



**Houston Forensic Science Center, Inc.  
FY15 Revised Budget Discussion  
January 2015**

# HFSC's Achievement Highlights

- **Expanded Quality Division:**
  - Completed international accreditation for four forensic disciplines.
  - Finalizing accreditation for remaining four disciplines, with on-site assessment in 2015.
  - Quality Manual being revised to cover all eight disciplines.
- HFSC has staffed the Latent Print Section with 10 examiners and one manager, all certified by the International Association for Identification, replacing a costly outsource contract.
- HFSC is retaining a forensic architectural firm to conduct a needs assessment, the first step in future planning for the Center.
- HFSC has sought and hired highly-qualified and credentialed scientists for open positions, and has supported existing staff in seeking additional professional accreditation.
- Modified security system to lab and office space so only HFSC staff have access.
- Training division established to expand internal and external training.
- Sexual assault kit outsourcing project nearly completed.
- Establishing a cost accounting system to track metrics and improve efficiency.

# FY15 Vision and Objectives

The objective for FY15 is to create a more effective and efficient forensic organization, demonstrated by improved customer service to HPD. These same FY15 initiatives also create the added benefit of generating potential future revenue streams to become more self-sufficient. The following goals to meet this objective were set forth to provide enhanced service to HPD and are reflected within the FY15 Houston Forensic Science Center, Inc. (HFSC) budget request:

- **Improved Accuracy of Test Results by Focusing on the Following:**
  - Training and Certification of Our Employees
  - Accreditation of Our Various Lab Disciplines
  - Quality Assurance Guidelines and Compliance Review and Testing
  - Development and Validation of Improved Testing Methodologies
  - Attract and Retain Quality Employees
- **Improved Turnaround Time of Test Results as Follows:**
  - Defining, Tightening and Measuring Acceptable Turnaround Times
  - Elimination and Prevention of Backlogs While Minimizing Third Party Assistance
  - Reintroduction of Trace Evidence Forensic Section to Provide HPD Timely Service and Single-Point Case Management
  - Improve Efficiency with Effective Use of Resources and Space Planning

# Focus on Lab Quality

## Initiatives Focused on Lab Quality Improvement

- \$350,586 - 5 QA Specialists to Enhance Quality in All Sections – 1 in July, 2 in Oct and 3 Jan Hires
- \$424,639 - 3 Evidence Techs / 2 Asst. Lab Directors (consolidating 6 Sr. Office Asst. positions)
- \$ 70,058 – Increase in Life Cycle Replacement Capital for FY15 over FY14
- \$125,000 - Training and Certification. State will require certification of each individual in 8 to 10 years.
- \$232,000 - Outside Consultants to Assist with Accreditation & Implementation of Bromwich Suggestions
- \$112,000 - New Hire Recruitment, Relocation & Employee Population Required Background Checks
- \$100,000 - External Quality Review Audit
- \$ 50,000 - Independent Legal Advice Related to Specific Criminal Justice Forensic Issues

**Total Budget: \$1,464,283**

# Reduction and Prevention of Backlog

## Labor

- **\$ 1,075,283** - 10 Latent Print Examiners and 1 Latent Print Supervisor hired for full year FY15 to replace Ron Smith and Associates (RS&A) third party processing of Latent Prints
- **\$110,687** - 2 NIBIN (National Integrated Ballistics Information Network) Firearm Techs to be added to prevent backlog
- 3 personnel for Development and Validation of Improved Testing Methodologies (see p.7) to be added to bring this in-house, which will both drive efficiency and reduce the need to hire third parties to perform this function

## New Technology

- Recent grant funding has been utilized to purchase lab equipment such as: 2 Genetic Analyzers (\$140,000 each + \$50,000 each for third party validation), 1 DNA Robot (\$130,000 + \$84,000 for validation), which allows for processing 96 DNA samples at once. Another one - Tecan (\$121,000 + \$50,000 validation) is under quote. Each one of these requires third party validation and training, generally covered by grants.
- Latent Print Division is adding touch screens and reducing paper and handling by going completely digital, which expedites processing

**Total Budget: \$1,185,970**

# Minimizing Third Party Assistance

- **\$(2,832,000)** - Elimination of Ron Smith and Associates (RS&A) Contract for Outsourced Latent Print Examination Services. Ended Service Contract 6/30/14
- Significantly reduced reliance on Bode and Sorenson for DNA rape kit processing, and associated non-budgetary funding

**Total Budget Savings: \$(2,832,000)**

# Essential Lab Capabilities

## Trace Evidence Examination

- \$197,375 - 2 Personnel: 1 in Oct, 1 in Jan
- \$305,000 - Instrumentation:
  - \$85,000 - Microscopes
  - \$120,000 – GC (Gas Chromatograph)/MS (Mass Spectrometer)
  - \$100,000 - FTIR (Fourier Transform Infrared Spectroscopy) with Microscope
- **Future Needs:**
  - LC (Liquid Chromatograph)/MS (Mass Spectrometer)
  - SEM (Scanning Electron Microscope) – EDAX (Energy Dispersive Spectroscopy and Micro X-Ray)
  - X-Ray Diffractometer (scatter patterns)
  - AA (Atomic Absorption) Spectrophotometer
- **Total: \$502,375**

### Reason:

- Conduct forensic analysis of trace evidence in criminal cases (hair, fibers, soil, glass, explosives, arson, gunshot residue)
- Provide HPD timely service and single-point case management

**Total Budget: \$502,375**

# Essential Forensic Capabilities

## Training

- 3 Personnel: 2 in Oct, 1 in Jan
- **Total: \$197,375**

### Reason:

- Provide training courses in forensic area for scientific and technical personnel (internally & externally), as well as attorneys, judges, etc.
- Educate Stakeholders & Users of HFSC's services on how to maximize our capabilities
- Reduce outside training expense
- Provide potential revenue stream

## Development and Validation of Improved Testing Methodologies

- 3 Personnel: 2 in Oct, 1 in Jan
- **Total: \$274,695**

### Reason:

- Provide validation service for other forensic laboratories
- Obtain grant funding for forensic research and development
- Reduce outside validation expense
- Provide potential revenue stream

**Total Budget: \$472,070**



# Other Needed Infrastructure

## Labor

- \$543,170 - 6 New Hires: Public Information Officer, IT, Accounting, and HR Support Staff for Full Year
- \$303,850 - Adjustments to Continue COH Employee Pay Programs (Not Recognized in Fund 2213)
- \$ 95,000 - FY15 HFSC Annual Merit Increases
- **\$942,020** - Total Other Labor Infrastructure

## Capital

- **\$120,000** - A/V Mobile Response Unit Fully Outfitted for efficient, on-site processing of evidence

## Supplies

- \$252,889 - "General Lab Supplies" historically short in FY13 & FY14; added supplies for new hires
- \$ 75,000 - Reagents for screening SA Kits which were previously paid by Bode and Sorenson
- **\$327,889** - Total Supply Increase to Sustain Existing Need

## Services

- **\$250,893** - Total Hardware/Software Annual Maintenance & Licensing (Paid by HPD IT in prior years)

**Total Budget: \$1,640,802**

# Space Requirements

## 2013 National Institute of Standards and Technology (NIST) Recommended Space-to-Staff Ratio for Laboratories

Laboratory Category	Staff Size	Total Laboratory Size	Space Per Staff Member
Small	Up to 30	Less than 30,000 GSF	930 to 1,000 GSF per staff member
Medium	30 to 70	30,000 to 60,000 GSF	860 to 930 GSF per staff member
Large	70 to 110	60,000 to 90,000 GSF	790 to 860 GSF per staff member
<b>Very Large</b>	<b>Over 110</b>	<b>More than 90,000 GSF</b>	<b>720 to 790 GSF per staff member</b>
<b>Current HFSC as of 6/30/14</b>	<b>147</b>	<b>50,984 Current GSF</b>	<b>Current 347 GSF per person</b>
<b>HFSC FY15 Budget</b>	<b>195</b>	<b>50,984 Current GSF</b>	<b>261 GSF per person</b>

# FY15 Space Needs

## FY15 Immediate Need

## Long Term Space Solution

### Need:

- Based upon FY15 budgeted staffing of 195, an additional 89,416 to 103,066 square feet are recommended per NIST's Study.

### FY15 Budget includes:

- **\$289,000** - Off-site 23,018 sq. ft. leased space for ½ year
- **\$152,500** - Lease Space Buildout
- **\$441,500** – Total Immediate Need

### FY15 Budget Begins Addressing Long Term Space Solution:

- **\$125,000** - Space Planning of potential future new facility and site visits of state-of-the art facilities

**Total Budget: \$566,500**

# FY15 Focus Summary

- **\$ 1,464,283 - Focus on Lab Quality** by enhancing internal and external quality review, staff training and certification, section accreditations, and keeping pace with state of the art equipment and technology
- **\$ 1,185,970 - Reduction and Prevention of Backlog** by Hiring Latent Print and Firearm Personnel and adding a Ballistics Comparison Microscope
- **\$(2,832,000)- Elimination of Ron Smith & Assoc. Outsourced Latent Print Examiner**
- **\$ 502,375 - Essential Lab Capabilities** of Trace Evidence Examination Added
- **\$ 472,070 - Essential Forensic Capabilities**
  - \$197,375 - Training Section
  - \$274,695 - Development & Validation of Improved Testing Methodologies
- **\$ 1,640,802 - Other Needed Infrastructure** in labor, capital, supplies and services
- **\$ 566,500 - FY15 Space Needs**
  - \$441,500 - Immediate Needs
  - \$125,000 - Long Term Space Planning

**\$3,000,000 – Total Itemized Remaining Budget Request**

# Needs Overview by Budget Category w/o OH Allocation

FY15 Revised Target \$19,654,321

FY15 Request: \$22,654,321

Delta: \$3,000,000

## Labor – New Fully Loaded with Fringes:

Target \$13,762,542 – Request \$17,336,366 = (\$3,573,824)

- \$ 197,375 - Trace Evidence
- \$ 197,375 - Training
- \$ 274,695 - Methods Dev & Validation
- \$1,075,283 - Latent Print Replacement of RS&A
- \$ 885,912 - Other New QA & Lab Infrastructure
- \$ 543,170 - New Corp. Office Positions
- \$ 95,000 – FY15 LGC Annual Merits
- \$ 303,850 - COH Empl Adjustments Not in 2213
- **\$3,572,660 - New Labor & Fringe Requirements**

## Supplies Shortfall:

Target \$715,263 – Request \$944,044 = (\$228,781)

- \$252,889 - Lab Supply Shortage Trend of FY13 & FY14 Coupled with Projected Growth
- \$ 75,000 - DNA Test Kits Previously Outsourced
- **\$327,889 - Supplies Required**

## Capital Equipment Shortfall:

Target \$650,975 – Request \$1,210,533 = (\$559,558)

- \$305,000 - Trace Evidence
- \$120,000 - Crime Scene Unit Equipped Vehicle
- \$ 72,000 - New Site Build-out
- \$ 70,058 - Life Cycle Replacements Increase
- \$ 80,500 - Furniture & Fixtures
- **\$647,558 - Additional Capital Request**

## Services & Non-Capital Overage:

Target \$4,525,541 – Request \$3,163,378 = \$1,362,163

(note: RS&A has been removed from Services to reduce request by \$2,832k)

- \$ 289,000 - Offsite Lease Space
- \$ 125,000 - Future Space Planning
- \$ 250,893 - HW/SW License/Maint. (HPD paid)
- \$ 307,000 - Accreditation/Certification
- \$ 312,000 - Recruit/Legal/Reporting Services
- **\$ 1,283,893 - Net Services Impact**

**Budget Impact: \$5,832,000 less \$(2,832,000) Ron Smith & Assoc. Savings**

**Budget Required to Meet Identified Initiatives: \$3,000,000**

# Historical HPD Forensic Divisions

## Fund 2213: Crime Lab and ID Divisions After AFIS and Polygraph Removal

Administrative  
DNA/Biology  
Firearms  
Controlled Substances  
Toxicology  
**Authorized Crime Lab: 92**  
**Adjusted FY14 Budget:**  
**\$6,719,752**

Administrative  
CSU  
Audio – Video  
Digital Forensics  
Latent Print  
**Authorized ID Division: 53**  
**Adjusted FY14 Budget:**  
**\$9,933,308**

**FY14 Total Adjusted Fund 2213 Budget: \$16,653,060**  
**Total Authorized Employees: 145**

**FY14 HFSC Operation Budget: \$1,940,113**  
**Total Authorized Employees: 7**

**Total FY14 Fund 2213/HFSC Operation Budget: \$18,593,173**

# FY15 Emphasis

The objectives outlined within this FY15 HFSC Operational Budget Plan can best be accomplished by partnering with the City of Houston and ensuring that entrusted funds are managed responsibly by creating an infrastructure which will provide for and uphold accurate and timely forensic results while remaining fiscally responsible and accountable to the Citizens of this Community.