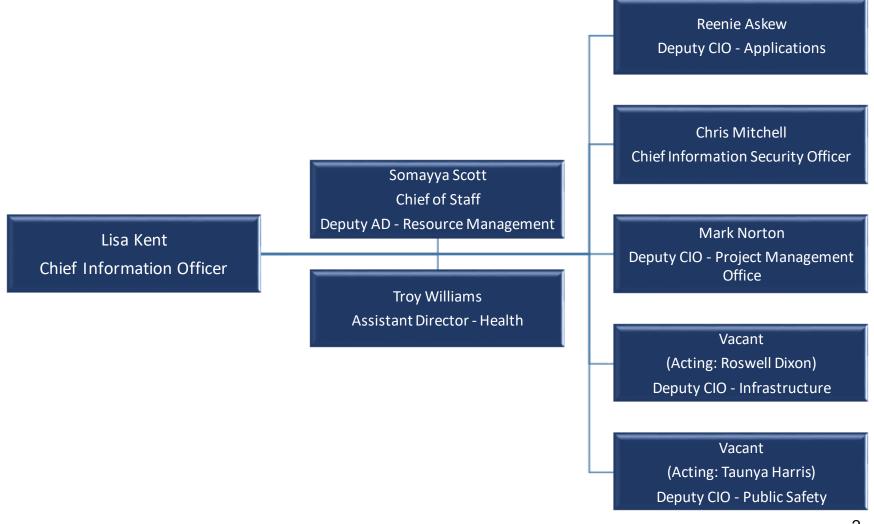


Houston Information Technology Services FY2019 Proposed Budget Presentation

May 14, 2018

Org Chart





Revenues By Funds (\$ in thousands)



Fund	FY17 Actual	FY18 Budget	FY18 Estimates	FY19 Proposed	Variance FY19 Prop/FY18 Est.	% Change
General Fund	\$2,185	\$1,868	\$ 1,877	\$1,885	\$ 8	0.4%
Revolving Fund	\$41,169	\$ 53,164	\$52,905	\$55,252	\$2,347	4.4%
Total	\$43,354	\$55,032	\$54,782	\$57,137	\$2,355	4.3%



- General Fund
 - No significant changes from FY18 19

- Revolving Fund revenue increase of \$2.3M
 - Revenues to match expenditure budget

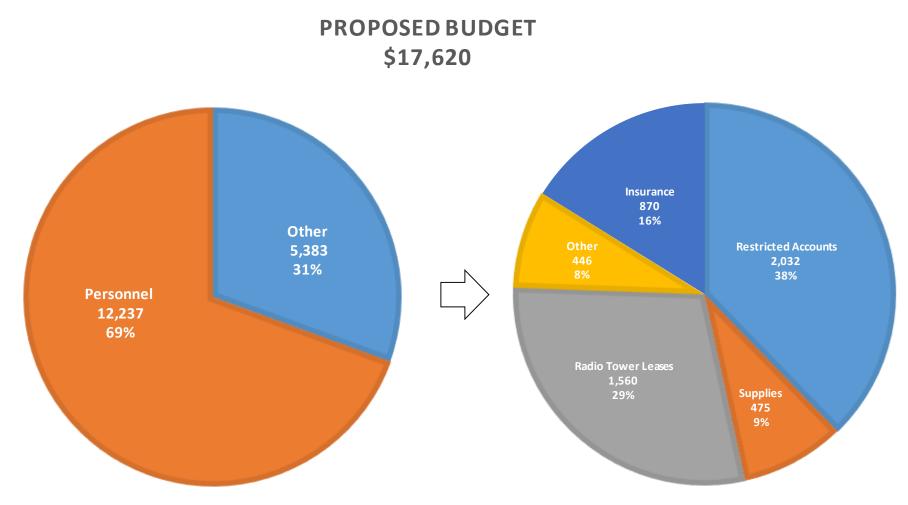
Expenditures By Funds (\$ in thousands)



Fund	FY17 Actual	FY18 Budget	FY18 Estimates	FY19 Proposed	Variance FY19 Prop/FY18 Budget	% Change
General Fund	\$21,391	\$ 17,230	\$ 17,230	\$17,620	\$390	2.3%
Revolving Fund	\$ 41,169	\$ 53,164	\$52,905	\$55,252	\$2,088	3.9%
Total	\$62,560	\$70,394	\$70,135	\$ 72,872	\$2,478	3.5%

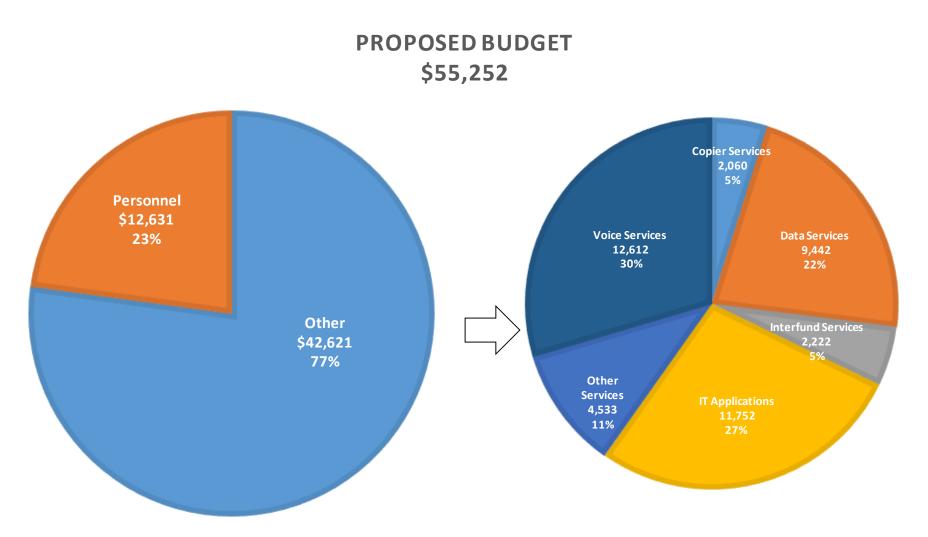
FY19 Personnel vs Non Personnel General Fund (1000) (\$in thousands)





FY19 Personnel vs Non Personnel Revolving Fund (1002) (\$in thousands)





Department Budget Reductions (in thousands)



Fund	FY17	FY18	FY19	3 - Year Total
General Fund	(703)	(6,704)	0	(7,407)
Revolving Fund	(5,504)	6,704	(681)	519
Total	(6,207)	0	(681)	(6,888)

 General Fund FY2017 Reductions: CFO Savings Initiative (\$380) Reduction Scenario (\$323) > 2 positions eliminated Revolving Fund FY2017 Reductions: CFO Savings Initiative (\$1,446) Reduction Scenario (\$4,058) > 7 positions eliminated 	 General Fund FY2018 Reductions: Reduction Scenario Moved to Revolving Fund provided (\$2,155) savings to General Fund 	 Revolving Fund FY2019 Reductions: Infrastructure Services (\$66) Telephony Services (\$140) Vacancy Factor (\$475)
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FY2019 Budget Expenditures Net Change (in thousands)



FY2019 General Fund Budget Expenditures Net Change to FY2018 Current Budget				
	Duuget			
FY2018 Current Budget	•		<u>Notes</u>	
Operating Budget	\$	15,148		
Restricted Budget	\$	2,082	1	
FY2018 Current Budget	\$	17,230		
Explanation of FY2018 Incremental Incre	ease/(Decrea	se)		
Operating Budget Adjustments				
Budget reduction initiatives		-		
Subtotal Operating Budget Adjustments	\$	-		
% Change from FY18 Operating Budget		0.0%		
Contractual or Mandated Adjustments:				
Health Benefits Active Civilian	\$	72		
Health Benefits Active Classified (if applicable)		-		
Municipal Pension		32		
Classified Pension (if applicable)		-		
Restricted Accounts		(50)		
Program Adjustment	\$	336		
Subtotal Contractual/Mandated Increases	\$	390		
FY2019 Proposed Budget				
Operating and Contractual Adjustments	\$	390		
FY2019 Proposed Budget	\$	17,620		
% Change from FY18 Current Budget		2.3%		
Notes:				
 Restricted Budget includes service chargeback accounts fo accounts, etc 	r items such	fuel, electici	ty, IT	

Program Adjustments:

- Contract escalation related to radio tower leases & Harris County (Greens Road) shared-use radio shop of \$95K
- Motorola Nice Log Software of \$50K
 (Recording radio transmission for HPD, HFD & HPW)
- Funding to provide 24x7 monitoring and annual maintenance for Public Safety Radio Communications Network Operation Center of \$191K

FY2019 – Revolving Fund Expenditures Highlights



FY2018 Adopted		\$ 53,164
Budget Reductions Infrastructure Services_ScanMail Telephony Services Vacancy Factor	(\$66) (\$140) (\$475)	(\$681)
FY2019 Major Contractual Increases		
Verizon Wireless	\$585	
Planning Dept EGIS-transfer to HITS	\$565	
Phonoscope	\$525	
Infor	\$320	
Northrop Grumman Systems Corp.	\$222	
PCI Audit	\$212	
eSignature	\$172	
Citywide Copier Services (Ricoh Contract)	\$168	\$2,769

Proposed FY2019 Budget

\$55,252

Functional Org Chart (in thousands)



Fund	Division Name	FY2019 FTE's	FY2019 Budget
General Fund	HITS – Director's Office Group	14.5	1,661
	HITS - Applications	11.6	3,855
	HITS – Infrastructure	52.2	6,287
	HITS – Public Safety	30.3	5,817
General Fund Total		108.6	17,620
Revolving Fund	HITS – Director's Office Group	8.7	6,296
	HITS – Applications	35.5	12,768
	HITS – Infrastructure Group	5.8	27,769
	HITS – Public Safety	19.9	4,461
	HITS – Client Solutions	11.5	1,828
	HITS – Project Group	15.4	2,130
Revolving Fund Total		96.8	55,252
Grand Total		205.4	72,872



Questions

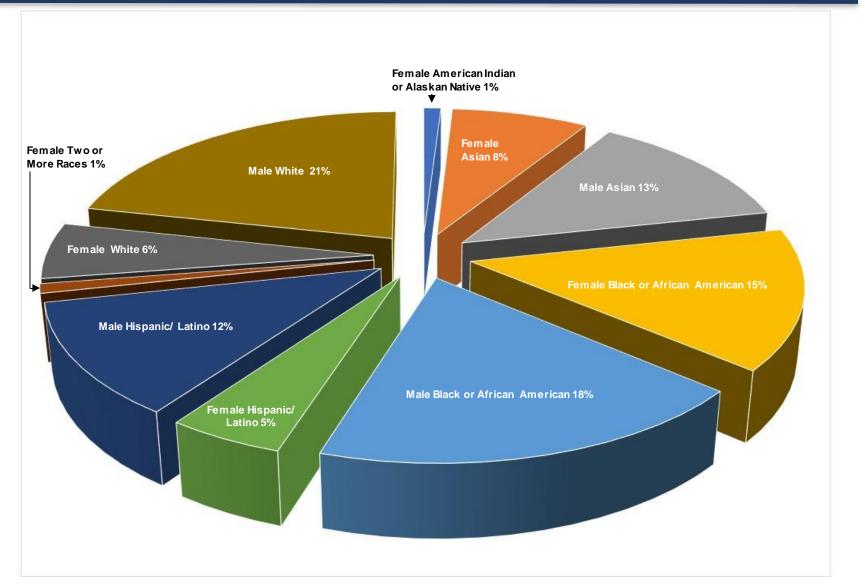
Appendix



- Contents, to include:
 - Department demographic breakdown (gender & ethnicity)
 - Optional Relevant operating information, examples:
 - Customer satisfaction surveys
 - Productivity or throughput trends impacted by recent initiatives

Demographics





FY2018 Planned Initiatives & Status / Accomplishments



HITS Goals & FY18 Initiative Highlights		Mayor's Priorities	Plan Houston Strategy
Enhance Citizen Engagement Protect City Information & Data	Public Safety	Provide responsive & efficient public safety services	
 HFD Infor Migration for inspections and permit fee collection; 		Improve public safety through effective crime prevention & enforcement	Partners with others, public and
 CJIS-mandated network equipment refresh; Data warehouse, analytics, and data classification initiatives 		prepare for, mitigate, and effectively respond to emergencies & special events	private.
 Cyber Security 4-year Master Plan initiatives; Network Security Tools; NexGen Firewall Replacement 		Reduce the murder rate to the lowest in a generation by 2020.	
Enhance Citizen Engagement Transform IT Workforce for the Future	Complete Communities	Ensure equal access to opportunity & prosperity	
		Support economic growth & jobs	
 IT Classification transition and benchmarking; Succession Planning; Learning & Development Plans 		Ensure quality affordable housing options throughout the City	Protect and conserve our resources.
		Provide vibrant and enjoyable activity and recreation centers	Partner with others, public and private.
		Promote healthy, safe, livable and	
		connected neighborhoods	
		Develop and skilled and talented workforce	_
		Champion learning	
Create a Resilient, Scalable, and Agile IT Infrastructure Improve the Overall Management of IT Services	Services & Infrastructure	Improve drainage and flood mitigation	
		Reduce traffic through improved streets and	
ARA license & permit migration to INFOR;		access to transit and mobility options	Sustain quality infrastructure.
 Server/Storage/Network & PC asset refresh; Microsoft Azure and Sharepoint Online initiatives; 		Ensure that infrastructure accommodates growth and meets community needs	Protect and conserve our resources.
311 / PWE UCS / MCD Contact Center upgrades		Improve the City's service delivery structure	
Align IT to Support the Business Priorities & Goals	Sound Financial Management	Achieve lasting pension reform	
 Update 3-year IT Strategic Plan; Software License Compliance; IT Expense & Chargeback dashboards; 		Put long-range financial plan into action	Spend money wisely. Partner with others, public and private.
Budget Software selection and design; Signature contract & policy changes		Deliver world class city services in an effective and efficient manner	Grow responsibly.



Disaster Recovery – Hurricane Harvey



- **RADIO:** Hurricane Harvey damaged equipment at one radio tower site, but radio service throughout the event was no less than **99.9999%** availability due to Herculean efforts by the HITS Public Safety Division. Our team worked 24/7 for several weeks to ensure that the system was operational and first responder radios were serviced and/or replaced as needed.
- **311 CALL CENTER**: 311 services remained fully operational throughout the event with agents working from home. This was possible because HITS Infrastructure Division had previously deployed *soft-phone capabilities* on agent laptops near the end of FY17.
- **NETWORK & REMOTE ACCESS:** During the height of the downtown flooding, numerous modifications were made to migrate mission-critical citywide network and server components from flooded locations like Lubbock and Riesner to safer data center locations. This was done rapidly "over the wire" prior to flood waters inundating the emergency generators that were keeping the legacy equipment online. These actions enabled the City to *continue to process payroll on time for 22,000 employees*, and for *311 agents, emergency responders and recovery teams to continue accessing the data network remotely* throughout the event.
- **EMAIL**: Email capabilities remained 100% online throughout the event due to HITS' successful migration to Office 365 near the end of FY17.
- **CYBER INCIDENT INCREASE**: During Harvey, we noted a significant increase in cyber incidents. Our cyber-security team actively mitigated multiple campaigns designed to harvest COH login credentials.
- Over 70 HITS employees worked during Harvey and throughout the essential-employee-only recovery period.
- **DAMAGE ASSESSMENT & RELOCATION**: For several months following the storm, HITS inventoried, assessed and restored / replaced damaged equipment. We relocated departments that were flooded out of their office locations and made interim service accommodations in new locations.

Additional Accomplishments – SECURITY



- Developed and implemented several core departmental *policies* (5), *procedures* (1) and *guidelines* (4)
- Implemented DNS and IP layer security solution; this is our first line of defense against Internet-based threats
- Implemented *vulnerability management* solution
- Implemented Advanced Threat
 Protection (ATP) email gateway solution
- Implemented *email encryption* solution to *auto-encrypt* sensitive outbound information
- Implemented Security Information and Event Management (SIEM) solution; this solution allows the COH Cyber Division to collect and correlate data from many COH internal sources to generate cyber event alerts requiring investigation

- Implemented anti-malware, anti-exploit endpoint solution
- Upgraded and saturated environment with basic anti-virus capability
- Implemented *intrusion detection* capability at an additional Internet egress point
- Implemented a *patch management* and *vulnerability management* approach
- Implemented cyber incident response capability
- **Incident response** to a multitude of domestic and international threat events, and threat actors
- Sponsor and participant in planning phase of *major cross-industry cyber exercise* scheduled for July 2018

Additional Accomplishments – INFRASTRUCTURE & APPLICATIONS



- Replaced end-of-life and non-supported *network & server infrastructure*. HPD Phase 1 (access layer switches) in progress and scheduled to be completed by July 2018. End of Life domain controllers in progress and forecasted completion by end of June 2018.
- Substantially improved **backup processes** for SAP and ~300+ other servers.
- Amended data center contract to include *more stringent Service Level Agreement* (SLA) at no additional cost to the City. The new SLA mandates Tier 3 redundant power and includes financial penalties for data center loss of power.
- Completed *Joint Processing Center integration and testing with CSMART*. Go-live forecasted to occur in the next few weeks.
- Enhanced 311 legacy application performance and reduced 311 agent average speed of answer by 50%.
- Completed *Department of Neighborhoods Phase 2 Infor upgrade* for inspections. Migrated more DON business process to Infor and eliminated legacy FORMS application.
- Completed department intranet *Sharepoint sites upgrades* to standard templates.
- Completed *Public website re-branding* and enhancements.
- Designed and tested *capital plan report by council district*. Scheduled go-live May 2018.
- Completed *data classification policy* to lay the foundation for properly handling and protecting data according to its sensitivity.
- Stabilized *eBid* legacy application.



- Completed the **7.17 Radio System Upgrade** of the hardware, software and services of the radio system equipping public safety personnel and partners with the most advanced radio communications technology.
- Completed the **Geo Prime Site Redundancy Project** that provided redundancy of the radio system improving overall public safety.
- Successfully planned and managed interoperable communications (voice & data) for all Special Events coordinating with local, state and federal agencies. Our staff have worked over 30 special events to include Bush Funeral, MS150 Bike Ride, Off Shore Technology Conference, Chevron Marathon, Thanksgiving Parade, Texans Football, NBA Finals, Freedom Over Texas, Rodeo, 2017 World Series, Wings Over Houston, Pride Parade, and various NRG concerts.

FY19 Revolving Fund (1002) Non-Personnel (Other) Components



Other Services- 11%

- Enterprise GIS Maintenance and Support
- HEC Dispatching System Support and Maintenance
- Management Consulting Services

Voice Services- 30%

- Wireless Communication Services
- Wireline Telephone Services
- Telecom Labor and Equipment

IT Application Svcs- 27%

- Infor Software Management Systems
- Microsoft Enterprise Licenses
- SAP Enterprise Support Suite
- Kronos Software
- CSMART Support
- EGIS-Planning Department Support

Data Services- 22%

- Ethernet Data & Internet Circuits
- Smartnet Maintenance Renewal
- Data Center /Lease/Connectivity Costs
- ProofPoint Suite / eDiscovery

Copier Services- 5%

Citywide Copier Services

Interfund Services- 5%

- Finance Department Support
- EGIS-Planning Department Support

FY 2019 Performance Measures



Customer Measures	Priorities	FY17 Actual	FY18 Budget	FY18 Estimates	FY19 Proposed
311 Citizen Service Center Availability during operational hours	Public Safety	N/A	100%	99.8%	100%
Citywide Radio System Availability Management	Public Safety	99.9%	99.9%	99.9%	99.9%
Business Process Measures	Priorities	FY17 Actual	FY18 Budget	FY18 Estimates	FY19 Proposed
Expenditures Adopted Budget vs Actual Utilization	Sound Fiscal Management	92%	98%	101%	98%
Revenues Adopted Budget vs Actual Utilization	Sound Fiscal Management	130%	100%	100%	100%
					22