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CITY OF HOUSTON

A Ten Year Plan for the City of Houston:
A Plan for Fiscal Sustainability and Economic Growth

November 2017

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Executive Summary

Last September, when the City of Houston began work on the development of a Ten Year Financial Plan, it was clear that the City was at a crossroads. The nation's fourth largest city and the center of one of its fastest growing metropolitan areas was confronting serious and significant fiscal challenges.

Houston – like many other cities – was facing a structural deficit where expenses were growing at a faster pace than revenues. At the same time, Houston clearly needed to make new investments to sustain and improve quality of life – in basic assets to keep City government working, in police services to help address concerns about public safety, in complete communities to address issues related poverty and economic inequality.

The City set about an ambitious process to go beyond the ad hoc decision-making that often results from looking at budgets one year at a time and instead begin to develop a more strategic approach to budgeting.

The process was not easy. Houston is the largest U.S. city to ever attempt a ten year financial plan, and it is impossible to put the government of a city of two million people on pause to go through the planning process. City leadership was appropriately focused on tackling its single most important threat by navigating a comprehensive reform of the pension system through the state legislature. Still early in a new mayoral administration, there were multiple changes in the leadership of key departments within City government. As a result, underlying assumptions about policy and finance changed multiple times over the year long process.

Still, by late August 2017, the City – working with the PFM team – was in the final stages of developing a Ten Year Plan.

Hurricane Harvey hit Houston in late August 2017, with the city seeing record rainfall on August 26 and 27. The storm had a devastating impact on parts of the City and on thousands of its residents. The full economic impact of Hurricane Harvey remains unknown. According to the Federal Reserve Bank of Dallas, the damage costs of Harvey are estimated at $85 billion across the entire affected region. A recent S&P Global analysis reported that debris clean up in Houston will cost $260 million and that City buildings sustained an estimated $175 million in damage.

Multi-year financial plans are always subject to change and are never intended to be one-time or static products. In fact, the City of Houston's financial policies recognize this fact and note the need to annually develop multi-year forecasts and design solutions to projected deficits.

Nevertheless, Hurricane Harvey's dramatic economic impact was not – and really could not be – anticipated by the financial scenarios that were in development for this initial Ten Year Plan for the City.

While Houston has made substantial and significant progress in the three months since the storm hit the city, the long term effects of Hurricane Harvey – both good and bad – remain unknown. In the immediate aftermath of large-scale economic shocks to big cities, it is very difficult to fully anticipate what the impact will be.

After the September 11th attack on the World Trade Center, there was widespread concern about New York City's ability to recover. In addition to the loss of thousands of lives, the attack crippled the City's economic engine – Wall Street – and the City's ability to deliver critical public services given the extraordinary loss of life among firefighters and police officers and the need to devote significant resources to recovery and clean up. There were fears of additional attacks and real concern about whether New York's recent population growth could be sustained.

Now, more than a decade and a half later, it is clear that New York has recovered. Its economy is stronger than ever and more people live in New York than ever before. But in the immediate aftermath of September 11th, the City did sustain short term tax revenue loss: a 2002 study by the New York City Comptroller found that the attack resulted in the loss of just under $3 billion in revenue, primarily due to losses in property taxes. And the same Comptroller report found significant increases in operational cost, primarily due to overtime.

Similarly, no one could fully anticipate the effect of Hurricane Katrina on New Orleans. Unlike New York in 2001 or Houston in 2017, New Orleans was already in the midst of an economic and population decline when Katrina hit in 2005: as the Federal Reserve Bank of Dallas analysis noted, "Katrina accelerated the out-migration from New Orleans." Still, few could have anticipated the impacts of Katrina. Population declined from an estimated 494,294 in 2005 to 230,172 one year later: today, there are still more than 100,000 fewer residents in New Orleans than pre-Katrina. Property tax revenue in New Orleans dropped from $80.1 million in FY 2004 to $68.5 million in FY 2006.

The degree to which Harvey will affect Houston's finances is dependent, in part, on the degree to which Houston receives assistance from the State of Texas and the federal government. Already, the City has demonstrated that if funding for recovery does not come from state or federal aid, it will increase the burden on City taxpayers: for example, the City was able to avoid a tax increase after the State provided needed funding for debris removal.

Over time, state and federal assistance can have a material impact on the City's economy and its finances. For example, New Orleans was able to use FEMA and other federal assistance to rebuild neighborhoods and infrastructure and do so in a manner that enhanced new development rather than simply replacing what had existed before the storm. It also benefitted from FEMA Community Direct Loans totaling more than $130 million that were instrumental to the City's ability to balance its budget in FY 2005 and FY 2006: these federal loans were subsequently forgiven.

With uncertainty around the long term fiscal impact of Hurricane Harvey, the challenge in finalizing this first Ten Year Financial Plan for the City of Houston has been to determine how to use the work accomplished pre-Harvey to help guide the City's financial course post-Harvey. The answer is that the City should be guided by some basic principles:

- While the fundamentals of the Houston economy remain in place, the City must carefully track and monitor the impact of Hurricane Harvey and fully update the underlying economic and population assumptions of the plan's baseline forecast prior to the development of the FY 2019 City budget. The approach outlined in Chapter II of this Plan remains the right one, but the City must review all of the baseline numbers and growth assumptions before using the forecast to develop next year's budget and in establishing projected revenues and expenditures going forward.
- The City should focus first on the impact of Harvey on property assessments and baseline revenue projections. While Houston has not experienced the same level of re-location as post-Katrina New Orleans, it is too early to tell whether it will be able to maintain its historic rate of continued population growth. As noted throughout the text, regional population growth has historically been the single most accurate predictor of property tax revenue for Houston. Moreover, annual changes in population have a direct impact on the limits on property tax revenue growth under the current revenue cap.
- The City should also carefully re-evaluate the scope, fiscal impact, and timing of the recommended initiatives in this Plan. Most of the potential operating fiscal impacts of the hurricane will be related to revenue. Nevertheless, there are potential impacts that could affect operating cost as well. Moreover, recommendations that made sense pre-Harvey may not make sense in a post-Harvey Houston.
- The need for new investment identified in the Plan should be re-evaluated in the context of the opportunity to not just build back aspects of the City's infrastructure, but instead to build it back differently and in a way that enhances the City's overall resiliency and ability to mitigate losses from future storms.
- A central conclusion of Chapter III of the Plan is that Houston's tax burden is competitive with other major cities and its regional neighbors. This analysis needs to be re-visited, in part because it was based on estimates that may

have changed and because of actions that other cities in the region may need to take in response to the effects of Harvey.

- Finally, the City needs to also carefully assess the impact of potential additional state and federal aid – not just on the ability to recover and rebuild, but on the City's operating budget as well.

With these caveats, the Ten Year Plan creates a basic framework for how Houston can move forward.

- There are opportunities to reduce, eliminate or curb growth in current costs through changes in the way that Houston does business. While each of these recommendations needs to be carefully evaluated based on changes resulting from Hurricane Harvey, the current set of nearly 60 recommendations would result in a minimum of $300 million in new revenue or savings over the course of a ten year period.
- Given that our pre-Harvey estimate was that the City would run a cumulative deficit of $1.02 billion from FY 2018 to FY 2027, it is clear that Houston cannot achieve fiscal sustainability through budget cuts alone. There is a need for new revenue. The City should chart a course that first maximizes efficient operation of government, but if it relies solely on efforts designed to curb expenditures then the City will be on a course toward fiscal distress. Our pre-Harvey projection was that the lifting of the revenue cap would close the projected deficit and produce a cumulative surplus sufficient to fund CPI based increases in wages and generate $900 million for new investment.
- Ultimately, to achieve fiscal balance, there is not a choice between reducing cost and increasing revenue. The City must do both. While both the underlying forecast and the recommended initiatives must be carefully reviewed in light of the impact of Hurricane Harvey, the combination of increased efficiencies and increased revenue is likely the best path to closing out year budget gaps, providing reasonable increases in pay and freeing up sufficient funding to invest in the City's future.

Summary of Findings

The following findings are based on analysis performed before Hurricane Harvey:

The City's Structural Deficit

- The City faces a cumulative structural General Fund gap of $1.02 billion (FY 2018 to FY 2027) – without any increases in headcount or out-year increases in employee wages. Adding only inflation-based increases in wages, the structural gap grows to $1.9 billion.
- Under this baseline forecast, revenue for the DDSRF will grow from $201.5 million in FY 2018 to $370.7 million in FY 2027. During the same period, spending will grow from $216 million to $365 million.

The Effect of the Revenue Cap and Deferred Investment

- Eliminating the revenue cap would close the City's General Fund structural deficit, allow for funding CPI based increases in wages and generate a ten-year cumulative surplus of $899 million.
- Across all income brackets, Houstonian's tax burdens are currently lower than those of residents living in other large U.S. cities. For all but the lowest income households, tax burdens are lower in Houston than in any other major Texas city. Houston's nominal tax property tax rate is comparable to that of nearby suburbs but significantly lower than other major Texas and U.S. cities.
- Even before Hurricane Harvey, Houston had a long list of unmet capital needs requiring new investment. A 2016 analysis by the General Services Department identified deferred maintenance needs of $631 million. Houston lacked a fully funded plan for fleet replacement. Compared to other cities, Houston has also made limited direct City-funded capital investments in mass transit and housing.

The Cost of Public Safety

- As of FY 2017, approximately 75.5 percent of all General Fund employees were in either the Police (HPD) or Fire Department (HFD). From FY 2011 (actual) to FY 2018 (proposed), classified HPD and HFD employees grew as a percentage of total General Fund workforce from 58.4 percent to 67.5 percent.
- Compared to other major cities, HPD has one of the lowest rates of FTEs per 100,000 residents --289.1, compared to a high of 589.0 in New York, 473.6 in Chicago and 461.1 in Philadelphia. Among major cities, only San Antonio and Austin had lower FTEs per 100,000 residents and both had lower crime rates than Houston.

- Compared to other major cities, HFD has one of the highest rates of FTEs per capita. At 189.4 FTEs per 100,000 residents, Houston is third behind New York and Chicago and has more FTEs per capita than Dallas, Philadelphia, Austin, San Antonio and Los Angeles. If Houston had the same number of Fire FTEs per capita as Philadelphia, it would reduce its headcount by more than 600 FTEs. Demand – based on call volume – varies greatly across the city, with some stations responding to fewer than 2,500 calls per year and others responding to more than six times that number. HFD responded to 25,669 false alarm calls in 2015 – or one in every eight calls for service.
- Like most fire departments nationally, HFD primarily responds to medical calls, both as first responder and as provider of EMS services. The City appears to be below the national baseline of between 44 percent to 56 percent net effective collection rate for EMS services (depending upon whether transport is for BLS, ALS-1, or ALS-2 transports).
- In its first three years, the City's effort to reduce EMS calls through community paramedicine has demonstrated promising results. During the initial nine months of operation, ETHAN served nearly 4,000 patients. Of these, only 740 (18.6 percent) required ambulance transport to an emergency room. Preliminary estimates suggest that this intervention reduced the need for approximately 3,200 ambulance transports to area hospitals, resulting in an estimated $4.1 million in avoided costs. Approximately 17 percent of patients accepted a referral to an alternative to a trip to an emergency department, yielding an estimated $320,000 in avoided hospital costs. By FY 2016, the City reported that 7,235 patients have been served.

The Cost of the City's Workforce

- From FY 2012 to FY 2017, the $307.1 million increase in General Fund personnel-related spending was largely driven by increases in the City's cost for pensions, active employee health benefits, and retiree health benefits – which grew at compound annual rates of 13.0 percent, 3.5 percent, and 6.3 percent respectively – comprising more than half of the total $307.1 million growth. Cash compensation had a compound annual growth rate of just 2.8 percent.
- While Houston's total budgeted General Fund FTEs declined by nearly 10 percent from FY 2011 to FY 2018, the City's total employment across all Funds decreased by 3.2 percent. As the City reduced General Fund FTEs – particularly non-public safety FTEs – it increased its use of other Funds to fund positions. For example, during this period, General Fund non-public safety FTEs decreased by nearly 28 percent, but decreased by only 2.4 percent across all Funds (inclusive of General Fund) – suggesting a "transfer" of expense from the General Fund to other Funds.

- While salaries drive overall cash compensation for City employees, in FY 2017, the City is projected to pay $162.0 million in non-salary cash compensation to its employees, a 26.3 percent increase since FY 2012. Nearly two-thirds of this resulted from increases in Phase Down program costs (primarily in HPD) and overtime cost increases (primarily in HPD and non-public safety departments). In FY 2017, Houston is projected to spend approximately $39.0 million in General Fund overtime compensation for its civilian and classified employees. Classified employee overtime expenses have grown by 21.4 percent since FY 2012, from $25.6 million to $31.1 million in FY 2017. At the same time, civilian overtime expenses have increased by 93.3 percent, from $4.1 million to $7.9 million.
- From FY 2012 to FY 2017, Houston's active and retiree health care costs increased by 21.8 percent – or $32.2 million. During this period, active health care grew at a compound annual growth rate (CAGR) of 3.5 percent (totaling $23.2 million), and retiree health care grew at a CAGR of 6.3 percent (totaling $9.0 million). Houston's employee contributions toward health benefits range from approximately 11 percent to 16 percent for employee only coverage and from 18 percent to 29 percent for plans with employee and dependent coverage – somewhat more generous than national averages.
- Houston funds retiree medical and life insurance benefits for retirees and their dependents/survivors (collectively, known as Other Post-Employment Benefits or OPEB) on a pay-as-you-go (PAYGO) basis, making only the annual payment due to fund a given year's OPEB costs without pre-funding future liabilities. In FY 2016, Houston's General Fund expenditures for OPEB totaled $33.9 million – an $8.9 million (35.9 percent) increase since FY 2012. Houston's most recent actuarial valuation report (AVR) – issued in 2013 – indicates the City's OPEB liability is nearly $2.1 billion, the entirety of which is unfunded.

The Cost of City Operations

- Many of Houston's core departments operate under a federated service model that allows individual departments to independently execute some or all of its core functions – such as human resources, procurement, information technology and finance. The Government Finance Officers Association recommends shared services as a best practice: "shared services take advantage of economies of scale by aggregating like services across the organization or between organizations. They also promote best practices by organizing services into 'shared-service centers' that are focused on the most efficient/effective performance of that service and that are subject to result-based accountability via formal service-level agreements with customers.'"
- The City lacks a fully consolidated procurement function. While most of the City's General Fund spending goes toward salary and benefits, significant

spending also goes toward construction, supplies, equipment, and other services. Based on analysis of FY 2016 actual General Fund spending, it appears that the City spent approximately $164 million on procurement. This spending is up from $134.7 million in FY 2011. An FY 2016 analysis of all contract awards and purchase orders by the City (all Funds) reported a much higher number – $1.42 billion.

- Despite the creation of the Department of Information Technology Services (HITS) in 2002, the technology function in City government remains spread across multiple departments. IT related positions exist in Public Works and Engineering, Police, Health and Human Services, the Houston Public Library and Parks and Recreation. In part as a result of decentralization and in part as a result of outsourcing certain functions, Houston has a lower number of IT FTEs in HITS than IT departments in other major cities.
- The incomplete consolidation of the Finance function is evident by both the number of financial staff in departments outside of Finance and, perhaps more importantly, the number of special revenue funds in City government. An analysis by the City Controller indicates that the City of Houston has 69 Special Revenue Funds (SRFs) with a total fund balance of $250.1 million: 32 of the SRFs are not included in the City budget. In FY 2017, 28 out of the 37 budgeted SRFs were projected to fund at least one employee. There were a total of 2,589.2 FTEs (not including overtime) budgeted to be funded by SRFs in FY 2017: this was up by 58 percent over FY 2011 actuals. In some cases, the increase was the result of General Fund employees being shifted to SRFs. In other cases, SRFs were used to create new positions in City government.
- Houston's Public Works and Engineering (PWE) department is the largest non-public safety department in the City. Unlike other major cities, Houston has created a Public Works super agency. In Austin, PWE's functions cut across four departments - Public Works, Transportation, Watershed Protection and Development Services. In New York, the functions housed in Houston PWE are spread across five departments: Buildings, Design and Construction, Environmental Protection, Housing Preservation and Development and Transportation. And, among big cities, Houston is the only one that does not have a separate transportation department of some kind.
- In a number of areas, Houston continues to provide services that other local governments have either contracted out or subjected to managed competition:
    - Solid Waste Management (SWM) has a FY 2017 General Fund budget of $80.1 million, up from $64 million in actual spending in FY 2011. As of June 2016, SWM had 460 employees, including 296 truck drivers or side-loader operators. Other cities, such as Phoenix and Charlotte, have

applied managed competition to solid waste management on a regional basis.

  - The General Services Department (GSD) provides support services to over 300 facilities; representing 7.7 million square feet of occupied space. GSD has a FY 2017 General Fund budget of $41.2 million, down from actual spending of $46.1 million in FY 2011. In addition to the General Fund, General Services is also funded through a separate Cost Recovery Fund (for capital project administration), the In-House Renovation Revolving Fund (for in hours renovation and reconstruction for police and fire stations and other facilities that are billed to bond funds when they result in permanent improvements) and the Maintenance Renewal and Replacement Fund. While GSD already contracts for multiple services, as of June 2016, General Services had a total of 262 employees – with 137 funded through the General Fund.
  - The City's Fleet Management department is charged with providing vehicle services to City departments including provision of fueling services, preventive maintenance and repair. As of FY 2016, there were just less than 12,000 vehicles in the City's fleet, and in FY 2017, Fleet Management had a budget of $89.2 million. Other local governments have contracted out for fleet management (e.g. Pittsburgh) or aspects of fleet management (e.g. Richmond, Virginia). Still other jurisdictions, most notably Indianapolis, have taken a managed competition approach. Indianapolis experienced considerable initial savings through managed competition – even as in-house workers continued to provide the service.
  - Houston contracts for some street maintenance, but continues to maintain a significant in-house capacity. PWE had 246 equipment workers, 74 laborers, and 20 electricians on staff. These employees are largely concentrated in a series of cost centers in PWE focused on infrastructure maintenance and funded through the DDSRF. Just the base salary for the 601 employees in these cost centers in PWE was $21.7 million.

The City and the Non-Profit Sector

- Houston benefits greatly from the presence of large non-profit organizations, particularly institutions of higher education and medical centers. These organizations are major drivers of the Houston economy. But they also benefit from public services provided by City government without supporting those services with property tax revenue. Based on November 4, 2016 property tax rolls, 46,862 accounts were exempt out of a total of 764,880 accounts in Houston. The appraised value of these exempt accounts (excluding government) is $12.1 billion – with $11 billion in value attributed to properties with a value of $1 million or more and $3 billion accounted for by just 12 accounts.

- Under a lease and operating agreement, the City provides the land and an annual operating subsidy for the Houston Zoo. In FY 2016, the annual subsidy was approximately $9.5 million – having increased from $8.4 million in FY 2011. The agreement with the City also provides for an annual increase in the subsidy based on inflation, irrespective of demonstrated need. Operation of a city zoo by a non-profit organization is a best practice and in most cases the operation receives some form of City subsidy. The Houston subsidy appears to be higher than for other major city zoos.

<u>Summary of Recommendations</u>

Over the course of the development of the Ten Year Plan, the PFM team has engaged in a series of conversations with department heads and senior leadership in City government to review potential initiatives designed to either reduce cost or increase revenue. Based on those conversations, we recommend that the City move forward with a phased approach to implementing the following recommendations:

- While one of its most important potential new investments will be in the hiring of new police officers, Houston can begin to increase its police patrol strength without hiring more officers by better utilizing its current sworn officers. A 2014 study by the Police Executive Research Forum identified more than 400 positions held by sworn officers that could be civilianized. The average HPD officer costs approximately $124,456 in salary, health and pension benefits compared to an average of $75,945 for a civilian. Patrol strength can also be increased if more arrests are diverted to summons, reducing the time that officers are processing low level offense arrests.
- The City can take a number of steps to right-size HFD and significantly reduce the number of FTEs through attrition. Nationally, many fire departments operate with a three platoon schedule rather than the four platoon, 46.7 hour work week for the HFD. Dallas and Fort Worth have 52 and 53 hour workweeks. Moving to a three platoon schedule would reduce the need for approximately 845 positions. HFD should also closely review workload and demand and determine whether it can reduce the number of fire stations. And, like HPD, HFD has opportunities to reduce cost through civilianization – particularly in the Houston Emergency Center and the Life Safety Bureau. Finally, the City should reform its current false alarm ordinance to allow fewer "free" false alarms, utilize a progressive penalty and levy higher charges for false alarms
- The City should build upon the success of ETHAN and create a next stage community paramedicine initiative with new revenue streams that, when

combined with actual cost reductions, can make service delivery cost neutral (and potentially, revenue positive) while meeting the City's core policy goals. At the same time, there are multiple opportunities to increase EMS related revenue by raising EMS fees, continued improvements in EMS collection rates and imposing new fees.

- Since 2010, Houston has implemented a series of initiatives to reduce the cost of health care for its employees – starting a wellness program, offering reduced or free co-pays for certain chronic conditions and increasing generic drug utilization (nearly 90 percent utilization of generics for certain chronic conditions), adding a high-deductible plan, and undertaking a review of its health benefit plan designs by a health care consultant among others – that have achieved a reduction in the average annual health benefit cost trend by approximately 1.1 percent. To achieve additional savings, the City should continue to implement regular dependent eligibility audits, seek to renegotiate its pharmacy benefits contract, consider a spousal carve out to limit or deny coverage to employee spouses with access to other medical benefits, phase-in increases in employee contributions for health insurance and deductibles, expand employee wellness clinics, increase the use of telemedicine and offer health benefit buyouts.
- The City needs to pursue meaningful reforms in OPEB to better position taxpayers and retirees for long-term affordability of the City's nearly $2.1 billion in unfunded retiree health benefits. Following the lead of Los Angeles, Houston should seek to cap OPEB exposure to inflation or 3 percent – whichever is less. In addition, the City should assess a series of options to restructure OPEB benefits, including eliminating coverage or creating a tiered approach based on years of service.
- The City should move forward with efforts at managed competition in four areas: Solid Waste and Recycling Collection, Building Maintenance, Fleet Management and Street Maintenance. The City should also explore opportunities related to both market based revenues and asset monetization.
- The City should work with the non-profit sector in the collection of voluntary payments in lieu of taxes (PILOTs) from tax-exempt property owners. As of 2012, there were at least 218 municipalities in 28 states receiving PILOT payments from non-profit organizations. The City should also work to renegotiate its current agreement with the Houston Zoo to reduce annual cost.
- There are many opportunities for consolidation of services between the City, Harris County, other county governments and other independent local governments (e.g. school districts). Each of these opportunities need to be weighed for potential cost savings and to ensure fairness in funding and service delivery. As a start, the City and Harris County should create a Shared

Services Working Group that would review each of these opportunities. The Working Group approach is in place in a number of jurisdictions, including the County-City Shared Services Commission in Cincinnati and Hamilton County, Ohio.

- All of the City's recruitment and personnel management functions should be consolidated into a single office. A single entity-wide approach to administrative support ensures that all divisions and agencies operate under the same standards and procedures. By improving the flow of information, this process can also greatly improve efficiency. Consolidation also allows governments to realize potential benefits from economies of scale in these functions. Further, the centralization allows operating divisions to focus more on the execution of their core missions.
- Consolidation of the City's recruitment and hiring function will also allow for enhanced vacancy control over budgeted and unfilled positions. Every time a position in City government becomes vacant, it is an opportunity for senior administrators and division heads to determine whether the position must be filled. Performance data and formalized process will allow for senior leadership to make informed decisions around the need and benefit to filling vacant positions.
- As the City achieves savings through consolidation of human resources functions, they can be invested in ongoing professional development for managers and City staff across all departments.
- The City needs to consolidate and professionalize the procurement function with a goal of increasing competition and reducing cost. A fully centralized procurement function should make better use of data to maximize the number of qualified bidders on City contracts. The Chief Procurement should also review the impact of Houston First to determine whether it is achieving its economic development goals and to assess the cost of selecting contractors with other than the lowest bid on contracts. The City should also more effectively monitor contractor performance – whether it is timely delivery of goods or services or meeting labor standards or good faith efforts at meeting MWBDE goals.
- The City of Houston needs a strategic technology plan focused on technology as a form of learning, public and City access to data, improved efficiency and effectiveness, and improved performance measurement. The plan should detail specifically how technology can improve overall service delivery.
- Consolidation of the Finance function in City government would ensure the application of uniform policies and procedures to limit risk and more effectively manage City resources. There have been several cases where the federated approach function has resulted in financial challenges that likely would have been avoided by a more centralized structure. While special

revenue funds make sense as a means of accounting for restricted uses of different revenues, the effect of wide-scale use of SRFs – and dedicated funding more generally – is that it limits the ability to manage resources. The City should reduce the number of special revenue funds and reduce the amount of revenue earmarked for specific functions, allowing for greater discretion in the budgeting process.

- The City should consider a reorganization of PWE that creates multiple departments rather than concentrating functions into a single department. This reorganization would not just divide up PWE, but would also incorporate functions and operations from other City departments. One approach would be to create a Department of Design and Construction, Department of Water Services, Department of Transportation and a consolidated Department of Code Enforcement.
- To complement a new Department of Code Enforcement, the City should also consider consolidating the remaining functions of the Department of Neighborhoods with Housing and Community Development into a single Housing and Neighborhood Development agency that would be focused on neighborhood revitalization and the Mayor's vision of complete communities.
- The City should create a coordinated Youth Services planning process designed to maximize the ability to leverage its own resources, the resources of local school districts and other youth-focused non-profit organizations. The process could be coordinated through the newly created Mayor's Office of Education.
- The City should pursue potential savings related to better use of its fleet – including expansion of the fleet share program -- and more effective use of its property and buildings. These recommendations may require particular attention as a result of Harvey related damage to City property, though the analysis in the Ten Year Plan occurred prior to the hurricane.
- There may be savings opportunities related to consolidation of 311 with other non-emergency call centers, including re-routing of non-emergency Police calls to 311 and potential partnerships related to 211.
- With a continued focus on performance measurement and management, the City should implement a program of continuous improvement through HouStat, adoption of budgeting for outcomes, performance contracts for department administrators and creation of a local productivity bank.

A Plan for Implementation

Twice during the development of the Ten Year Plan, the PFM team provided preliminary estimates of fiscal impact for the initiatives outlined in the Plan – once in the context of recommendations for the FY 2018 budget and then again, at a high level, in the initial drafting of the final plan.

But, in light of the uncertainty created by Hurricane Harvey, the City needs to start the implementation process by carefully re-evaluating assumptions underlying both the baseline forecast and the feasibility of the fiscal impacts of the recommended initiatives.

Based on pre-Harvey analysis, the PFM team developed a high level fiscal impact for each initiative that includes a range of potential savings or revenue over the next ten years. These high level estimates suggest that the recommendations will generate a minimum of $300 million in new savings or revenue over the ten year period. Combined with a lifting of the revenue cap, this would both close the projected $1.02 billion gap over the ten year period, provide for wage increases based on inflation and provide a little more than $1.2 billion for new investments and to address the City's long term liabilities (e.g. OPEB).

The PFM team, however, believes that the potential savings and new revenue from implementation of the recommendations will exceed the projected $300 million.

In some cases, initiatives expected to have a fiscal impact of at least $10 million – those initiatives in the "high" impact category – will likely have a significantly greater impact than $10 million over the course of the plan. For example, the proposed reduction in subsidy for the Houston Zoo is projected to achieve savings of at least $10 million: if, however, the City were to reduce the subsidy from $9.5 million annually to $5.6 million annually (the fixed amount of City subsidy for Lincoln Park Zoo in Chicago) then annual savings would be $3.9 million annually or $39 million over the ten year plan.

Similarly, the recommended reduction in firefighters due to a change in schedule would allow for up to a 20 percent reduction in personnel costs: even if the City shared half of the savings with firefighters who would be scheduled to work longer hours, the effect would be annual savings of a minimum of $40 million and – assuming fully implementation by the fifth year of the Plan – total savings of $240 million for this initiative alone.

In other cases, significant savings are likely from a recommended initiative but it is difficult to estimate even a range of impact. For example, efforts to increase the City's focus on performance measurement and management will almost certainly identify additional opportunities for savings or new revenue: estimates of potential savings and revenue, however, are too speculative to provide a range.

As part of an overall budget framework, the City should:

- Prioritize efforts to achieve maximum potential savings through implementation of recommended initiatives. The City should be in a position of making the case to voters that it has a plan to maximize the efficient use of existing tax dollars before asking for new tax dollars.
- Create opportunities for gainsharing with its workforce. As already noted, budgetary savings from a reduction in the number of fire platoons would be shared with firefighters working longer hours. More generally, out year salary increases should be funded first by savings achieved from changes in worker compensation and benefits. There should be an explicit relationship between the City's ability to fund future wage increases with its ability to curb other personnel costs.
- To the extent possible, use new revenue for new investment. Even if the City is able to achieve significantly more than $300 million in savings or new revenue from the recommendations in the Plan, it remains likely that it will need to seek a change to the revenue cap to achieve structural balance. But it should also use the change in the revenue cap to articulate its new investment needs as well.

Given the uncertainty around the baseline forecast projections and the need for a post-Harvey evaluation of each of the recommended initiatives, the City should proceed with implementation of the Ten Year Plan in a manner consistent with this framework, the principles outlined in the Preface and the following year-by-year action steps:

<u>Year 1</u>

- Review baseline forecast assumptions based on up-to-date, post-Harvey economic data for the city and region
- Begin implementing recommendations designed to enhance improvements in capacity and coordination including procurement reform, consolidation of Finance, IT and Human Resources, implementation of Productivity Bank, Budgeting for Outcomes and HouStat
- Implement Joint Planning for Youth Services to maximize coordination and collaboration among Health, Library, Parks and Recreation, school districts and other youth-serving organizations
- Enhance vacancy control process to limit hiring for budgeted positions
- Engage external partners in the non-profit sector to discuss voluntary PILOTs, service delivery partnerships, community paramedicine and the renegotiation of the Zoo contract
- Move forward with low cost steps designed to increase police strength through civilianization, arrest diversion and completion of jail merger

- Begin to phase in change in number of platoons in Fire Department with reductions in workforce through attrition
- Launch initiatives to increase HFD revenue through changes in fire alarm policy and improved collections on EMS and reduce cost through civilianization

Year 2

- Review baseline forecast assumptions based on up-to-date, post-Harvey economic data for the city and region and assess whether to move forward with reform of revenue cap based on impact of Year 1 initiatives and status of fund balance
- Develop and implement a Strategic Technology Plan, including analysis of in-house and contracted services
- Launch shared services working group with County and other local governments
- In deciding whether to renew its contract with the third party administrator of health benefits or issue an RFP, focus on outcomes based approach and integration of technology and case management.
- Begin changes to OPEB benefits, including restructuring, annual cap, elimination of coverage for retirees or dependents with access to other coverage
- Begin implementation of workforce initiatives including dependent eligibility audit for City employees, phase in of increases in employee share of health insurance, and changes in spousal and dependent eligibility coverage
- Begin using data to increase competition on bidding for City contracts and conduct and complete review of impact of Hire Houston First
- Launch two of the City's managed competition initiatives – street maintenance and solid waste management
- Conduct space utilization analysis and expand initiatives to reduce the City's fleet
- Complete review of special revenue funds, and reduce the number and use
- Continue to phase in change in number of platoons in Fire Department with reductions in workforce through attrition and initiate review of opportunities to reduce the number of fire stations

Year 3

- Review baseline forecast assumptions based on up-to-date, post-Harvey economic data for the city and region and assess whether to move forward with reform of revenue cap based on impact of Year 1 and 2 initiatives and status of fund balance
- Implement performance based pay for department heads
- Develop and implement comprehensive approach to crime control
- Continue implementation of workforce initiatives, including renegotiation of prescription benefits, expansion of wellness clinics and health benefit buyouts
- Depending on success of initial round of managed competition and outcome of space analysis and initiatives to reduce fleet, launch additional managed competition initiatives in building maintenance and fleet management
- Complete and implement asset monetization and market based revenue opportunity policies
- Complete and implement consolidation of 311 and non-emergency police call taking and coordination and collaboration with 211
- Launch shared services initiatives based on recommendations of the working group: potential candidates include shared information technology, public libraries, police consolidation and merger, public health and regional certification of minority, women, small business, disability and disadvantaged business enterprises
- Continue to phase in change in number of platoons in Fire Department with reductions in workforce through attrition and initiate review of opportunities to reduce the number of fire stations

Year 4

- Review baseline forecast assumptions based on up-to-date, post-Harvey economic data for the city and region and assess whether to move forward with reform of revenue cap based on impact of Year 1, 2 and 3 initiatives and status of fund balance
- Complete "rethink" of the current structure of Public Works and Engineering
- Consolidate Housing and Neighborhood Development Department
- Complete phase in of personnel reductions in Fire Department and implement any reduction in fire stations resulting from review

Under this plan, the City would complete implementation of the recommended initiatives in the Ten Year Plan by the end of its fourth year. This does not, however, mean that the work of the Ten Year Plan would be complete. In most cases, implementation of initiatives will be ongoing and will require regular monitoring, oversight and re-evaluation. For this reason, the City should consider tasking an individual or a working group with overall responsibility for Plan implementation.

And, as noted earlier, the goal of the Ten Year Plan is not to merely produce a static set of recommendations: instead, the Ten Year Plan should mark an important step forward in the City's efforts at continuous improvement whereby the search for improved efficiency and effectiveness is ongoing.

Overview and Introduction

Houston's strong regional economy and long-term trend of population growth position it well for the next ten years. Among the nation's largest cities (those over 1 million in population), Houston has grown faster than any other in the last twenty years. Houston's metro economy weathered the Great Recession more successfully than any other major metropolitan area in the nation. And, despite the recent economic slowdown, Houston has always successfully rebounded from similar downturns. Perhaps no other metropolitan area in the nation is better poised for success in the next decade than Houston.

While the Houston region is strong, the city of Houston – at the heart of a growing region – faces economic and demographic challenges. Houston's share of regional population is declining and is projected to continue to decline over the next twenty-five years. Houston's portion of regional employment is also down. Increasingly, residents and businesses are choosing to locate in surrounding suburbs instead of the city. To the extent that Houston captures a smaller share of regional economic growth, it limits economic opportunity for Houston residents and reduces potential revenue for the City.

At the same time, since 2000, the number of Houstonians living in poverty has increased by nearly one-third – with more than one in five Houston residents now living below the poverty line. Between 2000 and 2015, Houston's poverty rate increased from 19.2 percent to 22.5 percent. Moreover, poverty is increasingly concentrated at the neighborhood level. For example, an analysis by the Kinder Institute found that the percentage of high poverty census tracts in Harris County more than quadrupled to 39 percent since 1980.

Houston's economic opportunities and challenges are directly connected to its long-term fiscal health. More than other Texas cities and large cities nationally, Houston is dependent on property tax revenue. Historically, regional and city population growth accounts for more than 90 percent of the growth rate in property tax valuation. Under the current revenue cap, property tax revenue is directly tied to population through a formula that limits growth based on population increase and CPI change. Thus, any slowing of population growth will curb the City's revenue capacity.

If the number of residents living in poverty in Houston continues to grow and is increasingly concentrated at the neighborhood level, it will also have an impact on demand for City services. Thus, the continued economic vibrancy of Houston is the single most important factor in determining revenue and demand for services over the next decade.

But it is not the only factor. Even with population and employment growth, Houston's current fiscal path is not sustainable. The City has a structural deficit that has grown as spending has outpaced revenue growth. Structural deficits are the result of an imbalance between recurring revenues and recurring costs. In Houston, personnel costs – including salary, pension and health benefits – have driven spending growth while spending on public safety personnel has driven overall personnel growth. Moreover, Houston faces long-term obligations related to its pension system and retiree benefits costs.

Recurring revenue – usually from taxes, state and federal aid and fees – has not grown at the same rate. As a result, Houston has been forced to close year-to-year deficits with a combination of non-recurring revenue (such as sales of surplus property that can only be sold once), short-term service cuts, layoffs, and by tapping its fund balance. While it struggles to close year to year budget gaps, the City has not been able to meet demands for additional services or make new investments – both of which are critical to the City's overall economic competitiveness and its ability to continue to attract and retain residents and employers.

The City is in the process of addressing its long-term fiscal health through pension reform. Mayor Turner has fashioned a landmark reform of the City's three pension systems for municipal workers, firefighters and police officers that has been approved by the State Legislature and the City Council. For years, the City has kicked the can down the road on pension costs, making unrealistic assumptions about investment returns and failing to make its annual required contributions to the plan. The City's pension reform initiative provides a fiscally sustainable alternative.

The final step to pension reform was voter approval of the City's issuance of pension obligation bonds – a critical component to the overall plan.

Yet even as the City proceeds with pension reform, it will still need to do more to close its structural deficit. Moreover, City leaders and the public have identified a long list of strategies that will require new investment in school readiness and early childhood education, crime prevention, transportation and the environment. Structurally balanced budgets are essential for local government. But few residents or businesses seek to locate in a city just because it has a balanced budget. The goals for a competitive city are to achieve a quality of life and a business environment that supports and sustains opportunity and growth.

That's why the City of Houston has worked to develop this first-ever Ten Year Financial Plan.

The reality is that it did not take one year for the challenges facing Houston to emerge and it will not take just one year for them to be addressed. Annual budgets discourage long term thinking. Short-term budget fixes often win out over long-term investments. Moreover, with the need to limit spending, it always seems that priority issues never get addressed.

The Ten-Year Plan will allow the City to focus on the decisions that it needs to make to ensure sustained fiscal balance, while making investments essential to economic competitiveness and quality of life.

For the Plan to succeed, it will require hard work and a shared commitment – what Mayor Turner has referred to as "shared sacrifice." It will require that the City do different things and do certain things differently.

The City needs to undertake a series of steps to generate additional budget savings through improvements in efficiency and effectiveness. These initiatives will not necessarily be easy to implement and will often require significant changes in operations that have meaningful impacts on services and personnel. Moreover, these initiatives may not result in savings or new revenue in the first year of implementation. The greatest benefit of long-term fiscal planning is the ability to understand the long-term effects of changes in policy, program and operations.

The Ten Year Plan defines the opportunities and challenges before the City and outlines a blueprint for action.

Chapter I will provide greater detail on the Houston regional economy's impact on the City and its finances. We will look back at historic population and economic trends and how different sectors have affected growth both regionally and in the city of Houston. We will also look forward at projections for what will happen to the region and to the city between now and 2040.

Chapter II will explore the various factors that have led to the City's structural deficit. We will outline in detail a ten year forecast for revenues and expenditures and the underlying assumptions that drive those projections.

Chapter III will examine the impact of pensions and the revenue cap on the City's structural deficit. By bending the curve in the cost of pensions, the City is taking a vital step toward preventing the structural deficit from worsening. Chapter III will also make the case that the City's low tax burden that results from the revenue cap has not been effective in preventing shrinkage in the City's share of regional jobs and population.

Chapter IV will provide an overview of where city leaders have identified the need for additional investment. It will discuss the results of Plan Houston and priorities identified by the Mayor, other City leaders and the public – such as reducing flooding, improving transportation infrastructure, expanding the availability of affordable housing, reducing crime and creating complete communities. These are all critical steps to achieving sustainable growth and opportunity in the city. Chapter IV will also discuss the need to address deferred maintenance of the City's facilities and fleet.

Chapter V will outline a series of initiatives to improve efficiency and effectiveness in City government. Over the next ten years, these initiatives will generate the savings needed to fund the investments identified in Chapter IV. These initiatives fall into six broad categories of reform:

- Public Safety: The Plan details a series of steps to reduce the cost and size of the Houston Fire Department without reducing public safety. Changes in schedule and deployment can increase the efficiency of the City's second largest department. The Plan also outlines how to change the way that Houston delivers emergency medical services to improve outcomes and achieve budgetary savings. Even as the City works to increase the number of police officers, the Plan also explains why civilianization can reduce the cost of increasing police patrol strength.
- 21st Century Workforce: Houston's employees are its most valuable resource. To fund more competitive compensation for City workers, Houston needs to achieve savings in non-salary compensation through reforms to health and retiree benefits.
- Operations: Improvements in basic processes in local government can yield significant – if hard to quantify – savings and revenue opportunities. By focusing on its core operations, the City can ensure sustained improvements in efficiency. The Plan details recommendations for improving talent management, information technology, procurement and finance.
- Improving Coordination and Collaboration: The best, most efficient and effective way to improve service delivery is through coordination and collaboration. By reducing the number of siloes within City government, it is possible to reduce cost and improve outcomes.
- Creating a Culture of Performance and Innovation: The City needs to change the way that it does business to focus on outcomes and innovation. The Plan outlines a series of steps that will allow the City to identify and implement efficiencies as a standard operating procedure.
- Increasing Partnerships: In addition to improving internal coordination and collaboration, the City needs to create new partnerships with the private sector, the non-profit sector and other government agencies. Working with the private sector, the City can explore opportunities for managed competition where the public and private sector compete to provide City services. Through partnerships with the non-profit sector, the City can achieve efficiencies in the delivery of programs – particularly programs for young people. Finally, the City can work with other local government entities to share services.

Finally, Chapter VI outlines a year by year strategy showing how implementation would both close the structural deficit and provide funding for investment. We also detail what would happen should the City fail to act.

Chapter I. The Impact of the Houston Regional Economy on the City and Its Finances

One of the first steps toward developing a ten-year projection of revenues is to understand the trajectory of the local economy. Population and job trends directly affect property and sales tax projections – the two principal sources of revenue for the City.

In looking forward, it is helpful to understand recent history.

Houston has enjoyed tremendous population and economic growth in recent decades. From 1970 to 2015, the population of Harris County has more than doubled, growing from 1.7 to 4.5 million residents. Houston's population has nearly doubled, growing from 1.2 million to 2.3 million residents – essentially adding the equivalent of the entire population of Austin over just 40 years. During the same period, the Houston region grew as an international economic center for both the energy and medical industries. As of 2017, the U.S. Bureau of Economic Analysis estimates the that the Houston region – as defined by the Metropolitan Statistical Area (MSA) – has a GDP of $503.3 billion, the fourth largest metro economy in the country. If the Houston region were a state, its economy would rank 9th after New Jersey and its population would be greater than all but 15 other states.

However, as greenfield development patterns continue and an increasing number of households choose to reside in Houston's suburbs, Houston itself is capturing a smaller portion of the metro region's population growth, a trend likely to continue if not accelerate in the next few decades.

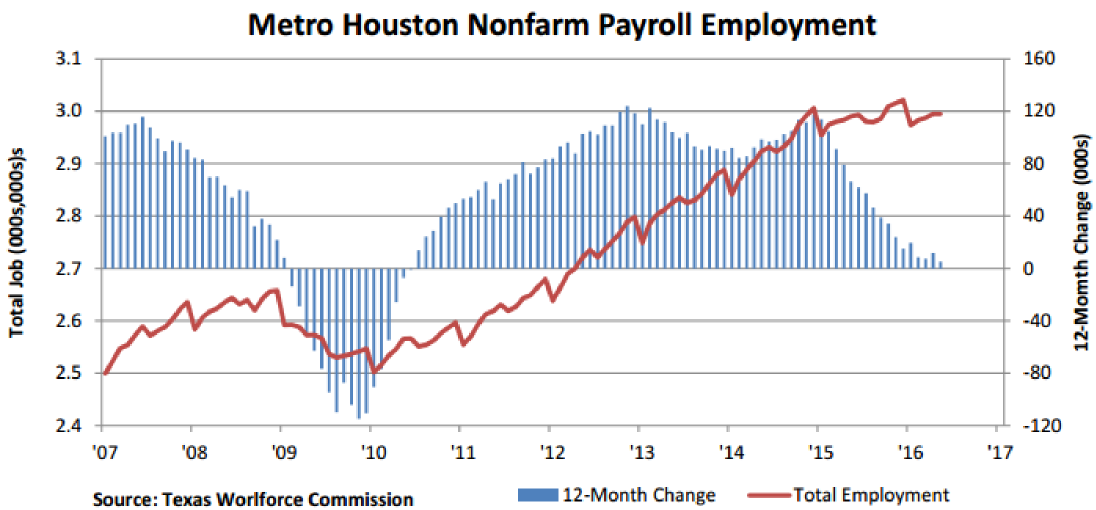
Population growth drives demand for everything from real estate to retail and is perhaps the single most important predictor of municipal revenue growth. In other significant metropolitan areas like Dallas, a departing middle class leaves the City's core vulnerable to rising rates of poverty and income segregation. These demographic shifts represent a risk to Houston's economic and fiscal future, as demand for City services may increase concurrently with a dampening growth rate in population-driven revenue sources like property and sales tax.

The following chapter highlights some of the key factors underlying Houston's economic trajectory, with particular attention paid to those trends which are likely to influence the city and metro economy during the next ten years.

Metro Houston’s Strong Economy

Sustained Job Growth and Rapid Recovery from Economic Downturns

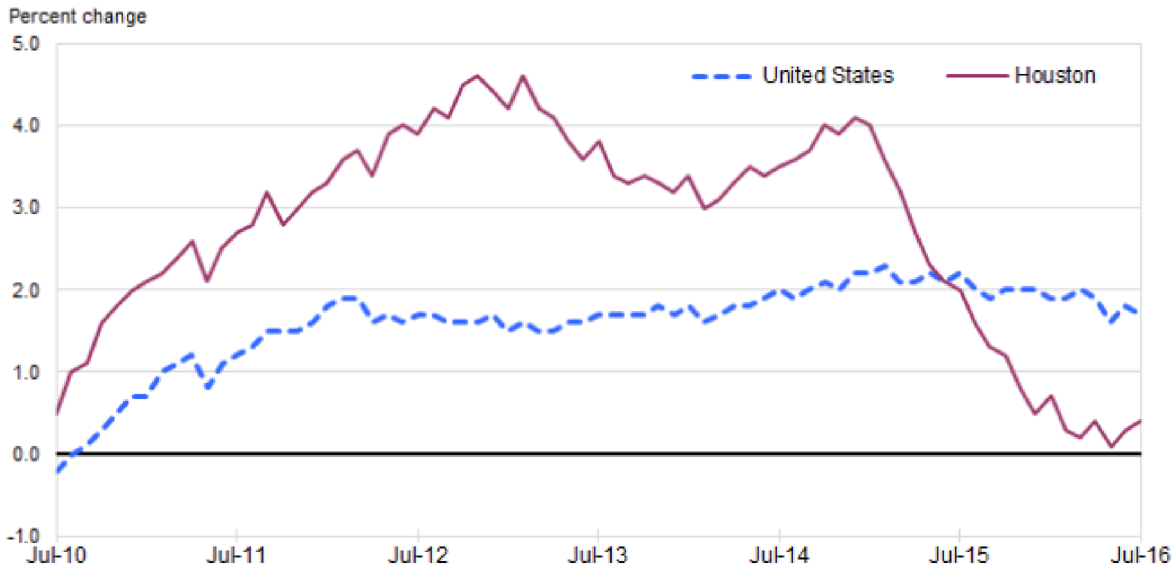
Over the last ten years, jobs in the Houston MSA have grown by almost 24 percent, for a compound annual growth rate of 2.17 percent. Annual job growth rates over 2.9 percent were not uncommon during this time. This is particularly striking given that this period included both the national recession and a local economic downturn prompted by a rapid fall in oil prices. As depicted in the chart below, the effects of the national recession on the Houston region’s employment growth were modest; net economic contraction lasted only 16 months from early 2009 to early 2010.



Unlike many other major U.S. cities in the 2000s, Houston did not struggle with either an overbuilding problem or a collapse of the housing market. The ratio between the city’s median house prices and median household incomes peaked at 2.7 in 2006. By comparison, a typical Miami family would have to spend five-and-a-half years of their total income to afford an average home in their city by 2006. In Riverside, California, it would take nearly seven years. So as housing values fell rapidly across the country – by 40 percent in Miami and 44 percent in Riverside – home values merely dipped about 2 percent in Houston.

From 2010 through 2014, the Houston regional economy significantly outperformed other major metropolitan areas and national trends. During this period, Houston’s regional employment growth typically exceeded national growth rates by between one and three percentage points. Recovery from the recession was more rapid than in any other major metropolitan area. Houston regained its pre-recession employment level by December 2011, only 23 months after the low point of the recession and more than a year faster than most other major metro areas.

Total nonfarm employment, year-over-year percent change, U.S. and Houston MSA



Source: U.S. Bureau of Labor Statistics.

Though employment growth has stagnated since 2014 due to a drop in oil prices – a correlation discussed below – Houston's sustained economic expansion is likely to continue during the next 10 years, though at rates more modest than those experienced between 2000 and 2009 or between 2011 and 2014.

Importance of the Energy Sector

Houston is home to a substantial portion of the nation's jobs in oil and gas extraction. As a result, there is a strong correlation between the region's economic strength and fluctuations in global energy prices. For example, when oil prices collapsed in 1982, oil and mining jobs fell by 57 percent; within five years, the region lost 221,900 jobs across all sectors.

More recently, the relatively quick recovery of oil prices in 2009 is cited as the main reason for Houston's rapid emergence from the 2008 recession. According to the U.S. Bureau of Labor Statistics, Houston job growth during this period was led by the mining, manufacturing, and professional services industries, the three local industries with the closest ties to the energy sector. As a result, the region lost only one in 22 jobs in the recent national recession, compared to one in seven jobs lost during the 1980s recession.

The significance of the energy industry in the Houston region continues to drive local economic trends – often in ways that run contrary to national trends. After achieving a high of nearly $106 per barrel in June 2014, oil fell to $29.19 in the second quarter of 2016 - a price point not seen since 2002. Between late 2014 and late 2016, the Houston metro region lost approximately 80,000 local oil-related jobs. This sparked an overall economic contraction across all economic indicators with office vacancy rates up and overall job creation and housing production down. Local economists predicted that this energy contraction would have lingering effects on the real estate industry until approximately 2020.

As of June 2017, the Energy Information Administration (EIA) forecast that West Texas Intermediate (WTI) averaged $43.33 per barrel in 2016 and projected a further appreciation in 2017 prices to more than $50 per barrel. The rig count bottomed out in May 2016 and steady increases have been reported since. According to local economists, over the long term, the marginal cost of oil tends towards an equilibrium of $65 per barrel. While this would assure an eventual economic recovery, it will not likely result in the return of the rapid energy sector expansion that occurred between 2011 and 2014, when average quarterly oil prices exceeded $90 per barrel.

The local energy industry is also more stable than oil price volatility. As of late 2016, there were nine refineries in the Houston metro area, processing more than 2.3 million barrels of crude oil per day (approximately half of the state's total production). This downstream energy sector – which dominates the eastern, industrial half of the city but often is overlooked by those focused on the upstream workers downtown – is thriving, in large part due to low energy prices. Lower oil and gas prices translate to lower costs for the inputs that refiners and many other manufacturers in the Houston area use, which can translate into higher profits and more employment related to refining and manufacturing. Indeed, according to the University of Houston Institute for Regional Forecasting, over $50 billion has been invested in downstream petrochemical refineries and chemical plants along the Texas Gulf Coast since energy prices dropped.

Over the next ten years, local economists anticipate that oil prices will remain the most important driver of the Houston economy, underpinning changes in foreign investment, local job creation, and demand for the wide range of industries that serve the energy sector. As the energy industry continues to globalize and foreign direct investments become an increasingly important source of local capital, Houston may see increased correlation between job creation and the strength of the U.S. dollar or Federal interest rates.

Local economists also anticipate that shifts towards automation will eventually change the type and number of jobs created by the local energy sector. Growth in energy sector GDP will increasingly lead to the creation of professional and business service jobs located in downtown Houston, whereas growth in extraction jobs is likely to phase out as the number of oil rigs in the Texas Gulf Coast approaches a natural cap of 1,200. This may result in a regional shift in the demand for various skills levels, limiting the accessibility of highly remunerated jobs for individuals with limited higher education.

Rising Sector Diversity

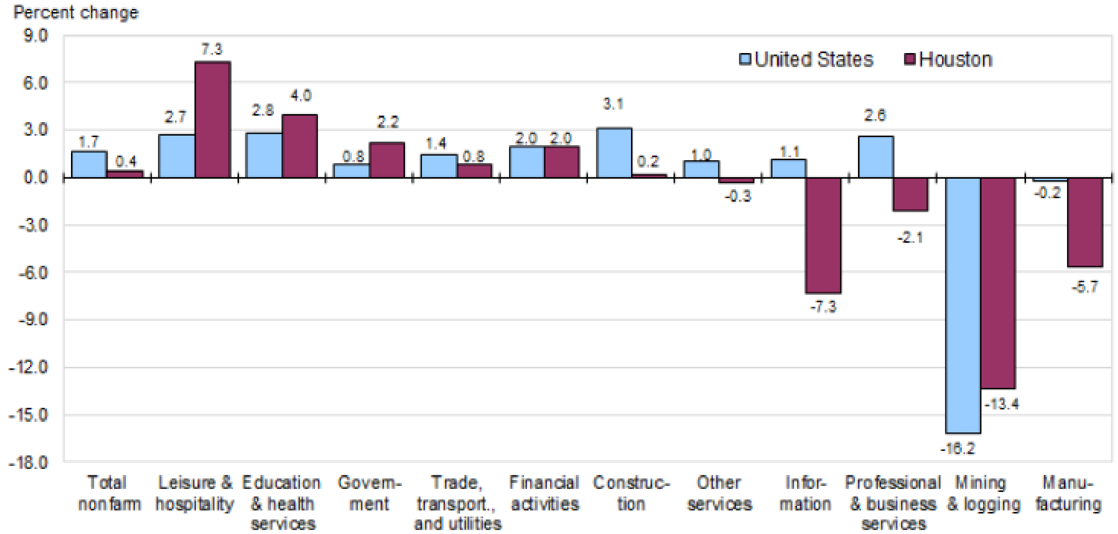
Though Houston's economy relies heavily on oil, its economy is much more diverse than it was during the oil busts of the 1980s. According to 2014 data from the Bureau of Labor Statistics, approximately 2.3 percent of the region's jobs are in the mining sector (which includes oil and gas).[1] That's slightly higher than places like Austin and Dallas, though significantly lower than places like Odessa and Midland. It's also much lower than the rate of oil and gas employment Houston has seen in the past, when Houston employment was more closely tied to the sector.

In 1980, for example, an estimated 82 percent of all Houston jobs were directly or indirectly tied to the oil and gas industry. The University of Houston Institute for Regional Forecasting estimates that only one-third of new job growth activity is directly or indirectly tied to the energy sector, while the remaining two-thirds of job growth is tied to local population growth and national economic trends. This increase in economic diversity has helped attenuate the impacts of oil price volatility. Even amid the energy downturn, the Texas Workforce Commission reported that Houston regional employment increased by 0.6 percent between 2014 and 2015, in part because the U.S. economy continued to grow strongly and support Houston's many employers that sell into national markets.

The chart below highlights the economic independence of the region's various industries. Between July 2015 and July 2016, the three local industries most closely tied to the energy sector (manufacturing, mining, and professional services) reported substantial job losses, often counter or disproportionate to national trends. In contrast, the Leisure and Hospitality industry reported 7.3 percent job growth, and the education and health services sector reported 4.0 percent job growth. The former is closely correlated to national economic trends, while the latter is connected to population growth – neither is closely correlated to energy sector employment. Job growth in both industries is likely to be more stable than in the energy sector, albeit less well remunerated.

[1] Includes only those jobs directly employed by industries categorized as part of the "Mining, Quarrying, Oil & Gas Extraction" industry by NAICS code. Indirect jobs associated with the energy sector are not included in the above figure.

Total nonfarm and industry employment, July 2015-July 2016 percent change



Source: U.S. Bureau of Labor Statistics.

Between 2000 and 2014, according to the Bureau of Labor Statistics, the health care sector and leisure sector reported both the largest numbers of net new jobs (+148,939 and +111,801, respectively) as well as the highest rates of growth (+88.8 percent and +79.7 percent, respectively). Almost 40 percent of the region's job growth occurred in these two industries. Other promising sectors include aerospace and aviation, biotech and life sciences, and distribution and logistics. Should these trends continue, Houston's regional economy will become increasingly insulated from the volatility in energy price.

The Population Shift to the Suburbs: Fiscal and Economic Risk

City's Shrinking Share of a Growing Region

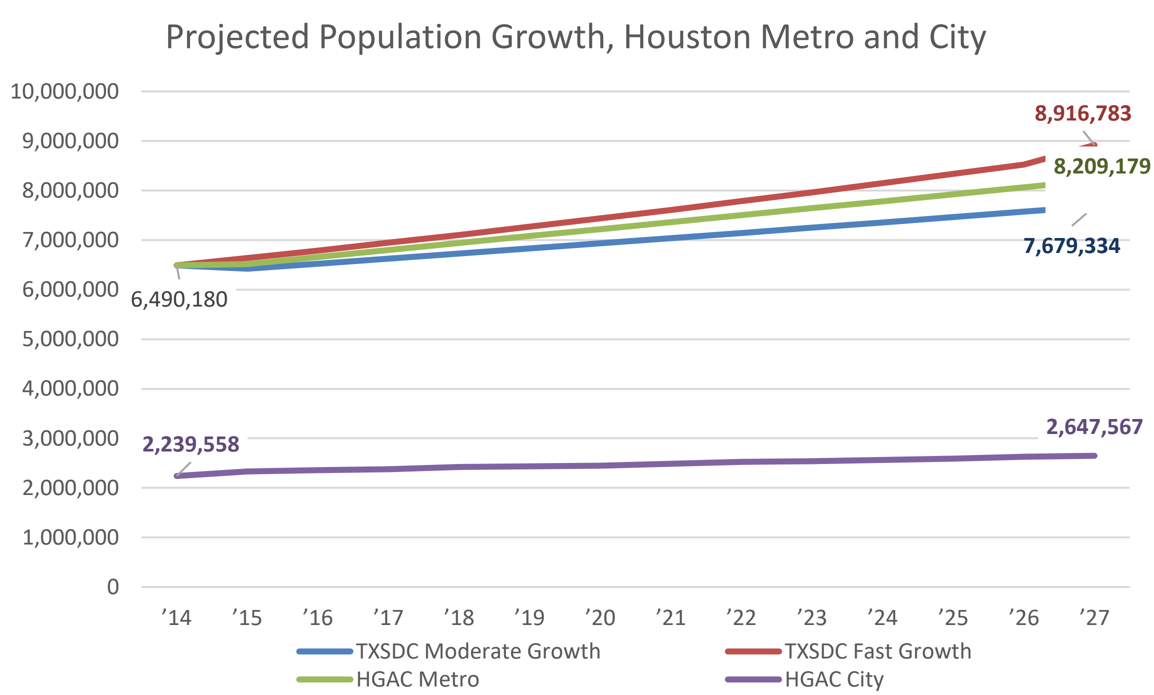
As of 2014, the Houston MSA had a total population of 6.49 million – with the city of Houston accounting for 34.5 percent of total MSA population or 2.24 million residents.[2] Between 2014 and 2015, Houston was one of only three metro areas nationwide to be ranked among both the top 20 in absolute population growth and the top 20 in fastest growing (percentage gains). According to the U.S. Census, metro Houston has grown more than any other metro area in the country since 2010. In Houston, approximately 45 percent of population growth comes from natural increase (births minus deaths) and approximately 55 percent comes from net in-migration.

The city itself has seen a shrinking share of that growth over the last four decades and there are signs that this trend will continue into the future. Historically, the city has captured a significant share of regional population growth through annexation --

[2] The MSA includes Harris, Fort Bend, Montgomery, Brazoria, Galveston, Liberty, Waller, Chambers and Austin counties.

from Bellaire in 1949 to Mykawa in 1956 to Clear Lake in 1977 to Kingwood in 1996. Between 1970 and 2015, Houston grew in size by 165 square miles – nearly a 40 percent increase in size as the city's population increased by 86 percent. Absent new annexation, population growth in the region is increasingly occurring in the outlying suburbs and unincorporated counties. Between 2000 and 2014, the city's share of the MSA population dropped from 41.8 percent to 34.5 percent.

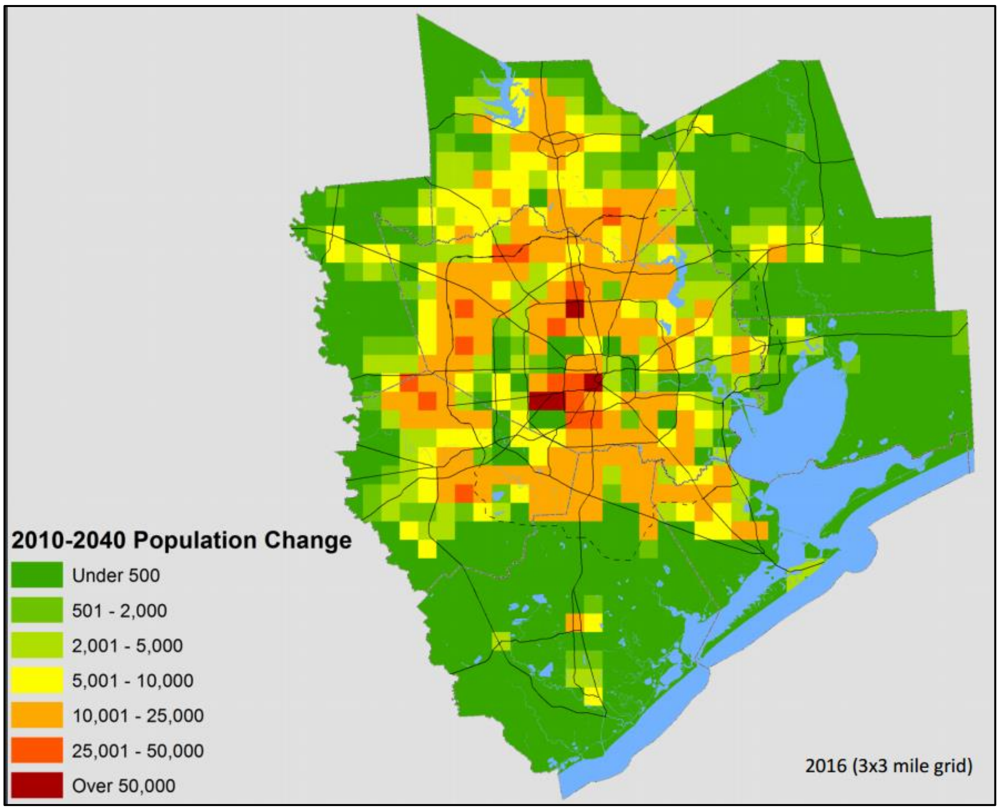
There are multiple projections on future population growth in the Houston region. In November 2014, the Texas State Data Center released both a fast growth scenario and a moderate growth scenario to predict future population in the Houston metro region. The former assumes that net in-migration will remain constant at 2000-2010 levels; under this scenario, the Houston MSA will add approximately 2.2 million residents per decade. The moderate growth scenario assumes that future net in-migration will be half of that experienced from 2000 to 2010, a scenario that will add approximately one million residents per decade. These population estimates were developed based on 2010 Decennial Census data – subsequently released American Community Survey population counts indicate that the MSA's 2014 population exceeds the fast growth scenario's 2014 forecast by 0.09 percent.



Source: Texas State Data Center; Houston – Galveston Area Council

The population forecasts released by the Houston Galveston Area Council (HGAC) predict growth trends approximately halfway between the Texas State Data Center's fast and moderate growth scenario. These forecasts use a more up-to-date base year (2014 American Community Survey) and take into account assumptions about the distribution of growth across the housing metro region based on prospective development patterns.

Under the HGAC projections, the city of Houston continues to grow but its share of overall population in the region declines. While the Houston region is expected to grow by 3.5 million residents by 2040, only 644,968 of these new inhabitants are expected to reside within Houston itself. As depicted in the map below, the forecasts anticipate significant suburbanization into unincorporated Harris, Fort Bend, and Montgomery Counties. Based on these projections, the share of the region's population residing within the city of Houston will drop from 35.5 percent in 2014 to 29.7 percent in 2040.

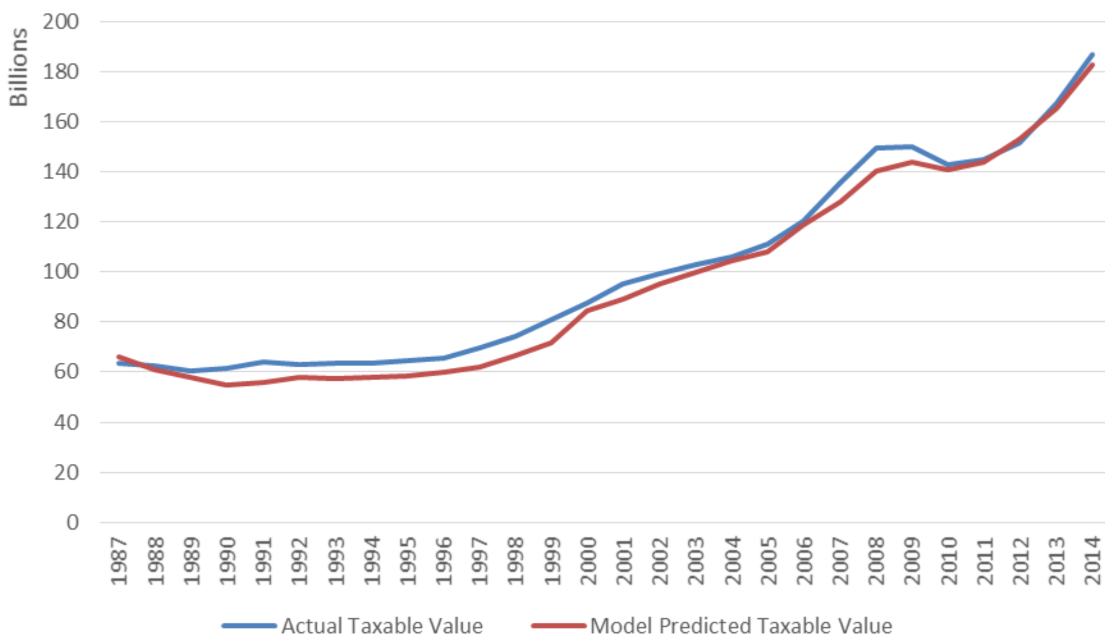


There is also some evidence that job location is following residents to the suburbs. Based on Census Longitudinal Household Dynamics data, the number of jobs located in the city increased between 2002 and 2014 from 1,463,665 to 1,743,552 – an increase of 19 percent. Yet, over the same time period, the city's share of overall regional employment declined from 65.9 percent to 60.4 percent.

The Fiscal Impact: Risk to Property Tax Growth

In Houston, population growth is possibly the single most important predictor of future economic growth. By extension, population growth determines trends in the City's most important revenue stream, property tax. For example, using only city and metro population figures as inputs for a regression model, the PFM Group was able to predict the City of Houston's historic total taxable valuation with 94.3 percent accuracy. Moreover, as a result of the revenue cap, any increase in property tax revenue is directly tied to population growth.

City of Houston Taxable Value, Actual versus Predicted Using Population Counts



Source: PFM Group, 2016.

As of 2015, the total assessed value for the City of Houston was $187.8 billion. While taxable valuation is essential to municipal fiscal health generally, it is even more important in Houston because of the City's reliance on property tax as a revenue source.

Almost 47 percent of the City's FY 2015 governmental revenues were derived from property taxes, compared to a median of 41.4 percent among Texas peers and 18.4 percent among other large U.S. cities. Property tax revenue caps in other cities have led to increased reliance on sales taxes or a more comprehensive and wide ranging tax and fee structure. Even when the comparison is limited to Texas peers with similar revenue generation structures, the City of Houston still ranks first in terms of its dependence on property tax revenues to fund general government activities.

Property Tax Revenue as % of Total Governmental Activities Revenue

Rank	City	%
1	Houston, TX	46.9%
2	Dallas, TX	44.5%
3	Austin, TX	42.1%
4	El Paso, TX	41.8%
5	Woodlands, TX	41.7%
6	Pasadena, TX	41.4%
7	New York, NY	39.5%
8	Pearland, TX	37.7%
9	Sugar Land, TX	27.9%
10	Los Angeles, CA	25.7%
11	San Antonio, TX	25.5%
12	Katy, TX	21.3%
13	Chicago, IL	18.4%
14	Philadelphia, PA	15.1%
15	Phoenix, AZ	9.1%
	Median (US Cities)	**18.4%**
	vs Houston	**-60.7%**
	Median (TX)	**41.4%**
	vs Houston	**-13.3%**

Source: FY2015 CAFRs

Assessed Valuation Characteristics

	Assessment per capita	% of Total Assessed Valuation	
		Residential	Non-Residential
Houston, TX	$47,436.59	58.1%	41.9%
State Comparisons			
Austin, TX	$67,465.23	63.7%	36.3%
Dallas, TX	$35,502.39	44.2%	55.8%
El Paso, TX	$33,937.93	71.1%	28.9%
San Antonio, TX	$29,872.75	55.4%	44.6%
Median	***$34,720.16***	***59.5%***	***40.5%***
vs Houston	***-36.6%***	***2.5%***	***-3.7%***
Metro Comparisons			
Woodlands, TX	$104,354.48	81.9%	18.1%
Pearland, TX	$50,825.25	79.0%	21.0%
Sugar Land, TX	$89,032.17	71.7%	28.3%
Pasadena, TX	$26,655.55	61.3%	38.7%
Katy, TX	$46,645.60	54.6%	45.4%
Median	***$50,825.25***	***71.7%***	***28.3%***
vs Houston	***6.7%***	***19.0%***	***-48.3%***

Source: FY2015 CAFRS and County Assessors Annual Reports

On a per capita basis, Houston's residential assessed valuation is comparable to the median of nearby suburbs, but 37 percent higher than the median of other Texas cities.[3] This reflects the higher cost of homes in Houston compared to costs in every other major Texas city, with the exception of Austin. Houston also has a significantly higher concentration of high value industrial and commercial properties compared to its Texas peers, as reflected in the relatively high proportion of assessed valuation associated with non-residential uses. Nonetheless, over 58 percent of Houston's assessed valuation is derived from residential properties, highlighting the importance of household location choice to the City's fiscal future.

[3] Unlike in New York or Chicago, Texas assessors include the full value of residential properties on the assessor rolls and reduce the residential tax burden through the subsequent application of exemptions. Due to these and other differences in assessment methodologies, only Texas cities are included as comparators for the relative importance of residential property values for the City's overall taxable valuation.

Economic Risk: Rising Levels of Concentrated Poverty and Income Segregation

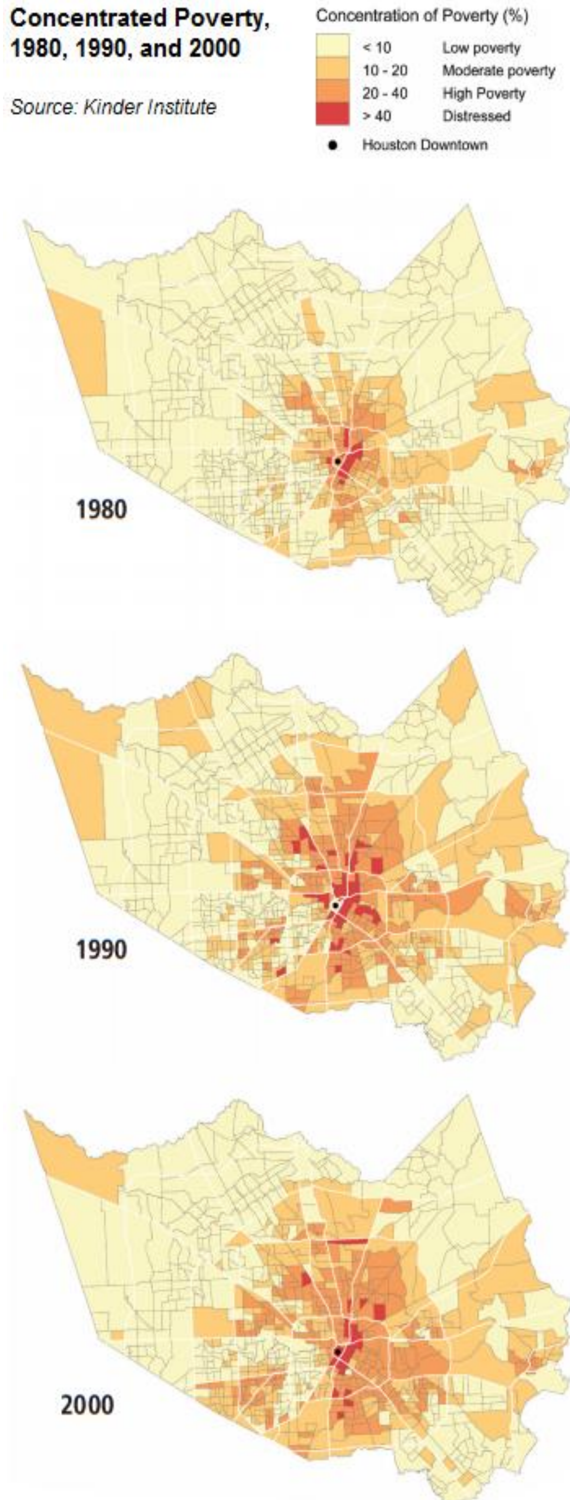
As development and population growth shift away from the city's core and towards suburbs and exurbs, Houston has become more vulnerable to rising poverty and income segregation. Between 2000 and 2014, the number of Houston residents living below the federal poverty line grew by 32.5 percent; at present, the city's poverty rate is 22.9 percent. Increased poverty threatens the region's economic wellbeing by reducing demand for local goods and services, eroding neighborhood vitality, and undermining economic mobility.

The increase in poverty in Houston coincided with a reduction in the city's share of college educated residents in the region: between 2000 and 2014, the percentage of college educated residents living in the city declined from 42.6 percent to 35.2 percent.

The challenges associated with poverty are further compounded when those living in poverty are geographically clustered together and neighborhoods become economically polarized. According to the Pew Research Center, after San Antonio, Houston is the second most highly economically segregated region out of the country's thirty largest metropolitan areas; economic residential segregation nearly doubled between the 1980 and 2010 decennial censuses.[4] A study conducted by Rice University's Kinder Institute for Urban Research found that, since 1980, the percentage of high poverty census tracts in Harris County more than quadrupled to 39 percent, nearly double the national rate of 20 percent.[5] Concentrated poverty, and the related concentration of economic disadvantage, is a significant threat to the overall economic competitiveness of Houston.

Concentrated Poverty, 1980, 1990, and 2000

Source: Kinder Institute



[4] Richard Fry and Paul Taylor. August 1, 2012. "The Rise of Residential Segregation by Income." Pew Research Center.

[5] Heather A. O'Connell and Junia Howell. 2016. "Disparate City: Understanding Rising Levels of Concentrated Poverty and Affluence in Greater Houston." Rice University Kinder Institute on Urban Research.

High poverty neighborhoods once confined to within or just beyond Houston's 610 Loop, have supplanted formerly middle class communities in much of the area between Houston's two beltways. Emerging high poverty areas are located throughout Beltway 8 loop, with the exception of the wealthy Galleria and River Oaks area to the west of the city's core.

Both high poverty and upper income neighborhoods have become increasingly homogenized over time, leaving Houston's wealthiest and its most vulnerable residents increasingly isolated from the rest of the region. Two of the high poverty communities – the Near Northside and the Fifth Ward, now have poverty rates as high as 70 percent.

Economic polarization may be a byproduct of Houston's rapid economic growth, which has been partially fueled by an influx of both low-skill, low-wage and high-skill, high-wage workers and wealthy retirees. These dual migration streams could well have contributed to a rise in residential segregation by income. However, the rising concentration of poverty in the historic urbanized core is both caused by and continues to drive the shift of middle class residents from the city and to the rest of the Houston region.

Chapter II. Houston's Growing Structural Deficit and What Drives It

An essential goal of a ten-year financial plan is achieving long-term fiscal balance. The baseline forecast predicts the City's financial results if it continues on its current path, based on historical and expected future trends.

The forecast is based on multiple sources including the latest Meet and Confer Agreements, actuarial reports, and Police, Fire, and Finance Department projections. The revenue forecast was also developed on the basis of the economic analysis detailed in Chapter I and after consultation with prominent area economists on critical indicators affecting the City's revenue streams.

Drawing on these sources and subject matter experts, PFM developed a set of forecast assumptions to project revenues and expenditures for the General Fund over a ten-year period. Some of the same factors that drive the General Fund structural deficit also affect the Dedicated Drainage and Street Renewal Fund (DDSRF), a dedicated source of funding for street and drainage improvement, enhancement and rehabilitation projects.

This chapter details the growing General Fund structural deficit, examines the factors affecting its growth and outlines a forecast for the ten year period. This chapter also outlines a forecast for the DDSRF over the ten year period.

This document reflects fiscal analysis and assumptions as of June 14, 2017. The City has since updated many of the underlying assumptions of the model that impact the projected fiscal outlook. Moreover, as noted in the Executive Summary, the forecast and the underlying assumptions are based on pre-Harvey economic conditions. For these reasons, the first step in the implementation of the Plan should be to revisit and update all of the underlying economic assumptions and the baseline forecast.

The Growing Structural Deficit

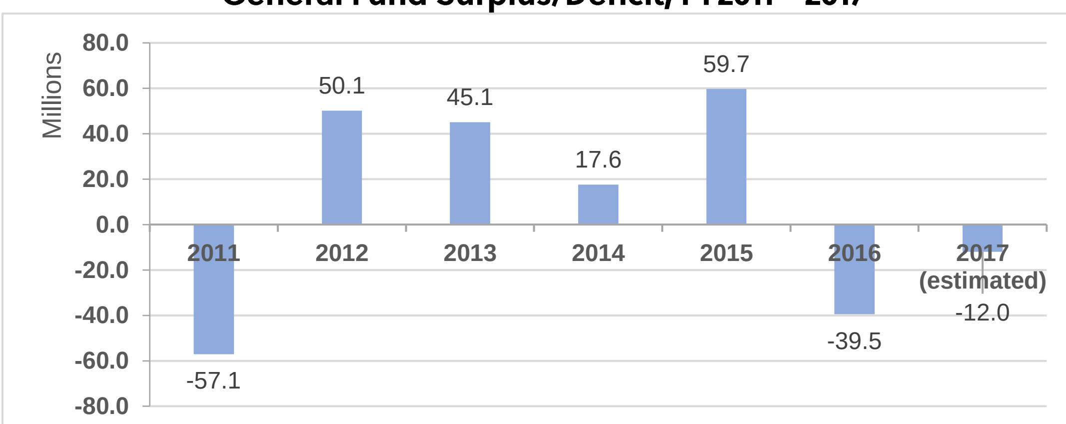
Houston's structural deficit is defined by expenditure growth exceeding revenue growth over time. Between FY 2011 and FY 2016, expenditure growth was driven by significant increases in pension contributions, health insurance and debt service and related costs. These three categories accounted for 68.4 percent of the increase in spending between FY 2011 and FY 2016. General Fund pension contributions alone increased by 53 percent - from $195.7 million in FY 2011 to $300.8 million in FY 2016. Total cost of salaries increased just 4.0 percent over the six-year period. These changes reflect both limited wage growth and significant reductions in General Fund full-time employees, particularly in non-public safety departments.

On a year-by-year basis, the City took a series of steps to achieve balanced budgets. By 2011, as the Great Recession set in, the City had developed a $57.1 million structural deficit from a sluggish economy and strong expenditure growth. The City implemented a series of belt-tightening measures including reductions of most departmental budgets by 4 percent to 27 percent; consolidations of Fleet, Information Technology, Human Resources, and payroll; and a series of employee layoffs. Expenditures were cut 4.6 percent. These efforts resulted in a $50 million surplus by FY 2012.

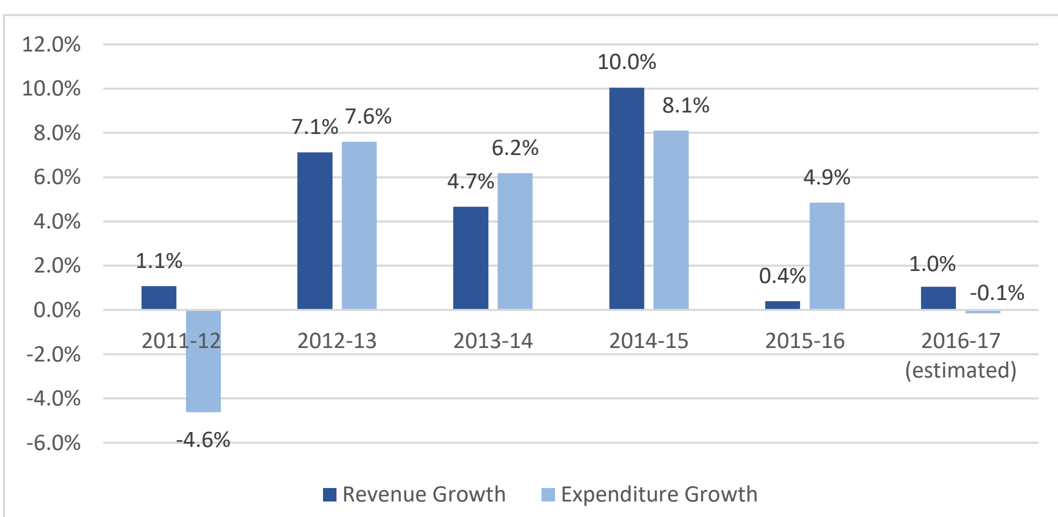
By FY 2013, the City was able to suspend service cuts and layoffs, flat-funding most departments and boosting its General Fund reserves by about $45 million. Expenditure growth began to exceed revenue growth, but the significant savings achieved in FY 2012 were sufficient to keep the City's budget in balance. By FY 2014, the City was able to restore service cuts, reducing the annual surplus to approximately $18 million. By the following fiscal year, the City's economy had largely recovered, with property and sales taxes rising 8.5 percent.

However, by FY 2016, a decline in energy prices that produced a $26.6 million drop in sales tax revenues and large increases in pension contributions produced a $39.5 million deficit. That year, expenditure growth again outpaced revenue growth by 4.5 percent. In FY 2015, FY 2016 and FY 2017, the City was also not able to fully recognize increases in property value as a result of caps on property tax growth.

General Fund Surplus/Deficit, FY2011 - 2017



General Fund Revenue and Expenditure Growth, FY2011 - FY2017

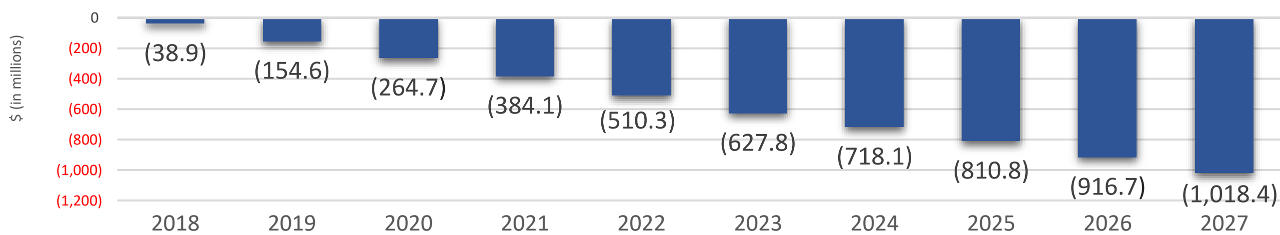


Projected Structural Deficit: FY2019 – FY2027

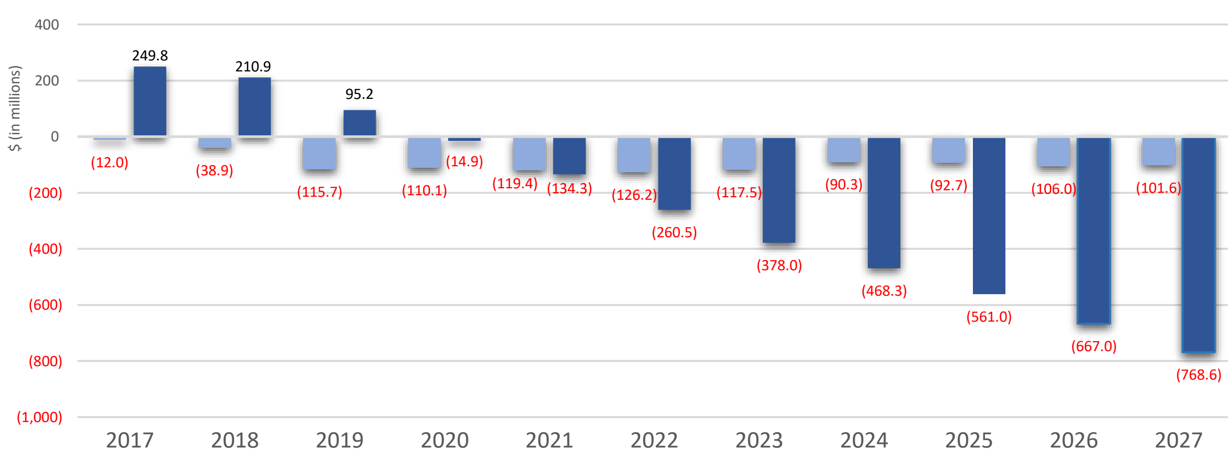
Using these historic trends as a starting point, the PFM team worked with City Finance to develop a long term forecast for expenditures and revenues.

Even with pension reform, the City faces a cumulative structural gap of $1.02 billion (FY 2018 to FY 2027) – without any increases in headcount or out-year increases in employee wages.

FY2018- FY2027 Cumulative Structural Gap – Baseline

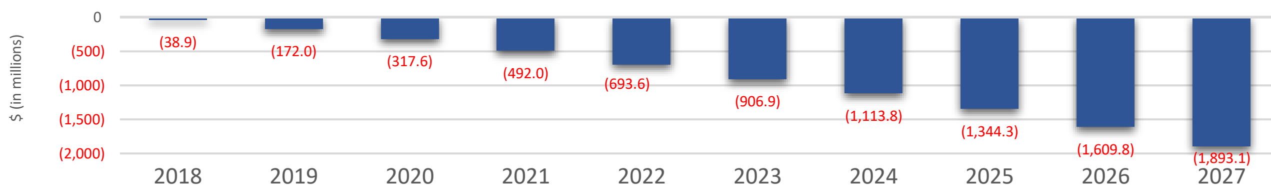


FY2017- FY2027 Surplus/Deficit and Fund Balance - Baseline

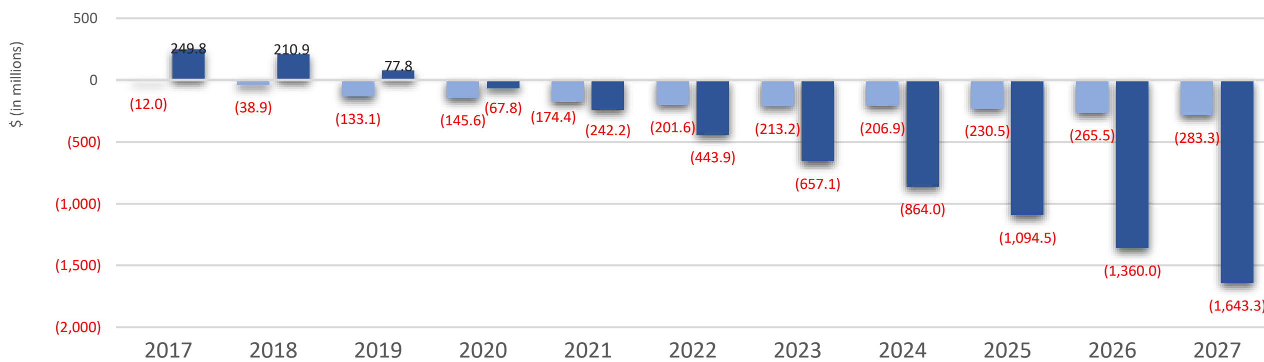


Adding only inflation-based increases in wages, the structural gap grows to $1.9 billion.

FY2018- FY2027 Cumulative Structural Gap – With CPI Growth in Wages



FY2017- FY2027 Surplus/Deficit and Fund Balance – With CPI Growth in Wages



Baseline Financial Forecast - FY2018 Proposed Budget & FY2019-FY2027 Forecast

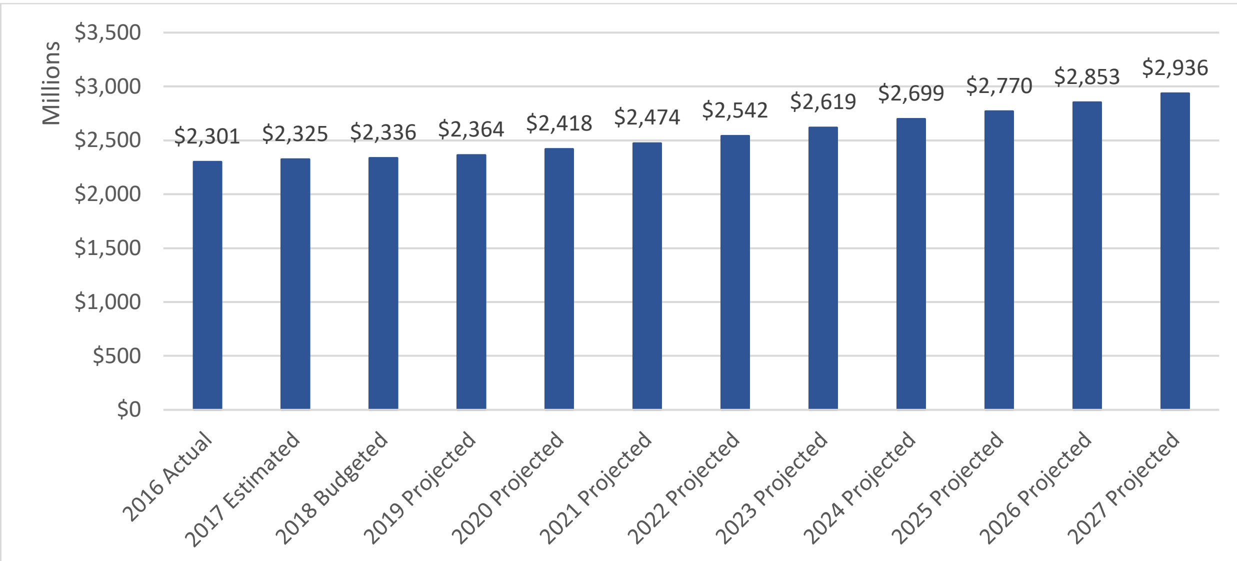
Fiscal Year Ending:	*2017*	*2018*	*2019*	*2020*	*2021*	*2022*	*2023*	*2024*	*2025*	*2026*	*2027*
	Estimated	*Budgeted*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
GENERAL FUND											
Revenues											
General Property Taxes	1,158,377,116	1,165,657,227	1,196,985,165	1,244,685,643	1,272,268,283	1,307,748,434	1,351,913,901	1,397,984,394	1,432,269,073	1,476,558,637	1,520,017,916
Sales Taxes	637,908,772	644,413,430	660,807,779	682,767,776	705,099,452	727,658,214	749,889,779	772,661,537	796,359,901	820,301,168	844,814,538
Gas and Electric Franchise Taxes	117,045,519	116,060,834	116,578,845	117,099,518	117,622,866	118,148,901	118,677,640	119,209,094	119,743,279	120,280,208	120,819,895
Other Franchise Taxes	71,336,848	64,020,826	64,275,417	64,591,102	64,969,252	65,411,320	65,918,843	66,493,445	67,136,839	67,850,834	68,637,334
Industrial Assessment	18,322,159	17,917,043	18,293,301	18,677,460	19,079,026	19,489,225	19,908,243	20,336,270	20,773,500	21,220,130	21,676,363
Licenses and Permits	39,218,871	39,586,832	40,592,063	41,647,370	42,755,676	43,920,087	45,143,905	46,430,639	47,784,024	49,208,028	50,706,874
Charges for Services	59,118,660	59,238,465	62,601,326	66,198,128	70,045,290	74,160,384	78,562,222	83,270,936	88,308,079	93,696,717	99,461,543
Municipal Courts Fines and Forfeits	21,371,058	21,371,058	19,629,496	18,045,845	16,604,316	15,290,893	14,093,105	12,999,836	12,001,159	11,088,194	10,252,980
Other Fines and Forfeits	4,127,935	4,094,489	4,136,769	4,179,579	4,222,925	4,266,814	4,311,253	4,356,248	4,401,806	4,447,936	4,494,643
Interest	4,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
Intergovernmental	71,412,894	71,062,250	57,227,393	34,974,443	33,465,508	34,555,680	35,754,869	37,073,977	38,524,995	40,121,116	41,876,848
Miscellaneous/Other	17,994,182	13,137,564	13,137,564	13,137,564	13,137,564	13,137,564	13,137,564	13,137,564	13,137,564	13,137,564	13,137,564
Other Resources	21,778,149	32,805,527	20,206,179	20,206,179	19,971,505	19,971,505	19,971,505	19,810,897	19,810,897	19,676,404	19,403,671
Direct Interfund Services	55,580,967	54,858,570	56,471,357	58,253,302	60,228,962	62,426,818	64,879,917	67,626,618	70,711,460	74,186,175	78,110,862
Indirect Interfund Services	27,172,484	29,000,502	29,827,306	30,716,878	31,674,894	32,707,565	33,821,687	35,024,703	36,324,759	37,730,774	39,252,516
Total Revenue	**2,324,765,614**	**2,336,224,617**	**2,363,769,961**	**2,418,180,787**	**2,474,145,519**	**2,541,893,404**	**2,618,984,432**	**2,699,416,159**	**2,770,287,336**	**2,852,503,884**	**2,935,663,548**
Revenue Growth	*1.0%*	*0.5%*	*1.2%*	*2.3%*	*2.3%*	*2.7%*	*3.0%*	*3.1%*	*2.6%*	*3.0%*	*2.9%*
Expenses											
Personnel Services	1,535,755,912	1,515,185,468	1,565,731,366	1,609,296,873	1,653,749,694	1,701,678,564	1,740,571,374	1,781,822,602	1,826,592,960	1,875,283,640	1,928,350,871
Salaries	*988,554,176*	*981,234,963*	*996,584,704*	*1,014,307,624*	*1,031,922,799*	*1,051,710,424*	*1,061,348,942*	*1,072,464,990*	*1,085,296,726*	*1,100,121,708*	*1,117,263,502*
Benefits	*547,201,736*	*533,950,505*	*569,146,662*	*594,989,248*	*621,826,895*	*649,968,140*	*679,222,432*	*709,357,612*	*741,296,234*	*775,161,932*	*811,087,369*
Supplies	35,021,184	34,771,605	35,034,579	35,308,462	35,593,753	35,890,973	36,558,097	37,161,841	37,784,097	38,425,530	39,086,831
Other Services and Charges	344,119,359	341,738,919	339,784,249	338,816,130	348,379,567	358,389,969	366,890,425	378,152,990	390,285,702	405,313,290	417,356,949
Services and Charges	*267,602,350*	*263,080,449*	*260,309,655*	*258,493,969*	*267,177,182*	*276,273,444*	*283,824,537*	*294,101,158*	*305,209,933*	*319,174,127*	*330,113,412*
Utilities	*64,480,638*	*67,055,720*	*67,871,844*	*68,719,412*	*69,599,635*	*70,513,775*	*71,463,137*	*72,449,082*	*73,473,019*	*74,536,413*	*75,640,787*
Repairs and Maintenance	*12,036,371*	*11,602,750*	*11,602,750*	*11,602,750*	*11,602,750*	*11,602,750*	*11,602,750*	*11,602,750*	*11,602,750*	*11,602,750*	*11,602,750*
Equipment	6,434,762	4,974,841	4,974,841	4,974,841	4,974,841	4,974,841	4,974,841	4,974,841	4,974,841	4,974,841	4,974,841
Debt Service and Other Uses	415,403,371	478,432,182	533,965,052	539,855,764	550,859,883	567,189,941	587,457,472	587,619,081	603,342,899	634,463,336	647,539,673
Total Expenses	**2,336,734,588**	**2,375,103,015**	**2,479,490,087**	**2,528,252,070**	**2,593,557,737**	**2,668,124,288**	**2,736,452,210**	**2,789,731,355**	**2,862,980,500**	**2,958,460,637**	**3,037,309,165**
Expenditure Growth	*-0.1%*	*1.6%*	*4.4%*	*2.0%*	*2.6%*	*2.9%*	*2.6%*	*1.9%*	*2.6%*	*3.3%*	*2.7%*
Operating Surplus/Deficit	**(11,968,974)**	**(38,878,398)**	**(115,720,126)**	**(110,071,283)**	**(119,412,219)**	**(126,230,884)**	**(117,467,778)**	**(90,315,196)**	**(92,693,164)**	**(105,956,753)**	**(101,645,617)**
Beginning Fund Balance	**261,748,554**	**249,779,580**	**210,901,182**	**95,181,056**	**(14,890,227)**	**(134,302,445)**	**(260,533,329)**	**(378,001,106)**	**(468,316,302)**	**(561,009,466)**	**(666,966,219)**
Ending Fund Balance	**249,779,580**	**210,901,182**	**95,181,056**	**(14,890,227)**	**(134,302,445)**	**(260,533,329)**	**(378,001,106)**	**(468,316,302)**	**(561,009,466)**	**(666,966,219)**	**(768,611,836)**

Full details on the assumptions that drive the baseline financial forecast are outlined in the sections that follow.

Revenues

The FY 2018 proposed budget serves as the basis for the ten-year baseline forecast. Assumptions on year-to-year growth or decline are applied to each revenue category in the FY 2018 budget to project revenues in future years. As shown below, General Fund revenues are expected to steadily rise each year. The assumptions underlying this forecast are provided below:

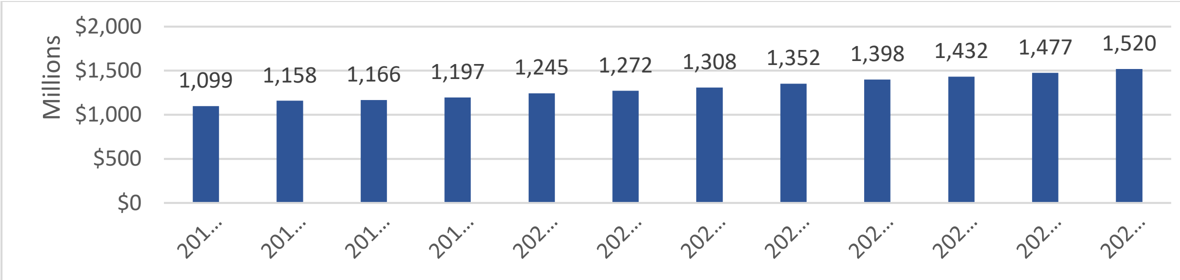
Total General Fund Revenues



Taxes

- **Property Taxes** will grow modestly from 2.2 percent to 4.0 percent per year. This forecast is based on projected City and metropolitan area population growth, capped by combined growth in CPI and population under the revenue cap.
  - *Tax Rates:* Tax rates are 0.5864 per $100 of assessed value in FY 2018 and remain flat throughout the entire projection period. These assumptions represent the "take-no-action" scenario for the purpose of developing a true baseline forecast. When property values increase, a flat tax rate would mean that the City is collecting more taxes than it did in the prior year.
  - *Collection Rate:* The baseline forecast assumes a 98.6 percent current year collection rate for property taxes in each year of the forecast.
    - The combination of these assumptions results in a General Fund property tax revenue forecast of $1.2 billion in FY2019, increasing gradually to $1.5 billion by FY 2027.

General Fund Property Tax Revenue Forecast



- **Delinquent Property Taxes and Rebates** will increase at rates ranging from 2.5 percent to 5.3 percent based on historical growth in current property tax levies.

- **Sales and Franchise Taxes** revenue is assumed to grow modestly each year. This forecast is based on historical trends and projected growth in employment, inflation, and oil prices.

Sales and Franchise Taxes Growth Rates

Revenue Source	2019	2020	2021	2022	2023	2024	2025	2026	2027
Sales Tax	2.4%	3.2%	3.1%	3.0%	2.9%	2.8%	2.9%	2.8%	2.8%
Bingo Tax	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%
Mixed Beverage Tax	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%	8.4%
Natural Gas Franchise Tax	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Electricity Franchise Tax	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Miscellaneous Franchise Fee	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cable TV Franchise Tax	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%
Telephone Franchise Tax	-2.2%	-2.2%	-2.2%	-2.2%	-2.2%	-2.2%	-2.2%	-2.2%	-2.2%
Solid Waste Hauler Franchise Fee	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%
All Other Franchise Fees	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Intergovernmental Revenue

- **Ambulance Services Supplemental Reimbursement** revenue source is expected to decline from $21.5 million in FY 2018 to $17 million in FY 2019, $4 million in FY2020, and then remain at $1.5 million thereafter.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
-20.9%	-76.5%	-62.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

- **1115 Waiver** (Medicaid Transformation) revenue is expected to decline by 50 percent in FY 2019 and expire in FY 2020.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
-50.0%	-100%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

- **TIRZ** revenue is forecasted to grow by an average of 10% per year for the full ten-year period.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%

- **All Other Intergovernmental Revenue** is expected to grow at 2.8% per year.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%

Industrial Assessment

- **Industrial District Assessment is** projected to grow in line with the value of industrial property, increasing with inflation.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
2.1%	2.1%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%	2.2%

Licenses & Permits

- **Licenses and Permits** revenues are expected to grow from 2.5 percent to 3.0 percent per year in the aggregate. Individual growth rates are based on historical trends.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
2.5%	2.6%	2.7%	2.7%	2.8%	2.9%	2.9%	3.0%	3.0%

Fines and Forfeits

- **Municipal Courts Fines and Forfeits** revenues are forecasted to decline from 7.5 percent to 8.1 percent per year in the aggregate, in line with recent trends.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
-8.1%	-8.1%	-8.0%	-7.9%	-7.8%	-7.8%	-7.7%	-7.6%	-7.5%

- **Other Fines and Forfeits** revenues, after declining 0.8 percent in FY 2018, are expected to grow from 1.0 percent to 1.1 percent per year based on past growth trends.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.1%

Charges for Services

- **Ambulance Services** revenue has been increasing in recent years. This forecast assumes that revenue from this source will continue to increase in the coming years at 7.1 percent per year.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%

- **All Other Charges for Services** revenue includes items such as janitorial services, tuition reimbursement, and office equipment rental and is expected to remain flat through FY 2027.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
0%	0%	0%	0%	0%	0%	0%	0%	0%

Interfund Transfers

- **Direct Interfund Transfers** into the General Fund are projected to rise 2.9 percent to 5.3 percent per year, based on historical growth.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
2.9%	3.2%	3.4%	3.6%	3.9%	4.2%	4.6%	4.9%	5.3%

- **Indirect Interfund Transfers** to the General Fund from other funds are expected to grow at 2.9 percent to 4.0 percent per year in line with historical trends.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
2.9%	3.0%	3.1%	3.3%	3.4%	3.6%	3.7%	3.9%	4.0%

Other Revenue Sources (Transfers)

- **Sale of Assets** revenue is expected to drop to the FY 2014 level ($1 million) by FY 2019 and remain flat through the remainder of the projection period.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
-93.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

- **Interest on Pooled Investments** revenue will remain flat in each year through FY 2027.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

- **Transfer from Parking Management** is projected to remain at $7 million a year. Parking Management revenue is a transfer from a Special Revenue Fund and total revenue is used to support debt service, maintenance and operations.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

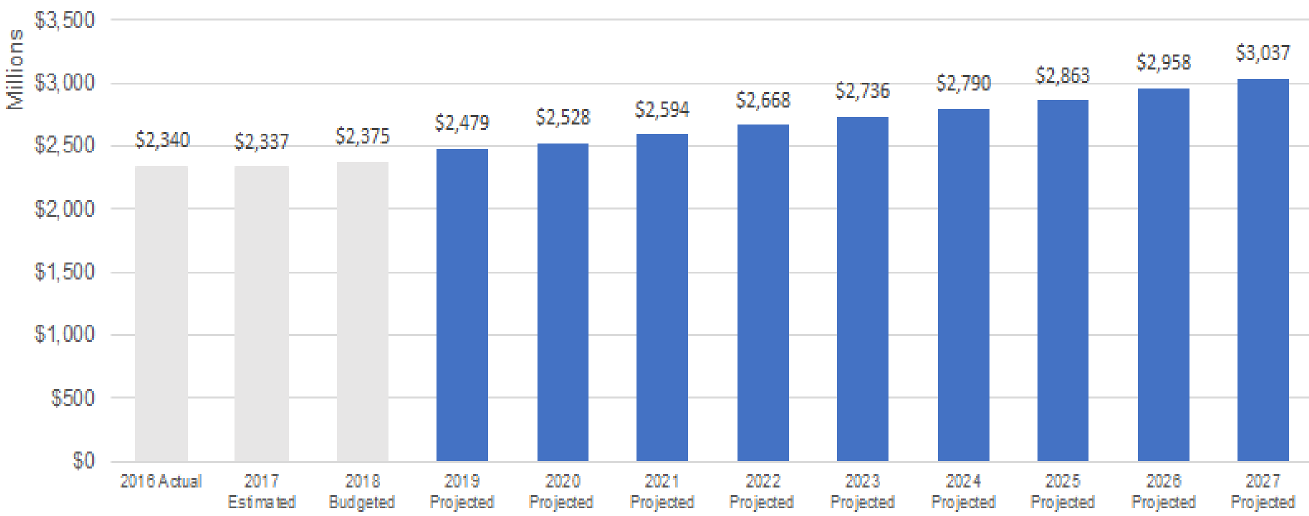
- **All Other Transfers** will remain flat.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Expenditures

Like the baseline revenue forecast, the baseline ten-year expenditure forecast is based on the FY 2018 budget. Assumptions on expenditure growth or decline are applied to each expenditure category in the FY 2018 budget to generate the multiyear forecast. As illustrated in the chart below, total General Fund expenditures are projected to increase steadily each year mostly from growth in employee health care and debt service costs. The specific assumptions driving this forecast are outlined below.

Total General Fund Expenditures



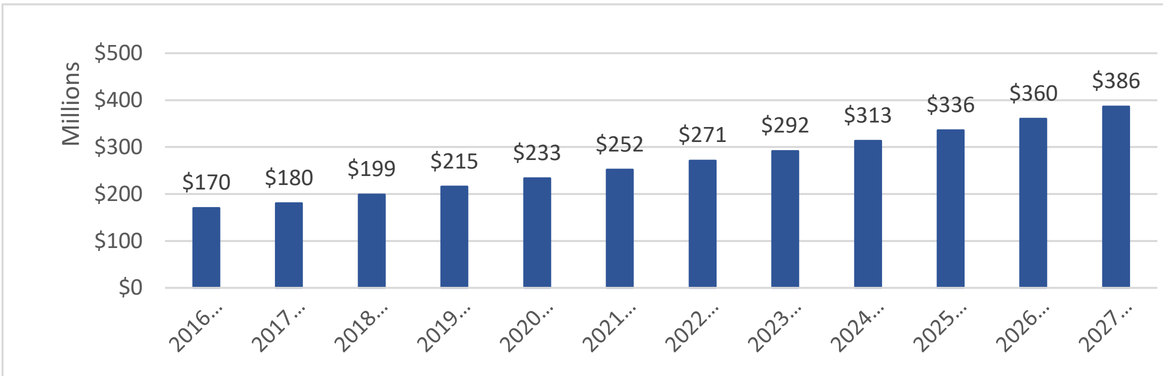
Personnel Costs

All personnel cost forecasts assume no net change in the size of the City's workforce over the full ten-year period. Employee turnover from attrition and new police and fire cadet classes are assumed in the projections. The projected growth in personnel costs is the result of assumed increases in per employee benefits and cash compensation for current staffing levels.

- **Employee Earnings:** For the purposes of developing the baseline projections, full-time salaries, part-time salaries and other elements of paid compensation, such as overtime, termination pay, and shift differential, are assumed to grow at levels required by the current Meet and Confer Agreements and remain flat thereafter. As noted earlier, an increase in salaries based on CPI would grow the overall structural deficit.

- **Health Benefits:** Based on historical trends in health care cost growth nationally, the baseline forecast assumes that the cost of active health benefits will grow by 7.7 percent annually.

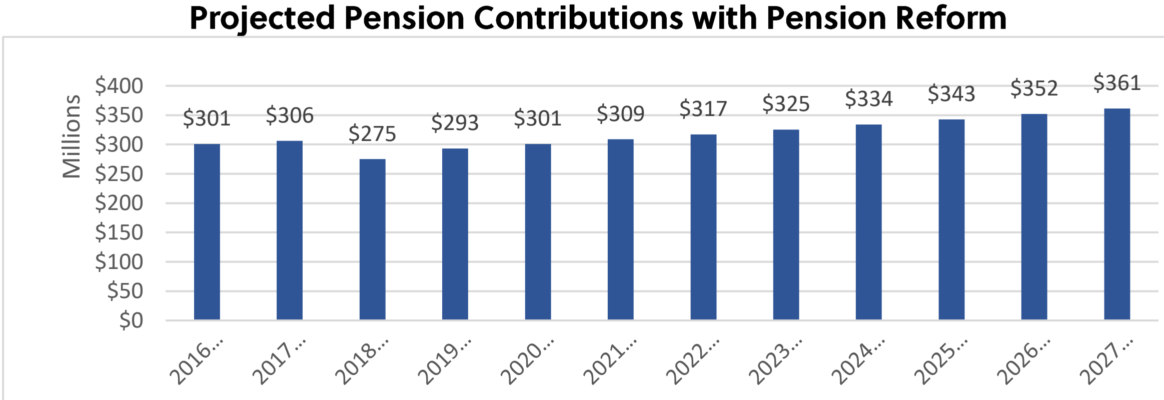
Health Benefit Expenditure Forecast



- **Retiree health benefit:** Costs are expected to grow in line with percentage increases included in the 2014 OPEB actuarial valuation, ranging from 5.4 percent to 11.2 percent per year. Under this baseline forecast, OPEB continues to be funded on a pay-as-you-go basis.

- **Pension:** The pension contribution assumptions are derived from the last contribution estimates under the Mayor's pension reform initiative. They include savings from higher employee contributions, changes to the Cost of Living Adjustment and Deferred Retirement Option Program, and a cash infusion from $1 billion in new pension obligation bonds for the police and civilian systems. Civilian pension expenditures are expected to grow at 2.6 percent in FY 2019, while Police and Fire pension expenditures both increase at 2.7 percent.

Projected Pension Contributions with Pension Reform



- **Other Personnel Costs:** Other personnel costs, which include payroll taxes, disability and life insurance, workers' compensation, equipment allowance and other personnel related expenditures, are projected to remain flat over the ten-year period.

Supplies

- **Fuel:** Costs are forecast to grow at 0.5 percent to 0.6 percent per year through FY 2022, and at inflation thereafter.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
0.5%	0.5%	0.5%	0.6%	2.6%	2.2%	2.1%	2.2%	2.1%

- **All Other Supplies:** Generally, all other supplies grow at historical growth rates, roughly 1.0 percent – 1.3 percent per year.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
1.0%	1.0%	1.1%	1.1%	1.1%	1.2%	1.2%	1.3%	1.3%

Other Services and Charges

- **Claims and Judgments:** Expenditures are projected to remain flat through the full ten-year period. Historically spending has varied significantly from year to year.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

- **Limited Purpose Annexation:** Payments for extra-territorial jurisdictions grows in line with the sales tax at 2.4 percent in FY 2019 and between 2.8 percent and 3.2 percent thereafter.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
2.4%	3.2%	3.1%	3.0%	2.9%	2.8%	2.9%	2.8%	2.8%

- **Interfund Vehicle Services:** Expenditures relating to fleet management grow at 2.7 percent annually through FY 2021, decline by 2.0 percent in FY 2022, and grow in line with inflation thereafter.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
2.7%	2.7%	2.7%	-2.0%	2.1%	2.2%	2.1%	2.2%	2.2%

- **Intergovernmental Contribution for the 1115 Waiver:** This expenditure declines by 50 percent in FY 2019 and is eliminated in FY 2020, corresponding with the forecast for revenue.

FY2019	*FY2020*	*FY2021*	*FY2022*	*FY2023*	*FY2024*	*FY2025*	*FY2026*	*FY2027*
-50%	**-100%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**

- **Zoo Contract:** Expenditures grow in line with inflation at 2.1 percent to 2.2 percent per year.

FY2019	*FY2020*	*FY2021*	*FY2022*	*FY2023*	*FY2024*	*FY2025*	*FY2026*	*FY2027*
2.1%	**2.1%**	**2.2%**	**2.2%**	**2.2%**	**2.2%**	**2.2%**	**2.2%**	**2.2%**

- **All Other Services and Charges:** Expenditures grow between 3.6 percent and 6.4 percent per year based on historical growth trends.

FY2019	*FY2020*	*FY2021*	*FY2022*	*FY2023*	*FY2024*	*FY2025*	*FY2026*	*FY2027*
3.6%	**3.8%**	**4.1%**	**5.7%**	**3.1%**	**4.7%**	**5.0%**	**6.4%**	**4.3%**

Utilities

- **Electricity, Natural Gas, and Telemetry Services** costs are forecasted to remain flat for the full ten-year period in line with historical growth.

FY2019	*FY2020*	*FY2021*	*FY2022*	*FY2023*	*FY2024*	*FY2025*	*FY2026*	*FY2027*
0.0%	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**

- **Refuse Disposal** costs grow at 3.8 percent per year, a doubling of historical average growth in expectation of higher costs in this area in the near future.

FY2019	*FY2020*	*FY2021*	*FY2022*	*FY2023*	*FY2024*	*FY2025*	*FY2026*	*FY2027*
3.8%	**3.8%**	**3.8%**	**3.8%**	**3.8%**	**3.8%**	**3.8%**	**3.8%**	**3.8%**

- **Voice Services** expenditures are projected to grow at 4 percent per year for the full ten-year projection period, in line with historical growth.

FY2019	*FY2020*	*FY2021*	*FY2022*	*FY2023*	*FY2024*	*FY2025*	*FY2026*	*FY2027*
4.0%	**4.0%**	**4.0%**	**4.0%**	**4.0%**	**4.0%**	**4.0%**	**4.0%**	**4.0%**

- **Repairs and Maintenance** costs remain flat, as these expenditures have varied from year to year.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Equipment

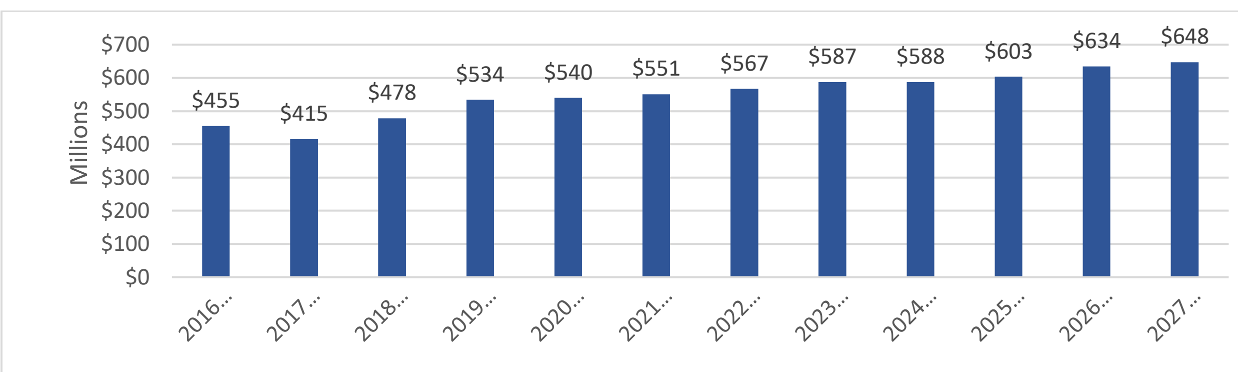
- **Equipment expenditures** are projected to remain flat through the projection period due to historical year-to-year volatility in these expenditures.

FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Debt Service and Other Uses

- **Debt service and other uses** in the aggregate fluctuate in line with the timing of anticipated debt payments.

Debt Service and Other Uses Forecast



- **Other Interest** payments remain flat for the full projection period.
- **Captured Revenue Transfer to DDSRF** is based on the 11.8 cents dedicated DDSRF levy, adjusted by the property tax revenue cap.
- **Transfers to the Component Unit** are projected at the same level for the entire ten-year period.

- **Transfers to Fleet/Equipment Acquisition and Capital Expenditures** are one-time, non-recurring expenditures scheduled to be eliminated in FY2019.

- **All Other Transfers** out of the General Fund, including transfers to the Maintenance Renewal and Replacement Fund, PIB Bonds Debt Service, and Special Revenue Funds grow in line with the Finance Department projection schedules.

DDSRF Forecast

DDSRF was established in 2012 and provides a dedicated source of funding for street and drainage improvement, enhancement, and rehabilitation projects. DDSRF also funds Public Works and Engineering (PWE) staff in the Streets and Drainage and Traffic Operations divisions.

Based on the short history of the DDSRF, PFM and the City Finance team developed a forecast for FY 2019 – FY 2027. Under this baseline forecast, revenue will grow from $201.5 million in FY 2018 to $370.7 million in FY 2027. During the same period, spending will grow from $216 million to $365 million.

Baseline DDSRF Financial Forecast - FY2018 Proposed Budget & FY2019-FY2027 Forecast

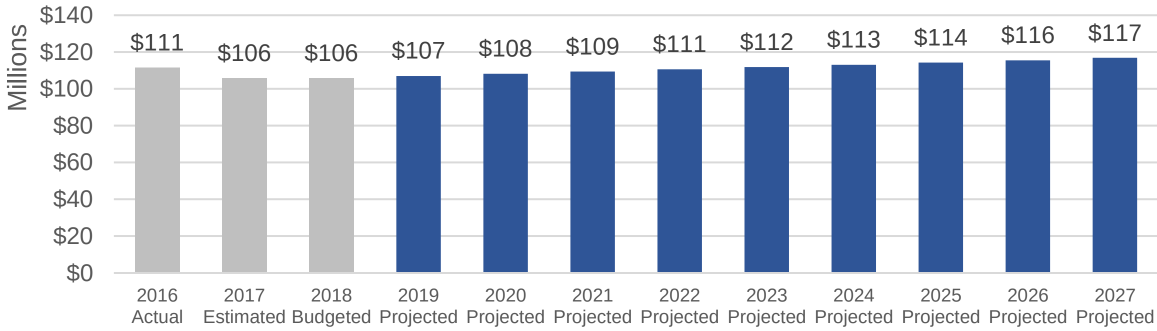
Fiscal Year Ending:	*2017*	*2018*	*2019*	*2020*	*2021*	*2022*	*2023*	*2024*	*2025*	*2026*	*2027*
	Estimated	*Budgeted*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
DDSRF											
Revenues											
Licenses and Permits	2,375,100	2,053,100	2,180,095	2,314,945	2,458,136	2,610,185	2,771,638	2,943,078	3,125,123	3,318,428	3,523,690
Charges for Services	106,968,998	107,006,200	108,167,915	109,342,373	110,529,715	111,730,081	112,943,615	114,170,461	115,410,764	116,664,673	117,932,337
Other Fines and Forfeits	500	500	506	513	519	526	532	539	546	552	559
Interest	600,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
Intergovernmental	61,576,000	49,540,000	50,944,592	52,389,016	53,874,402	55,401,911	56,972,738	58,588,111	60,249,293	61,957,584	63,714,319
Miscellaneous/Other	959,202	959,200	959,200	959,200	959,200	959,200	959,200	959,200	959,200	959,200	959,200
Other Resources	34,741,000	34,108,000	48,252,010	48,588,933	76,329,233	91,003,097	95,654,576	140,818,758	147,674,549	179,207,455	175,727,603
Direct Interfund Services	7,202,100	7,302,200	7,386,576	7,476,723	7,573,531	7,678,034	7,791,438	7,915,143	8,050,783	8,200,256	8,365,774
Total Revenue	**214,422,900**	**201,469,200**	**218,390,895**	**221,571,703**	**252,224,737**	**269,883,034**	**277,593,736**	**325,895,289**	**335,970,257**	**370,808,148**	**370,723,482**
Revenue Growth	*-8.5%*	*-6.0%*	*8.4%*	*1.5%*	*13.8%*	*7.0%*	*2.9%*	*17.4%*	*3.1%*	*10.4%*	*0.0%*
Expenses											
Personnel Services	36,360,643	38,391,500	39,535,401	40,154,694	40,809,406	41,502,905	42,237,406	43,013,843	43,838,870	44,715,938	45,648,754
Salaries	*23,587,769*	*24,563,960*	*24,564,190*	*24,564,425*	*24,564,666*	*24,564,911*	*24,565,161*	*24,565,417*	*24,565,678*	*24,565,945*	*24,566,217*
Benefits	*12,772,874*	*13,827,540*	*14,971,210*	*15,590,269*	*16,244,740*	*16,937,994*	*17,672,245*	*18,448,426*	*19,273,192*	*20,149,993*	*21,082,537*
Supplies	12,938,062	13,051,100	13,059,539	13,068,272	13,077,310	13,086,666	13,119,313	13,147,395	13,176,149	13,205,593	13,235,744
Other Services and Charges	27,084,335	29,331,200	29,889,041	30,506,656	31,191,508	31,755,710	32,570,363	33,478,344	34,491,738	35,624,246	36,891,405
Services and Charges	*25,619,700*	*27,795,700*	*28,327,740*	*28,918,550*	*29,575,553*	*30,110,822*	*30,895,417*	*31,772,169*	*32,753,119*	*33,851,920*	*35,084,059*
Utilities	*929,229*	*922,400*	*948,201*	*975,006*	*1,002,855*	*1,031,787*	*1,061,846*	*1,093,075*	*1,125,519*	*1,159,226*	*1,194,246*
Repairs and Maintenance	*535,406*	*613,100*	*613,100*	*613,100*	*613,100*	*613,100*	*613,100*	*613,100*	*613,100*	*613,100*	*613,100*
Equipment	4,588,150	11,109,800	11,109,800	11,109,800	11,109,800	11,109,800	11,109,800	11,109,800	11,109,800	11,109,800	11,109,800
Debt Service and Other Uses	127,983,271	124,070,100	130,656,910	130,993,833	158,734,133	173,407,997	178,059,476	223,223,658	230,079,449	261,612,355	258,132,503
Total Expenses	**208,954,461**	**215,953,700**	**224,250,691**	**225,833,255**	**254,922,157**	**270,863,078**	**277,096,358**	**323,973,040**	**332,696,007**	**366,267,932**	**365,018,206**
Expenditure Growth	*3.3%*	*3.3%*	*3.8%*	*0.7%*	*12.9%*	*6.3%*	*2.3%*	*16.9%*	*2.7%*	*10.1%*	*-0.3%*
Operating Surplus/Deficit	**5,468,439**	**(14,484,500)**	**(5,859,796)**	**(4,261,551)**	**(2,697,420)**	**(980,044)**	**497,379**	**1,922,249**	**3,274,251**	**4,540,216**	**5,705,276**
Beginning Fund Balance	**50,389,708**	**55,858,147**	**41,373,647**	**35,513,851**	**31,252,299**	**28,554,879**	**27,574,835**	**28,072,214**	**29,994,463**	**33,268,714**	**37,808,930**
Ending Fund Balance	**55,858,147**	**41,373,647**	**35,513,851**	**31,252,299**	**28,554,879**	**27,574,835**	**28,072,214**	**29,994,463**	**33,268,714**	**37,808,930**	**43,514,206**

Full details on the assumptions that drive the DDSRF financial forecast are outlined in the sections that follow.

Revenues

- **Drainage Charge Revenues** are the single largest revenue source for the DDSRF at a budgeted $106 million or approximately 53 percent of revenues in FY 2018. The drainage charge is assessed to Houston property owners served by the drainage utility system based on the square footage of actual impervious surface on their property. Drainage charge revenues will grow modestly at 1.1 percent per year. This forecast is based on historical growth in this revenue source since the inception of the DDSRF.

DDSRF Drainage Charge Revenue Forecast



- **Intergovernmental Revenue from Metro** is the second largest revenue source at approximately 25 percent or $34.1 million in FY 2018. This consists of payments from METRO for the cost of reimbursable street maintenance, traffic, and infrastructure activities by the City of Houston. This revenue source is supported by METRO's one percent sales tax. Intergovernmental revenue is assumed to grow at 2.8 percent annually in line with historical growth and is roughly in line with the sales tax forecast.

- **Total Other Revenues** include the **Captured Revenue Transfer from the General Fund,** and is based on the 11.8 cent dedicated DDSRF levy, adjusted by the property tax cap. These revenues grow in line with the capped property tax and with the street and drainage debt payments from the General Fund, which determine the remaining property tax revenues transferred to the DDSRF.

- **Licenses and Permit** revenues consist of Traffic Operations mobility permits and sign fees. These revenues are expected to grow at a combined rate of 6.2 percent per year, in line with the historical trend. **Fines and Forfeits** are returned check charges in the Traffic Operations Division and grow at a 1.3 percent annually, reflecting historical fines and forfeits growth. The **Interfund Drainage Fee** grows at 0.7 percent per year in line with its historical trend. **Other Interfund Services** grow at 16.4 percent annually, the historical average growth rate.

  All Other Charges and Services, Interest on Pooled Investments, TIRZ Municipal Service Fees, and **other miscellaneous revenues** are projected to remain flat in line with historical growth.

Expenditures

- **Transfers to Capital Projects** is the single largest expenditure category within the DDSRF at **46 percent** of budgeted spending in FY 2018. These transfers vary in line with the captured revenue transfer from the General Fund. All additional revenues transferred from the General Fund are assumed to be transferred from the DDSRF to the Capital Projects Fund for capital purposes. These funds vary from year to year as they represent the balance of property tax revenues remaining after street and drainage debt service is covered by the General Fund. These debt payments fluctuate in line with the City's debt schedule, producing an irregular pattern of residual tax revenues directly transferred to the DDSRF for capital purposes.

- As all employees funded by DDSRF are civilians and are assumed to receive no wage increases through FY 2027, all **salaries** and **salary-related items** remain flat throughout the projection period.

- **Pension payments** grow in line with the pension reform projections and grow at 11.8 percent in FY 2019 and between 2.6 percent and 2.7 percent through FY 2027. All DDSRF employees are part of the civilian pension system; therefore growth matches the projections for that system.

- **Health Insurance** grows between 7.6 percent and 7.8 percent annually based on historical trends in health care cost growth nationally. **All Other Benefits** grow at a combined rate of between 0.5 percent and 0.6 percent per year based on historical growth.

- **Supplies**, most of which are construction materials and associated supplies, grow at a combined rate of between 0.1 percent and 0.2 percent per year, in line with historical growth.

- **Infrastructure Maintenance Service** expenditures remain flat throughout the projection period due to historic volatility in this spending.

- **Interfund Vehicle Services** grow at 2.7 percent per year through FY 2021 in line with City projections, drop 2 percent in FY 2022, then grow at CPI thereafter.

- **All Other Services and Charges** grow at a combined rate of between 3 percent and 5.7 percent annually, based on historical trends in individual services and charges.

- **Utilities,** including electricity, natural gas, refuse disposal, and voice services, increase at a combined rate of between 2.8 percent and 3.0 percent per year based on the historical trends of utility spending by type.

- **Repair and Maintenance** and **Equipment** expenditures remain flat through the entire projection period, given historical volatility in this spending.

- **All Other Transfers,** which include **Chapter 380 payments, transfers to the Stormwater Fund,** and **other miscellaneous uses,** remain flat given past volatility in these expenditures.

Chapter III. The Impact of Pension Reform and the Revenue Cap on the Structural Deficit

The baseline forecast for Houston assumes implementation of pension reform, but it does not assume a change in the revenue cap. This chapter briefly examines the impact of both on the City's ability to close its structural deficit.

The Impact of Pension Reform

It would be impossible to ensure the City's long-term fiscal sustainability without addressing the rapid and continued growth in the cost of municipal pensions. At the time this plan was commissioned, Houston had an $8.2 billion pension obligation that it could not realistically meet without reform.

Even as the City's spending on pensions increased for more than a decade, Houston did not make annual actuarially required contributions for pension funds covering its employees.

Under a plan developed by the Turner Administration and adopted by the City Council and the Texas State Legislature, the City would adjust benefits to achieve $2.99 billion in pension savings and fund an additional $1 billion through issuing pension obligation bonds. The City would also manage costs more effectively through a closed 30-year amortization period and by creating a corridor that could trigger additional benefit adjustments, among other options, to control cost.

The savings to the City would be generated across all funds. The PFM team reviewed data provided by City Finance to determine impacts specific to the General Fund and to the DDSRF over the period covered by the Ten Year Plan.

The effect of these reforms will have an impact on the level of required contributions by the City as well as its overall long-term liability. The net effect on the General Fund will be savings of just over $2 billion between FY 2019 – FY 2027:[6]

[6] The City's annual costs and savings projections are based on a different set of assumptions than those contained in the baseline forecast for the Ten Year Plan. For example, the City assumes growth in headcount and wages beyond that contemplated by the baseline forecast.

FY 2019	**$ 233,629,760**
FY 2020	**$ 233,573,004**
FY 2021	**$ 233,461,390**
FY 2022	**$ 233,251,805**
FY 2023	**$ 233,035,736**
FY 2024	**$ 232,694,099**
FY 2025	**$ 232,373,747**
FY 2026	**$ 231,900,481**
FY 2027	**$ 231,406,408**
TOTAL	**$ 2,095,326,430**

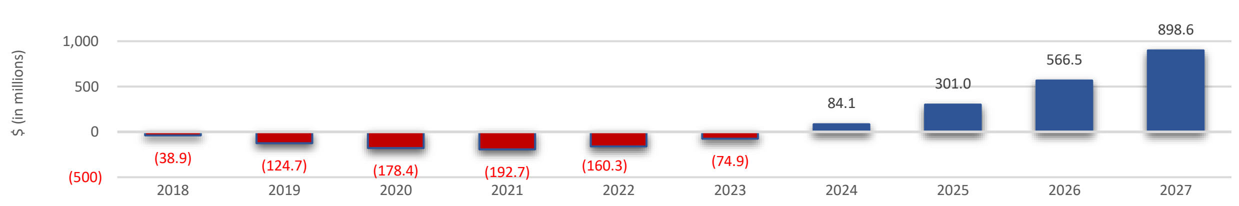
The Impact of the Revenue Cap

In developing our baseline forecast, we did not assume any change in the current cap on property tax revenue. Starting with current rates, we projected increases in assessed value. But each year, the revenue cap was applied to limit growth in revenue.

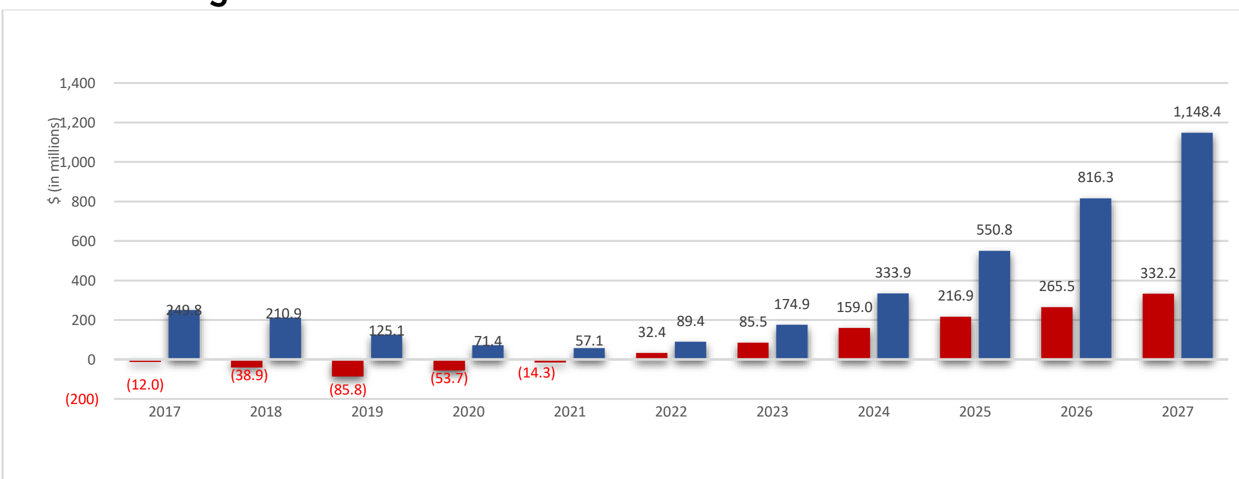
Between FY 2011 and FY 2016, property value in Houston increased by 43.8 percent: yet, because of the revenue cap, actual property tax revenue increased by just 27.8 percent. Between FY 2016 and FY 2017, property value increased by 7.7 percent: because of the revenue cap, growth in property tax revenue was limited to 3.7 percent.

Over the Ten Year Plan, our preliminary review indicates that the combined effect of pension reform and eliminating the revenue cap would close the City's structural deficit and provide sufficient resources in the out years for CPI growth in wages. The City would generate a ten-year cumulative surplus of $899 million. This analysis assumes that beginning in FY 2019, there would be no cap on actual revenue growth. It does, however, assume that in the first year, actual property tax growth would be limited by the projected growth in property value.

FY2018- FY2027 Cumulative Structural Gap – Lift Revenue Cap and CPI Growth in Wages



FY2017- FY2027 Surplus/Deficit and Fund Balance – Lift Revenue Cap and CPI Growth in Wages



As a result, the City would be able to make significant progress in meeting its next major long term fiscal challenge – OPEB liability. Like many cities, Houston currently funds its retiree benefits – or Other Post-Employment Benefits (OPEB) – on a pay-as-you-go basis. In the long term, this is not a sustainable approach. As of the City's FY 2016 CAFR, the City had an unfunded OPEB liability of approximately $2 billion.

In considering the implications of eliminating the revenue cap, it is also important to understand what the potential impact would be on the overall ability to attract and retain new residents and new businesses. As part of the development of the Ten Year Plan, the City asked that PFM assess Houston's tax competitiveness.

Rather than merely looking at tax rates, PFM examined actual tax burden – the amount that different households pay for government. PFM compared the major state and local tax burdens of Houstonians with those of residents living in peer cities elsewhere in the region, the state, and the nation. Comparison cities include Houston's five largest incorporated suburbs (Katy, Sugar Land, Pasadena, Pearland, and Woodlands); the four other major cities in Texas (Austin, Dallas, El Paso, and San

Antonio); and the five other cities in the U.S. with over 1.5 million residents (New York, Los Angeles, Chicago, Philadelphia, and Phoenix).

The three major taxes used in the comparison are the general sales and use tax, the real property tax on residential property and individual income tax for those municipalities located outside of Texas. Because some communities administer public services through special taxing districts – such as metropolitan utilities districts (MUDs) or fire service districts -- instead of through the local municipality, the analysis takes into account all overlapping state and local taxing jurisdictions. Finally, in order to compare how each municipality distributes its tax burden among its residents, the aggregate tax burden was calculated based on the following gross annual household income levels: $25,000; $50,000; $75,000; $100,000; and $150,000.

Elsewhere in the country, one of the main advantages of residing in a region's suburbs is lower tax burdens compared to urbanized cities. However, from a tax liability standpoint, the City of Houston is an extremely attractive and affordable place to live compared to local, state, and national peers. Nearby incorporated suburbs have comparable tax burdens, and all but Sugar Land have higher effective property tax rates due to less generous exemptions and credits.

Across all income brackets, Houstonians' tax burdens are lower than those of residents living in other large U.S. cities. Houstonians earning over $75,000 would pay more than twice as much in taxes should they relocate to New York or Philadelphia, and over 50 percent more should they relocate to Los Angeles, Chicago, or Phoenix.

The gap between Houstonians' tax burdens and the benchmark median increases as household income grows: the median estimated tax burden for a family earning $25,000 is 2.9 percent higher than the Houston tax burden, and 29.8 percent higher for a family earning $150,000 annually. In other words, the tax liability of Houston family earning $25,000 annually is approximately 37.1 percent of the tax liability of a family earning $150,000. With the exception of Chicago (32.4 percent), all other major U.S. cities have structured their tax policies so as to limit the tax liability of lower income households to less than 27 percent of the tax liability of higher income households.

Houston's relatively low tax burden and the reduced variance in tax liability across income brackets are partially due to the lack of personal income tax in Texas. It is relatively easy to graduate personal income tax rates to increase the marginal tax rates for higher earning households, whereas sales taxes do not vary based on consumers' income and are therefore regressive.

Estimated Overall Tax Burdens by Income Level (Including Property Tax, Sales Tax, and Income Tax)

Households Earning $25,000/year			Households Earning $50,000/year			Households Earning $75,000/year		
Rank	City	Est. Tax Burden	Rank	City	Est. Tax Burden	Rank	City	Est. Tax Burden
1	Philadelphia, PA	$4,790	1	Philadelphia, PA	$6,473	1	New York, NY	$9,458
2	Chicago, IL	$4,295	2	New York, NY	$5,851	2	Philadelphia, PA	$9,115
3	Los Angeles, CA	$4,006	3	Chicago, IL	$4,936	3	Chicago, IL	$7,199
4	Phoenix, AZ	$3,448	4	Phoenix, AZ	$4,819	4	Phoenix, AZ	$7,158
5	Dallas, TX	$3,333	5	Los Angeles, CA	$4,635	5	Los Angeles, CA	$6,917
6	Austin, TX	$3,247	6	El Paso, TX	$4,045	6	El Paso, TX	$6,020
7	New York, NY	$3,146	7	Austin, TX	$4,000	7	Austin, TX	$5,942
8	Houston, TX	$2,976	8	San Antonio, TX	$3,735	8	San Antonio, TX	$5,543
8	Katy, TX	$2,976	9	Pearland, TX	$3,577	9	Pearland, TX	$5,295
8	Sugar Land, TX	$2,976	10	Dallas, TX	$3,569	10	Dallas, TX	$5,279
8	Pasadena, TX	$2,976	11	Pasadena, TX	$3,373	11	Pasadena, TX	$4,982
8	Pearland, TX	$2,976	12	Katy, TX	$3,176	12	Katy, TX	$4,675
8	Woodlands, TX	$2,976	13	Houston, TX	$3,110	13	Woodlands, TX	$4,587
9	San Antonio, TX	$2,913	14	Sugar Land, TX	$3,076	14	Houston, TX	$4,576
10	El Paso, TX	$2,789	15	Woodlands, TX	$3,070	15	Sugar Land, TX	$4,536
Median (excl. Houston)		**$3,061**	**Median (excl. Houston)**		**$3,868**	**Median (excl. Houston)**		**$5,742**
Median vs. Houston		**2.9%**	**Median vs. Houston**		**24.4%**	**Median vs. Houston**		**25.5%**

Households Earning $100,000/year			Households Earning $150,000/year		
Rank	City	Est. Tax Burden	Rank	City	Est. Tax Burden
1	New York, NY	$13,398	1	New York, NY	$20,780
2	Philadelphia, PA	$12,694	2	Philadelphia, PA	$18,438
3	Los Angeles, CA	$9,697	3	Los Angeles, CA	$15,621
4	Phoenix, AZ	$9,379	4	Phoenix, AZ	$13,679
5	Chicago, IL	$9,357	5	Chicago, IL	$13,270
6	El Paso, TX	$7,669	6	El Paso, TX	$10,989
7	Austin, TX	$7,557	7	Austin, TX	$10,810
8	San Antonio, TX	$7,025	8	San Antonio, TX	$10,010
9	Pearland, TX	$6,686	9	Pearland, TX	$9,490
10	Dallas, TX	$6,662	10	Dallas, TX	$9,451
11	Pasadena, TX	$6,266	11	Pasadena, TX	$8,854
12	Katy, TX	$5,848	12	Katy, TX	$8,215
13	Woodlands, TX	$5,778	13	Woodlands, TX	$8,181
14	Houston, TX	$5,717	14	Houston, TX	$8,019
15	Sugar Land, TX	$5,670	15	Sugar Land, TX	$7,960
Median (excl. Houston)		**$7,291**	**Median (excl. Houston)**		**$10,410**
Median vs. Houston		**27.5%**	**Median vs. Houston**		**29.8%**

Even without a personal income tax, most other cities in Texas have opted for a more progressive tax structure that results in higher aggregate tax burdens. For all but the lowest-income households, tax burdens are lower in Houston than in any other major Texas city. Tax liability for Dallas residents ranges from 14.7 percent to 17.8 percent higher than Houston's tax liability for households earning $50,000 and $150,000 respectively.

Houston also has larger aggregate exemptions than most Texas cities reviewed and is second only to Philadelphia among the national peer comparisons. Over 22 percent of the City of Houston's total assessed value is exempt from property tax levies, due to a combination of partial exemptions (homestead, senior, disabled veterans, etc.) and total exemptions (property owned by charities, public entities, etc.). By comparison, the City of Austin property exemptions account for only 19.4 percent, despite the significant number of state properties.

Most taxing jurisdictions in Houston offer a 20 percent homestead exemption, comparable to taxing jurisdictions in Dallas and Austin but significantly more generous than taxing jurisdictions in San Antonio and El Paso. Of the 10 Texas cities reviewed, only the Cities of Houston, Dallas, and Katy offered a municipal homestead exemption of 20 percent; in other cities, the homestead exemption ranged from 15 percent (Pasadena) to $5,000 -- the minimum allowable under state law (El Paso and San Antonio).

Total Tax Exemptions as % of Total Assessed Valuation (a)

Rank	City	%
1	Katy, TX	28.2%
2	Dallas, TX	26.6%
3	Pasadena, TX	23.4%
4	Houston, TX	22.5%
5	Austin, TX	19.4%
6	San Antonio, TX	16.7%
7	Sugar Land, TX	14.5%
8	El Paso, TX	9.4%
9	Woodlands, TX	8.5%
10	Pearland, TX	6.5%
	Median (State Peers)	**18.1%**
	vs Houston	**-19.9%**
	Median (Metro Peers)	**14.5%**
	vs Houston	**-35.6%**

Note: Exemptions include the assessed valuation of properties not subject to tax (ex: public or nonprofit properties), as well as the aggregate value of all partial exemptions awarded (homestead, senior, disabled veteran, historic properties, transitional housing, etc).

Source: FY2015 CAFRS and County Assessors Annual Reports

Property Tax

Nominal Property Tax Rates per $100 of Assessed Value - Residential

	City	County	School and Community College Districts (a)	Utilities and Flood Districts (b)	Other	Total
Houston, TX	0.60%	0.42%	1.20%	0.03%	0.29%	**2.53%**
National Comparisons						
New York, NY	19.55%					**19.55%**
Los Angeles, CA	0.03%	1%	0.15%	0.004%		**1.18%**
Chicago, IL	1.19%	0.57%	4.00%	0.43%	0.62%	**6.81%**
Philadelphia, PA	0.63%		0.77%			**1.40%**
Phoenix, AZ	1.82%	1.36%	14.27%	0.30%	0.37%	**18.12%**
Median						***6.81%***
State Comparisons						
Austin TX	0.48%	0.46%	1.50%	0.34%	0.13%	**2.90%**
Dallas TX	0.80%	0.23%	1.42%		0.29%	**2.73%**
El Paso TX	0.73%	0.45%	1.48%		0.22%	**2.88%**
San Antonio TX	0.56%	0.30%	1.54%	0.03%	0.28%	**2.70%**
Median						***2.81%***
Metro Comparisons						
Katy, TX	0.53%	0.42%	1.19%	0.03%	0.19%	**2.35%**
Sugar Land, TX	0.32%	0.49%	1.34%			**2.14%**
Pasadena, TX	0.58%	0.42%	1.36%	0.03%	0.37%	**2.75%**
Pearland, TX	0.71%	0.49%	1.42%	0.22%		**2.82%**
Woodlands, TX	0.23%	0.48%	1.39%		0.07%	**2.17%**
Median						***2.35%***

Note: Tax rates listed do not reflect any exemptions or credits.
(a) In cases where one municipality is served by multiple school districts, the average tax rate is displayed abo
(b) In cases where one municipality is served by multiple utility districts (MUDs), and those utility districts cover a majority of the municipal area, the average tax rate is displayed above. In cases where only a small proportion of the city is served by MUDs, no MUD tax rate is displayed above.
Source: City CAFRs and County Assessor Districts

Real property tax burdens are a function of residential real estate values, the ratio of assessed value to market value, the tax rate, and any dedications or credits allowed by the taxing jurisdiction. The data above is intended to represent the total rate applicable to a homeowner in each city; as such, in cases where a city includes parts of multiple school districts or utility districts, the average of those rates is used. Note that these nominal rates are the rates adopted by each jurisdiction and are not reflective of exemptions or various assessment levels incorporated into each city's tax policy.

As shown in the table below, Houston's nominal property tax rate is comparable to that of nearby suburbs but significantly lower than large Texas and U.S. cities. This appears to be largely due to the relatively low school district tax rate: only Katy Independent School District has a lower property tax rate than the average school property tax rate for Houston.

In addition to tax rate differences, a household's property tax burden is also determined by the market value of residential homes, which vary substantially from one city to another. For example, according to 2014 American Community Survey (ACS) data, the median value of an owner-occupied home in the Houston MSA is $144,000, compared to $196,500 in the Austin MSA or $454,200 in the Los Angeles MSA.

The table below lists housing value assumptions used for each city by income level. These assumptions were calculated using the same methodology used to develop the annual Washington D.C. tax competitiveness studies.[7] The hypothetical housing values for each income level (except the $25,000 income level) are derived from five year 2014 ACS data and scaled to the various income levels. This involved dividing the median housing value of each MSA by the MSA's household income of mortgage holders and then multiplying that number by each income level for which home ownership is assumed. Though this approach captures market differences among regions, one disadvantage is that it does not differentiate between the different housing markets in suburban Houston municipalities. These figures also do not reflect the relative availability of units at these various price points.

Housing Value Assumptions at Indicated Income Levels

	$50,000	$75,000	$100,000	$150,000
Houston, TX	$79,901.45	$119,852.18	$159,802.91	$239,704.36
National Comparisons				
New York, NY	$197,462.80	$296,194.21	$394,925.61	$592,388.41
Los Angeles, CA	$229,444.93	$344,167.39	$458,889.85	$688,334.78
Chicago, IL	$125,359.55	$188,039.32	$250,719.10	$376,078.64
Philadelphia, PA	$131,485.43	$197,228.14	$262,970.86	$394,456.29
Phoenix, AZ	$111,756.05	$167,634.08	$223,512.11	$335,268.16
Median	***$131,485.43***	***$197,228.14***	***$262,970.86***	***$394,456.29***
State Comparisons				
Austin, TX	$105,372.10	$158,058.15	$210,744.20	$316,116.30
Dallas, TX	$84,608.87	$126,913.31	$169,217.74	$253,826.62
El Paso, TX	$91,830.74	$137,746.11	$183,661.48	$275,492.21
San Antonio, TX	$85,537.44	$128,306.16	$171,074.87	$256,612.31
Median	***$88,684.09***	***$133,026.13***	***$177,368.17***	***$266,052.26***
Metro Comparisons				
Katy, TX	$79,901.45	$119,852.18	$159,802.91	$239,704.36
Sugar Land, TX	$79,901.45	$119,852.18	$159,802.91	$239,704.36
Pasadena, TX	$79,901.45	$119,852.18	$159,802.91	$239,704.36
Pearland, TX	$79,901.45	$119,852.18	$159,802.91	$239,704.36
Woodlands, TX	$79,901.45	$119,852.18	$159,802.91	$239,704.36
Median	***$79,901.45***	***$119,852.18***	***$159,802.91***	***$239,704.36***

Source: U.S. Dept of Housing and Urban Development, Median Fair Market Rents by MSA; U.S. Census, American Community Survey 2014; MSA median household incomes of mortgage holders and MSA median house values

The study assumes that the hypothetical household at the $25,000 income level does not own a home and therefore does not pay property tax directly. Instead, the table

[7] District of Columbia. Dec 2015. "Tax Rates and Tax Burdens in the District of Columbia - A Nationwide Comparison." Available at: http://cfo.dc.gov/sites/default/files/dc/sites/ocfo/publication/attachments/2014%2051City%20Study.pdf

below assumes that 20 percent of the rent paid by these households goes toward paying property taxes. Fair market rent for each MSA was obtained from the FY 2015 U.S. Department of Housing and Urban Development rent estimates for one-bedroom housing units.

In computing property tax burdens, it is also necessary to consider the various exemptions, limitations, and credits offered by each jurisdiction. In Texas, for example, statewide tax policy allows for a $15,000 homestead exemption on the FY 2015 property tax rate associated with independent schools; the anticipated increase to $25,000 in FY 2016 is not reflected in these figures.

The figures below account for the various homestead exemptions and credits extended to primary residences by each taxing jurisdiction, as well as differences in effective assessment rates. Other exemptions – including those commonly offered to senior citizens and the disabled – are not included, nor are caps on tax liability growth.

Estimated Property Tax Burdens by Income Level

Households Earning $25,000/year			Households Earning $50,000/year			Households Earning $75,000/year		
Rank	**City**	**Est. Tax Burden**	**Rank**	**City**	**Est. Tax Burden**	**Rank**	**City**	**Est. Tax Burden**
1	New York, NY	$2,998	1	Los Angeles, CA	$2,621	1	Los Angeles, CA	$3,973
2	Los Angeles, CA	$2,647	2	El Paso, TX	$2,384	2	El Paso, TX	$3,707
3	Philadelphia, PA	$2,302	3	Austin, TX	$2,339	3	Austin, TX	$3,629
4	Chicago, IL	$2,213	4	San Antonio, TX	$2,074	4	San Antonio, TX	$3,230
5	Dallas, TX	$2,088	5	Phoenix, AZ	$2,025	5	New York, NY	$3,166
6	Austi,n TX	$2,002	6	New York, NY	$2,008	6	Phoenix, AZ	$3,038
7	Phoenix, AZ	$1,764	7	Pearland, TX	$1,916	7	Pearland, TX	$2,982
8	Houston, TX	$1,730	8	Dallas, TX	$1,908	8	Dallas, TX	$2,966
8	Katy, TX	$1,730	9	Pasadena, TX	$1,712	9	Pasadena, TX	$2,669
8	Sugar Land, TX	$1,730	10	Katy, TX	$1,515	10	Katy, TX	$2,362
8	Pasadena, TX	$1,730	11	Houston, TX	$1,449	11	Philadelphia, PA	$2,341
8	Pearland, TX	$1,730	12	Philadelphia, PA	$1,421	12	Woodlands, TX	$2,274
8	Woodlands, TX	$1,730	13	Sugar Land, TX	$1,415	13	Houston, TX	$2,263
9	San Antonio, TX	$1,668	14	Woodlands, TX	$1,409	14	Sugar Land, TX	$2,223
10	El Paso, TX	$1,543	15	Chicago, IL	$806	15	Chicago, IL	$1,233
Median (excl. Houston)		**$2,045**	**Median (excl. Houston)**		**$1,912**	**Median (excl. Houston)**		**$2,974**
Median vs. Houston		**18.2%**	**Median vs. Houston**		**32.0%**	**Median vs. Houston**		**31.4%**

Households Earning $100,000/year			Households Earning $150,000/year		
Rank	City	Est. Tax Burden	Rank	City	Est. Tax Burden
1	Los Angeles, CA	$5,325	1	Los Angeles, CA	$8,029
2	El Paso, TX	$5,030	2	El Paso, TX	$7,676
3	Austin, TX	$4,918	3	Austin, TX	$7,497
4	San Antonio, TX	$4,386	4	San Antonio, TX	$6,697
5	New York, NY	$4,324	5	New York, NY	$6,641
6	Phoenix, AZ	$4,050	6	Pearland, TX	$6,177
7	Pearland, TX	$4,047	7	Dallas, TX	$6,138
8	Dallas, TX	$4,023	8	Phoenix, AZ	$6,075
9	Pasadena, TX	$3,627	9	Pasadena, TX	$5,541
10	Philadelphia, PA	$3,261	10	Philadelphia, PA	$5,102
11	Katy, TX	$3,209	11	Katy, TX	$4,902
12	Woodlands, TX	$3,139	12	Woodlands, TX	$4,868
13	Houston, TX	$3,078	13	Houston, TX	$4,706
14	Sugar Land, TX	$3,031	14	Sugar Land, TX	$4,647
15	Chicago, IL	$1,659	15	Chicago, IL	$2,513
Median (excl. Houston)		**$4,035**	**Median (excl. Houston)**		**$6,107**
Median vs. Houston		**31.1%**	**Median vs. Houston**		**29.8%**

As illustrated above, residents living in the City of Houston have significantly lower property tax burdens compared to residents of other peer cities. This is due to a combination of low aggregate property tax rates, generous exemptions, and low housing costs relative to other metropolitan areas. Across all income brackets over $50,000, the median tax liability of other peer cities is consistently 30 percent higher than the tax liability paid by Houston residents. The contrast with neighboring suburbs is particularly notable – a home valued at approximately $240,000 in Houston would be assessed $1,470 less in taxes than it would in Pearland and $835 less than it would in Pasadena.

General Sales and Use Tax

Under Texas state law, the overall sales and use tax rate cannot exceed 8.25 percent, and local governments may determine how to allocate a maximum of 2 percent sales tax rate among local taxing jurisdictions.

The Texas sales tax rate of 8.25 percent is lower than all but one of the rates adopted by other large U.S. cities. Philadelphia has a comparable sales tax rate of 8.0 percent; those of other cities range from 8.38 percent (New York) to 10.8 percent (Phoenix).

State and Local General Sales Tax Rates, FY2015

	State	City	County	Transit	Other	Total
Houston, TX	6.25%	1.00%		1.00%		8.25%
National Comparisons						
New York, NY		4.00%	4.38%			8.38%
Los Angeles, CA	7.50%		1.50%			9.00%
Chicago, IL	6.25%	1.25%	1.75%	1.00%		10.25%
Philadelphia, PA	6.00%	2.00%				8.00%
Phoenix, AZ	6.30%	4.50%				10.80%
Median						***9.00%***
State Comparisons						
Austin TX	6.25%	1.00%		1.00%		8.25%
Dallas TX	6.25%	1.00%		1.00%		8.25%
El Paso TX	6.25%	1.00%	0.50%	0.50%		8.25%
San Antonio TX	6.25%	1.25%		0.50%	0.25%	8.25%
Median						***8.25%***
Metro Comparisons						
Katy, TX	6.25%	1.00%		1.00%		8.25%
Sugar Land, TX	6.25%	2.00%				8.25%
Pasadena, TX	6.25%	1.50%			0.50%	8.25%
Pearland, TX	6.25%	1.50%			0.50%	8.25%
Woodlands, TX	6.25%	1.00%			1.00%	8.25%
Median						***8.25%***

Sources: City CAFRs and State Revenue Departments

This analysis relies on the 2015 U.S. Bureau of Labor Statistics' Consumer Expenditure Survey (CES) to translate aggregate sales tax rates into estimated sales tax liabilities. The CES includes data on average annual taxable expenditures by income level broken down by expenditure type. The table below reflects only those expenditures that would be subject to sales tax, excluding categories such as housing or education.

Overall, Houstonians pay approximately 9.1 percent less in sales taxes compared to their counterparts in other major U.S. cities. A household earning $150,000 in Phoenix will pay over $1,000 more in sales taxes each year, and a comparable household in Chicago will pay over $800 more in sales taxes.

Estimates Sales Tax Burden by Income level

	$25,000	$50,000	$75,000	$100,000	$150,000	% Comparison to Houston
Texas Cities (Including Houston)	$1,245	$1,661	$2,313	$2,639	$3,313	NA
National Comparisons						
New York, NY	$1,264	$1,686	$2,348	$2,679	$3,363	1.5%
Los Angeles, CA	$1,359	$1,812	$2,523	$2,879	$3,614	9.1%
Chicago, IL	$1,547	$2,064	$2,873	$3,279	$4,116	24.2%
Philadelphia, PA	$1,208	$1,611	$2,242	$2,559	$3,212	-3.0%
Phoenix, AZ	$1,630	$2,175	$3,027	$3,455	$4,336	30.9%
Median	***$1,359***	***$1,812***	***$2,523***	***$2,879***	***$3,614***	***9.1%***

Income Tax

Texas is one of seven states to not have any personal income tax. As depicted in the table below, Houston is the only city in the U.S. with a population over 1.5 million without an income tax. The two cities with the highest income tax rates are New York and Philadelphia.

Income Tax Burden for a Hypothetical Family of Three, by Annual Household Income

	$25,000	$50,000	$75,000	$100,000	$150,000	Tax Rate Structure
Tax Rates						
New York, NY	-4.50%	4.30%	5.30%	6.40%	7.20%	Graduated State and Local Tax Rate
Los Angeles, CA	0.00%	0.40%	0.60%	1.50%	2.70%	Graduated State Tax Rate
Chicago, IL	2.10%	4.10%	4.10%	4.40%	4.40%	Flat State Tax Rate with Exemptions
Philadelphia, PA	5.10%	6.90%	6.00%	6.90%	6.70%	Flat State and Local Tax Rates
Phoenix, AZ	0.20%	1.20%	1.50%	1.90%	2.20%	Graduated State Tax Rate
Median	***0.20%***	***4.10%***	***4.10%***	***4.40%***	***4.40%***	
Estimated Tax Burden						
New York, NY	-$1,116	$2,157	$3,944	$6,395	$10,776	
Los Angeles, CA	$0	$201	$421	$1,493	$3,978	
Chicago, IL	$535	$2,066	$3,093	$4,419	$6,642	
Philadelphia, PA	$1,281	$3,442	$4,532	$6,874	$10,124	
Phoenix, AZ	$54	$619	$1,093	$1,874	$3,267	
Median	***$54***	***$2,066***	***$3,093***	***$4,419***	***$6,642***	

Note: a negative property tax credit reflects a refundable credit.

Source: District of Columbia. Dec 2015. "Tax Rates and Tax Burdens in the District of Columbia - A Nationwide Comparison." p27

The existence of a personal income tax significantly increases households' overall tax liability. For a household earning over $150,000 in New York or Chicago or Philadelphia, over half of the overall tax liability is associated with income tax. Without a state or local income tax in Houston, even if Houston taxing jurisdictions were to raise local property and sales tax burdens, Houston's tax structure would remain competitive compared to other major U.S. cities, particularly for higher income earners.

Chapter IV. Meeting Essential Needs and Investing in Citywide Priorities

As Houston has struggled to achieve balanced budgets, it has greatly limited the City's ability to make needed investments to both maintain existing infrastructure and build infrastructure to support a growing city. The City has also been unable to make investments that could reduce cost and address pressing social and economic concerns that threaten overall economic competitiveness.

These additional investments - both capital and operating - are critical to making Houston a welcoming city that works for all. They are essential to the City maintaining its share of regional population and employment growth and reducing poverty in the next decade. And they are the difference between a City that survives and one that thrives.

Capital Investment and Rebuild Houston

Houston's long term investment in infrastructure is funded through its Capital Improvement Plan (CIP). The FY 2018 – 2022 CIP calls for a total of $8.3 billion in investment over a five year period, with $2.3 billion in spending in FY 2018 alone. Most of the planned spending in the CIP, however, is for non-General Fund affected expenditures.

The City's water system, operated as a utility by the Public Works and Engineering department and funded through an enterprise fund, accounts for $2.4 billion in projected spending over the five-year CIP. Houston's airports are funded through an enterprise fund. Just under one-in-four CIP dollars in the five year plan are dedicated to investments at the airports.

The CIP also calls for $2.3 billion in investment in streets, storm drainage and wastewater infrastructure. In part, these investments are funded through ReBuild Houston and the DDSRF (discussed in Chapter II).

The degree to which ReBuild Houston is funded is directly affected by the cap on property tax revenue. Under the structure of DDSRF, 11.8 cents of every $100 in property value is dedicated to the DDSRF. These property tax revenues pay down existing debt service and then fund further ReBuild Houston investment on a pay-as-you go basis. The property tax revenue cap, however, has the effect of limiting this allocation. The City has interpreted the revenue cap so that it limits the amount of revenue dedicated to ReBuild Houston proportionately: in other words, funding for the DDSRF is limited so that the 11.8 cents of every $100 in value is adjusted down based on population growth and CPI growth.

Under our current baseline forecast – without eliminating the property tax revenue cap – the DDSRF would be funded with $1.003 billion in new revenue from FY 2019 – FY 2027. If the cap were lifted, however, total DDSRF revenue would increase to $1.078 billion.

	Baseline	With Revenue Cap Lifted	Difference
2019 Projected	$48,252,010	$56,162,451	$7,910,441
2020 Projected	$48,588,933	$54,456,473	$5,867,540
2021 Projected	$76,329,233	$87,111,575	$10,782,342
2022 Projected	$91,003,097	$100,716,006	$9,712,909
2023 Projected	$95,654,576	$102,811,804	$7,157,228
2024 Projected	$140,818,758	$148,125,097	$7,306,339
2025 Projected	$147,674,549	$157,301,972	$9,627,422
2026 Projected	$179,207,455	$187,485,495	$8,278,040
2027 Projected	$175,727,603	$183,797,062	$8,069,459

The CIP also calls for $219.1 million in spending on Bayou Greenways and Parks and Recreation. Another $192.4 million is for investments in the City's fleet, including sedans for the Police Department, fire trucks for the Fire Department and sanitation vehicles for Solid Waste Management.

Much smaller investments are budgeted for other key areas of City government. For example, the CIP includes $1.1 million annually for City investments in housing.

The CIP does not fully address core infrastructure issues related to the day to day operations of City government. In addition to maintaining and building public-facing infrastructure like streets and sewers, the City also has to invest to maintain buildings, vehicles, equipment and assets that its employees utilize on a daily basis to deliver basic services.

Houston's last full facility condition assessment was conducted in 2012. The project evaluated and scored 421 city-owned facilities on a priority scale of 1 to 5, projecting the total value of deferred maintenance at $417 million; the replacement value of the assessed facilities was $2.1 billion.

A 2016 follow-up assessment by the General Services Department (GSD) found that total replacement value increased to $2.8 billion and the value of deferred maintenance had increased to $631 million. In the intervening four years, GSD completed $68 million in repairs, with preference given to Priority 1 and 2 conditions. In the 2016 report, GSD projects a considerable increase in deferred maintenance costs over the next five years. Assuming no investments in deferred maintenance, GSD estimates that the backlog will rise from $631 million in 2016 to $1.3 billion in 2021. The City's FY 2018 budget includes $20.9 million in spending from the Maintenance Renewal and Replacement Fund.

Even with nearly $200 million in CIP funding devoted to fleet replacement in the next five years, the City does not have a fully funded and adequate fleet replacement schedule. The lack of adequate funding for fleet replacement has multiple impacts on the City's day to day operations. Vehicles that operate past the point of recommended replacement are more likely to be out of service, affecting service delivery. Older vehicles also tend to increase repair and operating costs.

The limited investment in core infrastructure also has the effect of reducing opportunities for operational savings. For example, as discussed in Chapter V, there are opportunities for increasing coordination and collaboration across City departments through co-location of certain facilities. Parks and Recreation, Houston Public Library and Health each run community facilities – community centers, libraries and multi-service centers. Heads of each of these respective departments have recognized the opportunity for co-location and are implementing this vision with the Alief capital project. But the ability to consolidate often requires an up-front capital investment.

Citywide Priorities and Plan Houston

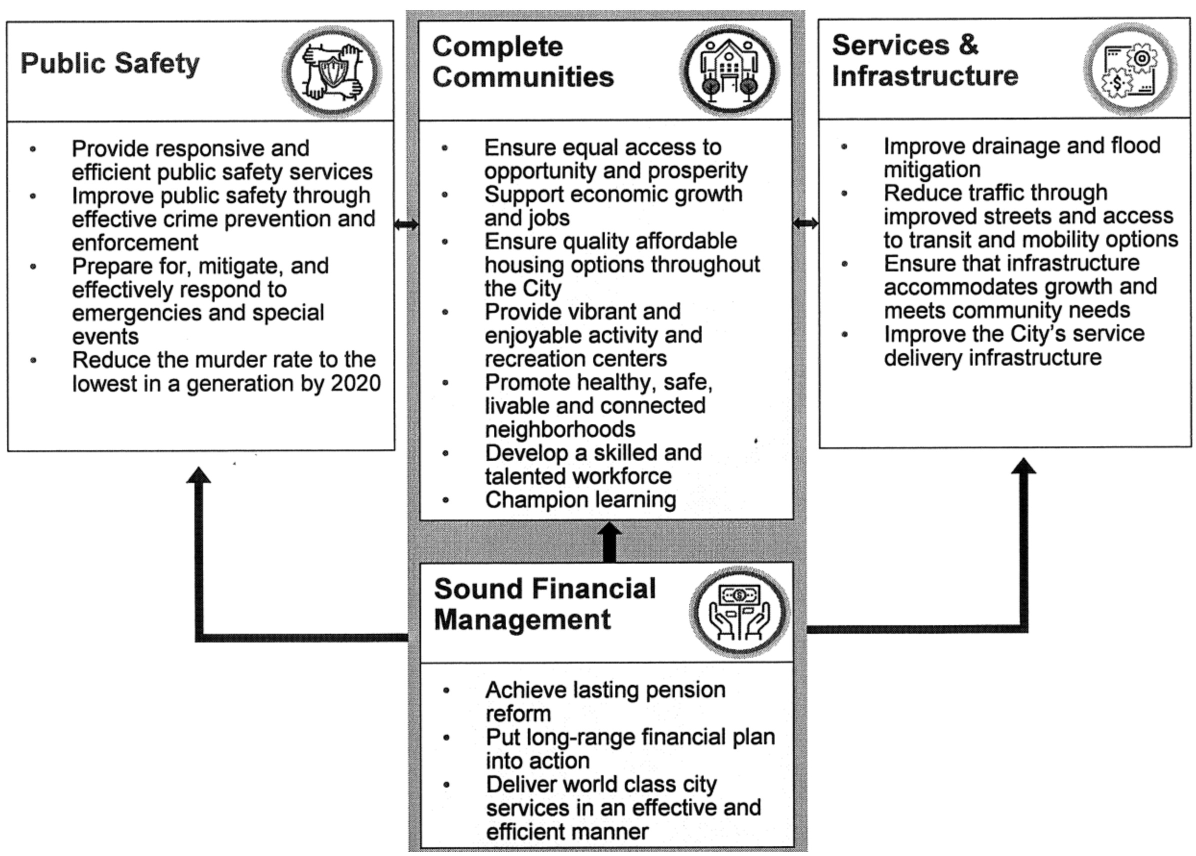
In 2015, the City Council adopted the city's first-ever General Plan, Plan Houston. Plan Houston outlines a series of core strategies designed to meet the vision for the City: "Houston offers opportunity for all and celebrates its diversity of people, economy, culture, and places. Houston promotes healthy and resilient communities through smart civic investments, dynamic partnerships, education, and innovation. Houston is the place where anyone can prosper and feel at home."

To achieve this vision, the Plan details 32 goals across the following areas of focus: People, Place, Culture, Education, Economy, Environment, Public Services, Transportation and Housing.

In 2016, the City surveyed Houston residents on those components of Plan Houston that should be priorities. These were the ten highest-rated areas of focus.

- ✓ Crime and Public Safety
- ✓ Flooding
- ✓ Potholes and Street Condition
- ✓ Traffic Congestion
- ✓ Transportation Options (Rail, Buses and Bike Lanes)
- ✓ Walkable Streets
- ✓ Affordable Housing
- ✓ Air Quality and the Environment
- ✓ Access to Job Training
- ✓ Supporting Schools and Afterschool Activities

These areas of focus were reflected in the Administration's budget priorities for FY 2018. Mayor Turner's budget message focused on connecting budget to strategy in four key areas:



Each of these areas of focus also came up in meetings with City department heads, members of the City Council and community stakeholders. A 2016 citizen survey conducted by Rice University on behalf of the City Finance Department found that several of these priority areas needed improvement. Residents were asked to evaluate the quality of current services on a scale of 1 (poor), 2 (fair), 3 (good) and 4 (excellent).

- Survey respondents rated the following services as good - Fire (3.2), EMS (3.1), Garbage (3.0) and Libraries (3.0).
- Most services were rated as fair – Parks (2.9), Emergency Preparedness (2.9), Police (2.8), Water and Sewer (2.6), Public Health (2.6), Traffic signals (2.6), Recycling (2.5), Bus (2.5), Light rail (2.4), Affordable housing (2.3), Traffic (2.3), Animal (2.3) and Land Use (2.2).
- Three services were rated as poor – Flood prevention (1.9), Streets (1.9) and Sidewalks (1.8).

Not all of these areas necessarily require new investment, but many do. For example, in the area of crime and public safety, we will discuss the need for additional staffing in the Police Department to have a sufficient number of patrol officers to address crime in Houston. The City has fewer Police FTEs than most other large U.S. cities even though it has a higher crime rate.

Beyond investment in law enforcement, there is also a need for a more comprehensive approach to crime and violence reduction that builds upon the City's investments to reduce recidivism through initiatives focused on offenders returning to the community. At present, there is no comprehensive crime reduction strategy or resources for implementation.

While ReBuild Houston provides funding for investments in street and sewer infrastructure designed to address flooding and street conditions, the City makes only limited investments in addressing traffic congestion and transportation options: in part, this is because the City depends on METRO for transit options, but in part it is also because the City does not have adequate resources for such investments due to the fiscal pressures of legacy costs and the cap on property tax revenue. As we discuss in Chapter V, Houston is one of the only large U.S. cities that does not have a department dedicated to transit and transportation.

As already noted, Houston plans to devote just over $1 million a year in capital funding to address housing affordability and housing issues. The City primarily relies on federal funds to provide or preserve affordable housing: those funds, largely provided through the Community Development Block Grant and HOME programs, may be at risk of reduction in the federal budget process. Other large cities are dedicating local dollars to increase access to affordable housing. For example, New York City plans to devote just over $4 billion over the next five years in capital investment for implementation of its Housing New York plan to create or preserve 200,000 units of affordable housing. In November 2016, Los Angeles voters approved a bond measure to provide $1.2 billion to spur construction of 1,000 new units of housing per year for the next ten years as a means of reducing homelessness: the measure passed with more than 76 percent of the vote.

Conclusion

At present, the City of Houston's has a limited ability to make the type of investments needed to maintain the conditions of its existing infrastructure, build new infrastructure to sustain growth, and address the priorities outlined by the Turner Administration and reflected in Plan Houston. If Houston keeps doing what it is doing today, it will fall further behind in meeting investment needs.

Investment is critical to both the city's economic competitiveness and long term fiscal sustainability. Investments in physical and human capital are essential to making Houston continue to be a place where residents want to live and businesses want to locate. Infrastructure investment may be one of the most important components of local economic development strategy that is under the control of city government.[8] At the same time, basic investments in quality of life – such as reduction in crime – go to the core of a city's ability to attract and retain residents.

In addition to long term economic benefits, some investments can also have a direct impact on the City's bottom line. For example, as we will discuss in Chapter V, we know that the current level of homelessness in Houston has a direct impact on the City's ability to provide effective police and fire response. Affordable housing strategies that rapidly reduce the City's homeless population can both meet the goals of Plan Houston and reduce demand on costly City services.

To achieve structural budget balance and begin to investing in core infrastructure and initiatives to sustain and increase Houston's overall competitiveness, the City will need to implement a series of steps designed to increase overall efficiency and effectiveness. That is the focus of the next chapter of the plan.

[8] See, e.g., Jeffrey Thompson, "Prioritizing Approaches to Economic Development in New England: Skills, Infrastructure, and Tax Incentives," Political Economy Research Institute, University of Massachusetts, Amherst, August 2010 for a summary of recent articles.

Chapter V. Greater Efficiency and Effectiveness

To ensure that Houston has sufficient resources to achieve fiscal sustainability and toward achieving goals for continued growth and economic competitiveness, the City needs to increase efficiency and effectiveness. Savings opportunities exist in both General Fund-funded departments and in the DDSRF. Our analysis of best practices and benchmarking has largely focused on six broad areas:

- Public Safety
- 21st Century Workforce
- Operations
- Coordination and Collaboration
- Culture of Performance
- New Partnerships

Public Safety: Right-Sizing the City's Response

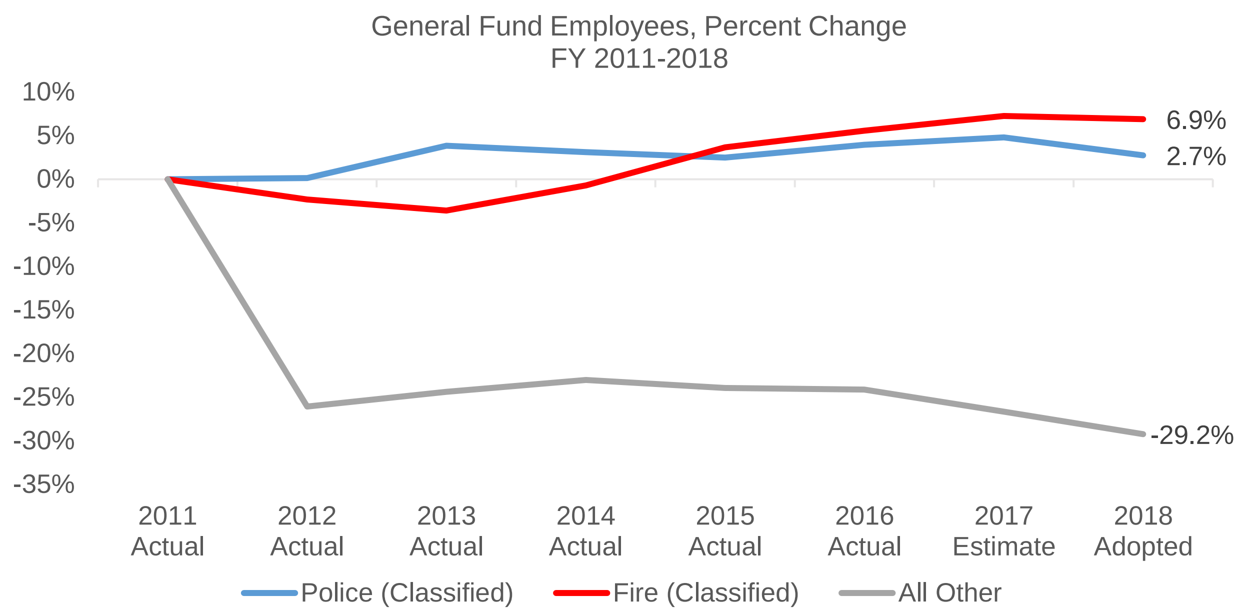
Most General Fund City employees and spending are dedicated to public safety functions largely housed in the Houston Police Department (HPD) and Fire Department (HFD). As of FY 2017, approximately 75.5 percent of all General Fund employees were in either the Police or Fire Departments (30.2 percent Houston Fire Department; 45.3 percent Houston Police Department). HPD and HFD combined to account for approximately 80.7 percent of the City's total FY 2017 General Fund projected personnel services expenditures. Public safety's proportionate share of Houston's General Fund spending would be even greater if all indirect costs were allocated (for example, Information Technology; Human Resources; Legal Department).

GENERAL FUND (,000)	FY2011 Actual	FY2012 Actual	FY2013 Actual	FY2014 Actual	FY2015 Actual	FY2016 Actual	FY2017 Adopted
Citywide Personnel Services Expend.	**$1,344,695**	**$1,228,661**	**$1,301,369**	**$1,360,502**	**$1,427,314**	**$1,496,548**	**$1,535,756**
Police and Fire	*$1,042,799*	*$987,364*	*$1,046,316*	*$1,087,682*	*$1,146,809*	*$1,211,407*	*$1,238,609*
Police	*$622,687*	*$596,720*	*$644,039*	*$673,125*	*$693,255*	*$752,292*	*$778,874*
Fire	*$420,112*	*$390,644*	*$402,277*	*$414,557*	*$453,554*	*$459,114*	*$459,735*
All Other	*$301,896*	*$241,297*	*$255,053*	*$272,820*	*$280,505*	*$285,141*	*$297,147*

Since FY 2011, the City's General Fund total FTEs decreased by 9.5 percent. Non-public safety General Fund positions decreased by 28.7 percent, Police decreased by 4.1 percent, and Fire increased by 4.0 percent.

From FY 2011 (actual) to FY 2018 (proposed), classified HPD and HFD employees grew as a percentage of total General Fund workforce – from 58.4 percent to 67.5 percent. Much of the increase in classified HPD and HFD personnel as a proportional share of General Fund employees was a result of the reduction in civilian employees (within police and fire and in all other departments).

Since FY 2011, budgeted General Fund HPD classified employees and cadets have increased from 33.1 percent of all General Fund employees to 37.6 percent of all General Fund employees. During this time, the number of classified and cadet positions in HPD increased by just 2.7 percent. During the same period, HFD classified and cadet positions increased as a percentage of total General Fund positions from 25.3 percent to 29.9 percent, as HFD's classified and cadet positions increased by 6.9 percent. As a result, HPD and HFD classified positions account for a greater percentage of General Fund employees, while civilians in HPD, HFD, and across City government represent a significantly reduced portion of General Fund employees.



Police Overview

Between FY 2011 and FY 2018 (proposed), the total number of budgeted HPD FTEs declined from 6,993 (all Funds; 6,564 General Fund) to 6,384 (all Funds; 6,296 General Fund), an 8.7 percent decrease in all Funds and a 4.1 percent decrease in General Fund employees.[9] This represents a 28.1 percent (408.0 FTEs) decrease in the number of civilians in HPD and a 2.7 percent (140.1 FTEs) increase in staffing for classified staff.[10]

[9] This trend, reflected in data from City budgets, is generally consistent with data from the City's annual Comprehensive Annual Financial Report (CAFR) and its annual reported information to the FBI's Uniform Crime Report (UCR): the FBI UCR data is reported annually in October and the City's CAFR information is as of the end of each respective fiscal year (June 30). As a result of the timing of data collection by the FBI, UCR data align most generally with the prior calendar year because UCR data for 2011 represents October 2011 data, the Fiscal Year covering October 2011 is Fiscal Year 2012 – the City's Fiscal Year runs July 1 – June 30 of every year. Variances in the three data sets are expected given the different data collection times and the inevitable personnel changes (i.e. new recruit class, retirements, etc.) that occur in an organization the size of the HPD.

[10] Annual budget data shows the City's General Fund police employees. Not all police employees are funded by the General Fund and the number of positions funded by non-General Fund sources has decreased since FY2011.

As the number of HPD civilians decreased – notably from FY 2011 to FY 2012 in light of the City's response to its fiscal pressures – the remaining sworn officers began to necessarily undertake tasks that were formerly the responsibility of civilians.

While the Department's sworn complement increased by 4.8 percent from FY 2011 to FY 2017 (estimated), its expenditures increased by 24.1 percent ($160.1 million), primarily driven by a change in pension costs (+87.2 percent), active health benefits (+31.3 percent), and classified salaries (+15.9 percent).

HPD's personnel costs comprised a significant portion of its budget – an annual average of 94.3 percent of spending. In FY 2017, the average fully-loaded cost (salary, overtime, non-salary cash compensation, pension, health benefits, etc.) for an HPD employee (combining sworn and civilian employees) is $116,188. The fully-loaded cost for the remainder of City government (excluding the Police and Fire Departments) is $80,525. Within HPD, the average fully-loaded cost for a sworn officer was $124,456 compared to $75,945 for a civilian employee.

Historical General Fund Expenditures – Police Department	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Budgeted
Personnel Services	$622,686,834	$596,720,402	$644,039,050	$673,125,215	$693,254,849	$752,292,482	$778,874,344
Supplies	$15,386,675	$17,788,426	$18,116,658	$18,804,281	$14,930,838	$13,368,033	$12,489,665
Other Services and Charges	$20,178,013	$26,186,643	$32,277,428	$29,816,439	$34,237,811	$33,592,009	$31,591,608
Equipment	$176,935	$1,067,244	$1,309,819	$620,199	$293,346	$610,855	$497,462
Debt Service and Other Uses	$4,283,662	$-	$1,588,272	$-	$-	$-	$-
Total	**$662,712,120**	**$641,762,715**	**$697,331,227**	**$722,366,133**	**$742,716,844**	**$799,863,378**	**$823,453,079**

Source: City of Houston data

Compared to other major cities, the Houston Police Department has one of the lowest rates of FTEs per 100,000 residents (sworn officers and civilians). Based on 2015 FBI data, Houston has 289.1 Police FTEs per 100,000 residents – higher than Austin and San Antonio, but trailing every other major U.S. city. Cities like New York, Chicago and Philadelphia have significantly more FTEs and sworn officers per capita.

At the same time, Houston has more violent crime per capita than the two benchmark cities with fewer FTEs and officers per capita. If Houston had the same number of police FTEs per capita as Los Angeles, it would have an additional 695 FTEs.

Source: FBI UCR Data, 2011, 2015

	2011 FTE per 100,000	2015 FTE per 100,000	2011 Officers per 100,000	2015 Officers per 100,000	2011 Violent Crime Rate	2015 Violent Crime Rate	FTE per 100,000 % Change	Officers Per 100,000 % Change	Violent Crime % Change	Population Change
Houston	**304.7**	**289.1**	**246.96**	**241.55**	**974.6**	**966.7**	**-5.1%**	**-2.2%**	**-0.8%**	**6.1%**
New York	601.6	589.0	420.6	413.9	623.6	585.8	-2.1%	-1.6%	-6.1%	4.1%
Austin	274.0	243.9	203.7	186.4	430.1	372.5	-11.0%	-8.5%	-13.4%	16.3%
Dallas	331.3	310.3	287.1	267.6	681.1	694.2	-6.3%	-6.8%	1.9%	6.5%
San Antonio	221.5	185.0	171.5	149.7	519.3	587.2	-16.5%	-12.7%	13.1%	8.0%
Chicago	473.4	473.6	447.2	441.8	-	905.4	0.0%	-1.2%	-	0.8%
Philadelphia	485.1	461.1	432.8	409.0	1193.3	1,029.0	-5.0%	-5.5%	-13.8%	2.4%
Los Angeles	331.6	319.6	257.0	248.9	522.4	634.8	-3.6%	-3.1%	21.5%	3.3%

Fire Overview

From FY 2011 to FY 2018 (proposed), HFD's total budgeted staff increased by 6.8 percent or a net of 267 positions. Much of the change was the result of a 7.2 percent increase among the number of classified employees in HFD or a net of 272.9 positions.

During the same period, HFD's expenditures increased by 13.2 percent ($58.8 million) -- primarily driven by a change in active health benefits (+36.5 percent), firefighter pension costs (+22.0 percent), and classified employee salaries (+8.6 percent).

HFD's personnel costs comprised the overwhelming majority of its annual spending during this period (90.6 percent). In FY 2017, the average fully-loaded cost (salary, overtime, non-salary cash compensation, pension, health benefits, etc.) for an HFD employee (combining classified and civilian employees) is $103,937. The fully-loaded cost for the remainder of City government (excluding the Police and Fire Departments) is $80,525. Like HPD, within HFD, a difference between classified employees and civilian employees exists – an average fully-loaded cost of $104,275 for a classified firefighter and $91,488 for a civilian employee.

Houston Fire Department Expenditures	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Budgeted
Personnel Services	$419,845,111	$390,640,256	$402,277,094	$414,556,920	$453,554,233	$459,114,299	$459,735,004
Supplies	$10,949,425	$8,936,482	$10,420,373	$11,036,388	$12,043,617	$10,804,124	$11,152,732
Other Services and Charges	$10,410,096	$18,538,498	$20,154,490	$26,428,071	$30,286,084	$33,502,668	$34,255,140
Equipment	$22,741	$8,467	$199,990	$342,401	$11,253	$37,308	$51,299
Debt Service and Other Uses	$4,623,999	$-	$-	$-	$-	$-	$-
Total	**$445,851,371**	**$418,123,703**	**$433,051,947**	**$452,363,780**	**$495,895,188**	**$503,458,399**	**$505,194,175**

Source: City of Houston Annual Budgets

Based on data from benchmark city budgets, HFD has one of the highest rates of FTEs per capita. At 189.4 FTEs per 100,000 residents, Houston is third behind New York and Chicago and has more FTEs per capita than Dallas, Philadelphia, Austin, San Antonio, and Los Angeles. If Houston had the same number of Fire FTEs per capita as Philadelphia, it would reduce its headcount by more than 600 FTEs.

Comparison of Fire FTEs	Population	FY 2017 Budgeted Uniform Firefighters	FY 2017 FTEs per 100k	2015 Service Calls per Capita	2015 EMS Calls Per Capita	2015 Structure Fires per Capita
New York	8,550,861	16,473.0	197.1	6,515	2,218	305
Chicago	2,724,121	5,171.0	189.8	10,153	7,173	218
Houston	**2,275,221**	**4,308.9**	**189.4**	**9,123**	**5,771**	**72**
Dallas	1,301,977	2,261.0	173.7	9,072	4,480	84
Philadelphia	1,567,810	2,526.0	161.1	17,853	13,493	159
Austin	938,728	1,244.0	132.5	9,132	5,060	64
San Antonio	1,463,586	1,797.0	122.8	10,048	7,595	75
Los Angeles	3,962,726	3,719.0	93.8	-	-	-

Source: FY2017 Adopted Budgets, 2015 NFIRS data

Police Department Initiatives

Houston's violent crime rate per 100,000 residents is the second highest among benchmarked large cities. In response, throughout the process of developing the 10-year Plan, City officials and stakeholders have clearly articulated a desire to increase the number of classified employees (sworn officers) in HPD. At the same time, there are opportunities to make more effective use of department resources to maximize Houston's crime-fighting capacity.

The City has committed to increase its classified police employees during the first half of the 10-Year Plan. The first step in determining how many officers to add and the timing for adding them is to establish desired service levels for the HPD.

Currently, HPD functions as a full service police department. Most calls from the public result in a direct response from a uniformed HPD officer. This is a dominant model in most large U.S. cities. There are police departments, however, where a significant number of non-violent, non-emergency police responses are handled by civilians and still other calls for service are handled by phone or otherwise without deployment of a uniformed officer.

Policing strategy will also drive the number of officers needed. Several of the police departments with higher FTEs per capita listed in the benchmarking discussion have a more robust approach to community policing. The full deployment of a community policing model that includes all officers assigned to patrol would require that officers have time between responding to 911 calls to engage in proactive policing.

Regardless of the final "target" number of HPD classified personnel, the City has committed to increase its police headcount. Currently, the City has fiscal and operational capacity to conduct five annual academy classes of 70 cadets each. While most cadets successfully complete the academy, not all do so. On average, the HPD reports that approximately 90 percent of incoming cadets graduate from the academy. So, the current number of academy classes would produce up to 325 new officers per year.

At the same time the Department recruits and trains new hires, it also loses approximately 250 officers per year to attrition (retirement, resignation, termination, etc.). Thus, even if HPD is able to add 325 new officers per year in new academy classes, that increase would be offset so that there is a net annual increase of just 75 officers per year.

HPD could offer more annual classes in an effort to increase the hire and graduation rate to bolster its classified force. To do so, HPD would need to dedicate reassign personnel to teaching and training at the academy. There would be additional operating costs related to an increase in academy classes.

Increase Civilianization

Civilians perform many activities within a police department from administrative support to responding to certain non-emergency calls. Benchmarking analysis found that Houston has a comparatively lower percentage of FTEs who were civilians than other police departments. Given the reduction in civilian FTEs in HPD since 2011, these findings are not surprising.

Considerable cost savings are possible from the civilianization of non-patrol or investigative positions currently held by sworn officers. An average police officer costs the City approximately $124,456 in salary, health benefits, and pension costs while the Department's average civilian costs $75,945 in salary, health benefits, and pension costs – a difference of $48,512, or 48.4 percent. HPD can achieve savings by either replacing officers with civilians as positions become vacant or shifting sworn officers to patrol and backfilling with civilians as an alternative means of increasing patrol strength.

2016 Police FTEs	2016 Sworn	2016 Civilian	Civilian/Sworn Ratio
Los Angeles	9866	6115	1.6
New York	35990	14353	2.5
Austin	1896	702.25	2.7
San Antonio	2199	551	4.0
Houston	5317.7	1164.1	4.6
Dallas*	3483	545	6.4
Philadelphia	6115	796	7.7
Chicago**	12902	868	14.9
Median Excluding Houston	**6115.0**	**796.0**	**4.0**
Rank	**4 of 8**	**6 of 8**	**5 of 8**

*2015 CAFR used for Dallas
**2014 FBI UCR used for Chicago. In 2016, Chicago civilianized an additional 150 positions.

The City should maximize the number of sworn officers performing patrol and investigative tasks and minimize the number of sworn personnel performing administrative, back office or non-police functions. In 2014, the Police Executive Research Forum (PERF) conducted a review of HPD that noted opportunities for civilianization.[11] A preliminary analysis of the PERF-recommended civilianization

[11] HPD's civilian positions were significantly reduced as part of the City's FY 2012 staff reductions: HPD lost 392 civilian positions. The most significant civilian loss from FY 2011 to FY 2012 was in Police Service Officers and Senior Police Service Officers where 122 of 149 positions were eliminated in a single year, including all non-senior staff. Employees in these positions provided support to police operations, preparing incident reports, maintaining records, and monitoring local storefronts. As of June 2016, 61 HPD employees held a Police Service Officer or Senior Police Service Officer position, and 63% were Senior Officers. Additional reductions included mechanics reorganized to the central Fleet Management Department and administrative and analytical

opportunities suggests that most of the identified positions remain filled by classified staff. PERF's study preliminarily identified 443 positions for civilianization:

- Chief's Command: 33 Positions
- Field Operations: 163 Positions
- Investigative Operations: 93 Positions
- Strategic Operations: 154 Positions

As of 2016, there were still sworn officers in positions that could be civilianized in Legal Services, Planning, Employee Services, Public Affairs, and Fleet Management.

The HPD Mobility Response Team (MRT) is a good example of civilianization. As of May 2017, HPD had 29 civilians in MRT positions. These personnel are responsible for assisting with directing traffic related to storms, special events, accidents, and other occurrences throughout the City. HPD could expand its use of MRT-like positions and re-brand the positions as Police Service Technicians (PSTs). PSTs would be entry level, non-permanent positions that primarily handle crash investigations, issue non-moving traffic citations, and perform other support services designed to free classified officers' time for higher-priority duties. PSTs would not carry weapons or respond to crime scenes unless called to do so for traffic enforcement reasons.

An additional benefit for HPD is that PSTs could be a pool for recruiting future sworn officers.

Continue with Merger of Jail with Harris County

The Police Department will also benefit from savings upon completion of the merger of jail functions between the City and County. HPD currently estimates that the merger of jail operations with Harris County will occur in June 2018. As a result of the merger, HPD will book arrested individuals directly with the County and no longer have significant custody and detention supervision requirements.

As of June 2016, there were 324 HPD FTEs assigned to the Jail – 98 sworn police officers (many of whom hold sergeant titles) and 226 civilians. The current civilian jail employees can be used to either backfill other vacant and necessary positions in city government, civilianize certain positions in HPD to increase available sworn officers or a combination of all of the above. The current sworn officers assigned to the Jail will be freed up to augment the City's current patrol capacity and supervision.

support. Currently, among the pure civilianization opportunities that warrant examination are uniformed officers in Legal Services, Planning, Employee Services, Public Affairs, and Fleet Management.

Expand Arrest Diversion Options

To increase the number of officers available for patrol, HPD can work to reduce the amount of time that officers spend on processing low level arrests. A significant amount of police resources are devoted to making and processing arrests for relatively low-level offenses. This includes the time that an officer spends in responding to a call or a condition and the time transporting and booking an arrestee.

In 2007, the Texas state legislature authorized alternative police response for certain Class A and Class B Misdemeanors, commonly known as "Cite and Release." Rather than arresting offenders for personal marijuana possession, theft or property damage under $500, or driving with an invalid license, municipal police forces can issue on-site citations, with an accompanying court summons. The goal of this approach is to reduce the number of low-level, non-violent offenders in the jail population and to relieve officers of the need to complete a formal transport and arrest.

This is a very common approach to low level offenses in U.S. cities. As of 2013, 45 states have some provisions for misdemeanor citations in lieu of formal arrest, most commonly at the discretion of the police officer after an arrest has taken place (25 states).[12] Large cities such as New York City, Chicago and Philadelphia use various forms of citations in lieu of arrest for specific offenses.

Offenses that are approved for "cite and release" or diversionary actions in Texas include:

- Possession of marijuana under 2 ounces (Class B)
- Possession of marijuana under 4 ounces (Class A)
- Possession of certain synthetic marijuana compounds under 2 ounces (Class B)
- Possession of synthetic marijuana compounds under 4 ounces (Class A)
- Graffiti, where damage is less than $750 (Class B)
- Graffiti, where damage is less than $2,500 (Class A)
- Theft of Property less than $750 (Class B)
- Theft of Service value under $750 (Class B)
- Possession of Contraband in a correctional facility by a volunteer or employee (Class B)
- Driving with an Invalid License

Between 2009 and 20212, a study of cite and release in Travis County found that 15,211 offenders received citations for offenses that would have previously resulted in arrests.[13] Dallas became the most recent Texas city to pursue cite and release strategy,

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[12] http://www.ncsl.org/research/civil-and-criminal-justice/citation-in-lieu-of-arrest.aspx

[13] http://www.mystatesman.com/news/crime--law/travis-cite-and-release-program-suspects-are-shows/fQLapM9P73Kfsh6v5H4fTI/

doing so in early 2017. A published report indicated that, in 2016, 436 marijuana arrests in Dallas would have qualified for cite and release.

HPD and the Harris County District Attorney's Office have agreed to prioritize arrest diversion options. In February 2017, the Mayor and District Attorney announced that individuals found with less than four ounces of marijuana would be given the opportunity to take a four-hour drug education class instead of facing prosecution. As with other Texas cities, the offense is not entirely decriminalized and offenders could face prosecution upon refusing to take the diversionary drug education course. City officials estimate that as many as 12,000 people could annually be diverted from the criminal justice system with the new policy.

The City can continue this proactive approach to diversion and move to broaden the types of non-violent, low-level offenses subject to a "cite and release" approach in a similar manner to what Austin has implemented. A broad and safe "cite and release" policy would extend to all of the offenses eligible under state law and reduce the number of hours that officers are involved in processing arrests. This would increase patrol strength without a need for additional hires or additional cost.

Invest in a Comprehensive Approach to Crime Control

Between 2011 and 2015, Houston saw a 0.8 percent decline in violent crime even as the number of sworn officers per capita also declined. Seven other cities with a population of 500,000 or more also saw simultaneous reductions in the number of officers per capita and violent crime rate. Thus, while increasing the number of officers in Houston can absolutely be part of a strategy to reduce crime, other efforts independent of the size of the police force can also play a role in crime reduction.

2011-2015 Violent Crime, Sworn Officer, and Population Change	Change in Violent Crime Rate (%)	Change in Violent Crimes (#)	Change in Officers Per 100,000 (%)	Change in Officers (#)	Population % Change (%)
Columbus	-17.0%	-554	-4.5%	50	7.6%
El Paso	-15.0%	-343	-7.7%	-47	3.5%
Philadelphia	-13.8%	-2,136	-5.5%	-212	2.4%
Austin	-13.4%	26	-8.5%	106	16.3%
Fort Worth	-13.0%	-210	-5.9%	48	9.6%
New York	-6.1%	-1,121	-1.6%	853	4.1%
San Jose	-1.6%	194	-21.0%	-164	7.8%
Houston	-0.8%	1,102	-7.8%	-116	6.1%

Source: FBI UCR Data, 2011/2015

A comprehensive approach to crime control would identify the array of crime challenges facing the city and develop programmatic responses that include the HPD, but also include non-profit and government partners. Among the issues that a comprehensive plan might address are:

- Violence prevention
- Levels of juvenile crime
- Activity by gangs
- Drug market activity
- Offenders returning to the community from prison or jail
- Incidence of family violence, including domestic violence and child abuse
- Incidence of substance abuse and addiction
- Police Community Relations

Policing is just one tool in the City's crime-fighting tool kit. Other crime reduction strategies have been proven to have a significant impact in the reduction of crime and are often less expensive than hiring additional police officers. A 2011 evaluation by the Washington State Institute for Public Policy (WSIPP) identified a series of crime prevention initiatives with a proven record of high return on investment. For example, according to WSIPP, a family-based therapy model designed for juveniles on probation produces benefits of $37,739 per participant – a return on investment of $11.86 per dollar invested. The benefits are generated primarily from reduced juvenile crime, but also contain labor market and health benefits due to increased likelihood of high school graduation. A portion of the projected savings is attributable to cost avoidance and savings to the government's budget.

Fort Worth is an example of a Texas city that has taken this sort of approach. In the late 1980s and early 1990s, Fort Worth had the second highest violent crime rate among major cities in Texas, trailing Dallas. By 1993, the state legislature authorized counties and municipalities to create locally funded and governed boards to address the violent crime issues. In 1995, Fort Worth authorized the creation of a Crime Control and Prevention District (CCPD). The CCPD is funded primarily through a ½ cent sales tax; in the FY 2017 budget, the District is projected to collect $67.4 million in sales tax revenue for a total budget of $74.9 million. In comparison, the General Fund budget for the Fort Worth Police Department is $226.3 million.

Through the CCPD, Fort Worth is able to fund a wide range of programming, services and capital improvement projects to prevent and reduce crime. CCPD provides matching funds for COPS Grants, officer training, and funding infrastructure initiatives like police radios, vehicle replacements, and facility upgrades. Some police divisions are either wholly or partially supported by CCPD, including Neighborhood Patrol, School Resource Officers, Parks Policing, and SWAT functions.

CCPD resources also augment the Police Department's community outreach strategies. Five independent school districts and two Safe Haven programs provide a network of after school programming for at risk youth, while two initiatives focus on gang-involved older adolescents and young adults, and the Family Justice Center brings together inter-agency partners to provide support to victims of domestic violence. Each year, a pool of funds is made available to other community-based programs with a focus on at-risk populations.

Fort Worth has seen a long-term decline in per capita violent crime since its peak in 1992. Compared to other Texas cities with a current population over 250,000, Fort Worth's per capita violent crime rate decreased by 54.7 percent since the start of the CCPD in 1995. The City's percent decrease is more than double that experienced by Houston and ranks as the third largest per capita violent crime decrease among Texas cities with more than 250,000 residents.

During the same time, Fort Worth had the single largest percentage decrease in per capita sworn personnel. While total sworn officers actually increased for Fort Worth during this time (1,111 to 1,557), the city's population grew by 84 percent in the same period.

While Houston does not have the ability to further increase the sales tax, the Fort Worth approach is a model for how the City could use other revenue sources to fund a more comprehensive approach to crime reduction.

	1995 Violent Crime Rate	2014 Violent Crime Rate	1995 Violent Crime Rank	2014 Violent Crime Rank	Violent Crime Percent Change	1995 Officers Per 100K Capita	2015 Officers Per 100K Capita	Officers Percent Change
Houston PD	**1,283.50**	**966.7**	**2**	**1**	**-24.7%**	**290.59**	**227.58**	**-21.7%**
Dallas PD	1,532.40	694.2	1	2	-54.7%	272.28	267.59	-1.7%
Corpus Christi PD	985	645.0	4	3	-34.5%	143.11	137.21	-4.1%
San Antonio PD	517.9	587.2	9	4	13.4%	181.03	149.70	-17.3%
Fort Worth PD	1,160.90	525.4	3	5	-54.7%	246.82	187.65	-24.0%
Arlington PD	881.2	502.1	5	6	-43.0%	150.82	-	-
Laredo PD	724.8	379.3	8	7	-47.7%	152.24	179.49	17.9%
Austin PD	773.4	372.5	7	8	-51.8%	177.09	186.42	5.3%
El Paso PD	838.3	366.6	6	9	-56.3%	171.84	147.21	-14.3%
Plano PD	403.5	153.0	10	10	-62.1%	117.35	122.98	4.8%

Source: FBI UCR Data 1995-2015

Fire Department Initiatives

There are multiple opportunities for savings in HFD while ensuring proper public safety. By better deploying personnel and clarifying its role and mission in emergency medical services, Houston can become a leader in re-defining the role of the fire service in the 21st century.

Move to Three Platoons

HFD currently operates with a four platoon (A, B, C, D platoons) schedule system with firefighters working in four different 24-hour shifts. HFD's shift structure results in firefighters working one 24-hour shift, followed by 24-hours off, a second 24-hour shift, followed by 120-hours off. Within this shift schedule, HFD firefighters are also separated into nine debit-groups per platoon with each group working approximately one additional 24-hour shift per month. This results in firefighters working an average of 46.7 hours per week – or 480 hours during each 72-day work cycle – well below the allowed hours for fire service under the Fair Labor Standards Act (FLSA).[14]

Nationally, many fire departments (particularly in the south and west) operate with a three platoon schedule and average 47 to 56-hour work weeks. Minneapolis and Memphis both have 56 hour work weeks, while Dallas and Fort Worth have 52 and 53 hour workweeks, respectively. One of the most prevalent three platoon schedules is a 24-hour shift, followed by two consecutive days off before another 24-hour shift.

Houston should move from a four platoon to three platoon schedule. Doing so would reduce the need for approximately 845 classified positions within HFD (approximately 20.7 percent of all budgeted classified personnel), though 10 percent to 20 percent of those positions could be reabsorbed within HFD to fill vacant or otherwise necessary classified duties elsewhere in the Department.

HFD could achieve these reductions through attrition. Even if the City increased pay for firefighters working longer hours, the City would reduce personnel costs. HFD would require a certain number of currently planned fire academy classes and would avoid associated costs to operate and staff the training classes.

Identify Opportunities to Reduce the Number of Fire Stations

The City should consider opportunities over the 10-year period to decommission certain stations that are low volume or end of useful life stations. By reducing the number of stations, HFD will be able to reduce staffing and enhance operational efficiency. The City may need to construct new stations that are more centrally located.

[14] Each 72-day cycle results in a firefighter working 18 regular 24-hour shifts and two 24-hour debit days. U.S. Department of Labor, Wage and Hour Division, Fact Sheet #8: Law Enforcement and Fire Protection Employees Under the Fair Labor Standards Act (FLSA); hours worked beyond 106 hours in a 14-day work period are subject to overtime pay.

Doing so will also address the Department's long-term capital needs, reduce ongoing repair and maintenance costs, provide better and more efficient service coverage and reduce overtime costs associated with shift coverage.

The City should study changes in deployment based on risk and identify opportunities to optimize its apparatus and personnel deployment. All decisions regarding station location and apparatus deployment should be based upon response time goals to ensure public safety.

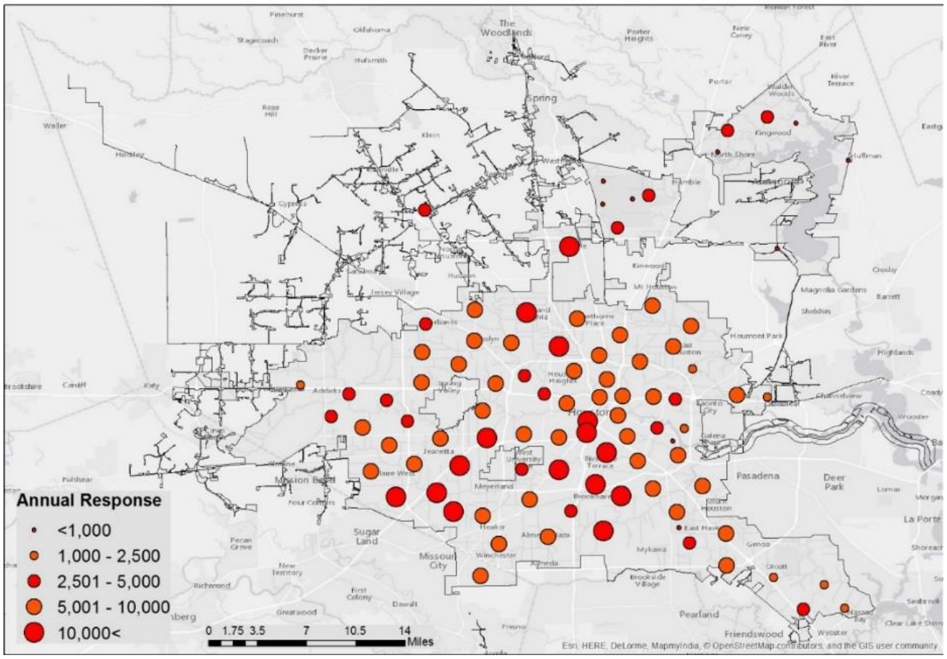
HFD may also be able to provide different station staffing and different levels of service based on actual demand. Emergency medical calls drive the majority of HFD's call for service, 63.3 percent of all calls in 2016. Between 2011 and 2016, annual structural fires decreased by 9.4 percent. In fact, the past five years have seen a steady decrease of fires of all types, while EMS calls have increased as a share of calls and in total volume.

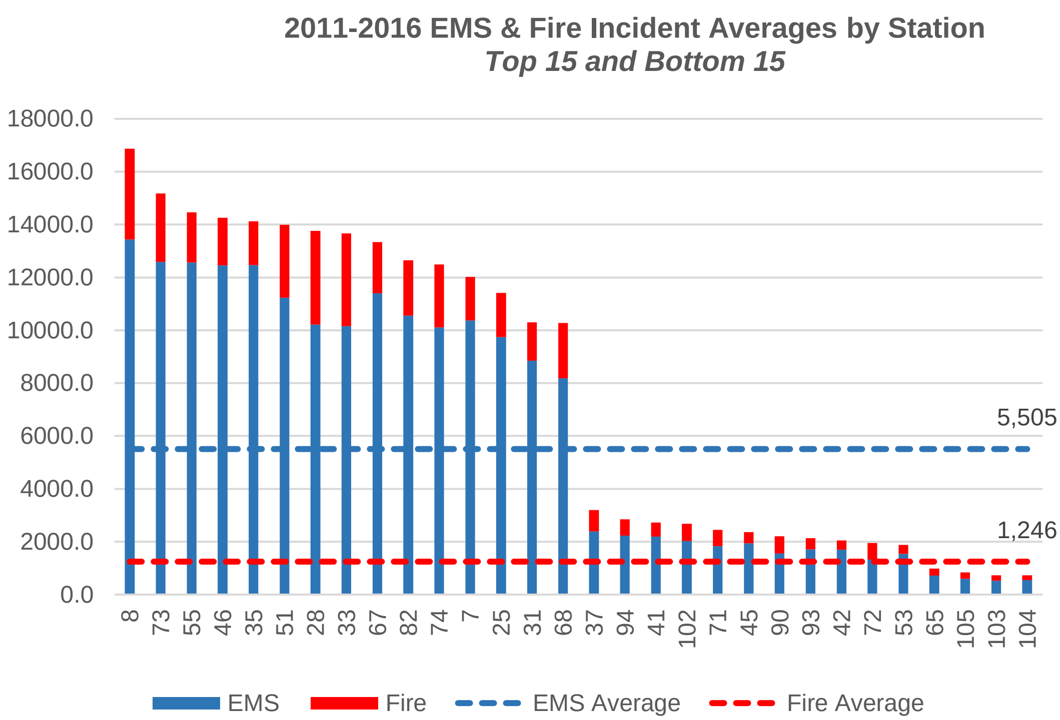
	Calls for Service	Structural Fires	All Fire Categories	Multiple Alarm Fires	Multiple Alarm as % of all Fire Incidents
2011	154,340	1,796	7,325	35	0.5%
2012	187,700	1,369	5,180	19	0.4%
2013	196,688	1,367	5,218	16	0.3%
2014	198,715	1,648	5,499	30	0.5%
2015	207,569	1,627	5,564	26	0.5%
CAGR	**7.7%**	**-2.4%**	**-6.6%**	**-7.2%**	**-**

Source: NFIRS reported incidents, 2011-2015

As HFD reviews its workload and demand, it may find it useful to transfer resources from one area of the City to another in order to provide more efficient and cost effective coverage. In recent years, HFD has experienced significant call volume in the inner core of the City – driven mostly by EMS response. This has resulted in the Department's resources being stretched in that area of the city.

Average Annual Response Volume by Station, 2011-16





Source: City of Houston Fire Response Data

In making these changes, the City should seek to adhere to the guidelines from the National Fire Protection Association (NFPA). NFPA is a trade organization that creates and oversees more than 300 codes and standards pertaining to fire prevention and suppression, training, and equipment, and regularly publishes standard recommended response times for Fire and EMS emergency scenarios. The codes and standards set by the NFPA do not have any legal standing, but are commonly accepted standards used by fire departments throughout the country.

NFPA 1710 sets staffing minimums for fire apparatus and guidelines for both emergency response manpower and response time. Ultimately, NFPA 1710 sets "requirements for effective and efficient organization and deployment of fire suppression operations, emergency medical operations, and special operations to the public by career fire departments to protect citizens and the occupational safety and health of fire department employees."[15] NFPA 1710 also sets standards for emergency response times for call processing, turn-out and travel times. Response time is a frequent performance metric used by Fire Departments because it easy to comprehend for the public, simple to calculate, and meaningful in the evaluation of service delivery and performance.

Most fire departments use the NFPA 1710 standard as a goal, not as a prescriptive requirement. In its 2016 edition, NFPA recommends in the case of 90 percent of emergency calls, a response of four minutes for first responder and fire suppression apparatus and eight minutes for full EMS Advanced Life Support (ALS) apparatus.

Consolidating stations and, potentially, apparatuses is likely to result in discussion regarding the City's Insurance Services Office, Inc. (ISO) rating.[16] Houston Fire Department holds an Insurance Services Office (ISO) Public Protection Classification (PCC™) rating of 1, placing City in the top 0.5 percent of ratings in the nation.

While an ISO rating is one data point for fire suppression analysis, it is limited in its application to how demand and risk actually plays out at the local level. ISO ratings largely reflect the availability of personnel and equipment. A limitation with an ISO rating is that it does not consider the realities and performance level of a given department. As a result, the rating does not control for a given jurisdiction's higher fire risks (e.g., prevalence or absence of abandoned buildings) or population or socioeconomic factors

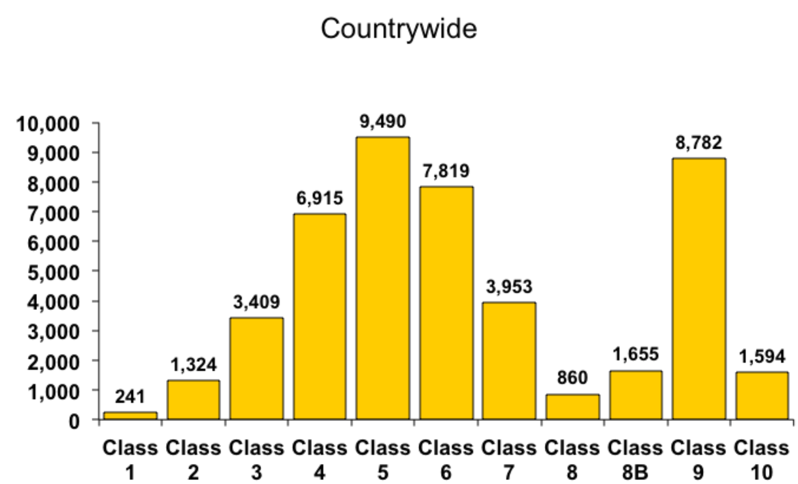
For Houston, it is unclear how much impact having an ISO rating of "1" provides. Insurance companies – not ISO – set rates, and it is uncertain whether there would be any impact in insurance rates if the Department made station and staffing changes

[15] http://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=1710

[16] ISO provides ratings for most jurisdictions' fire suppression services – this rating does not measure emergency medical services. The ratings are largely used to help insurers assess the quality of a jurisdictions fire suppression services in the industry's risk analysis and rate setting activities. A jurisdiction's ISO score can range from a "1" (best) to a "10" (worst). Ratings are based, in large part, on the number of apparatus a department has, the size of its staff, and its available water capacity. In short, the more apparatus and fire stations and classified personnel a department has, the better its likely ISO score.

that resulted in moving to an ISO rating of "2" or even "3." In fact, in many states, State Farm Insurance stopped relying on ISO ratings in 2001[17].

Houston's ISO Class 1 rating is unlikely to provide a sufficient return on investment – or meaningful additional public safety – to taxpayers compared to the current cost of HFD operations. As a result, the City should instead focus on its prevention, response time, and service delivery priorities to ensure public safety. This can be done while achieving meaningful changes in organization and operations that deliver the same, critical public services in a more efficient and cost effective manner – including, as warranted, station closures and consolidations.



National ISO Ratings (Communities by Class Level)

Source: ISO Mitigation

Increase HFD Civilianization

In the last five years, Houston has had an annual average of 1,561 structure fires – or fewer structure fires per year than the City currently has classified firefighters (4,070). Classified firefighters are a critical part of the City's core public safety service delivery; however, civilians can play an important role in ensuring the availability and use of classified firefighters is efficient and cost effective.

Benchmark analysis suggests that the percentage of FTE positions in Houston Fire Department held by civilians is low. Among benchmark cities, Houston has the second lowest ratio of civilian employees to classified (uniform) employees – trailing only Chicago. Dallas has a ratio (1:18.3) that is nearly double Houston's ratio and San Antonio's ratio (1:10.2) is more than triple Houston's ratio.

[17] http://www.insurancejournal.com/pdf/InsuranceTimes_20010821_37763.pdf

2016 Fire FTEs	2016 Sworn	2016 Civilian	Sworn/Civilian Ratio
New York	10,945.0	5,813.0	1.9
San Antonio	1,616.0	158.0	10.2
Los Angeles	3,265.0	309.0	10.6
Austin	1,129.0	94.0	12.0
Dallas*	1,901.0	104.0	18.3
Philadelphia	2414.0	110.0	21.9
Houston	**4,128.9**	**113.7**	**36.3**
Chicago**	4,548.0	91.0	50.0
Median Excl. Houston	**2414.0**	**110.0**	**12.0**
Rank	**3 of 8**	**4 of 8**	**2 of 8**

Source: FY2016 Adopted Budgets
*2015 CAFR used for Dallas
**Chicago civilian counts based on a 2015 audit by the Office of the Inspector General

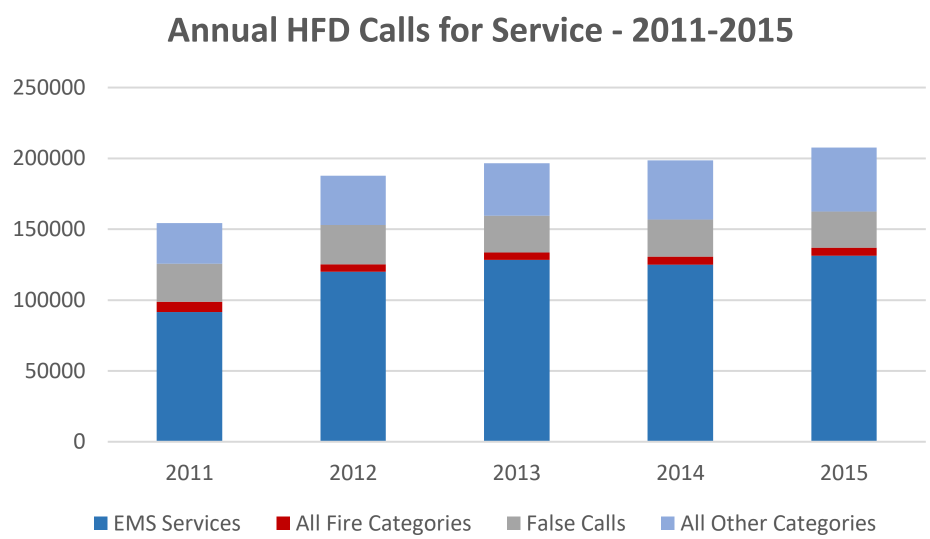
The Department should implement strategies focused on civilianization of certain functions and positions in order to ensure uniform staff members are dedicated to the services that they alone are able to provide to the public.

In particular, the Department should move forward with the decade-old study that called for civilianizing dispatch positions at the Houston Emergency Center (HEC) – providing the same service for less cost. HEC is staffed by civilian 911 call takers, civilian Police dispatchers, and uniformed Fire dispatchers. The study recommended that the three groups be consolidated under a single HEC management structure and that the remaining uniformed positions be civilianized. At the time of the review, the Fire Department was contractually prohibited from civilianizing dispatch positions. As of June 2016, the average annual salary of HEC's 183 staff was $53,412, while the salary average for the 95 employees of HFD's Office of Emergency Communications was $69,469 – a 30 percent difference (nearly $16,100 per position).

Another area with meaningful civilianization opportunities is the Life Safety Bureau. The purpose of the Life Safety Bureau is to provide fire safety and inspection services including inspection of multi-family and high-rise buildings, regulation of hazardous materials and special events. The Bureau's 111 active employees are divided by subject matter and region. HFD could reassign the Bureau's classified employees to primary firefighter functions and, with proper training and supervision, civilians could perform required inspections at a lower cost of service. While uniformed inspectors are more common in large cities, New York City's Fire Investigation department is mostly staffed by civilians, as is Phoenix's Fire Prevention Division and Fort Worth's Bureau of Fire Prevention.

Reduce Frequent Users of 911 and EMS

The overwhelming majority of calls to the Fire Department are calls for emergency medical services.



Source: National Fire Incident Response (NFIRS) reported incidents, 2011-2015

Houston Fire Department's EMS call volume totals approximately 800 calls per day – nearly half of which are calls for emergency transport. In Houston, the billed cost for an ambulance transport is at least $1,600 to $1,800. Full cost is seldom reimbursed in whole by public or private health insurers. Patient transports require significant staff time and resources – both are factors that drive budget costs.

One factor responsible for Houston's EMS call volume is that the City – like many EMS providers – transports patients regardless of assessed need. As a result, some patients rely on the system for all medical care (some emergent, but also some non-emergent care). These so-called "super utilizers" are generally transported to a nearby hospital due to medical protocol despite the lack of evidence for emergent care and often provided a more costly and time consuming form of service.

To address this issue, in December 2014, the City of Houston launched the Emergency TeleHealth and Navigation (ETHAN) Project. ETHAN, a pilot program, analyzes 911 data to identify frequent 911 callers and flags these individuals for potential alternative interventions. When identified "super utilizers" call for service, an intermediate step is added to the process: the caller is provided with remote access to a general practice physician via a tablet carried by paramedic staff. The physician assesses the patient's condition and the patient and doctor arrive at a mutual decision as to whether emergency, non-emergency, or no care is appropriate.

The program is possible due to a range of collaborating partners – local health centers and community clinics provide primary care, UT Health Sciences evaluates clinical & economic outcomes, a local taxi service (Harris County RIDES) is responsible for alternative medical transport, while others contribute technical assistance, medical and philanthropic support. During the initial nine months of operation, ETHAN served nearly 4,000 patients. Of these, only 740 (18.6 percent) required ambulance transport to an emergency room.[18] Preliminary estimates suggest that this intervention reduced the need for approximately 3,200 ambulance transports to area hospitals, resulting in an estimated $4.1 million in avoided costs. Approximately 17 percent of patients accepted a referral to an alternative to a trip to an emergency department, yielding an estimated $320,000 in avoided hospital costs. By FY 2016, the City reported that 7,235 patients have been served.[19]

ETHAN, which costs approximately $300 per-patient for service delivery, has showed promise in reducing the number of transports to hospitals leading to cost savings and avoidance for the City, hospitals, and insurance providers. ETHAN, however, has required meaningful investments. The City's costs include salaries for 2.5 full-time and 16 part-time physicians, information technology and equipment, and miscellaneous transport costs – in sum, approximately $1 million per year. ETHAN was initially funded by a five-year, $12 million Section 1115a wavier of the Federal Social Security Act, known as the Delivery System Reform Incentive Payment. As a condition of the waiver funds, Houston was required to commit City funds to its regional healthcare partners. ETHAN's Section 1115a funds are expected to last through December 2018.[20] A portion of the program's funding comes from internal grants from Houston's Pay-or-Play (POP) Fund, which requires municipal contractors to either provide health insurance to employees or pay a penalty.

In addition to ETHAN, the POP Fund funds a $400,000 intra-city collaboration called CareHouston Links.[21] CareHouston Links uses EMS response data and Houston Health Department employees to identify individuals from low-income, high-risk communities who use 911 more than five times in a 90-day period. The City offers in-home case management from a nurse care manager to these super utilizers. According to a report by the City's Office of Business Opportunity, in FY 2016, the program served 715 patients from 1,934 referrals, and avoided $1,528,000 in transportation costs.

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[18] AHRQ Program Evaluation – Project ETHAN. https://innovations.ahrq.gov/profiles/scene-video-consultations-emergency-physicians-reduce-unnecessary-ambulance-transports-and

[19] www.houstontx.gov/obo/payorplay/fy2016popreport.pdf

[20] For the purpose of funding, ETHAN is a subsidiary program of CareHouston Links, as the only entities originally qualified to receive 1115 waiver funds were hospitals and Health Departments.

[21] Office of Business Opportunity FY2015, FY2016 Pay or Play Report http://www.houstontx.gov/obo/popforms.html

Mobile Integrated Health – Community Paramedicine

Project ETHAN is one of a number of Mobile Integrated Health – Community Paramedicine (MIH-CP) models that have emerged across the nation in the last decade.

Different diversionary models generally fall into three categories:

- *Post-Discharge Short-Term Follow Up* programs are designed to drive down costly hospital readmission rates for patients with chronic conditions.
- *Frequent EMS User* programs, like Project ETHAN, identify frequent 911 callers for intensive, short-term case management.
- *Alternative Destination* programs empower paramedics to make onsite decisions to offer 911 callers transport to non-emergency room care, either through in-home hospice, health crisis centers, or urgent care facilities.[22]

The market conditions that are driving MIH-CP generally stem from an alignment of financial, policy and operational interests of EMS providers, hospitals, and insurance companies.

Public and private insurance providers are a primary revenue stream for EMS services – normally with capitated payments for transport and other services. In addition to the capitated rates, EMS providers are required to provide emergency transport regardless of ability to pay and hospitals must provide emergency care upon arrival. Beyond potentially unnecessary and expensive care, hospitals are penalized by Medicare when patients who visit the emergency room are readmitted for a related issue within 30 days. MIH-CP models have demonstrated intelligently deployed paramedicine can positively impact the policy and fiscal goals of the primary parties in emergency medical treatment and improve patient outcomes.

[22] Evaluation of California's Community Paramedicine Pilot Project. https://healthforce.ucsf.edu/sites/healthforce.ucsf.edu/files/publication-pdf/Evaluation%20of%20California%C2%B9s%20CP%20Pilot%20Program_final2%5B1%5D.pdf.

Potential Benefits from MIH-CP	
City/Local Government	Whether a city is providing EMS services itself or subsidizing/partnering with a third party, reducing the cost of inefficient transports (and associated time and staffing requirements) is of significant interest to many jurisdictions seeking a more cost-effective and cost-efficient approach to enhance patient outcomes.
Hospitals	Hospitals are heavily penalized for patients readmitted within 30 days of discharge and therefore have direct incentive to partner with EMS providers to mitigate readmissions and maintain discharged patients in a community setting (e.g. MIH-CP), thereby, avoiding costly penalties.
Insurance Providers	Insurance providers may often be the fiscal winners. MIH-CP cost savings break disproportionately to insurers, who avoid major health expenses for patients with complex needs –through fewer transports, community-based interventions and case management as well as reduced hospital readmissions.
Patients	MIH-CP gives paramedics broader discretion to provide effective, patient-centric care, avoiding a costly service and increasing likelihood that patients will receive appropriate, timely, and personalized care and case management.

Fort Worth's MedStar, an early innovator in the MIH-CP space, has developed a full menu of options for their patient population, from intensive in-home visits with community paramedics, to a 911 nurse triage program for low acuity, high frequency callers with chronic conditions. Staffed by 5.5 full-time equivalent employees, the model requires a mobile health care paramedic to be on duty 24/7, with managers and directors working for the program as part of their regular job duties. With a startup cost of $46,000, MedStar's MIH-CP suite costs $560,000 annually to operate. MedStar provided initial funds, but has secured transportation agreements with local long-term care facilities to obtain third party reimbursement. Like ETHAN, MedStar also established partnerships with local hospitals to become eligible for a 3 year, $3.5 million 1115a waiver. Based on a 12 month pre- and post-enrollment evaluation of emergency room transports for 302 patients, MedStar estimates that $4.9 million in unnecessary transport costs – over $16,000 per patient – were avoided.[23]

MedStar is preparing for a shift in the payor landscape. MedStar's directors have received strong interest from private insurers, including those with large publicly-insured populations, in new payment structures to providers of ambulance services.

[23] Zavadsky, Matt AHRQ Program Evaluation - MedStar

Currently, insurers pay a per-transport fee to providers. MedStar and its payors are exploring a model that would result in a capitated per-patient, per-month flat fee, regardless of transport volume.

The implications are significant. Under the new payment structure, ambulance providers (especially partially or unsubsidized contractors) would have an incentive to provide transport only when it is necessary and provide a more dynamic range of options and outcomes that deliver appropriate care without unnecessary costs or services.

Tucson Collaborative Community Care (TC-3), formerly the Human Services Referral Program, is a home-grown department-based and department-funded program. TC-3 is a digitally-integrated MIH-CP program that identifies patients for intensive case management by paramedics. Patients identified through internal review of 911 data and via paramedic referral receive follow-up visits from TC-3 staff, which coordinate with stakeholders and partners in non-emergent care organizations like the Nurse Help Line, crisis centers and homeless-focused nonprofits. Between June 2007 and June 2009, TC-3 enrolled 244 high-frequency callers, and successfully reduced 911 calls in the group by 57.

TC-3 required 80 hours in IT development and six months of setup for a prehospital manager. On an ongoing basis, the IT analyst spends a few hours a week on troubleshooting and the prehospital manager devotes one day a week. The paramedicine work is conducted by Fire Department staff as a regular part of their duties. Because the program was built on an ad-hoc basis and borrows existing staff from Operations, it has never been fully costed by administration. TC-3 program administrators are attempting to develop revenue-sharing and/or funding partnerships with insurers and hospitals, but none have been achieved to date.[24]

Department leaders suggest that the number of independently operating hospitals has been a barrier to establishing formal partnerships, as such an arrangement could create a natural preference amongst paramedics to steer patients towards cooperating facilities. TC-3 hopes to establish a reimbursement schedule for community paramedicine with Medicare and Medicaid, as their patients and payments are an overwhelming portion of the market.

San Diego Resource Access Program (RAP) is the result of a partnership between the City and EMS provider Rural-Metro. RAP began in 2008, funded from a $15-million Beacon Community Grant from the Office of the National Coordinator for Health Information Technology. RAP is staffed by four community paramedics and one program coordinator and focuses primarily on a patient population with frequent (10+)

[24] McDonough, Sharon, "Can metro fire departments afford community health programs?" Fire Chief Magazine

annual transports and complex conditions – often some combination of homelessness, chronic health issues, substance abuse and mental illness.

Once potential program participants are identified and automatically prioritized by on-site paramedics inputting data into a health information-linked system, the RAP coordinator and paramedics work to create a care plan that connects the patient to a network of community-based partners for alternatives to emergent care. In the first two years, the program saved an estimated $300,000 per year by reducing the transport frequency of 51 participants by 38 percent.[25] According to the California Community Paramedicine Pilot Project (CPPP) evaluation by UCSF for the years 2015-16, with an average monthly enrollment of 26, San Diego achieved a net savings of $45,607 per month.[26]

The City is now collaborating with Orange County on a next-generation MIH-CP innovation called Search, Alert, File and Reconcile (SAFR). According to the San Diego EMS Medical Director, the purpose of SAFR is to be able to provide both healthcare teams and on-scene paramedics with real-time bi-directional information sharing, thus giving paramedics sufficient information to divert habitual 911 users to non-emergent care.

In 2015, Rural Metro was acquired by AMR which continued RAP as part of a good-faith agreement with the City. The agreement was terminated in late 2016 after the City levied a $291,000 fine on Rural Metro for non-compliance with the contractually required response to 90 percent of EMS calls within 12 minutes.[27] As a result, the RAP paramedics were temporarily brought into the employ of the Fire Department. While the vendor change has caused a short-term management challenge, the program's outcomes and design are not in question**.** RAP is in preliminary discussions with major third-party Medi-Cal managed care providers to reimburse for service.

The California Paramedicine Pilot Project, a statewide initiative designed to test innovative community paramedicine concepts that operated between November 2014 and September 2016, evaluated a cohort of thirteen innovative MIH-CP programs. Of these, five EMS entities were selected to test the post-discharge short-term follow-up model: three of the five were EMS/Fire Departments, one was a private provider, and one was a hospital/fire partnership. Collectively, the programs identified a population of 922 patients at risk for readmission due to diagnosed conditions, most commonly congestive heart failure. The programs employed between one and three dedicated staff. The programs' monthly costs were between $2,183 and $22,649. At the conclusion of the evaluation, all but one of the five had noticeably reduced hospital readmission rates, and avoided hospital expenditures between $188 and $1,230 per

[25] James Dunford and Anne Marie Jensen, AHRQ Program Evaluation - San Diego

[26] CPPP Evaluation, p. 18

[27] "City of San Diego Lays Out Demands For Rural/Metro, Threatens To Terminate Contract" -NBC 7 - Jan 4, 2017

patient, per month. The only program to lose money, Alameda County, had the lowest monthly enrollment, the second lowest readmission rate reduction, and the highest monthly cost. Evaluators concluded that cities with personnel fully integrated into existing department organizations produced higher per-patient average cost savings.[28] California is considering legislation to develop a state agency devoted to MIH-CP services as a follow-up to their CPPP endeavor.

State regulatory environments play a critical role in the successful deployment of MIH-CP services. The state of Minnesota authorized community paramedics as licensed care providers in 2011. Community paramedics are authorized to bill Medicaid for reimbursement. Providers may charge a fee for face-to-face interaction with Medicaid patients in 15 minute increments, but cannot charge for indirect costs like mileage or travel costs. According to the state's 2016 paramedic toolkit, no MIH-CP provider has yet to successfully bill Medicare for services rendered.[29] Similarly, the state of Maine authorized EMS providers to perform Community Paramedicine services in 2012 and hospital-owned EMS services are bearing the cost of developing MIH.[30]

Mobile Integrated Health-Community Paramedicine is an opportunity for EMS services to augment existing data collection with more responsive, interactive technologies to produce system efficiencies and savings, both in unnecessary medical expenses and personnel. While many MIH-CP models have proven capable of reducing emergency room visits and transports, the landscape for persistent, reliable funding (and the ability to reduce actual expenditures) has not yet fully evolved.

To date, most community paramedicine programs primarily use cost avoidance (as opposed to cost reduction) as a key measure. Hospitals avoid costs for readmissions; insurers avoid costs for medical appointments and interventions; and local governments avoid costs for transportation.[31] Few, if any, programs have found a reliable source of revenue outside of departmental budgets or grant funding. Third-party reimbursement, either from Medicaid and Medicare or private insurance providers, is an often-desired, but rarely achieved funding stream for MIH-CP services. As MIH-CP emerges nationally, jurisdictions, health care providers, and insurers are just beginning to develop sustainable models that compensate government or third-party EMS providers for providing services to reduce risk and costs to insurers and hospitals.

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[28] CPPP Evaluation, pp. 10-14

[29] 2016 Community Paramedicine Toolkit http://www.health.state.mn.us/divs/orhpc/workforce/emerging/cp/2016cptoolkit.pdf

[30] Maine EMS Community Paramedicine Pilot Program Evaluation, https://www1.maine.gov/ems/documents/cp_muskie_report.pdf

[31] In most current MIH-CP approaches, while transportation costs (e.g. fuel, general vehicle maintenance, and other non-fixed costs) may be avoided, there is limited, if any, savings related to personnel because EMS employees (whether fire-based or through another model) remain on shift and the organization staffs accordingly. EMS employees' respective time may be used more efficiently, but no associated cost savings are generated.

Given the upcoming conclusion of 1115a waiver funding and the rising cost of delivering service, Houston has an opportunity to design, create, and expand its own MIH-CP to uniquely fit its needs. The City can be a leader in MIH-CP provision by designing a program model that achieves new revenue streams that, when combined with actual cost reductions, can make service delivery cost neutral (and potentially, revenue positive) while meeting the City's core policy goals. To do this Houston must address four critical questions:

- What existing models or elements of existing models, recognizing the differences in scale, appear to be the least costly to implement while achieving desired outcomes?
- What model has been the most effective in reducing cost to the City, hospitals, insurers and others in a manner that could work for the City and its partners?
- What is the optimal way for Houston and its partners to define savings to insurers, hospitals, and the City, and what is the best structure to provide sufficient revenue payments for City services?
- Are any of the current models a perfect fit for Houston or does Houston need to develop its own model?

As the City answers these questions, it must do so in a manner that is consistent with the City's current and projected fiscal realities, which require that any such program be commensurate with the City's ability to generate sufficient revenue to fully offset costs associated with service delivery. While complex, this analysis – including significant discussions and negotiations with insurance providers, hospitals, medical professionals, and other stakeholders – will be critical to ensure the City's ability to balance the reality of its fiscal constraints with its desired policy and operational goals.

Pursue Additional EMS Collections

In the short-term, while the City pursues more robust EMS service delivery model reforms and partnerships, Houston should focus on steps to increase cost recovery from EMS. This would require an increase in EMS fees, continued improvements in EMS collection rates and new fees from an ordinance that would authorize the Fire Department to bill for non-transport treatment services and transports when patients die.

HFD routinely performs emergency medical services for individuals who do not require transportation to a hospital and bills private insurers, public insurers, individuals, and others for services, annually generating approximately $42 million in revenue (as of Federal fiscal year 2016).

Houston's EMS collection rate has hovered around 38 percent to 40 percent since Federal fiscal year 2013 (October-2012 through September 2013).[32] Since the beginning of the City's current contract with its third-party EMS collections entity, EMS revenue collections have increased. Going forward, for every percentage point increase in collections – using 2016 data – Houston would generate an additional $1.1 million.

The City has a three-pronged opportunity to increase its EMS revenue.

- Increase EMS fees
- Increase percentage of EMS fees that are collected
- Pursue City ordinance authorizing Fire Department to bill for non-transport treatment services and transports during which the patients who pass away during treatment/transportation

The City should ensure it is charging the appropriate sums for provision of EMS services. Houston last completed a comprehensive fee study approximately 10 years ago. The City is currently contemplating a review of its fire-based fees for service and has periodically adjusted its rates for EMS services. Regardless of fee level adopted, the City must contend with the reality of rate capitation by Medicare and Medicaid. At least 12 percent of all calls, however, are billed to private insurers that would pay more with an increase in fees.[33] If, in 2016, the City had increased its EMS rates by 10 percent, it would have generated an additional $1.4 million in revenue from private insurers.[34]

The City is currently considering an ordinance revision to increase transportation fees for EMS services. Unlike most peer cities, Houston does not distinguish between Basic Life Support (BLS) and Advanced Life Support (ALS) transport in its fee structure. The proposed revision would increase emergency transport fees from $1,072.18 to $1,876.40. While the rate would be the highest among surveyed cities, the department maintains that the new rates more accurately reflect the cost of delivering services.

While the City has notable limiting factors on its ability to increase the collection rate, HFD and its third-party billing entity have both indicated there are additional opportunities to maximize collections, including:

- Designing process to bill EMS co-pays sooner to improve co-pay collection rate
- Implementing a discount program for uninsured EMS patients and moving to secondary collections sooner
- Improving quality assurance and documentation inputs

[32] These figures are net of Section 1115 waiver.

[33] Individuals who self-pay would also be subject to the rate increase; however, many of these individuals are indigent and the City's collection rate (3 percent) with this population, means that little to no additional revenue may be realized. As a result, this population is excluded from revenue estimates in this analysis.

[34] This calculation assumes that the proportion of billed charges and paid revenue from private insurers would have remained the same.

- Improving data matching between hospitals and City billing data and expanding interface to include large volume hospitals
- Working with the Police Department to identify auto accident reports that have insurance
- Adding a surcharge for non-residents
- Continuing with programs to address the needs of the repeat callers with high EMS resource utilization

Regardless of the means pursued, the City has an opportunity to increase its EMS revenues at baseline. The City appears to be below the national baseline of between 44 percent to 56 percent net effective collection rate (depending upon whether transport is for BLS, ALS-1, or ALS-2 transports).[35] In 2016, the City of San Antonio adopted a contract with its third-party EMS billing/collections entity to generate a 56 percent net effective collection rate. If Houston were able to increase its cost recovery percentage to 44 percent, it would have generated an additional $6.6 million.

Due to the absence of an authorizing City ordinance, "non-transport" services are unable to be billed to private or public insurance providers (public insurance provider would require waiver) or to the individual receiving treatment. Charging for such "non-transport" services is increasingly common among Texas cities. For instance, San Antonio charges $100.00 for such calls for service and Dallas charges $125.00.[36] Due to the lack of an authorizing ordinance, the City is also unable to charge for services provided when a patient dies in transport or during treatment. The Department's proposed ordinance update pertaining to transport fees also includes new fees for non-emergent transport and cases where individuals are dead on the scene.

Alarm	BLS	ALS	ALS II	Mileage	Non-Transport	Dead on Scene
Houston (proposed)	$1,876.40	$1,876.40		$13.94	$175.00	$292.00
Dallas	$1,578.00	$1,578.00		$15.00	$125.00	
Los Angeles	$1,030.00	$1,452.00		$19.00		
New York	$704.00	$1,190.00	$1,290.00	$12.00		
Houston (current)	$1,072.18	$1,072.18		$13.94		
Chicago	$900.00	$1,050.00	$1,200.00	$17.00		
Philadelphia	$950.00	$1,050.00		$10.00		
San Antonio	$950.00	$950.00	$950.00	$12.00		$70.00
Austin	$831.00	$901.00	$966.00	$13.50	$104.00	$415.00

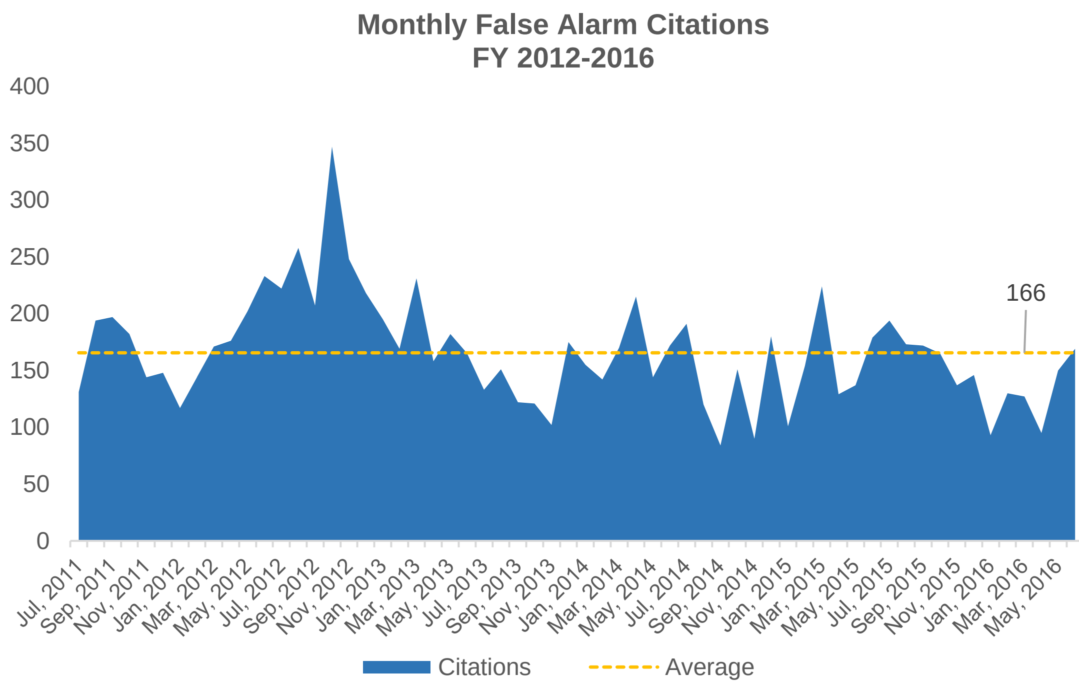
Source: City Administrative Code and Ordinances

[35] http://www.jems.com/articles/print/volume-37/issue-2/administration-and-leadership/jems-surveys-200-most-populous-cities.html.

[36] http://www.sanantonio.gov/SAFD/Ordering-Reports-and-Billing/EMS-Billing; http://dallascityhall.com/Budget/adopted_1617/FY201617-AdoptedBudgetBook.pdf

Revise False Alarm Policy and Fee

According to its NFIRS data, the Houston Fire Department responded to 25,669 false alarm calls in 2015 – or one in every eight calls for service. False alarm calls are costly and inhibit the Department's ability to respond to actual fires or medical emergencies.



Source: City of Houston

Currently, the Department allows five false alarm calls per registered alarm system (with no more than 10 actuating devices) on an annual basis before it levies a $402.55 fine for each false alarm thereafter (plus an additional $120.76 false fire alarm response collection fee if unpaid after 61 days from due date). Registered alarm systems with at least 11 and not more than 100 actuating devices are allowed 15 false alarms on an annual basis before incurring a $360 fine for each additional false alarm. The goal of a false alarm fine is to deter such calls and ensure availability of appropriate emergency response personnel to actual emergencies. In discussions with Department personnel, it was suggested that false alarm enforcement activity could be strengthened.

Through October 2016, the Department collected nearly $564,000 in false alarm fine revenue from 1,268 incidents. If annualized, this suggests a 2016 total of more than $675,000 – approximately $100,000 less than generated in 2015 – from 1,521 incidents (or approximately 1 of every 17 false alarm calls received by the Department).

Many other cities allow fewer "free" false alarms, utilize a progressive penalty, levy higher charges for false alarms, or implement all of the aforementioned approaches. For instance:

- In recent years, Toronto, Canada imposed what may be the most stringent fee structure in North America: building owners are charged on the basis of actual cost to the fire department on an hourly basis, with some fees – even for the first false alarm – in excess of $1,000.
- San Antonio applies no fee to the first false fire alarm activation, then charges $125 per call for up to four calls, $250 per call for calls five through ten, and $500 per call for more than ten calls in the preceding 12-month period.[37]
- Plano applies a $200 fee for each false fire alarm after the first two alarms for the lifetime of the permit granted to a person or business.[38]
- Dallas uses a per month model, where a $50 alarm service fee is charged for a resident or $100 for a business for each false alarm notification after the first false alarm in a given month.[39] A separate service fee of $100 is charged for each false medical alarm in excess of one per year.
- The San Francisco Fire Department charges $250 for each false fire alarm after the first two in a calendar year, and $500 for each false fire alarm after the first five false fire alarms within a calendar year.[40]
- San Diego Fire-Rescue grants up to two false alarms per calendar year at no penalty. After two false alarms, there is an $85 cost recovery fee for time spent by fire crew in addition to a penalty fee schedule beginning with $110 for the third response, $220 for the fourth response, $440 for the fifth response, and $2,200 for the sixth response and any subsequent responses.[41]

Building a 21st Century Workforce

To ensure that the Houston has the police officers, firefighters, and other City workers needed to deliver services, it needs to provide competitive wages to its workforce. Yet, Houston must strike a balance between providing sufficient compensation to attract and retain talented and motivated employees and the realities of its constrained fiscal resources.

From FY 2012 (after significant personnel reductions in FY 2011) through FY 2017, the City's personnel services expenditures increased by the same rate as the City's revenues – approximately 25 percent. Among the compensation items that drove the $307.1 million increase in personnel services during this period were: salaries (13.1

[37] https://www.municode.com/library/tx/san_antonio/codes/code_of_ordinances?nodeId=PTIICO_CH25PO; http://www.sanantonio.gov/Portals/0/Files/SAPD/ProgramsServices/FeeSchedule.pdf; http://www.sanantonio.gov/SAPD/Alarm-Permits#197902251-penalties.

[38] https://www.plano.gov/FAQ.aspx?TID=64.

[39] http://dallascityhall.com/departments/waterutilities/Pages/special_collections_registrations.aspx.

[40] http://library.amlegal.com/nxt/gateway.dll/California/fire/chapter1sanfranciscogeneralcodeprovision?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$anc=JD_113.13.

[41] https://www.sandiego.gov/sites/default/files/legacy/fire/pdf/alarmpermitfaq.pdf

percent growth, or $95.6 million increase) and benefits (48.1 percent growth, or $177.8 million increase).

Prospective total compensation costs, however, are projected to increase at unsustainable rates without corrective action. In response, the City has started to address its need to re-balance its total employee compensation with efforts to reduce health care spending and by enacting pension reform.

While the City's recent compensation studies found it may slightly lag the market in compensation for select City functions, recent benchmarking indicates that City employee healthcare benefits are generous relative to private sector norms — and multiple elements of Houston's health benefits package also exceed typical public sector levels in benchmark Texas cities.

During the 10 Year Plan, the City should work to re-balance its total compensation portfolio by focusing on personnel cost containment efforts (primarily on active and retiree health benefits) and prioritizing investment in compensation toward wages and salaries. Over the course of the next ten years, this re-balancing approach should better position the City to competitively recruit and retain a talented workforce and improve the affordability and sustainability of the City's total compensation package. When combined with actions discussed in other sections of the 10-Year Plan, Houston can strategically address both the average cost per employee and the total number of employees.

Workforce Costs Overview

Like most local governments, the great majority of the City's General Fund expenditures are related to personnel services. In recent years, those expenditures have increased as the cost of benefits outpaced the growth in cash compensation – and, most importantly, overall revenue growth.

From FY 2011 to FY 2017, the City's General Fund personnel services spending as a share of the City's total General Fund spending decreased from 71.0 percent to 65.7 percent. During the same period, Houston reduced its General Fund workforce by 5.1 percent. One primary driver of this decline occurred in FY 2012 when the City moved 493 FTEs in PWE from the General Fund to the DDSRF. The same year, the City also reduced personnel through layoffs in other departments causing General Fund FTEs to decrease by 11.4 percent from FY 2011 to FY 2012. From FY 2011 to FY 2017, even with a 5.1 percent decrease in personnel, the City's General Fund expenditures on personnel increased by $191.1 million (14.2 percent).

Viewed from FY 2012 to FY 2017, the City's General Fund workforce increased by 4.1 percent -- with 8.4 percent growth in Human & Cultural Services, 6.8 percent growth in Administrative Services, 4.4 percent in Public Safety, and a 12.2 percent *decrease* in Development & Maintenance Services. During this period, the General Fund's 4.1 percent increase in FTEs was accompanied by a $307.1 million (25.0 percent) increase in personnel expenditures.

General Fund Major Expenditure Categories	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Personnel Services	68.0%	66.9%	65.9%	64.0%	64.0%	65.7%
Supplies	2.3%	2.2%	2.2%	1.8%	1.5%	1.5%
Other Services and Charges	15.0%	15.6%	15.9%	15.4%	14.8%	14.7%
Equipment	0.4%	0.4%	0.4%	0.6%	0.3%	0.3%
Debt Service and Other Uses	14.4%	14.8%	15.6%	18.3%	19.4%	17.8%
Total Expenses ($,000)	**$1,807,260**	**$1,944,623**	**$2,064,696**	**$2,231,874**	**$2,340,148**	**$2,336,735**

From FY 2012 to FY 2017, the $307.1 million increase in General Fund personnel-related spending was largely driven by increases in the City's cost for pensions, active employee health benefits, and retiree health benefits – which grew at compound annual rates of 13.0 percent, 3.5 percent, and 6.3 percent respectively – comprising more than half of the total $307.1 million growth.

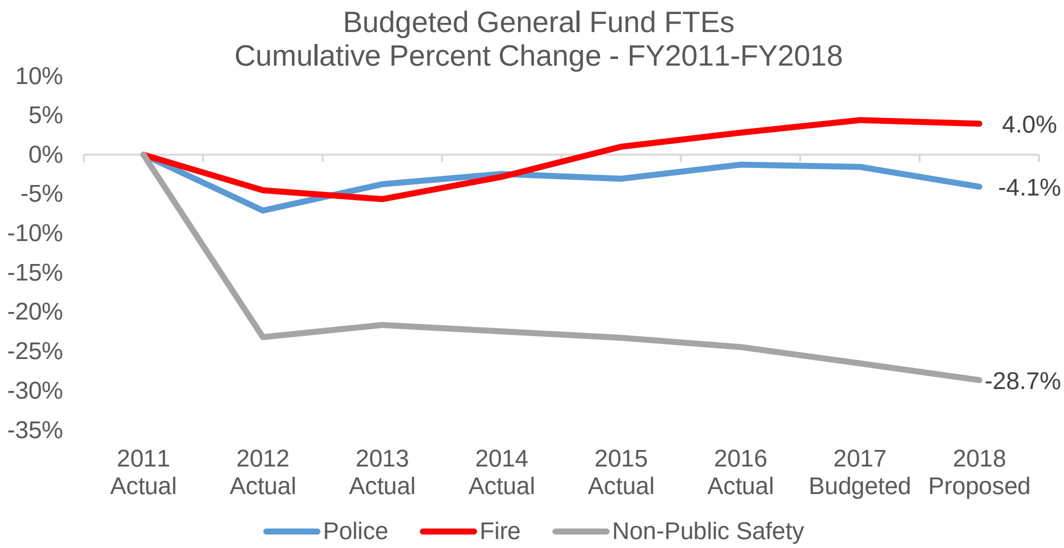
General Fund Compound Annual Growth Rate	FY2012 - FY2017 CAGR
All Personnel Expenditures	**4.6%**
Cash Compensation	*2.8%*
Pension	*13.0%*
Active Health Benefits	*3.5%*
Retiree Health Benefits	*6.3%*
Non-Personnel Expenditures	**6.7%**
Debt	*9.7%*
Materials, Supplies, Services	*4.0%*
Revenues	**4.6%**

Public Safety Drives Workforce Costs

While Houston's total budgeted General Fund FTEs declined by nearly 10 percent from FY 2011 to FY 2018, the City's total employment across all Funds only decreased by 3.2 percent. As the City reduced General Fund FTEs – particularly non-public safety FTEs – it increased its use of other Funds to fund positions. For example, during this period, General Fund non-public safety FTEs decreased by nearly 28 percent, but decreased by only 2.4 percent across all Funds (inclusive of General Fund) – suggesting a "transfer" of expense from the General Fund to other Funds.

Approximately 75.5 percent of all FY 2017 General Fund employees are in either the Police or Fire Departments (30.2 percent Houston Fire Department; 45.3 percent Houston Police Department). With 75.5 percent of the General Fund workforce, HPD and HFD combine to account for approximately 80.7 percent of the City's total FY 2017 General Fund projected personnel services expenditures.

GENERAL FUND (,000) Expenditures	FY2011 Actual	FY2012 Actual	FY2013 Actual	FY2014 Actual	FY2015 Actual	FY2016 Actual	FY2017 Adopted
Personnel Services	**$1,344,695**	**$1,228,661**	**$1,301,369**	**$1,360,502**	**$1,427,314**	**$1,496,548**	**$1,535,756**
Police and Fire	*$1,042,799*	*$987,364*	*$1,046,316*	*$1,087,682*	*$1,146,809*	*$1,211,407*	*$1,238,609*
Police	*$622,687*	*$596,720*	*$644,039*	*$673,125*	*$693,255*	*$752,292*	*$778,874*
Fire	*$420,112*	*$390,644*	*$402,277*	*$414,557*	*$453,554*	*$459,114*	*$459,735*
All Other	*$301,896*	*$241,297*	*$255,053*	*$272,820*	*$280,505*	*$285,141*	*$297,147*



Compensation Overview

Salaries

Through a series of compensation studies in the last five years, the City found that compensation for fire personnel was generally on par with neighboring cities, while uniformed police and municipal employees were both below market competitiveness for minimum and midpoint pay ranges.

Select Compensation Study Job Titles	Base Pay Market Average	Base Pay Houston Average	% Above/ Below Market	Base Pay & Benefits Market Average	Base Pay & Benefits Houston Average	% Above/ Below Market	General Fund Employee in Title
Firefighter Level C (Firefighter)	$57,632	$53,027	-8.0%	$73,274	$75,404	2.9%	1,676
Firefighter Level F (Senior Captain)	$83,116	$75,707	-8.9%	$101,265	$102,484	1.2%	185
Custodian	$28,857	$27,612	-4.3%	$39,577	$39,010	-1.4%	63
Police Level C (Police Officer)	$63,301	$49,899	-21.2%	$78,873	$71,881	-8.9%	2,452
Police Level D (Senior Police Officer)	$79,059	$61,662	-22.0%	$95,921	$86,094	-10.2%	2,135
Senior Payroll Clerk	$47,224	$38,792	-17.9%	$59,223	$50,845	-14.1%	484
Firefighter Level B (Firefighter- Probationary)	$54,778	$40,170	-26.7%	$70,139	$60,053	-14.4%	414
Police Level B (Police Officer – Probationary)	$43,776	$28,169	-35.7%	$57,749	$45,624	-21.0%	77

Source: Segal Waters Consulting, 2015 Compensation Studies

While not dispositive, the studies collectively suggest certain job titles/functions for additional review as the City evaluates employee compensation during the 10-year horizon. In addition to increasing market competitiveness at the minimum and mid-point ranges for police and municipal employees, Houston also needs to keep up with future growth.

In assessing overall compensation, the City would also need to look at the degree to which it is competitive with the broader local labor market – particularly in terms of educational attainment. For instance, classified police and fire employees earn average salaries that are more than $7,700 above the median earnings for Houston residents with a Bachelor's degree, though these positions do not require a Bachelor's degree.[42] Houston's public safety employees and non-public safety employees also earn well above the median income of Houston residents – the average public safety salary is nearly double the median income of Houston residents and the average non-public safety salary is approximately $18,500 above the median of city residents.

Non-Salary Cash Compensation

In addition to salary, Houston employees receive other forms of cash compensation. In FY 2017, the City is projected to pay $162.0 million in non-salary cash compensation to its employees, a 26.3 percent increase since FY 2012. Nearly two-thirds of this resulted from increases in Phase Down program costs (primarily in HPD) and overtime cost increases (primarily in HPD and non-public safety departments).

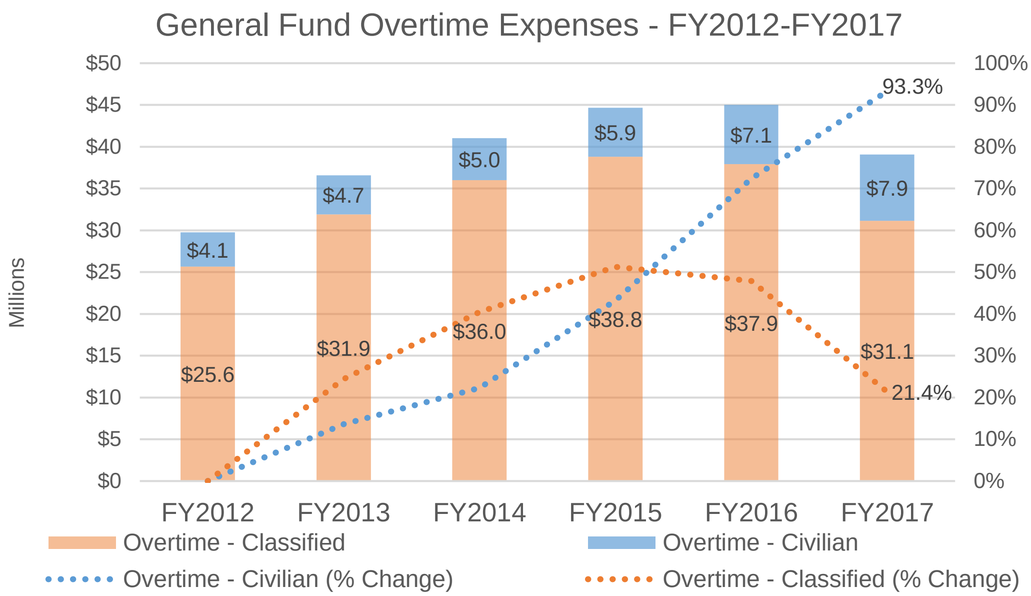
Overtime. In FY 2017, Houston is projected to spend approximately $39.0 million in General Fund overtime compensation for its civilian and classified employees. Classified employee overtime expenses have grown by 21.4 percent since FY 2012, from $25.6 million to $31.1 million in FY 2017. At the same time, civilian overtime expenses have increased by 93.3 percent, from $4.1 million to $7.9 million.

HPD's classified police employees are projected to receive $15.7 million of overtime in FY 2017. On average, each classified officer will receive $3,029 in overtime pay during the fiscal year – an increase of 60.7 percent since FY 2012 or more than a $1,100 *increase* in average annual overtime pay per classified police officer.

In FY 2012, HFD spent $15.9 million on classified overtime costs or an annual average overtime payment of $4,176 per classified firefighter. In FY 2017, HFD classified employees are projected to receive $15.4 million in overtime earnings, a 2.9 percent decrease in total costs and $3,787 in annual overtime earnings per classified firefighter.

[42] HPD does require at least 48 semester hours of credit from an accredited college or university; or 18 months of active duty in the United State armed forces with honorable discharge; or a minimum of five years of fully-time employment as a peace officer. HFD requires 24 credit hours or two years of full-time military service with an honorable discharge for non-certified trainees; certified trainees are required to possess at least 15 credit hours.

Civilian overtime is projected to reach $7.9 million in FY 2017, primarily driven by Solid Waste Management and HPD civilians. In FY 2017, Solid Waste overtime pay is projected to increase by more than $3.3 million – from $1.3 million in FY 2012 to $4.6 million in FY 2017. During the same period, HPD civilians are projected to receive $1.8 million in overtime payments, an increase of more than $400,000 (nearly 28 percent) since FY 2012.



Police Training Incentive Pay. Houston provides police officers with varying levels of training incentive pay based upon an individuals' years of service: $53.85 bi-weekly (approximately $1,400 annually) for those with 1 to 5 years of service; $129.25 bi-weekly (approximately $3,360 annually) for employees with 6 to 11 years of service; and $318.55 bi-weekly (approximately $8,280 annually) for those with 12 or more years or service. In FY 2017, incentive pay is projected to cost the City $29.7 million.

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Police Training Incentive Pay	**$31,237,129**	**$31,127,693**	**$30,746,971**	**$30,526,123**	**$30,375,062**	**$30,136,691**	**$29,681,396**

Educational Incentive Pay. Houston provides its public safety workforce with cash compensation for certain training and based on educational attainment. In FY 2017, the City is projected to spend $17.1 million in educational incentive pay for HFD and HPD employees – an increase of 10.0 percent since FY 2011.

Uniformed HFD employees who meet certain training and specialized education requirements/certification from the Texas Commission on Fire Protection are eligible for one of three levels of additional bi-weekly pay, ranging from an additional $41.55

bi-weekly (approximately $1,080 annually) to $92.08 bi-weekly (approximately $2,395 annually). In FY 2017, HFD employees are projected to receive $5.4 million in education incentive pay.

Sworn HPD employees are eligible for additional compensation based upon educational attainment: an additional bi-weekly sum of $140 for a Bachelor's Degree (approximately $3,640 annually), an additional bi-weekly sum of $240 for a Master's Degree (approximately $6,240 annually), and an additional bi-weekly sum of $340 for a Doctorate (approximately $8,840 annually).

HPD employees are eligible for the additional compensation at all educational attainment regardless of the area of concentration. In FY 2017, HPD employees are projected to receive $11.8 million in education incentive pay.

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Educational Incentive Pay	**$15,571,974**	**$15,741,013**	**$15,929,335**	**$16,101,563**	**$16,427,616**	**$16,634,338**	**$17,124,484**
Fire	*$5,149,806*	*$5,121,282*	*$5,036,322*	*$5,008,650*	*$5,069,540*	*$5,114,337*	*$5,366,835*
Police	*$10,422,168*	*$10,619,731*	*$10,893,012*	*$11,092,913*	*$11,358,076*	*$11,520,001*	*$11,757,649*

Phase Down Compensation. Houston offers its uniformed public safety employees the option to "ride out" their terminal leave payments and – depending upon whether the payments are deferred – to potentially gain additional City contribution to retiree medical coverage. The program provides an option for soon-to-be retirees to expend their respective paid time off leave banks and compensatory leave banks instead of taking a lump sum payment.

The Phase Down programs for HPD and HFD are different. HPD employees can choose to "ride out" through one of four different Phase Down offerings. HFD employees have one program option and must have a minimum number of years of service. Due to the differences in Phase Down offerings between HFD and HPD, HPD employees utilize the program with greater frequency than HFD employees.

In FY 2017, the Phase Down program is projected to cost the City approximately $23.4 million – $21.7 million of which is for HPD employees.

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Phase Down Program	**$10,000,178**	**$10,455,867**	**$12,166,588**	**$13,582,957**	**$16,573,433**	**$18,274,660**	**$23,365,284**
Fire	*$0*	*$11,655*	*$0*	*$0*	*$0*	*$0*	*$1,635,077*
Police	*$9,991,175*	*$10,444,212*	*$12,166,588*	*$13,582,957*	*$16,573,433*	*$18,274,660*	*$21,730,207*
All Other	*$9,003*	*$0*	*$0*	*$0*	*$0*	*$0*	*$0*

Terminal Leave Pay. In FY 2017, Houston is projected to spend $12.6 million in terminal leave pay to uniformed police and fire employees – a decrease of 36.7 percent since FY 2011.

Related to Phase Down pay, the City allows employees to cash-out unused sick and vacation days upon separation. As a result of the City's Phase Down plan being more attractive for members of HPD, the City's Terminal Leave payments are significantly greater for HFD employees. While the City's overall Terminal Leave payouts have decreased by more than one-third since FY 2011, HFD payments have decreased by approximately 50 percent. At the same time, HPD terminal leave payments have increased by more than 80 percent.

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Terminal Leave Pay	**$19,868,148**	**$15,138,936**	**$16,502,149**	**$12,687,801**	**$11,310,870**	**$13,860,591**	**$12,569,598**
Fire	***$13,448,863***	***$10,076,819***	***$12,032,000***	***$7,648,231***	***$6,819,240***	***$8,109,065***	***$6,754,323***
Classified	*$13,394,621*	*$10,071,606*	*$11,983,682*	*$7,624,471*	*$6,686,213*	*$8,062,164*	*$6,691,347*
Civilian	*$54,241*	*$5,213*	*$48,319*	*$23,760*	*$133,027*	*$46,901*	*$62,976*
Police	***$1,883,402***	***$1,840,631***	***$2,158,162***	***$1,679,838***	***$2,137,185***	***$2,516,789***	***$3,429,793***
Classified	*$924,157*	*$1,358,645*	*$1,710,123*	*$1,376,232*	*$1,687,909*	*$2,013,304*	*$2,532,184*
Civilian	*$959,245*	*$481,987*	*$448,039*	*$303,605*	*$449,276*	*$503,485*	*$897,609*
All Other	***$4,535,884***	***$3,221,486***	***$2,311,987***	***$3,359,732***	***$2,354,445***	***$3,234,737***	***$2,385,482***

Salary Assignment Pay. In FY 2017, Houston is projected to spend $8.8 million in specialty assignment pay to uniformed police and fire employees – an increase of nearly one-third since FY 2011.

Houston provides additional compensation to uniformed firefighters serving in various specialized roles or those who take on additional duties. HFD assignment pays range from an additional $69.23 bi-weekly (approximately $1,800 annually) for hazmat and paramedic/preceptor pay to an additional $276.92 bi-weekly (approximately $7,200 annually) for a firefighter certified as a paramedic and serving in a non-restricted status on an EMS unit or in an administrative staff assignment designated by the Fire Chief.

Uniformed HPD employees serving as Field Training Officers (FTOs) receive an additional $69.30 on a bi-weekly basis (approximately $1,800 annually) and those serving as FTOs responsible for training and evaluating new officers receive an additional $119.30 on a bi-weekly basis (approximately $3,100 annually).

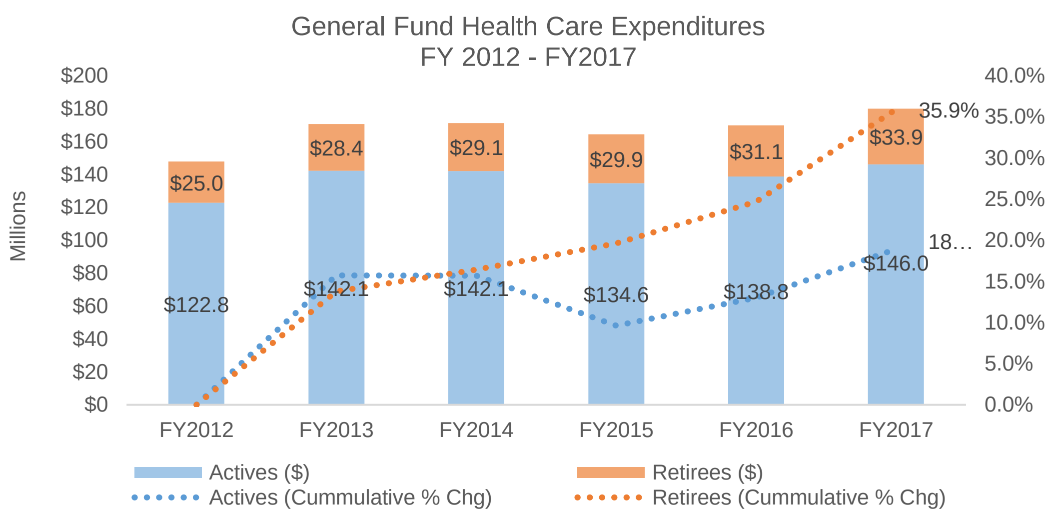
	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Salary Assignment Pay	**$6,642,420**	**$6,955,385**	**$6,805,651**	**$6,816,993**	**$7,143,991**	**$8,102,604**	**$8,791,948**
Fire	*$5,871,883*	*$5,828,147*	*$5,564,004*	*$5,553,347*	*$5,885,394*	*$6,463,613*	*$7,073,669*
Police	*$770,537*	*$1,127,238*	*$1,241,647*	*$1,263,647*	*$1,258,597*	*$1,638,991*	*$1,718,279*

If the City is able to achieve sufficient savings by reducing the above non-salary elements of cash compensation, it can then pursue sharing the benefits with its employees to increase compensation to targeted levels based on appropriate market comparisons.

Health Benefits Overview

Houston's active employee health benefits have consumed a greater share of the City's General Fund spending in recent years. From FY 2012 to FY 2017, Houston's active and retiree health care costs increased by 21.8 percent -- or $32.2 million. During this period, active health care grew at a compound annual growth rate (CAGR) of 3.5 percent (totaling $23.2 million) and retiree health care grew at a CAGR of 6.3 percent (totaling $9.0 million).

Looking forward, the City's health benefits costs for both active employees and retirees are projected to increase at unsustainable rates. Houston is not alone in this challenge. A December 2016 report by the U.S. Government Accountability Office (GAO) found that a primary driver of long-term state and local government fiscal challenges is health-related costs – which impact active and retiree benefits for local governments. Such costs are forecast to continue to outpace overall economic growth and public sector revenues.[43]



[43] https://www.gao.gov/assets/690/681506.pdf

Active Health Benefits[44]

The City of Houston is self-insured for health benefits – directly paying for the claims incurred by its employees. The City utilizes a Third-Party Administrator – currently Cigna – to manage this process and operations of its medical benefits. As of 2016, the City's benefit plans cover the lives of approximately 54,000 active and pre-65 eligible members.

City employees can choose between several plan design options – a Limited Plan (HMO-like), an Open Access Provider Plan (PPO-like), a Consumer Directed Health Plan with Health Reimbursement Account, and – for retirees residing outside of the Greater Houston Area, but within Texas – a Retirees of Texas Options Plus Plan. In addition to health benefit coverage, the City also provides a pharmacy benefit managed through Cigna's pharmacy benefits manager (PBM) from Catamaran. City employees also have access to dental benefits and vision benefits through separate providers with most of the cost paid by the employee.

Houston's highest enrolled health plan is the Cigna Limited Plan. The Plan's key design features include a requirement that "most non-hospital medical services be performed in one of three Independent Physicians Associations (IPAs) that must be selected at open enrollment:"[45] Kelsey-Seybold is one such provider and selected by nearly 75 percent of all enrollees. The Plan's structure offers a low in-network deductible, a low monthly employee contribution and competitive co-pay structures.

2016 Plan Design	Monthly Employee Contribution	In-Network Deductible	Out of Network Deductible	Out of Pocket Maximum for In-Network
Cigna Limited Plan (Kelsey Seybold)	$58.44 EE only $233.76 EE + Children $175.30 EE + Spouse $350.64 Family	$150 individual/ $450 family	N/A	$3,250 individual/ $6,500 family

	PCP Co-pay	Specialist Co-pay	ER Co-Pay	Rx Generic Co-Pay	Rx Formulary Co-Pay	Rx Non-Formulary Co-pay
Cigna Limited Plan (Kelsey Seybold)	$35	$65	$400 (waived if admitted)	Smaller of $10 (or cost)	$45	$60

[44] Overview of benefits provided by City of Houston, Department of Human Resources. Due to timing of the 10-Year Plan's data collection needs and analysis, as well as the timing of the City's 2017 open enrollment period, 2016 Plan year benefits are used for this analysis and for comparison. The 2017 Limited Plan design did not change the bi-weekly employee contribution amounts or annual deductible; however, it did increase the annual out-of-pocket maximum to $4,500 for individual coverage and $9,000 for family coverage.

[45] City of Houston, Department of Human Resources information.

While the City's plan is generally competitive on most other high-level plan details, the driver of the City's health benefit costs is the payment of claims. Even though the employee premium share is lower than national averages and some Texas cities, the low deductible cost in the Limited Plan is more fiscally significant. Among national public employers, the average deductible for employee coverage is $922.

Nationally, most employees contribute to the cost of their health insurance by paying a portion of the monthly premium.[46] According to the 2016 Kaiser Family Foundation's Employer Health Benefits Annual Survey, nationally, workers contribute 18 percent ($1,129) of the average annual health insurance premium for individual coverage and 29 percent ($5,277) of the average annual health insurance premium for family coverage.[47] The U.S. Bureau of Labor Statistics (BLS) published a 2016 National Compensation Survey finding that local government employees were typically responsible for 13 percent (single coverage) and 31 percent (family coverage) for costs of health benefits.[48]

Houston's employee contributions toward health benefits range from approximately 11 percent-16 percent for employee only coverage and from 18 percent to 29 percent for plans with employee and dependent coverage – somewhat more generous than national averages.

[46] The statistics in this paragraph come from the 2014 Annual Survey on employer health benefits published by the Kaiser Family Foundation and Health Research and Educational Trust.

[47] http://files.kff.org/attachment/Report-Employer-Health-Benefits-2016-Annual-Survey

[48] https://www.bls.gov/ncs/ebs/benefits/2016/ownership/govt/table10a.htm

2016 Highest Enrolled Health Benefit Plans	Monthly Employee Contribution (Family Coverage)	In-Network Deductible	Out of Network Deductible	Out of Pocket Maximum for in Network	Out of Pocket Maximum for Out of Network
Houston	**21%** **($351)**	**$150 individual/** **$450 family**	**N/A**	**$3,250 individual/** **$6,500 family**	**N/A**
Austin	30% ($556)	$500 individual/ $1,500 family	$1,500 individual/ $4,500 family	$3,500 individual/ $12,700 family	$12,000 per person
Dallas	46% ($618)	$2,500 individual/ $5,000 family	N/A	$6,350 individual/ $12,700 family	N/A
San Antonio	22% ($239) (Police do not contribute to healthcare)	$1,250 individual/ $2,500 family	N/A	$3,000 individual/ $6,000 family	N/A
Private Sector	29% ($439)	$1,478 individual/ $2,411 Family	N/A	N/A	N/A
Local Governments	31% ($427.00)[49]	N/A	N/A	N/A	N/A

[49] Median is shown.

	PCP Co-pay	Specialist Co-pay	ER Co-pay	Rx Generic Co-pay	Rx Formulary Co-pay	RX Non-Formulary Co-pay
Houston	**$35**	**$65**	**$400**	**$10**	**$45**	**$60**
Austin	$15	$25	$150	$10	$30 or 20% coinsurance (max of $60)	$50 or 20% coinsurance (max of $100)
Dallas	25% after deductible			10%	25%	40%
San Antonio	$30	$35	$55	$10	$35	$65
Private Sector	$24	$38	$282	$11	$33	$57

OPEB (Primarily Retiree Health Benefits)

Houston funds retiree medical and life insurance benefits for retirees and their dependents/survivors (collectively, known as Other Post-Employment Benefits or OPEB) on a pay-as-you-go (PAYGO) basis, making only the annual payment due to fund a given year's OPEB costs without pre-funding future liabilities.[50] In FY 2016, Houston's General Fund expenditures for OPEB totaled $33.9 million – an $8.9 million (35.9 percent) increase since FY 2012.

Houston's most recent actuarial valuation report (AVR) – issued in 2013 – indicates the City's OPEB liability is nearly $2.1 billion, the entirety of which is unfunded.[51] The City has not funded an OPEB Trust that would pre-fund future benefits, much like a pension fund. Nationally, many state and local government have delayed pre-funding their OPEB expenses and have little (or no) funds set aside to meet these fast-growing costs. Recognition of OPEB liabilities is now nearly a decade old – per GASB 45 – and credit rating agencies have started to show increasing attention to the need to address a long-term solution in many jurisdictions.[52] Pro-active pre-funding and actions to

[50] In 2004, the Government Standards Accounting Board (GASB) issued Statement 45 (GASB 45) requiring local governments to begin treating OPEB costs as liabilities in financial reporting by the end of 2008. The GASB requirement created an expectation that governments treat OPEB in the same manner as pensions and should seek to pre-fund the benefits. GASB 75 will take effective for FY2018. An analysis of whether or not GASB 75 will or will not affect the City's projected liabilities is beyond the scope of this Plan and will need to be reviewed by the City's OPEB actuaries. For more information on GASB 75, please visit: http://gasb.org/cs/ContentServer?c=Pronouncement_C&pagename=GASB%2FPronouncement_C%2FGASBSummaryPage&cid=1176166370763

[51] The City's FY2016 Comprehensive Annual Financial Report (CAFR) indicates that its OPEB liabilities – as of July 1, 2014 – were approximately the same – at just under $2.1 billion, without any assets accumulated to pre-fund future benefits.

[52] It is critical to note that jurisdiction-specific credit ratings are dependent upon a vast number of criteria and jurisdictions with similar pension and/or OPEB liabilities may experience different credit ratings for numerous reasons. The above discussion is intended to be illustrative only. It is not intended to reflect the likely or resultant credit ratings that would occur if a jurisdiction adopts or fails to adopt any OPEB and/or pension funding strategy.

ensure sufficient and affordable retiree benefits are considered a best practice – much like the City's actions related to pension sustainability and affordability.

Initiatives to Create a Sustainable and Affordable Workforce for the 21st Century

During the 10-Year Plan, the City will need to take actions in early years to balance its budget and create sufficient revenue to re-invest in its priorities. One such priority area for re-investment is employee compensation. The City has identified areas of desired investment in employee compensation, but employee benefits are crowding out opportunities to do so. In order to better balance salary and cash compensation with benefits – and better meet the demands of a future workforce that may desire benefit portability – the City will need to take a series of actions related to employee and retiree benefits.

Active Health Care Initiatives

Since 2010, Houston has implemented a series of initiatives – starting a wellness program, offering reduced or free co-pays for certain chronic conditions and increasing generic drug utilization (nearly 90 percent utilization of generics for certain chronic conditions), adding a high-deductible plan, and undertaking a review of its health benefit plan designs by a health care consultant among others – that have achieved a reduction in the average annual health benefit cost trend by approximately 1.1 percent.[53]

The City of Houston is not alone in making material changes to revise employee benefits. A late-2014 survey of local governments found that approximately 57 percent of respondent governments increased cost sharing of premiums paid by employees and nearly 50 percent of respondents reported that their government changed the way health insurance is provided.[54] A 2016 follow-up study, found that within the last year, more than half of all state and local governments made changes to health benefit offerings, with most changes focused higher employee premiums, co-payments, and/or deductibles.[55]

Even with recent changes, more adjustments are needed. As a result, the City must ensure its health benefits program is more affordable to taxpayers, while also providing competitive and quality benefits for employees and their dependents.

Among large cities in the U.S., Houston may find recent New York City reforms to be a model for action. Under a four-year health care reform initiative beginning in FY 2014,

[53] Of note is the City's wellness program which is re-branded and expanded in 2017 ("win for life"). The new plan requires employees and their covered spouses to take certain actions to retain the contribution discounts available; for instance, employees and covered spouses must choose one of three proactive wellness activities (such as telephone coaching, fitness tracking, lifestyle management programs, and preventative screenings and health exams).

[54] http://slge.org/wp-content/uploads/2014/12/LG-Strategies-to-Address-Rising-Health-Care-Costs1.pdf

[55] http://slge.org/wp-content/uploads/2016/05/State-and-Local-Government-Workforce-2016-Trends.pdf

the City targeted total savings of $3.4 billion by FY 2018. The City and unions agreed that the first $365 million in excess savings would go to the workforce as bonus payments and that the City and workforce would split additional savings. Together, the City and its bargaining units identified plan design changes, technology improvements, and prevention resources to encourage positive behaviors and achieve significant reductions in healthcare expenditures.

Some of the major cost initiatives in New York's approach included identifying new vendors for key programs, adding wellness initiatives, and performing a Dependent Eligibility Verification Audit (DEVA) saving $209 million over two fiscal years. The City also made changes to plans by adjusting plan design and administrative structure and controls. Status updates on the progress of the savings reforms emphasize a clear outcomes-based approach in identifying programs and services that both contribute to employee wellness and offer clear savings.

Perform Dependent Eligibility Audit: As it has in the past, Houston should continue to regularly conduct dependent health insurance eligibility audits. An audit does not change fundamental employee health benefits or coverage in any way. Dependent audits identify individuals who receive health coverage even though they are no longer eligible. In many cases, dependents remain on employees' health plans even after divorce, death, reaching the cutoff age, or securing health coverage elsewhere. Dependent audits can reduce the number of dependents covered by the City and thereby reduce City health claims and associated costs.

Typically, audits find approximately 8 percent of dependents ineligible.[56] Implementing regular audits has the potential to generate immediate recurring cost savings. Dependent audits have become an increasingly common practice by local government employers and have even become a popular state strategy to reduce health care costs.

In 2012, the State of Texas conducted a dependent eligibility audit and reported a five percent reduction in overall membership through the removal of ineligible dependents. Corpus Christi conducted a dependent eligibility audit of its workforce to ensure that all dependents met plan rules in FY 2013. The audit found that more than 10 percent of City dependents were ineligible reducing the City's health care insurance cost by $1 million in the first year.[57]

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[56] Mark Mack, *Controlling Health-Care Costs with Dependent Eligibility Audits* (Government Financial Review, June 2015), 31.
[57] http://slge.org/wp-content/uploads/2014/12/LG-Strategies-to-Address-Rising-Health-Care-Costs1.pdf

Renegotiate Prescription Benefits Plan Design and Contract: Houston may have opportunities to achieve better rebates through its PBM.[58] New York City renegotiated its PBM contract to include cost management provisions that continue to deliver savings. The specialty drugs program changes save $32 million annually.[59]

Explore Changes to Spousal and Dependent Eligibility Coverage in Active and Retiree Benefits: Among active employees, a 2016 analysis found that the 15,000 City employees enrolled in the Limited Plan had an average of 1.4 dependents enrolled on their plan. Houston could consider a spousal carve out to limit or deny coverage to employee spouses with access to other medical benefits, thereby providing spousal coverage to only those without access to another form of health benefits.

Spousal carve outs are increasingly common in both the public and private sectors. A November 2015 analysis found that 43 percent of large U.S. companies were evaluating a "per person" cost for health coverage instead of traditional tiered plan designs (e.g. employee only, employee and spouse, employee and children, family, etc.).[60] A Society for Human Resource Management survey found employers implementing a spousal carve out reduced approximately 27 percent of covered lives; the savings, however, are typically front-loaded and dissipate over time as other employers may adopt a similar strategy.[61]

In addition to or in place of a spousal carve out, the City could allow employees to cover their spouse, but do so at 100 percent of the cost difference between single coverage and the chosen type of plan enrollment (e.g. employee and spouse or family). The City should also explore the value of secondary coverage claims during recent years to inform its decision.

Within Texas, Fort Worth is actively exploring changes to spousal coverage to address the 49 percent growth in healthcare costs from FY 2010 to FY 2016. A spring 2017 estimate found that by removing coverage for active employee spouses with access to other employer coverage, the City could annually save $2 million to $4 million. Fort Worth is also exploring carving out coverage for retirees who have access to health care from a current employer and who are eligible for Medicare coverage (see also OPEB initiatives).[62]

Shelby County, TN utilizes a spousal carve-out provision in their active and retiree health care plans. Under Shelby County's policy, employee spouses who are eligible

[58] Additional analysis by the City's health care consultant would be required in order to quantify the order of magnitude of the opportunity.

[59] http://www1.nyc.gov/assets/olr/downloads/pdf/collectivebargaining/savings-report-q4-fy2016.pdf

[60] http://aon.mediaroom.com/2015-11-12-2015-Records-Lowest-U-S-Health-Care-Cost-Increases-in-Nearly-20-years

[61] https://www.shrm.org/ResourcesAndTools/hr-topics/benefits/Pages/Spouse-Coverage-Exclusion.aspx

[62] http://www.star-telegram.com/news/local/community/fort-worth/article137777073.html

for health coverage under their employer were deemed to no longer be eligible to receive coverage from the County effective January 1, 2015.[63]

Phase-in Increases in Employee Share of Health Insurance (contribution level and deductible): It is critical that the focus of any plan design changes be the health of employees (and their dependents), particularly improving prevention and wellness initiatives. Cost reductions follow if – and only if – employee health experiences improve and are maintained over time. The City, through its wellness program, has already introduced elements of consumerism to incent positive changes in employee health management and wellness awareness. It can reinforce this approach with additional employee contributions to claims through increased deductibles. Increasing the employee annual deductible will help affect employee behavior so that health maintenance and wellness goals are tied to financial contributions.

Expand Employee Wellness Clinics: One such option that Houston could consider is to provide an expanded on-site wellness clinic – free of charge – to its employees and their dependents. El Paso provides City employees, retirees, and their dependents enrolled in the City's health plan access to the City's three wellness clinics at no charge.[64] Galveston County also provides free primary care services through two CareHere healthcare centers to County retirees, employees, spouses and dependents covered by the Health Plan. Those covered have no co-pays or deductibles, receive free lab work and injections, and have no cost prescription coverage.[65]

Increase Access to Telemedicine: New York City provides access to physicians' online and via telephone 24 hours per day in an effort to increase employee access to providers and reduce costs associated with unnecessary emergency room visits.[66] Houston's health care consultants had previously found that restrictive laws in Texas had made telemedicine and clinic opportunities challenging. In May 2017, Governor Abbott signed SB 1107/HB2697 allowing physicians to utilize telehealth to serve new patients without first meeting the patient in person. The bill formalizes that telemedicine visits are the parallel to in-person visits and requires that telemedicine visits be held to the same standards of care. With this legislation, Houston can consider investments in telemedicine to provide additional services to employees and explore potential cost savings.

Offer Health Benefits Buy Outs: A subset of City employees has access to other health benefit options (e.g. through a spouse, partner, or secondary employer). Houston could provide a monetary incentive to these employees for waiving City coverage and

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[63] https://www.shelbycountytn.gov/3091/Spousal-Carveout

[64] https://www.elpasotexas.gov/benefits-and-risk-management/benefit-services/wellness-clinics

[65] http://www.galvestoncountytx.gov/hr/Documents/Resources/Galveston%20County%20Handout%20CareHere_Intro.pdf

[66] Ibid.

enrolling in other eligible coverage, perhaps even paying for some or all of the cost share for the other benefit plan.

Los Angeles and New York City offer "Cash in Lieu of Health and Dental Benefits" and "Health Benefits Buy Out" incentive programs, respectively, for employees who waive City coverage and elect coverage through another plan.

Review Funding Structure: Given prospective reforms, Houston should review whether or not the City's self-insured funding structure remains optimal. New York City changed its funding structure for the City's GHI plan from a fully insured plan to a minimum premium plan arrangement. The changes resulted in FY 2016 and FY 2017 savings of $61 and $41 million respectively.

The City should consider two other steps to reduce active employee health costs – stop loss coverage over a certain amount and incentivizing additional monitoring of claims by the Third Party Administrator.

- ***Stop-loss Coverage.*** Working with its health care consultant, and in the context of other health benefit changes, Houston should review whether or not the cost of stop-loss coverage would provide meaningful savings. The City previously had stop-loss coverage for the most expensive claims, but discontinued it after finding that it was not proving cost effective. The City's experience may have changed warranting reconsideration. Additional analysis by the City's health care consultant is a prudent first step to explore the cost-benefit of again carrying stop-loss insurance.

  Houston has Health Benefit Fund Reserves – both claim reserves and contingency reserves – that exist to provide a buffer for catastrophic claims, significant and unexpected claim increases and to mitigate overall risk. The City aims to maintain at least 10 percent of annual claim costs. Because the City does not have stop-loss coverage, it may find a more conservative approach warranted for its reserve level. The City should explore this option with its health care consultant.

  Among other Texas cities, Austin purchases stop-loss insurance for the City's PPO and HMO health plans. The insurance covers individual claims that exceed $500,000 per calendar year. The investment in stop-loss shielded the City from sixteen claims in FY 2016, fourteen in FY 2015, and sixteen in FY 2014.[67]

- ***Incentivize Effective and Proactive TPA Monitoring and Management as part of next TPA RFP.*** Houston's contract with its current TPA, Cigna, was a three-year contract (through April 30, 2017) with two one-year options thereafter. The City has elected the first option. As the City plans for issuance of an RFP for TPA

[67] https://assets.austintexas.gov/financeonline/downloads/cafr/cafr2016.pdf

services in coming years, it should work with its health care consultant to explore opportunities to drive plan designs that meet the health and wellness needs for its employees at a sustainable and affordable price to both employees and taxpayers. Several key aspects that the City may find useful to help drive its desired health outcomes through a TPA RFP include (but are not limited to):

- Integration of technology between TPA and City to provide transparent and regular data analysis and experience information for proactive interventions and plan management/design adjustments
- PBM pricing approaches and rebate structure to both reduce costs to the City and employees. There appear to be opportunities – given the City's number of covered lives – to achieve better rebates and overall rates

Within Texas, an example of an RFP that sought to drive proactive management and monitoring is found in San Antonio. San Antonio issued an RFP for a Third Party Administrator for medical plans, pharmacy and spending accounts in February 2017. In the RFP's Scope of Service, the City outlined a need for case management programs for high cost claimants and a disease management program that can be controlled by adherence. The scope also requested options for reduction of high costs associated with out-of-network services.[68]

On a much smaller scale, the City of Brockton, MA (population just under 100,000 residents) reduced retiree benefit costs in FY 2013 through a competitive RFP process to match or exceed the City's current benefit plans. The bidders competed on optimizing federal Medicare reimbursements, maintaining medical and prescription drug coverage without raising co-pays. The process achieved $2.4 million in annual savings for the City.[69]

OPEB Initiatives[70]

Retiree and OPEB benefits are the next major fiscal area of concern for most local governments. Like pension benefits, most public sector employers used future post-employment benefits as a means of compensating employees without increasing current salary. These costs are not sustainable. The City could pursue meaningful reforms – including the following actions – to better position taxpayers and retirees

[68] https://webapps.sanantonio.gov/RFPListings/uploads%5CRFP_2825_201602170152070.pdf

[69] http://www.governing.com/blogs/bfc/col-other-post-employment-benefits-opeb-medicare-brockton-massachusetts.html

[70] The initiatives are presented as consideration for the City's 10-Year Plan. Actuarial costing is necessary to assess a precise magnitude of impact associated with the strategies discussed in this section; however, it is expected the strategies presented could have a sizable impact in reducing the long-term liabilities associated with OPEB and some may have short-term cost savings as well. It is critical to note that all projected savings attributable to the above OPEB liability reduction options must be thoroughly reviewed with, and by, the City's health care consultant and legal counsel to ensure the City achieves full legal and policy compliance. Best practices presented include, but are not limited to those discussed in the GFOA's recent OPEB Sustainability publication: http://www.gfoa.org/ensuring-other-postemployment-benefits-opeb-sustainability-0.

for long-term affordability of the City's nearly $2.1 billion in unfunded retiree health benefits.

No matter what prospective OPEB reforms Houston undertakes, it must couple such reforms with a phased-in plan to achieve full funding of its resultant and outstanding OPEB liabilities – above and beyond the current PAYGO approach.

Cap Annual OPEB Exposure: Following the lead of Los Angeles, the City should seek to cap OPEB exposure to inflation or 3 percent – whichever is less. In 2011, Los Angeles passed a freeze ordinance that presented employees with an option to contribute 4 percent more for post-employment health costs or accept a plan with a $1,140 a month cap.[71] The 2011 ordinance was agreed upon by all unions with an estimated savings of $80 million in FY 2011.[72]

For Houston, such an initiative would be unlikely to produce significant year one fiscal impact, but would have long-term impact as the health care inflation rate is projected to continue to grow at an amount greater than 3 percent. An alternate approach to capping the City's expense would be to limit its contribution to a fixed dollar amount per month. Here again, the out-year savings would be significantly greater.

Restructure OPEB Benefits: The City's OPEB liabilities were not created in a short period of time and are unlikely to be solved in a short period of time. As a result, over the 10-year period, the City should make meaningful reforms to OPEB to curb its costs, but also ensure that it invests any associated savings to ensure a dignified and sustainable retiree health coverage. As the City assesses the following options to curb its retiree health benefit costs, it should also contemplate how it can best invest in ensuring adequate benefits for retirees – whether through new plan designs, subsidies, or employee/retiree savings vehicles (such as a Health Savings Account – or HSA – which is akin to a 401k, but can be dedicated to retiree health care). HSAs are way to pay for out-of-pocket health expenses and save for future healthcare needs in a tax-deductible manner. Similar to a 401(k) and IRA, employees can make contributions to the fund from job to job and withdraw funds for any reason after age 64.

Alternatively, the City could simply eliminate OPEB coverage altogether or create a more-tiered approach to OPEB based on years of service. In recent years, several cities, both nationally and in Texas, have taken similar approaches.

The City of Chicago recently undertook perhaps the most significant change to OPEB coverage of any large city. In 2016, the City began a three-year phase-out of retiree medical care for employees who retired after August 1989, meaning that 2016 was the

[71] https://www.lacers.org/retired/news/2011/retiree-benefits-q&a/Attachment%201%20Q&A%20on%20Subsidy%20Freeze%20and%20vesting%20of%202%20pty.pdf

[72] http://clkrep.lacity.org/onlinedocs/2013/13-1373_RPT_CAO_10-17-13-A.pdf

final year of coverage for retirees on City-provided health benefits. The City's OPEB elimination presumes that non-Medicare-eligible retirees will transition to the federal Affordable Care Act exchanges to secure health coverage.[73] The City anticipates its reforms to save $107 million annually.[74]

In 2015, the City of Memphis restructured its OPEB benefits for pre-65 retirees to pay 100 percent of health benefits premiums. Additionally, spouses with access to other coverage are no longer eligible to participate in the City's plan. As a result of the changes, Memphis estimated a $27 million savings in FY 2015 as a step toward eliminating the City's $1.3 billion unfunded OPEB liability.[75]

San Antonio implemented a series of reforms for non-uniformed employees that resulted in employees separating with less than five years of service no longer being eligible to participate in the City's retiree health program; employees separating with between 5 and 10 years of service may participate in the program at full cost and without any City subsidy.[76] Employees with 10 or more years of service pay 50 percent of the pay-as-you-go contributions to the program and the City contributes the remaining 50 percent.[77]

Fort Worth employees hired on or after January 1, 2009 and Dallas employees hired on or after January 1, 2010 receive no City subsidy for retiree healthcare coverage.

Houston could also increase or tier its retiree cost share for health benefits. The City of Austin tiers its OPEB contributions based upon a retiree's years of service (YOS) with the City. Retirees receive a maximum health benefit subsidy of 80 percent for single coverage and up to 50 percent for dependent coverage. Retirees with less than 5 YOS receive 20 percent of the maximum subsidy; 5 to 9 YOS receive 30 percent; 10 to 14 YOS receive 50 percent; 15-19 YOS receive 70 percent; and 20+ YOS receive the full subsidy.[78]

Eliminate OPEB Coverage for Retirees or Dependents with Access to Other Coverage: The City could eliminate or reduce coverage for retirees and their dependents who have access to another health benefits plan (e.g. through a spouse, employer, etc.), thereby eliminating a cohort of plan participants and reducing future liabilities.

The City's most recent AVR indicates that, as of 2013, there were nearly 2,900 spouses covered through City retirees. If the City chooses to eliminate dependent eligibility for retirees, it could consider allowing "buy-up" eligibility for dependents that could

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[73] http://www.labfchicago.org/city-retiree-healthcare-expires-december-31-2016-/

[74] http://chicago.suntimes.com/politics/rahm-emanuel-3-year-phaseout-chicago-retiree-health-care-program/

[75] http://www.memphistn.gov/Portals/0/pdf_forms/fy2015_adopted_op/fy2015_adopted_op_full.pdf

[76] http://www.sanantonio.gov/Portals/0/Files/Finance/FY%202009%20CAFR.pdf

[77] http://www.sanantonio.gov/Portals/0/Files/Finance/FY%202009%20CAFR.pdf

[78] Austin Retiree 2016 Benefits Guide; 2014 OPEB AVR, PDF p.11

be obtained by retirees for the full cost of the attributable premium or through a defined contribution plan (the City could match employee contributions up to a certain percentage to "pre-fund" employee directed OPEB savings).

Fully Fund a Retiree's Share of Health Benefits through another Employer: A portion of City retirees hold second jobs, some with access to health benefits through a non-City employer. The City could offer to fund a retiree's employee share of health care through their non-City job (up to a certain dollar value). In return, the City would gain the benefit of the retiree (and potential dependents) not enrolling in retiree medical coverage, thus capturing the savings between the lower cost employee share for the City retiree's coverage through a non-City employer and the cost of coverage through the City's retiree health benefits plan. This approach is likely most applicable to classified retirees who tend to retire at younger ages and have more years of retiree benefit coverage with the City before becoming eligible for Medicare.

New York City recent took a similar, but slightly different approach to this action. New York offers a Health Benefits Buy-Out Waiver where active employees and pre-Medicare retirees are eligible for a cash incentive ($500 for individual, $1,000 for family) payment for waiving City coverage by joining their spouse or partner's plan. Houston would need to identify a proper level of monetary incentive to balance participation and cost savings.

Require Firefighters to Attain a Minimum Eligibility Age: Firefighters are eligible for retiree health benefits without a minimum age requirement. The City could move to implement a minimum age – for example, 55 years – before being eligible for retiree medical coverage. The City would have to weigh potential savings from this initiative with a potential interaction with pension experiences to ensure that it achieves both policy and fiscal goals in a prudent manner.

Support Operations

Citywide administrative functions in Human Resources, Procurement, Information Technology and Finance are all essential to the day to day operations of City government. Improvements in basic processes in local government can yield significant – if hard to quantify – savings and revenue opportunities.

Many of the core departments operate under a federated service model that allows individual departments to independently execute some or all of these core functions. A federated model that provides significant autonomy may inhibit the central departments from executing key reforms and programs that provide consistency and efficiency. This model often leads to some departments developing processes that may adequately fill the department's immediate needs but stray from the established citywide processes and policies.

The GFOA promotes the consolidation of like services across organizations – or between organizations – as a best practice. According to the GFOA, "shared services take advantage of economies of scale by aggregating like services across the organization or between organizations. They also promote best practices by organizing services into 'shared-service centers' that are focused on the most efficient/effective performance of that service and that are subject to result-based accountability via formal service-level agreements with 'customers.'"

Successful execution of the 10 Year Plan will require the City to truly centralize its administrative and back-office functions. Doing so would support back-office leadership to implement reforms that meet the needs of the entire City. A centralized organizational structure must also allow client City departments to hold the centralized support departments accountable for service quality.

Human Resources – 21ST Century Talent Management

The Human Resources Department (HR) provides critical services to all of the City's departments. HR is responsible for recruiting and onboarding the City's workforce and is the official custodian of the personnel records administration for active and inactive employees. HR is also responsible for the administrative activities associated with labor relations across the city.

As of June 1, 2016, 263 employees were employed in HR, with nearly ninety percent funded through the Central Service Revolving Fund, the Worker's Compensation Admin Fund, and the Health Benefits Fund.

Between FY 2011 and FY 2016, General Fund funding for HR went from $3.2 million to $3.4 million dollars.

Centralize the Talent Management Function

Earlier sections of this Plan outline initiatives that would affect employee compensation and benefits. The City also needs to create a more centralized structure to drive talent management.

The need for talent management and a focused hiring strategy is not unique to Houston. The Center for State & Local Government Excellence found that recruiting and retaining qualified personnel with needed skills for public service was the most important workforce issue for public employers.[79]

[79] State and Local Government Workforce 2016 Trends Survey Findings, Center for State & Local Government Excellence, Available at: http://slge.org/wp-content/uploads/2016/05/State-and-Local-Government-Workforce-2016-Trends.pdf

Currently, some, but not all of the City's HR functions are centralized in its Human Resources Department. For example, as of June 2016, 149 City employees held one of the following titles:

- Human Resources Assistant
- Human Resources Technician
- Human Resources Generalist
- Human Resources Specialist
- Human Resources Supervisor
- Senior Human Resources Generalist
- Senior Human Resources Specialist
- Human Resources Manager

Out of the 149 City employees in these positions, 38 did not work in HR:

Department	Number of Human Resources Positions
Human Resources	110
Police	20
PWE	8
Houston Emergency Center (HEC)	3
Houston Airport System (HAS)	3
Legal	2
Fire	2

All of the City's recruitment and personnel management functions should be consolidated into a single office. Many local governments are achieving improved interdepartmental communication, greater continuity of operations and increased operational efficiency through the consolidation of Human Resources functions. Centralized HR functions support offers a variety of benefits for governments. A single entity-wide approach to administrative support ensures that all divisions and agencies operate under the same standards and procedures. By improving the flow of information, this process can also greatly improve efficiency. Consolidation also allows governments to realize potential benefits from economies of scale in these functions. Further, the centralization allows operating divisions to focus more on the execution of their core missions.

Other major cities have adjusted the organizational structure and service delivery of Human Resources and realized savings and efficiency.

- Baltimore realized $1.5 million in savings through their FY 2015 effort to consolidate Human Resources and streamline the City's workforce by 10 percent over 10 years.

  The City found that even with cost containment measures in compensation and a hiring freeze, it was necessary to take a citywide approach to address rising personnel costs. The City consolidated Human Resource functions resulting in a net reduction of six support positions and eliminated 17 positions of prolonged vacancies as the first steps in FY 2015.[80]

- Los Angeles consolidated 100 Human Resource functions from 23 departments in FY 2012 and FY 2013.[81] In the FY 2012 Four-Year Budget Outlook and update to the Three-Year Plan to Fiscal Sustainability, the City noted that departments can no longer afford to have their own human resources, information technology, or accounting staff. The report called for a consolidation of these functions where a centralized department already existed. Through the consolidation, the department strengthened human resources capacity citywide and reduced redundant work.[82] The two-year phased consolidation brought efficiencies and improved services that contributed to the City's elimination of a $238 million structural deficit.[83]

The consolidated human resources service model is an emerging best practice among larger cities:

- Consolidation is a major component of Seattle, WA's Workforce Equity Strategic Plan. As the first priority of that plan, the City is pursuing consolidation of human resource programs, performance management, and a centralized data collection and measurement effort. The plan phases-in consolidation over three years.[84]
- San Antonio's Office of Innovation set out to improve the City's hiring process in FY 2012. The City reduced a 100 step process that took 175 business days to hire to a 30 to 45 step process that ranges from 18 to 46 business days. The City also implemented new recruitment methods and fully implemented an online

[80] City of Baltimore, FY 2015 Executive Summary, Available at: http://bbmr.baltimorecity.gov/sites/default/files/FY2015%20Executive%20Summary.pdf

[81] City of Los Angeles, Personnel Department FY 2012-2013 Proposed Budget, Available at: http://clkrep.lacity.org/onlinedocs/2012/12-0600_misc_4-23-12f.pdf

[82] City of Los Angeles, City at a Crossroads, Available at: http://cao.lacity.org/Reports/City%20at%20a%20Crossroads%20Report%20020713%20-%20final.pdf

[83] http://cao.lacity.org/budget12-13/2012-13Budget_Summary.pdf

[84] http://murray.seattle.gov/wp-content/uploads/2016/07/Workforce-Equity-Strategic-Plan-July-2016.pdf

recruiting resource. The City was able to hire the best candidate 75 percent faster and at almost half of the cost.[85]

A strategic approach to human resources citywide will support investments that Human Resources leadership have already identified as opportunities to improve recruitment and talent development. While the City has many processes in place that begin to address the needs of a 21st Century workforce, a more formal, data-driven process could result in additional savings:

- Improve employee retention by leading efforts to create and promote a great work climate and provide consistency and transparency in communication and training. Employee resource groups are one way to build an environment of support.
- Support seamless on-boarding and off-boarding through applicant self-scheduling for all pre-employment testing and reduce the cost per hire, increase visibility and move to a complete paperless process.
- Provide departments across the City with access to workforce data such as compensation, benefits, and applicant tracking by investing in a single system for relevant workforce data.

Any move to centralize human resources functions should be accompanied by clear service levels for these activities so that departments can have expectations and hold the centralized department accountable for timeliness and quality. Clear expectations create an opportunity for both HR and departments to have well defined roles in the talent acquisition and development process.

Enhance Vacancy Control over Budgeted, Unfilled Positions

Every time a position in City government becomes vacant, it is an opportunity for senior administrators and division heads to determine whether the position must be filled. Performance data and formalized process will allow for senior leadership to make informed decisions around the need and benefit to filling vacant positions. The City already has a process for reviewing vacancies but a more informed and formalized process based on performance and other data may result in fewer vacancies being filled. Continued data-based reviews would enable department heads and senior leaders to make better decisions about filling vacancies based on answers to the following questions:

- Will failure to fill the position result in an increase in cost or loss of revenue to the city?

[85] http://www.sanantonio.gov/Innovation/Our-Impact

- If the position is approved to be filled, is there another position in the Department that can be eliminated – either by attrition or layoff?
- If the position is not approved, explain how the Department will continue to do the work that the current employee performs?

According to FY 2017 data, as of July 5, 2016, there were 354 vacant, funded General Fund civilian positions in non-public safety departments totaling approximately $22.5 million in annual salary and benefits.

Invest in Talent Development

Compensation and benefits often attract talent while work environment, professional development opportunities, and connection to the organization are major factors to retaining staff. The City needs to invest in ongoing professional development for managers and City staff across all departments.

The Learning and Development Center (LDC) is a central part of the City's effort to create a results-oriented workforce and performance-based culture. LDC offers ongoing learning and organizational development programs tailored to the City's workforce – ranging from new employee orientations and new supervisor trainings to stand-alone internal professional development programs and customized classes to meet departmental needs. LDC also facilities new employee and supervisor orientations as well as organizational development services to City departments. By continuing to develop and expand LDC in innovative and cost-effective ways, Houston can better meet its human capital needs, improve service to the public, and provide its employees opportunities to advance their careers.

Like Houston, cities across the nation have started to take a more active role in employee development and training. In Albuquerque, New Mexico, the City launched a Public Service University (PSU) to create and implement learning and training tools for City employees with online- and classroom-based delivery. PSU focuses on building core skills in managers, building skills of current employees, providing career counseling and ensuring employee health and safety. [86]

Dallas offers City University, a professional development and training program that began in FY 2015. City University is managed by Human Resources staff and was part of an effort to better align the City's resources for employee development.[87] San Antonio offers an array of professional development, technical training, and

[86] https://www.cabq.gov/humanresources/workforce-development
[87] https://dallascityhall.com/government/Council%20Meeting%20Documents/2015/CuSPReport_111814.pdf

mentorship opportunities designed to assist in recruiting and retaining employees and improving service delivery.[88]

New York City operates a Citywide Leadership and Development Program and Training Center through its Department of Citywide Administrative Services. City agencies pay for personnel participating in the program through intra-City funds [89]

Rather than providing compensation to employees through education benefits, the City should focus on funding tailored training programs. Expanding the programs and course offerings by LDC would support City workforce development and retention. HR is also working to develop training tracks for career growth opportunities. Aligning offered classes and certifications in the LDC at no or reduced cost encourages staff to consider long-term career options within the City.

Procurement

While most of the City's General Fund spending goes toward salary and benefits, significant spending also goes toward construction, supplies, equipment, and other services. Based on analysis of FY 2016 actual General Fund spending, it appears that the City spent approximately $164 million on procurement. This spending is up from $134.7 million in FY 2011.[90] An FY 2016 analysis of all contract awards and purchase orders by the City (all Funds) reported a much higher number – $1.42 billion.[91]

[88] http://www.sanantonio.gov/EmployeeInformation/Training

[89] http://www.nyc.gov/html/dcas/html/employees/learning_ctc_about.shtml

[90] These data are based on information provided by the Strategic Procurement Division and do not include contracts funded by any source other than the General Fund.

[91] http://www.houstontx.gov/obo/reports/fy2016annualawardsreport.pdf

Department	FY 2016 Contract and Procurement Awards Total Greater than $20 million
PWE	$762.8 million
Strategic Procurement*	**$156.7 million**
Finance*	$93.9 million
General Services	$90.2 million
ARA	$47.6 million
Housing & Community Development	$41.5 million
Fleet	$40.1 million
Police	$36.7 million
Houston Airport	$35.2 million
HR	$31.1 million
Fire	$28.9 million
Health and Human Services	$23.3 million

Much of the City's approach to procurement is based on requirements under state law. But the City has also adopted local legislation that affects the procurement process – including requirements related to participation by minority and women owned businesses and preferences for firms located in the Houston region (Hire Houston First).

Despite the significant amount of funding that goes to outside contractors, the City lacks a centralized infrastructure for monitoring and managing the procurement process. Moreover, as is frequently the case in government procurement, emphasis is placed on compliance over value.

The City's Chief Procurement Officer and the Strategic Procurement Division reports through the Finance Department. As of June 1, 2016, 41 employees were employed in Strategic Procurement, all of whom were funded through the General Fund. Between FY 2011 and FY 2016, funding for the Strategic Procurement Division went from $3.8 million to $4.8 million dollars – with most of the change due to growing wage and benefit costs. Strategic Procurement staff members are divided into Professional Services, Specialized Commodities and Construction, Procurement Intelligence, Commodities, Work Services and Small Purchases units.

The City uses a federated model where some procurement personnel are embedded within departments with limited oversight by the Chief Procurement Officer. Looking across City government (not including the Airport or Houston First), there were 81 employees holding the positions of Buyer, Senior Buyer, Purchasing Manager, Procurement Specialist and Senior Procurement Specialist across ten City departments:

	Total Procurement Employees
Public Works and Engineering	31
Finance	29
Police	8
Health	5
Parks & Recreation	2
Business Opportunity	2
Other	4

The Office of Business Opportunity (OBO) also plays a role in the procurement process. OBO has four primary areas of responsibility:

- The Certification Division oversees certification of contractors and vendors as Minority, Women, Small Business Enterprise, Persons with Disabilities Enterprise and Disadvantaged Business Enterprise as part of the City's overall effort to increase diversity and promote business opportunity in the contracting community. Certification also oversees the Hire Houston First program.
- Contract compliance enforces local and federal labor standards requirements on contracts, monitors equal employment opportunity law compliance and assesses whether contractors are meeting good faith requirements related to MWDBE participation.
- Department Services works with City departments on determining appropriate MWDBE goals on individual contracts.
- External Affairs works to increase awareness of contracting opportunities.

As of June 1, 2016, 30 employees were employed in OBO, 93 percent funded through the General Fund. The remaining 7 percent were funded through the Contractors Responsibility Fund. Between FY 2011 and FY 2016, funding for OBO went from $2.4

million to $2.8 million dollars – with most of the change due to growing personnel costs and marketing to promote services offered by OBO.

Consolidate and Reform Procurement

Under a consolidated model, all procurement activity would be under the review of the Chief Procurement Officer. Procurement activity would be carried out by two City departments – Strategic Procurement for all goods and non-construction and Design and Construction for all construction and construction related services.

As in the case of the recommended consolidation of HR functions, there would have to be service level agreements between Strategic Procurement and operating departments. For example, there would need to be reasonable expectations set on the amount of time needed to move from identifying a contract need to bidding or formal proposals to award and to start date.

Consolidation would also make it easier to implement a series of strategies designed to reform the overall procurement process. In pursuing a high level of consolidation and reform in procurement, Houston would be following the lead of other major cities.

Chicago created a Procurement Reform Task Force (PRTF) in May 2015 to develop recommendations to make procurement and contract management in the City efficient, cost effective, and uniform. The PRTF included the City of Chicago, City Colleges of Chicago, the Chicago Housing Authority, Chicago Park District, Chicago Public Schools, Chicago Transit Authority, and the Public Building Commission. The task force participants adopted uniform rules governing solicitation of contracts. PRTF also evaluated the consistency of MBE/WBE/DBE certifications accepted by task force participants. The analysis indicated that the agencies accepted certifications from different agencies and prompted a recommendation for greater coordination.

As of March 2017, the City of Chicago had implemented eleven of the fifteen immediate recommendations, passed an intergovernmental agreement for all participating agencies to work cooperatively to implement recommendations, and created a CIO Committee to address necessary improvements in technology and procurement systems.[92] Among other initiatives, the City has adopted recommendations establishing minimum standards for due diligence of vendors before entering into a contract, creating uniform rules governing re-solicitation of contracts due to scope change and developing a process for information sharing on professional development for procurement personnel.

[92] Annual Report of the Chicago Procurement Reform Task Force, Marc 1, 2017, Available at: https://www.cityofchicago.org/content/dam/city/depts/dps/Outreach/2016AnnualReport_PRTF_030107.pdf

Cincinnati created a Chief Procurement Officer in May 2015 as part of a larger effort to centralize the procurement process to one responsible authority that reports directly to the City Manager. As of April 2016, Cincinnati has created and reissued new policies and manuals, restructured the Purchasing Division, and established a multiple-award Master Agreement competition policy. Procurement leadership has begun to outline standardized procurement processes with clear priorities and processes that can be duplicated across the city.

Increase Professional Development of Procurement Staff

Before proceeding with centralization, the City needs to invest additional resources in the professional development of Strategic Procurement Division staff members. Strategic Procurement needs to move beyond a focus on rule compliance to identifying strategies for reducing cost and increasing value for the City. This is a very different approach to procurement and requires skills and expertise that many members of the Strategic Procurement staff currently lack.

For example, NIGP: The Institute for Public Procurement offers a range of training and professional development courses including:

- Selecting the Right Procurement Method
- Strategic Procurement Planning in the Public Sector
- Best Practices in Developing Public Construction Bid Documents
- Getting What You Need Through Successful Negotiation Strategies
- Managing Your End Users and Suppliers: It's All About Relationships

Staff development has also been recognized as a key driver in other successful public sector procurement reform efforts. Minnesota achieved $90 million in savings by training staff in negotiating for active vendor contracts. Miami-Dade public health agency's approach to procurement reform included gain-sharing, where staff were eligible to receive bonuses by re-bidding sole source contracts. The pilot program saved nearly $16.6 million in procurement costs.

Use Data to Drive Competition

The City does not regularly review levels of competition on its procurements. For example, the number of contracts and the value of contracts awarded based on sole source or with fewer than three bidders is not easily available for review.

There is some information on the number of contracts awarded by sole source or through an emergency process. Data from the OBO FY 2016 report indicates a total of 27 sole source contract awards totaling $36.2 million and 13 emergency contracts totaling $22 million. Limited bid contracts – where there are only one or two bidders, even though there is not a declared sole source or emergency and where the City expects a competitive field – are in some respects an even greater concern.

In New York City, the City Charter requires the Comptroller to publish an annual analysis of contracting. The report examines the total value of City contracts, number and value of contract by department, number and value of contracts by type of procurement. The City's Financial Management System also allows for easy identification of the number of contracts and value of contracts by number of bidders. The availability of this data makes it easier for procurement officials to identify trends and opportunities for greater competition.

By accurately tracking levels of competition, the City will better understand its vendor pool by project type and would be able to take steps to target efforts to increase competition. Clear data analytics on levels of competition can also highlight opportunities to improve contract language, processing time, and other deterrents of competition from the perspective of the bidder.

Review the Impact of Hire Houston First

In some cases, the City has made a policy decision to make awards to firms that are not the lowest responsible bidder. Under the Hire Houston First program, the City grants a preference in competitive procurements to firms bidding on goods and services for the City. Under the program, if the contract value for goods is $100,000 or greater, then the contract is awarded to a city business that is within three percent of the lowest bid received from a bidder that is not a city business. If the contract value is under $100,000, then the contract is awarded to a city business that is within five percent of the lowest bid received from a bidder who is not a city business. City businesses are defined as businesses with a principal place of business within the city limits.

The program is somewhat different for services. The same preferences are in place, but they are applicable for businesses located anywhere inside of the metropolitan area – in other words, non-Houston businesses are also eligible for the benefit.

The City also has the authority for goods or services of $50,000 or less to select vendors within the local area (defined as the metropolitan area) provided that any such vendor's bid is no more than 5 percent greater than the lowest bid.

According to the Office of Business Opportunity FY 2015 report, the City awarded contracts and purchase orders totaling $486 million to firms registered as eligible for the Hire Houston First preference. The annual report details the economic benefits of contracting with the City. It does not, however, indicate the cost of the preference – in other words, there is no information on what the additional cost was to contract with a Hire Houston First contractor. The only reference is to two contracts totaling

$15,240,375 awarded by PWE to non-low bidders that were registered for Hire Houston First.

NIGP generally recommends against blanket local price preference programs because "preference policies, including local preferences, conflict with the fundamental public procurement principles of impartiality and full and open competition."[93] On the other hand, NIGP does recommend that local preference can be considered as part of an overall assessment of best value. NIGP goes on to note that best value is defined as "the most advantageous balance of price, quality, and performance identified through competitive procurement methods in accordance with stated selection criteria…generally refers to a source selection based upon a cost/benefit analysis."

While the City has legitimate policy goals for its Hire Houston First program, it does not currently measure the impact of the program on cost (e.g., the number of contracts awarded to other than low bidders as a result of the local preference). Moreover, given the absence of data on overall procurement competitiveness for the City, it would be worth reviewing the current policy to determine impact on competition.

Focus on Quality Contractors

Individual contracting departments have responsibility for monitoring the timeliness, quality and cost of goods and services. OBO has broad responsibilities for contractor compliance with legal mandates.

The City needs to bridge the two so that there is a consolidated means of monitoring contractor performance – whether it is timely delivery of goods or services or labor standards or good faith efforts at meeting MWBDE goals in a contract. Despite the amount of money that the City spends on outside contractors, there are real limitations on its capacity to effectively monitor these contracts.

Excluding Houston Airport, as of June 2016, there were just 20 contract compliance, senior contract compliance and contract compliance supervisors in City government – none in OBO. City procurement officials indicate that contractors are rarely barred from awards based on non-responsibility determinations, where an otherwise low bidder is found to lack responsibility to work on a particular contract based on non-compliance with past contracts, poor performance or other factors. Similarly, debarment – where poor performing or otherwise non-responsible contractors are barred from bidding or proposing on work – is also rare. The City also does not have a system for regularly evaluating contractor performance.

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[93] www.nigp.org/docs/default-source/New-Site/positionpapers/localpreferencepositionpaper2015cap.pdf?sfvrsn=2

New York has an extensive process for contract oversight and monitoring and regularly collects information on contractor performance that it shares widely in its VENDEX database.

Other local governments seek to weed out poor performance through a process of pre-qualification. Pre-qualification allows potential bidders to establish their ability to perform work and meet basic legal standards before bidding for City work: Houston does use a qualification process for selecting project architects, but the same process could also be used to create a stable, qualified pool for other contracts as well.

Other low or no-cost steps can be taken to increase compliance as well. Where the City has reason to believe that there may be compliance issues – but where there may not be sufficient basis to disqualify a contractor – it can impose a compliance program as a condition of award of the contract. In some cases, the City of New York has required contractors to hire "independent private sector inspectors general" (IPSIGs) to oversee compliance. The City selects the IPSIG, but the cost is borne by the contractor.

Technology

Technology is essential to every function performed by City government. Strategic deployment of technology resources can result in significant enterprise-wide improvements in efficiency and effectiveness.

The City's IT leader is the Department of Information Technology Services (HITS), established in 2002 to improve technology utilization throughout the City. As of June 2016, HITS had 201 employees across 22 different units: Active Directory, Administrative Services, Application Development, Client Services Help Desk, CSMART, Cyber Security, Data Warehouse, Desktop Support, Enterprise Applications, ERP, GIS, Houston Emergency Center, Infrastructure, Network, Network-Data Services, Operations, Project Management, Radio and Public Safety Communications, Radio Communications, Resource Management, Server Team and Telecom Services. While 147 HITS employees were funded through the General Fund, another 54 were funded through a separate Central Service Revolving Fund.

As part of the HITS FY 2017 budget, the department had General Fund funding of $23.4 million and additional $45.1 million in funding through the Central Service Revolving Fund. Between FY 2011 and FY 2016, actual General Fund spending for HITS increased from $19.1 million to $22.3 million.

Despite the creation of HITS more than a decade ago, information technology has not been fully centralized within City government. As in the case of Procurement and HR, the City continues to operate with a somewhat federated model. Public Works and Engineering, Police, Health and Human Services, Houston Public Library, and Parks &

Recreation all continue to have a significant number of employees focused on IT. The four most common titles in HITS are Tech Hardware Analyst, Systems Support Analyst, Senior Microcomputer Analyst and Systems Consultant: these four titles account for 88 out of the 201 FTEs in HITs as of June 2016. At the same time, more employees holding these titles were employed in Public Works and Engineering (126), the Police Department (36), Health and Human Services (8), Houston Public Library (6) and Parks & Recreation (6).

One effect of the federated approach to IT may be less than optimal span of control. Based on data from June 2016, there were 25 HITS employees identified as managers. The number of employees assigned per manager ranged from one to eighteen.

More than 15	**2**
Between 11 and 15	**5**
Between 6 and 10	**10**
Between 1 and 5	**8**

There is significant variation from city to city in the operations and funding of Information Technology. Some cities are highly centralized, with all IT and IT-related activities consolidated enterprise-wide in a single department. These departments frequently are led by a Chief Technology Officer or Chief Information Officer. Other cities have a much more decentralized model where most departments – certainly larger departments – have their own IT staff capacity.

There is also an increasing trend where traditional IT departments are charged with broader responsibilities. For example, in Chicago, Los Angeles and Philadelphia, the IT department has been restructured and renamed to be responsible for Innovation and Technology. In Los Angeles, the City's 311 system staff members are housed in their IT department.

There is also a relatively wide range in the degree and amount of staffing that is provided in-house and that which is provided by outside contractors. Outsourcing can be a means of supplementing in-house IT staff, especially for specialized functions. Outsourcing can also be a means of overcoming the inability to recruit quality IT staff at government salaries. On the other hand, there have been multiple cases where government agencies become overly reliant on external contractors to provide basic services.

In Houston, the limited reliance on in-house personnel is reflected in the General Fund allocation between personnel and non-personnel costs: personnel services account for more than 75 percent of the HITS FY 2017 General Fund budget. By comparison, in Chicago, salaries (benefits are not in the departmental budget) accounted for 44 percent of the Innovation and Technology FY 2017 Corporate Fund budget.

These differences are also reflected in the differences in FTEs across large city departments.

	Total IT FTEs	IT FTEs per 100,000 residents
Chicago	106	3.9
Dallas	249	19.2
Houston	**201**	**8.8**
Los Angeles	434	10.9
New York	1379	16.1
Philadelphia	328	20.9
San Antonio	340	23.1

Develop a Strategic Technology Plan

Under a previous Strategic Plan adopted for 2015-2017, HITS focused on six broad goals:

- Engage to Enable IT to Become a Partner of Choice
- Create a Resilient, Scalable and Agile IT Infrastructure
- Transform our Future IT Workforce
- Improve the Overall Management of IT Services
- Protect City Information and Data
- Enhance Citizen Engagement

The City needs a strategic technology plan – not just a plan for HITS. The plan should be focused on technology as a form of learning, public and City access to data, improved efficiency and effectiveness, and improved performance measurement. The plan should also detail specifically how technology can improve overall service delivery.

A citywide strategic technology plan will outline opportunities for citywide investment in new technology and opportunities to better leverage existing technology and data systems. Dallas released its first Technology+ Strategic Plan in FY 2016. The three year plan outlined a vision and direction for the City's technology aligned with the operations and priorities of city programs and needs of Dallas citizens. The plan focuses on the following business goals to integrate technology into city operations and citizen experience.[94]

- Seamless Resident and Business Interaction
- 360° View of City Constituents
- Transparent Performance Measures
- Effective "Digital" Service Delivery

As part of the strategic technology plan, the City should define HITS' role in serving internal customers and the public. The operations of the department can be driven by that focus and a set of goals clearly aligned to it. For example, the Raleigh, North Carolina IT department strategic plan focused on four goals:

- Technology should form a means of constant learning
- Citizens and staff should have complete access to information
- Technology should make us more efficient
- We should be able to see the measure of our work

The City should also determine whether its strategic goals can best be accomplished by completing consolidation of all IT functions within City government. This would place all IT functions and FTEs – including those currently in other departments – under HITS. The strategic plan should also address whether HITS should broaden its responsibility to housing the City's efforts at government innovation.

If the City proceeds with full consolidation and centralization of the IT function through HITS, it should also explore whether savings could be achieved through reorganization that achieves a more uniform span of control and whether savings could be achieved through an increase in the outsourcing of more specialized functions.

Any move toward further consolidation of the IT function must be accompanied by agreed levels of service. Operating departments should be able to hold a consolidated IT department accountable for everything from responsiveness to basic help desk requests to timely delivery of new systems.

[94] http://dallascityhall.com/departments/ciservices/DCH%20Documents/City-of-Dallas-Technology+StrategicPlan.pdf

Finance

Finance provides critical services to all of the City's operating departments. Finance is responsible for treasury and capital management, financial planning and analysis, financial reporting and operations, and strategic procurement. As of June 1, 2016, 138 employees were employed in Finance, 73.2 percent of whom were funded through the General Fund. The remaining 26.8 percent were funded through the Central Service Revolving Fund. Between FY 2011 and FY 2016, funding for Finance went from $9.8 million to $17.6 dollars – with most of the change due to the transfer of Strategic Procurement from ARA to Finance in FY 2014 adding 44 FTEs, as well as growing personnel costs.

Not all of the City's finance functions are housed within the Finance Department. By Charter, the City Controller – an elected position – is responsible for audit and investments. Multiple City departments are charged with collection of revenues from permits, franchises, licenses and fees. Payroll services reside within Administration and Regulatory Affairs. And individual departments and agencies retain responsibilities for different budget and accounting functions.

As one indicator of the federated model for finance, as of June 2016, 165 City employees (not including the Airport) held one of the following titles (not including Airport):

- Account Clerk
- Accountant
- Accountant Associate
- Accountant Manager
- Accounting Services Supervisor
- Financial Analyst I
- Financial Analyst II
- Financial Analyst III
- Financial Analyst IV

Just 36 out of the 165 City employees in these positions worked in Finance: more (43) worked in PWE.

Department	Number of Financial Positions
Public Works and Engineering	43
Finance	36
Police	22
Housing	15
Health	14

An analysis by the City Controller indicates that the City of Houston has 69 Special Revenue Funds (SRFs) with a total fund balance of $250.1 million: 32 of the SRFs are not included in the City budget. As of the FY 2017 budget, the 32 SRFs funded

In FY 2017, 28 out of the 37 budgeted SRFs were projected to fund at least one employee. There were a total of 2,589.2 FTEs (not including overtime) budgeted to be funded by SRFs in FY 2017: this was up by 58 percent over FY 2011 actuals. In some cases, the increase was the result of General Fund employees being shifted to SRFs. In other cases, SRFs were used to create new positions in City government. For example, because of the creation of the DDSRF, employees were shifted from the General Fund to the DDSRF.

	FY 2011 Actual	FY 2017 Budget	Change
PW&E - Building Inspection	468.1	610.3	142.2
PW&E - DDSRF	0	500.1	500.1
PW&E - Stormwater Utility	362.2	331.1	-31.1
HEC - Houston Emergency Center	244.2	251.3	7.1
HHD - Essential Public Health	0	190.4	190.4
ARA - BARC Special Revenue	58	119.6	61.6
PRD - Golf Special	0	79.5	79.5
ARA - Parking Management	72.5	74	1.5
GSD - Maintenance Renewal/Replacement	0	73.4	73.4
PD - Planning & Development	0	47.5	47.5
HHD - Special Waste	0	45.4	45.4

HPD - Forensic Transition Special - Classified	0	40	40
HPD - Forensic Transition Special - Civilians	0	30	30
HPD - Auto Dealers - Classified	20	23	3
MCD - Juvenile Case Manager Fee	12.1	23	10.9
MYR - Tourism Promotion	0	23	23
HHD - Health Special Revenue	0	21.6	21.6
MYR - Cable Television	11.5	20	8.5
PRD - Bayou Greenway 2020	0	17	17
PRD - Maintenance Renewal and Replacement	0	17	17
HHD - Swimming Pool Safety	0	14.1	14.1
PRD - Parks Special Revenue	88.8	10.9	-77.9
HPD - Auto Dealers - Civilians	6.3	9	2.7
PW&E - Houston TranStar	6.8	9	2.2
SWD - Recycling Revenue	1	4	3
HPD - Special Services - Civilians	8.1	2	-6.1
OBO - Contractor Responsibility	0	2	2
MCD - Municipal Courts Technology Fee Fund	7	1	-6
HPD - Asset Forfeiture - Civilians	0	0	0
HPD - Asset Forfeiture - Classified	0	0	0
HPD - Digital Automated Red Light - Classified	29.2	0	-29.2
HPD - Digital Automated Red Light- Civilian	6.9	0	-6.9
HPD - Mobility Response Team	28	0	-28
HPD - Special Services - Classified	179.5	0	-179.5
HPL - Digital Houston	2	0	-2
MCD - Municipal Security	20.4	0	-20.4
PWE - Mobility Response Team	5.8	0	-5.8
TOTAL	1638.4	2589.2	950.8

Increase Consolidation of Finance Functions

Greater consolidation of Finance staff would give the Mayor and Finance Director greater control over spending and revenue citywide. In a city the size of Houston, there is a need for a single Chief Financial Officer to oversee all City finances – at least those that directly impact the General Fund.

As is the case with consolidation of the procurement function, potential efficiencies and savings go beyond staffing consolidation. Consolidation of the finance function would ensure the application of uniform policies and procedures to limit risk and more effectively manage City resources. There have been several cases where the federated approach to the finance function has resulted in financial challenges that likely would have been avoided by a more centralized structure. For example, the City Controller is currently auditing funds dedicated to affordable housing in Houston after published reports indicating that the City's Housing and Community Development department was unable to account for $45 million in funds.

Other cities have seen efficiencies in staffing result from consolidation. Chicago consolidated the Department of Revenue with the Department of Finance to leverage efficiencies and ensure that core departments are streamlined. The FY 2012 consolidation of Finance and Fleet Management with General Services allowed the City to reduce the budget by $14.9 million and eliminate 70 positions.[95]

As is the case with all recommendations for consolidation, it would have to be accompanied by service level agreements with operating departments. Finance would have to develop clear metrics for accountability.

Reduce the Use of Special Revenue Funds

GASB Statement No. 54 states that: "Special revenue funds are used to account for and report the proceeds of specific revenue sources that are restricted or committed to expenditure for specified purposes other than debt service or capital projects."

SRFs make sense as a means of accounting for restricted uses of different revenues. The effect of wide-scale use of SRFs – and dedicated funding more generally – is that it limits the ability to manage resources. Non-restricted funds provide fiscal managers and policy-makers greater capacity to adjust to changing circumstances and to ensure alignment of resource allocation with overall, City-wide priorities.

[95] City of Chicago, FY 2018 Budget Book

Factors weighing toward formal or informal revenue dedication may include:

- Requirements of grants or other restricted funding used in tandem with the charges.
- Significant issues of user acceptance for a fee or fine. In some cases, users may be more likely to support and comply with a new or increased charge if it results in faster, better services and revenue dedication is seen to encourage the proper level of resources for service delivery.
- Charges that produce volatile revenues as a result of volatile service demand. In such cases, revenue dedication may promote greater stability for overall budget management, as resources will increase to support peak demands, and any declines may be offset by reduced fee-supported activity and expenditures. In turn, such practices may reduce City-wide reliance on volatile revenue streams, making it easier to manage through cyclical downturns.

Absent such factors, the creation of SRFs may unnecessarily constrain citywide budgeting flexibility, hindering the ability of City leaders to allocate resources where most needed.

For example, the geographic dedication of Parks' revenues constrains the department's ability to shift funding towards the most under-resourced parks or invest in new citywide service deployment contracts. Under the Parks and Open Space Ordinance, developers of multi-family residential units are required to either provide land for parks or open space or pay a $700 fee per unit developed. The funds, however, can only be used for capital costs, must be expended in the same Park Sector of the development for which the fee was assessed, and must be obligated within three years. In FY 2014, the City collected $5.86 million in fees for the Fund – none of which can be used for operating costs.

Other municipalities are also reviewing their use of SRFs. In May 2015, the City of Baltimore released a research memo on the City's use of Special Funds. Their analysis highlighted that oversight on the funds was weak and that forecasting for the particular funds was often decentralized. With many of the funds run by individual departments, accurate revenue projections were not used to appropriately budget expenditures.[96]

The City should reduce the number of special revenue funds and reduce the amount of revenue earmarked for specific functions, allowing for greater discretion in the budgeting process.

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[96] City of Baltimore, BBMR Management Research Memo, Special Fund Analysis, May 2015, Available at: http://bbmr.baltimorecity.gov/sites/default/files/special%20fund%20analysis.pdf

Coordination, Collaboration and Consolidation

The best, most efficient and effective way to improve service delivery is through coordination and collaboration. Yet, it is often the hardest thing for government to do. Coordination and collaboration require different departments and department heads to work together. Incentives are frequently lacking. In many cases, changing the operations of one department can improve the outcomes for another department. Similarly, investing in one department may produce savings in another department. Yet, department heads are usually appropriately focused on the resources and successes of their own department.

For coordination and collaboration to be successful, it usually requires executive authority to create incentives and drive the process. It may also require the reorganization of the government so that like roles are more centralized.

This section outlines a series of steps that the City can take organizationally to ensure greater coordination, collaboration and consolidation. In all cases, the goal is to increase the overall effectiveness of City government – including, specifically, its ability to implement measures outlined in this plan. In many cases, greater coordination, collaboration and consolidation can also have the effect of directly reducing cost or increasing revenue.

Increase Coordination to Reduce Fleet and the City's Footprint

As noted in Chapter IV, the City faces a significant challenge when it comes to deferred maintenance of its facilities and fleet. To reduce the cost of maintaining vehicles and facilities, the City should reduce the number of vehicles and the City's footprint.

The City should continue to move forward with expansion of its fleet share efforts and reductions in the fleet. As of December 2016, Houston's FleetShare program owned 94 vehicles, and had 1,182 participating employees. Fleet Management has identified 57 existing traditional fleet vehicles as potential transfers to FleetShare, and has a ten year acquisition and replacement plan of $4.7 million.

Car sharing cannot eliminate the need for a fleet, but it can allow for significant reductions in the number of passenger vehicles. In 2007, Philadelphia reduced its fleet and used fleet sharing as a means of complementing the remainder of the fleet as a means of providing vehicles for City employees when needed. In New York, the City contracts with Zipcar for the FastFleet network, with approximately 600 cars in the network.

The City should also undertake a full facility assessment analysis to examine whether it can reduce existing space. The City owns more than 7.7 million square feet of buildings. It also leases 387,152 square feet of space and three parking garages at an annual cost of $6,103,388. The size of the City's footprint also drives other costs – such as building maintenance, security and utility costs.

As the City reviews its "physical footprint" and conducts a space utilization review/needs assessment, it should incent divisions to view space utilization as a cost, not a centrally-absorbed expense. One way to do this is to charge divisions rent on a square foot basis for all of its space. If a Division rents space, the Division's charge should include costs necessary to maintain the property (that the City provides and/or pays). With respect to those properties owned by the City, General Services should include property maintenance costs and depreciation in the Division's square footage rent calculation. Divisions will ultimately "vote with their feet" if they have too much space and do not want to absorb additional overhead expenses.

In December 2012, the City of Chicago's Department of Fleet and Facilities Management announced a plan for the consolidation and reorganization of the City's office space. By FY 2014, the City had negotiated the exit of thirteen leases and negotiated seven new leases for a net annual savings of $2.6 million. The City also began to consolidate office in City Hall and relocate offices from leased space, resulting in an additional $4 million a year in savings.

The New York City Mayor's Office of Operations (MOO) developed a seven point action plan for streamlining and professionalizing the city's allocation and use of real estate, including the implementation of Mayor Bloomberg's public call to reduce the city's office space footprint and cost by 1.2 million square feet and $36 million annually. Contemporary municipal offices had an 11 percent workstation vacancy rate. After cataloguing all owned and leased space, MOO identified high-priority target locations with at least one of three parameters: high vacancy rate, high cost per-employee per-square foot, or near-term lease expiration. 50 city agencies collectively produced 65 opportunities for relocation, consolidation, or disposition of leases, for a combined total savings of $32.8 million and 1.2 million square feet. By 2010, 14 recommendations were implemented, another 30 were in progress and 21 were in planning.

Combine 311 and Police Non-Emergency Calls

The City should consider consolidation of its Police non-emergency number and 311. Currently, Houston 311 is staffed through Administration and Regulatory Affairs while non-emergency police calls go through the Houston Emergency Center. Houston 311 is staffed 24 hours a day and seven days a week. As of June 2016, there were 87 employees assigned to the 311 Center. The Police Department's non-emergency number is staffed by the Department through the Houston Emergency Center: where civilian staff members answer both 911 and non-911 calls.

311 was initially conceived of as a means of diverting calls from 911. A 2005 Justice Department study detailed the benefits of non-emergency call consolidation with 311

systems. Among other things, providing an easy to remember police non-emergency number can be more effective in diverting calls from 911. Both Baltimore and Chicago are major cities that use 311 for police non-emergencies. In Minneapolis, the following non-emergency police calls are handled by 311:

- Abandoned bicycles
- Bicycle Parking Issues
- Credit card/ATM fraud
- Damage to property, vehicle or cemetery (excluding burglary, forced entry, or attempted burglary of a residence, garage or business). When reporting vehicle damage, have the make, model, license plate number, insurance company name and policy number available when you call.
- Failure to pay for gasoline
- Failure to pay hotel, restaurant or entertainment debts
- Failure to pay taxi fare
- Harassing and obscene phone calls
- Identity theft
- Lost property
- Theft by swindle
- Theft from building
- Theft from coin operated device
- Theft from motor vehicle (have vehicle information available, including make, model, license plate number, insurance company name and policy number)
- Violation of restraining order
- Violation of visitation rights

At a minimum, 311 call takers could be trained to take police non-emergency calls to reduce the need for overtime in the Emergency Center and to reduce hold times.

Rethink Public Works and Engineering

Public Works and Engineering (PWE) is the largest non-public safety department in the City of Houston. It has a wide range of responsibilities including Engineering and Construction, Planning and Development, Streets and Drainage and Traffic Operations. PWE is also responsible for administration of the City's Water and Wastewater Utility.

As of June 1, 2016, just over 3,800 individuals worked for PWE – including 2,100 who worked for, and were funded through, a separate utility fund. PWE is also primarily responsible for administration of projects funded through the Dedicated Drainage and Street Renewal Fund (DDSRF).

The vast majority of PWE operations are not funded through the General Fund. In the FY 2017 budget, just $31.9 million in General Fund expenditures were attributable to PWE. Most of the PWE funding and most PWE employees are funded by a series of special revenue funds.

The current level of staffing for the non-utility functions within PWE is lower than many other major cities. The opportunities for savings through greater efficiency – as measured solely by headcount may therefore be limited.

City	Public Works FTEs*	FTE per 100,000 residents
Chicago	4423	162.6
Austin	1347.25	144.6
Los Angeles	5316	133.8
Dallas	1283	98.7
New York	8113	94.9
San Antonio	1249	85.0
Houston	**1790.9**	**78.0**
Philadelphia	857	54.7

* Public Works FTEs for other cities includes all employees performing similar functions to Houston PWE (excluding Utility). For example, Austin includes Public Works, Transportation (excluding Parking Management), Watershed Protection and Development Services.

In meetings with stakeholders and members of the Council, however, many expressed concern about the size of the PWE bureaucracy. Members of Council worried about the lack of transparency in project management. Community stakeholders raised questions about the procurement and contract management process.

One of the biggest differences between Houston's approach to Public Works and the approach in other cities is that Houston has concentrated a series of related functions into a single "super" agency. In Austin, PWE's functions cut across four departments - Public Works, Transportation, Watershed Protection and Development Services. In New York, the functions housed in Houston PWE are spread across five departments: Buildings, Design and Construction, Environmental Protection, Housing Preservation and Development and Transportation. And, among big cities, Houston is the only one that does not have a separate transportation department of some kind.

City	Department
Austin	Department of Transportation
Chicago	Department of Transportation
Dallas	Mobility and Street Services
Los Angeles	Department of Transportation
New York	Department of Transportation
Philadelphia	Streets Department
San Antonio	Transportation and Capital Improvements

The City should consider a reorganization of PWE that creates multiple departments rather than concentrating functions into a single department. This reorganization would not just divide up PWE, but would also incorporate functions and operations from other City departments.

A Department of Design and Construction (DDC) would take on the responsibility of design and construction for all departments, including General Services. While the Chief Procurement Officer would be responsible for all goods and services procurement, DDC – modeled after a similar department in New York – would be responsible for all construction-related procurement and project management. While there are differences between so-called vertical and horizontal construction, there are also real similarities – in the nature of the procurement process, the potential for the use of pre-qualification of contractors and construction project management. Even if there were no resulting reduction in headcount, savings could be achieved through improvements in project management and procurement.

A Department of Water Services would focus on the City's flooding problems, storm water and management of the Water utilities. It would be modeled after the Department of Water Services in Metro Nashville which has a mission "to provide drinking water, wastewater treatment and storm water management services to our community so we can enjoy a vital, safe and dependable water supply and protected environment." Again, consolidation of "all things water" under a single operating department would complement the Mayor's strategic focus on addressing flooding through the Chief Resiliency Officer.

A Department of Transportation would consolidate transportation planning, traffic operations, streets and bridges into a single department and would be responsible for liaison with METRO. It would also be charged with transportation-related responsibilities, such as implementation of the City bike plan.

Finally, the City should consider creating a single Department of Code Enforcement that would consolidate the Building Code Enforcement activities currently within the PWE Planning and Development Services division and the Department of

Neighborhoods (DON). This would allow for consolidated inspection activity. Both Los Angeles and Dallas have centralized code enforcement activity to reduce administrative cost, increase efficiencies and align strategies. The Department of Code Enforcement would also be positioned to impose new fees related to blight and vacant properties and increase compliance with anti-blight regulations.

Consolidate Housing and Neighborhood Development Department

To complement the new Department of Code Enforcement, the City should also consider consolidating the remaining functions of the Department of Neighborhoods with Housing and Community Development into a single Housing and Neighborhood Development agency that would be focused on neighborhood revitalization and the Mayor's vision of complete communities. It could drive development and implementation of potential investments in affordable housing.

The new department should also work in close coordination with the Housing Authority. There are frequently bright lines between local government housing departments and the local housing authority. Housing authorities, however, have access to considerable resources: the Houston Housing Authority's annual operating budget is $187.4 million.

Greater coordination with the Housing Authority could lead to opportunities for shared services and programming. Consolidation of functions would also allow for more strategic deployment of federal CDBG and HOME funding. For example, New York City has both a Department of Housing and Preservation Development and a Housing Authority. The City's Housing New York plan recognizes the critical role that the Housing Authority plays in both preservation of existing affordable units and new construction.

Increase Joint Planning for Youth Services

Parks and Recreation, the Library, and Health and Human Services all provide citywide services to Houstonians. While they do not exclusively serve young people, they each provide specific and unique services to the City's population under 18 years old. Houston, however, does not fund and is not responsible for providing public education: instead, 35 different school districts and public charter schools serve Houston students. The largest school district serving the city is the Houston ISD, the nation's seventh largest school system.

Parks and Recreation, the Library, and Health and Human Services independently provide community-based facilities with resources and programming for neighborhood residents: there are 60 community centers, 44 branches of the Library and 11 multi-service centers. Department heads across these three departments have worked collaboratively on potential co-location of services. But there is no formal planning process for coordination of programming and services citywide.

The City should create a coordinated Youth Services planning process designed to maximize the ability to leverage its own resources, the resources of local school districts and other youth-focused non-profit organizations. The process could be coordinated through the newly created Mayor's Office of Education.

Boston and Los Angeles both offer potential models for this type of approach.

In 1988, then-Mayor Tom Bradley launched a new partnership between City government and the Los Angeles Unified School District. LA's BEST (Better Educated Students for Tomorrow) is a non-profit organization that provides after school programming for more than 28,000 students a year. BEST funding comes from a combination of City and private sector sources. Initially, the organization was run out of the Mayor's office, but all programming activities were run out of the Unified School District's offices and provided at school facilities.

In 2008, then-Mayor Thomas Menino launched the Boston Community Learning Initiative "to address key factors for healthy development in youth by aligning Boston Centers for Youth & Families (BCYF) Boston Public Schools and Boston Public Library to coordinate youth services and programming." Under the Initiative's plan, the City worked at a neighborhood-by-neighborhood level:

- Aligning services and opportunities the City provides to make them more user-friendly and easily accessible to children, youth and families
- Expanding opportunities available to youth by seeking to partner with the City's many youth-oriented community organizations and institutions
- Providing an enriching curriculum that allows all children and youth access to Arts, Character-building, Education and Sports and recreation activities
- Developing communication materials and vehicles that will make it easy for parents and youth to learn about, sign up for, and participate in Community Learning programs.[97]

Create a Culture of Performance

Long-term fiscal sustainability also requires a relentless and ongoing focus on performance.

The Ten Year Plan is not a static document. It will require continuous updates – both to adjust revenue and expenditure forecasts and to continuously identify

[97] https://www.cityofboston.gov/news/Default.aspx?id=4021

opportunities for efficiency. Effective and efficient city government means that the City should always be looking opportunities for improvement.

Cities that have succeeded at continuous improvement have gone beyond changes in system and program. They have adopted a cultural shift to focus on performance. Outcomes and performance become the focus of everything that the government does – from day to day operations to budgeting to strategic planning.

Rather than just measuring performance as a means of assuring compliance, cities that achieve real culture change measure performance because it is integral to what they do.

Focus on Performance Measurement and Management

Performance measurement and management is not new to local government. As far back as the early 1900s, the Bureau of Municipal Research in New York undertook a regular process of measuring government performance. Local government performance measurement has, however, been revolutionized by the combination of technology and the increased availability of data.

Many cities now regularly collect and report government performance data. In the last five years, the Open Data movement has made this an increasingly standard practice in local government. Most city governments, however, have not been fully utilizing performance data as the basis for day-to-day management. Instead, to the extent that performance data is collected, it is reported – usually as part of budget and other finance documents.

In the last twenty five years, some local governments have started to focus on performance management. This more recent effort really started with the adoption of the Compstat model by the New York City Police Department. Department leaders held regular meetings with precinct captains and division heads and used data to both hold individuals accountable for results (e.g. crime reduction) and to solve problems. The Compstat approach is widely credited with helping to drive New York City's twenty-five year decline in crime.

As Mayor of Baltimore, Martin O'Malley sought to apply the Compstat approach to other aspects of City government. Whereas regular collection and reporting of crime data was fairly common, performance data for other departments was harder to capture. Baltimore sought to use data from its then newly adopted 311 system to measure City response to citizen service requests. Applied citywide, the Compstat approach became known as CitiStat.

Other cities have sought to replicate CitiStat and adopt what Harvard Kennedy School of Government Professor Bob Behn has called "PerformanceStat." One of the best current programs focused on performance measurement and management is in New Orleans, where Mayor Mitch Landrieu created a new Office of Performance and Accountability. New Orleans has been ground breaking in its approach to use performance management as a tool for taking on bureaucratic silos. Whereas Compstat was focused solely on police performance and CitiStat meetings started by reviewing data on a department by department basis, New Orleans has structured its performance measurement and management initiatives to address specific problems – recognizing that problem solving may require the participation of multiple City departments.

As part of its ResultsNOLA initiative, the City has created:

- BlightStat, a multi-department approach to measuring and managing efforts to reduce blight that includes the Department of Code Enforcement, Office of Community Development, Office of Information Technology and Innovation, Law Department, and New Orleans Redevelopment Authority.
- BottomLineStat, a multi-department approach to revenue collection and cost containment that includes the Bureau of Accounting, Emergency Medical Services, Equipment Maintenance Division, Department of Finance, Office of Information Technology and Innovation, Department of Public Works, Bureau of Revenue, Risk Management, and Department of Sanitation.
- CustomerServiceStat, a multi-department approach to improving City interactions with residents and other customers that includes Safety and Permits, One Stop Shop, Taxicab and For Hire Vehicle Bureau, City Planning Commission, Bureau of Revenue, Vieux Carrè Commission, Historic District Landmarks Commission, 311, and Office of Information Technology and Innovation.
- QualityofLifeStat, a multi-department approach to infrastructure and related issues that includes 311, Law Department, Department of Parks and Parkways, Department of Public Works, Department of Sanitation, and Sewerage and Water Board.
- ReqtoCheckStat, a multi-department approach to improving contracting and timely payment of contractors that includes Bureau of Accounting, Budget Office, Capital Projects Administration, Office of Community Development, Department of Finance, Department of Information Technology and Innovation, Law Department, Department of Public Works, Bureau of Purchasing, Office of Supplier Diversity.

Houston needs to develop a similar focus on performance management. To start, it can build on the work of the Office of Innovation and Performance (OIP). OIP functions as a centralized resource of data and works to identify operational improvements. It makes considerable amounts of government data available on its website and has conducted a series of internal reviews designed to surface recommendations that can save money or improve performance.

Houston is beginning to take steps to build upon its collection and reporting of data by creating a formal PerformanceStat initiative. Mayor Turner has designated OIP as the lead agency in developing HouStat.

In developing HouStat, the City can look to best practices in New Orleans and elsewhere. Former Indianapolis Mayor and Deputy Mayor of the City of New York Stephen Goldsmith has identified a series of strategies critical to the success of PerformanceStat efforts in improving performance:

- Strong executive leadership of the process
- A focus on measuring value, not just activities
- Involving the public
- Making sure to measure the right things

Professor Behn offers somewhat more practical advice. Stat meetings must have a clear purpose, one person who regularly runs the meetings, an analytical staff to support the process and relentless follow up. Regular monitoring of performance allows for continuous improvement of service and the identification and remediation of inefficiencies in government.

When successfully implemented, Houston employees will view performance measurement as part of what they do, so they can do better. Executive leadership, department heads and employees will all be able to point to examples of how performance measurement improved efficiency or the quality of public service delivery. The Mayor, Council, department heads, managers will make decisions based on data and research. Performance metrics will help to solve problems and answer questions. And department heads, managers and employees will be able to use data to talk about their successes and challenges.

By focusing on performance throughout the year, senior leadership and department heads will constantly be identifying and implementing changes in practice and policy designed to improve effectiveness and efficiency. And, because they will constantly and consistently be reviewing data, they will be able to determine what works and what doesn’t.

Implement Budgeting for Outcomes: Aligning Resources and Results

Houston is also moving toward a more outcomes based budgeting process (also known as Budgeting for Outcomes, or BFO). By setting clear priorities and regularly monitoring data to determine whether the City is meeting those goals, the City can allocate resources in a far more targeted way. BFO also encourages cross-department collaboration and collaboration with non-City entities.

Baltimore, New Orleans and Chattanooga – along with other cities – have successfully implemented BFO. Full and successful implementation of BFO, however, takes time. BFO reflects a fundamental change from what is typically a more incremental approach to local government budgeting. Rather than considering budgets on a department by department basis, BFO requires local governments to think about specific desired outcomes.

The change in approach also requires a change in mechanics. Most budgeting systems are based on accounting at the department, division and unit level. Outcomes based budgeting with its incentives for collaboration, however, frequently leads to changes that go across budget codes and across departments. In the early stages of BFO implementation, it can take time for the mechanics to catch up with philosophy.

BFO also requires careful thought as to how to address mandated costs – for example, debt service and pension contributions.

In some cases, cities have phased in BFO. Rather than subjecting the entire budget to a BFO approach, these cities have created targeted pools of funding that would go through BFO. This is how the process was introduced in Chattanooga. Other cities have limited BFO to specific funds, but not made it an enterprise-wide initiative.

Efforts at BFO have had limited benefit where local government have merely sought to re-cast existing budget in the context of newly stated priorities. In these cases, departments can sometimes seek to justify an entire departmental budget as an "offer" to achieve multiple outcomes. While more closely linking spending to measurable outcomes is beneficial, it is really just a first step in what can be a much more transformative process.

Old Budget Model	Budgeting for Outcomes
Energy spent at the margin: incremental cuts	Examine the entire budget
Inertia maintains current spending	Prioritization forces decisions
Dollars spent are most important	Value-add is most important
Fund departments and fund costs	Purchase results
Debate increases and reductions	Debate performance improvements

How should BFO work?

It starts with creation of a leadership team that will advise the Mayor on the proposed budget and oversee the BFO process. The leadership team starts with a determination of how much money is available – in other words, the projected revenue for the coming year. This is how much the city has available to "purchase" desired results or outcomes.

The leadership team develops a set of goals that reflect the city's priorities. In some cases, this list of priorities is defined by the Mayor's priorities or the priorities of the Mayor and Council or can be informed by a public process.

Each goal becomes a "Result Area" and "Result Teams" are formed. Teams may consist exclusively of City officials or community stakeholders can be invited to participate as well.

Result Teams work to create Request for Offers (RFO) for their result. Much like a Request for Proposal, the RFO asks city departments – and in some cases, outside partners – to develop proposals for how they would use funds to achieve the specific goal or result. An RFO typically includes outcome measures, a map of strategies that the Team believes could achieve the result and a purchasing strategy (criteria used to determine which services will be selected for funding). For example, an RFO for safer neighborhoods might outline a way to measure outcomes (e.g. Part I and II crime), strategies (e.g. increased police patrol or programs for youth) and criteria (e.g. evidence based strategies).

The leadership team takes the total amount of revenue available and allocates it to the different Result Teams. Essentially, the leadership team is deciding how much it is willing to spend to achieve each goal.

Departments and external partners submit their offers in response to the RFOs. The same department may respond to multiple RFOs. Frequently, the BFO process allows for the submission of draft responses so that Result Teams can provide feedback. In reviewing final responses, Result Teams will function much like an external foundation evaluating and considering grant requests. They will review requests for alignment with priorities, use of best practices, ability to monitor performance and the capacity to implement (i.e. does a requesting entity have a proven track record to execute projects or programs successfully). In some cases, Result Teams may also go back to proposing departments and suggest revisions to their offer or that different departments collaborate.

Next, the Result Team ranks all of the offers. Based on the rankings, the Result Team begins to "purchase" these offers until it runs out of money. Once the Team has spent all of the allocated funding, a proverbial line is drawn and anything above the line is funded and anything below is left unfunded.

The Result Team recommendations for funding are then forwarded to the leadership team. At that point, the leadership team may make final adjustments to the recommendations. For example, the Result Team rankings – and the quality of offers – may cause the leadership team to reconsider its final allocation across results. There may also be revised estimates on the availability of revenue. The leadership team then makes final recommendations to the Mayor for inclusion in the proposed budget.

After the BFO-based budget is adopted, performance measures based on those used by the Result Teams in evaluating offers are finalized. During the course of the fiscal year, those measures are monitored to see if the outcomes are being achieved.

Implement Pay for Performance: Accountability for Results

Houston's growing focus on performance metrics and data provides an opportunity to take another step in fostering a results-driven government by introducing incentive-based compensation.

In the private sector, levels of compensation are frequently tied directly to performance. While pay for performance has been implemented in the public sector, it has been harder. Scholars have noted that "[E]lected officials in particular are sometimes uncomfortable with extra monetary rewards and/or cost savings that accrue to public sector paychecks when, in their opinion, public sector workers are serving the greater good. Because of these reservations, some agencies have met strong resistance when seeking authorization for a pay for performance program. Others have found their pay for performance program upended by auditors who claim that process improvements "should have been made anyway."

Still, many Texas cities already offer some form of performance-based compensation. Dallas, San Antonio, and Fort Worth align department outcomes or managerial performance with additional compensation.

- Dallas awards, on average, between 3 percent and 6 percent additional pay from an annual bonus.
- Austin's Success Strategy Performance Review that evaluates how each employee is performing and which is used to determine eligibility for pay increases. [98]
- San Antonio offers performance pay in the form of base salary increases for professionals, managers and executives to reward strong performance. The City annually allocates 3 percent of salaries for performance pay.[99]

[98] https://www.austintexas.gov/content/1333/FAQ/2786

[99] https://www.sanantonio.gov/portals/0/files/budget/fy2017/FY2017FinalAdoptedBudget.pdf

- The City of Fort Worth also dedicates 3 percent of general employee salaries for pay for performance as part of its three year effort to restructure its compensation and personnel classification structure.[100]

Sometimes the case for performance based compensation is stronger for entire units, divisions or even departments. Often, performance – especially when based on outcomes – is the result of multiple employees, rather than a single individual. Providing performance based compensation to groups of employees can also be a means of incentivizing not just a focus on performance, but a focus on collaboration as well.

As a start, the City should consider developing performance contracts for its department heads. Department head performance based contracts are rare in local government. Performance contracts, however, are common internationally. A review by the World Bank identified a series of key best practices associated with the development of performance contracts.[101]

- Performance contracts should be freely negotiated, rather than imposed by senior leadership
- Success and measures of success should be clearly identified at the beginning of the contract period
- There should be consequences for both good and bad performance
- The method for collecting and calculating indicator data should be determined at the beginning of the contract period
- Contracts should recognize that there may be "known unknowns" that would materially affect performance and define how those will be treated

While performance based contracts can be a way of driving performance, there would need to be great care in ensuring that total compensation for any position would not exceed the City's means. In addition, performance based compensation would need to be directly related to stretch goals and real areas of focus for individual departments. Incentives should be just that – and not rewards for expected levels of performance.

Establish Productivity Bank

The City should establish a Productivity Bank as another means of fostering a culture of performance. The Productivity Bank would provide up-front operational funding for initiatives designed to produce long-term savings. Under the terms of funding,

[100] http://fortworthtexas.gov/budget/fy2017/full/

[101] Prajapati Trivedi, Performance Contract: An Instrument for Creating Competition in Public Services, The World Bank

departments would be responsible for funding repayment based on projected out-year savings.

Both Philadelphia and Washington, D.C. have implemented the Productivity Bank approach. The City of Houston has a similar program for certain capital investments. Under the Fund 1850 Reimbursable Program, the City provides selected projects with a dedicated funding source for debt service and removes these projects from the general competition for capital funding. To receive such funding, departments must agree to a repayment schedule covering debt service with revenue or savings coming out of their department budget. In 2014, GFOA recognized the program with an Excellence in Government Finance Award.

The Productivity Bank would extend the concept behind the Fund 1850 Reimbursable program to non-capital investments as well. It would operate as an internal revolving loan program that allows departments to make otherwise unaffordable up front investments in return for longer-term cost savings, revenue gains and service improvements.

A Productivity Bank can provide loans to departments for individual or collaborative projects that normally would cause a spike in annual operating allocations. Eligible projects would be defined as those that could not otherwise be funded from the City's capital budget or from a department's operating budget without jeopardizing normal service levels. Savings and revenues achieved through Bank projects would be reflected in adjusted operating budgets and loan repayments so that the Bank's lending capacity is not depleted and financial benefits can be redistributed to other programs or departments.

Initial loan criteria should require that projects generate cost savings or additional revenues in an amount sufficient to repay the loan plus interest within five years. A limited number of loans could be authorized for projects expected to generate substantial service improvements, even if financial benefits were not readily quantifiable.

Loan applications with detailed project proposals and repayment plans would be prepared by departments, with assistance from the Bank. An interdisciplinary Loan Committee, including senior City officials and private sector business leaders, would assess the business case for requested investments and approve or disapprove applications.

A useful example of Productivity Bank investment spurring innovation, savings, enhanced revenues, and improved service levels comes from Philadelphia. The Mayor and City Council created the Productivity Bank in 1992 to promote a strategic approach to the way in which city government conducted its business. Using a capital base of $20 million, the Bank proved to be a significant management tool in reforming the operations of the government, especially for technology upgrades. Moreover, these projects created long-lasting innovations that enhanced service benefits well beyond their significant financial impacts.

Examples of departments and agencies that have been loan recipients in Philadelphia include the City Law Department for an upgrade of its computer system, allowing improved delinquent tax collection; the Police Department for an on-line photo-imaging system to store criminal mug shots; portable truck scales to enforce heavy vehicle weight limits on county roads; a tracking system for Police officers on court overtime; and up front funding to the City's energy office for an energy-efficient light bulb replacement effort.

The effectiveness of the Houston Productivity Bank will depend on the ability to hold departments accountable for agreed to repayment schedules. That means – for example – that repayment of the loan would have to be budgeted for even if it could potentially affect other departmental costs: in other words, it would have to be treated like any other obligation. Regular reporting on progress on savings creates some level of accountability and discipline.

New Partnerships with the Private Sector, Non-Profit Sector and Other Local Governments

The opportunity for coordination and collaboration to achieve greater efficiency and effectiveness and savings extends beyond City government. Through partnerships with the private sector, non-profit sector and other local governments, Houston can do more with less.

<u>Partnerships with the Private Sector: Managed Competition, MBRO and Asset Monetization</u>

The City should develop a set of policies and criteria for increased use of the private sector to deliver services and perform activities currently performed by City employees. In most cases, the focus should not be on outright contracting out but instead on managed competition.

Managed competition provides an environment where private sector firms and public sector employees can both be given an opportunity to compete to provide services. This model has also been used to provide a broader choice in how to deliver service.

Managed competition first came into broad use in Phoenix, Arizona in the late 1970s. When first in extensive use, the City of Phoenix reported savings of over $25 million from managed competition, with municipal employees winning 18 out of the 51 contracts put out to bid. Other cities reported savings as well, including Indianapolis estimating $28 million in annual savings by identifying over 150 opportunities to use managed competition; in the instances where city employees prevailed over private sector firms, the City saved an average of 25 percent. Philadelphia estimated that managed competition for 13 city services annually saved $16.4 million.

More recently, the City of San Diego began to bid certain services using managed competition and City employees won the first five bid opportunities for publishing, fleet maintenance, street sweeping, landfill operations and street/sidewalk maintenance. Changes in the City's publishing operations saved approximately $1 million in its first year.

A 2013 study of managed competition by the Chicago Civic Federation highlighted results in Charlotte, North Carolina:

- Between February 1994 and July 2010, Charlotte municipal departments conducted approximately sixty competitions. The services subject to competition included transportation, neighborhood development, garbage collection and water treatment.
- Of those competitions, forty-six were awarded to City departments while fourteen were initially awarded to private contractors.
- As a result of using managed competition, the City reports that municipal departments have changed their business culture and now systematically incorporate benchmarking and continuous process improvements into their operations. It is estimated that more than $10 million in administrative and program costs over time have been saved since the inception of Charlotte's managed competition program.

Public sector employees, when given the opportunity and incentive to compete, can effectively do so. Unlike their private counterparts, the public sector employees do not have to factor a profit into their bids, they have access to a trained and experienced workforce, and they can, if necessary, obtain capital at a lower cost than their private sector counterparts. At the same time, there may be services where the private sector has a competitive advantage that translates into better service and pricing.

For managed competition to succeed, the City needs to also make fundamental reforms in its procurement process (discussed earlier in this chapter). Managed competition requires a high degree of sophistication in both developing required specifications and analyzing different proposals. And while managed competition can result in savings, there is a need for ongoing monitoring of contractor performance in any case where managed competition results in outsourcing. Absent effective oversight, managed competition could actually lead to higher costs and lower quality of service. Thus, savings opportunities exist through managed competition but only if well executed and implemented.

While managed competition is often portrayed as a measure to reduce costs or improve service delivery, part of its appeal is the opportunity to incentivize innovation among public employees. A well designed process gives front line workers the opportunity to create better processes from the ground up. It encourages the philosophy of continuous quality improvement that has proven effective in a variety of activities in the private and public sector.

Such continuous improvement may also result in the City identifying some areas of opportunity for "in-source." In other words, there may be opportunities for the City to assume some of the functions itself that it currently contracts to the private sector – similar to managed competition, a close cost-benefit analysis is necessary before deciding to "in-source" a function to City government. Insourcing tends to work best in those areas where private sector salaries are higher than public sector salaries – for example attorneys, engineers, etc.

An ideal case to apply managed competition would be where work can be divided between City workforce and outside contractors allowing for a real time comparison in both service quality and cost. There are at least four areas where this opportunity appears to exist for the City of Houston: Solid Waste and Recycling Collection, Building Maintenance, Fleet Management and Street Maintenance.

Solid Waste Management

Solid Waste Management (SWM) has a FY 2017 General Fund budget of $80.1 million, up from $64 million in actual spending in FY 2011. As of June 2016, SWM had 460 employees, including 296 truck drivers or side-loader operators.

The department provides the following services:

- Weekly residential garbage collection
- Weekly yard waste collection
- Once-per-month collection of heavy trash (tree waste and junk waste in alternating months
- Curbside Recycling
- Dead animal collection

Solid Waste Management also operates a number of neighborhood depository and recycling centers. Its operations are divided into four regional sectors – Northeast, Northwest, Southeast and Southwest.

In FY 2016, personnel costs accounted for $31 million in SWM spending. This included $3.3 million in overtime costs, more than double the overtime costs in FY 2011. Another $15.2 million in the SWM budget went to inter-fund spending for vehicle services. In

FY 2016, SWM also expended more than $13 million on refuse disposal contracts for both recycling and solid waste.

As part of its ongoing efforts to right-size and increase the efficiency of services, the department is about to conduct a comprehensive route management study. Route management studies often identify opportunities to re-organize collection as a means of providing the same levels of service to customers with fewer personnel and fewer sanitation trucks.

The City recently reached a new agreement to continue private sector processing of recycling. On the other hand, there is a likely risk in the near term that the City will need to seek new landfill space for solid waste.

Other cities, such as Phoenix and Charlotte, have applied managed competition to solid waste management on a regional basis. Under this approach, the city is divided into different zones and private sector bidders can compete against City personnel for the right to provide the service by zone.

There are a number of advantages to this approach. First, if the private sector wins a zone, a city still has sufficient resources so that if it needs to resume service after an initial contract then it does not need to completely re-start a garbage collection service. Second, the zone approach allows a city to identify those zones where continued service by its own workforce may be most expensive. In other words, while contracting out for an entire city may not make fiscal or operational sense, there may be advantages to serving parts of the city using a private contractor.

In Houston, there already is precedent for private sector residential service. More than 50,000 Houston residents currently rely on solid waste services from private providers through sponsorship agreements. Under the City's sponsorship program, homeowner associations are permitted to contract for solid waste collection and the City provides a reimbursement to the homeowners associations at a rate of $6 per month per service unit. In many cases, sponsorships are a means by which home owner associations provide for more frequent garbage collection.

The SWM routing study is likely to be complete by early 2018. Based on the routing study, the City could determine zones where the City's costs are currently the highest and employ managed competition to deliver solid waste services in those areas. The City could also consider privatizing high-cost services, such as bulky pickup. The evaluation of managed competition needs to look beyond just operating costs and savings within Solid Waste Management. Contracting out for at least some of the solid waste collection services could also alleviate the need for the City to make new investments in fleet.

General Services

The General Services Department (GSD) was established to construct and maintain the City's building portfolio. GSD provides a comprehensive suite of services to over 300 facilities; representing 7.7 million square feet of occupied space.

General Services has a FY 2017 General Fund budget of $41.2 million, down from actual spending of $46.1 million in FY 2011. Personnel Services accounted for $10.5 million in FY 2016. Approximately $9.3 million in FY 2016 department spending was for citywide utility costs, including more than $8 million for electricity cost.

General Services already contracts for a significant amount of services. In FY 2016, the department expended $4.2 million for security services, $3.8 million for janitorial services and $2.4 million for building maintenance. General Services spending in FY 2016 also included $1.7 million in lease and office rental costs.

In addition to the General Fund, General Services is also funded through a separate Cost Recovery Fund (for capital project administration), the In-House Renovation Revolving Fund (for in hours renovation and reconstruction for police and fire stations and other facilities that are billed to bond funds when they result in permanent improvements) and the Maintenance Renewal and Replacement Fund.

As of June 2016, General Services had a total of 262 employees – with just 137 funded through the General Fund. Across all funds, the most common titles at General Services are:

- Maintenance Mechanics and Supervisors (55)
- Custodian and Custodian Leader (34)

The department also has groundskeepers, carpenters and painters on staff. As previously noted, building maintenance and repair is an area where managed competition and contracting out is fairly common.

Fleet Management

The City's Fleet Management department is charged with providing vehicle services to other departments. This includes provision of fueling services, preventive maintenance and repair. The City consolidated fleet management in 2011. Several fleet related functions, however, remain the responsibility of other departments. Individual departments make determinations related to which employees have use of take home vehicles.

As of FY 2016, there were just under 12,000 vehicles in the City's fleet. In FY 2017, Fleet Management had a budget of $89.2 million. Fleet Management is funded through a revolving fund and its revenue comes from allocations from individual departments –

though not all of it from the General Fund. In FY 2016, however, Interfund Vehicle Services spending through the General Fund for Police ($11.4 million), Fire ($10.5 million) and Solid Waste ($15.2 million) accounted for more than $37 million. As of June 2016, Fleet Management had 373 employees, including 235 mechanics and mechanic helpers.

As noted above, other local governments have contracted out for fleet management (e.g. Pittsburgh) or aspects of fleet management (e.g. Richmond, Virginia). Still other jurisdictions, most notably Indianapolis, have taken a managed competition approach. Indianapolis experienced considerable initial savings through managed competition – even as in-house workers continued to provide the service.

Street Maintenance

Houston contracts for some street maintenance, but continues to maintain a significant in-house capacity. PWE had 246 equipment workers, 74 laborers, and 20 electricians on staff. These employees are largely concentrated in a series of cost centers in PWE focused on infrastructure maintenance and funded through the DDSRF. Just the base salary for the 601 employees in these cost centers in PWE was $21.7 million.

Market Based Revenue Opportunities

Houston should develop a policy that maximizes potential revenue from its current assets. Chicago, Los Angeles, New York and Philadelphia all generate significant revenue from Market Based Revenue Opportunities (MBRO) where the cities maximize market value of certain assets – through advertising and other uses of City owned sites.

Chicago passed a Municipal Marketing Ordinance that authorized creation of a digital billboard network on City highways and advertising on trash cans. The City projected $155 million in revenue over a 20-year period.

In New York, a 20-year agreement for advertising on bus shelters, newsstands, public toilets and trash receptacles called for $1.3 billion in revenue.

The City of Boston started its Coordinated Street Furniture Program in FY 2002 that extends to FY 2026. The advertising partnership added 462 pieces of furniture including 297 bus shelters and 113 City information panels with maps at no cost to the City. In FY 2015, the program generated $26.1 million in City revenue.

Asset Monetization

The Finance Department should also develop criteria for the sale of City assets. Privatization of assets can, in some cases, produce a significant source of revenue for cities and reduce operating costs. Houston has frequently utilized revenue from land and building sales as a means of funding budget deficits. But a more strategic approach would allow the City to manage asset sales in a manner that produces a stream of recurring revenue, rather than one-time revenues.

As City's resources are constrained, it needs to identify opportunities and strategies to generate revenues from assets it already owns. These strategies can include sale/privatization, leases, joint ownership or development, securitization and other forms of public-private partnerships.

Prior to any sale, lease or joint development, the City will need to conduct a more detailed review including:

- Retaining independent firms to conduct feasibility and valuation analysis and provide legal and finance advice
- Transaction structuring to minimize credit and balance sheet impact
- Transparent, fair and disciplined procurement processes designed to achieve superior results

As a first step, the City should develop a policy as to when asset monetization or other types of public private partnerships are appropriate and how the proceeds of asset monetization should be budgeted. The policy would also create a decision-making framework that allows the City to address key questions in assessing opportunities, such as:

- Does the project size justify the transaction and management costs?
- Is there real value in transferring responsibility for operations and maintenance to the private sector?
- Is there a clearly identified group of private sector bidders?
- What is the appropriate allocation of risk between the City and the private sector?
- What types of financial benchmarks, such as whole-of-life net present value, should be established?
- What types of projects should be prioritized and which City divisions will participate?

Other municipal governments looking for alternatives to the traditional sources of tax and fee revenue have considered parking monetization.

While City-owned downtown parking lots do not provide revenue for the General Fund, the City also manages more than 9,000 parking spaces citywide and neighborhood parking lots. In FY 2017, the City projected that this would generate revenue of $20.8 million and net $7 million in revenue for the General Fund.

In a parking monetization, the government uses its parking assets (i.e. garages, surface lots, meters) to generate revenue higher than historic annual levels, often through a type of agreement with a private sector investor and parking operator in which the government receives a large upfront payment in return for the right to own or operate the parking assets and collect the associated revenue for a lengthy period. Governments can opt to receive some or all of the revenue over a period of years, rather than up front. A private sector operator may merely run the existing parking system, add innovations such as timed spaces or enhanced metering, or commit to improving parking infrastructure.

Scranton, Pennsylvania recently closed a successful parking monetization agreement. In 2016, it monetized its garages and parking meters in an agreement with the National Development Council (NDC), a national non-profit economic development organization. Under the agreement covering four parking garages and approximately 1,500 street meters, the City received approximately $32 million that it used to pay off outstanding debt. Under Scranton's approach, the City maintained its ownership of the parking assets and entered into a lease concession agreement. It also continues to play a role in decision-making on the overall parking system. NDC is responsible for maintaining and operating all of the leased parking assets – including making future capital investments. NDC issued 40 year tax exempt bonds to finance its initial payments to the City and also agreed to provide net revenues to the City going forward.

Partnerships with the Non-Profit Sector

Negotiate Voluntary PILOTs with Tax Exempt Organizations

Houston benefits greatly from the presence of large non-profit organizations, particularly institutions of higher education and medical centers. These organizations are major drivers of the Houston economy. But they also benefit from public services provided by City government without supporting those services with property tax revenue.

Based on November 4, 2016 property tax rolls, 46,862 accounts were exempt out of a total of 764,880 accounts in Houston. The appraised value of these exempt accounts (excluding government) is $12.1 billion – with $11 billion in value attributed to properties with a value of $1 million or more and $3 billion accounted for by just 12 accounts.

According to a November 2016 Policy Brief by the Lincoln Institute of Land Policy, local governments across the country forego between 4 to 8 percent of property tax revenue due to exemptions from hospitals, universities, and other nonprofit organizations. Other cities are working with large non-profits to obtain voluntary Payment In Lieu of

Tax (PILOT) agreements. As of 2012, there were at least 218 municipalities in 28 states receiving PILOT payments.

The City of Boston has multiple PILOT agreements with colleges and other nonprofits located within its borders, which captured $27.9 million in revenue in FY 2015. Boston has applied its PILOT program to the largest 49 private, tax-exempt organizations with property values exceeding $15 million. Organizations are asked to pay 25 percent of what they would be paying as a non-exempt property. PILOT receipts as a percentage of requests were 90.7 percent in FY 2012 and 68.6 percent in FY 2015 with the variation in rate being attributable to the voluntary nature of the agreements.

Providence, Rhode Island has also entered into a series of voluntary agreements with its largest non-profit property owners. Providence – a city with less than one-tenth of the population of Houston – projected $7.1 million in revenue from voluntary PILOTs with six non-profits.

Because these sorts of PILOT payments are voluntary, cities need to develop a compelling case for why non-profit institutions should enter into these agreements when they do not have to. In some cases, local governments have simply made an equity argument. These non-profit institutions benefit from City services and infrastructure and it would only be fair if they contributed to the cost.

A 2015 study by the National Resource Network outlined a different approach. The study, led by researchers from New York University and the Urban Institute, suggested that cities and anchor institutions – higher education and medical institutions that are typically among the largest tax exempt property owners in a jurisdiction – needed to arrive at a grand bargain that balances local government interests with those of anchor institutions. In most cases, the relationship between local governments and anchor institutions tends to be transactional: local governments may seek PILOTs and anchor institutions may seek support for specific projects, such as expedited permitting or infrastructure investments. The grand bargain approach urges a more strategic relationship where there is an ongoing partnership between local governments and anchor institutions. So, for example, PILOT payments by anchor institutions might be directly related to spending on local government initiatives that advance their interests. For example, higher education institutions might provide PILOTs that help to fund initiatives around school readiness. Medical institutions might provide PILOTs that fund health prevention initiatives. By shifting to a more strategic partnership approach, local governments and anchor institutions can help to advance their mutual interests.

Implement Service Delivery Partnerships with Non-Profit Organizations

Houston should work with non-profit organizations to provide programming in parks and libraries. The Seattle Public Library has entered into a series of cooperative agreements with service providers to facilitate language learning opportunities in public libraries. The Broward County Library implemented Career Connect, as a one stop for workforce development in a partnership with the local workforce development provider, Hispanic Unity of Florida and the Broward County Urban League.

The City should also consider outsourcing the operation of community centers to non-profit organizations. Non-profit organizations are frequently able to deliver the same level of service – sometimes more – at a lower cost. In New York City, six recreation centers are treated as community centers where the operation and programming is delivered by community based organizations. For example, the Kingsbridge Heights Community Center (KHCC) has been operated by a non-profit organization for more than 40 years. KHCC provides a range of programming around early childhood services, youth and adults and senior citizens.

Austin has over 135 community partners that offer a range of programs and services to its Parks and Recreation Department that fall into one of the following categories; Park/Facility Operations and Management, Park Development, Maintenance and Activation, Arts and Culture, Active Recreation & Healthy Lifestyles, and Education. Organizations sponsor youth sports leagues, grounds maintenance, park improvements, and operate recreation centers. In FY 2016, the Austin Parks and Recreation Financial Services Division partnered with 13 local non-profit groups and 68 individual recreation professionals to provide services to Austin residents at no cost to the department. Austin's more than 20,000 volunteers saved the department $1.3 million.

The City should also work with neighborhood-based organizations to expand on efforts to "non-profitize" weeding and mowing of vacant properties. Under the Mow Down program, the City partners with Keep Houston Beautiful and neighborhood organizations to mow abandoned lots. DON also provides weeding and mowing services in response to nuisance complaints on properties that are not abandoned. This effort costs approximately $225 (for a 5,000 sq. ft. lot) for mowing or weeding and an additional $300 for court costs per property. City Code allows DON to contract with property owners for weed and lawn services – whereby owners would pay DON to provide the service. In turn, DON could contract with neighborhood-based organizations to do the actual work – providing employment opportunities for the hard-to-employ.

Renegotiate the Contract with the Houston Zoo

Under a lease and operating agreement, the City provides the land and an annual operating subsidy for the Houston Zoo. In FY 2016, the annual subsidy was approximately $9.5 million – having increased from $8.4 million in FY 2011. The agreement with the City also provides for an annual increase in the subsidy based on inflation, irrespective of demonstrated need.

Operation of a city zoo by a non-profit organization is a best practice and in most cases the operation receives some form of City subsidy. The Houston subsidy appears to be higher than for other major city zoos. It is also not necessary for the actual operation of the zoo.

In 2015, the Houston Zoo reported attendance of 2.46 million. In FY 2013 and FY 2014, total spending on the zoo was $34.8 and $38.9 million respectively. According to tax returns filed by the Houston Zoo, the organization ran a surplus in both years -- $15.4 million and $13.6 million respectively. Moreover, the Houston Zoo has accumulated assets of cash, savings, pledges, and investments totaling in excess of $40 million.

The City of Los Angeles has a separate Department of the Zoo, but provides no General Fund support for the zoo's operations. Instead, the zoo operates on the basis of revenue from ticket sales, membership, fundraising, and other sales. Total zoo annual expenditures in FY 2016 equaled $19.2 million with attendance of more than 1.5 million visitors.

The Lincoln Park Zoo in Chicago is operated with an operating subsidy from the Chicago Park District. The fixed subsidy is $5.6 million annually. The Park District also provides subsidies for the operation of museums and the Shedd Aquarium. The Lincoln Park Zoo reported more than 3.5 million visitors in 2015.

In FY 2015, the City of New York provided a $25.7 million operating subsidy to the Wildlife Society for the operation of the Bronx Zoo, the New York Aquarium, and smaller zoos in Central Park and Prospect Park. The total budget for the operation of these facilities was $94.1 million and total attendance was in excess of 4 million visitors.

The City should seek to renegotiate its current operating agreement and lease for the zoo to establish a fixed level subsidy of the lesser of $5 million or ten percent of total Zoo expenditures annually. The current agreements give either party the right to terminate. The City could offer to continue and extend the current agreements in return for a reduction in operating subsidy.

Support 311 and 211 Collaboration and Coordination

As the City builds out its 311 platform, it could also work to coordinate with 211. While the City provides 311, 211 Texas is provided through the Texas Health and Human Services Commission and administered locally in partnership with the United Way of

Greater Houston as the 2-1-1 Texas/United Way HELPLINE. 211 primarily provides resource and referral support for individuals in need of social services.[102]

There are several reasons to consider collaboration and consolidation with the United Way. Often, there is overlap between the services provided by government and accessible through 311 and the services provided by United Way agencies and other nonprofit service providers accessible through 211. This is particularly true in Houston where the Health and Human Services department provides many of the same services as non-profit social service agencies.

Evidence also suggests that, nationally, many individuals calling 311 are the same individuals calling 211. Residents from low- and moderate-income communities are among the most frequent callers of 311 in some cities. These residents are also the most likely to seek social services.

Certain efficiencies could be achieved as well in the areas of staffing, technology, and training. The same economies of scale available through the consolidation of multiple department call centers into a centralized 311 or unified call center would seem to apply to consolidation or coordination of separate 311 and 211 systems.

Collaboration would allow for joint marketing efforts to make the differences between two systems clear in the minds of the public, just as many cities have sought to do in advertising campaigns that distinguish when to call 311 and when to call 911.

In 2007, New York City launched a consolidated 211/311 model – where callers could dial either number and reach both types of services. In Houston, full consolidation may be harder to achieve. Unlike the case in New York, both 311 and 211 are already fully deployed and 211 is provided on a regional basis. But the opportunities for collaboration and coordination are still significant.

[102] The discussion of 311/211 consolidation draws extensively from David Eichenthal, 211/311: Is There a Case for Consolidation or Collaboration?," ICMA, June 2010 at http://legacy.icma.org/en/icma/knowledge_network/documents/kn/Document/301482/211311_Is_There_a_Case_for_Consolidation_or_Collaboration.

Opportunities for Regionalization and Consolidation

Explore Police Consolidation and Merger

The Houston Police Department is just one of several police agencies that have jurisdiction within the city. For example, Houston METRO and Houston ISD both have independent police departments. Houston residents are also served by County Constables and deputy sheriffs.

Police and Security Employees

Institution	FY 2017 Estimated FTEs	Officers
Houston Police Department	6,463.4	5,187.7
Houston Independent School District	242.0	242.0
Metro Police Department	235.0	191.0

Source: FY2017 Agency Budgets, Department websites

Calls for coordination and pooling of police services date back a half century. In 1967, the President's Commission on Law Enforcement and Administration of Justice found that "[T]he machinery of law enforcement in this country is fragmented, complicated and frequently overlapping." The Commission outlined a series of steps for how different police departments could merge or share resources.

The degree to which there is coordination varies from city to city. In Chicago, the Police Department provides policing of the city's transit system. In Philadelphia, the transit system – SEPTA – maintains its own, separate police force. Repeated efforts at merger of airport and port police with the Los Angeles port police have been unsuccessful. In Houston, the Police Department already is responsible for policing the airport and Housing Authority properties.

New York, however, stands out as a model of implementation of police merger and its success over time. In 1995, the New York Police Department (NYPD) merged with what had been separate police departments for housing and transit.

In the two decades since the merger of the housing and police departments with the NYPD, New York has had the most sustained reduction of crime of any major U.S. city. While there is not a complete consensus on the reasons for the reduction, there is general agreement that the increase in the size of the police department and the deployment of police were important factors.

Through merger, the NYPD significantly increased the number of officers available for deployment across the city. Criminologist Eli Silverman noted that half of the increase in police force was the result of the merger with the previously independent housing and transit agencies. While the NYPD had additional responsibility (e.g. primary policing of housing developments and the transit system), it also had more flexibility and more resources.

As part of the effort to better utilize existing law enforcement resources, the City of Houston should begin discussions with METRO on police consolidation. If these discussions ultimately lead to a merger, the City might then pursue similar discussions with school districts with schools in the City of Houston and other independent police agencies (e.g. Port of Houston).

Create a Regional Certification of Minority, Women, Small Business, Disability and Disadvantaged Business Enterprises

The Office of Business Opportunity (OBO) certifies businesses as Minority, Women, Small Business, Disability and Disadvantaged Business Enterprises. Certification is a means of ensuring that these businesses are eligible for contracting and subcontracting opportunities with City government. There are now approximately 2,900 firms with OBO certification.

OBO also has significant responsibility for compliance – both to ensure the integrity of the MWSBE, PWDBE and DBE programs and to make sure that City contractors are complying with federal and local labor and equal opportunity standards (see the earlier discussion of OBO in the section on Procurement).

The FY 2017 budget for the Office of Business Opportunity is just over $3 million and it is projected to collect approximately $125,000 in revenue.

The OBO certification is also accepted by the following agencies: METRO, the Port of Houston Authority, the Houston Independent School District, Houston Community College, the Environmental Protection Agency (EPA), the Houston Housing Authority, the Texas Comptroller of Public Accounts, the Texas Department of Transportation and Airport Transportation Agencies Statewide. In effect, OBO provides the certification service to these other entities - and to vendors seeking to do work with these entities – at no cost.

There is, however, no universal reciprocity: vendors certified by these organizations – those that have separate certification processes -- still must apply and go through the certification process for the City of Houston. The City does have a fast track agreement for certification with both the Houston Minority Supplier Development Council (HMSDC) and the Houston Women's Business Enterprise Alliance (WBEA).

A better approach would be for all government entities in the region to agree to a single standard for certification and apply that standard across all contractors and vendors. Whether the certification process is led by OBO, the State or another entity, there would be a single point of application and a single point of certification. Those public agencies relying upon the certification would contribute proportionately to the cost of the process.

Created a Shared Services Working Group

There are many opportunities for consolidation of services between the City, Harris County, other county governments and other independent local governments (e.g. school districts). Each of these opportunities need to be weighed for potential cost savings and to ensure fairness in funding and service delivery. As a start, the City and Harris County should create a Shared Services Working Group that would review each of these opportunities. The Working Group approach is in place in a number of jurisdictions, including the County-City Shared Services Commission in Cincinnati and Hamilton County, Ohio.

- ✓ Nationally, public health services in major cities are a county-level responsibility. This is the case in four of the nation's most populous cities – Los Angeles, Phoenix, San Diego and San Jose. Two of the nation's largest cities – New York and Philadelphia – are also counties (or in the case of New York, multiple counties) and have departments of health. Larger cities in Texas employ various different models. Dallas has a Department of Environmental Health, but all other health and human service functions are provided by County government. San Antonio has a Metropolitan Health District that operates as a city department but provides services to unincorporated parts of Bexar County as well. Similarly, Austin has an Inter-local agreement with Travis County for the provision of their Health and Human Services. Other than Houston, Chicago is the only one of the ten most populous cities that has a Department of Public Health in addition to a county-level health department.

  The City and the County should consider opportunities for jointly providing services. In some cases, it may make sense for the City to provide certain services countywide – as is the case in Austin and San Antonio – with funding from the County. In other cases, it may make sense for the City to rely on County provision of services – much as other municipalities in the county do.

- ✓ The City should consider a shared services approach to Information Technology. In FY 2018, Harris County Central Technology Services has a budget of $54.3 million and the Houston Independent School District Information Technology Division has a FY 2017 budget of $61.6 million: while the County, HISD and City are all separate governmental entities, Houston taxpayers are paying for all or most of their respective budgets for Information Technology. While both the City of El Paso and El Paso County continue to have IT departments, the two have worked closely together since entering into an interlocal agreement in 2009. Among other things, the two departments have a shared data center and servers. The City of Charlotte's Shared Services Division provides IT services for both the City and Mecklenburg County.

- ✓ Both Harris County and the City of Houston have public libraries. The City has previously provided funding to at least one County library branch that was annexed into the City. The Houston Area Library Automated Network (HALAN) is a means of providing technology, procurement and other support services to area libraries: Houston and seven other library systems participate in HALAN, but not Harris County.

  Building on these efforts, the City and County should consider a consolidated library system. The San Antonio Library system provides library services for the city and surrounding unincorporated areas and Bexar County. An Inter-local Agreement (ILA) between the San Antonio Public Library System and Bexar County is projected to bring $1.2 million in savings over four years through an efficiency initiative to eliminate duplicate digital resources. The agreement also allows Bexar County residents access to the City's digital resources. In 2007, the City of Minneapolis and Hennepin County merged their separate library systems.

- ✓ Homelessness has a fiscal impact on both city and county government. Both the Houston Police Department and Houston Fire Department indicate that a significant number of their calls to service are related to individuals who are homeless. Frequently, a significant number of homeless individuals wind up with temporary housing in jail and detention facilities. The Turner Administration recently announced a commitment to increase the number of beds in regional shelters and limits on homeless encampments. Together, through The Way Home initiative, the City and County could work to further reduce homelessness through additional opportunities for supportive housing. These investments could produce long-term savings to city and county governments.

Chapter VI. Implementing the Plan

Twice during the development of the Ten Year Plan, the PFM team provided preliminary estimates of fiscal impact for the initiatives outlined in the Plan – once in the context of recommendations for the FY 2018 budget and then again, at a high level, in the initial drafting of the final plan.

But, in light of the uncertainty created by Hurricane Harvey, the City needs to start the implementation process by carefully re-evaluating assumptions underlying both the baseline forecast and the feasibility of the fiscal impacts of the recommended initiatives.

Based on pre-Harvey analysis, the PFM team developed a high level fiscal impact for each initiative that includes a range of potential savings or revenue over the next ten years. These high level estimates suggest that the recommendations will generate a minimum of $300 million in new savings or revenue over the ten year period. Combined with a lifting of the revenue cap, this would both close the projected $1.02 billion gap over the ten year period, provide for wage increases based on inflation and provide a little more than $1.2 billion for new investments and to address the City's long term liabilities (e.g. OPEB).

Fiscal Impact of Proposed Initiatives (cumulative over ten years)

High = Greater than $10 million Medium = $5 million to $10 million Low - Less than $5 million N/A - Impact is unknown, reorganization, study/review Increase Cost - New costs not totally offset			
	Initiative	**Fiscal Impact**	**Page**
Police	Increase Civilianization	Medium	79
Police	Continue with Merger of Jail with Harris County	Low	80
Police	Expand Arrest Diversion Options	Medium	81

Police	Invest in a Comprehensive Approach to Crime Control	Medium	82
Fire	Move to Three Platoons	High	85
Fire	Identify Opportunities to Reduce the Number of Fire Stations	High	85
Fire	Increase HFD Civilianization	Medium	89
Fire	Reduce Frequent Users of 911 and EMS	High	91
Fire	Pursue Additional EMS Collections	Medium	98
Fire	Revise False Alarm Policy and Fee	Medium	101
Workforce	Perform Dependent Eligibility Audit	High	117
Workforce	Renegotiate Prescription Benefits Plan Design and Contract	High	118
Workforce	Explore Changes to Spousal and Dependent Eligibility Coverage	High	118
Workforce	Phase-in Increases in Employee Share of Health Insurance	High	119
Workforce	Expand Employee Wellness Clinics	Low	119
Workforce	Increase Access to Telemedicine	Low	119
Workforce	Offer Health Benefits Buy Outs	Low	119
Workforce	Review Funding Structure	N/A	120
Workforce	Review Stop-loss Coverage	N/A	120
Workforce	Incentivize Effective and Proactive TPA Monitoring and Management	High	120
Workforce	Cap Annual OPEB Exposure	High	122
Workforce	Restructure OPEB Benefits	High	122
Workforce	Eliminate OPEB Coverage for Retirees or Dependents with Access to Other Coverage	High	123

Workforce	Fully Fund a Retiree’s Share of Health Benefits through Another Employer	High	124
Workforce	Require Firefighters to Attain a Minimum Eligibility Age	High	124
Operations	Centralize the Talent Management Function	Medium	125
Operations	Enhance Vacancy Control	Medium	128
Operations	Invest in Talent Development	Increase Cost	129
Operations	Consolidate and Reform Procurement	Low	133
Operations	Increase Professional Development of Procurement Staff	Increase Cost	134
Operations	Use Data to Drive Competition	High	134
Operations	Review the Impact of Hire Houston First	N/A	135
Operations	Focus on Quality Contractors	Medium	136
Operations	Develop a Strategic Technology Plan	N/A	139
Coordination	Increase Consolidation of Finance Functions	Low	144
Coordination	Reduce the Use of Special Revenue Funds	High	144
Coordination	Increase Coordination to Reduce Fleet and the City’s Footprint		146
Coordination	Combine 311 and Police Non-Emergency Calls	Low	147
Coordination	Rethink Public Works and Engineering	N/A	147
Coordination	Consolidate Housing and Neighborhood Development Department	N/A	151
Coordination	Increase Joint Planning for Youth Services	N/A	151
Performance	Focus on Performance Measurement and Management	N/A	153

Performance	Implement Budgeting for Outcomes: Aligning Resources and Results	N/A	155
Performance	Implement Pay for Performance	N/A	*158*
Performance	Establish Productivity Bank	High	159
Partnerships	Managed Competition - Solid Waste	High	163
Partnerships	Managed Competition - General Services	Medium	165
Partnerships	Managed Competition - Fleet Management	Medium	165
Partnerships	Managed Competition - Street Maintenance	Medium	166
Partnerships	Market Based Revenue Opportunities	High	166
Partnerships	Asset Monetization	High	166
Partnerships	Negotiate Voluntary PILOTs with Tax Exempt Organizations	High	168
Partnerships	Implement Service Delivery Partnerships with Non-Profit Organizations	High	169
Partnerships	Renegotiate Contract with Houston Zoo	High	170
Consolidation	Support 311 and 211 Coordination and Collaboration	Low	171
Consolidation	Explore Police Consolidation and Merger	N/A	173
Consolidation	Create a Regional Certification of Minority, Women, Small Business, Disability and Disadvantaged Business Enterprises	Low	174
Consolidation	Create a Shared Services Working Group	High	175

The PFM team believes that the potential savings and new revenue from implementation of the recommendations will exceed the projected $300 million.

In some cases, initiatives expected to have a fiscal impact of at least $10 million – those initiatives in the "high" impact category – will likely have a significantly greater impact than $10 million over the course of the plan. For example, the proposed reduction in subsidy for the Houston Zoo is projected to achieve savings of at least

$10 million: if, however, the City were to reduce the subsidy from $9.5 million annually to $5.6 million annually (the fixed amount of City subsidy for Lincoln Park Zoo in Chicago) then annual savings would be $3.9 million annually or $39 million over the ten year plan.

Similarly, the recommended reduction in firefighters due to a change in schedule would allow for up to a 20 percent reduction in personnel costs: even if the City shared half of the savings with firefighters who would be scheduled to work longer hours, the effect would be annual savings of a minimum of $40 million and – assuming fully implementation by the fifth year of the Plan – total savings of $240 million for this initiative alone.

In other cases, significant savings are likely from a recommended initiative but it is difficult to estimate even a range of impact. For example, efforts to increase the City's focus on performance measurement and management will almost certainly identify additional opportunities for savings or new revenue: estimates of potential savings and revenue, however, are too speculative to provide a range.

As part of an overall budget framework, the City should:

- Prioritize efforts to achieve maximum potential savings through implementation of recommended initiatives. The City should be in a position of making the case to voters that it has a plan to maximize the efficient use of existing tax dollars before asking for new tax dollars.
- Create opportunities for gainsharing with its workforce. As already noted, budgetary savings from a reduction in the number of fire platoons would be shared with firefighters working longer hours. More generally, out year salary increases should be funded first by savings achieved from changes in worker compensation and benefits. There should be an explicit relationship between the City's ability to fund future wage increases with its ability to curb other personnel costs.
- To the extent possible, use new revenue for new investment. Even if the City is able to achieve significantly more than $300 million in savings or new revenue from the recommendations in the Plan, it remains likely that it will need to seek a change to the revenue cap to achieve structural balance. But it should also use the change in the revenue cap to articulate its new investment needs as well.

Given the uncertainty around the baseline forecast projections and the need for a post-Harvey evaluation of each of the recommended initiatives, the City should proceed with implementation of the Ten Year Plan in a manner consistent with this framework, the principles outlined in the Preface and the following year-by-year action steps:

Year 1

- Review baseline forecast assumptions based on up-to-date, post-Harvey economic data for the city and region
- Begin implementing recommendations designed to enhance improvements in capacity and coordination including procurement reform, consolidation of Finance, IT and Human Resources, implementation of Productivity Bank, Budgeting for Outcomes and HouStat
- Implement Joint Planning for Youth Services to maximize coordination and collaboration among Health, Library, Parks and Recreation, school districts and other youth-serving organizations
- Enhance vacancy control process to limit hiring for budgeted positions
- Engage external partners in the non-profit sector to discuss voluntary PILOTs, service delivery partnerships, community paramedicine and the renegotiation of the Zoo contract
- Move forward with low cost steps designed to increase police strength through civilianization, arrest diversion and completion of jail merger
- Begin to phase in change in number of platoons in Fire Department with reductions in workforce through attrition
- Launch initiatives to increase HFD revenue through changes in fire alarm policy and improved collections on EMS and reduce cost through civilianization

Year 2

- Review baseline forecast assumptions based on up-to-date, post-Harvey economic data for the city and region and assess whether to move forward with reform of revenue cap based on impact of Year 1 initiatives and status of fund balance
- Develop and implement a Strategic Technology Plan, including analysis of in-house and contracted services
- Launch shared services working group with County and other local governments
- In deciding whether to renew its contract with the third party administrator of health benefits or issue an RFP, focus on outcomes based approach and integration of technology and case management.
- Begin changes to OPEB benefits, including restructuring, annual cap, elimination of coverage for retirees or dependents with access to other coverage

- Begin implementation of workforce initiatives including dependent eligibility audit for City employees, phase in of increases in employee share of health insurance and changes in spousal and dependent eligibility coverage
- Begin using data to increase competition on bidding for City contracts, conduct and complete review of impact of Hire Houston First
- Launch two of the City's managed competition initiatives – street maintenance and solid waste management
- Conduct space utilization analysis and expand initiatives to reduce the City's fleet
- Complete review of special revenue funds and reduce the number and use
- Continue to phase in change in number of platoons in Fire Department with reductions in workforce through attrition and initiate review of opportunities to reduce the number of fire stations

<u>Year 3</u>

- Review baseline forecast assumptions based on up-to-date, post-Harvey economic data for the city and region and assess whether to move forward with reform of revenue cap based on impact of Year 1 and 2 initiatives and status of fund balance
- Implement performance based pay for department heads
- Develop and implement comprehensive approach to crime control
- Continue implementation of workforce initiatives, including renegotiation of prescription benefits, expansion of wellness clinics and health benefit buyouts
- Depending on success of initial round of managed competition and outcome of space analysis and initiatives to reduce fleet, launch additional managed competition initiatives in building maintenance and fleet management
- Complete and implement asset monetization and market based revenue opportunity policies
- Complete and implement consolidation of 311 and non-emergency police call taking and coordination and collaboration with 211
- Launch shared services initiatives based on recommendations of the working group: potential candidates include shared information technology, public libraries, police consolidation and merger, public health and regional certification of minority, women, small business, disability and disadvantaged business enterprises
- Continue to phase in change in number of platoons in Fire Department with reductions in workforce through attrition and initiate review of opportunities to reduce the number of fire stations

Year 4

- Review baseline forecast assumptions based on up-to-date, post-Harvey economic data for the city and region and assess whether to move forward with reform of revenue cap based on impact of Year 1, 2 and 3 initiatives and status of fund balance
- Complete "rethink" of the current structure of Public Works and Engineering
- Consolidate Housing and Neighborhood Development Department
- Complete phase in of personnel reductions in Fire Department and implement any reduction in fire stations resulting from review

Under this plan, the City would complete implementation of the recommended initiatives in the Ten Year Plan by the end of its fourth year. This does not, however, mean that the work of the Ten Year Plan would be complete. In most cases, implementation of initiatives will be ongoing and will require regular monitoring, oversight and re-evaluation. For this reason, the City should consider tasking an individual or a working group with overall responsibility for Plan implementation.

And, as noted earlier, the goal of the Ten Year Plan is not to merely produce a static set of recommendations: instead, the Ten Year Plan should mark an important step forward in the City's efforts at continuous improvement whereby the search for improved efficiency and effectiveness is ongoing.

The Cost of Inaction

Without the initiatives detailed in this plan, Houston would remain on a fiscally unsustainable course. Deficits would continue. There would be less funding available for new investments.

If it does not act now, the City will eventually need to take far more drastic actions to avoid insolvency. There would be no funding available for wage increases beyond those contemplated by existing Meet and Confer agreements. The City would need to impose an effective freeze on all employee wages for the foreseeable future.

There would need to be reductions in personnel. In the Police Department, recommendations to civilianize certain positions would not result in a net increase in patrol strength. Instead, civilianization would be a means of maintaining existing police patrol strength even as the number of sworn officers would decline. There would be no funding available to invest in increased staffing in the Police Department.

The phased approach to reductions in the Fire Department staffing would likely need to be accelerated and, as a result, the City would to resort to layoffs. For example, rather than achieving the reduction of 600 firefighters through attrition over three or four years, the City might need to lay off 300 to 400 firefighters as early as FY 2019. The immediate reduction in firefighters would result in the need for an immediate change in the number of shifts in the Fire Department – again, without an opportunity to use gainsharing as a means of allocating part of the savings to firefighters. Firefighters would need to be paid less to do more.

Finally, the City might need to close certain fire stations or at least proceed with a policy of brownouts where some lower use stations would be closed during low-demand shifts. In 2014, the City implemented a brown out strategy to compensate for departmental overspending on overtime.

Even though Fire and Police account for the bulk of the City's workforce and related personnel costs, the budgets of other departments will likely need to be reduced as well. For example, both the Houston Public Library and the Parks and Recreation department provide important services related to quality of life in Houston. They also directly affect the one in five Houstonians living in poverty. These departments will need to reduce costs as well. While personnel reductions and budget cuts do not always result in service reductions, it is unlikely that cuts in these departments – which already sustained budget and personnel reductions in response to the Great Recession – can be undertaken at the level necessary to reach structural budget balance without having a service impact.