



Our organization works every day to maintain a high quality of life by providing a safe and peaceful environment within the City of Pearland for all residents. Our desire is that every Pearland resident and visitors goes about their day as they choose without any unfortunate events, regardless of location within Pearland, or time of day. In the instance when criminal, traffic, medical, fire, natural disaster or any other emergency occur, it is our responsibility at the City to have properly trained and equipped professionals who can quickly respond to any scene with empathy and judgment, aided by communications and technology structures in place.

Prevention, preparation, and planning take the majority of any given day, and properly so. Education, information, presence, good design and maintenance, and a culture of awareness and responsibility all play a key role in that effort. For instance, traffic crashes take lives and impose costs. With well-designed traffic flows, ongoing road maintenance, and effective awareness and enforcement of traffic laws, crashes can be reduced. When traffic emergencies do occur, a coordinated response from Police and Fire professionals is critical to control traffic and protect lives. Similarly, there are unavoidable natural weather threats that must be prepared for with staff training and awareness, with contingency plans for a resilient community and City government that can get back on firm ground once high waters subside. The response to such events requires a coordinated effort between all City Departments, each of whom have a different role. In all these areas of our function as a local government, we are responsible to provide independent and coordinated levels of service that protect lives and property, for our citizens and those that do business in Pearland.

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FY20 White Paper



To: Clay Pearson, City Manager

From: Vance Riley, Fire Chief

CC: John McCarter, Budget & Procurement

Date: December 21, 2018

Re: Implementing Citygate Fire Service Plan

Background

The purpose of this paper is to outline progress made since the 2017 Citygate Fire Service Plan was presented and approved by City Council.

It is important to have a historical perspective to gain understanding of the context of the findings and recommendations of the Citygate Report. The last 11 years have brought significant and sweeping changes to improve the fire and emergency medical services provided by the City to its citizens and visitors. Not resting on any laurels or satisfied with *status quo*, we remain committed to continuous improvement and change, there remains significant and critical opportunity for improvement to still be achieved.

Historic Milestones of Pearland FD

1946. The Pearland Volunteer Fire Department, Inc. was formed to serve the City of Pearland in 1946 to provide service to a population of less than 1000. The Department remained all volunteer for over 60 years.

October 2007. The City of Pearland hired its first full-time fire fighters (1 Chief and 18 fire fighters) to supplement PVFD, Inc. An exponential population growth had brought a corresponding increase in emergency incidents while the number of available volunteer fire fighters was declining. Population was 78,000 not including the ETJ.

April 2010. McGrath Consulting Group, Inc. completed a Fire and EMS Departments Staffing, Scheduling, and Resource Deployment Alternatives Study. This study considered consolidation, among other items, of the Fire and EMS Departments to meet the growing emergency incidents demand in the City. Council chose not to consolidate the departments at that time. Population was 94,000 not including the ETJ

January 2011. The City hired 9 additional fire fighters in January 2011 to staff the newly constructed Fire Station 5 (Kirby Drive). At that time all full-time fire fighters moved to a 24 hour shift schedule. A few part-time fire fighters were also hired to supplement the full-time staff and volunteers. Population was 96,000 not including the ETJ

October 2011. The City used a Staffing for Adequate Fire & Emergency Response (SAFER) grant from FEMA to hire a part-time Recruiting and Retention Coordinator. This was done in an attempt to get more volunteer fire fighters and retain the ones that were currently on staff. This program was funded by the general fund for a few years after the grant expired.

November 2011. The City accepted another (SAFER) grant from FEMA. This grant paid for 6 new full-time fire fighters for a period of two years. The city was required to employ the 6 full-time fire fighters for an additional year as part of the grant.

March 2012. Council adopted a Fire Station Master Plan after a study conducted by Mike Pietsch P.E. Consulting Services, Inc. This plan outlined the best locations to relocate 3 fire stations and 5 future fire stations, as well as the emergency response vehicles to be placed in current and future fire stations.

May 2012. Fire Station 6 opened in the Lakes of Savannah Development. Station 6, a volunteer fire station, was built by BC MUDS 21 and 22 as part of a 2002 agreement with the City. The City does not own or maintain Fire Station 6. Despite a strong push for volunteers in that area from 2010 to 2014, only a couple of area residents volunteered. As of today, there are no volunteers for that station. Population was 99,000 not including ETJ.

October 2013. Council approved the consolidation of the Fire and EMS Departments. This included a plan for voluntary cross-training of former EMS Department paramedics to be certified fire fighters by June of 2014. Population was 103,000 not including ETJ.

August 2015. Council ended the long time contract with Pearland Volunteer Fire Department, Inc. and transitioned the existing volunteers into part-time employees of the City. As the demographics of the City changed and as long-time volunteers retired or moved, it became increasingly difficult to recruit and retain volunteers. Population was 111,000, not including ETJ

January 2016. A new and relocated Fire Station 3 was opened on Yost Road at Broadway. This site previously had a residential home with one ambulance staffed 24/7/365. The City hired 9 new full-time firefighter-paramedics to staff one fire engine pumper 24/7/365. The ambulance formerly located at the now demolished residence was relocated to new Fire Station 3. Approximately 9 part-time fire fighters were hired to supplement the full-time staff.

October 2016. A new and relocated Fire Station 2 opened on Fite Road at Harkey Road. The City hired 15 new firefighter-paramedics to staff one fire engine pumper and one ambulance 24/7/365. Approximately 9 part-time fire fighters were hired to supplement the full-time staff. Population was 116,000 not including ETJ.

February 2017. Citygate Associates, LLC completed a Standards of Cover and Staffing Study for the Pearland Fire Department. With extensive use of response and traffic data, the study made 25 recommendations to improve the performance of the Fire Department to better meet the needs of the community. The Fire Department agreed with most of the recommendations and began implementing some of them beginning in the last quarter of FY2017.

June 2017. Council accepted the findings of the Citygate Final Report for the Fire Department Standards of Cover and Staffing Study as well as the Fire Department's recommendations. (Please see Appendix C for a baseline chart status update). Population was 119,000, not including ETJ

March 2018. Construction begins on a new and relocated Fire Station 1 on Old Alvin at McHard Road. This station does not require additional staff as one ambulance and one fire engine pumper will simply be relocated from the old Fire Station 1. Current population estimate is 125,000 not including ETJ.

Appendix A provides information on Fire Station 7 and 8 progress. **This white paper serves as a two year update as to the current status in implementing the recommendations of the Citygate Final Report as follows:**

10.2 DEPLOYMENT RECOMMENDATIONS

Recommendation #1: With the recent change in dispatch centers, the City should monitor, on a monthly basis, the dispatch processing times, including the PSAP transfer times from the Pearland Police Communications Center.

The Fire Department receives monthly statistical reports from the Cypress Creek EMS Communications Center in compliance with NFPA 1221 standards. Pearland PD provides call transfer time reports upon request.

Recommendation #2: **Adopt City Council Deployment Measures Policies:** The City's elected officials should adopt updated, complete performance measures to direct fire crew planning and to monitor the operation of the Department. The measures of time should be designed to save patients where medically possible and to keep small but serious fires from becoming greater-alarm fires. With this in mind, Citygate recommends the following measures:

2.1 Distribution of Fire Stations: To treat medical patients and control small fires, the first-due unit should arrive within 7:30 minutes, 90 percent of the time, from the receipt of the 9-1-1 call in the fire dispatch center. This equates to a 1:30-minute dispatch time, a 2:00-minute company turnout time, and a 4:00-minute drive time in the most populated areas.

The Department agrees with this recommendation. To date, Council has not formally adopted a standards of cover or performance measures.

2.2 Multiple-Unit Effective Response Force for Serious Emergencies: To confine fires near the room of origin, and to treat up to five medical patients at once, a multiple-unit response of a minimum of two engines, one quint, one medic unit, one Fire Captain—EMS, and one Battalion Chief, totaling 16 personnel, should arrive within 11:30 minutes from the time of 9-1-1 call receipt in fire dispatch, 90 percent of the time. This equates to a 1:30-minute fire dispatch time, a 2:00-minute company turnout time, and an 8:00-minute drive time spacing for multiple units in the most populated areas.

The Department agrees with this recommendation, however we are not currently able to meet this goal with current quantity and distribution of resources.

- 2.3** Hazardous Materials Response: Provide initial hazardous materials response designed to protect the community from the hazards associated with uncontrolled release of hazardous and toxic materials. The fundamental mission of the City response is to protect the public by isolating them from the event and waiting for additional trained personnel for mitigation. It can achieve this with a first company capable of investigating a hazmat release at the operations level within 11:30 minutes total response time, 90 percent of the time. After assessment and scene evaluation is completed, a determination will be made whether to request additional resources from the City's multiple-agency hazardous materials response partnership.

The Department agrees with this recommendation. However, to operate at the Operations Level at a Hazardous Materials incident will require the purchase and maintenance of additional detection and protective equipment and associated training time at significant expense. Some of this equipment includes consumables and disposables with shelf-life limitations. The Department has not made progress on this recommendation.

- 2.4** Technical Rescue: Respond to technical rescue emergencies as efficiently and effectively as possible with enough trained personnel to facilitate scene security and community safety until a trained Technical Rescue team from mutual aid companies can arrive. Deliver a first-due company for assessment of the rescue within 7:30 total response time minutes, 90 percent of the time. Assemble additional resources for technical rescue capable of initiating a rescue within a total response time of 11:30 minutes, 90 percent of the time. Safely complete rescue/extrication to ensure delivery of patient to a definitive care facility.

The Department agrees with this recommendation. However, a large portion of the Operations Division is not currently trained to the Operations Level for Trench, High Angle, Confined Space and Collapse Rescues. Due to the rarity of these types of incidents and the availability of other agency specialized teams, Department training, to-date, has been prioritized in more frequent types of emergency response incidents. The Department has not made progress on this recommendation.

2.5 ALS Medical Services: The City should provide ALS services in all neighborhoods within 8 minutes travel time and thus 11:30 minutes total response time, 90 percent of the time.

The Department agrees with this recommendation. The Department currently has 5 Mobile Intensive Care Unit (MICU) ambulances and a Fire-Captain EMS that provide Advanced Life Support (ALS) services to the City. Fire apparatus also have the capability to provide ALS services until the arrival of an ambulance depending upon the EMS qualifications of those staffing the fire apparatus.

The Department agrees, in general, with all of Recommendation #2. They are excellent best practice targets. However; due to budget growth limitations, the Department realizes that it will take several years to reach these targets.

Recommendation #3: Pearland needs three additional fire stations, with engines, as soon as funding permits in the northwest, southwest, and southeast areas of the City to better meet best outcome-based travel and response times.

A design contract for Fire Station #8 was awarded to Joiner Architects in March 2018, with construction projected to begin in March 2019 and opening by February 2019. Design for Fire Station #7 is anticipated to begin in February 2019 with construction to begin in October 2019 and opening by October 2020. A plan has been presented to City Council to provide limited staffing of Fire Station #6, pending agreement by Brazoria County MUDS 21 and 22 to pay for the costs of that staffing. To date, the Boards of MUDS 21 and 22 have not responded to the most recent proposal by the City. Fire Station #11 will need to be constructed based upon build out of the Massey Subdivision south of Brazoria County Road 100.

Please see Appendix B for most recent response time data.

Recommendation #4: To improve aerial ladder unit coverage, Pearland should convert to staffing three dedicated aerial ladder trucks over time as the City continues to grow.

The Department agrees with this recommendation and plans to staff its first dedicated ladder truck upon opening of Fire Station #8 in January 2020. At that time, Ladder 4 will relocate to Fire Station #2 and Ladder 1 will relocate to Fire Station #3. Two existing engine companies will be relocated to Fire Stations #4 and #1. This will provide a fire apparatus in each station with equal distribution of ladder companies across the city. Until the completion of continuous onboarding, Ladder 8 will remain as the only dedicated ladder truck in the city.

Recommendation #5: To improve Battalion Chief coverage, Pearland could consider a second supervising chief unit in the western City.

The Department agrees, in general, with this recommendation and may consider proposing that a 2nd Battalion Chief be added after 7 fire stations are fully staffed with all required engine, ladders and ambulances.

Recommendation #6: As the four busiest ambulances maintain 30 percent unit-hour utilization for multiple hours during the day, the City will need a sixth ambulance on a peak-hour schedule from 10:00am to 7:00pm at least Monday through Saturday.

The Department agrees with this recommendation. Current demand for emergency medical service west of 288 requires the addition of the sixth ambulance (Medic 8). Medic 8 will be staffed after completion of Fire Station #8

Recommendation #7: As the Department adds full-time firefighters, the goal should be to increase the number of paramedics to the point that every fire engine has one paramedic with equipment at all times to provide first responder paramedic care if the ambulance is not immediately available.

The Department agrees with this recommendation. As staff increases with a continuous onboarding program, fire fighters with paramedic certification will be hired until the goal is reached.

10.4 HEADQUARTER PROGRAMS RECOMMENDATIONS

Recommendation #8: As soon as possible, the City should fill the vacant Operations Chief position, allowing the Fire Chief to concentrate his time on implementing strategic initiatives from the Department Strategic Plan.

The Department agrees with this recommendation. This position was not funded in FY2017, FY 2018 and FY2019. In October of 2018, the Assistant Chief of Training was transferred to the position of Assistant Chief of Operations. However, this left the position of Assistant Chief of Training vacant which is highly undesirable and makes implementing training recommendations very difficult. See all Recommendations #24 and #25. An Assistant Chief of Training will ensure a thorough training program, compliance with the training mandates of the Texas Commission on Fire Protection and the Texas Health and Human Services Commission in addition to the

[recommendations of ISO and NFPA. A request for an Assistant Chief of Training will be requested as a high priority in the FY2020 budget.](#)

Recommendation #9: The Department should dispatch the on-shift Fire Captain—EMS(s) on all Battalion Chief responses for incident safety and communication roles.

[This practice is already in place.](#)

Recommendation #10: The Department should review both the Clinical Manager and Fire Captain—EMS position descriptions to reduce redundancy for clinical oversight tasks and improve training and safety oversight on shift.

[This recommendation is complete as stated. In October 2018, the Battalion Chief of Logistics Group was transferred to the position of Battalion Chief of EMS. The position of Clinical Manager was split into an Office Assistant for the Training Division and an Internal Customer Service Representative for the Logistics Group. An internal promotion was made so that a Logistics Supervisor is the head of the Logistics Group.](#)

Recommendation #11: As attrition allows, the Fire Captain—EMS position should change to that of a fire-suppression qualified Fire Captain, then the three Captain—EMS positions become overall shift training and Quality Assurance officers for both suppression and clinical programs. They will be shift training officers during the day and Battalion Chief aids for safety whenever needed.

[With some minor nuances much of this recommendation is complete. In addition to Quality Assurance, the Fire Captain—EMS positions have been assigned to help with EMS training on the shifts as well as incident safety officers and infection control officers for the shift.](#)

Recommendation #12: The Department should complete a cost analysis of the training, safety equipment, and overhead burden for a large number of part-time employees against slowly replacing these positions with permanent, full-time employees.

[The Department has set a fixed number of part-time employees at 30. This number is an effective, efficient and manageable number of part-time employees, while continuous onboarding takes place. No new part-time employees will be hired for future Fire Stations 8, 7, 11 and 10.](#)

Recommendation #13: The Department should begin overstaffing the personnel needed for an additional fire station at least a year before the station opens. Doing

so will accommodate new recruit training and probation, staff retirements or separations, and will lessen the daily burden of scheduling so many part-time employees.

The Department began the process of continually onboarding new firefighters at a rate of three personnel every 90 days. When Fire Station #8 opens, it will require 30 to fully staff the initial vehicles. This goal will not be met until after Station #8 opens. Hurricane Harvey budget impacts and funding have not been available to maintain a program of continuous onboarding.

Recommendation #14: The Department should develop and adopt a formalized Risk Management Health and Safety Program for its members.

The Department has taken initial steps towards this, but there is not a formalized a Health and Safety Program. This recommendation follows Recommendation #15 to appoint a dedicated Health and Safety Officer.

Recommendation #15: The Department should appoint a dedicated Health and Safety Officer for the organization.

The Department will propose a full-time Health and Safety Officer for FY2020. Health and Safety responsibilities were with the Assistant Chief of Training. As the Assistant Chief of Training is now vacant these responsibilities have been divided up among the Fire Chief, Assistant Fire Chiefs and the Battalion Chief of EMS. *This is highly undesirable and makes completing Recommendations #14 and #15 difficult to achieve.*

Recommendation #16: The Department should develop or purchase a formal set of policies and procedures that are tailored to Pearland's needs and organizational structure.

Initially, the Department did not agree with this recommendation. However, the Department has purchased the Lexipol policy management system and standardized policy set at relatively minimal expense. Implementation is in progress. We hope meet this recommendation by the end of 2018.

Recommendation #17: The Department should acquire a spare set of PPE for each employee, and assure proper fit.

The Department has issued a second set of PPE to all firefighters. This was completed in October 2017.

Recommendation #18: On an annual basis, the Community Risk Reduction (CRR) Division should monitor the workload and work hours of all fire inspection personnel to assure that all inspections are being accomplished.

The CRR Division has improved tracking of work hours in the Firehouse (Fire) and TRAKIT (Code Enforcement) record management systems.

Recommendation #19: The CRR Division should develop a permit and fee schedule for occupancy use to help recover cost for operating the Division.

There were modest fee increases adopted with the FY2018 budget.

Recommendation #20: Every two years, the CRR Division should rotate the Fire Inspectors/Investigators between areas to improve cross-training and depth in the Division.

The Department somewhat disagrees with this recommendation and has not implemented a process of rotating Inspector/Investigators. We believe that our current program and assigned districts continues to allow for an effective level of cross training of fire inspectors. The Department is using the recommendations from [NFPA 1730: Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation and Public Education Operations](#) for inspection frequencies, depending on type of occupancy and hazard.

Recommendation #21: The Department should consider adding one Business Manager position to the Administration Division.

The Department hired a Business Manager in July 2017.

Recommendation #22: The Department should add, as soon as practical, two Administrative Assistant positions, one in Administration and one in the Training/Clinical Oversight Division.

One Office Assistant was added to the Training Division (see #10 above). Administrative Assistant position was requested in the FY2018 and FY2019 budget but was not funded. This position will be considered again during the FY2020 budget process. However, the Department is seeking internal efficiencies that may reduce the need for this position.

Recommendation #23: The Department should assign EMS patient care Quality Assurance to the Clinical Manager, relieving the on-shift Fire Captain—EMS of this responsibility unless specific training of personnel is required. Time

permitting, the Fire Captain—EMS could still conduct quality assurance for low-acuity patient incident reports and to determine that all types of incident reports are completed appropriately and on time per policy.

This recommendation was not initially implemented as it was beyond the capabilities of a single Clinical Manager to review nearly 7000 EMS incidents per year. The Clinical Manager reviews all high acuity incidents for patient care compliance, however *all* incidents need to be reviewed for completeness and billing compliance which is best done at the shift level to ensure timely response. The Clinical Manager duties are now divided up among the Battalion Chief—EMS and three Fire Captain—EMS (see PFD response to Recommendations #10 and #11. We believe this recommendation has been completed.

Recommendation #24: The Department should complete the development of a Pearland specific Career Development Guide to assist employees in preparing for promotions and ensure the requirements are stipulated in the plan and policies.

The Department agrees with this recommendation for the need to complete the creation of a Career Development Guide for the department. This plan is based on the current job descriptions and the Officer Development Handbook 2nd edition from the International Association of Fire Chiefs. *This work is still in progress however with a vacant Assistant Chief of Training there will be significant delay in completion.*

Recommendation #25: The Department should develop a plan to deliver, enforce, and track its training requirements to ensure all personnel fully comply with the training goals and objectives of the Department.

This plan is still in development and has been limited due to multiple roles and responsibilities of the Training Division with limited staff. *This work is still in progress however with a vacant Assistant Chief of Training there will be significant delay in completion.*

The Department responds to high risk fire and emergency medical services incidents. However many of these high risk incidents occur at very low frequency thus making proficiency difficult to always maintain. To prevent fire fighter injury and death it is necessary to train as realistically as possible on these high risk incidents. With minimal capacity staffing in the Training Division, no live fire burn building and no training field for other high risk incidents, it is next to impossible to train to high proficiency.



Since January 2013, the NIOSH (National Institute for Occupational Safety and Health) Fire Fighter Fatality Investigation and Prevention Program has completed 30 investigation reports involving firefighter fatalities at structure fires. 22 of these investigations identified some aspect of training, including live-fire training, as a contributing factor and/or made specific recommendations related to training. The purpose of this program is to investigate fire fighter fatalities and share lessons learned to reduce and prevent future fatalities. *The Department does not have the facilities nor training personnel capacity to implement many of these recommendations. Facility improvements are being recommended in a proposed upcoming bond election.*

Overall, the Pearland Fire Department has plans to complete most of these recommendations as budget and staffing capacity allows. Though many are not yet complete, many are in progress. We look forward to continuing that progress with these recommendations from Citygate. If you have any questions please do not hesitate to contact me.

APPENDIX A

Fire Station #7 and #8 Progress

BACKGROUND

Fire Station #8 is a planned fire station to be built in the northwest part of the city on Shadow Creek Parkway just west of Reflection Bay. The station is planned to be built on property already owned by the City, adjacent to the Reflection Bay wastewater treatment plant.

Fire Station #7 is a planned fire station to be built on Bailey Road between the Natatorium and the railroad overpass. The station is planned to be built on property currently owned by Pearland ISD.

The need for additional stations to provide coverage across the City was initially outlined in the Master Fire Station Location Plan performed by Mike Pietsch Consulting Services in 2011. The plan actually called for two additional stations in the western part of the City; one in the Shadow Creek neighborhood in the vicinity of Regents Bay Drive and Kingsley, and another in the vicinity of McHard Road and Country Place Parkway. Due to lack of available tracts of land in these areas, the Fire Department and Projects Department worked together to find suitable alternative locations to cover this area. The availability of City owned property adjacent to the Reflection Bay wastewater treatment proved to be an ideal location for a Fire Station, somewhat in between the two locations identified in the study. The plan moving forward was to combine the proposed Fire Stations #8 and #9 identified in the study into one station.

In early 2017 the Fire Department, in conjunction with Citygate, LLC, completed a Standards of Cover and Staffing Utilization Study. Among the priorities of this study was to review the adequacy of Fire Department deployment from current fire station locations. The entire western portion of the City (west of Highway 288) is currently serviced by Fire Station #5, located on Kirby south of Broadway. Station #5 has the both the highest demand for service, and due to the size of area covered, traffic congestion, and road network design, response times of over ten minutes at the 90th percentile. This is significantly above the desired best-practice goal of seven minutes and thirty seconds at the 90th percentile. Fire Station #7 will be situated to improve response times in the southeastern portion of the City. Stations #1, #2, and #3 that currently cover the southeastern part of the City all have 90th percentile response times at or above ten minutes.

The design of Fire Station #8 calls for an approximately 16,000 – 18,000 square foot building that will house two engine companies, one ladder company, and an ambulance. This will require an ultimate staffing of 42 personnel, plus relief personnel to account for sick and vacation time. The resources that will be housed at this station are expected to cover the workload of two fire stations.

The design of Fire Station #7 will be similar in scope to new Fire Station #1, being approximately 11,000 square feet. Initially, this station will only house a single engine company and 12 personnel. The station will be built with the capacity to add an ambulance and associated additional staffing once service demand dictates the need in that portion of the City.

CURRENT STATUS

Fire Station #8 - In December 2017, a Request for Qualifications was solicited from interested architects. Projects Department and Fire Department personnel reviewed the proposals and ultimately selected Joiner Architects as an architecture firm with a contract awarded in February 2018.

Utilizing the Construction Manager at Risk (CMAR) process, Durotech was hired to provide review and construction estimation starting at the 60% design. This is in progress with review of costs anticipated in late December. Plans at the 90% stage are being developed and will incorporate changes from the 60% review. A Guaranteed Maximum Price by the CMAR will be developed from the 90% plans and will be utilized for the contract. It is anticipated that a construction contract will be awarded in January 2019, and construction would begin in February 2019. Construction is expected to take twelve months for substantial completion.

Fire Station #7 - The design is scheduled for FY2019 and is 4 months behind baseline. It is anticipated that Joiner Architects will be the designer. This contract will also follow the CMAR process with construction anticipated in FY2020. Currently the project is waiting on land negotiations with PISD for an approximate 3 acres on the northwest corner of the intersection of Bailey Rd and Wells Road.

FISCAL IMPLICATIONS

Construction costs for Fire Station #8 are estimated to be \$9.9 million, with \$1.1 million budgeted in FY2018 for engineering and design, and the remainder budgeted in FY2019 for construction. Additionally, approximately \$3.2 million has been allocated for capital outlay to include a fire engine pumper, a 100ft aerial ladder truck, and an ambulance. The fire apparatus have been ordered in November 2018 and have an approximate one year lead time. Personnel costs to staff the station are forecast to be approximately \$3.2 million per year once the station is fully staffed.

Construction costs for Fire Station #7 are estimated to be \$5.6 million, with \$1.1 million budgeted in FY2019 for engineering and design. Additionally, about \$1 million will be needed for capital outlay for the purchase of a fire engine pumper and associated equipment. Personnel costs to staff the station are forecast to be approximately \$1.1 million per year.

STAFFING

The Fire Department has begun a process of continuous onboarding in FY2018. This process, based upon the Citygate study, is designed to add three firefighters every fiscal quarter for at least the next six years to bring the Fire Department up to full staffing and begin staffing up for future stations. Based on the 6 firefighters hired in FY2018 and 6 firefighters planned to be hired in FY2019, we will be 24 firefighters short when Station #8 opens. To accommodate this, we will only be able to staff a fire engine pumper or ladder truck when the station opens.

APPENDIX B

5.3.1 Citywide Response Time Performance

A resident or visitor of a city measures the speed of fire department response from the time assistance is requested until the assistance arrives. This measurement is called “Call to First Apparatus Arrival” (or “Call to Arrival”). Police and sheriff’s departments act as PSAP for 9-1-1 calls. All 9-1-1 calls for fire service in the City are received at the Pearland Police Department and dispatched from the Cypress Creek Communications Center.

Based on national recommendations, Citygate’s response time test goal is for 90 percent call to arrival to be 7:30 minutes. This is comprised of three component parts:

Call Processing: 1:30 minutes (receive, determine need, and alert crew)

Turnout: 2 minutes (notify, don required protective gear, and begin traveling)

Travel: 4 minutes (travel time)

The following is the breakdown of 9-1-1 call received to first apparatus arrival for the overall City and by station area by year for **fire and emergency medical** incidents.

Table 23—Call to First-Unit Arrival – 90 Percent Performance

Station	RY 13/14	RY 14/15	RY 15/16	RY 16/17	RY 17/18
Department-Wide	13:23	13:19	13:03	11:49	11:03
Station 1	14:08	13:41	13:30	12:04	10:44
Station 2	12:35	14:03	13:41	13:13	12:22
Station 3	13:25	13:39	12:31	10:37	9:58
Station 4	13:07	12:17	12:12	11:38	11:13
Station 5	13:09	13:26	13:22	11:44	10:58

* RY = Report Year (August 1 to July 31 of following year)

All the 9-1-1 call to arrival times to 90 percent of emergent incidents in the Table 23 are well past the Citygate-recommended 7:30 minutes.

Finding #7: The call to arrival times, in all fire station areas, are significantly longer than best-practice and Citygate recommendations to deliver desirable urban area outcomes to serious fires and medical events.

Appendix B is page 68 from the original Citygate report. *We have added the two far right columns with data as the Citygate report only had three years of data with first RY having partial*

data due to Station 3 beginning operation in January 2016 and Station 2 beginning operation in October 2016. It should be noted that RY16/17 and RY 17/18 data is calculated using Fire Department software and not Citygate software. Actual response times may be slightly longer.

The most important considerations from this data is that it demonstrates:

1. Response time improvements when fire stations are constructed and staffed in areas previously without a staffed fire stations (reducing the domino effect), and
2. Department-wide response times are improved when increasing capacity, and
3. Existing fire stations response times are improved when new stations are constructed and staffed that decrease the primary response area of that existing fire station.

These response time improvements will continue as staffed fire stations are added per Pietsch Study and Citygate Study recommendations.

APPENDIX C

Pearland Fire Department

Citygate Standards of Cover and Staffing Study

Recommendations Proposed Schedule January 2019

Baseline	Current	Actual	Days
July 2017			
Start New Business Manager	Completed	Jul-17	0
Start 6 New Fire Fighters for Backfill/OT Reduction	Completed	Sep-17	-62
October 2017			
Start Design of Fire Station 8	In Progress	Mar-18	-151
Start 3 New Fire Fighters	Completed	Jan-18	-92
Start 6 New Fire Fighters for Fire Station 6	On Hold		
Start 1 New Assistant Chief--Operations	Oct-19		-730
Start Training Division Administrative Assistant	Completed	Oct-18	-365
January 2018			
Start 3 New Fire Fighters	Completed	Oct-18	-243
April 2018			
Start 3 New Fire Fighters	Apr-19		-365
July 2018			
Start 3 New Fire Fighters	Jul-19		-365
October 2018			
Start Design of Fire Station 7	Feb-19		-123
Start Construction of Fire Station 8	Jan-19		-92
Start 3 New Fire Fighters	Oct-19		-365
Start New Health & Safety Officer	Oct-19		-365
Start Administration Division Administrative Assistant	Oct-19		-365
Start Planning Officer	Oct-19		-365
January 2019			
Start 3 New Fire Fighters	Jan-20		-365
April 2019			
Start 3 New Fire Fighters	Apr-20		-366
July 2019			
Start Construction of Fire Station 7	Jan-20		-184
Start 3 New Fire Fighters	Jul-20		-366

Pearland Fire Department

Citygate Standards of Cover and Staffing Study

Recommendations Proposed Schedule January 2019

Baseline	Current	Actual	Days
October 2019			
Start 3 New Fire Fighters	Oct-20		-366
Fire Station 8 Completion	Jan-20		-92
January 2020			
Start 3 New Fire Fighters	Jan-21		-366
April 2020			
Start 3 New Fire Fighters	Apr-21		-365
July 2020			
Start 3 New Fire Fighters	Jul-21		-365
Fire Station 7 Completion	Jul-20		0
October 2020			
Start Design of New Fire Station 4	Dec-19		305
Start 3 New Fire Fighters	Oct-21		-365
Start 3 New Battalion Chiefs	Oct-20		0
January 2021			
Start 3 New Fire Fighters	Jan-22		-365
April 2021			
Start 3 New Fire Fighters	Apr-22		-365
July 2021			
Start 3 New Fire Fighters	Jul-22		-365
October 2021			
Start Construction of New Fire Station 4	Dec-20		304
Start 3 New Fire Fighters	Oct-22		
January 2022			
Start 3 New Fire Fighters	Jan-23		-365
April 2022			
Start 3 New Fire Fighters	Apr-23		-365
July 2022			
Start 3 New Fire Fighters	Jul-23		-365

Pearland Fire Department

Citygate Standards of Cover and Staffing Study

Recommendations Proposed Schedule January 2019

Baseline	Current	Actual	Days
October 2022			
Fire Station 4 Completion	Dec-21		304

FY20 White Paper



To: Clay Pearson, City Manager
From: Vance Riley, Fire Chief
CC: John McCarter, Budget & Procurement Manager
Date: December 21, 2018
RE: Emergency Services Districts and Fire Service into ETJ

Background

The Pearland Fire Department (PFD) has historically provided initial call response in the form of fire protection and emergency medical services to the City's extraterritorial jurisdictions with little to no reimbursement for those services. On March 26, 2018, Council passed Resolution R2018 - 59 requiring all areas outside the City limits, which are not subject to a Fire Service Agreement, Strategic Partnership Agreement (SPA), Sales Tax Agreement, or some other contractual terms and conditions that require payment in exchange for fire protection and/or emergency medical services, must do so before December 31, 2018.

Pursuant to R2018 - 59, and "in an effort to develop a degree of equity related to the payment for the high quality fire services provided by the City," those areas failing to establish such an agreement by that date will no longer receive such services from the City. Following the passage of that resolution, staff conducted a number of outreach activities designed to engage area leaders and elected officials from the affected areas in discussions and planning for solutions, including but not limited to those representing:

- Special Purpose Districts;
- the applicable counties in which Pearland is located in (elected officials);
- HOAs and business associations made up of area property owners; and
- other local area entities heavily involved in policy matters affecting the ETJ.

Brazoria County

In April 2016, Council passed R2016-62 which appointed two Council members to assist City staff work with city staff in meeting with Brazoria County (BC) Commissioners to discuss Fire and EMS issues in Pearland's BC ETJ. Historically, there has been a significant gap in the cost (approximately \$1.7 million) of providing services versus the traditional amounts annually received from BC (\$20,000 for fire and \$9,000 for EMS). BC Commissioners responded by adding an additional \$100,000 to the annual payment while investigating other means of revenue to pay the City closer to the actual costs.

After R2018-59 was passed, the unincorporated areas in the BC portion (approximately 9,698 acres) of Pearland's ETJ responded to Council's action in this regard, and have been authorized by the voters in these areas to establish two Emergency Service Districts ("ESD's"), in accordance with Chapter 775 of the Texas Health and Safety Code.

In June of 2018, two groups of proponents from the applicable areas coordinated efforts with

the City to form two ESDs; one group representing the interests of MUDs 2 and 3 (ESD #5), and another that coordinated the efforts involving unincorporated areas outside any BC Special Purpose District (ESD #4). Both groups met the basic statutory requirements for the formation of an ESD, Council approved their requests for consent to allow the proposals to be presented to the registered voters in each proposed territory. Voters approved the formation of each District and BC's Commissioners' Court issued the final Court Orders confirming the formation of the Districts, appointing each District's five (5) board members on 27 November 2018.

These ESDs will not be fully functional until 2019, requiring time to establish governance procedures, establish a budget, adopt a tax rate, negotiate a contract for services, and other elements of their organizational capacity towards full formation.

Both ESDs have the ability to set a tax rate as high as 10 cents. If these ESD Boards select the City of Pearland as their provider of fire and emergency medical services, it is unlikely that the City would be able to collect the full 10 cents. These ESDs will have some legal costs, paperwork, etc. However, it will be important for these ESD boards to set their tax rates at 10 cents because even at that rate it will not truly pay for the cost of services provided by the City of Pearland. A reasonable rate for Pearland to expect is the revenues of 9.5 cents from each ESD.

The ESD Boards have final authority to set the tax rate and determine the agency(s) who to contract with for providing service. The most logical decision is to contract with the City as we have far more resources, personnel and stations available to provide service than any other nearby fire or ems agency. In addition, PFD has been providing service to these areas for years and is already familiarized with these areas.

BC ESD Revenue Estimates.

The below calculations are based upon estimates for discussion purposes only and do not represent any official fees or charges to ESDs. Council must approve any contract and its associated fees for services.

Based upon recent appraised values, a 10 cent tax rate in ESD 4, may create revenues of \$850,000. If the City's fee is 9.5 cents then revenue would be approximately \$810,000.

Based upon recent appraised values, a 10 cent tax rate in ESD 5 (portions of MUDS 2 and 3) may create revenues of approximately \$565,000. If the City's fee is 9.5 cents then revenue would be approximately \$540,000.

Again, even if the ESDs levied the full 10 cent tax and paid that to the City it would come close to, but not fully, reimburse the City for fire and ems services.

Next Steps

The ESD Boards are meeting in December 2018 and January 2019. We will be in contact with them to see if they want our continued services and then negotiations can begin. On 10 December 2018 Council passed R2018-241 extending initial call response for fire protection and emergency medical services, on a temporary basis, to the portions of the City's ETJ located in BC ESD #4 and BC ESD#5 until 15 April 2019. If the ESD's select our services we hope to bring contracts for Council's consideration before that deadline.

Other Brazoria County ETJ Areas

The City receives sales tax from MUD 6 (Silverlake) and provides fire and emergency medical services to that MUD. This area is primarily served by Fire Station 5 (Kirby adjacent to Pearland Town Center).

Since 2002, the City has had an agreement with MUDS 21 and 22 (Lakes of Savannah) to pay a monthly fee based upon number of water taps in return for the City to providing fire and emergency medical services. Recently, the boards of MUDS 21 (primarily) and 22 have requested that the City staff Fire Station 6 (a volunteer fire station). The City has offered to staff Fire Station 6 (24/7/365) with two personnel on a small fire/rescue/EMS vehicle in exchange for an increase in the monthly fee to cover the costs of those full-time personnel. Those boards have indicated that the increase is not acceptable and they already pay enough to warrant full-time personnel in Fire Station 6. The City has not heard from MUDS 21 and 22 since April 2018. Members of those MUDS did approach Brazoria County ESD #3 and ask for fire and emergency medical services. However, ESD #3 respected the existing agreement between the City and the MUDs and chose not have further discussions.

MUD 16 (Avalon Terrace) has a similar agreement (fees based upon number of water taps) as MUDS 21 and 22. MUD 16 is surrounded by City limits is near to, and primarily served by, Fire Station 4 on Freedom Drive at Cullen.

Fort Bend County

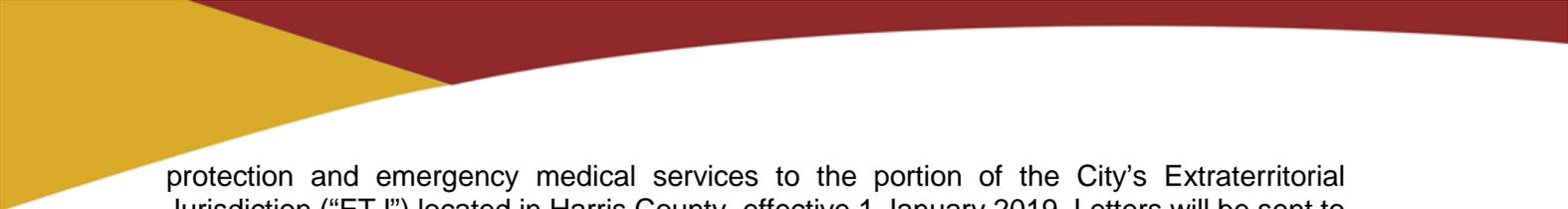
The Pearland Fire Department has *not* historically provided initial call response in the form of fire protection and emergency medical services to the City's Fort Bend County extraterritorial jurisdiction. Fresno Fire Department and Fort Bend County EMS provide initial call response to that area. Recently Fort Bend County ESD #7, with voter approval, expanded their boundaries to include Pearland's Fort Bend ETJ. This was done without notifying the City. Though a City's permission is required to establish the creation of an ESD within the city limits or it's ETJ, state law does not require such permission to expand an ESD.

Harris County

The PFD has historically provided initial call response in the form of fire protection and emergency medical services to the City's extraterritorial jurisdiction located in Harris County (approximately 1,378 acres). There has been no compensation or reimbursement for these services. In 2017, the City attempted to incorporate a portion of this area into the City limits, but lawsuits were filed against the City which resulted in a Court Order temporarily restraining Pearland from moving forward with its intent to annex certain areas. During the attempted annexation process, representatives from the applicable 344 acre area known as "Area I" (Southbelt Industrial Park Association) argued that property owners in these sections of the ETJ did not require the services of the PFD. Ultimately, Council decided to reverse several 2017 annexations, removing areas that were previously annexed in November of 2017.

Staff communicated the City's new policy to Harris County and the Southbelt Industrial Park Association in the same manner that was done with other entities representing ETJ property owners and residents. In addition, local media outlets have covered this issue in publications that reach the Houston-Pearland- Friendswood market, which included the cumulative progress that was made towards the formation of Emergency Service Districts #4 and #5. **Despite staff's efforts, there was no response from applicable agencies or associations in Harris County to the City's efforts to establish an agreement for fire protection and/or emergency medical services being provided to those areas.**

On 10 December 2018, Council passed R2018-39 terminating initial call response for fire



protection and emergency medical services to the portion of the City's Extraterritorial Jurisdiction ("ETJ") located in Harris County, effective 1 January 2019. Letters will be sent to all property owners in the Harris County ETJ notifying those property owners that Harris County will be responsible for obtaining a service provider for them.