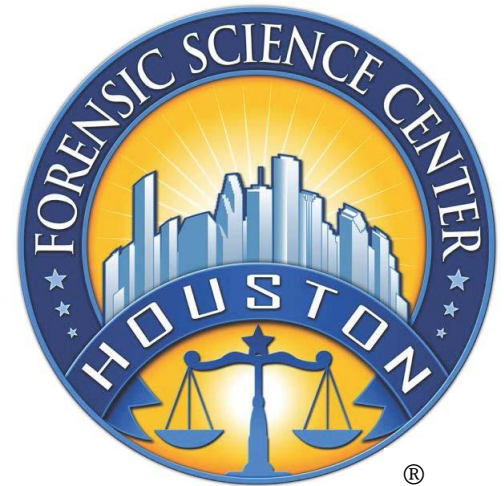


How Houston's Crime Lab is Transforming Criminal Justice

Sandra Guerra Thompson, Univ. of Houston
Vice-Chair of the Board of Directors
Houston Forensic Science Center





**CSI:
MIAMI**

Objectives

A decorative graphic element consisting of a thick blue line that curves from the top right towards the bottom left, and a green line that forms a rectangular shape around the text 'How is it governed?'.

What is Houston Forensic Science Center?

How is it governed?

What has the lab accomplished?

How can a lab transform criminal justice?

How Harris County Deputies Mistook a Sock Full of Cat Litter for a Half Pound of Meth

BY MEAGAN FLYNN

WEDNESDAY, JANUARY 11, 2017 AT 6 A.M.





Scientific evidence = trust in justice

*Unfortunately, most labs operate
like black boxes . . .
that sometimes explode.*

“NAS report”

- 2009
- 13 recommendations
- Separation of forensic science operations from law enforcement or prosecution

STRENGTHENING
**FORENSIC
SCIENCE**
IN THE UNITED STATES

A PATH FORWARD

Committee on Identifying the Needs of the Forensic Science Community

Committee on Science, Technology, and Law
Policy and Global Affairs

Committee on Applied and Theoretical Statistics
Division on Engineering and Physical Sciences

NATIONAL RESEARCH COUNCIL
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COPS IN LAB COATS



Curbing *Wrongful Convictions* through
Independent Forensic Laboratories

SANDRA GUERRA THOMPSON

West Virginia Law Review 2016

*Building the Infrastructure for
'Justice Through Science': The Texas Model
by Sandra G. Thompson & Nicole Casarez*

- Provides an overview of Texas reforms
- Most important reform:
Texas Forensic Science Commission
- Also includes discussion of HFSC

What is HFSC?

- A Local Government Corp.
 - A corporation “to aid and act on behalf of one or more local governments to accomplish any governmental purpose of those local governments.”
 - Tex. Transportation Code §431.101(a).
 - HFSC incorporated in 2012 as an LGC for the City of Houston.

How is HFSC organized?

- Corporate structure
 - 9 member board of directors
 - Corporate officers, CEO, COO, CFO, etc.
 - Technical Advisory Group
 - Operates as a federal “Justice Agency”
 - Also, has 501(c)(3) status
- *April 2014* – Took management responsibility from HPD.

Current Stats

7 Disciplines

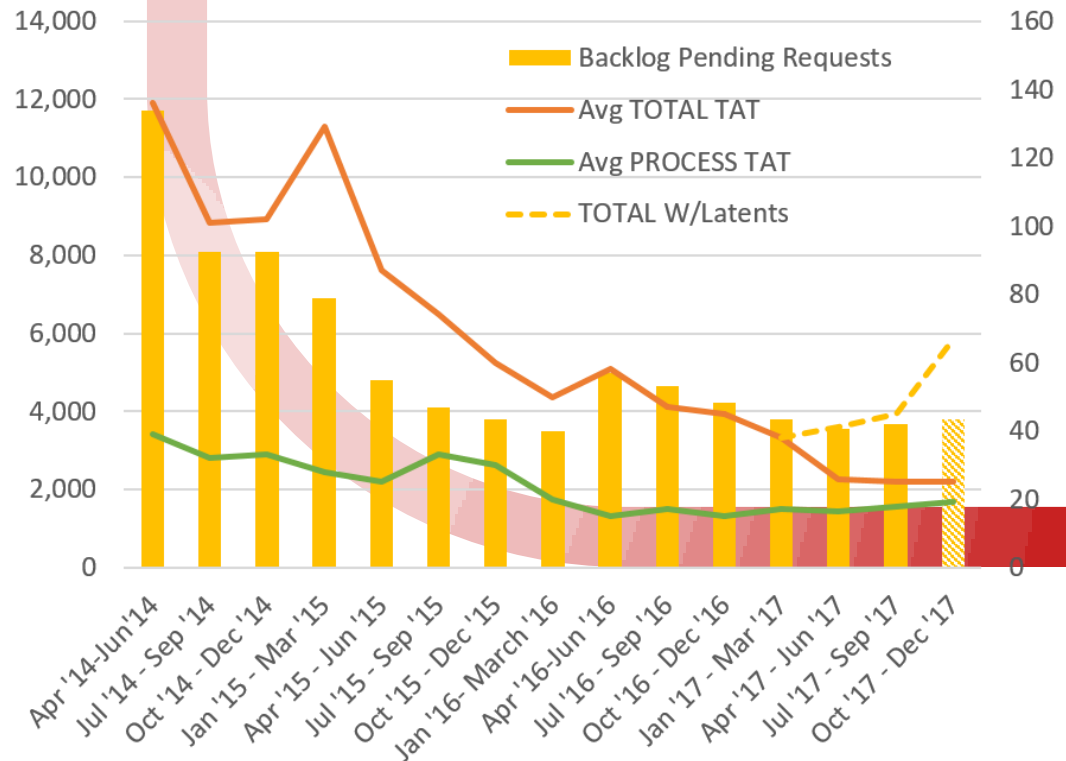
- Crime Scene
- Controlled Substances
- Toxicology
- Digital and Multimedia
- Latent Prints
- Biology
- Firearms

Stats

- ~27,000 requests last calendar year
- 180-190 staff
- ~80,000 sq ft of facility
 - 11 floors, 4 buildings
- ~60% of staff is <35yo
- ~72% of staff is female

What has been accomplished?

- ↓ *82% in avg TOTAL turnaround time
- ↓ 67% in backlogged requests
- ↓ *57% in avg PROCESS turnaround time
- ↓ *94% in WAIT gap



*Data impacted by latent print backlog. Statistics calculated without latent prints

Tectonic Shift in Values

- **“Radical Transparency” = Public Trust**

- Public Board of Directors meetings
- Board meeting videos posted online
- Meeting documents posted online (budgets, backlogs, incidents, audits)
- Public Relations director *responsive to* the media & puts out news releases on incidents.
- Searchable eDiscovery database of lab documents publicly available (SOPs, corrective action reports)



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Leadership

HFSC Discovery & Public Records

Meeting Archives

Governing Documents

Objectives

Accreditation

Organizational Chart

Contact Us

ACE

bers, explosives
physical evidence

Learn More



Other New Lab Values

- Redefining the “client” as the entire criminal justice system—not only police and prosecution.
- Quality -- pioneered **blind quality testing** in five disciplines, also live testimony monitoring & transcript audits.

Other New Lab Values

- Studied Efficiency
 - Lean Six Sigma has increased lab efficiency
 - High efficiency lab building concept
- Developing research culture
 - Publishing papers, applying for grants
 - Solidifying the scientific basis of forensics
 - Improving processes, new applications

Lean Six Sigma: a methodology that relies on a collaborative team effort to improve performance by systematically removing waste and reducing variation. It combines **lean** manufacturing/**lean** enterprise and **Six Sigma** to eliminate eight kinds of waste.



How the Lab is Transforming *State* Criminal Justice

- Texas Forensic Science Commission has asked HFSC to assist it in studying **crime scene investigation** standards.
- Texas DPS has now begun posting corrective action reports.
- Other labs watch board meetings and study the lab's SOPs.

Building Parity with Law Enforcement

- Quick lab results help solve cases.
- **“Investigative leads”** in latent prints, firearms— popular with investigators.
- Hurdles have included disagreements with police union over HFSC’s Crime Scene Unit, which until recently employed mostly officers.
- CSU investigates homicides & officer-involved shootings. Now all civilian.

Transforming *Local* Criminal Justice

- Controlled Substances Section had a 14-day turnaround that allowed creation of “impact docket” to get people into rehab quickly.
- October 2017, post-Hurricane Harvey, courts trying to reduce jail overcrowding caused by storm delays.
- CS section tweaked process to reduce turnaround from 14 days to **7 days!**

Uncovering Wrongful Convictions

- In 2014, Controlled Substances section tested drugs from cases that had already resulted in guilty pleas.
- Found hundreds of cases where tests showed no CS, different CS, or different weight CS.
- Most other labs destroy drug evidence if there's a guilty plea pre-testing.

Some Future Goals

- eDiscovery portal for prosecutors *and* defense attorneys.
- Providing reasonably priced forensic work for defense attorneys.

