

# HOUSTON FIRE DEPARTMENT RESOURCE STATUS

Samuel Peña, Houston Fire Chief

February 17, 2022

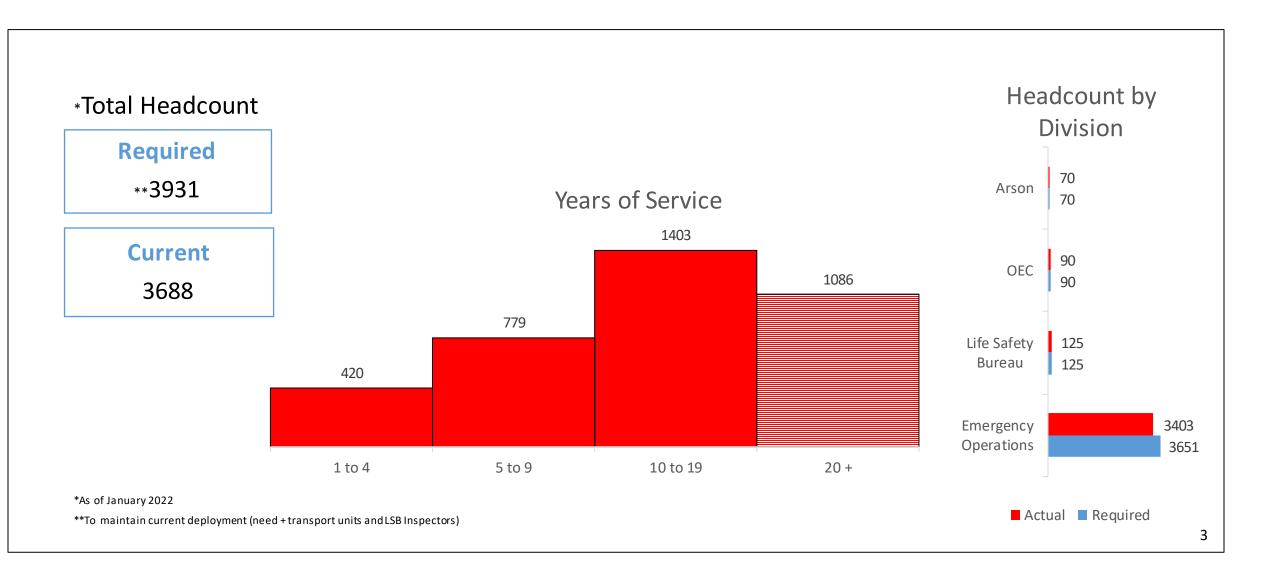
### Agenda



- Provide Staffing Level Summary
- Provide Ambulance Service Demand Information
- Provide status of major Houston Fire Department (HFD) programs
  - 1. Fleet (Engine, Aerial, Ambulance) and Flood Response Programs
  - 2. Firefighter Health and Safety Program

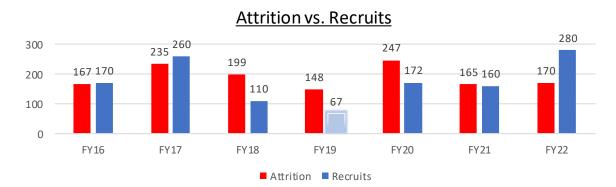
# **HFD Staffing Summary**



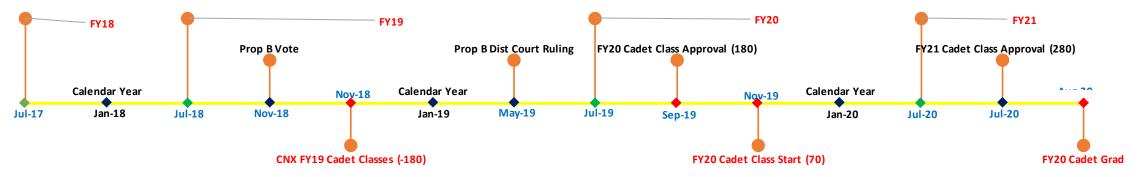


### HFD Staffing Summary





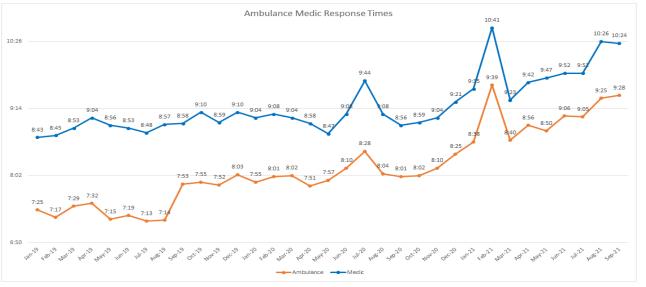
- Current staffing is ~250 FF below optimal level
- FY18 and FY20: Higher than normal attrition
- FY19-20: Prop B forced cancellation of 4 academy classes
  - Missed recruitment target by ~200 FF
  - 1 year between academy classes
  - Only 67 new FF from May '19 to Aug '20
- Approved 4 Academy classes per year in FY21, FY22
  - 280 Recruits per year (100 above normal attrition)
  - Additional Classes approved by Mayor



#### **Ambulance Service Demand**

- EMS incidents account nearly 90% of HFD workload
- Call volume has increased over 15% in the last 7 years
- Increase is completely driven by EMS call volume
- Peak time demand between 1100 and 1800
  - EMS Resource Management in effect 13% of the time
- Dispatch adjustments in attempts to send the most appropriate resource have been made to over 37 medical call types
  - Dispatch adjustments have made limited impact on Ambulance capacity.
- Minimum 5 Additional Ambulance Units needed in the System (8,33,35,46, and 73)

Year	Total Fire Incidents	Total EMS Incidents	All Incidents
2010	11,341	226,084	270,425
2011	46,200	230,518	276,718
2012	44,707	248,974	293,681
2013	42,061	257,040	299,101
2014	41,747	276,842	318,589
2015	43,053	289,973	332,926
2016	42,103	293,811	335,914
2017	44,451	297,385	341,836
2018	44,595	295,711	340,306
2019	45,299	301,731	347,095
2020	43,115	301,266	344,381
2021	46,047	337,842	383,889



## Fleet Replacement Program



#### **HFD Fleet CIP Summary 2016-2022**



Apparatus	2017	2018	2019	2020	2021	2022	Totals	Replacement %
Fire Engines (88)	4	4	10	8	9	6	41	47%
Aerials (38)	3	2	3	3	3	2	16	42%
Ambulance (104)	0	9	18	8	15	15	65	63%

### Fleet Replacement Program

#### **FY20 Fleet**

Engines	8
Rescue Trucks	1
Ladders Trucks	2
Boosters	4
Ambulances	5
Light Duty	13

**Total Investment** \$10,086,641

#### **FY21 Fleet**

Engines	9		
Ladder Trucks	3		
Ambulances	15		
Boosters	1		
District Chief Trucks	2		
Forklifts	1		
EMS Supervisor Vehicles	3		
Box Vans	1		
Cascades	1		
Arson Vehicles	15		
Cargo Vans	1		
Specialty Vehicles	6		
Total Investment \$14,972,000			

lotal Investment **\$14,873,000** 

#### **FY22 Fleet**

Engines	6
Ladder 12yr+	2
Ambulances 7yr+	15
DC/Safety Vehicles 7yr+	3
Arson 10yr+	10
Command Staff Vehicles	2

Total Investment **\$10,229,510** 

Flood Response	Inventory
Rescue Boats	11
Evacuation Boats	21
HW Vehicles	9
(Plus: Booster/HWV's)	(6)
Wave Runners	10
Prime Movers	10
PS Drones	3
Water Strike Team	80
Training/Equipment	
GF Investme	nt: \$2,911,349

\$20,000 CDF **District C** (Zodiac Boat):

> \$593,012 \*Donations:

Total Investment(FY'18-'20): \$3,524,361









### HFD Vehicle Lease Program



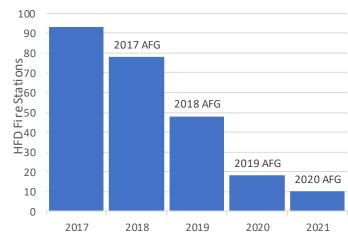
- Contracted with Enterprise to replace 105 vehicles across multiple HFD divisions
  - LSB, Training, OEC
  - Vehicles received in April 2021 (10 months of lease payments)
- Enterprise contract is at its first cycle of replacement.
  - Supply chain delays will limit wholesale replacement of all 105 lease vehicles
  - 49 of 105 vehicles will be replaced this year
  - Enterprise will buy-out 65% equity of remaining 56 lease vehicles and extend the lease term for 12 months

Lease Program Cost (105 Vehicles)	FY21 (3months)	FY22
LSB Vehicle Outlay	\$(133,912)	\$(654,040)
2021 Sale of 84 of 105 old LSB vehicles	\$119,468	\$0
Sale of 49 lease vehicles (replaced)		\$563,500
Equity of 56 vehicle extended lease		\$410,809
Vehicle Sale + Equity Total		\$974,309
Net Cost	\$(114,444)	\$320,269

### Firefighter Health and Safety Program

#### **Program Improvements**

- Plymovent Vehicle Exhaust System
  - · Reduces the health risk in the station
  - 50 Fire Station installations completed
  - Funding assisted by 2017, '18, '19, '20 AFG Grant
  - 10 Stations not qualified for grant funding @ \$75,000/station
- Extractor Commercial Washers
  - Improves process of keeping gear clean and firefighters safe
  - Completed purchase for each Fire Station, Arson & Academy
  - Funding assisted by Firefighter Foundation of Houston (FFFH) & CDF Districts A,E,G
- Thermal Imaging Cameras (TIC)
  - Vital tool helps FF "see" through smoke, monitor fire spread, locate hot-spots, and save lives
  - All apparatus are now outfitted with a TIC
  - Funding through CIP and CDF Dist F, G, AL 1 & 5



Fire Stations without Diesel Exhaust System



# Firefighter Health and Safety Program

Equipment	Completed/Projected	Needs	Estimated Cost
Plymovent System	50 Fire Stations	39 to install **(10 No Grant)	\$5.9 Million \$750,000
Extractor/Gear Washers	76 Fire Stations	17 to install	\$1.1 million
Thermal Imaging Cameras	Completed All Units	0	\$450,000
Half Mask Respirators & Filters	Completed All Personnel	Mx Costs	\$350,000
Annual Program M&O	Safety Equipment Mx, Repla	\$220,000	
*Created the Department Health			
*Applied for 2020 AFG Grant to	\$2.2 Million		
*Purchased standard Physical F collaboration with Health and Sa	\$200,000		
NEED: Implementation of IAFC, NEED: Personal Protective Equ	Combination of Programs \$500,000		

#### Non-Traditional Funding Sources



#### August 2017 to August 2021

- Donations:
- Grant Funding Local, State and Federal:
  - (UASI & HLSR: \$1,459,646)

• AFG, State and other Local: \$7,766,156

• Other Grants: \$1,148,596

Total Non-Traditional Funding to HFD: \$11,629,347

#### HFD Accomplishments



- ISO Class 1 Designation- Insurance Services Office Public Protection Classification 1
- CFAI Accredited Agency Designation- Commission of Fire Accreditation International
- 18% salary increase over 3-FY for all ranks
- Created Department Health and Safety Chief position
- Added HazMat Unit capability in West Houston
- Implemented Wildland Firefighter Team capability
- Adopted 2015 International Fire Code
- Lease Vehicle Program replaced 105 vehicles for the Life Safety Bureau, Training, OEC
- Plymovent (Diesel Exhaust Removal System)

   install in 50 of 79 fire stations approved for grant funding
- Extractors (Commercial Gear Washers)- installed in 76 fire stations to date, including 21 District Houses
- Purchased Half-Mask Respirators for each member to use post fire extinguishment in non-IDLH
- Replaced SDI Fireground Accountability Program
- Operation Stocking Stuffer (6,500 Fams/20,00 Kids) Huge Thank you! sponsors and contributors

#### Operation Stocking Stuffer Sponsors and Contributors





#### A Huge Thank You To All Our Sponsors & Contributors!

Binkley-Barfield BNSF Railways Books-A-Million Buca di Beppo The Bull: FM 100.3 The Cannon Dril-Quip EKI Electric Fajita Pete's Frazerbilt Freebirds World Burrito FW Walton GD Energy Products Golf Cars of Houston Gordon Food Service Harris County Precinct 7 Houston 311 The Houston Astros Foundation/Major League Baseball Houston BOMA Houston Police Department Houston Poly Bag Houston Public Works Houston Texas Fire Fighters Federal Credit Union Houston Texans Katz Coffee Leeco Steel Lincoln Property Company M.D. Anderson Mann Eye Institute Mayor's Office of Special Events Miller Grossbard Advisors Rice University: Jones Business School S & B Young Professionals Organization Silver Eagle Distributors Houston LLC. Weatherford



# Questions?