that they have to sign the death certificate out with manner of death "homicide."

Multiple bills related to cannabis

- Looking more and more like none of this is moving.
- Does not improve the situation for hemp, but at least things may not get more complicated.

SB 402 Sen Whitmire

- Seeks to prioritize homicide cases in the courts
- Lab impact:
 - Potential priority conflicts for analysis, testimony and document support
- Passed the senate 29/1. Pending committee action in House
- Seems likely to advance

Other Bills

Multiple bills about making fentanyl test strips NOT paraphernalia

STUCK in the Senate

HB 270 Relating to post conviction DNA testing (favorable from committee)

On the house floor

HB 1739/SB409 Tracking of evidence and rights to information for victims

Passed the Senate 30/0, passed out of house committee

SB 497 Kratom products

Passed both house and senate with the Governor

Property transition

He just won't give it up will he?

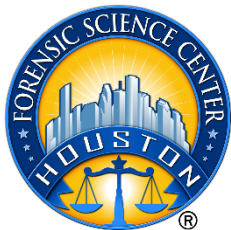
State of the concept

- Transition property and evidence management from HPD to HFSC
- Likely involves approximately 86 personnel with 35 classified officers
- Additional facility for high-risk items (guns, drugs, cash)
- Assume responsibility for the 1201 Washington property facility
- Congressionally directed funding request related to property management through US Representative Lizzie Fletcher



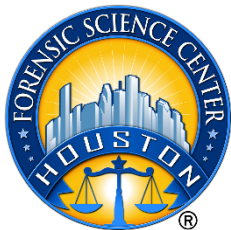
Why?

- Evidence quality continues to be a challenge
 - Significant efficiency drain
- Accreditation
 - ANAB just launched a new property and evidence accreditation (unique accreditation program)
- Resources
 - Clear inefficiencies
 - Over time, greater efficiency means resources that could be available for other lab needs
 - Free up classified officers for HPD

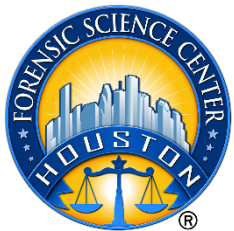


What is yet to do?

- Lease negotiations
 - 1201 Washington
 - High risk item facility
- Staff transitions
- Budget transitions
- City Council actions



New TAG members





Dr. Adele Quigley McBride

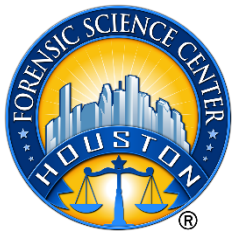
- Currently finishing up a post doctoral fellowship at Duke with Brandon Garrett
- PhD Psychology Iowa State
- Headed to Simon Fraser University as Assistant Professor of Psychology (Vancouver, BC, Canada)
- Vice Chair Human Factors Task Group - OSAC

Dr. Michael Swartz

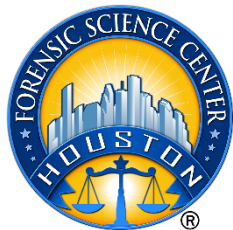
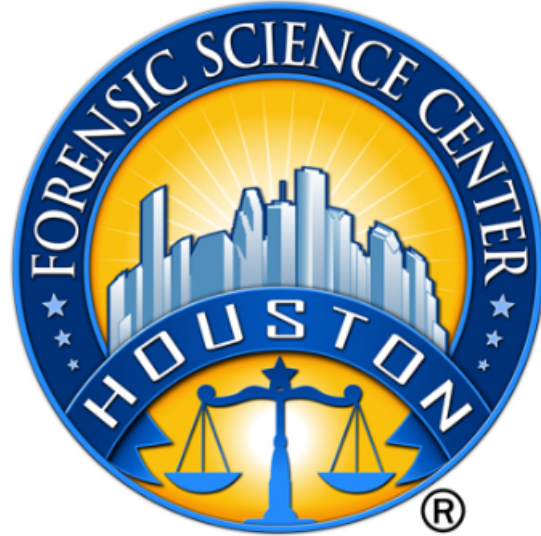
- Professor and Vice Chair
- The University of Texas Health Science Center at Houston School of Public Health
- PhD Statistics
- Biostatistics
- Bayesian statistics



Detail data



April 2023 Company Overview



HFSC Turnaround Time (TAT)

TAT Date Range*

Porter Lee

Justice Trax

10/1/2022

4/28/2023

10/1/2022

4/29/2023

Analysis TAT

31

Overall TAT

130

* Both Porter Lee and Justice Trax date ranges MUST be set to the same date range

Backlog

Number of Requests
Backlogged

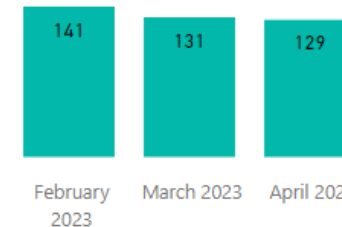
4,606

% of Requests in
Backlog

17.6%

Avg Age of Open Requests

Avg Age of Open Request...



% Decrease in
Avg Age of Open
Requests*

-33.8%

May 12, 2023 Board Meeting - Page 87 of 174

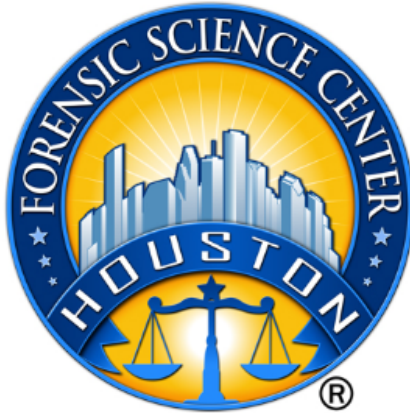
* compared to beginning of performance year

April 2023 Company Overview

% Decrease in Age of Open Requests*

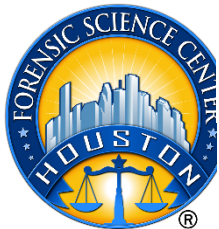
-33.8%

* compared to beginning of performance year

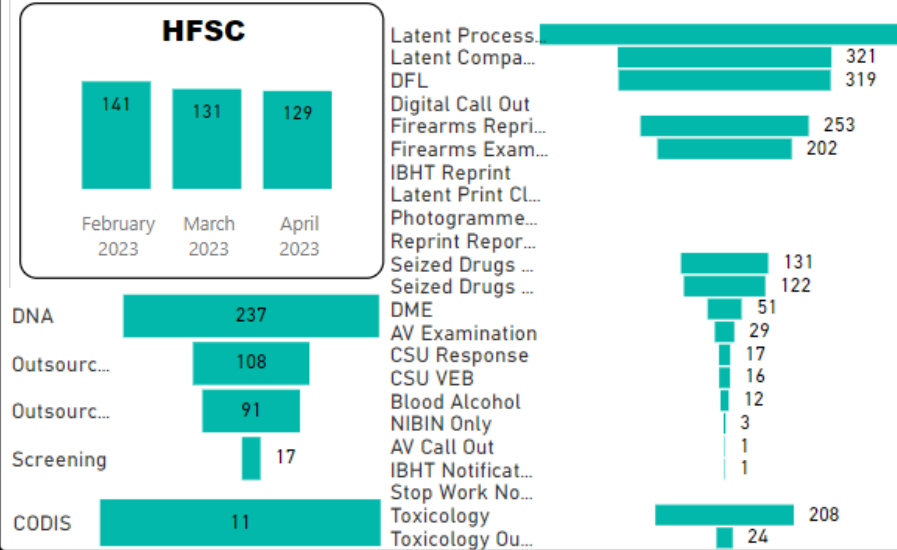


% of Requests in Backlog

17.6%



Avg Age of Open Requests (Days)



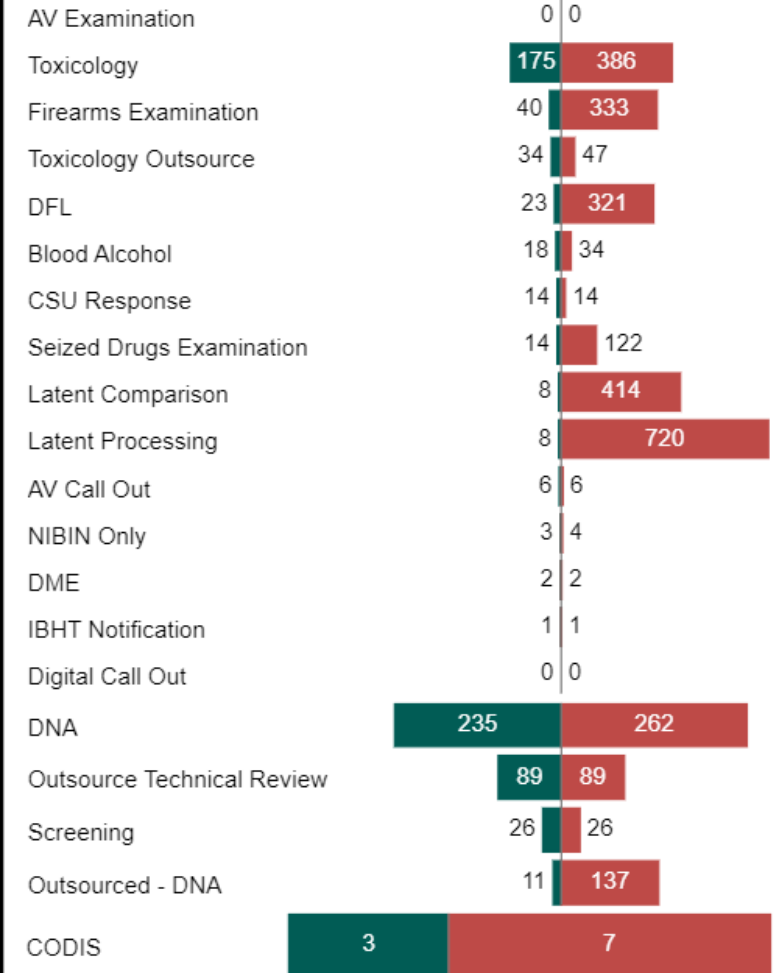
Turnaround Time (Past 30 Days)

HFSC

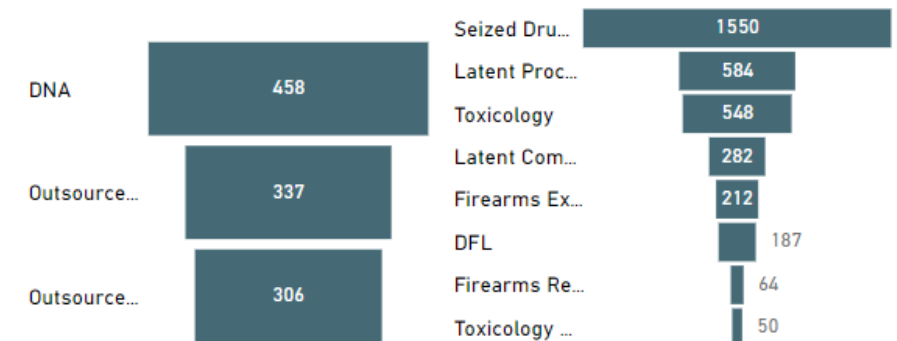
36

128

Analysis TAT | Overall TAT



Request Backlog



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

Key for Dashboard Section Pages

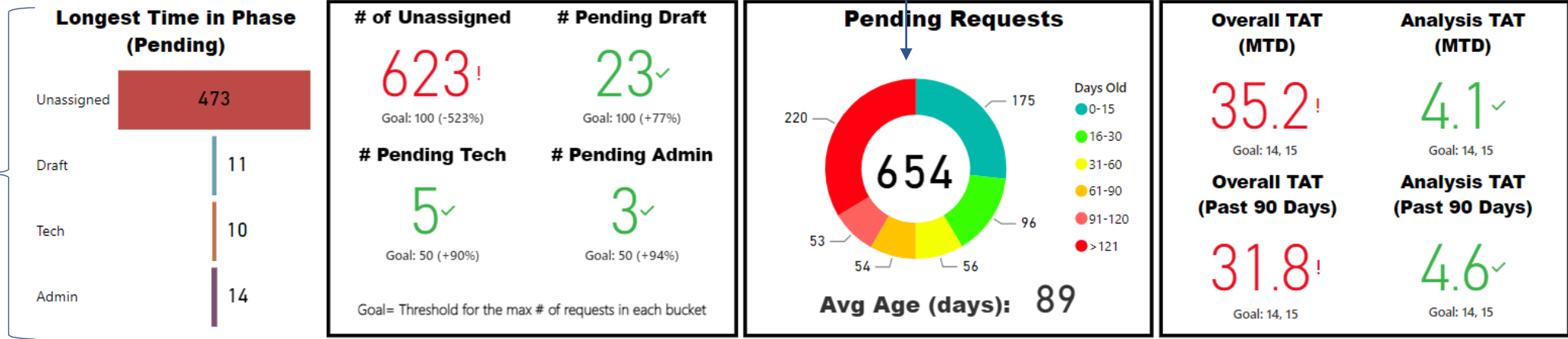
Center of ring=total pending cases
 Ring=breakdown of age for all pending cases

Type of Testing →

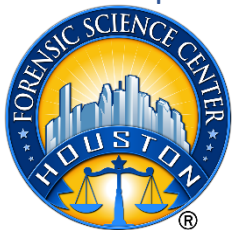
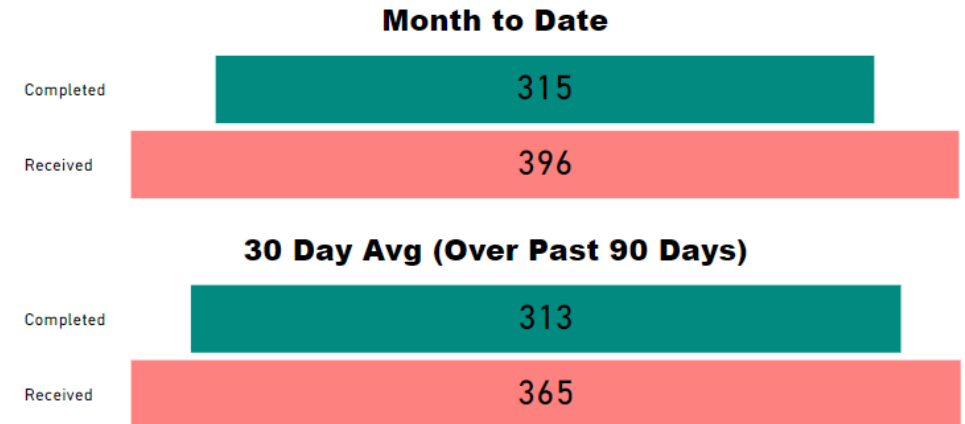
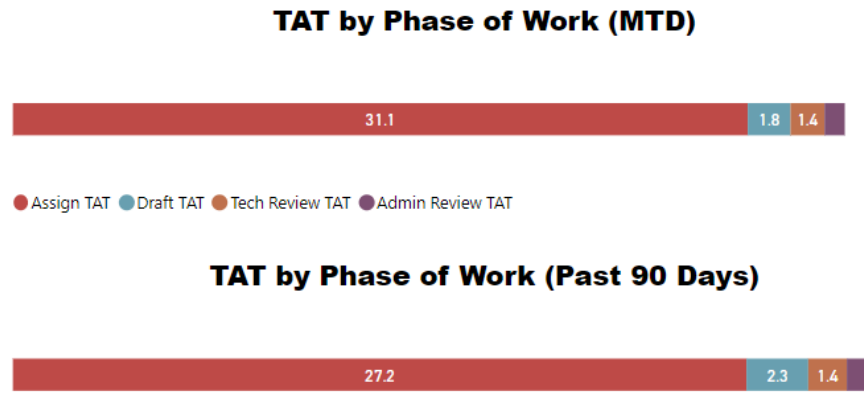
Service: **Seized Drugs Examination** | Priority Type: **All**

Backlogged Requests: 383
Avg Age of Backlog (days): 142

Pending work



Turnaround time (days) by phase of work



TAT= Turnaround Time MTD= Month to date Backlogged Requests = Requests open over 30 days

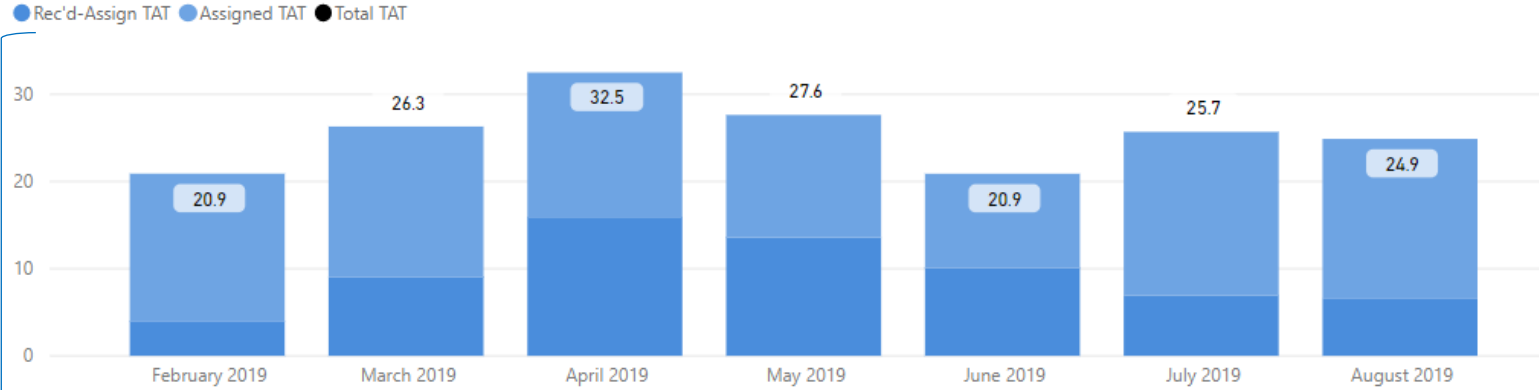
Key for Dashboard Historical Pages 1/2

Date Range

8/1/2018

8/31/2019

Total TAT by Month



Type of testing

Request Type

Firearms Examination

Priority Type: All

Report type

Selected Time Frame Averages

26.11
Total TAT (Rec'd-Compl.) Avg

16.08
Assigned TAT (Asgmt.-Compl.) Avg

Overall average for the selected date range

Received to Complete

238
Requests Completed

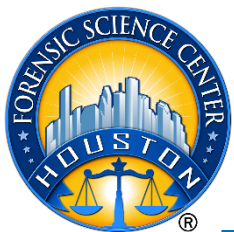
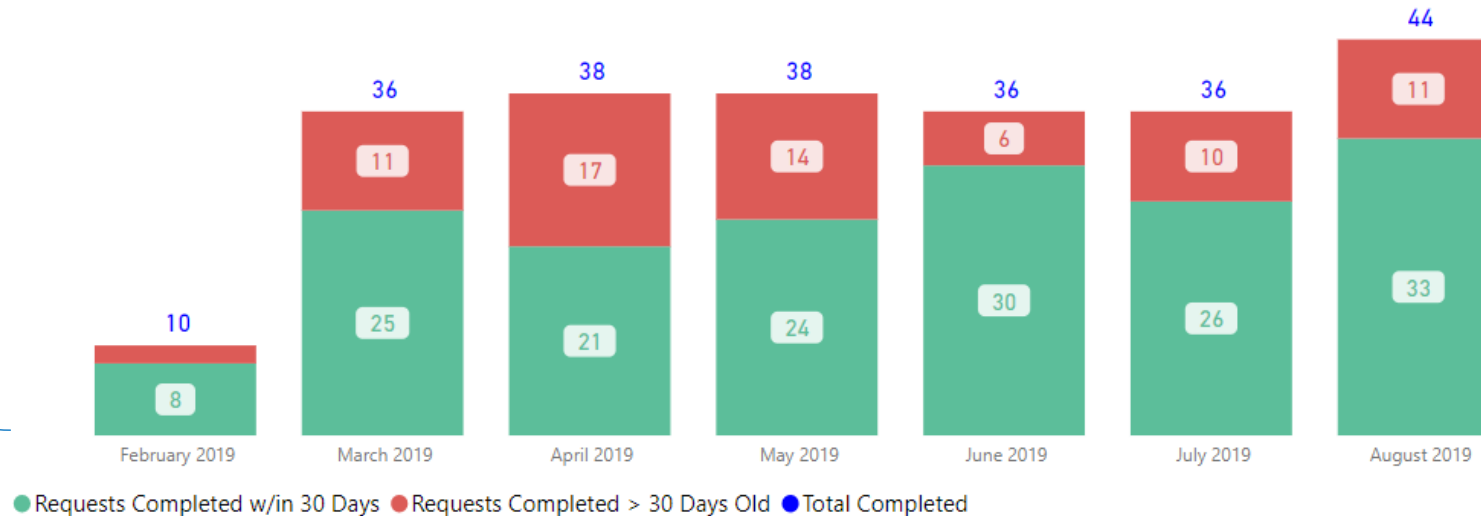
71
Requests Completed > 30 Days Old

29.83 %
% Completed > 30 Days Old

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

Data broken down by month

Requests Completed



TAT= Turnaround Time

Key for Dashboard Historical Pages 2/2

Type of testing →

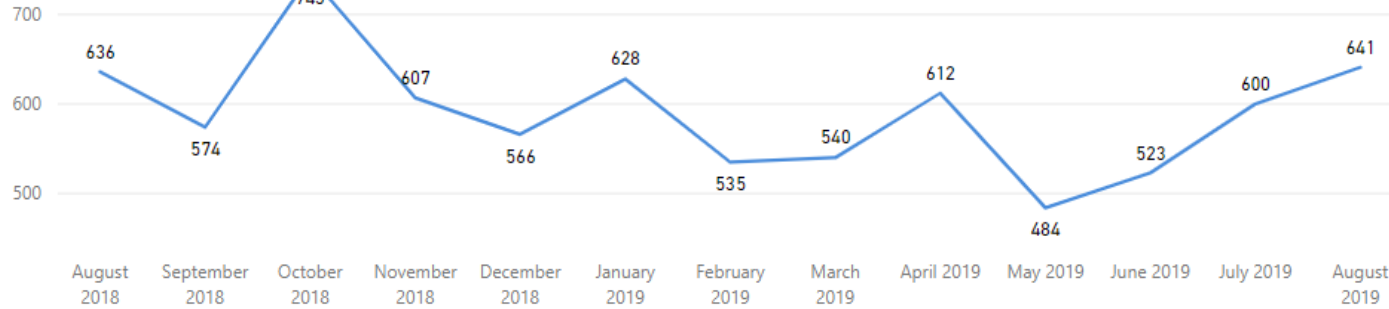
Service: Seized Drugs Examination
 Priority Type: All

Report type

Received Filter

8/1/2018 8/31/2019

Received by Month



Total Received

7,689

Received per Month (Avg)*

591

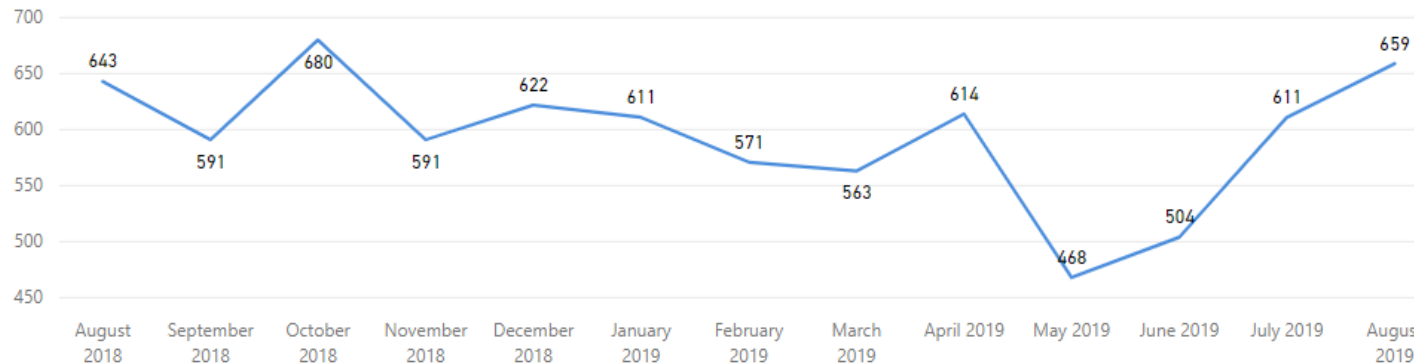
Overall average for the selected date range

Data broken down by month

Completed Filter

8/1/2018 8/31/2019

Completed by Month



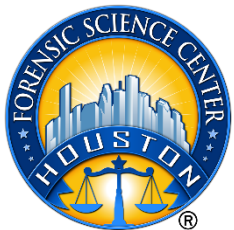
Total Completed

7,728

Completed per Month (Avg)*

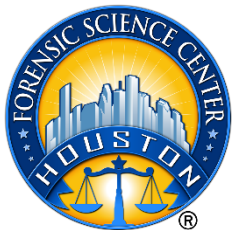
594

Overall average for the selected date range



* months with zero activity are not calculated into the average

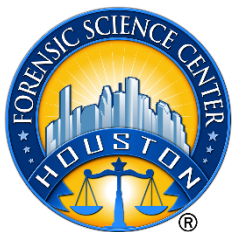
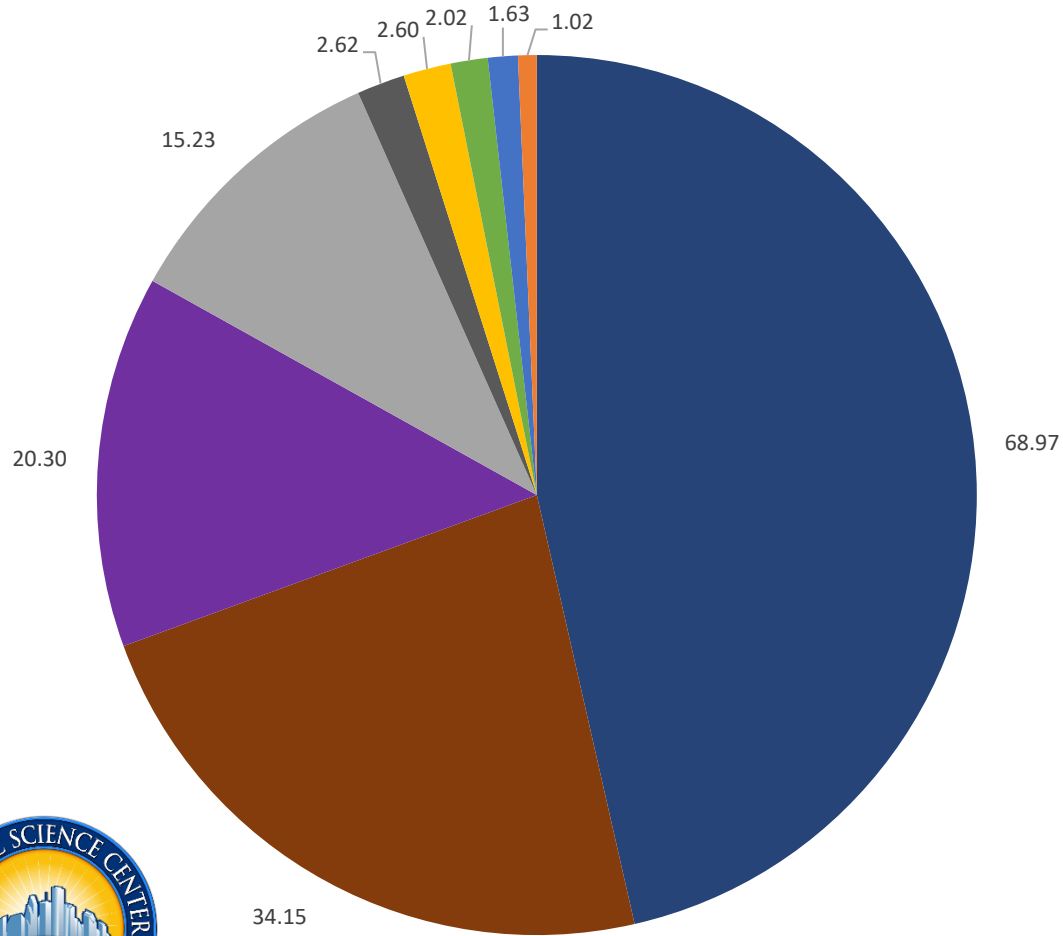
Client Services and Case Management (CS/CM)



CS/CM – April

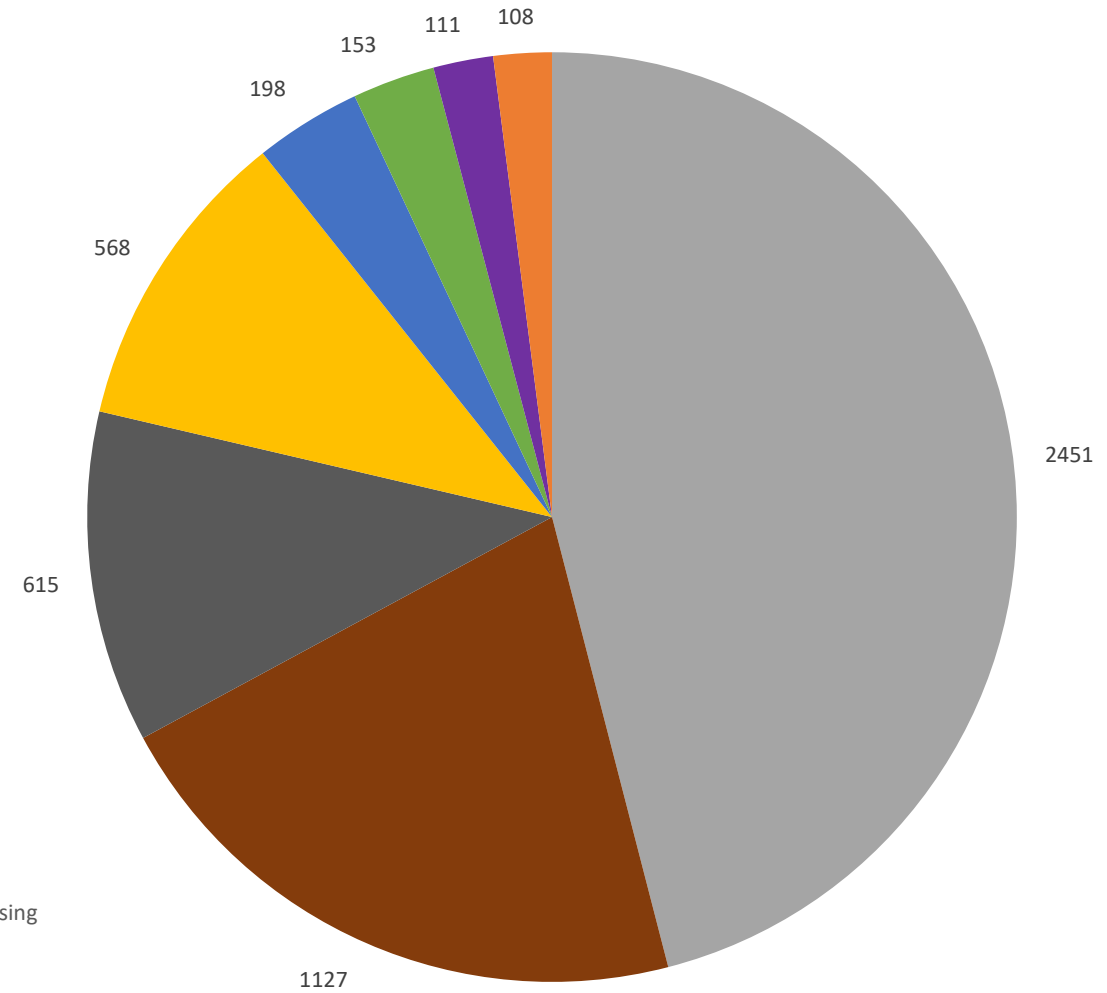
Total Time by Section (Hours)

See Time Categories by Section slide for breakdown



Evidence Handling

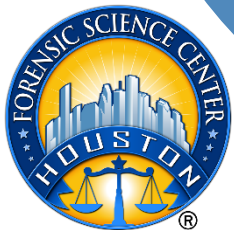
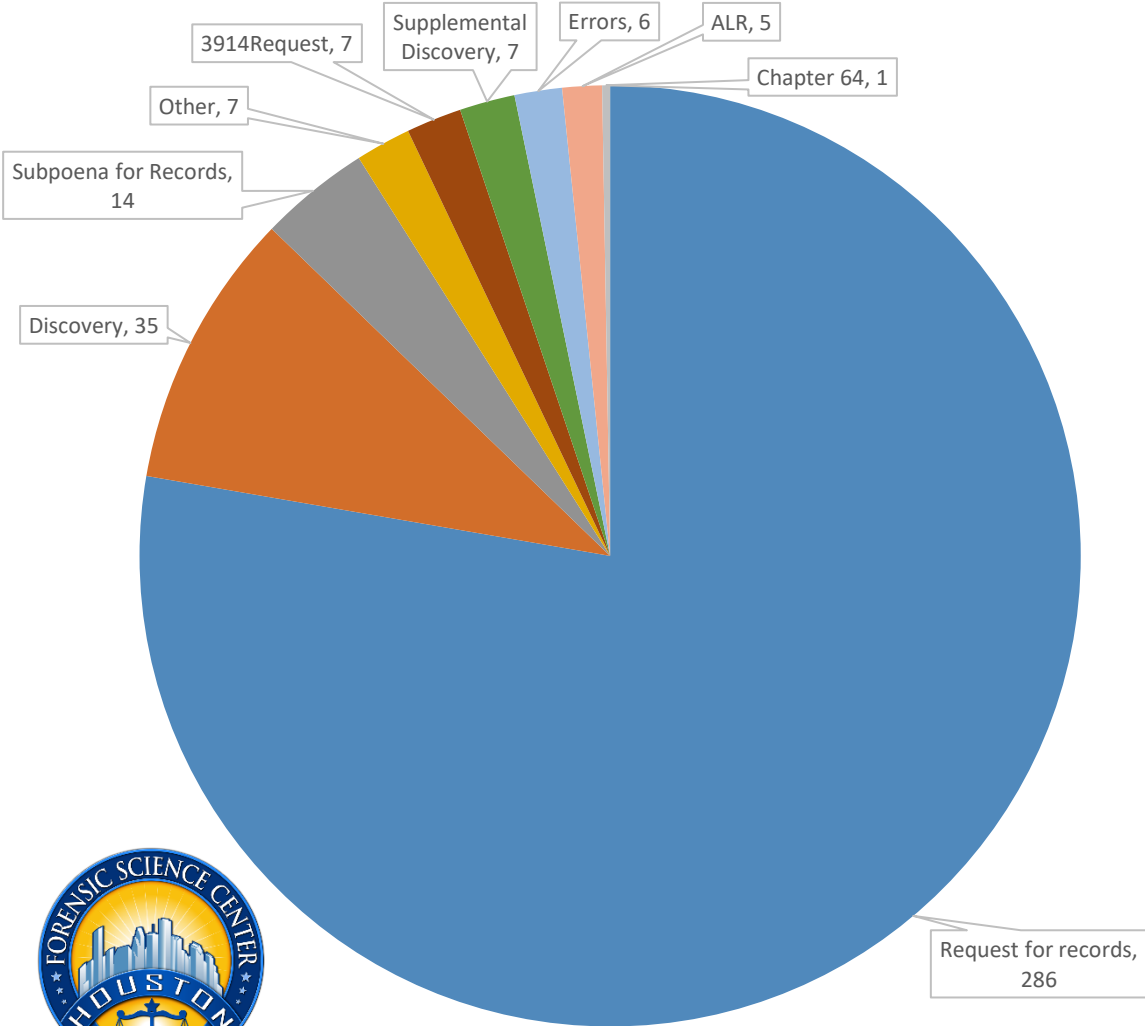
Total Items by Section



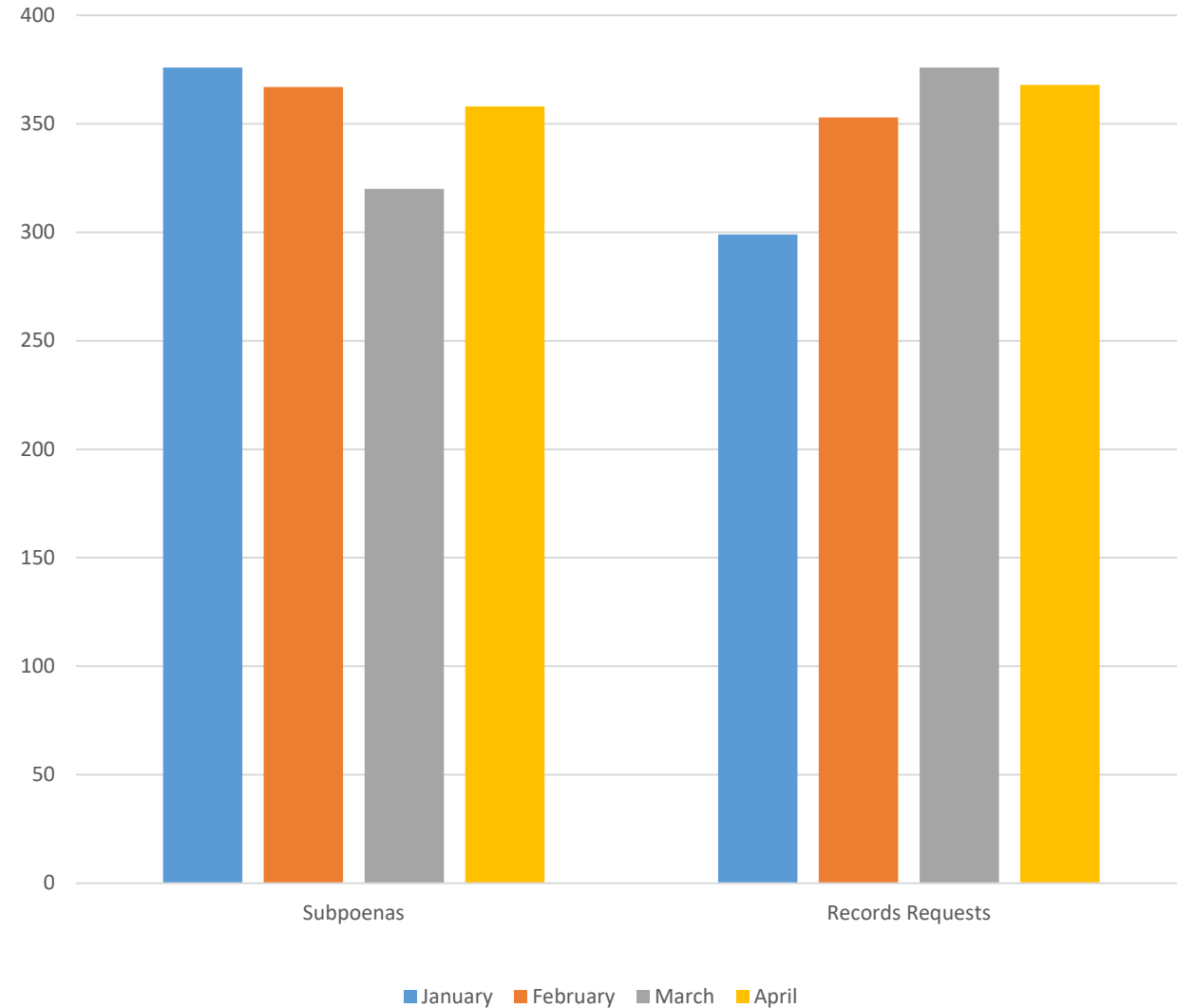
CS/CM – April

Administrative

Requests by Type

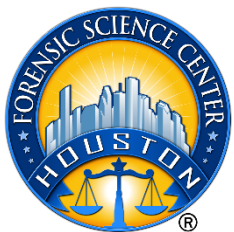
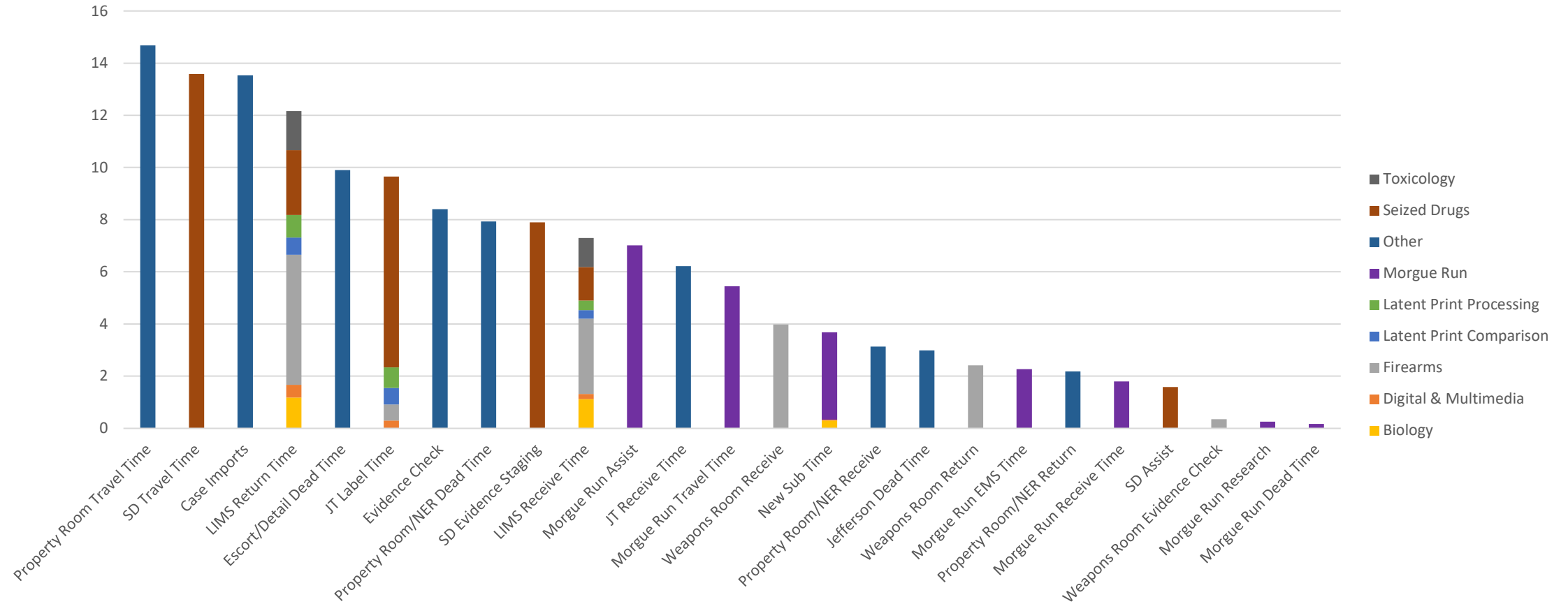


Subpoenas & Records Requests



Time Categories – April

Evidence Handling



Service

CSCM Tox Accession

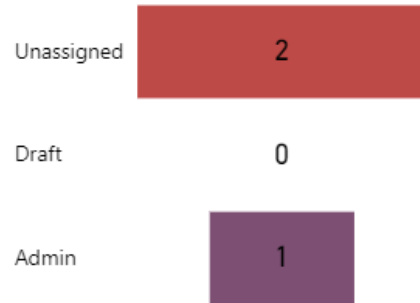
Priority Type

All

Backlogged Requests: 0

Avg Age of Backlog (days): (Blank)

Longest Time in Phase (Pending)



of Unassigned

3

Goal: 150 (+98%)

Pending Draft

0

Goal: 3 (+100%)

Pending Admin

8

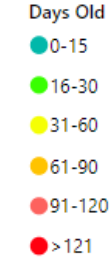
Goal: 60 (+86.67%)

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

Pending Requests



Avg Age (days): 1



Overall TAT (MTD)

2.5

Goal: 5, 10

Overall TAT (Past 90 Days)

1.7

Goal: 5, 10

Accessioning TAT is TAT for request received to assigned.

Accessioning TAT (MTD)

1.9

Goal: 5, 10

Accessioning TAT (Past 90 Days)

1.4

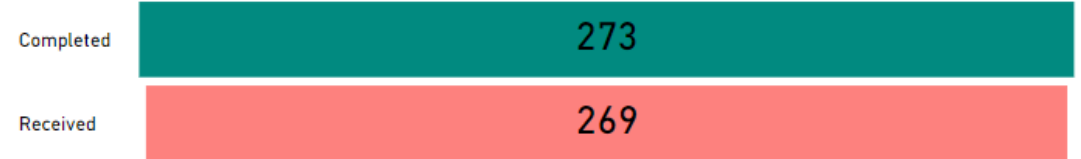
Goal: 5, 10

TAT by Phase of Work (MTD)



Assign TAT Draft TAT Admin Review TAT

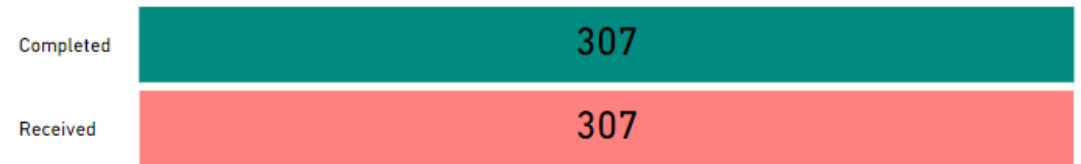
Month to Date



TAT by Phase of Work (Past 90 Days)



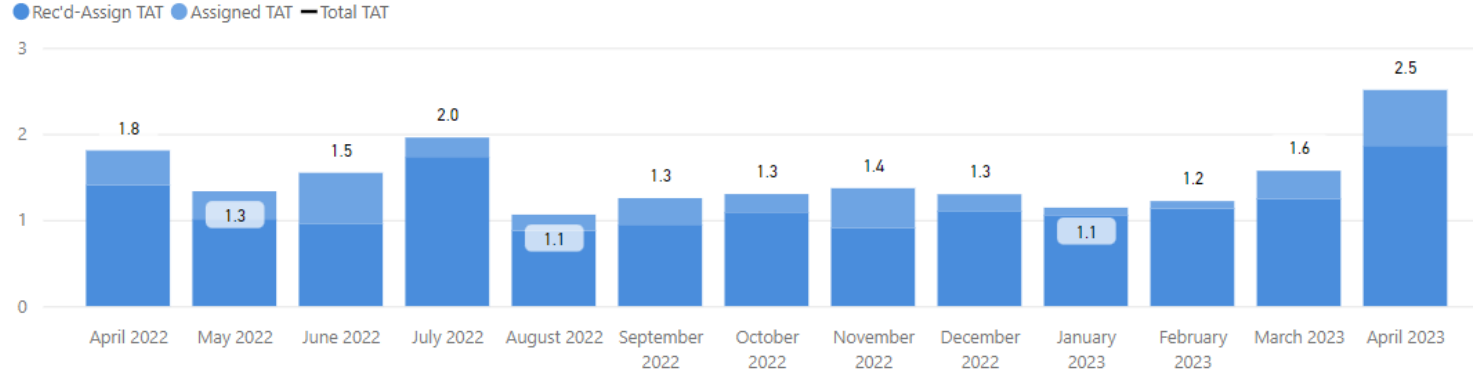
30 Day Avg (Over Past 90 Days)



Date Range

4/1/2022 4/30/2023

Total TAT by Month



Request Type

CSCM Tax Accession

Priority Type

All

Selected Time Frame Averages

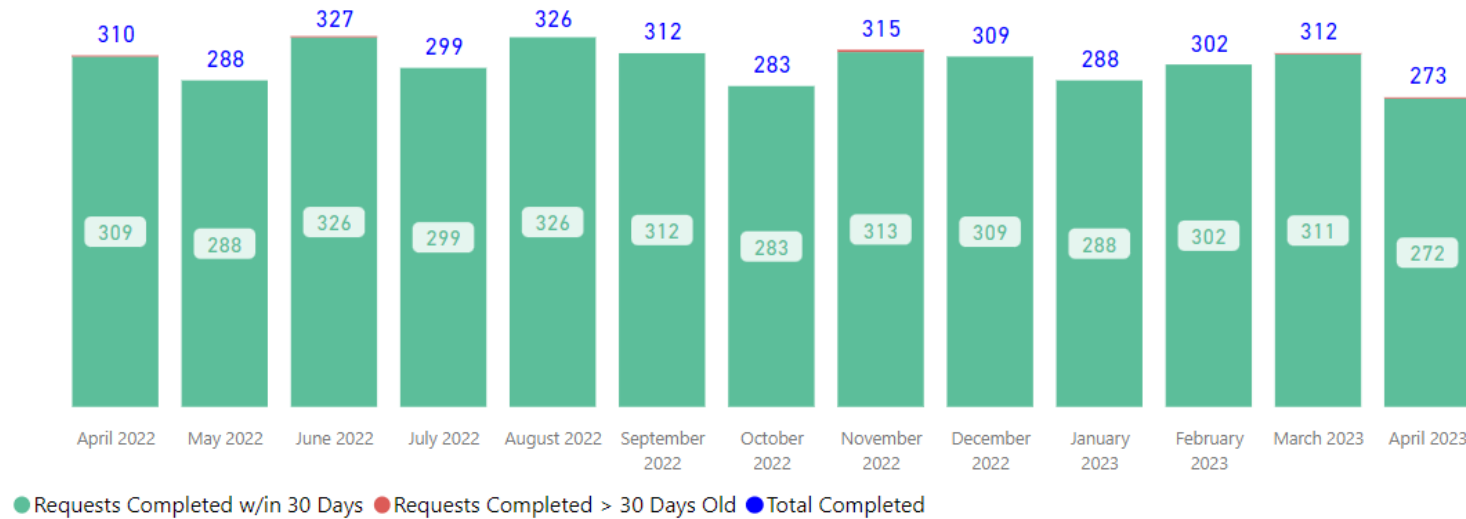
1.48

Total TAT (Rec'd-Compl.) Avg

0.31

Assigned TAT (Asgmt.-Compl.) Avg

Requests Completed



Received to Complete

3944

Requests Completed

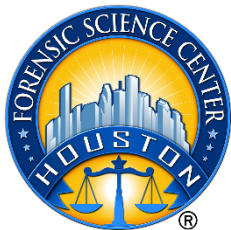
6

Requests Completed > 30 Days Old

0.15 %

% Completed > 30 Days Old

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



Service

CSCM Tax Accession

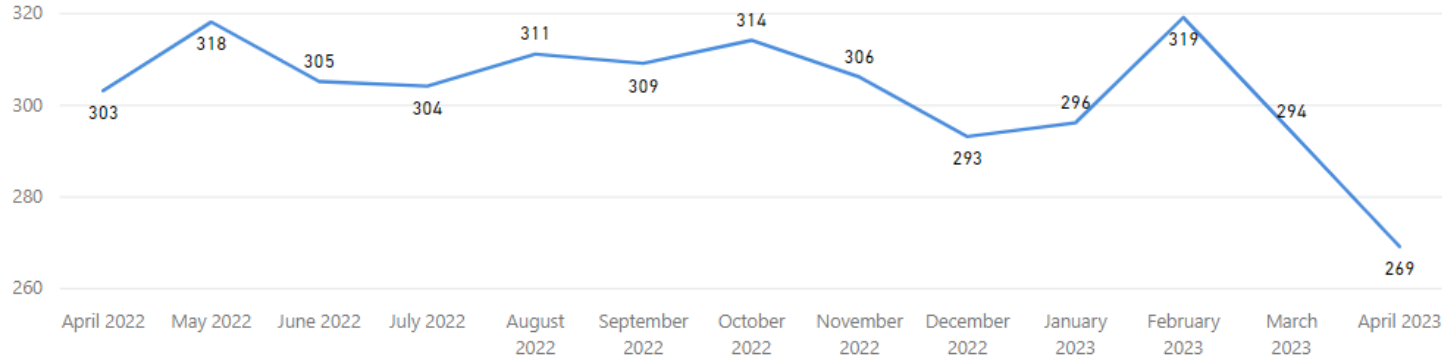
Priority Type

All

Received Filter

4/1/2022 4/30/2023

Received by Month



Total Received

3,941

Received per Month (Avg)*

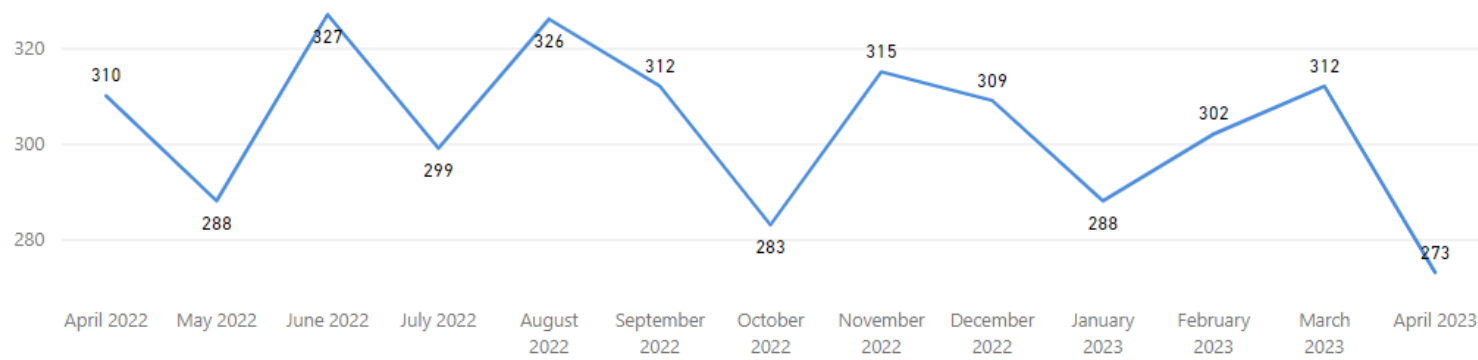
303

🔗 📄 🗑️ 🗃️ ⋮

Completed Filter

4/1/2022 4/30/2023

Completed by Month



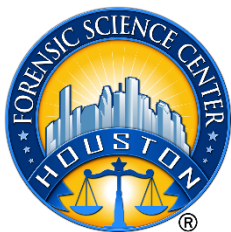
Total Completed

3,944

Completed per Month (Avg)*

303

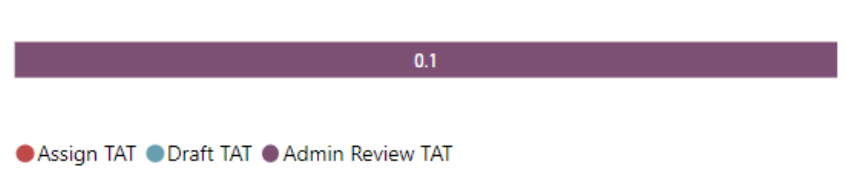
* months with zero activity are not calculated into the average



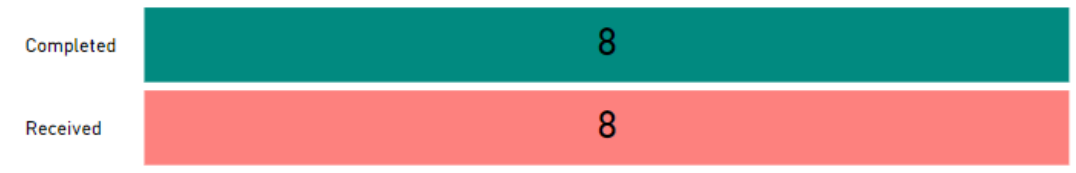
Service: **CSCM Tox Rejection** | Priority Type: **All** | Backlogged Requests: **0** | Avg Age of Backlog (days): **(Blank)**

Longest Time in Phase (Pending)		# of Unassigned	# Pending Draft	Pending Requests		Overall TAT (MTD)	Accessioning TAT (MTD)
Unassigned	0	0 ✓ Goal: 3 (+100%)	0 ✓ Goal: 5 (+100%)	0	Days Old ● 0-15 ● 16-30 ● 31-60 ● 61-90 ● 91-120 ● >121	0.1 ✓ Goal: 5, 10	0.0 ✓ Goal: 5, 10
Draft	0	# Pending Admin				Overall TAT (Past 90 Days)	Accessioning TAT (Past 90 Days)
Admin	0	0 ✓ Goal: 10 (+100%)				0.3 ✓ Goal: 5, 10	0.0 ✓ Goal: 5, 10
		Goal= Threshold for the max # of requests in each bucket		Avg Age (days): (Blank)		Accessioning TAT is TAT for request received to assigned.	

TAT by Phase of Work (MTD)



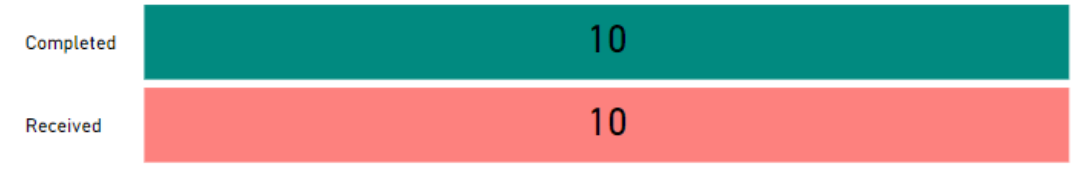
Month to Date



TAT by Phase of Work (Past 90 Days)



30 Day Avg (Over Past 90 Days)



Date Range

4/1/2022 4/30/2023

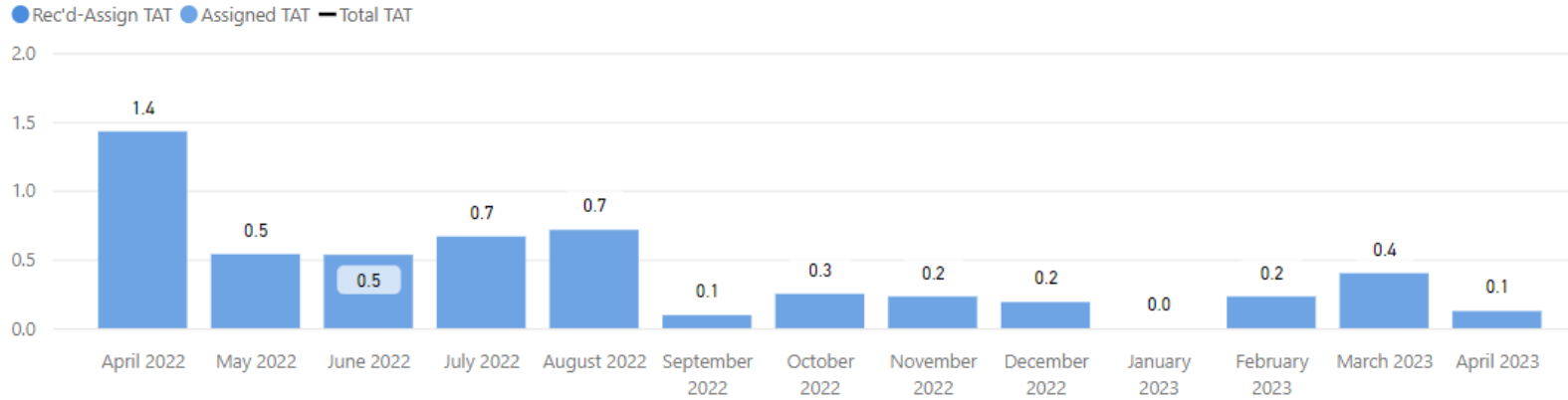
Request Type

CSCM Tox Rejection

Priority Type

All

Total TAT by Month



Selected Time Frame Averages

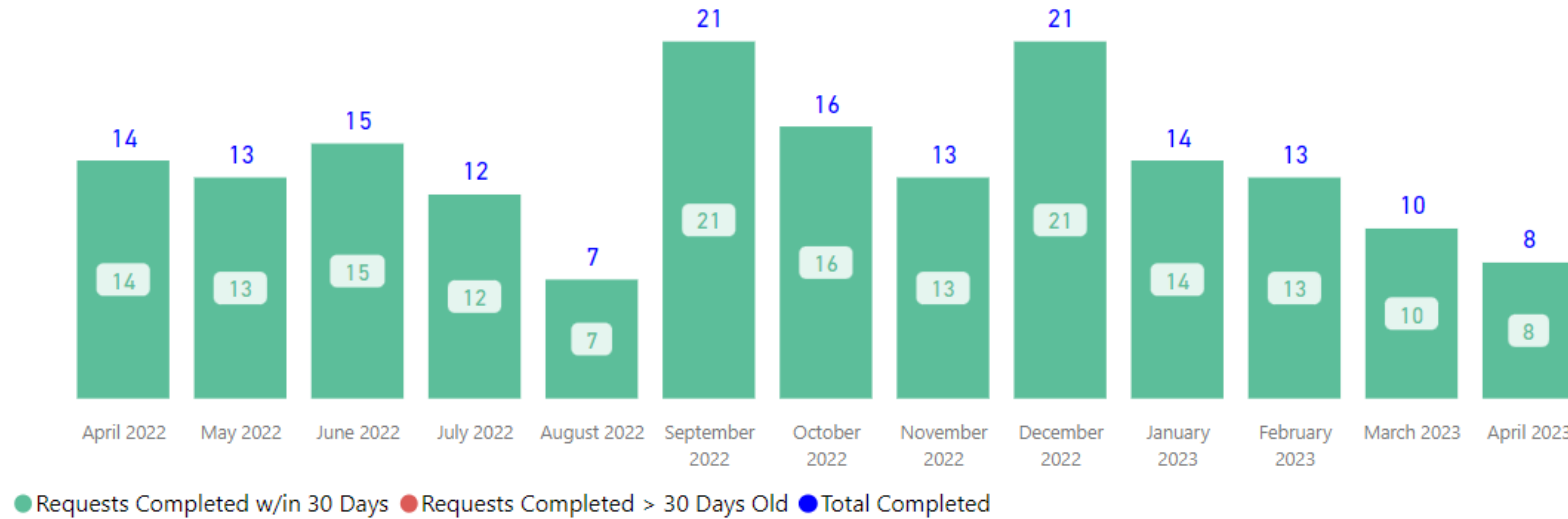
0.39

Total TAT (Rec'd-Compl.) Avg

0.39

Assigned TAT (Asgmt.-Compl.) Avg

Requests Completed



Received to Complete

177

Requests Completed

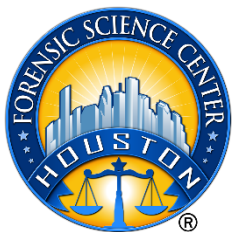
0

Requests Completed > 30 Days Old

0.00 %

% Completed > 30 Days Old

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



Service

Priority Type

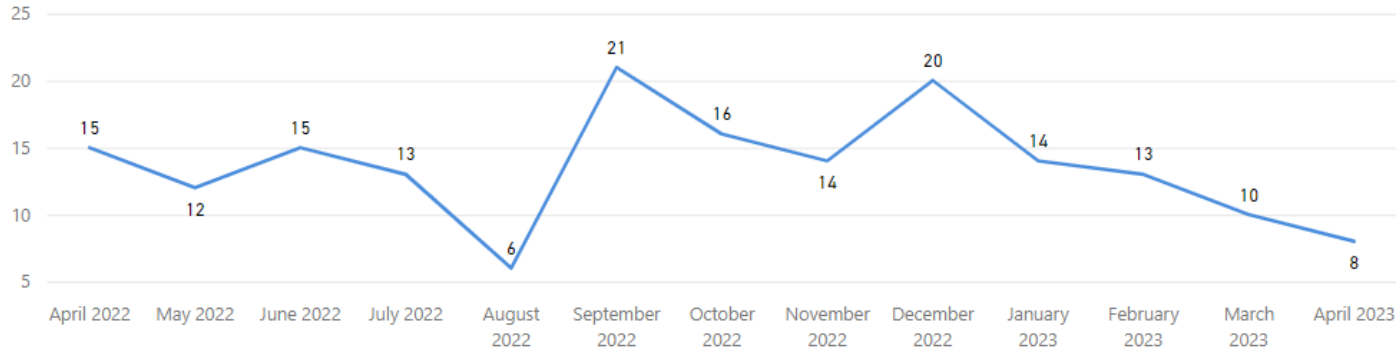
CSCM Tax Rejection

All

Received Filter

4/1/2022 4/30/2023

Received by Month



Total Received

177

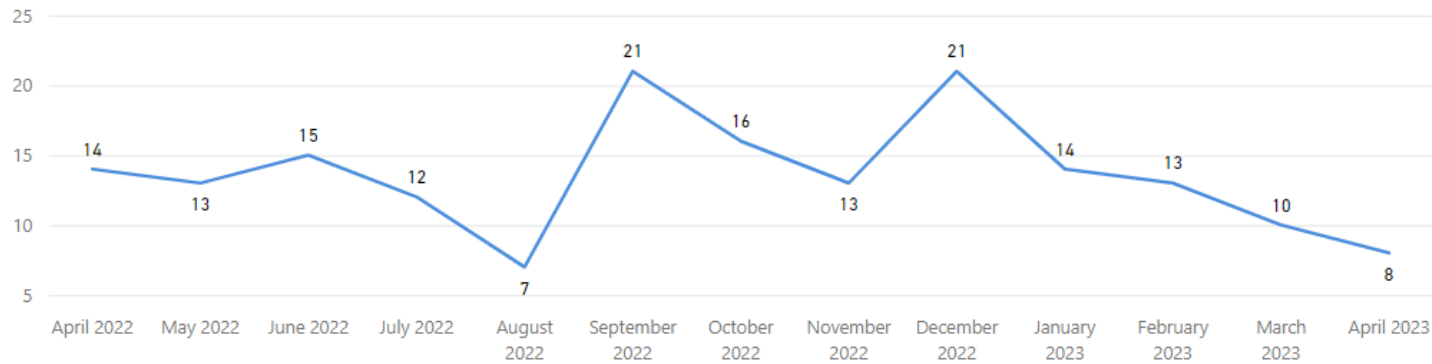
Received per Month (Avg)*

14

Completed Filter

4/1/2022 4/30/2023

Completed by Month



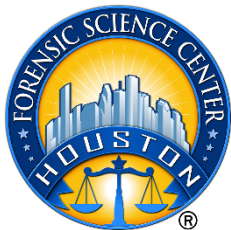
Total Completed

177

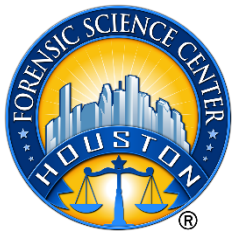
Completed per Month (Avg)*

14

* months with zero activity are not calculated into the average



Seized Drugs



Service

Seized Drugs Examination

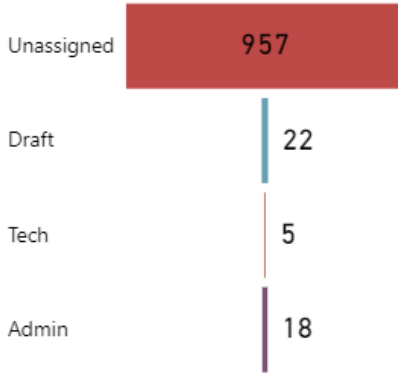
Priority Type

All

Backlogged Requests: 1550

Avg Age of Backlog (days): 148

Longest Time in Phase (Pending)



of Unassigned

1807!

Goal: 100 (-1707%)

Pending Draft

25✓

Goal: 100 (+75%)

Pending Tech

40✓

Goal: 50 (+20%)

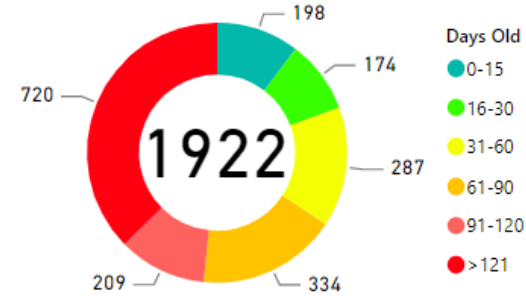
Pending Admin

50✓

Goal: 50 (+0%)

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

Pending Requests



Avg Age (days): 122

Overall TAT (MTD)

119.2!

Goal: 14, 15

Overall TAT (Past 90 Days)

109.1!

Goal: 14, 15

Analysis TAT (MTD)

13.3✓

Goal: 14, 15

Analysis TAT (Past 90 Days)

8.6✓

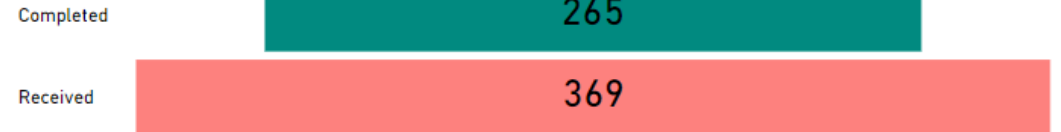
Goal: 14, 15

TAT by Phase of Work (MTD)

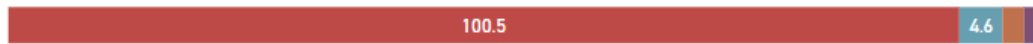


Legend: Assign TAT, Draft TAT, Tech Review TAT, Admin Review TAT

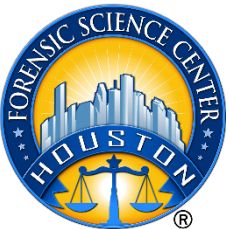
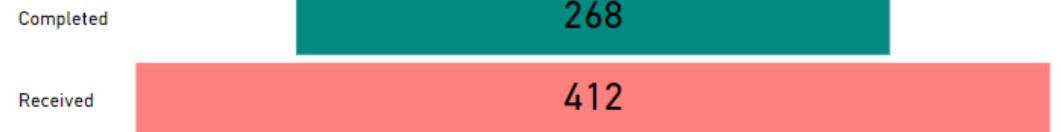
Month to Date



TAT by Phase of Work (Past 90 Days)



30 Day Avg (Over Past 90 Days)



Service

Seized Drugs Examination

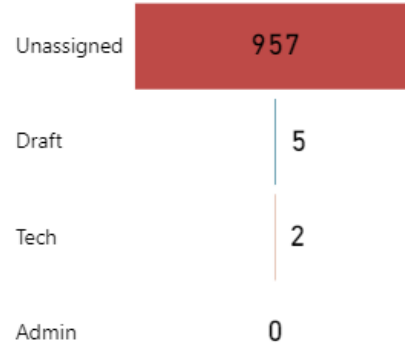
Priority Type

Mari

Backlogged Requests: 297

Avg Age of Backlog (days): 243

Longest Time in Phase (Pending)



of Unassigned

325!

Goal: 100 (-225%)

Pending Draft

8✓

Goal: 100 (+92%)

Pending Tech

5✓

Goal: 50 (+90%)

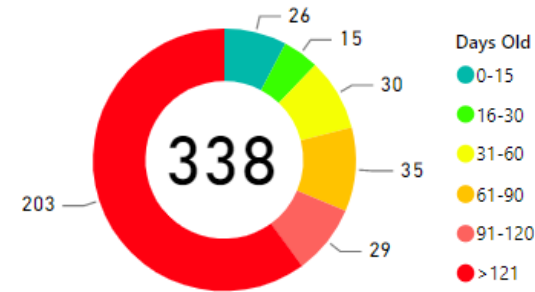
Pending Admin

0✓

Goal: 50 (+100%)

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

Pending Requests



338

Avg Age (days): 215

Overall TAT (MTD)

253.0!

Goal: 14, 15

Overall TAT (Past 90 Days)

286.5!

Goal: 14, 15

Analysis TAT (MTD)

5.3✓

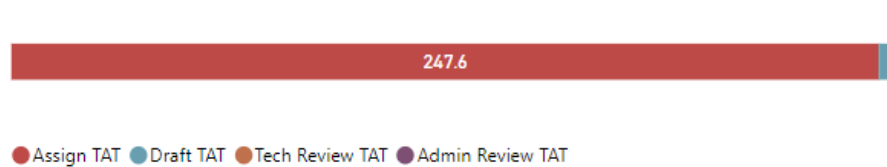
Goal: 14, 15

Analysis TAT (Past 90 Days)

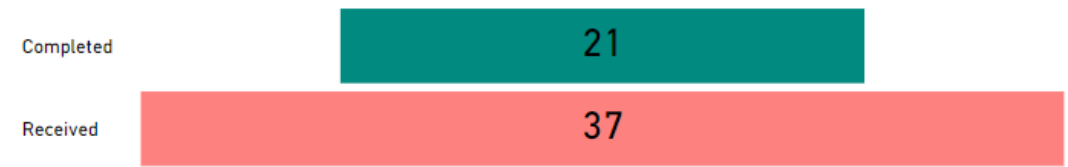
5.8✓

Goal: 14, 15

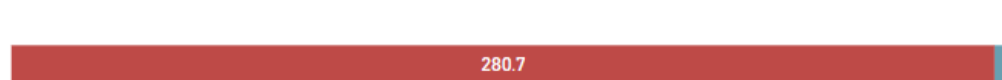
TAT by Phase of Work (MTD)



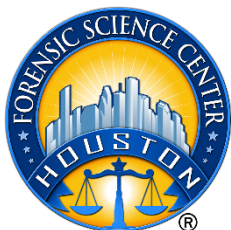
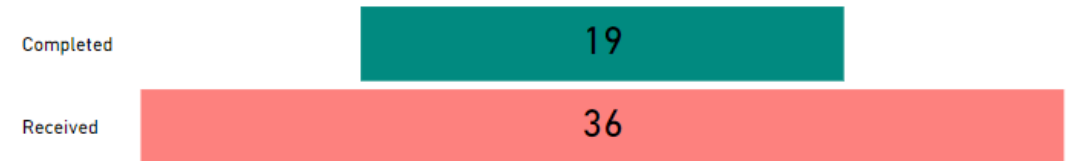
Month to Date



TAT by Phase of Work (Past 90 Days)



30 Day Avg (Over Past 90 Days)



Date Range

4/1/2022

4/30/2023

Request Type

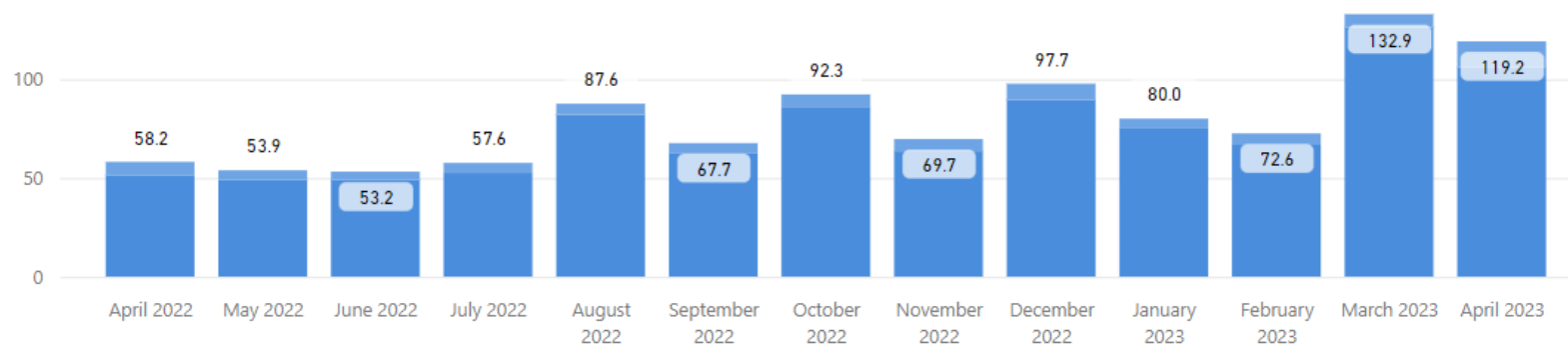
Seized Drugs Examination

Priority Type

All

Total TAT by Month

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



Selected Time Frame Averages

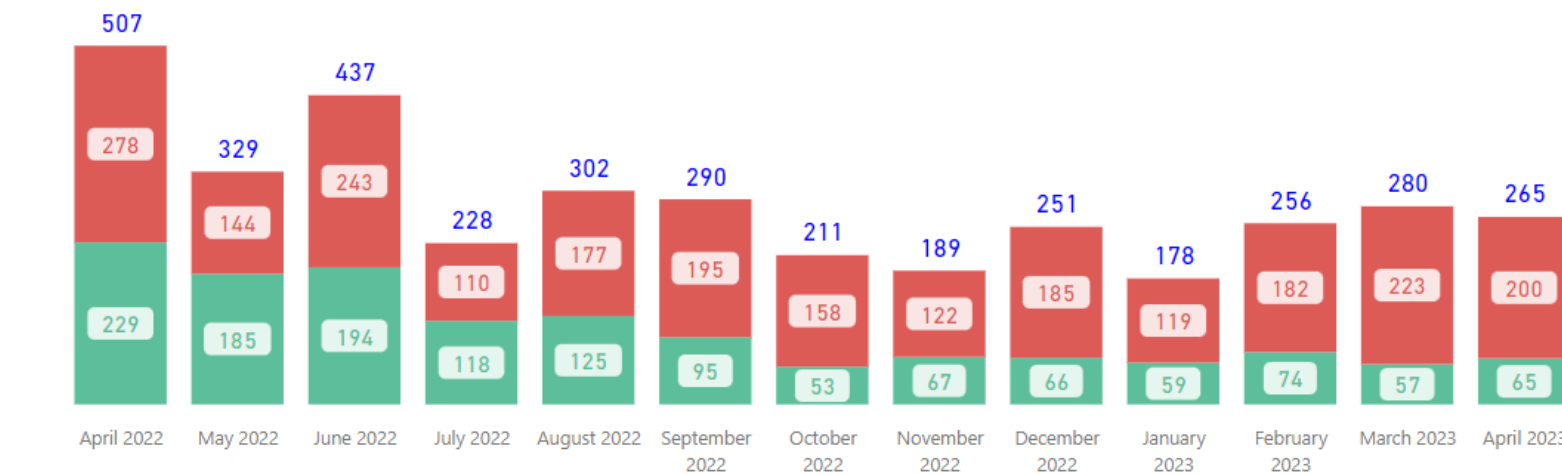
77.48

Total TAT (Rec'd-Compl.) Avg

6.42

Assigned TAT (Asgmt.-Compl.) Avg

Requests Completed



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

Received to Complete

3723

Requests Completed

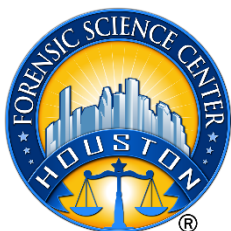
2336

Requests Completed > 30 Days Old

62.75 %

% Completed > 30 Days Old

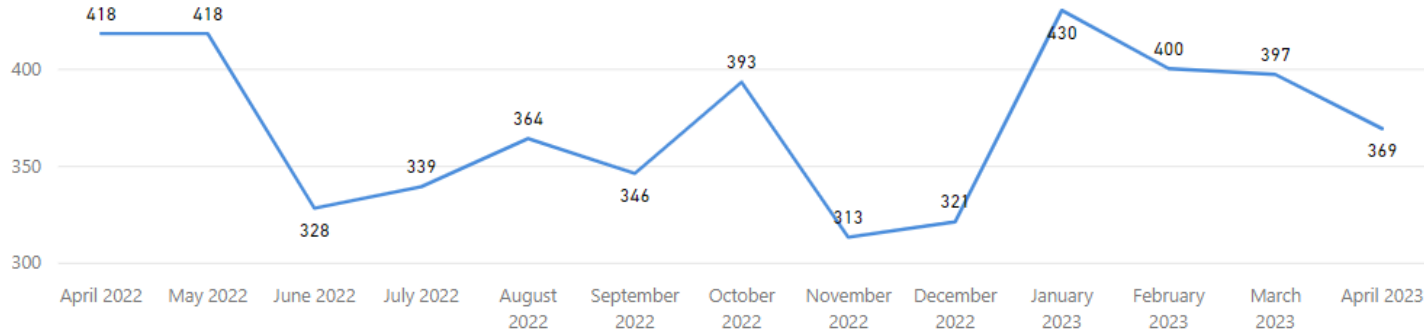
Requests more than 30 days old are considered to be backlogged requests



Service Priority Type

Received Filter

Received by Month



Total Received

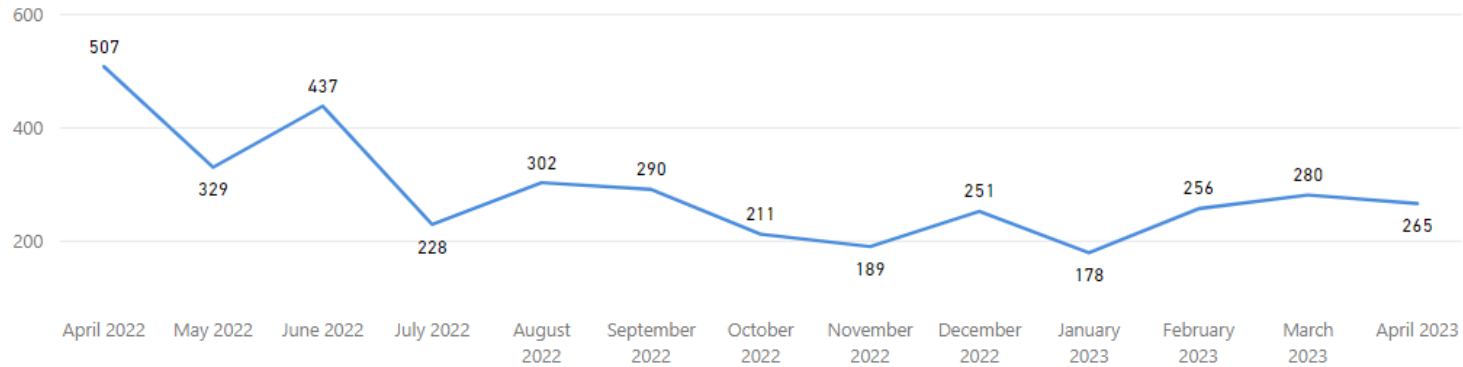
4,836

Received per Month (Avg)*

372

Completed Filter

Completed by Month



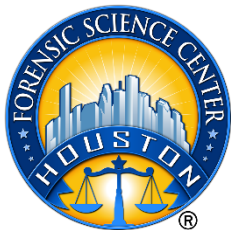
Total Completed

3,723

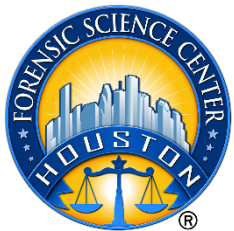
Completed per Month (Avg)*

286

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



Toxicology



Service

Blood Alcohol

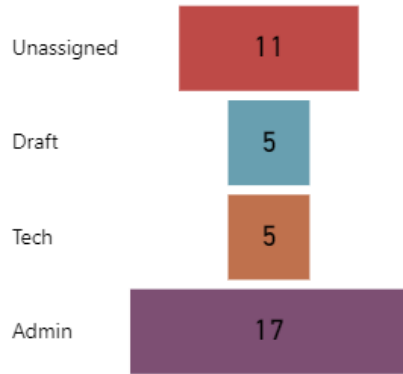
Priority Type

All

Backlogged Requests: 1

Avg Age of Backlog (days): 47

Longest Time in Phase (Pending)



of Unassigned

73!

Goal: 50 (-46%)

Pending Draft

77✓

Goal: 120 (+35.83%)

Pending Tech

72✓

Goal: 90 (+20%)

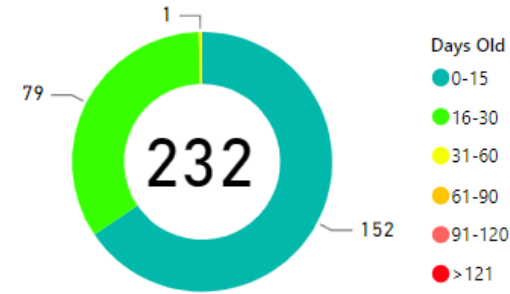
Pending Admin

10✓

Goal: 90 (+88.89%)

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

Pending Requests



Avg Age (days): 12

Overall TAT (MTD)

34.2!

Goal: 30, 31

Overall TAT (Past 90 Days)

33.8!

Goal: 30, 31

Analysis TAT (MTD)

17.6✓

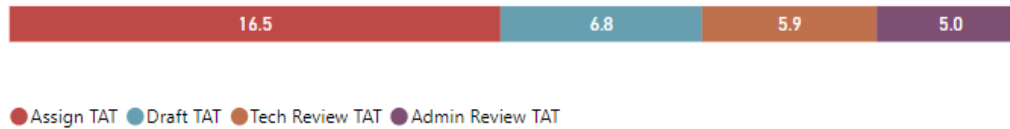
Goal: 30, 31

Analysis TAT (Past 90 Days)

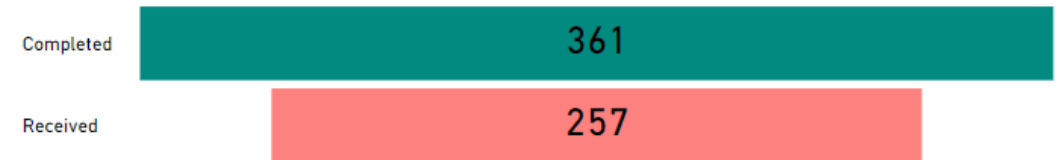
14.9✓

Goal: 30, 31

TAT by Phase of Work (MTD)



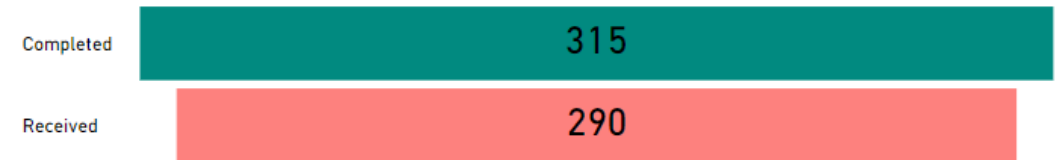
Month to Date



TAT by Phase of Work (Past 90 Days)



30 Day Avg (Over Past 90 Days)



Date Range

4/1/2022 4/30/2023

Request Type

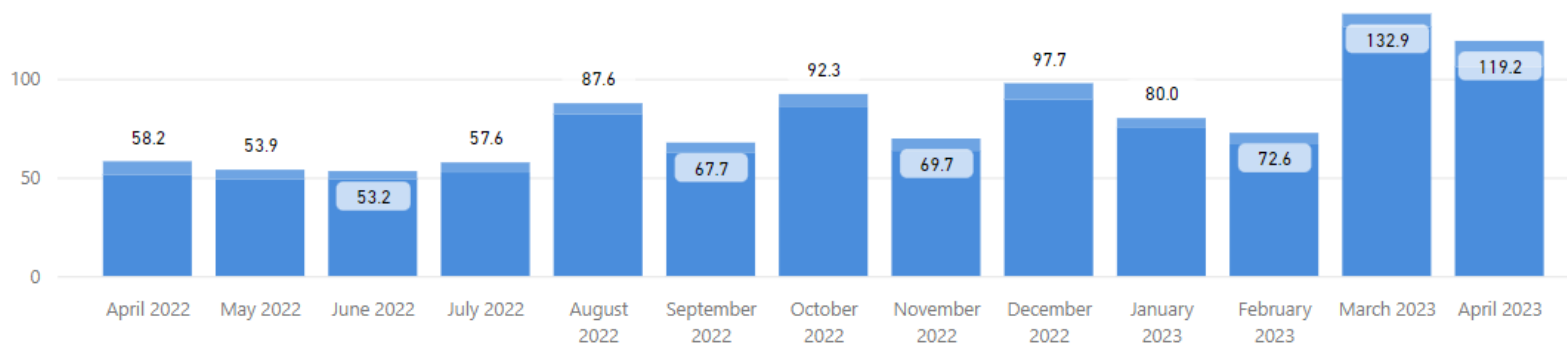
Seized Drugs Examination

Priority Type

All

Total TAT by Month

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



Selected Time Frame Averages

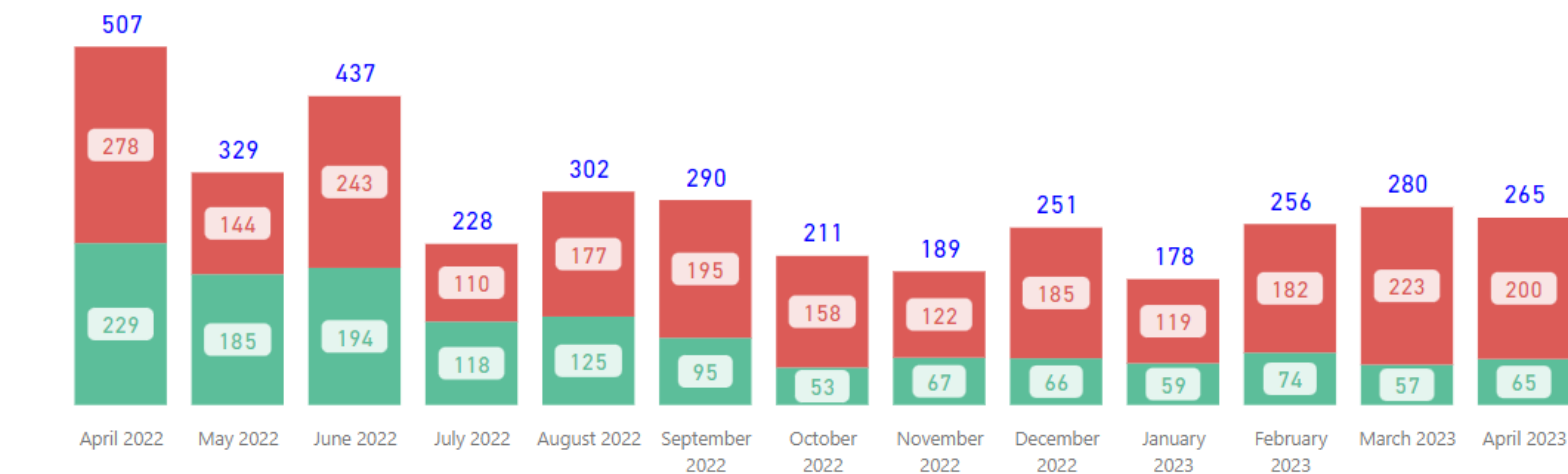
77.48

Total TAT (Rec'd-Compl.) Avg

6.42

Assigned TAT (Asgmt.-Compl.) Avg

Requests Completed



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

Received to Complete

3723

Requests Completed

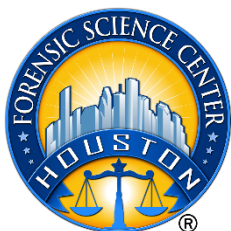
2336

Requests Completed > 30 Days Old

62.75 %

% 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

4/1/2022 4/30/2023

Received by Month



Total Received

4,836

Received per Month (Avg)*

372

Completed Filter

4/1/2022 4/30/2023

Completed by Month



Total Completed

3,723

Completed per Month (Avg)*

286

* months with zero activity are not calculated into the average



Service

Toxicology

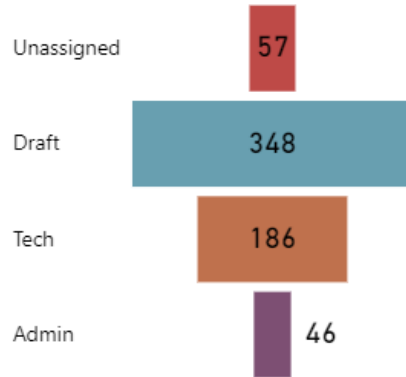
Priority Type

All

Backlogged Requests: 548

Avg Age of Backlog (days): 218

Longest Time in Phase (Pending)



of Unassigned

47✓

Goal: 120 (+60.83%)

Pending Draft

195!

Goal: 30 (-550%)

Pending Tech

225!

Goal: 30 (-650%)

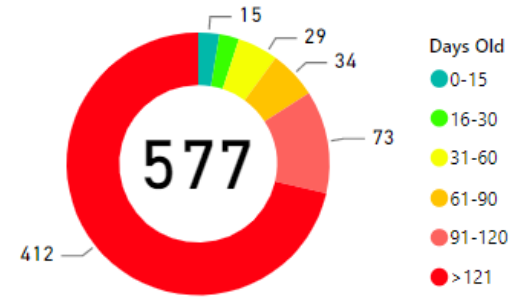
Pending Admin

110!

Goal: 30 (-266.67%)

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

Pending Requests



Avg Age (days): 208

Overall TAT (MTD)

385.7!

Goal: 90, 91

Overall TAT (Past 90 Days)

419.9!

Goal: 90, 91

Analysis TAT (MTD)

178.5!

Goal: 90, 91

Analysis TAT (Past 90 Days)

162.3!

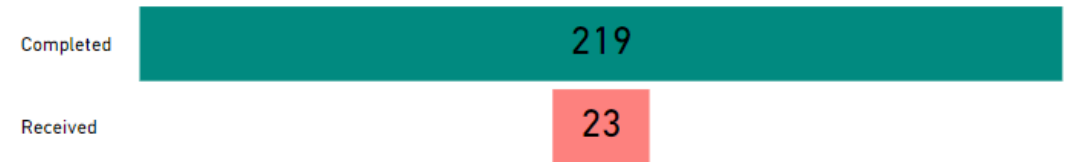
Goal: 90, 91

TAT by Phase of Work (MTD)



● Assign TAT ● Draft TAT ● Tech Review TAT ● Admin Review TAT

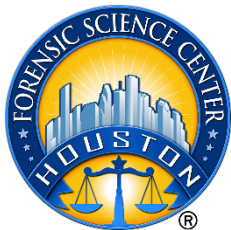
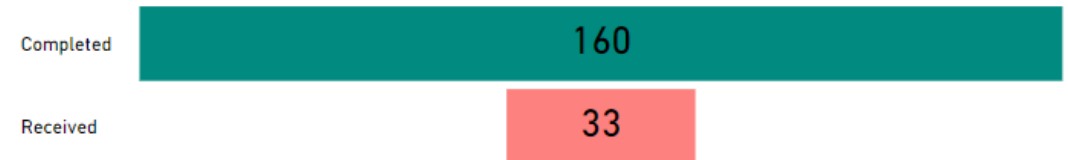
Month to Date



TAT by Phase of Work (Past 90 Days)



30 Day Avg (Over Past 90 Days)



Date Range

4/1/2022

4/30/2023

Request Type

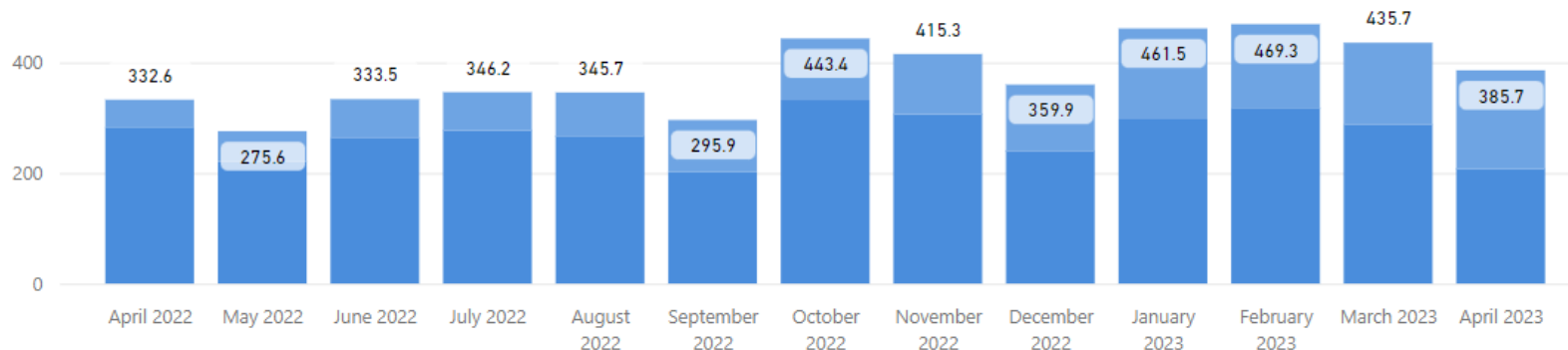
Toxicology

Priority Type

All

Total TAT by Month

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



Selected Time Frame Averages

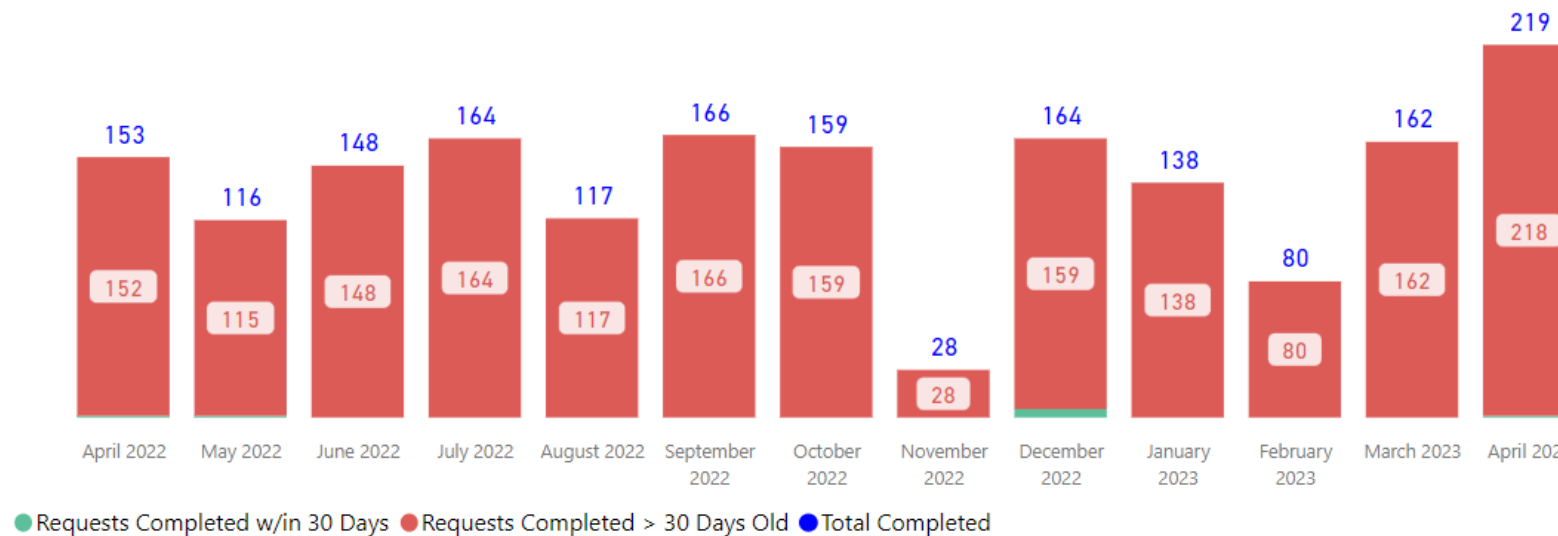
372.64

Total TAT (Rec'd-Compl.) Avg

109.89

Assigned TAT (Asgmt.-Compl.) Avg

Requests Completed



Received to Complete

1814

Requests Completed

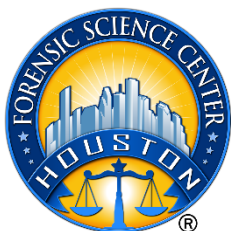
1806

Requests Completed > 30 Days Old

99.56 %

% Completed > 30 Days Old

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

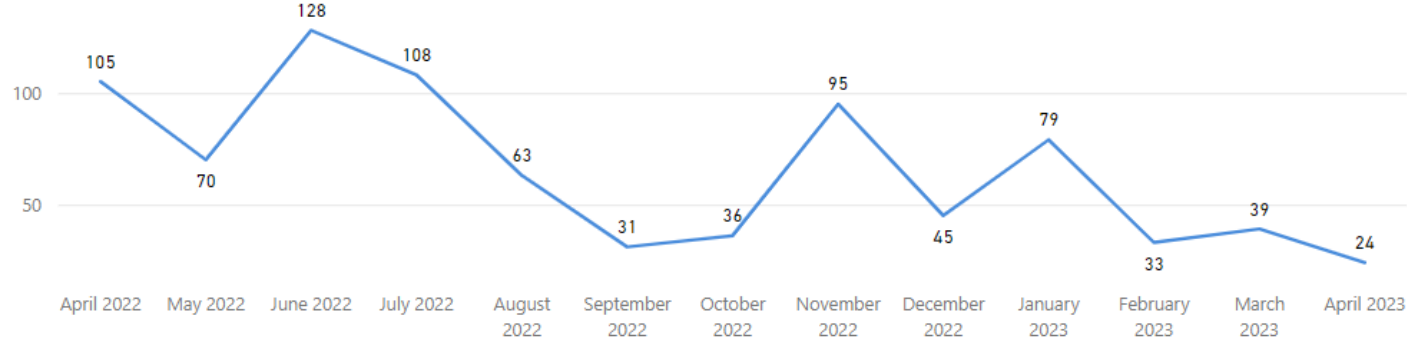


Service: Toxicology
 Priority Type: All

Received Filter

4/1/2022 4/30/2023

Received by Month



Total Received

856

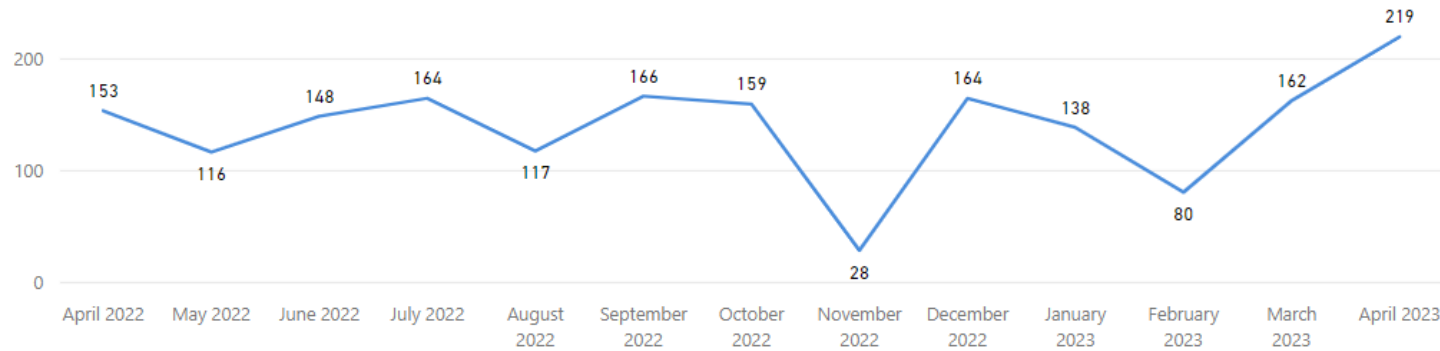
Received per Month (Avg)*

66

Completed Filter

4/1/2022 4/30/2023

Completed by Month



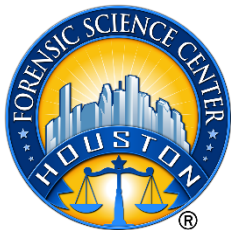
Total Completed

1,814

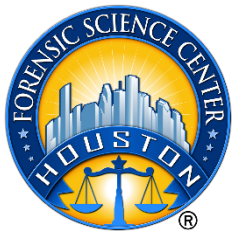
Completed per Month (Avg)*

140

* months with zero activity are not calculated into the average



Firearms



Service

Firearms Examination

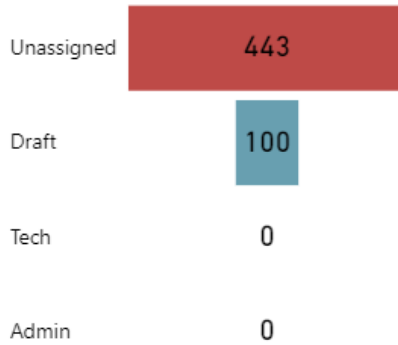
Priority Type

All

Backlogged Requests: 212

Avg Age of Backlog (days): 222

Longest Time in Phase (Pending)



of Unassigned

218!

Goal: 10 (-2080%)

Pending Draft

17!

Goal: 14 (-21.43%)

Pending Tech

0✓

Goal: 9 (+100%)

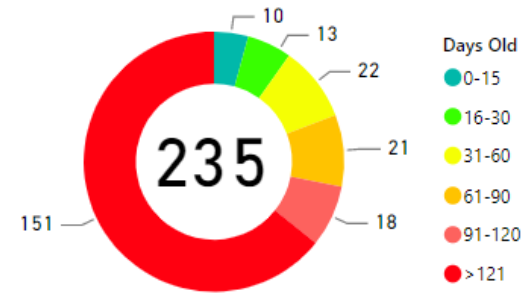
Pending Admin

0✓

Goal: 5 (+100%)

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

Pending Requests



235

Avg Age (days): 202

Overall TAT (MTD)

333.4!

Goal: 40, 41

Overall TAT (Past 90 Days)

283.4!

Goal: 40, 41

Analysis TAT (MTD)

39.8✓

Goal: 40, 41

Analysis TAT (Past 90 Days)

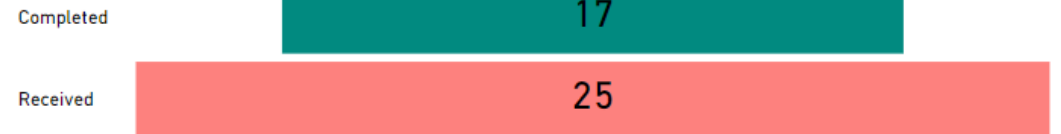
28.3✓

Goal: 40, 41

TAT by Phase of Work (MTD)



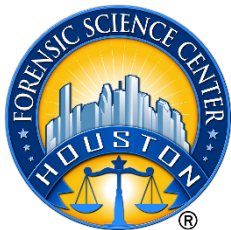
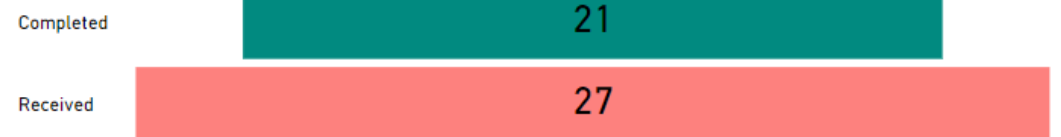
Month to Date



TAT by Phase of Work (Past 90 Days)



30 Day Avg (Over Past 90 Days)

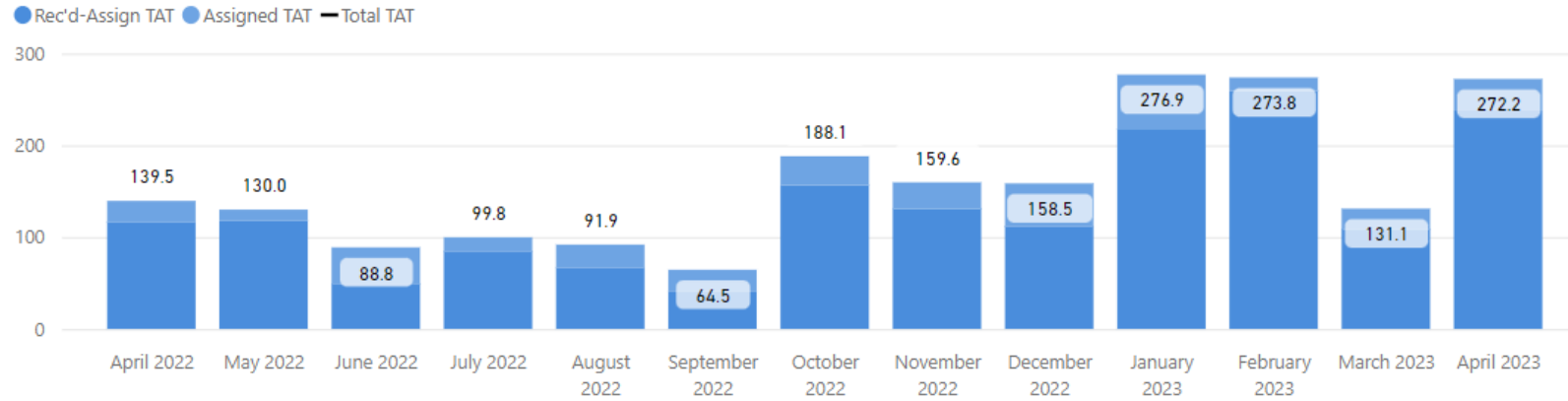


Date Range

4/1/2022

4/30/2023

Total TAT by Month



Request Type

Firearms Examination

Priority Type

All

Selected Time Frame Averages

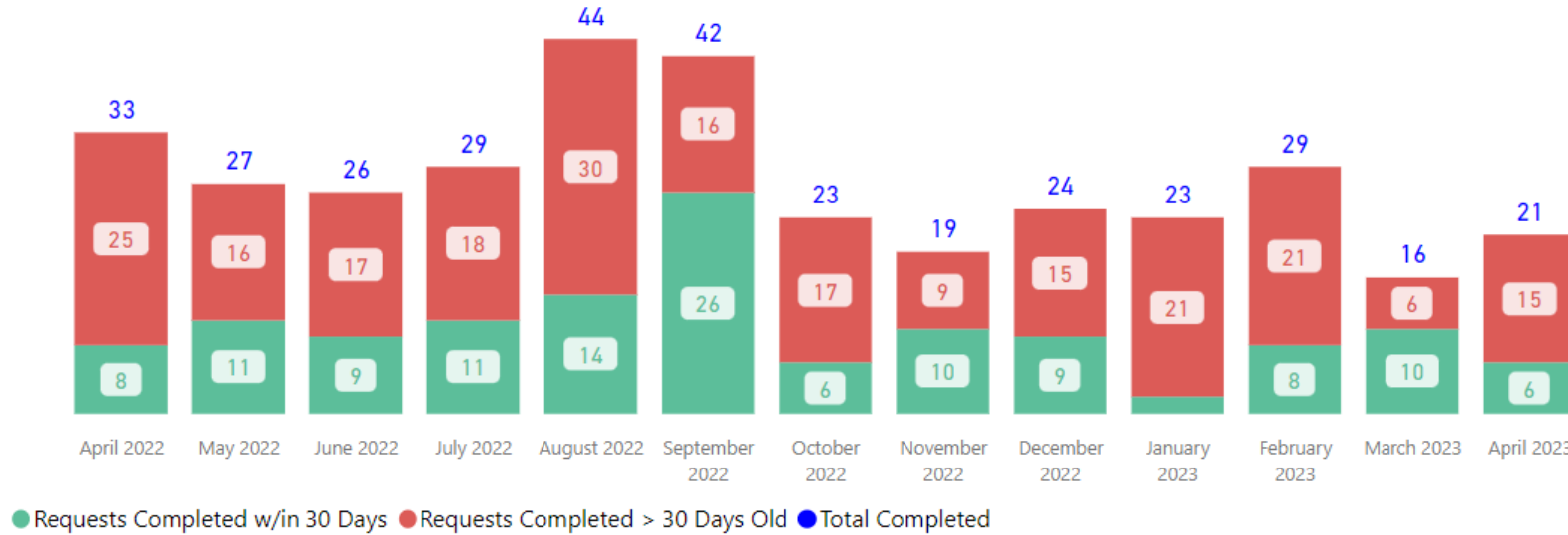
149.87

Total TAT (Rec'd-Compl.) Avg

27.92

Assigned TAT (Asgmt.-Compl.) Avg

Requests Completed



Received to Complete

356

Requests Completed

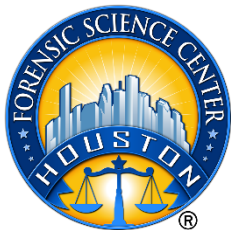
226

Requests Completed > 30 Days Old

63.48 %

% Completed > 30 Days Old

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



Service

Firearms Examination

Priority Type

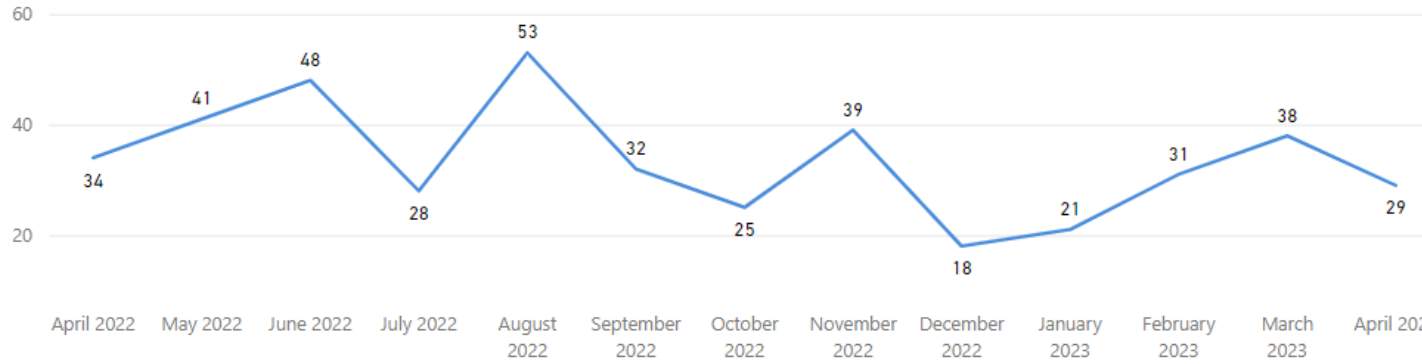
All

Received Filter

4/1/2022

4/30/2023

Received by Month



Total Received

437

Received per Month (Avg)*

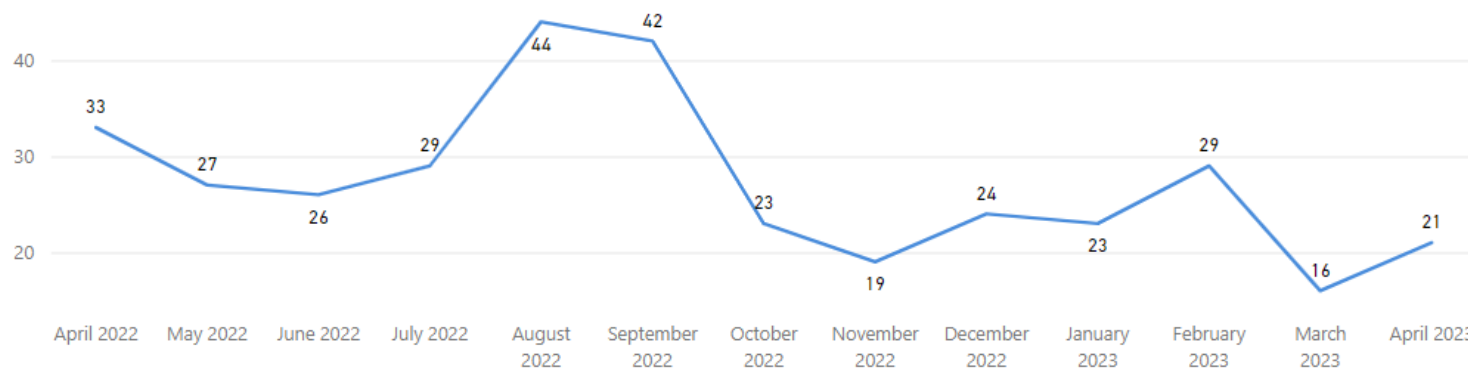
34

Completed Filter

4/1/2022

4/30/2023

Completed by Month



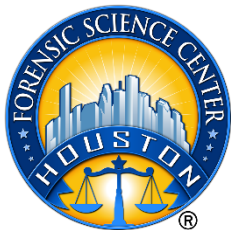
Total Completed

356

Completed per Month (Avg)*

27

* months with zero activity are not calculated into the average



Service

NIBIN Only

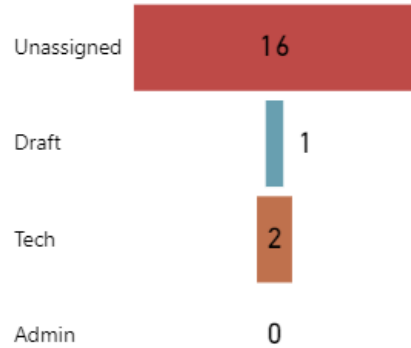
Priority Type

All

Backlogged Requests: 0

Avg Age of Backlog (days): (Blank)

Longest Time in Phase (Pending)



of Unassigned

7✓

Goal: 20 (+65%)

Pending Draft

13✓

Goal: 35 (+62.86%)

Pending Tech

4✓

Goal: 20 (+80%)

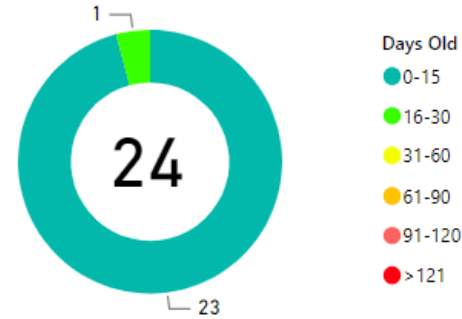
Pending Admin

0✓

Goal: 20 (+100%)

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

Pending Requests



Avg Age (days): 3

Overall TAT (MTD)

4.5✓

Goal: 7, 8

Analysis TAT (MTD)

3.3✓

Goal: 7, 8

Overall TAT (Past 90 Days)

5.1✓

Goal: 7, 8

Analysis TAT (Past 90 Days)

3.6✓

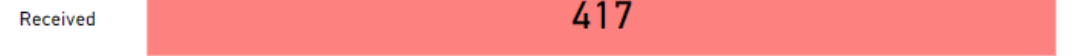
Goal: 7, 8

TAT by Phase of Work (MTD)

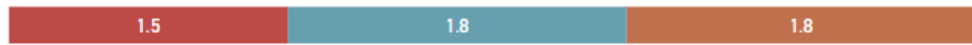


● Assign TAT ● Draft TAT ● Tech Review TAT ● Admin Review TAT

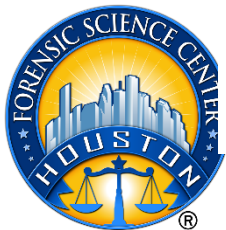
Month to Date



TAT by Phase of Work (Past 90 Days)



30 Day Avg (Over Past 90 Days)

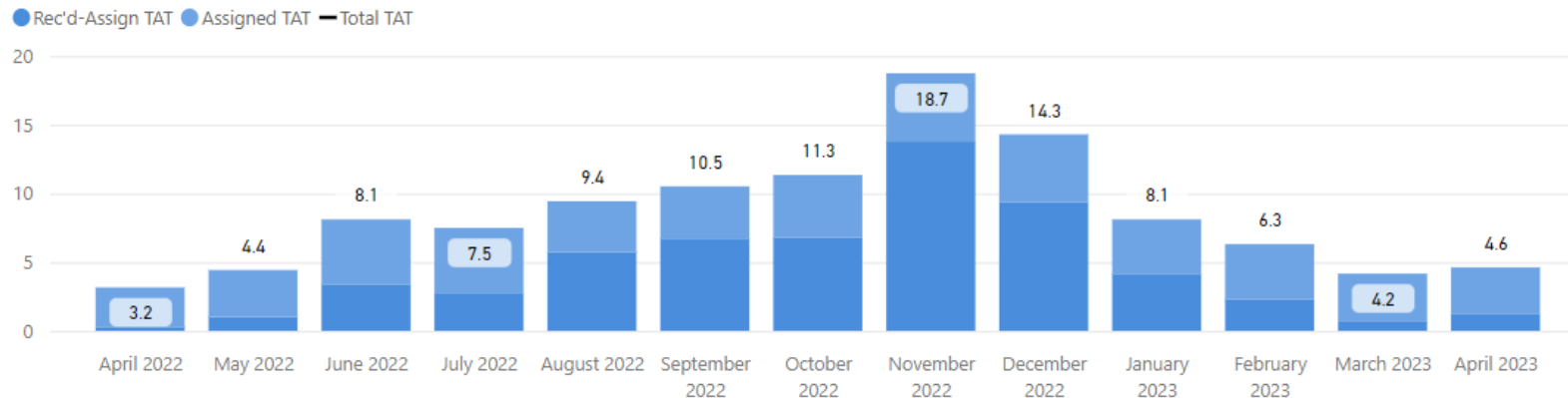


Date Range

4/1/2022

4/30/2023

Total TAT by Month



Request Type

NIBIN Only

Priority Type

All

Selected Time Frame Averages

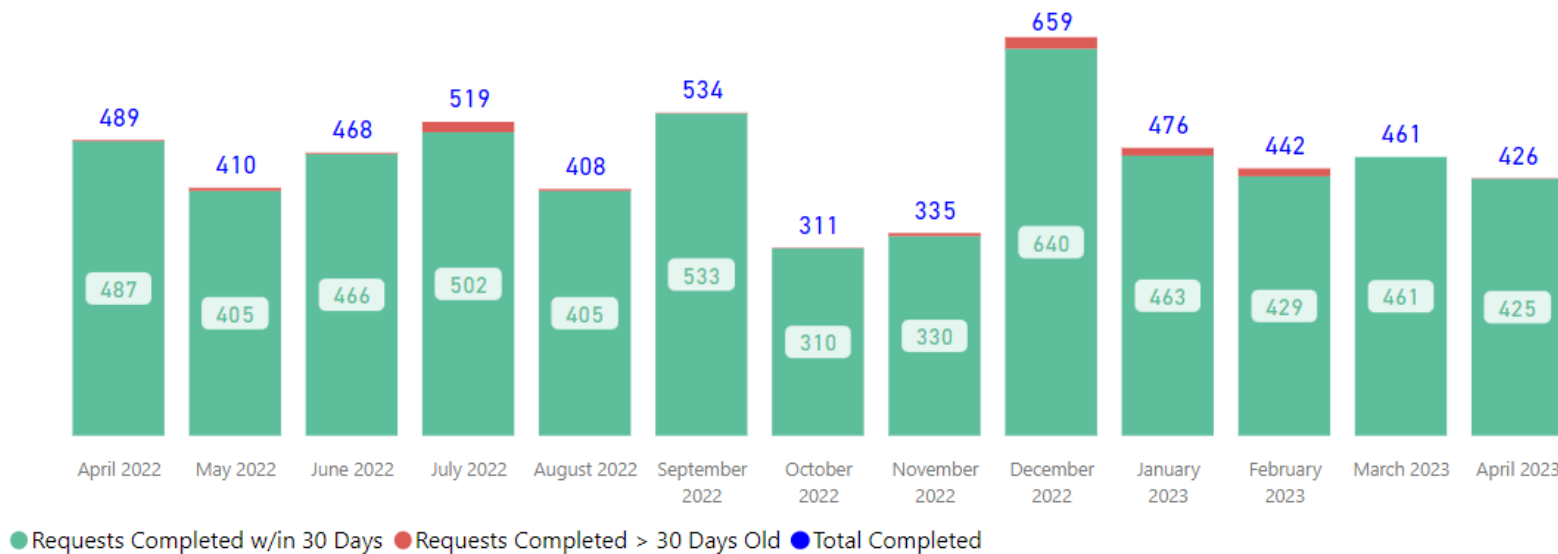
8.47

Total TAT (Rec'd-Compl.) Avg

4.06

Assigned TAT (Asgmt.-Compl.) Avg

Requests Completed



Received to Complete

5938

Requests Completed

82

Requests Completed > 30 Days Old

1.38 %

% Completed > 30 Days Old

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



Service

NIBIN Only

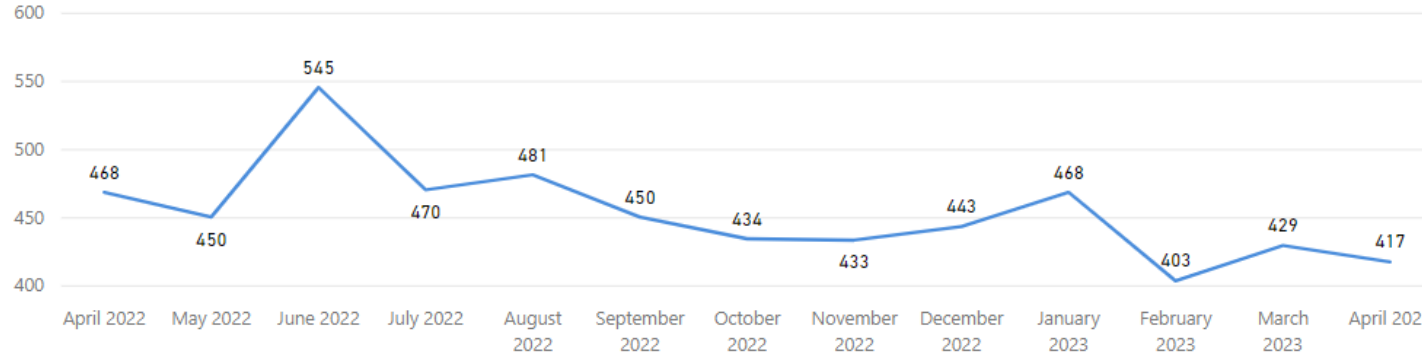
Priority Type

All

Received Filter

4/1/2022 4/30/2023

Received by Month



Total Received

5,891

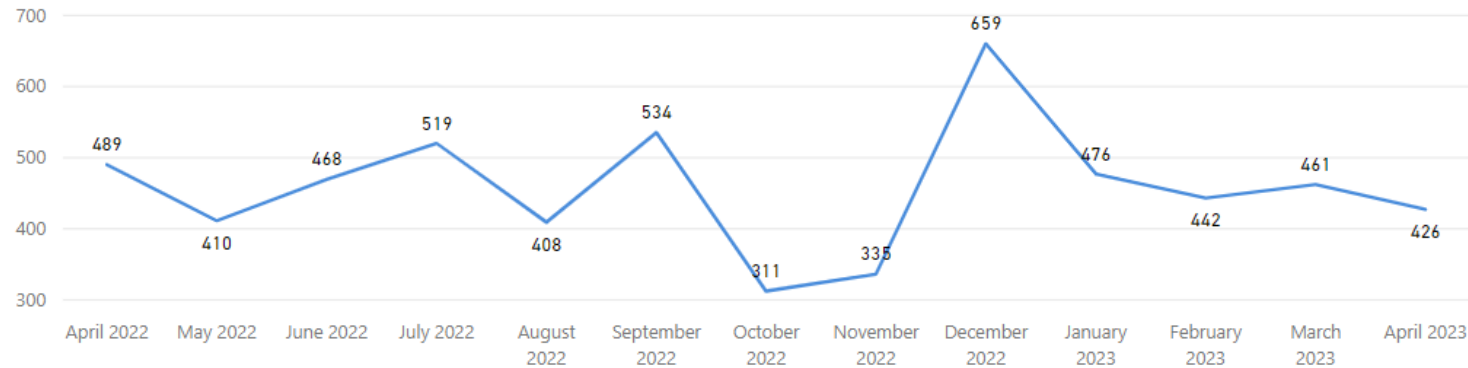
Received per Month (Avg)*

453

Completed Filter

4/1/2022 4/30/2023

Completed by Month



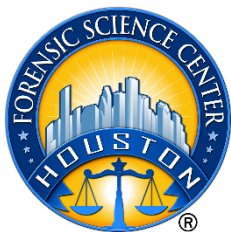
Total Completed

5,938

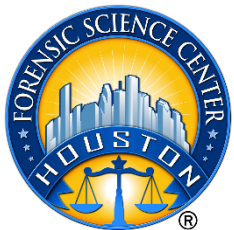
Completed per Month (Avg)*

457

* months with zero activity are not calculated into the average

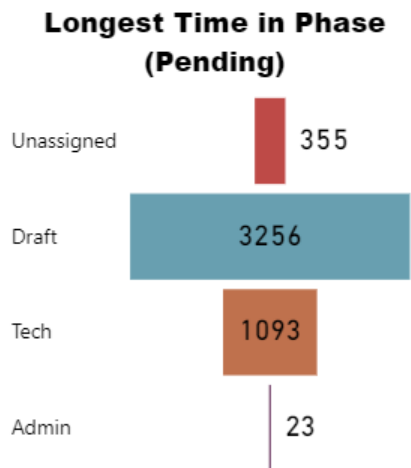


Forensic Biology



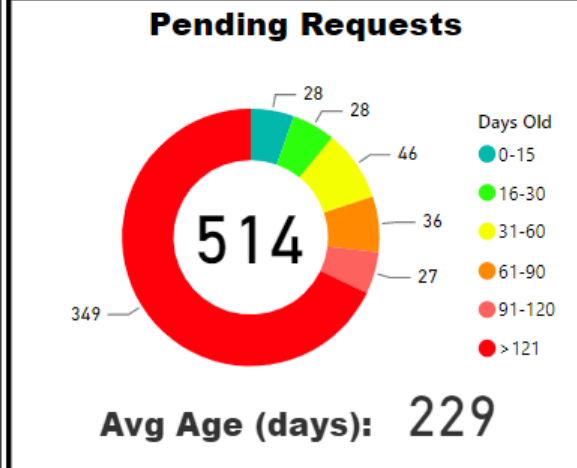
Section: **DNA** | Request Type: **All**

Backlogged Requests: 458
Avg Age of Backlog (days): 256



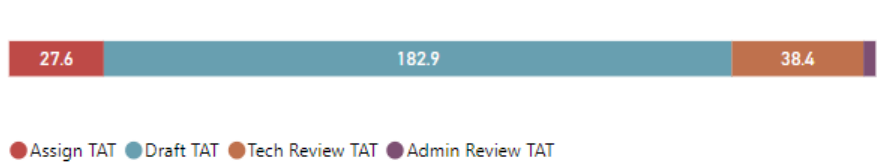
# of Unassigned 69! Goal: 20 (-245%)	# Pending Draft 366! Goal: 24 (-1425%)
# Pending Tech 69! Goal: 24 (-187.5%)	# Pending Admin 10✓ Goal: 20 (+50%)

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

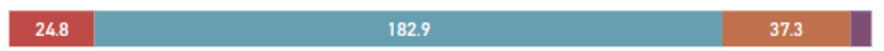


Overall TAT (MTD) 252.5! Goal: 30, 31	Analysis TAT (MTD) 224.9! Goal: 30, 31
Overall TAT (Past 90 Days) 251.2! Goal: 30, 31	Analysis TAT (Past 90 Days) 226.4! Goal: 30, 31

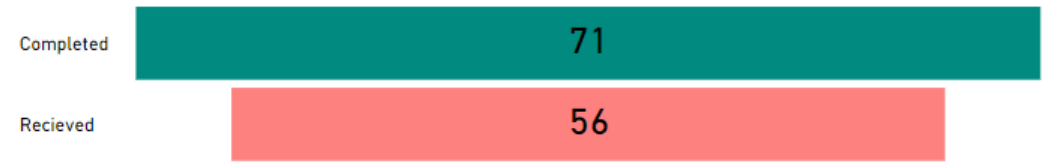
TAT by Phase of Work (MTD)



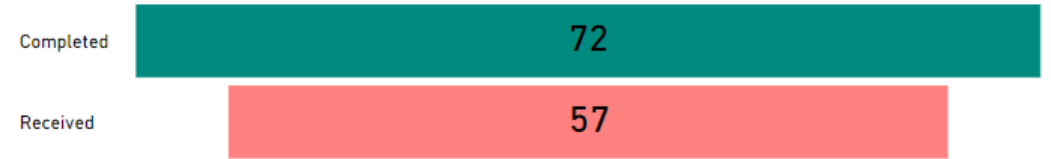
TAT by Phase of Work (Past 90 Days)



Month to Date



30 Day Avg (Over Past 90 Days)



Section

DNA

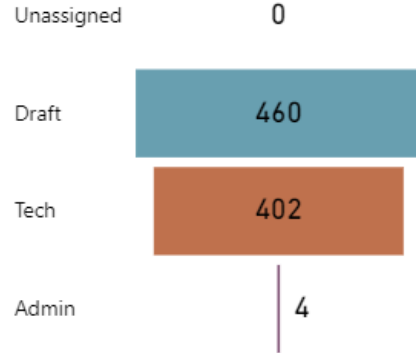
Request Type

SAK

Backlogged Requests: 31

Avg Age of Backlog (days): 286

Longest Time in Phase (Pending)



of Unassigned

0✓

Goal: 20 (+100%)

Pending Draft

28!

Goal: 24 (-16.67%)

Pending Tech

5✓

Goal: 24 (+79.17%)

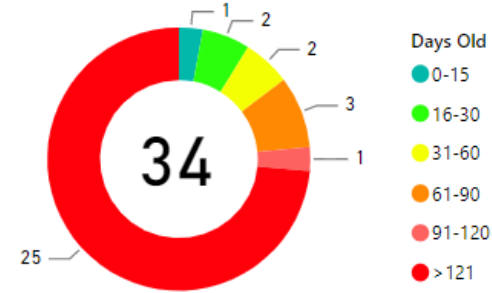
Pending Admin

1✓

Goal: 20 (+95%)

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

Pending Requests



Avg Age (days): 263

Overall TAT (MTD)

125.3!

Goal: 30, 31

Overall TAT (Past 90 Days)

196.5!

Goal: 30, 31

Analysis TAT (MTD)

114.8!

Goal: 30, 31

Analysis TAT (Past 90 Days)

190.9!

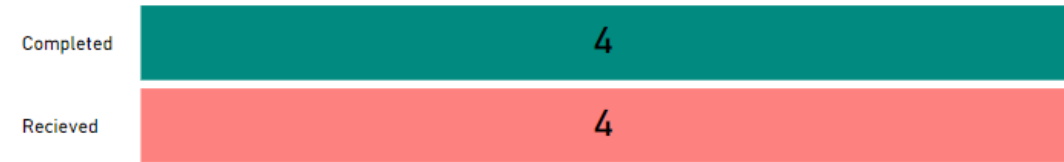
Goal: 30, 31

TAT by Phase of Work (MTD)

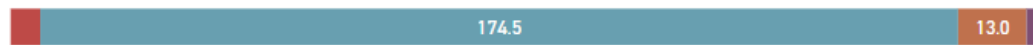


● Assign TAT ● Draft TAT ● Tech Review TAT ● Admin Review TAT

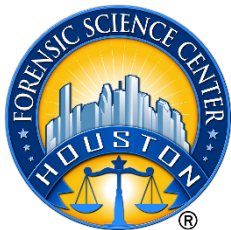
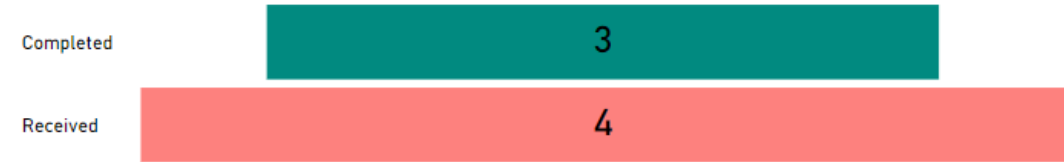
Month to Date



TAT by Phase of Work (Past 90 Days)



30 Day Avg (Over Past 90 Days)



Section

Outsourced - DNA

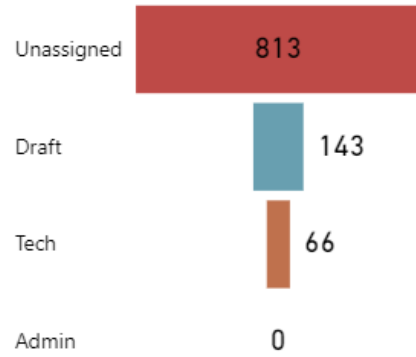
Request Type

All

Backlogged Requests: 337

Avg Age of Backlog (days): 139

Longest Time in Phase (Pending)



of Unassigned

442!

Goal: 100 (-342%)

Pending Draft

4✓

Goal: 100 (+96%)

Pending Tech

3✓

Goal: 100 (+97%)

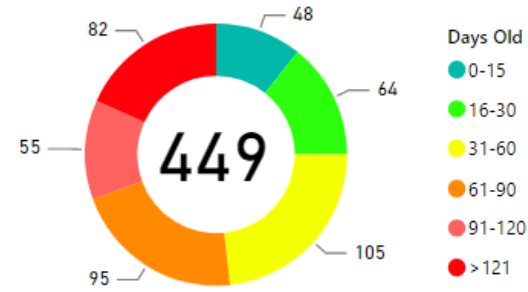
Pending Admin

0✓

Goal: 100 (+100%)

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

Pending Requests



Avg Age (days): 108

Overall TAT (MTD)

137.3!

Goal: 100, 100

Analysis TAT (MTD)

11.4✓

Goal: 100, 100

Overall TAT (Past 90 Days)

118.3!

Goal: 100, 100

Analysis TAT (Past 90 Days)

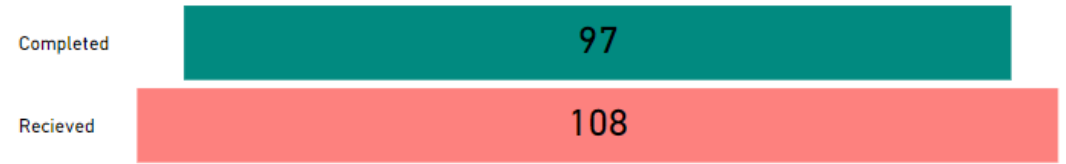
6.6✓

Goal: 100, 100

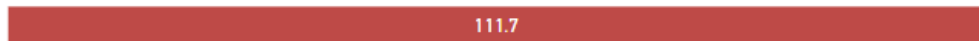
TAT by Phase of Work (MTD)



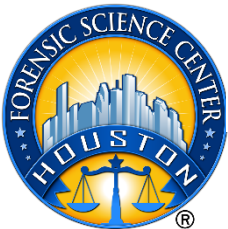
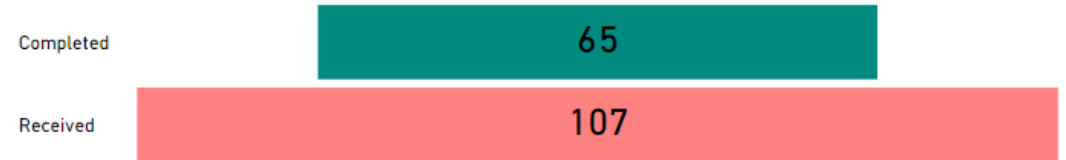
Month to Date



TAT by Phase of Work (Past 90 Days)



30 Day Avg (Over Past 90 Days)



Section

Outsourced - Non-SAK

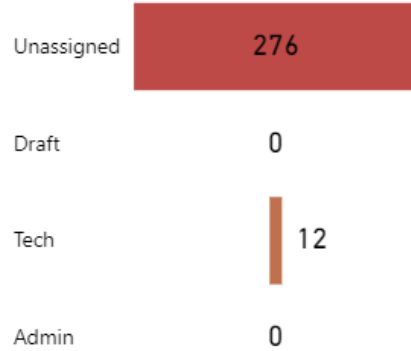
Request Type

All

Backlogged Requests: 306

Avg Age of Backlog (days): 152

Longest Time in Phase (Pending)



of Unassigned

278!

Goal: 100 (-178%)

Pending Draft

0✓

Goal: 100 (+100%)

Pending Tech

63✓

Goal: 100 (+37%)

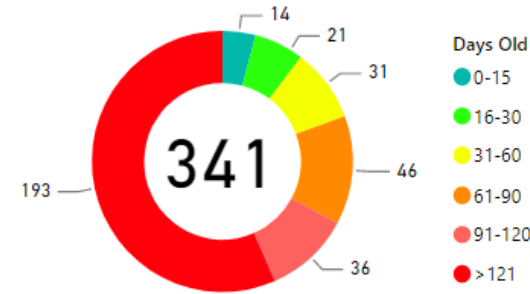
Pending Admin

0✓

Goal: 100 (+100%)

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

Pending Requests



341

Avg Age (days): 138

Overall TAT (MTD)

NaN✓

Goal: 100, 100

Analysis TAT (MTD)

NaN✓

Goal: 100, 100

Overall TAT (Past 90 Days)

210.3!

Goal: 100, 100

Analysis TAT (Past 90 Days)

0.0✓

Goal: 100, 100

TAT by Phase of Work (MTD)

● Assign TAT ● Draft TAT ● Tech Review TAT ● Admin Review TAT

Month to Date

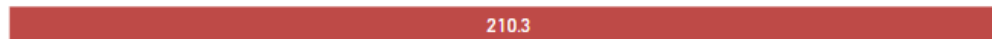
Completed

0

Received

31

TAT by Phase of Work (Past 90 Days)



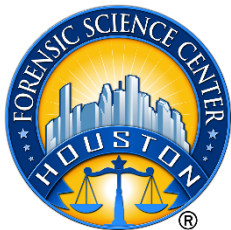
30 Day Avg (Over Past 90 Days)

Completed

21

Received

37



Section

Outsource Technical Revi... ▾

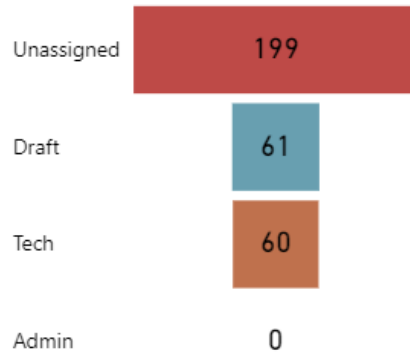
Request Type

All ▾

Backlogged Requests: 4

Avg Age of Backlog (days): 91

Longest Time in Phase (Pending)



of Unassigned

1 ✓

Goal: 100 (+99%)

Pending Draft

1 ✓

Goal: 100 (+99%)

Pending Tech

2 ✓

Goal: 100 (+98%)

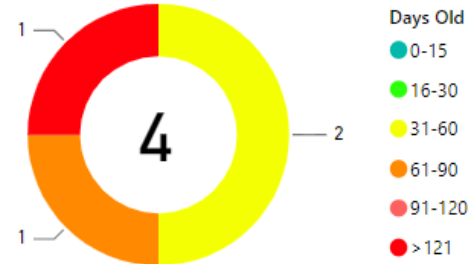
Pending Admin

0 ✓

Goal: 100 (+100%)

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

Pending Requests



Avg Age (days): 91

Overall TAT (MTD)

89.0 ✓

Goal: 100, 100

Analysis TAT (MTD)

89.0 ✓

Goal: 100, 100

Overall TAT (Past 90 Days)

93.0 ✓

Goal: 100, 100

Analysis TAT (Past 90 Days)

93.0 ✓

Goal: 100, 100

TAT by Phase of Work (MTD)



● Assign TAT ● Draft TAT ● Tech Review TAT ● Admin Review TAT

Month to Date

Completed

105

Received

0

TAT by Phase of Work (Past 90 Days)



30 Day Avg (Over Past 90 Days)

Completed

55

Received

13



Date Range

4/1/2022

4/30/2023

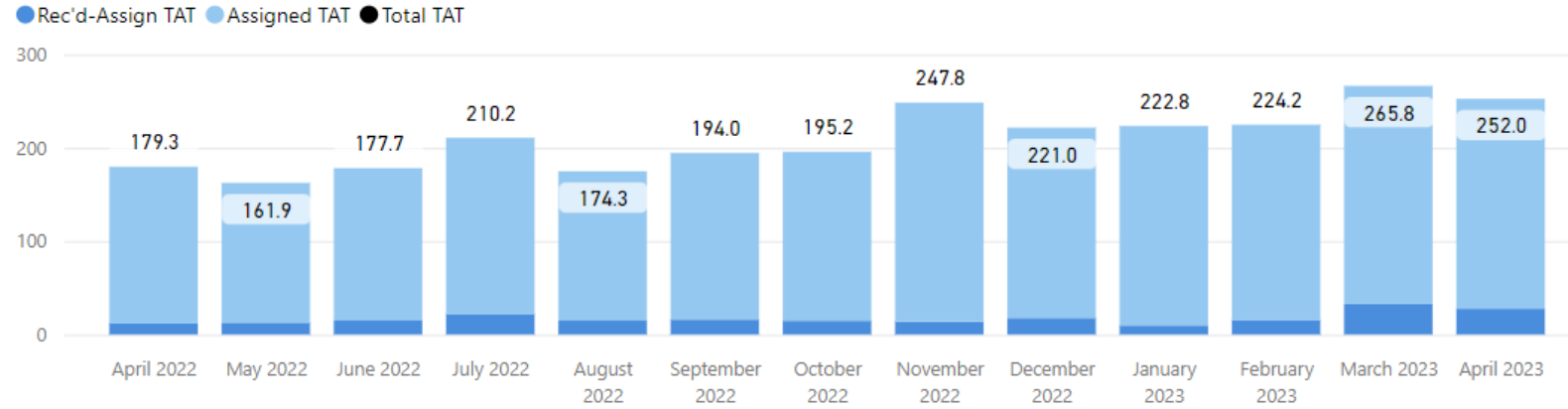
Request Type

DNA

Request Type

All

Total TAT by Month



Selected Time Frame Averages

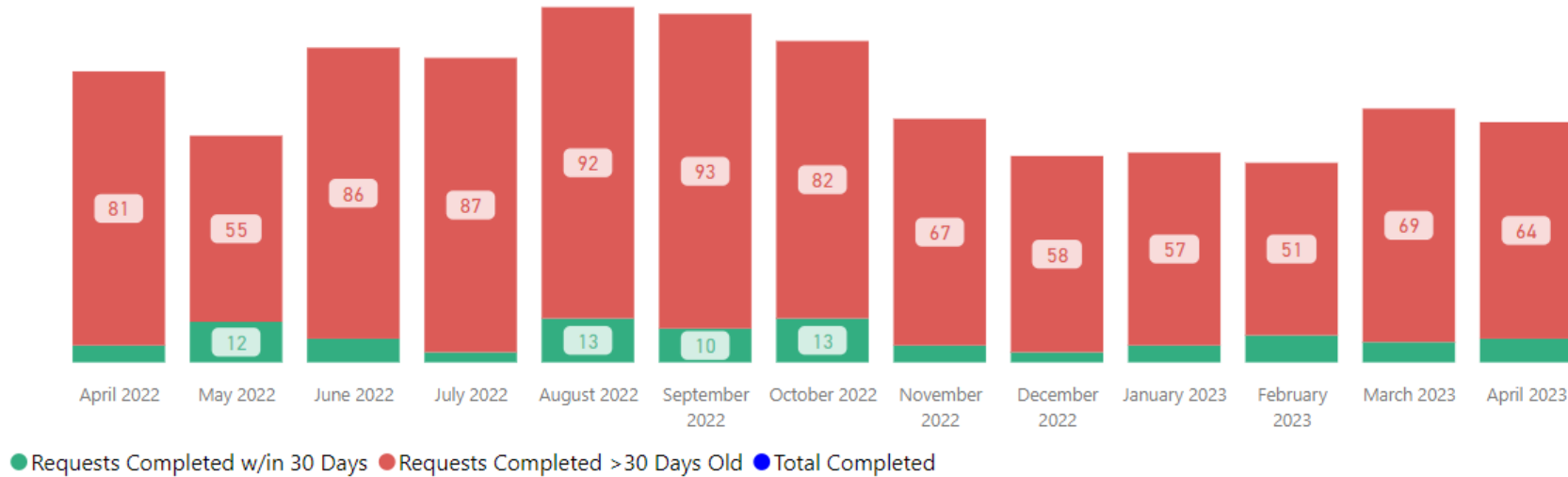
206.67

Total TAT (Rec'd-Compl.) Avg

189.88

Assigned TAT (Asgmt.-Compl.) Avg

Requests Completed



Received to Complete

1039

Requests Completed

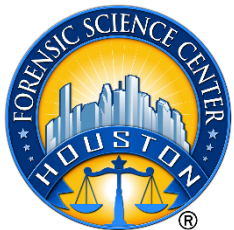
942

Requests Completed > 30 Days

90.66 %

% Completed > 30 Days

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



Section

DNA

Request Type

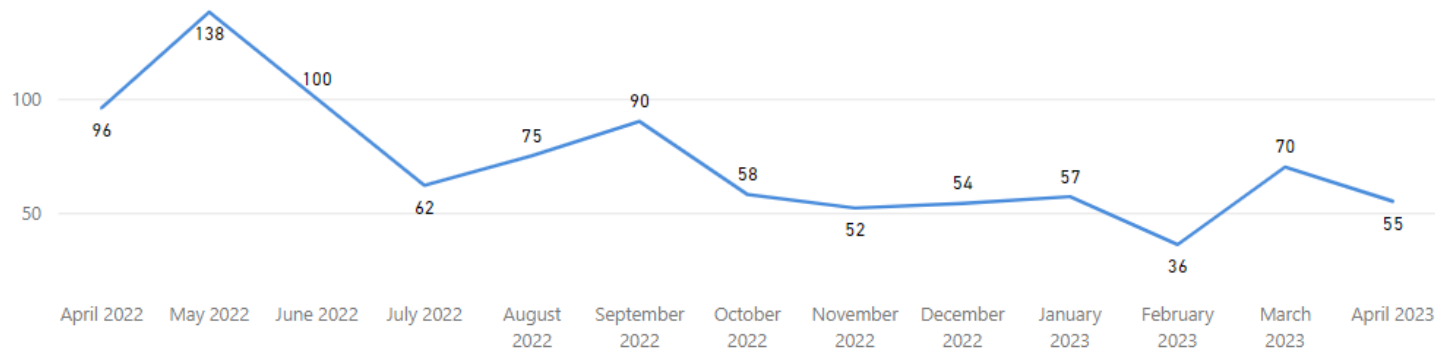
All

Filter icons

Received Filter

4/1/2022 4/30/2023

Received by Month



Total Received

943

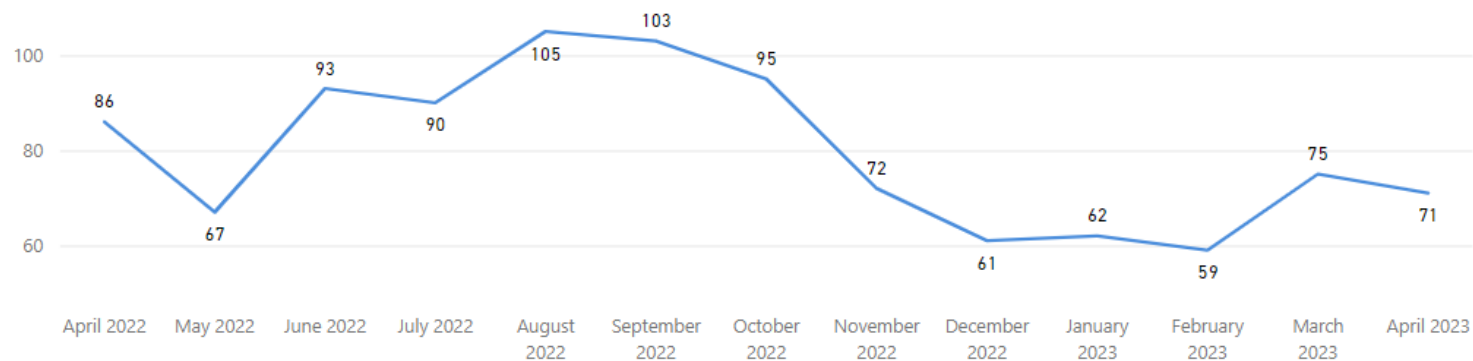
Received per Month (Avg)*

73

Completed Filter

4/1/2022 4/30/2023

Completed by Month



Total Completed

1039

Completed per Month (Avg)*

80

* months with zero activity are not calculated into the average



Section

Screening

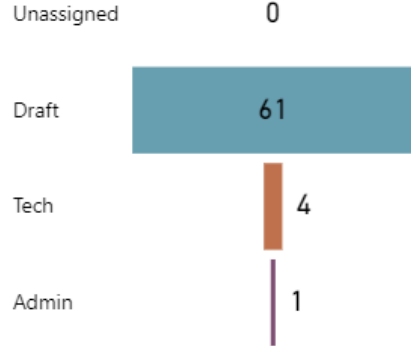
Request Type

All

Backlogged Requests: 10

Avg Age of Backlog (days): 47

Longest Time in Phase (Pending)



of Unassigned

0 ✓

Goal: 10 (+100%)

Pending Draft

55!

Goal: 14 (-292.86%)

Pending Tech

8 ✓

Goal: 16 (+50%)

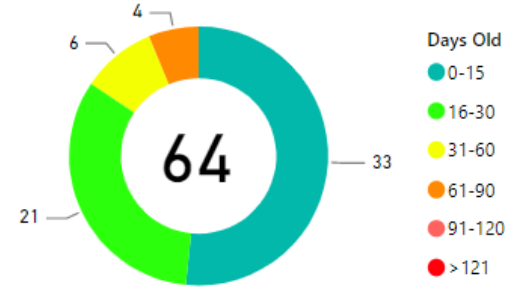
Pending Admin

1 ✓

Goal: 12 (+91.67%)

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

Pending Requests



Avg Age (days): 17

Overall TAT (MTD)

25.6!

Goal: 10, 11

Analysis TAT (MTD)

25.6!

Goal: 10, 11

Overall TAT (Past 90 Days)

21.0!

Goal: 10, 11

Analysis TAT (Past 90 Days)

21.0!

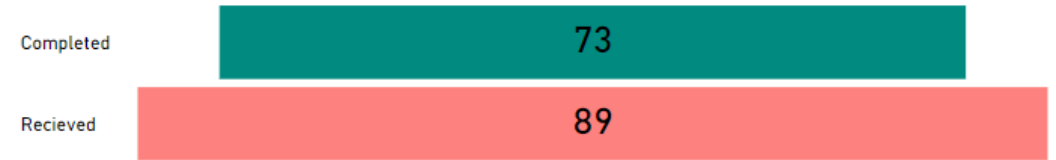
Goal: 10, 11

TAT by Phase of Work (MTD)



Assign TAT Draft TAT Tech Review TAT Admin Review TAT

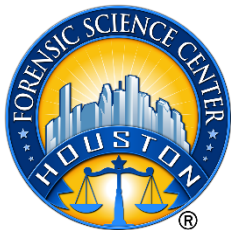
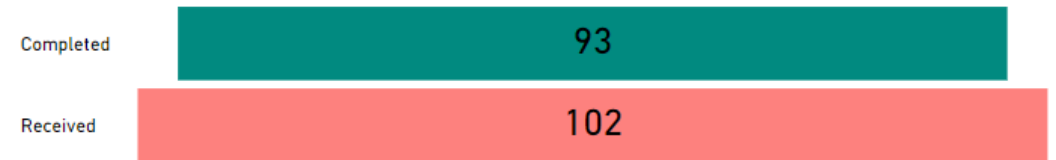
Month to Date



TAT by Phase of Work (Past 90 Days)



30 Day Avg (Over Past 90 Days)



Date Range

4/1/2022

4/30/2023

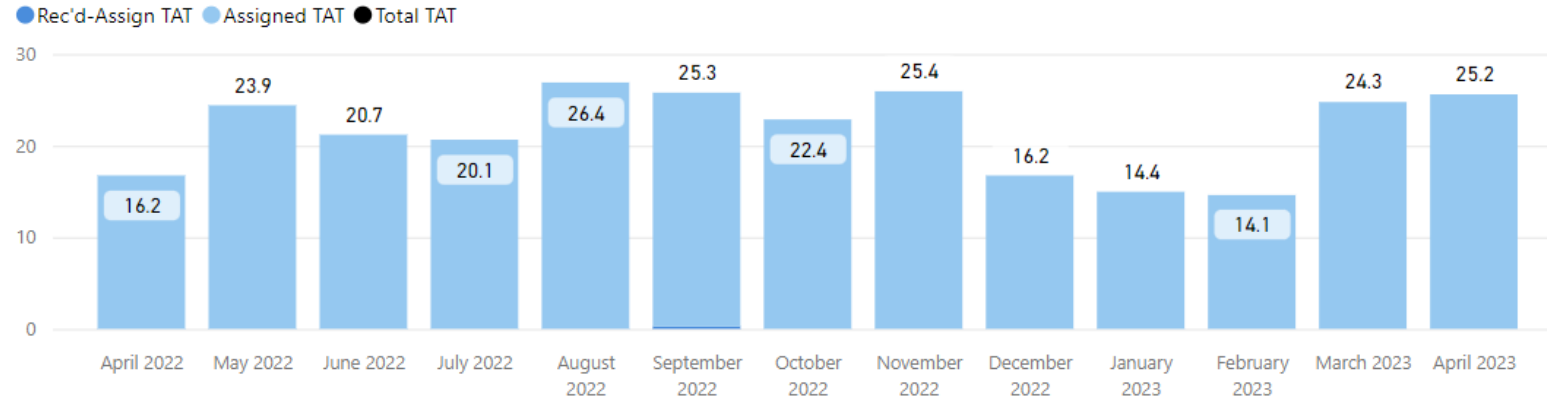
Request Type

Screening

Request Type

All

Total TAT by Month



Selected Time Frame Averages

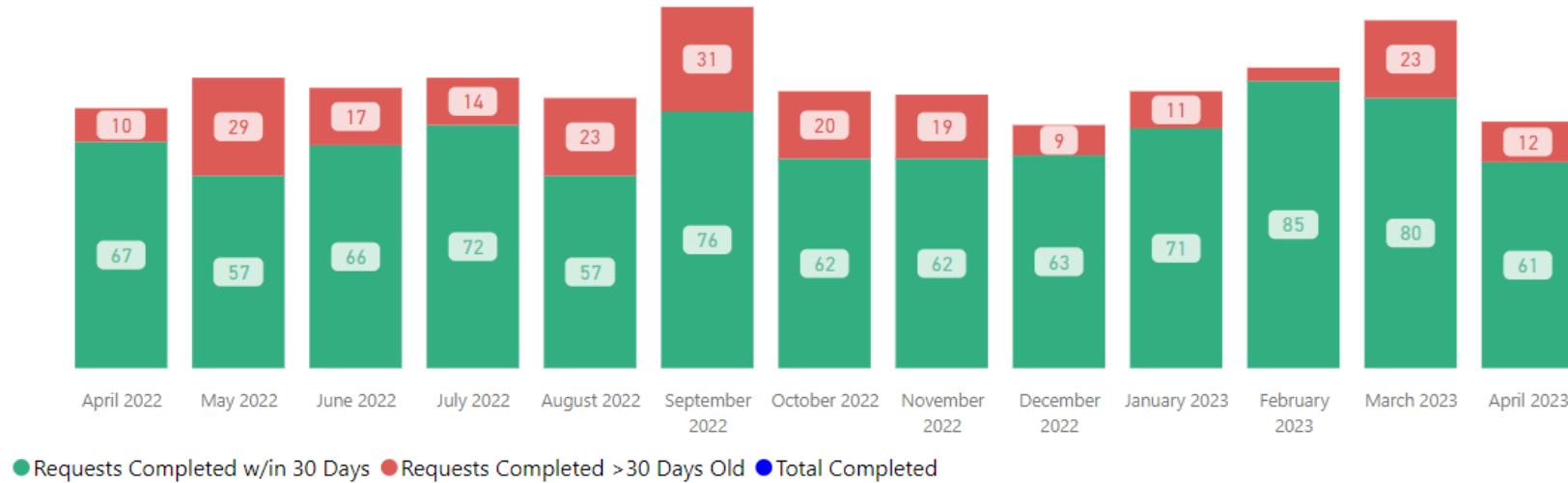
21.27

Total TAT (Rec'd-Compl.) Avg

21.73

Assigned TAT (Asgmt.-Compl.) Avg

Requests Completed



Received to Complete

1101

Requests Completed

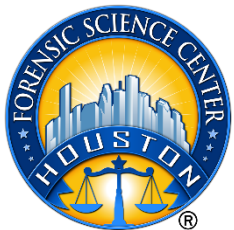
222

Requests Completed > 30 Days

20.16 %

% Completed > 30 Days

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



Section

Screening

Request Type

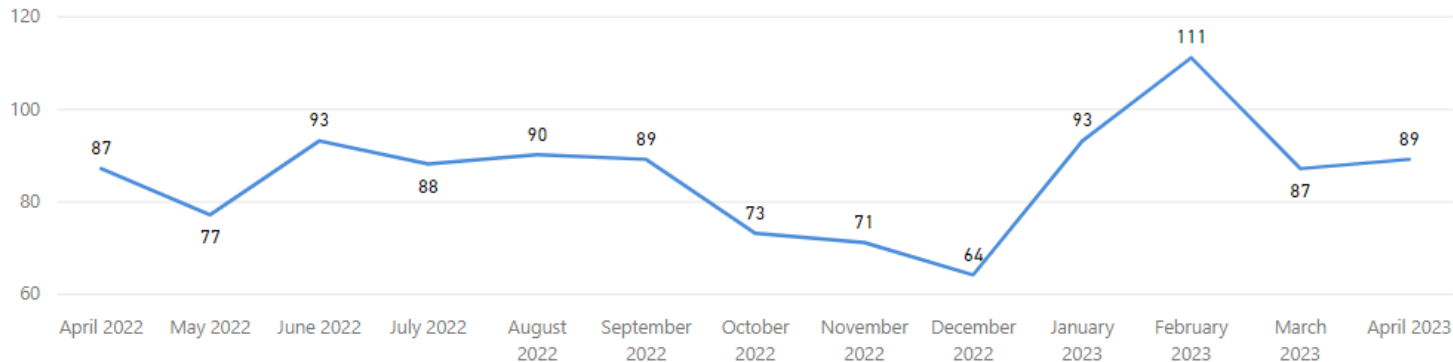
All

Received Filter

4/1/2022

4/30/2023

Received by Month



Total Received

1112

Received per Month (Avg)*

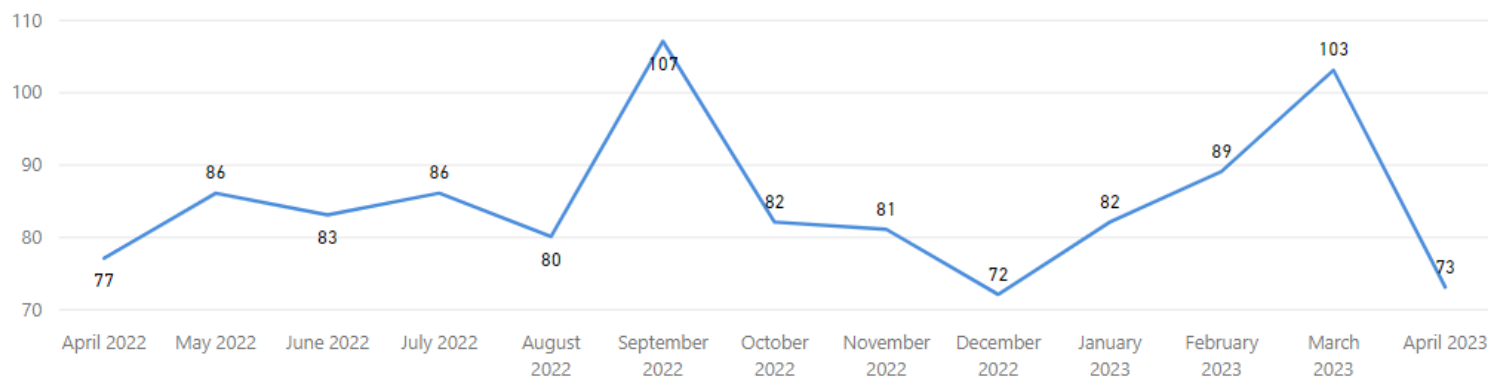
86

Completed Filter

4/1/2022

4/30/2023

Completed by Month



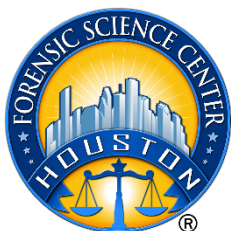
Total Completed

1101

Completed per Month (Avg)*

85

* months with zero activity are not calculated into the average



Section

CODIS

CODIS Hit Type

All

Backlogged Requests: 4

Avg Age of Backlog (days): 31

Longest Time in Phase (Pending)



of Unassigned

41 ✓

Goal: 100 (+59%)

Pending Draft

8 ✓

Goal: 20 (+60%)

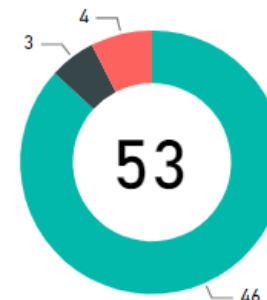
Pending Admin

4 ✓

Goal: 15 (+73.33%)

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

Pending Requests



Avg Age (days): 11

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

Overall TAT (MTD)

9.9 ✓

Goal: 30, 31

Overall TAT (Past 90 Days)

7.6 ✓

Goal: 30, 31

Analysis TAT (MTD)

3.3 ✓

Goal: 30, 31

Analysis TAT (Past 90 Days)

3.0 ✓

Goal: 30, 31

TAT by Phase of Work (MTD)

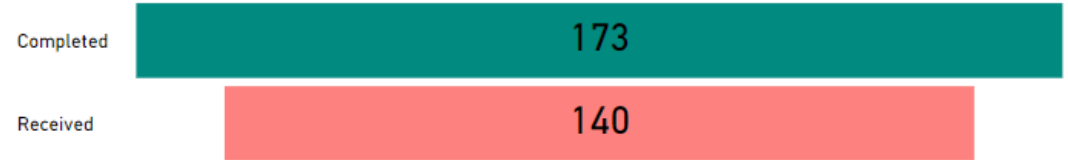


- Assign TAT
- Draft TAT
- Draft to Release TAT
- Assigned to Release TAT (no draft)

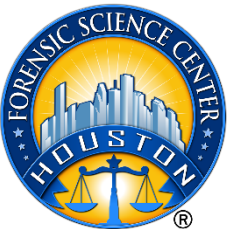
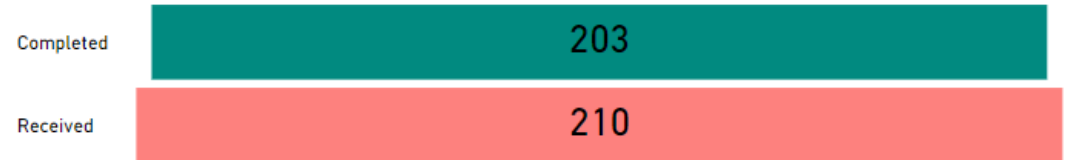
TAT by Phase of Work (Past 90 Days)



Month to Date



30 Day Avg (Over Past 90 Days)



Date Range

4/1/2022

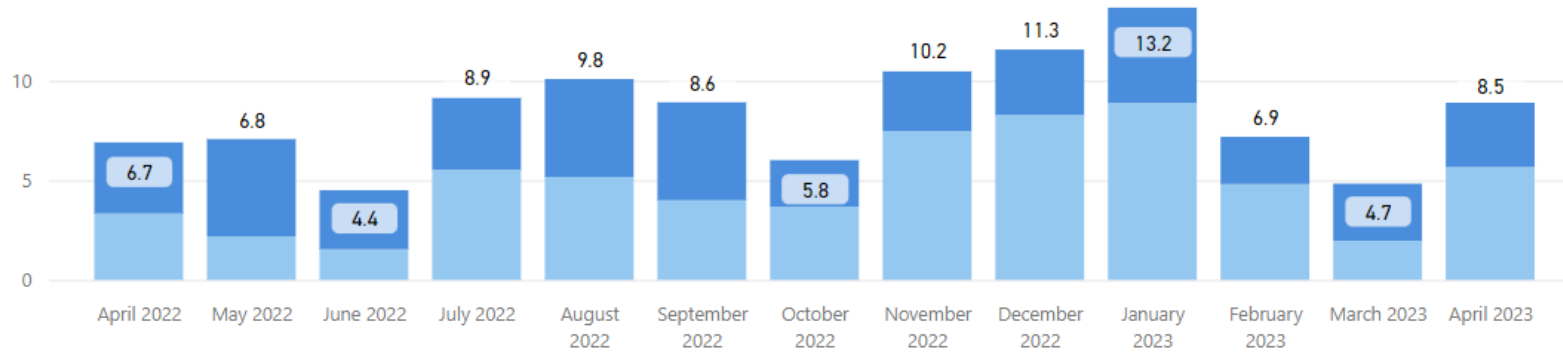
4/30/2023

Request Type

CODIS

Total TAT by Month

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



Selected Time Frame Averages

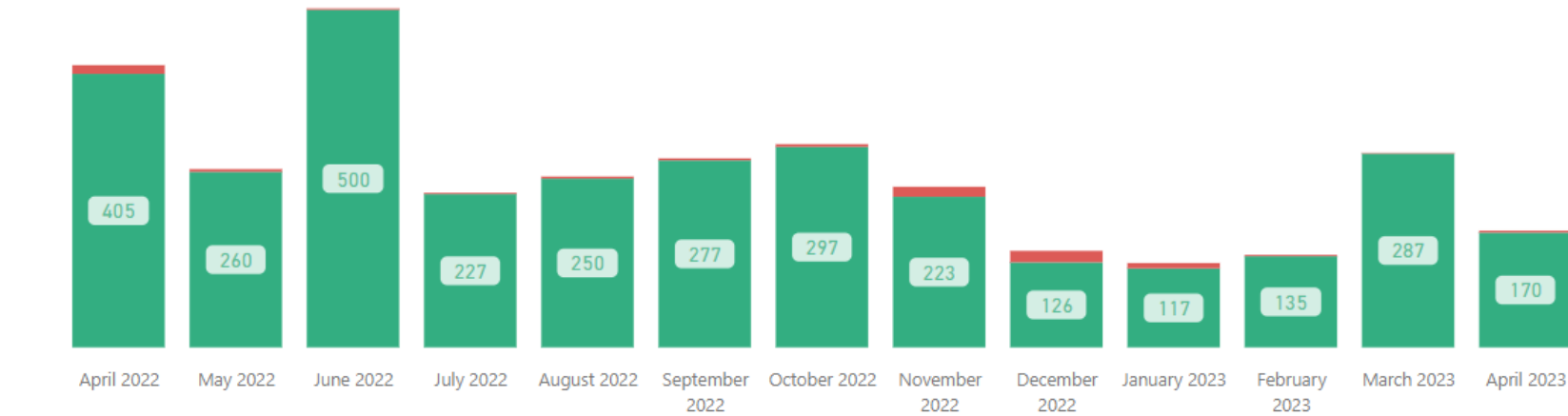
7.44

Total TAT (Rec'd-Compl.) Avg

3.55

Assigned TAT (Asgmt.-Compl.) Avg

Requests Completed



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

Received to Complete

3351

Requests Completed

77

Requests Completed > 30 Days

2.30 %

% Completed > 30 Days

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



Section

CODIS

Hit Type

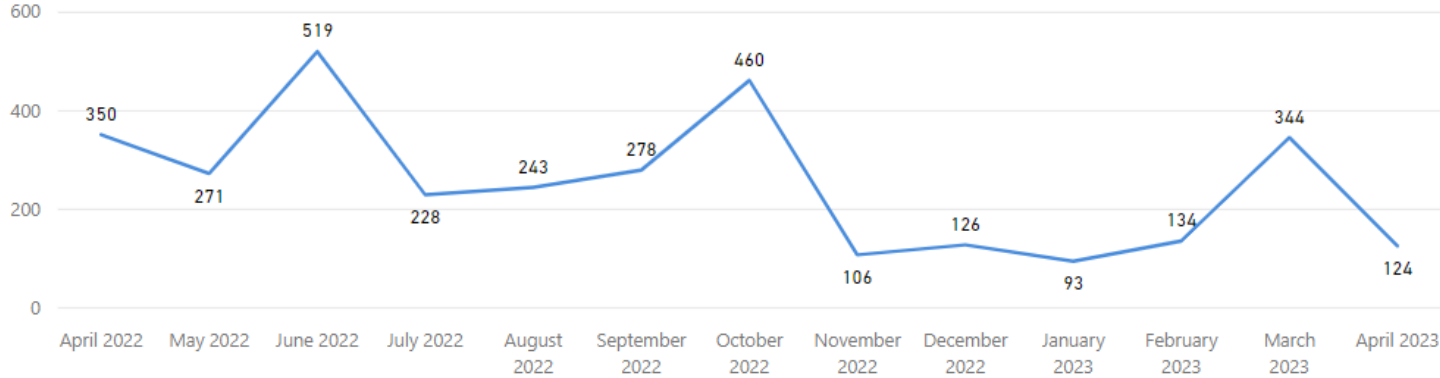
All

Received Filter

4/1/2022

4/30/2023

Received by Month



Total Received

3276

Received per Month (Avg)*

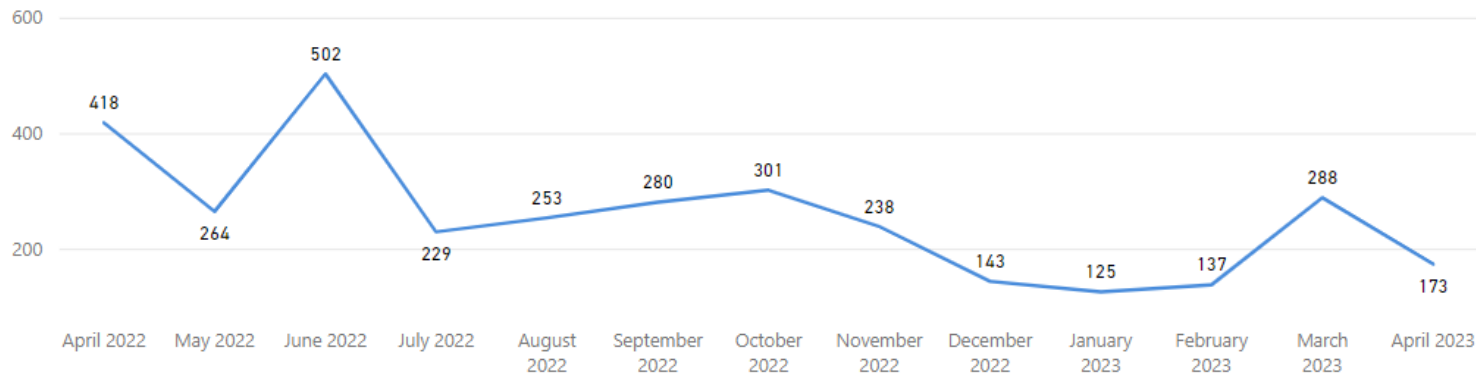
252

Completed Filter

4/1/2022

4/30/2023

Completed by Month



Total Completed

3351

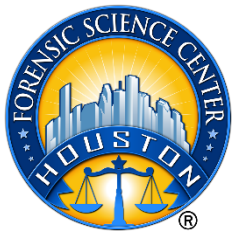
Completed per Month (Avg)*

258

* months with zero activity are not calculated into the average



Latent Prints



Service

Latent Comparison

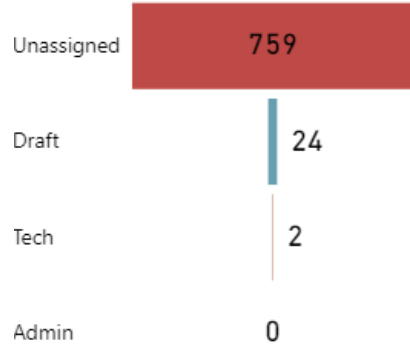
Priority Type

All

Backlogged Requests: 282

Avg Age of Backlog (days): 388

Longest Time in Phase (Pending)



of Unassigned

316!

Goal: 230 (-37.39%)

Pending Draft

25✓

Goal: 50 (+50%)

Pending Tech

3✓

Goal: 50 (+94%)

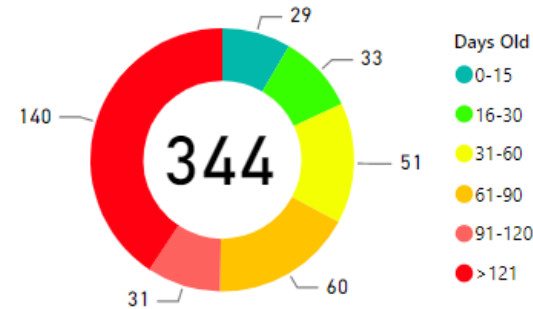
Pending Admin

0✓

Goal: 50 (+100%)

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

Pending Requests



Avg Age (days): 321

Overall TAT (MTD)

386.4!

Goal: 45, 46

Overall TAT (Past 90 Days)

505.2!

Goal: 45, 46

Analysis TAT (MTD)

9.6✓

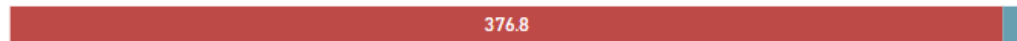
Goal: 45, 46

Analysis TAT (Past 90 Days)

4.9✓

Goal: 45, 46

TAT by Phase of Work (MTD)



● Assign TAT ● Draft TAT ● Tech Review TAT ● Admin Review TAT

Month to Date

Completed

130

Received

65

TAT by Phase of Work (Past 90 Days)



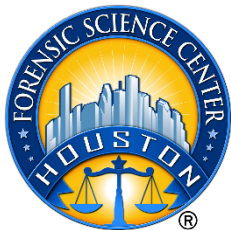
30 Day Avg (Over Past 90 Days)

Completed

262

Received

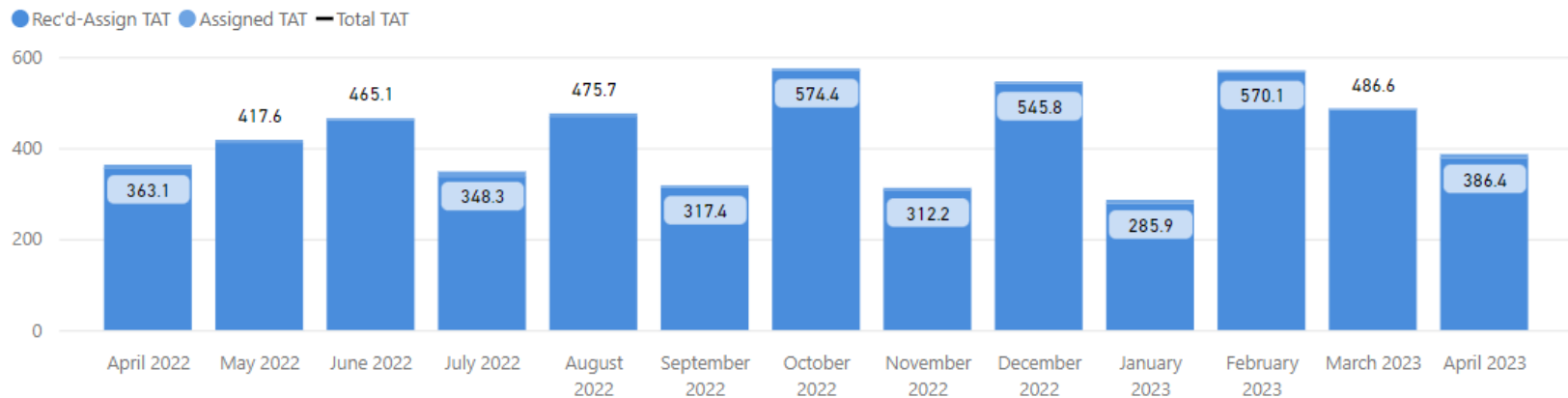
83



Date Range

4/1/2022 4/30/2023

Total TAT by Month



Request Type

Latent Comparison

Priority Type

All

Selected Time Frame Averages

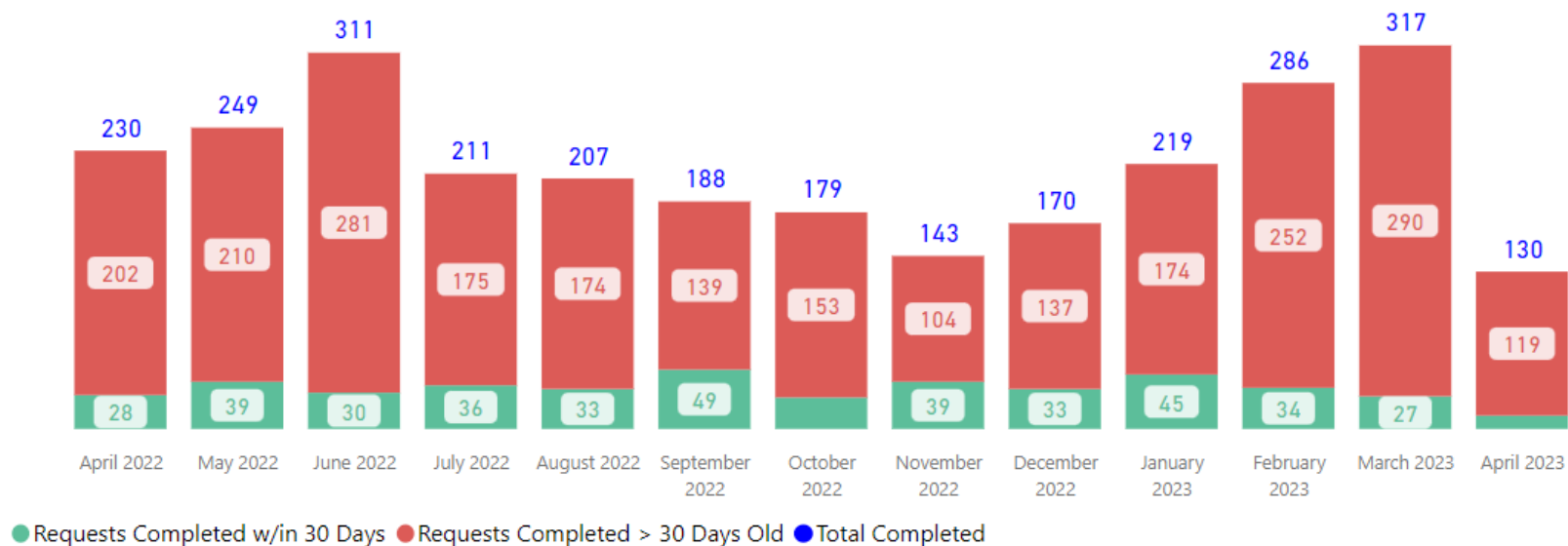
434.57

Total TAT (Rec'd-Compl.) Avg

6.15

Assigned TAT (Asgmt.-Compl.) Avg

Requests Completed



Received to Complete

2840

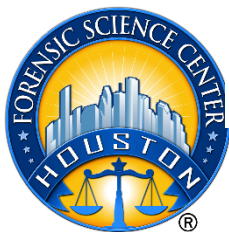
Requests Completed

2410

Requests Completed > 30 Days Old

84.86 %

% Completed > 30 Days Old



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

Service

Priority Type

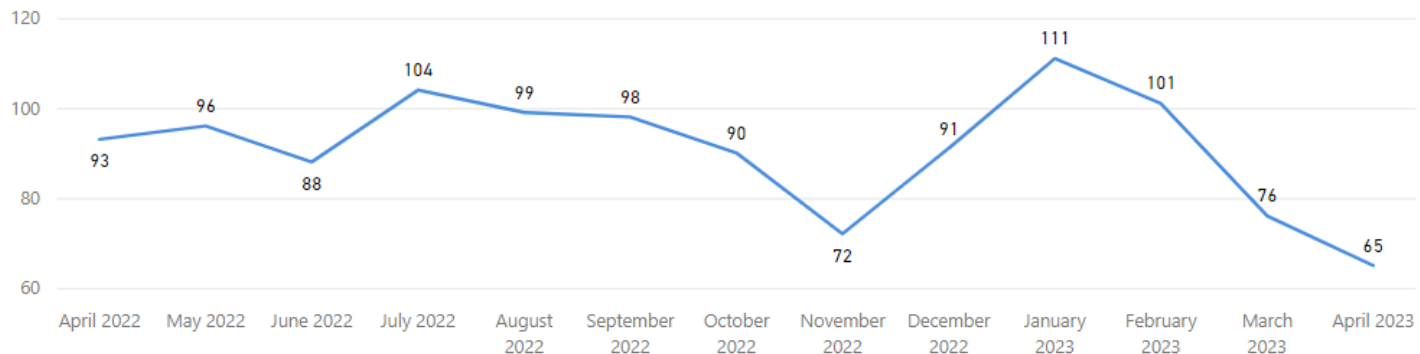
Latent Comparison

All

Received Filter

4/1/2022 4/30/2023

Received by Month



Total Received

1,184

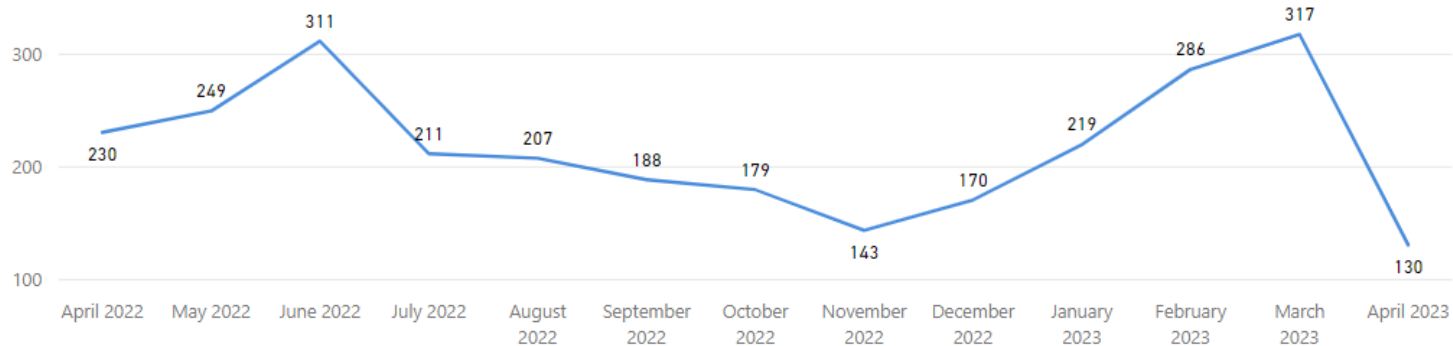
Received per Month (Avg)*

91

Completed Filter

4/1/2022 4/30/2023

Completed by Month



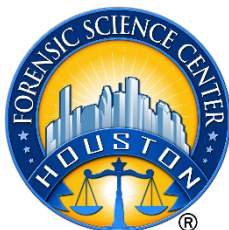
Total Completed

2,840

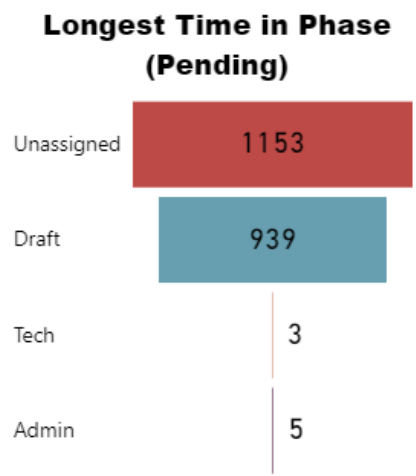
Completed per Month (Avg)*

218

* months with zero activity are not calculated into the average

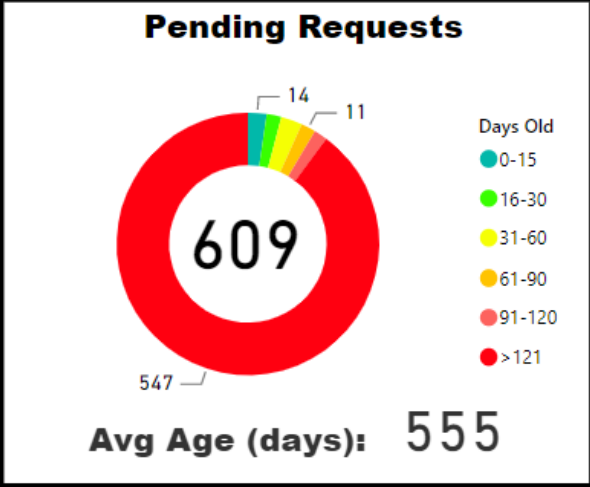


Service: **Latent Processing** | Priority Type: **All** | **Backlogged Requests: 584** | **Avg Age of Backlog (days): 579**



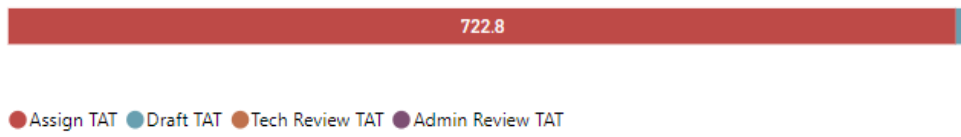
# of Unassigned 590! Goal: 50 (-1080%)	# Pending Draft 12✓ Goal: 30 (+60%)
# Pending Tech 6✓ Goal: 30 (+80%)	# Pending Admin 1✓ Goal: 30 (+96.67%)

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

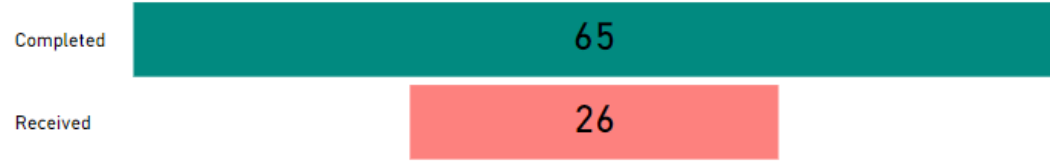


Overall TAT (MTD) 731.2! Goal: 30, 31	Analysis TAT (MTD) 8.5✓ Goal: 30, 31
Overall TAT (Past 90 Days) 685.7! Goal: 30, 31	Analysis TAT (Past 90 Days) 7.4✓ Goal: 30, 31

TAT by Phase of Work (MTD)



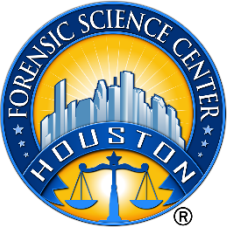
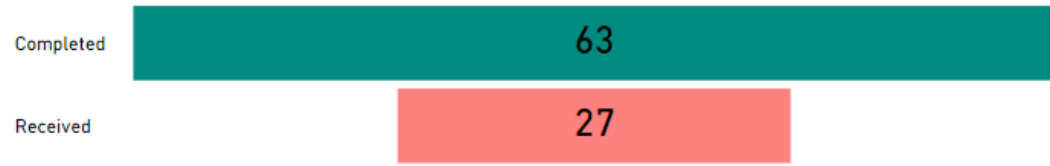
Month to Date



TAT by Phase of Work (Past 90 Days)



30 Day Avg (Over Past 90 Days)

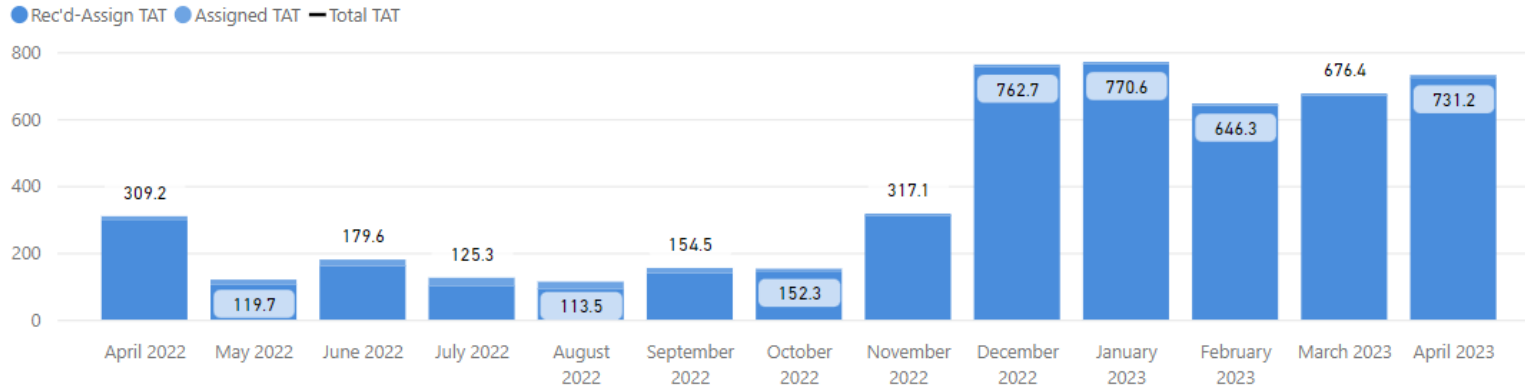


Date Range

4/1/2022

4/30/2023

Total TAT by Month



Request Type

Latent Processing

Priority Type

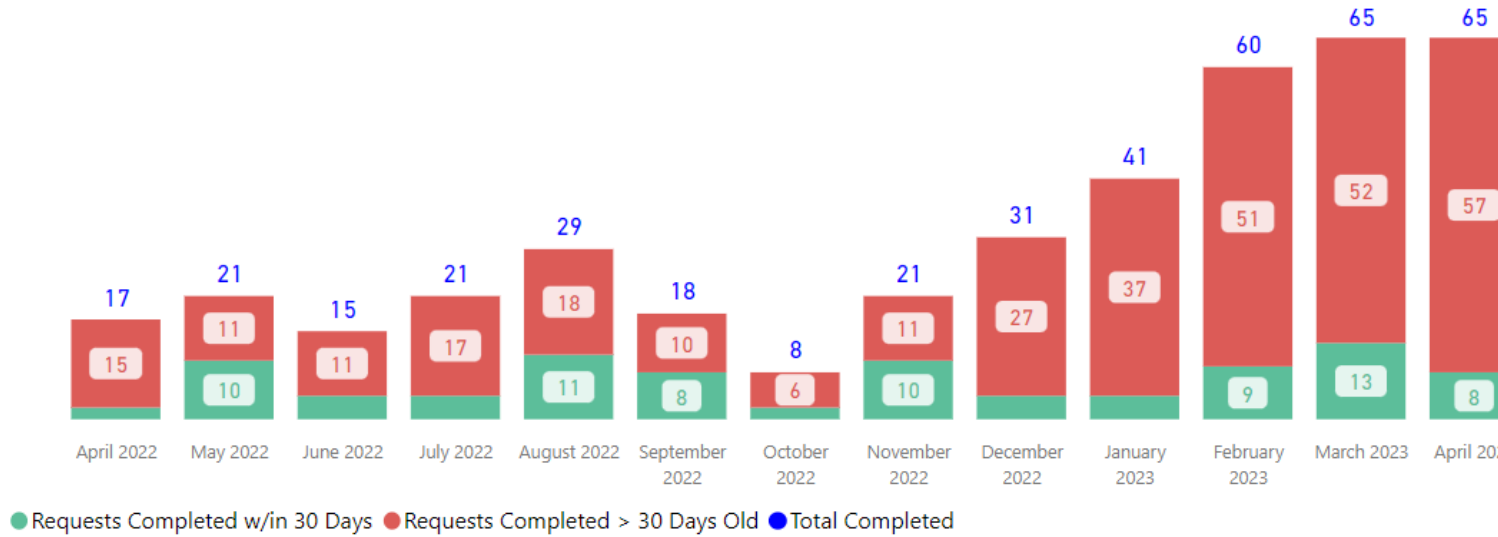
All

Selected Time Frame Averages

515.91
Total TAT (Rec'd-Compl.) Avg

10.56
Assigned TAT (Asgmt.-Compl.) Avg

Requests Completed



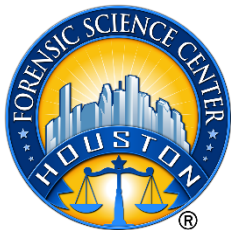
Received to Complete

412
Requests Completed

323
Requests Completed > 30 Days Old

78.40 %
% Completed > 30 Days Old

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



Service

Priority Type

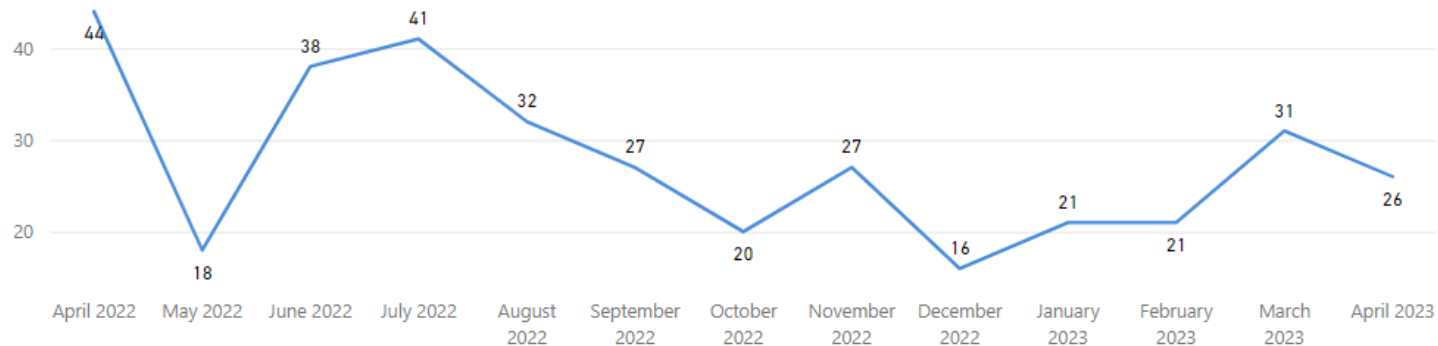
Latent Processing

All

Received Filter

4/1/2022 4/30/2023

Received by Month



Total Received

362

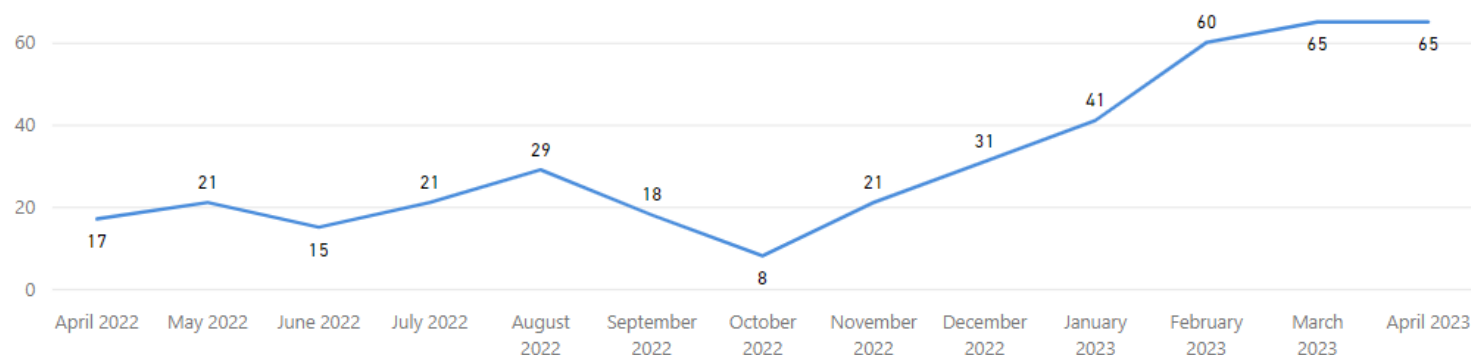
Received per Month (Avg)*

28

Completed Filter

4/1/2022 4/30/2023

Completed by Month



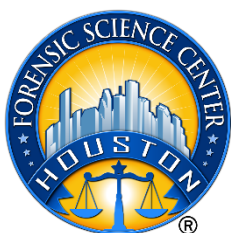
Total Completed

412

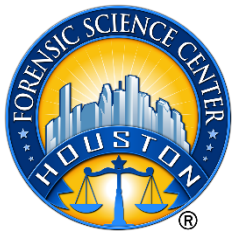
Completed per Month (Avg)*

32

* months with zero activity are not calculated into the average



Digital Multi-Media



Service

AV Examination

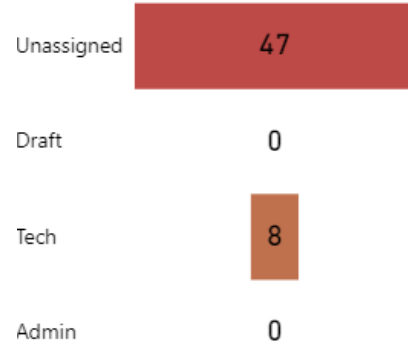
Priority Type

All

Backlogged Requests: 4

Avg Age of Backlog (days): 42

Longest Time in Phase (Pending)



of Unassigned

6

Goal: 15 (+60%)

Pending Draft

0

Goal: 5 (+100%)

Pending Tech

1

Goal: 5 (+80%)

Pending Admin

0

Goal: 5 (+100%)

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

Pending Requests



Avg Age (days): 29

Overall TAT (MTD)

NaN

Goal: 45, 46

Overall TAT (Past 90 Days)

34.6

Goal: 45, 46

Analysis TAT (MTD)

NaN

Goal: 45, 46

Analysis TAT (Past 90 Days)

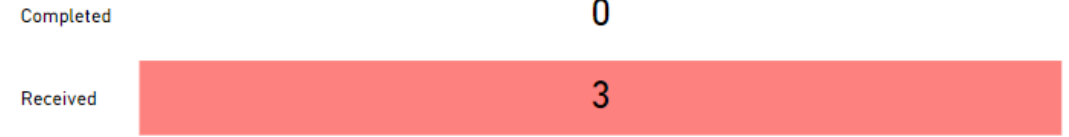
24.0

Goal: 45, 46

TAT by Phase of Work (MTD)

Assign TAT Draft TAT Tech Review TAT Admin Review TAT

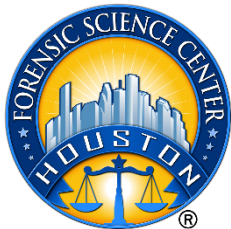
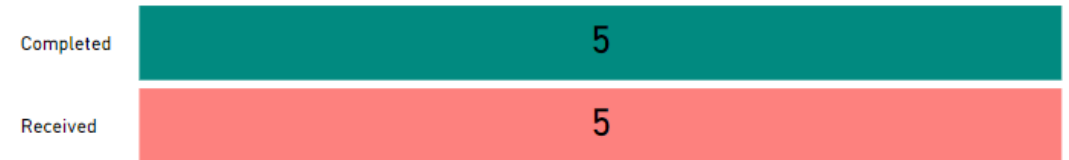
Month to Date



TAT by Phase of Work (Past 90 Days)



30 Day Avg (Over Past 90 Days)

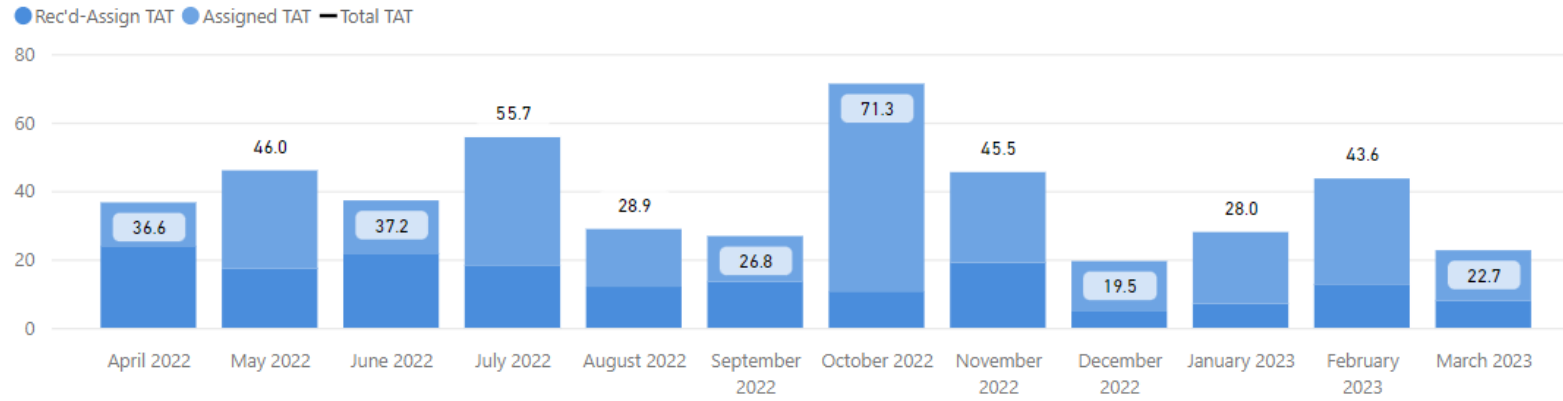


Date Range

4/1/2022

4/30/2023

Total TAT by Month



Request Type

AV Examination

Priority Type

All

Selected Time Frame Averages

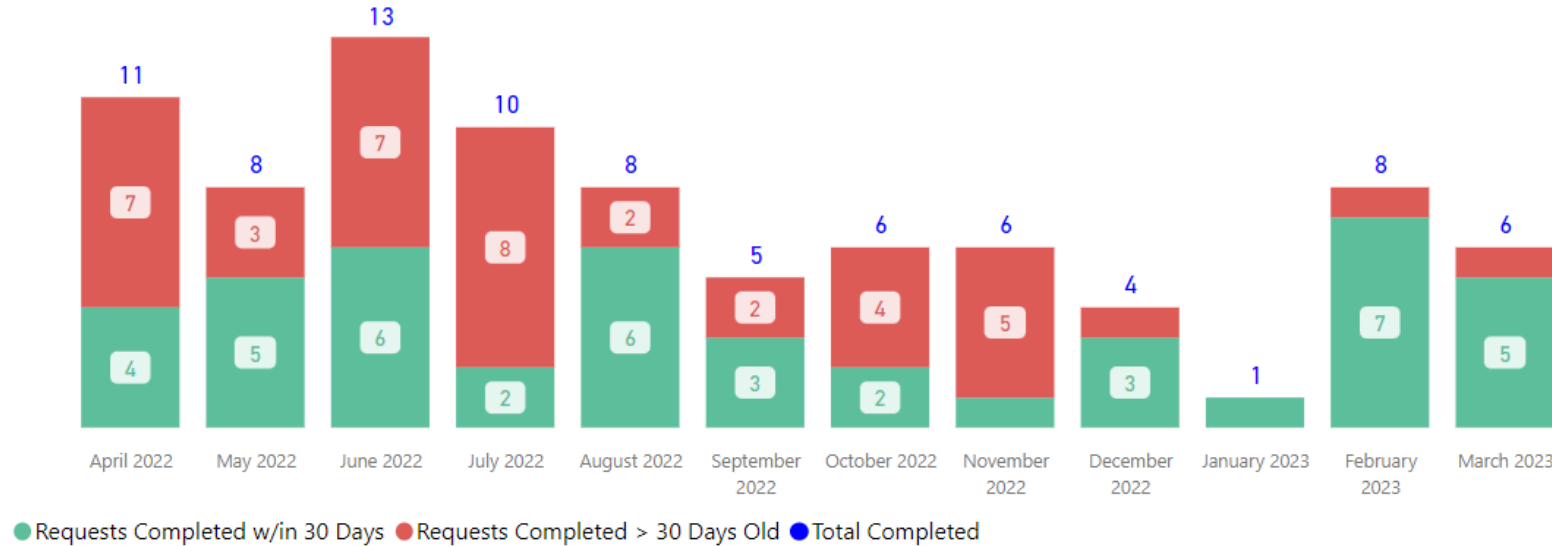
40.34

Total TAT (Rec'd-Compl.) Avg

24.24

Assigned TAT (Asgmt.-Compl.) Avg

Requests Completed



Received to Complete

86

Requests Completed

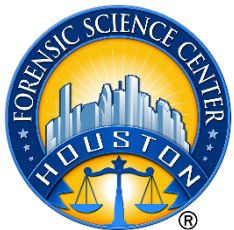
41

Requests Completed > 30 Days Old

47.67 %

% Completed > 30 Days Old

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



Service

AV Examination

Priority Type

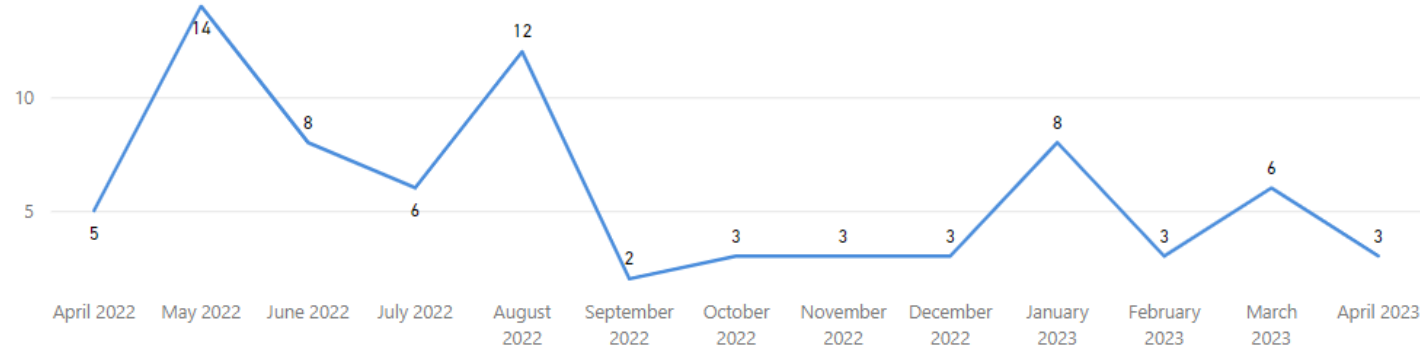
All

Received Filter

4/1/2022

4/30/2023

Received by Month



Total Received

76

Received per Month (Avg)*

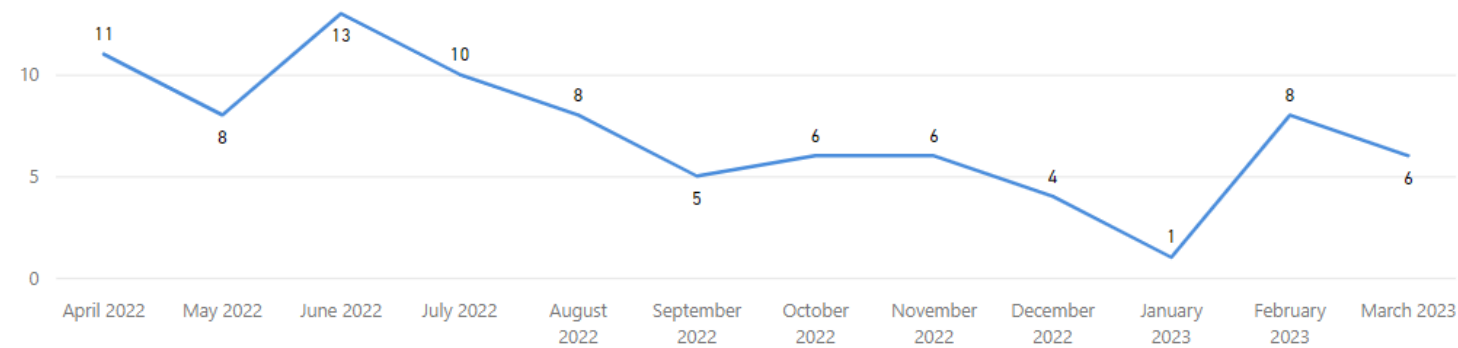
6

Completed Filter

4/1/2022

4/30/2023

Completed by Month



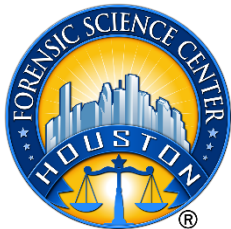
Total Completed

86

Completed per Month (Avg)*

7

* months with zero activity are not calculated into the average



Service

DFL

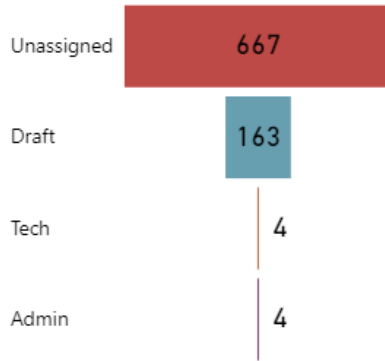
Priority Type

All

Backlogged Requests: 187

Avg Age of Backlog (days): 342

Longest Time in Phase (Pending)



of Unassigned

180!

Goal: 50 (-260%)

Pending Draft

14!

Goal: 5 (-180%)

Pending Tech

6!

Goal: 5 (-20%)

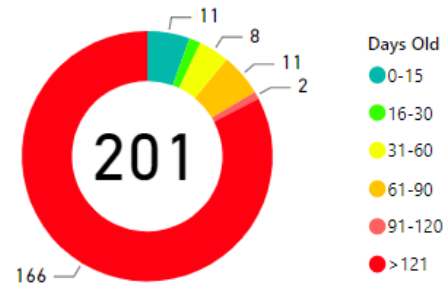
Pending Admin

1✓

Goal: 5 (+80%)

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

Pending Requests



Avg Age (days): 319

Overall TAT (MTD)

330.7!

Goal: 45, 46

Overall TAT (Past 90 Days)

384.3!

Goal: 45, 46

Analysis TAT (MTD)

24.6✓

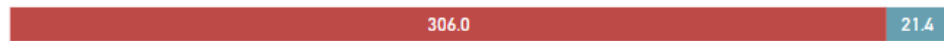
Goal: 45, 46

Analysis TAT (Past 90 Days)

17.2✓

Goal: 45, 46

TAT by Phase of Work (MTD)



● Assign TAT ● Draft TAT ● Tech Review TAT ● Admin Review TAT

Month to Date

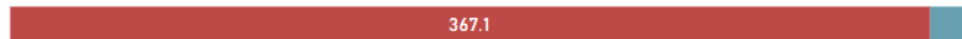
Completed

42

Received

18

TAT by Phase of Work (Past 90 Days)



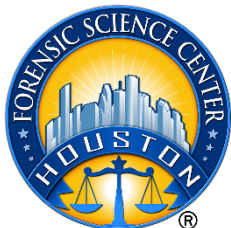
30 Day Avg (Over Past 90 Days)

Completed

51

Received

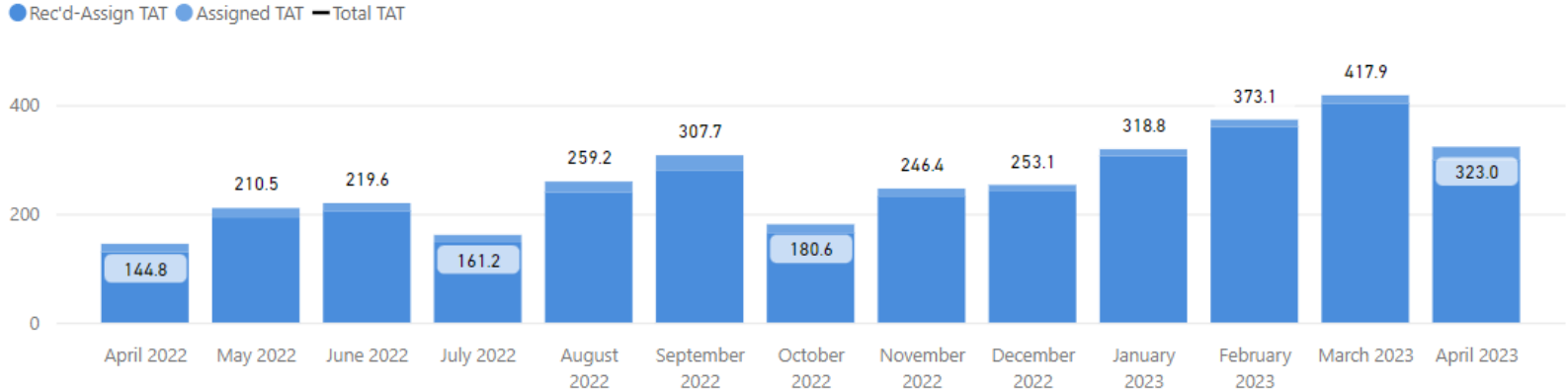
19



Date Range

4/1/2022 4/30/2023

Total TAT by Month



Request Type

Multiple selections

Priority Type

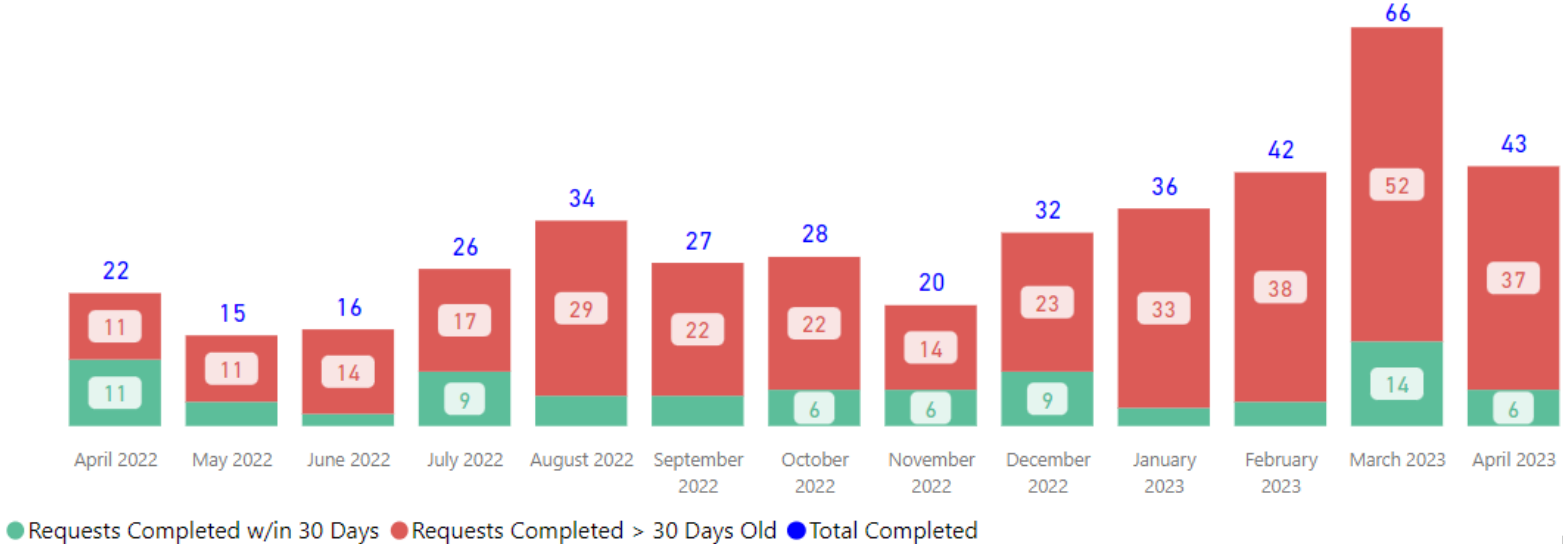
All

Selected Time Frame Averages

289.61
Total TAT (Rec'd-Compl.) Avg

16.64
Assigned TAT (Asgmt.-Compl.) Avg

Requests Completed

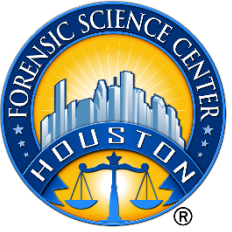


Received to Complete

407
 Requests Completed

323
 Requests Completed > 30 Days Old

79.36 %
 % Completed > 30 Days Old



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

DFL and DME

Service

Multiple selections

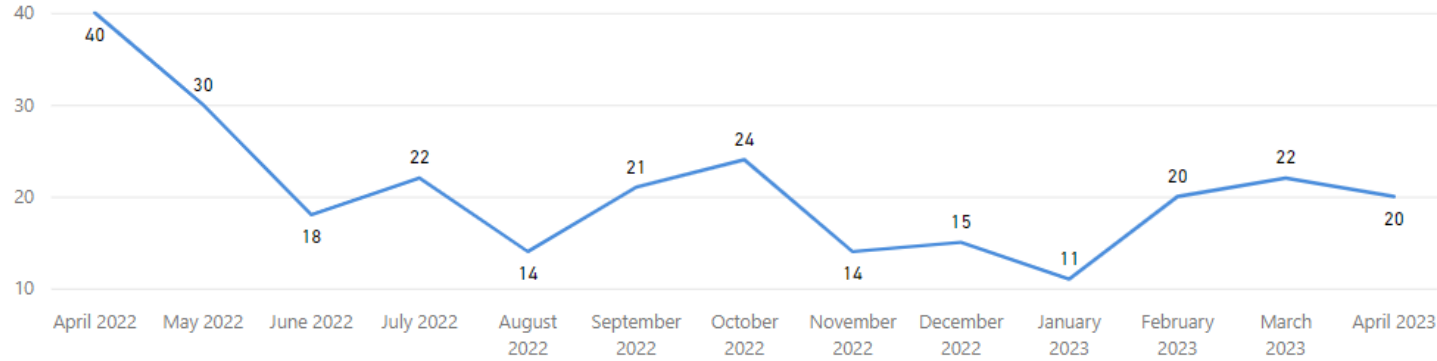
Priority Type

All

Received Filter

4/1/2022 4/30/2023

Received by Month



Total Received

271

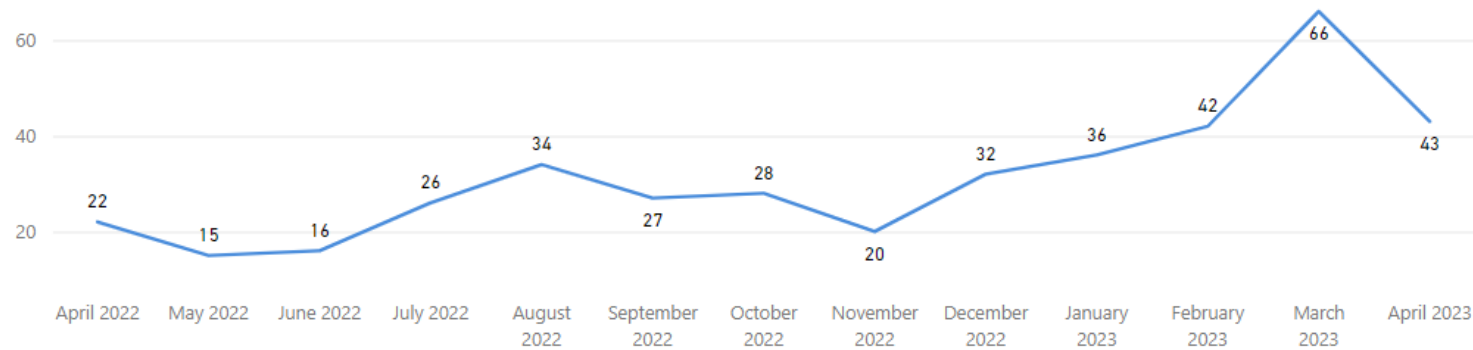
Received per Month (Avg)*

21

Completed Filter

4/1/2022 4/30/2023

Completed by Month



Total Completed

407

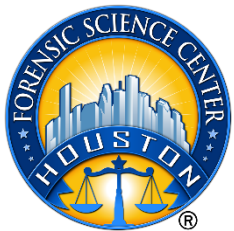
Completed per Month (Avg)*

31

* months with zero activity are not calculated into the average



Crime Scene Unit



Service

CSU Response

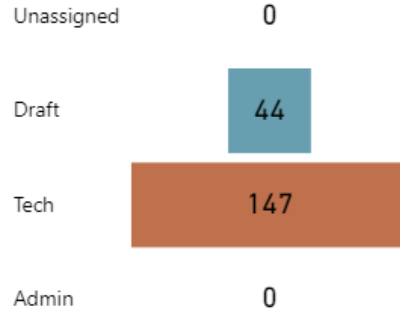
Priority Type

All

Backlogged Requests: 4

Avg Age of Backlog (days): 76

Longest Time in Phase (Pending)



of Unassigned

0 ✓

Goal: 0

Pending Draft

19 ✓

Goal: 30 (+36.67%)

Pending Tech

31 !

Goal: 30 (-3.33%)

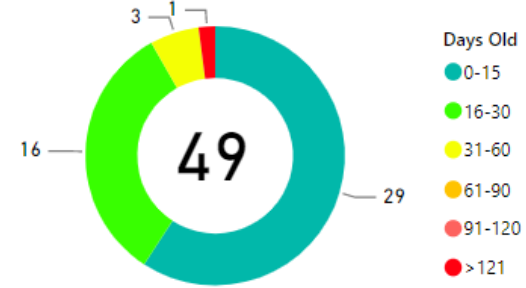
Pending Admin

0 ✓

Goal: 0

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

Pending Requests



Avg Age (days): 17

Overall TAT (MTD)

14.3 ✓

Goal: 30, 31

Overall TAT (Past 90 Days)

34.3 !

Goal: 30, 31

Analysis TAT (MTD)

14.1 ✓

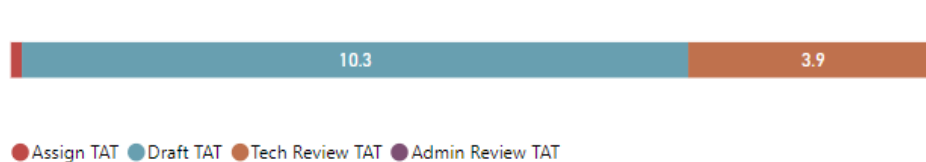
Goal: 30, 31

Analysis TAT (Past 90 Days)

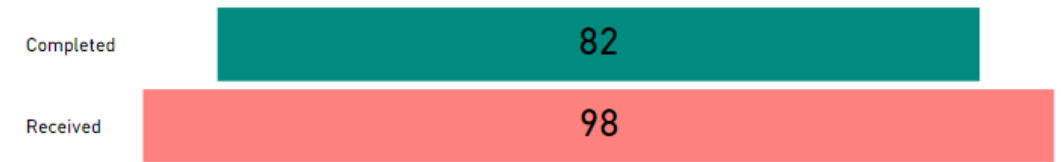
29.3 ✓

Goal: 30, 31

TAT by Phase of Work (MTD)



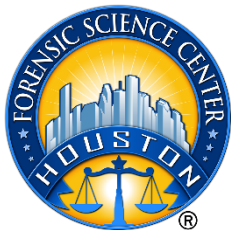
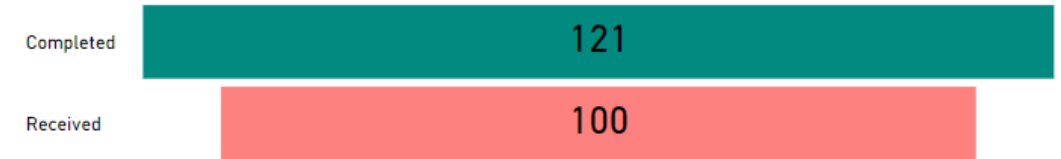
Month to Date



TAT by Phase of Work (Past 90 Days)



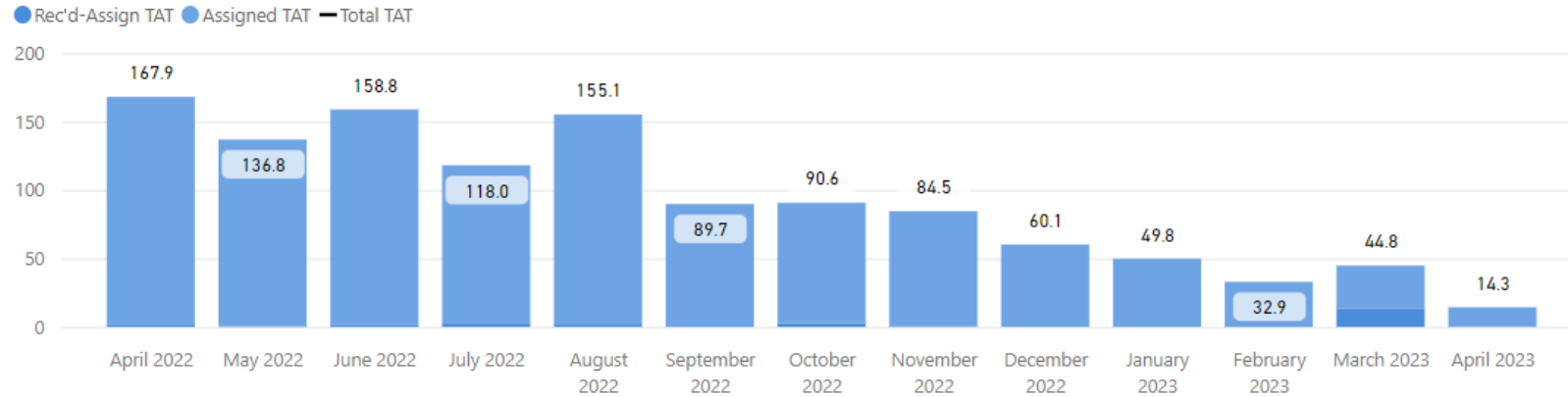
30 Day Avg (Over Past 90 Days)



Date Range

4/1/2022 4/30/2023

Total TAT by Month



Request Type

CSU Response

Priority Type

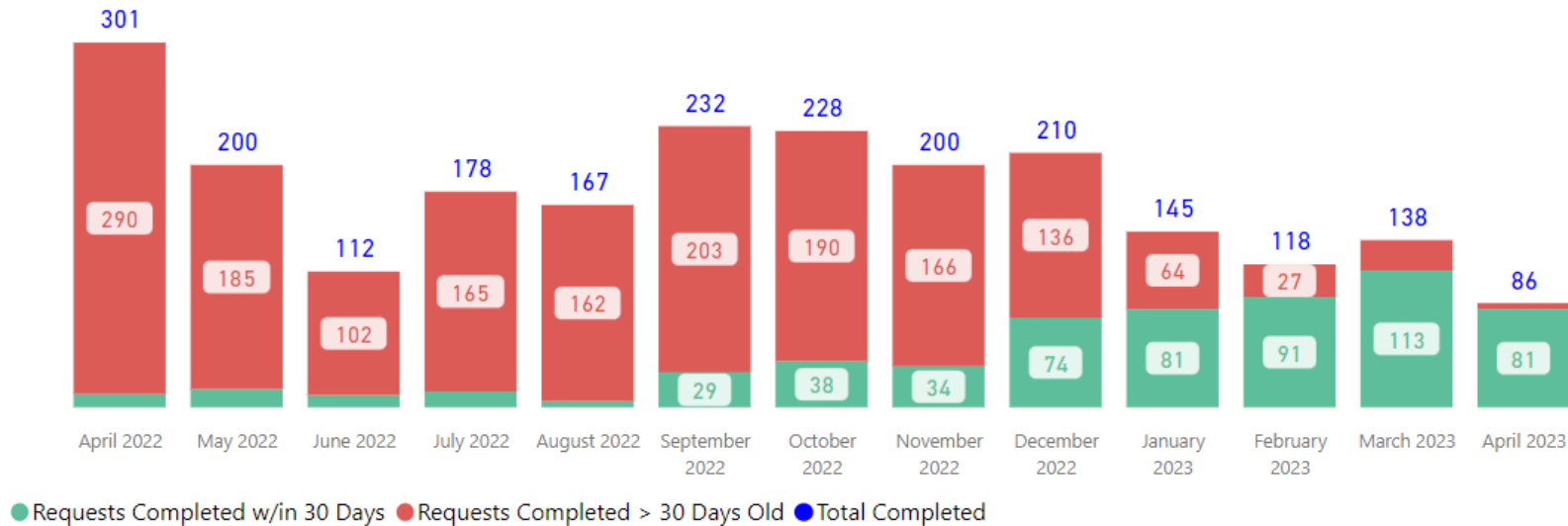
All

Selected Time Frame Averages

100.26
Total TAT (Rec'd-Compl.) Avg

98.57
Assigned TAT (Asgmt.-Compl.) Avg

Requests Completed



Received to Complete

2315
Requests Completed

1720
Requests Completed > 30 Days Old

74.30 %
% Completed > 30 Days Old

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



Service

CSU Response

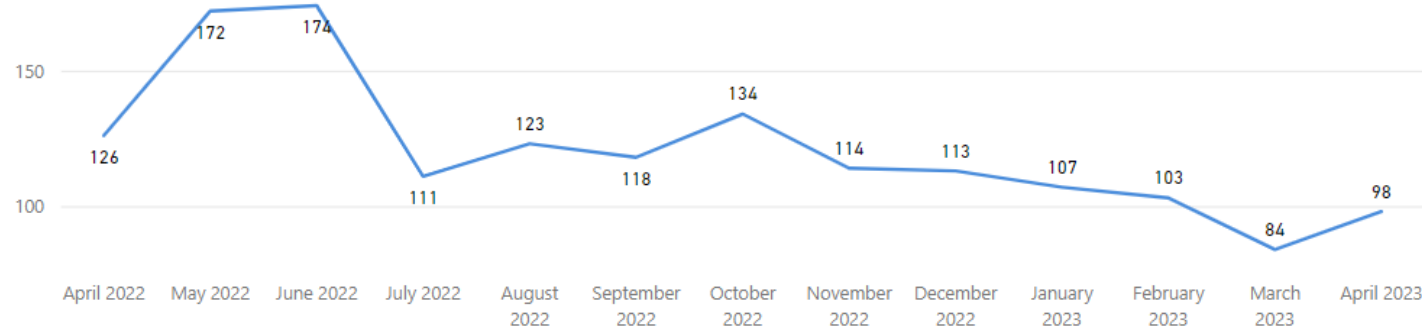
Priority Type

All

Received Filter

4/1/2022 4/30/2023

Received by Month



Total Received

1,577

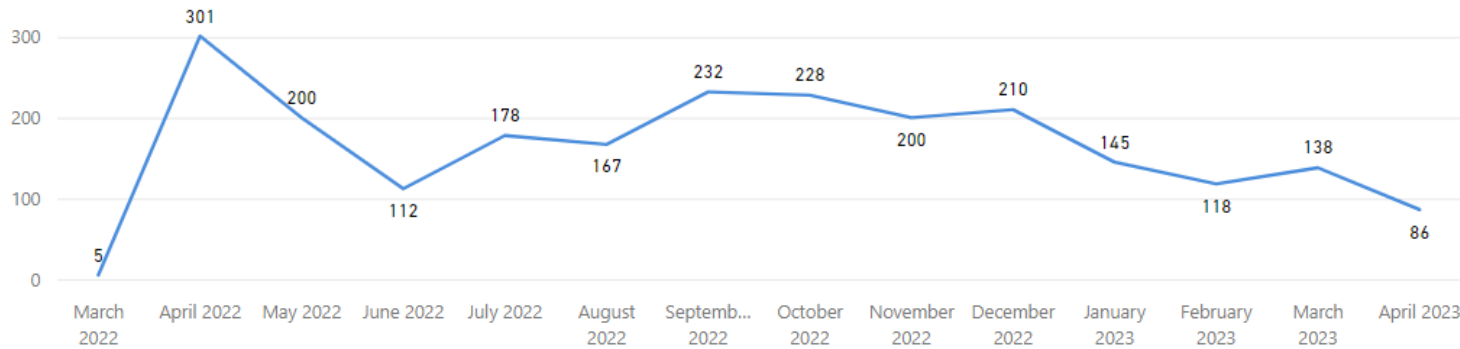
Received per Month (Avg)*

121

Completed Filter

4/1/2022 4/30/2023

Completed by Month



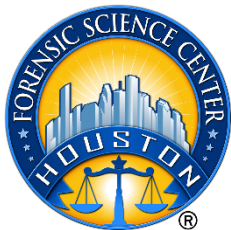
Total Completed

2,320

Completed per Month (Avg)*

166

* months with zero activity are not calculated into the average



Service

CSU VEB

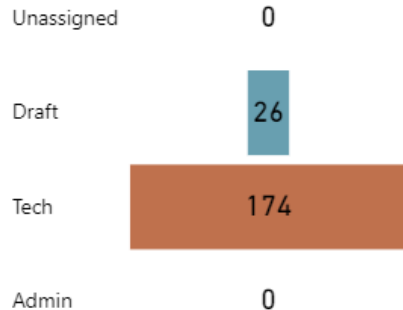
Priority Type

All

Backlogged Requests: 3

Avg Age of Backlog (days): 105

Longest Time in Phase (Pending)



of Unassigned

0 ✓

Goal: 0

Pending Draft

15 ✓

Goal: 30 (+50%)

Pending Tech

18 ✓

Goal: 30 (+40%)

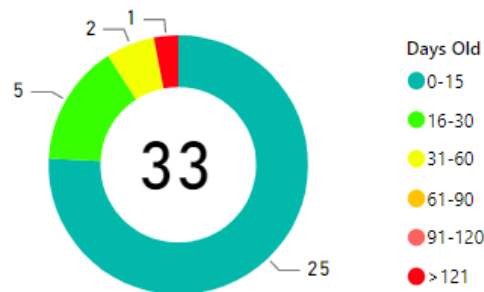
Pending Admin

0 ✓

Goal: 30 (+100%)

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

Pending Requests



Avg Age (days): 16

Overall TAT (MTD)

10.7 ✓

Goal: 30, 31

Overall TAT (Past 90 Days)

22.1 ✓

Goal: 30, 31

Analysis TAT (MTD)

10.7 ✓

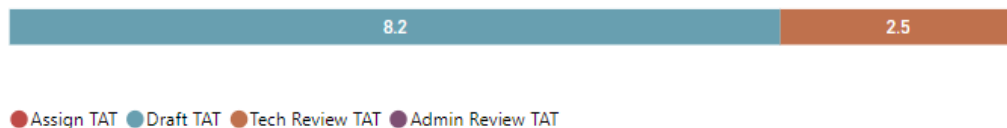
Goal: 30, 31

Analysis TAT (Past 90 Days)

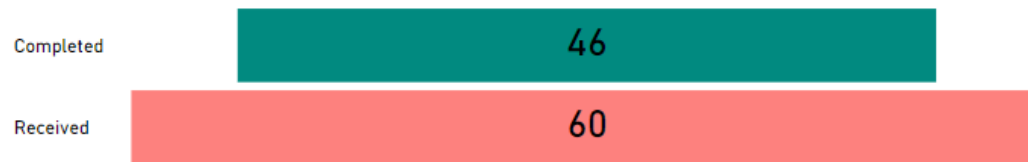
21.3 ✓

Goal: 30, 31

TAT by Phase of Work (MTD)



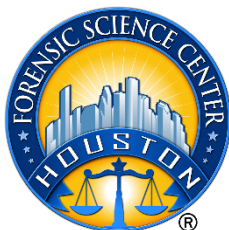
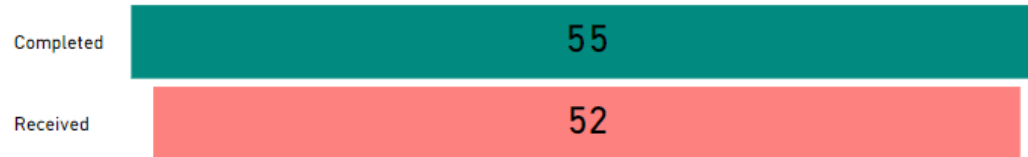
Month to Date



TAT by Phase of Work (Past 90 Days)



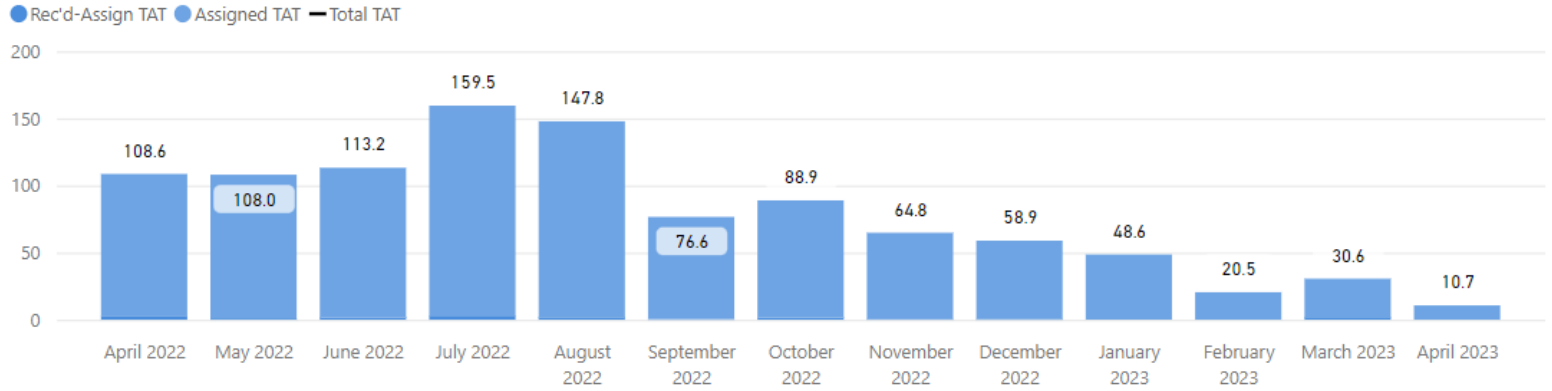
30 Day Avg (Over Past 90 Days)



Date Range

4/1/2022 4/30/2023

Total TAT by Month



Request Type

CSU VEB

Priority Type

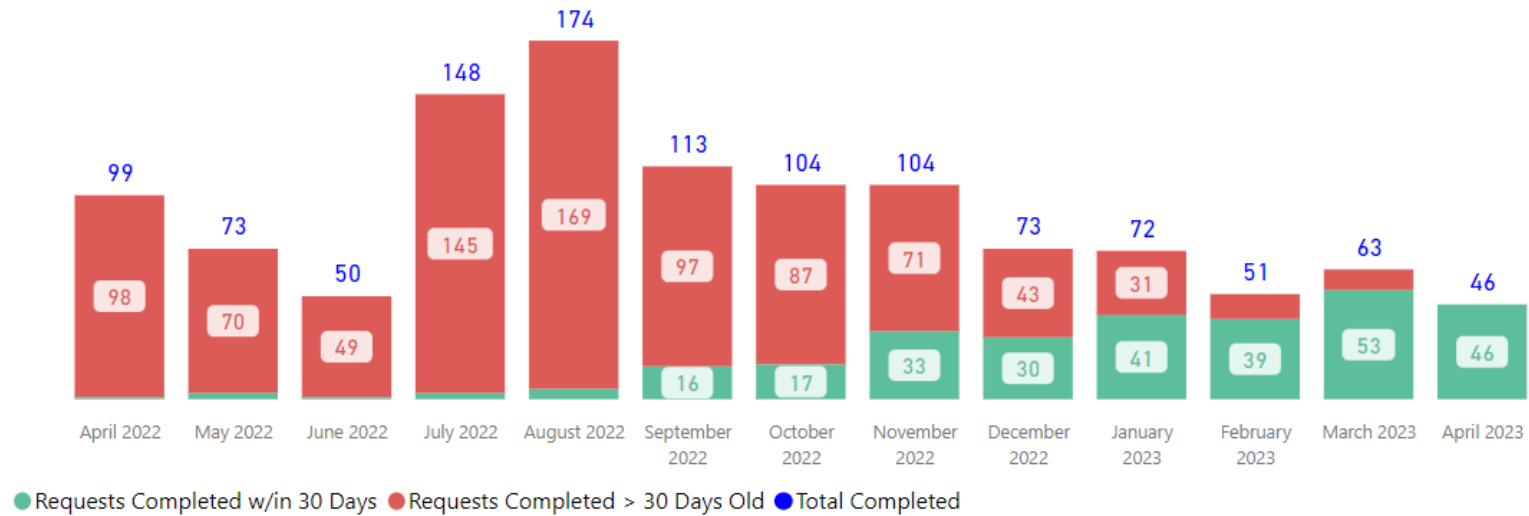
All

Selected Time Frame Averages

93.62
Total TAT (Rec'd-Compl.) Avg

92.29
Assigned TAT (Asgmt.-Compl.) Avg

Requests Completed



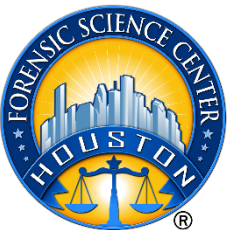
Received to Complete

1170
Requests Completed

882
Requests Completed > 30 Days Old

75.38 %
% Completed > 30 Days Old

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



Service

CSU VEB

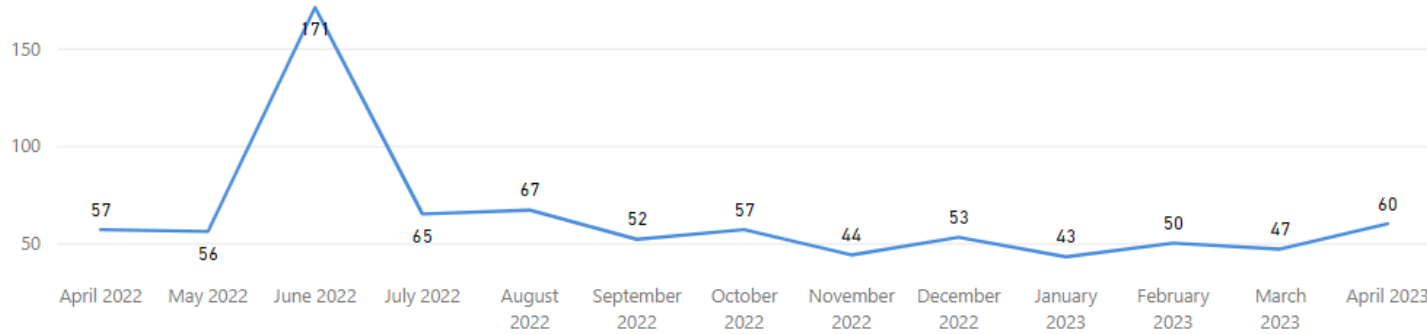
Priority Type

All

Received Filter

4/1/2022 4/30/2023

Received by Month



Total Received

822

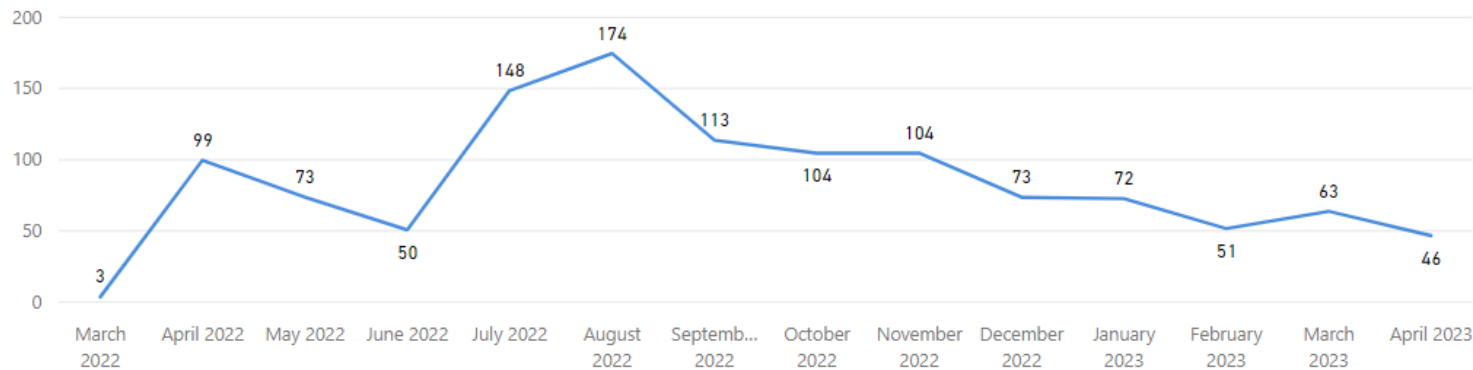
Received per Month (Avg)*

63

Completed Filter

4/1/2022 4/30/2023

Completed by Month



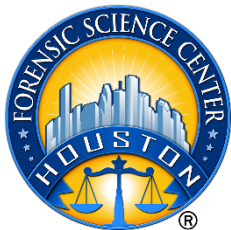
Total Completed

1,173

Completed per Month (Avg)*

84

* months with zero activity are not calculated into the average



HOUSTON FORENSIC SCIENCE CENTER, INC.

Regular Meeting of the Board of Directors

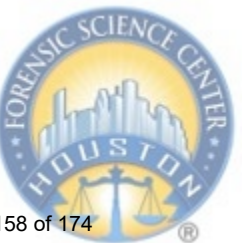
May 12, 2023 at 9:00 a.m.

Agenda Action Item No.: 11	<p>11. Presentation by Dr. Stout regarding a proposal to add property and evidence management services to the corporation’s operations.</p> <p>a. Consider approval of a proposal to add property and evidence management services to the corporation and authorize Dr. Stout to negotiate all necessary agreements to expand operations, and possible related action.</p>
Subject:	Consider approval of proposed plan to add property and evidence management to HFSC operations and authorize Dr. Stout to enter into negotiations to begin executing the expansion.
Background:	Pursuant to the corporation’s Bylaws, HFSC is a non-profit local government corporation whose purpose is to aid and act on behalf of the City of Houston (“the City”) to accomplish a governmental purpose; namely to create and govern the operation of an independent center to provide accurate and timely analysis of forensic evidence and related services. Upon the creation of HFSC, the corporation entered into the First Interlocal Agreement (ILA) with the City to transfer to the corporation control of, and responsibility for, the “Forensic Operations” of the City, as defined in the ILA. The described Forensic Operations included the HPD Crime Laboratory (forensic biology, firearms, crime lab quality control) and HPD Identification Unit (toxicology, controlled substances, latent print laboratory, audio/visual laboratory, digital forensics, and crime scene units). Management and control of these operations officially transition at 12:01am on April 3, 2014.
Executive Summary:	<p>Dr. Peter Stout, HFSC President and CEO has presented to the board on several occasions regarding the potential benefits of consolidating property and evidence management with HFSC Forensic Operations, as a related service. After preliminary discussions with stakeholders, the City of Houston, and Houston Police Department, Dr. Stout has secured support for the framework around the expansion of HFSC’s operations.</p> <p>The transfer of management and control of property and evidence management will require the execution of several agreements to ensure appropriate funding, organizational structure, policies, procurement of assets and office/storage space, as well as designation and transfer of personnel. To continue these efforts Dr. Stout will need the board’s approval to begin negotiating all necessary agreements. Dr. Stout will regularly update the board on his progress and present to the board any agreement which requires the board’s approval by law or HFSC policy.</p>

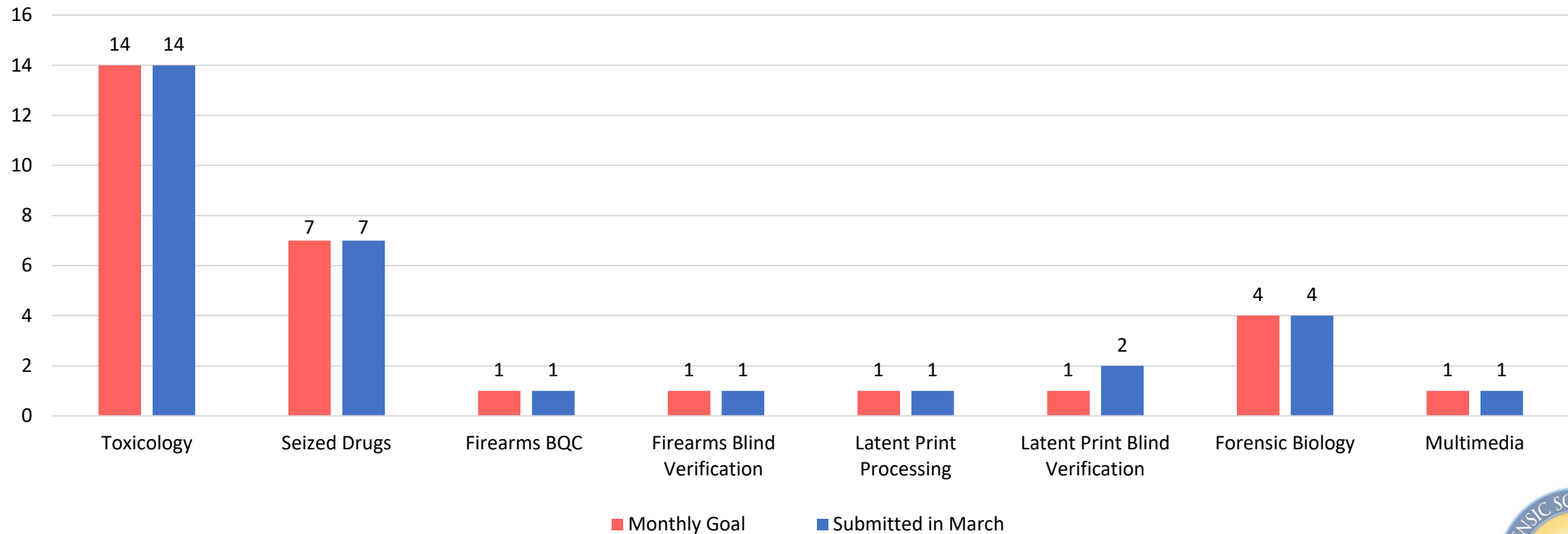
Fiscal Impact:	Anticipated additional fiscal impact beginning in FY24 or FY25.
Staff Recommendation:	Staff recommends approval.
By:	Dr. Peter Stout, President and CEO

Quality Division Report

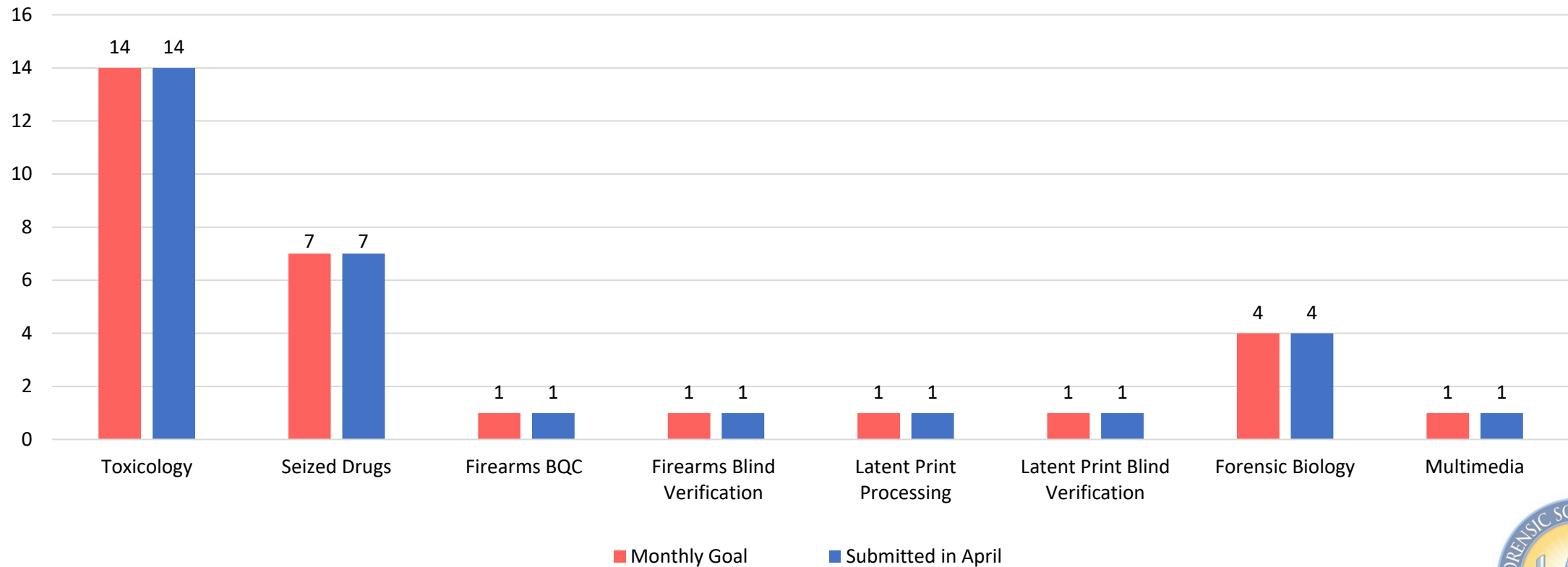
May 12, 2023



Blind Quality Controls Submitted in March



Blind Quality Controls Submitted in April



Quality Updates

ANZPAA
Australia New Zealand
Policing Advisory Agency

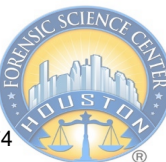


- Transparency in Forensic Quality Management: Perspectives from the Houston Forensic Science Center (HFSC)

Upcoming:



- Blind Testing and Blind Verification in Firearms Workshop to be presented at the Association of Firearms and Toolmarks (AFTE) Conference in Austin, TX on May 26, 2023.
 - Presenters include Aimee Grimaldi, Callan Hundl, Donna Eudaley, and Maddi Neuman



2023 Internal Audit Updates

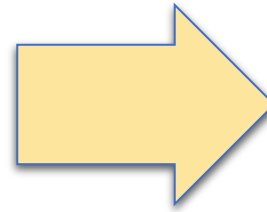
March

Multimedia

- No nonconformances identified

Firearms

- 1 nonconformance



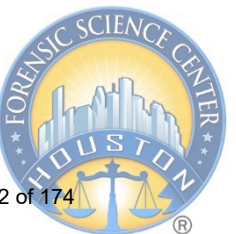
April

Latent Prints

- No nonconformances identified

Toxicology

- No nonconformances identified



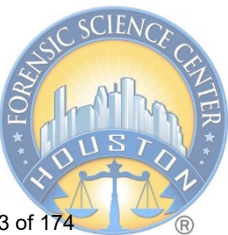
Disclosures



Seized Drugs

Cases were analyzed using the incorrect sample vials causing their results to be improperly reported.

- Analyzed through the “decision point” assay, an instrumental method used to differentiate hemp from marijuana.
- Retroactive audit identified 18 cases
- Cases re-analyzed = All results agreed with the previously reported
- Harris County District Attorney’s Office & ANAB notified



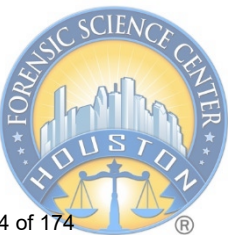
Disclosures



Firearms

During the 2023 Firearms internal audit an item of evidence could not be located.

- This item of evidence contained test fires created from an officer's firearm as part of an officer involved shooting case.
- HFSC's legal counsel researched the status of this case and determined that it was a "No Bill" and therefore was no longer active.

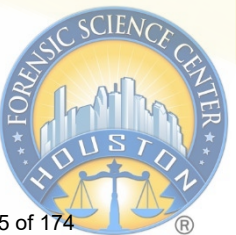


Disclosures

Crime Scene

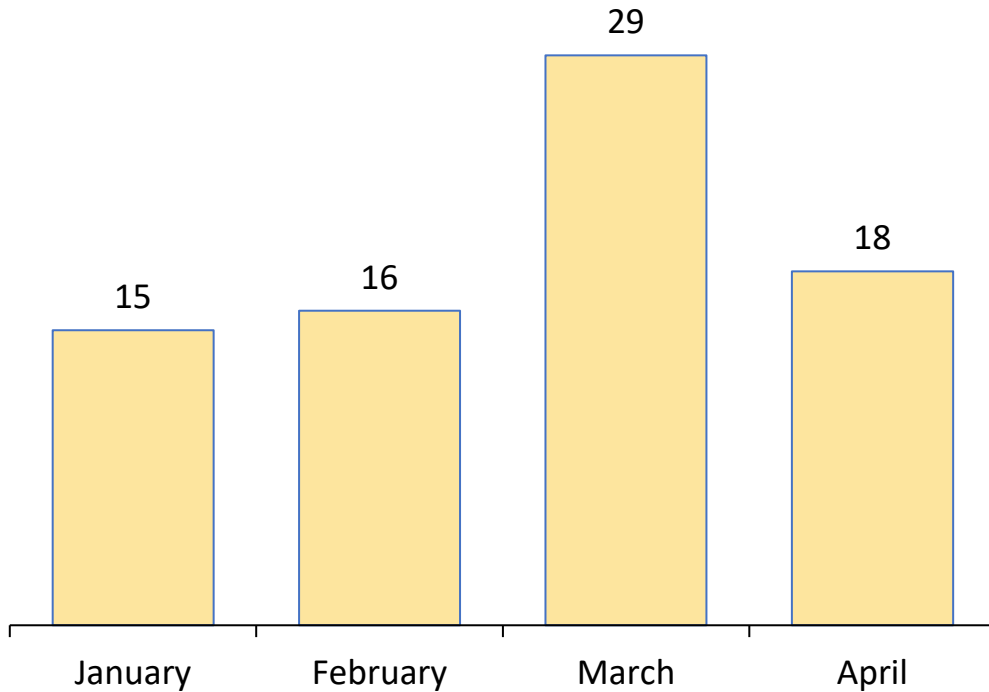
The original handwritten case notes for three Crime Scene cases could not be located.

- For two cases, a draft report was written before the case notes were misplaced.
 - Unable to complete a review to substantiate the information contained in these draft reports. Reports could contain inaccurate information.
- For third case, a scanned copy of these notes was found in the case record.
 - A report with results was issued since the results could be reviewed and authorized prior to their release

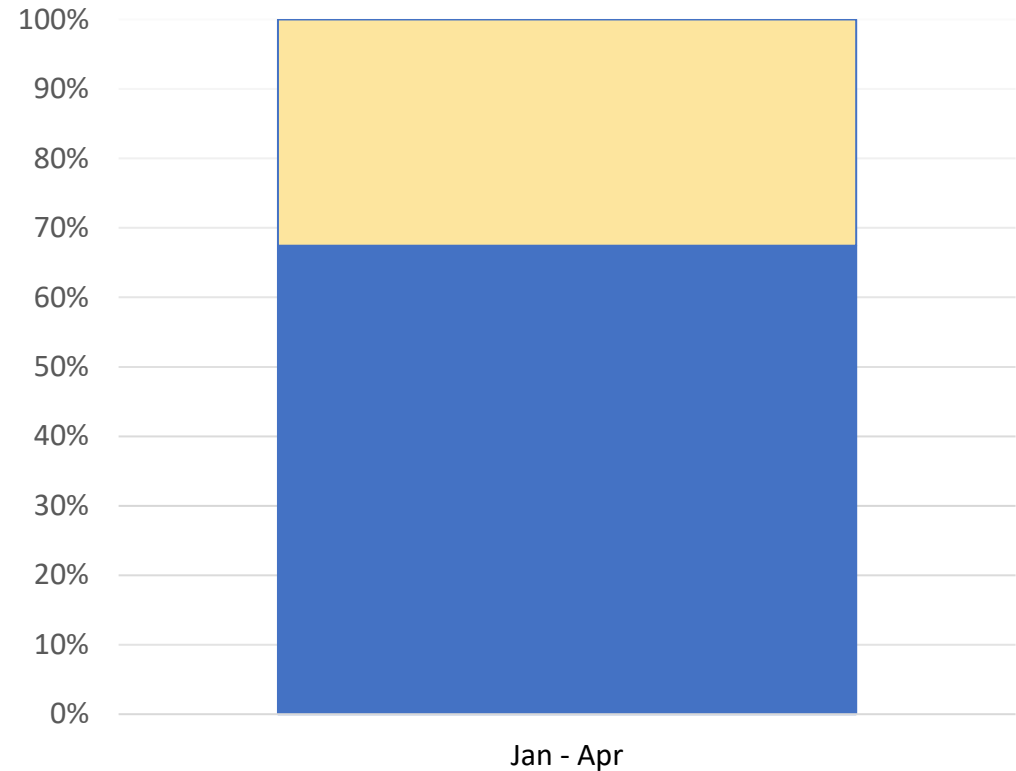


2023 Testimony Monitoring

Testimonies by Month

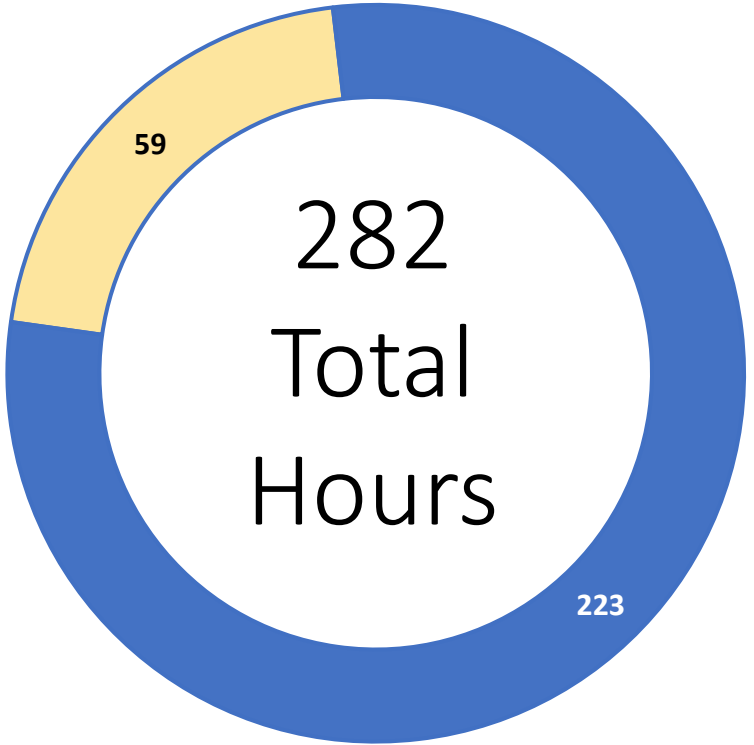


Testimony Monitored vs. Unmonitored



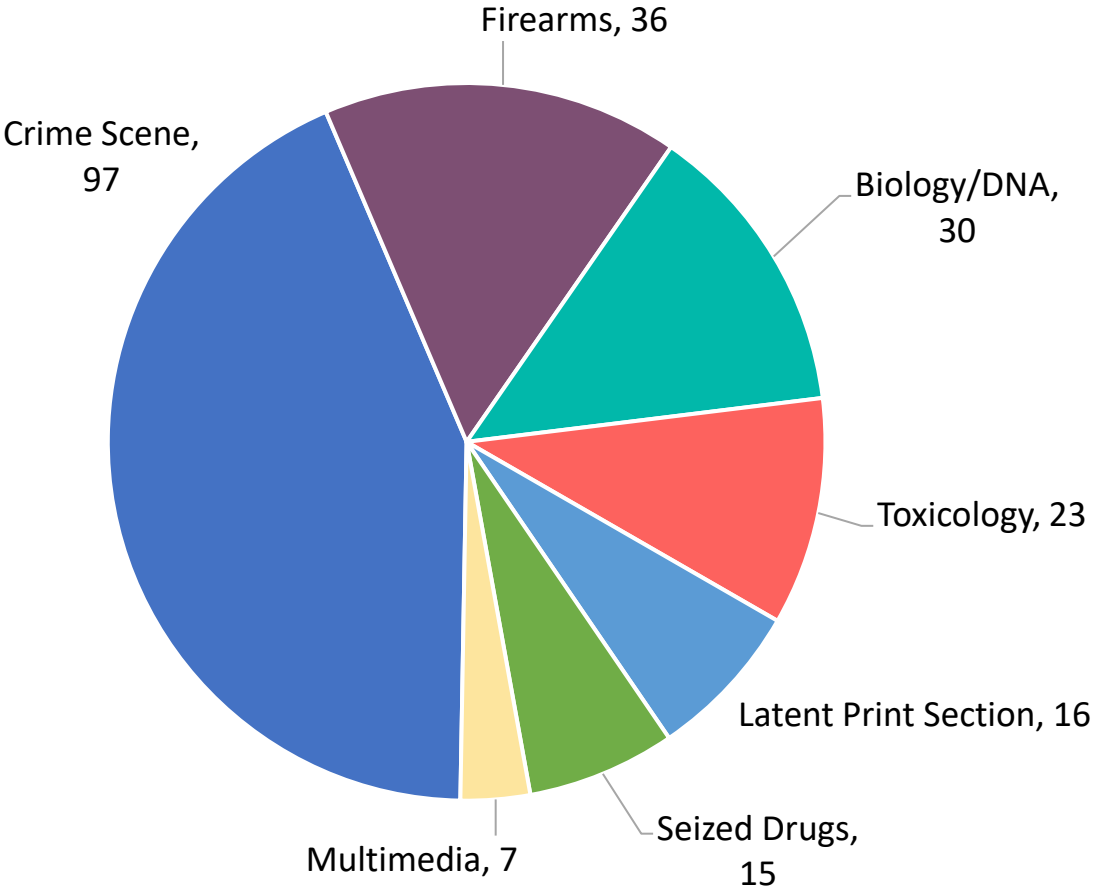
2023 Testimony Data

Time Spent in Court

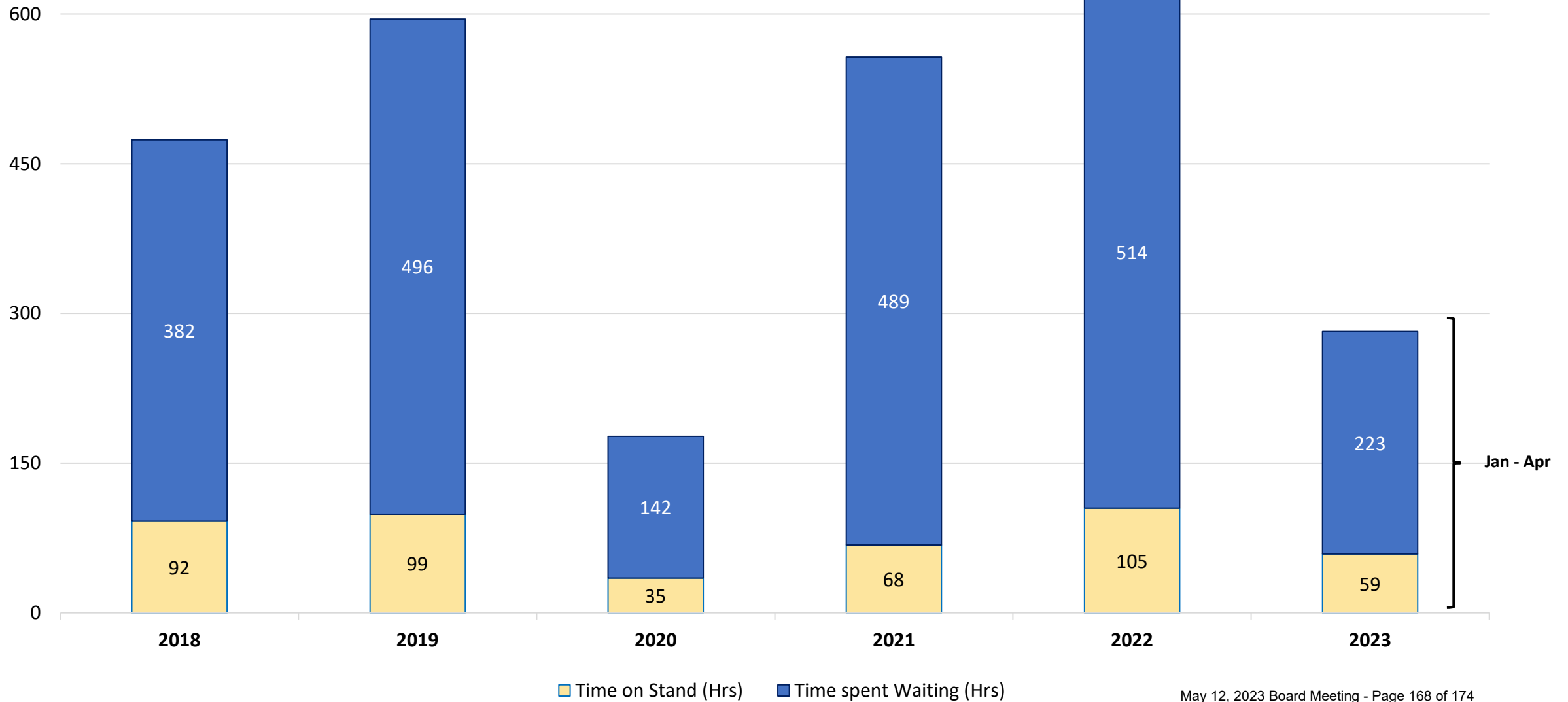


Hours on Stand Hours Waiting to Testify

Waiting Hours by Section



Testimony data throughout the years

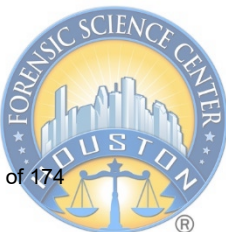


Detailed Data



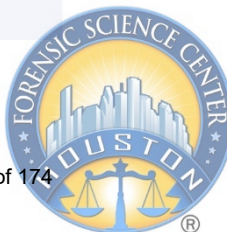
Blind Quality Controls Completed

Forensic Discipline	March	April
Toxicology	14 (BAC) 0 (Drugs)	16 (BAC) 0 (Drugs)
Seized Drugs	8	12
Biology	2 (DNA) 2 (screening)	0 (DNA) 4 (screening)
Firearms	0	1
Firearms Blind Verification	2	2
Latent Print Processing	0	1
Latent Print Comparison	10	1
Latent Print Blind Verification	2	1
Multimedia	7	6



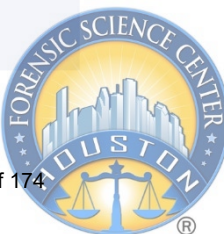
2022 Proficiency Testing

Discipline		Tests in Progress	Tests Completed	Comments
Seized Drugs		0	11	
Toxicology		0	39	
Firearms		0	14	
Crime Scene		0	24	
Latent Prints		0	16	
Multimedia	Audio/Video	0	2	
	Digital	0	4	
Forensic Biology		0	47	



2023 Proficiency Testing

Discipline		Tests in Progress	Tests Completed	Comments
Seized Drugs		5	0	
Toxicology		5	6	
Firearms		0	0	
Crime Scene		2	0	
Latent Prints		9	0	
Multimedia	Audio/Video	0	0	
	Digital	4	0	
Forensic Biology		20	0	





Quality Division Notifications

Corrective Actions, Incidents, and Preventive Actions

Quality Tracking Number	Section	Classification	Notification Date	Summary of Notification
2023-012	Biology/DNA	Incident	3/9/2023	While using the statistical software, STRmix, a DNA analyst conditioned on the incorrect suspect during interpretation on an evidence item that yielded a mixture. After consultation with the district attorney's office, the evidence item was re-evaluated, and new likelihood ratios were generated for all references associated with the case. The exclusions in the original report were also exclusionary in the amended report.
2023-015	Biology/DNA	Incident	4/6/2023	A Forensic Biology proficiency test result yielded a non-consensus result in the provider's consensus report. Upon further review, the item was correctly analyzed, interpreted, and reported, however, the result was incorrectly transcribed into the proficiency test provider's submission portal.
2023-016	Biology/DNA	Incident	4/18/2023	Two proficiency test reference samples were switched by a DNA technician during the DNA laboratory processing. The switch was discovered by the same DNA technician and the samples were appropriately re-analyzed.
2023-017	Biology/DNA	Incident	4/27/2023	The Forensic Biology screening supervisor noted that the bleach dispenser used to make a 10% bleach solution was dispensing lower inconsistent volumes. The Biology SOP requires a 10% bleach solution to be used to decontaminate utensils and work benches. Although the concentration of the bleach solution used to decontaminate was not 10%, there are routine monthly deep cleanings conducted and swipe tests that monitor DNA activity after the deep cleanings are conducted.

HFSC'S Quality Division investigates nonconforming work and helps develop solutions in compliance with accreditation and legal standards. For the purposes of this board report, Quality tracking numbers associated to nonconformances are subject to re-assignment based upon further investigation and/or risk assessment.



Quality Division Notifications

Corrective Actions, Incidents, and Preventive Actions

Quality Tracking Number	Section	Classification	Notification Date	Summary of Notification
2023-013	Crime Scene	Incident	3/15/2023	An evidence item analyzed by the Forensic Biology section presented an unknown male DNA profile in the mixture that did not match any of the reference samples that were received for comparison. The unknown profile was then compared to the staff database and was consistent with a crime scene investigator who responded to the scene.
2023-IA-01	Firearms	Corrective Action	4/10/2023	During the 2023 Firearms internal audit an item of evidence could not be located. This item of evidence contained test fires created from an officer's firearm as part of an officer involved shooting case. HFSC's legal counsel researched the status of this case and determined that it was a "No Bill" and therefore was no longer active.
2023-014	Seized Drugs	Corrective Action	3/20/2023	Twenty-two samples from a total of eighteen cases were analyzed by a Seized Drugs analyst using the incorrect sample vial causing the results to be improperly reported. The cases were re-analyzed and all results agreed with the previously reported results.

HFSC'S Quality Division investigates nonconforming work and helps develop solutions in compliance with accreditation and legal standards. For the purposes of this board report, Quality tracking numbers associated to nonconformances are subject to re-assignment based upon further investigation and/or risk assessment.