Please submit any comments on the Capital Improvements Program (to be presented to Commissioners Court on September 24, 2019) to HarrisCountyCIP@hctx.net.

FY 2020 Mid-Year Review and Capital Improvements Program



September 24, 2019

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September 2019-2020 Capital Improvements Program

Executive Summary

Maintaining and expanding Harris County's facilities and infrastructure to serve our rapidly growing population is essential. The Capital Improvements Program (CIP) is intended to provide project information in one planning document so Court Members can review the county's infrastructure needs and provide direction to establish a program that balances these needs and community need with fiscal constraints. The CIP is designed to be a centralized presentation and transmittal to Court with decentralized execution by the presenting departments. As such, individual project approvals and related funding sources are done during the regular meetings of Commissioners Court.

This CIP is presented in conjunction with or immediately following the Mid-Year Review in September. Though many of the projects have been presented before, this CIP allows the Court to review these, and new proposals since February 2019. The CIP will be transmitted in conjunction with a public meeting preceding the September 24th Commissioners Court meeting to allow for input and discussion similar to the budget hearings.

The following is a discussion of the Capital Improvements Program representing $1.4 billion of expenses between now and September 2020:

Office of the County Engineer (OCE)

The Engineering Department works on a number of infrastructure projects each year, typically funded with long-term debt. The current focus is a combination of deferred maintenance projects, renovations, and new facilities. The County Engineer is also continuing to remediate many of the larger infrastructure damages created by Harvey while simultaneously providing project management and support to the HCFCD bond package. Beyond this CIP, the County Engineer manages over $120 million annually in transportation projects.

OCE Project Types	Sept. 1, 2019-Aug. 31, 2020
Capital Repair and Maintenance	$ 65,000,000
New Facilities	$ 48,500,000
Renovation and Demo	$ 27,450,000
Studies	$ 4,500,000
Disaster Recovery: Hurricane Harvey	$ 2,000,000
Other Projects	$ 17,350,000
Other US Projects	$ 2,815,000
Total	**$ 167,615,000**

A report prepared by the County Engineer is included. The project expenses between now and September 2020 are estimated to cost approximately $167.6 million, but does not include some of the undetermined expenses related to disaster recovery from Harvey.

Harris County Universal Services (US)

US typically executes a $20 million CIP annually. Though they are within that range for their normal repair, replace, and business enterprise initiatives, this year will require numerous public safety and emergency response initiatives on behalf of various departments needing systems established or upgraded. Similarly, initiatives to further enhance our cybersecurity are prioritized to counter the continued and ever increasing threat to the security of our systems and data. These additional needs increases their typical CIP of $20 million to $55.6 million this year.

US Project Types	Sept. 1, 2019-Aug. 31, 2020
Capital Repair & Replace	$ 10,487,610
Cybersecurity & Data Center	$ 2,923,492
Public Safety	$ 31,610,265
Business Enablement	$ 10,577,365
Total	**$ 55,598,732**

September 2019-2020 Capital Improvements Program

Harris County Sports & Convention Corporation (HCSCC)

HCSCC's primary request this year is a continued focus on the NRG Center. Phase 1 targets meeting room upgrades, as well as updating carpet, paint, and installing energy-efficient lighting throughout the complex. The project cost this fiscal year is $4.2 million. The masterplan for the NRG Park maintenance program is almost complete, and is anticipated to drive future CIP spending.

Harris County Toll Road Authority (HCTRA)

The HCTRA capital program priorities focus on roadway projects, toll system infrastructure improvements, and facility improvements. The largest project is the continued work on the new toll road bridge over the Houston Ship Channel, which is expected to take several years to complete.

HCTRA Project Types	Sept. 1, 2019-Aug. 31, 2020
Roadway Projects	$ 378,000,000
Roadway Improvements	$ 45,000,000
Toll System Projects	$ 101,700,000
Total	**$ 524,700,000**

Harris County Hospital District (HCHD)

HCHD continues to work on modernizing and renovating Ben Taub hospital's operating rooms and trauma center. HCHD will also be working to improve Electronic Health Record (EHR) infrastructure at the Harris Center and Jail Health facilities to improve care coordination and collaboration among County related health care providers. Harris County's portion of these costs is estimated at $36 million. This portion of EHR infrastructure would also act as a catalyst for future discussions between Harris County, The Harris Center, and HCHD on detention care.

HCHD Project Types	Sept. 1, 2019-Aug. 31, 2020
Capital Repair & Maintenance	$ 16,944,962
Renovation & Demo	$ 40,777,721
New Facilities/ Expansion	$ 21,774,588
Medical Equipment	$ 15,300,000
Other	$ 2,113,600
Information Technology Refresh	$ 4,850,000
Information Technology New Projects	$ 17,450,102
Total	**$ 119,210,973**

Port of Houston Authority

Harris County continues to support the Port of Houston by allocating part of the property tax rate to pay approximately $50 million of annual debt service payments.

Miscellaneous Projects

Approximately $8.2 million has been requested for the CIP period for miscellaneous projects. These projects include acquisition of street-level imagery with light detection and ranging (LIDAR), and hazardous materials response equipment identified in the ITC Disaster Gap Analysis. Additionally, the County Clerk is requesting to replace existing voting equipment; the cost has not yet been determined.

Miscellaneous Projects	Sept. 1, 2019-Aug. 31, 2020
New Projects	$ 8,223,907
Total	**$ 8,223,907**

September 2019-2020 Capital Improvements Program

Harris County Flood Control District (HCFCD)

One year after Hurricane Harvey, Harris County voters approved $2.5 billion in bonds to finance flood risk reduction projects. The bond program contains a list of needed projects totaling approximately $4.9 billion in value. This value includes $2.4 billion in potential partnership funding that would help leverage District dollars, which is an important part of implementing the bond program.

The FY 2019/20 District's Five-Year Capital Improvement Program (CIP) outlines an aggressive program to implement approximately $4 billion in projects over the next five years, in which 37 percent of that value is anticipated partner funding. Types of projects funded in this CIP include:

- Channel modifications to improve stormwater conveyance
- Regional stormwater detention basins
- Major repairs to flood-damaged drainage infrastructure
- Removing large amounts of sediment and silt from drainage channels
- Voluntary buyouts of flood-prone properties
- Wetland mitigation banks
- Property acquisition to preserve the natural floodplains
- Drainage improvements in partnership with other cities, other local government agencies, and the federal government
- Upgrading the Harris County Flood Warning

Flood Control District Projects	Sept. 1, 2019-Aug. 31, 2020
Addicks Reservoir	$ 64,787,753
Armand Bayou	$ 4,071,814
Barker Reservoir	$ 18,906,966
Brays Bayou	$ 20,182,604
Buffalo Bayou	$ 7,092,447
Carpenters Bayou	$ 1,599,642
Cedar Bayou	$ 19,143,788
Clear Creek	$ 49,161,515
Cypress Creek	$ 52,794,703
Galveston Bay	$ 13,186,182
Goose Creek	$ 1,689,640
Greens Bayou	$ 22,119,904
Halls Bayou	$ 15,689,214
Hunting Bayou	$ 21,666,478
Jackson Bayou	$ 1,345,937
Little Cypress Creek	$ 17,430,910
Luce Bayou	$ 550,717
San Jacinto River	$ 10,611,894
Sims Bayou	$ 21,623,251
Spring Creek	$ 5,006,033
Vince Bayou	$ 2,133,471
White Oak Bayou	$ 30,972,305
Willow Creek	$ 16,725,292
Countywide	$ 119,981,360
Total	**$ 538,473,820**

CIP Standard Operating Procedures and Changes (SOP)

Each year we strive to make the CIP, and the process leading up to it, better. Added to the capital program are Standard Operating Procedures to articulate how the process works and to better educate readers about the decision-making process that goes into the intent, projects, models, and overall presentation. As far as changes for this CIP, each project has a more detailed individual project sheet (see Readers' Guide for more details) and the projects are given a prioritization category from 1 to 4. These categories respectively are: Fire/Life Safety; Continuity of Government Operations; Regulatory or Legal Mandate; and Operational Savings or Value Enhancement. This prioritization should not be confused with the recently adopted prioritization methodology of HCFCD for their bond program.

Debt and Financing

This CIP covers four entities representing a combined total of $1.4 billion in estimated project expenses between now and September 2020. Not all of these project expenses will ultimately end up as long-term debt for Harris County taxpayers. A portion of these projects are potentially reimbursable through other governmental agencies at various cost shares. It is too early to quantify

those shares, and as most cost shares are on a reimbursement basis (Harris County governmental entities pay the initial full cost and await repayment), it is prudent to quantify the total capital cost for planning purposes. Not all of the projects in this CIP represent Harris County Property Tax Obligations, as other legal entities and financing mechanisms (revenue bonds) are represented within this CIP. Below is a breakdown of expenditures and potential debt additions based on four separate responsible entities contained within the CIP:

Capital Spending by Legal Entity

	Sept. 1, 2019-Aug. 31, 2020
Entity 1. Harris County (Property Tax)	
County Engineering Department	$ 167,615,000
Universal Services	$ 55,598,732
Miscellaneous	$ 8,223,907
Harris County Sports & Convention Corporation (HC Portion)	$ 3,000,000
Harris County Hospital District (HC Portion)*	$ 36,035,859
Harris County (Property Tax) Subtotal	**$ 270,473,498**
Entity 1. Harris County (Revenue)	
Harris County Toll Road Authority	$ 524,700,000
Harris County (Revenue) Subtotal	**$ 524,700,000**
Entity 2. Harris County Flood Control District Subtotal	**$ 538,473,820**
Entity 3. Harris County Sports & Convention Corp. Subtotal	**$ 1,200,000**
Entity 4. Harris County Hospital District Subtotal	**$ 83,175,114**
Total	**$ 1,418,022,432**

Budget Management Department recommends that Harris County (Entity 1 above) should limit its portion of new property tax debt to a range between $313 million and $335 million this fiscal year in order to meet the affordability model outlined within the SOP. The capacity for additional debt is calculated using debt principal retirement and expected growth of taxable value. The range then accounts for any capacity reduction where projects not considered by the CIP are approved this fiscal year, and additional capacity where projects are anticipated to move into future fiscal years or canceled altogether. Though the projected project expense for Harris County Property Tax is only $270.4 million and well below the affordability range, it does not include road borrowing and disaster recovery expenses from the Office of the County Engineer for undetermined projects.

Time is the most important variable in the fiscal constraint of $313 million and $335 million. Historically, the County realizes financial impacts from a proposed CIP (receives an expense it must borrow against) at a much lesser rate than the total cost of the proposed CIP. This is due to the complexity, duration, and limited market resources (professional services, contractors, materials, and project managers) to execute the projects proposed. Because of this, variables such as road bond allocation, project expense timing, and cash financing will all determine the affordability and impacts to the borrowing capacity of this plan moving forward. Budget Management will monitor the progress of individual project approvals and requests for financing to ensure we advise the court appropriately on the financial impact.

Summary of FY 2020 CIP (Capital Improvements Program)

CIP Categories

Public Services: $612M
Improvements and new infrastructure to support public-facing County operations. This includes improvements to the toll-road system, modernization of the Ben Taub emergency center, renovations to libraries, and new voting equipment.

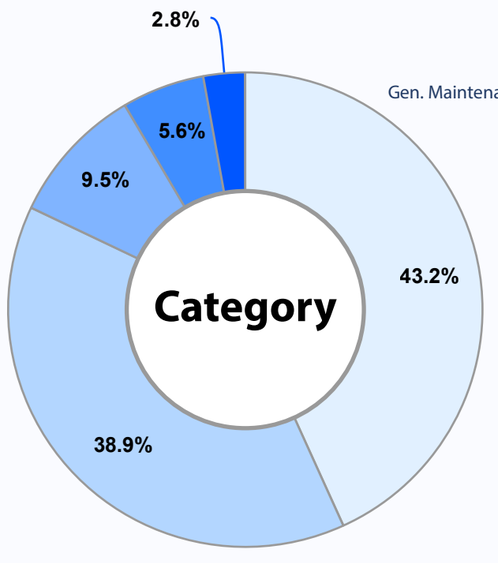
Resiliency: $550M
Resiliency projects help the County better withstand and recover more quickly from emergencies and disasters. This includes HazMat response equipment, projects related to Hurricane Harvey damages, and flood damage reduction projects that work with appropriate regard to community and natural values. Capital funding for flood control has more than quadrupled through a voter-approved $2.5B bond program with an additional $3B in outside funding.

General Maintenance & Lifecycle Management: $133M
Focuses on deferred maintenance and lifecycle management of current facilities to extend the useful life. This includes projects to address fire/life-safety issues, replacement of the Lynchburg ferry, toll-road system maintenance, and other maintenance on facilities across the County.

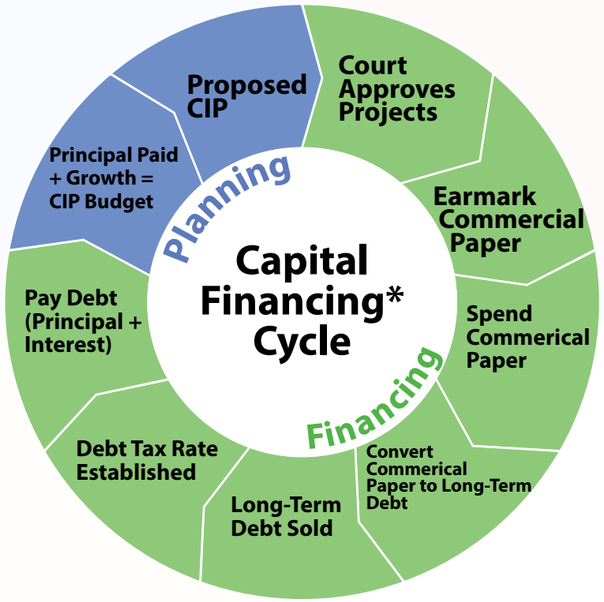
Public Safety & Justice: $79M
Projects that improve emergency response capabilities, support the court system, or are associated with law enforcement. Examples include renovations to the Criminal Justice Center, a new Pre-trial case management system, repairs to the detention facilities, radio replacement, and Community Supervision & Corrections facilities improvements.

General Government: $40M
Improvements and new infrastructure to support Harris County's internal operations to meet the County's changing needs. Includes cybersecurity, facilities to improve County efficiencies, masterplans/ studies, and records management improvements.

CIP Total: $1,416,822,432

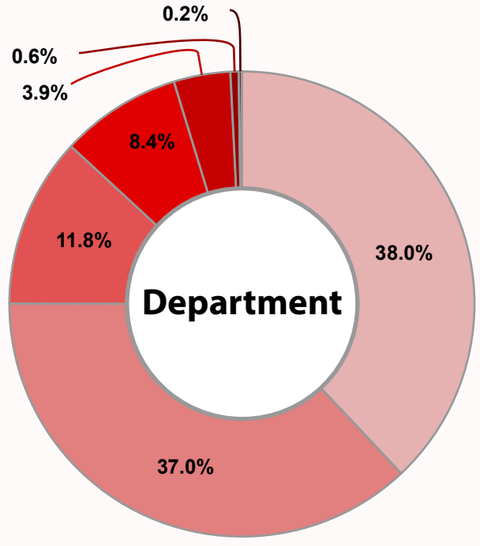


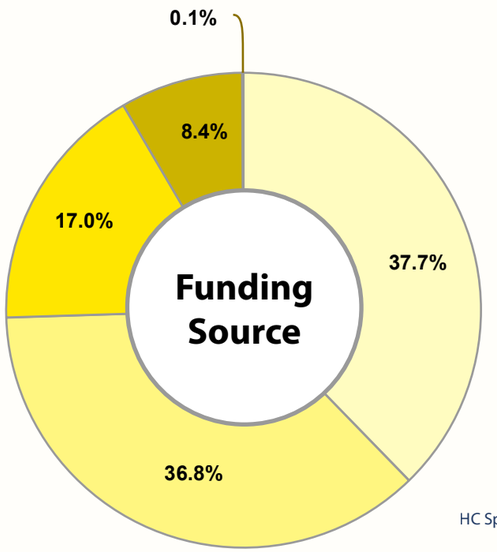
- Public Services **(43.2%)**
- Resiliency **(38.9%)**
- Gen. Maintenance & Life cycle Management **(9.5%)**
- Public Safety & Justice **(5.6%)**
- General Government **(2.8%)**



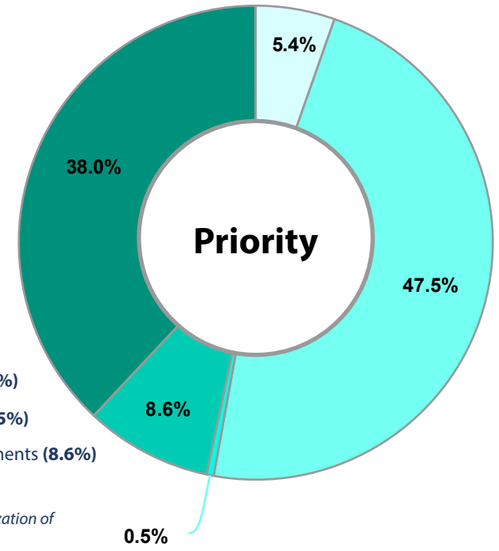
*Harris County's AAA rating means the County can easily sell bonds at low interest rates.

- HC Flood Control District **(38.0%)**
- HC Toll Road Auth. **(37.0%)**
- HC County Engineer **(11.8%)**
- HC Hospital District **(8.4%)**
- HC Universal Services **(3.9%)**
- Miscellaneous **(0.6%)**
- HC Sports & Convention Corp. **(0.2%)**





- HC Flood Control District **(37.7%)**
- HC Revenue **(36.8%)**
- HC Property Tax **(17.0%)**
- HC Sports & Convention Corporation **(8.4%)**
- HC Hospital District **(0.1%)**



- Fire/Life Safety **(5.4%)**
- Continuity of Government **(47.5%)**
- Regulatory or Legal Mandate **(0.5%)**
- Oper. Savings or Value Enhancements **(8.6%)**
- Other** **(38.0%)**

** *Flood Control has a separate prioritization of projects for Court consideration.*

PURPOSE

The Harris County ("County") Capital Improvements Program (CIP) is the planning and budgeting process by which the County identifies, prioritizes, finances, and schedules capital improvement projects ("capital projects"). These Standard Operating Procedures (SOPs) provide a strategic framework to guide the County's CIP based on specific policy objectives and establish a process for monitoring the impacts of the County's capital project investments to improve prioritization and decision-making over time.

MISSION

The CIP should maximize the utilization of the scarce financial resources in order to support a master plan that meets the near, mid, and long-term capital project goals of the County. The CIP should be planned around the current and future needs of the constituent, and prioritized to support safe operations, continuity of government, master plans, and cost savings that develop through the proliferation of tested technologies and studies. Finally, the CIP should be balanced with the goals and financial constraints of the County to ensure the long-term resiliency and sustainability of the County.

VISION

At the direction of Commissioners Court, the CIP should respond to important public needs and prioritize strategic, coordinated, and evidence-based investments of scarce public resources. The goal of the CIP should be to optimize the per-capita impacts and the performance of capital projects. Investments should not be allocated without a contextual basis or otherwise be considered in a vacuum. The proposing department should justify how each proposed CIP project fits within its strategic plan and how the project will enable the department to accomplish its goals and objectives. The CIP should also support coordinated, holistic, and predictive planning. Community input, best practices, and reliable data should drive well informed decision-making based on public and departmental needs and an ongoing assessment of outcomes.

PRIORITIZATION

Individual project proposals should describe how a specific project aligns with one or more of the guiding strategic principles and operational considerations, which are described in the following two subsections:

Operational Benefits/Requirements or Legal Considerations – Why the project is needed or proposed and its urgency.

1. Fire/Life Safety
    - Construction, protection, and occupancy features necessary to minimize danger to life.
    - Project examples include:
        - Fire suppression systems.
        - Removing mold or other toxic substances from a building.
        - Replacing deteriorated electrical systems.

        - Elevator replacement.
    - Projects meeting these criteria must be completed as soon as possible.
2. Continuity of Government Operations
    - Does this project address issues that would restrict normal government operations?
    - Project examples include:
        - Replacing a leaking roof.
        - Repairing the central plant that powers the downtown complex.
        - Replacement of unsupported failing systems.
    - Projects meeting this criteria must be completed as soon as practical.
3. Regulatory or Legal Mandate
    - Is this project related to a statutory requirement or court order?
    - Project examples include:
        - Updating voting locations to comply with ADA requirements.
        - Projects to address new floodplain map issues.
    - Projects meeting these criteria likely must be completed as soon as practical or ordered.
4. Operational Savings or Value Enhancement (including Lifecycle Management)
    - Will the project provide the County a recurring cost savings and/or prolong an asset's useful life, with an acceptable return on investment?
    - Includes projects that add value to the operations, efficiencies, and customer service experience of current systems and processes.
    - Maintenance and replacement projects, including deferred maintenance projects.
    - Project examples include:
        - LED lighting replacement.
        - Moving out of an aging building that requires regular costly maintenance.
        - Renovating the jury assembly area.
        - Building program rooms at the library.
        - Additional Services.
    - Projects meeting this criteria are prioritized by Commissioners Court

Project Attributes and Guiding Principles – How the project should be executed and weighed against alternative solutions.

Strategic investments in capital projects should consider the following strategic principles, as well as others that the department proposing a specific project might suggest for consideration:

- Equitable access to resources, services, and opportunities across the county;
- Wellbeing—including but not limited to health and safety—of residents;
- Resilience to reduce vulnerability in response to disaster;
- Transparent, responsive and accountable government;
- Economic development, including mobility, flood prevention, and other factors;
- Flexibility to adapt to changing needs, opportunities, technological advancements, growth, and other factors that influence capital investments over time;

- Long-term affordability to reflect the financial constraints and goals of the County (including the County's credit rating and outlook)[1]; and
- Alignment with existing plans (including Countywide Master Plan, department-specific strategic plan, and/or an operational increase already approved by Commissioners Court).
- Sustainability and energy efficiency, including LEED principals Low Impact Development & Green Infrastructure Design as recommended by the County Engineer and approved by Commissioners Court;

PROCESS

Presenting Entities

- Harris County Flood Control District
- Harris County Port of Houston Authority
- Harris County Sports & Convention Corporation
- Harris County Toll Road Authority
- Harris County Universal Services
- Harris Health System
- Office of the County Engineer
- Other departments and offices, as applicable based on needs and opportunities

Eligible Projects

Projects eligible for inclusion in the CIP typically involve investment in a physical asset with an expected useful life of greater than one year, including new construction or equipment and the expansion, renovation, or replacement of existing physical assets (including equipment).

Project Nomination

1. A need or opportunity is identified by Commissioners Court, the public, or a department submitted by the department to Budget Management for initial consideration.
2. The project is assessed by Budget Management to confirm eligibility for CIP.
3. The relevant department develops a project proposal that includes justification for the project, including how the project will help the department achieve its strategic objectives, and projected performance (including cost, timeline, and metrics).
4. The project is evaluated alongside other department project proposals.
5. The project is forwarded to Budget Management for fiscal analysis.
6. Budget Management combines the department CIP requests into a CIP program and present to Commissioners Court.

Community Input

The CIP process will facilitate opportunities for public engagement. Budget Management will publically share the CIP two weeks prior to a public hearing for the program. The public will be

[1] See details on the topic of affordability in the appendix.

invited to speak both at the preceding Commissioners Court and at the CIP hearing itself. The CIP transmittal to Commissioners Court is intended to act as a centralized presentation, however, the individual projects within the CIP are acted on by the individual departments with decentralized execution. Meaning beyond the CIP presentation and public hearings, the departments will have varying degrees of community touch-points depending on the project or proposed program and evaluated impact on the varying stakeholders.

Approval

The Harris County CIP represents a rolling five-year planning cycle transmitted and presented annually to Commissioners Court. Though transmitted annually, the projects presented on the CIP get approved and funded individually during Commissioners Court meetings. This process allows for Commissioners Court members and the public to be briefed on the projects, ask questions, and to provide input prior to project approval. The approval process typically happens as follows:

- Step 1 – CIP presentation during or subsequent to midyear review in September
- Step 2 – Individual project is added to responsible department's agenda for Commissioners Court approval
- Step 3 – The responsible department requests full or partial funds transfer at a subsequent Commissioners Court

PERFORMANCE EVALUATION

The County will actively monitor the outcomes of investments in capital projects by tracking projected versus actual project costs, projected versus actual timing of project completion, and achievement of goals related to any metrics associated with each project proposal. With the development of a County Infrastructure Masterplan, and strategic systems such as Tririga, E*Builder, and a new financial system coming online, the future will bring the County closer towards an asset management database that will assist future evaluations and metrics development. These metrics will drive a CIP that will focus capital allocation in the most efficient method possible.

APPENDIX

CIP Fiduciary Guiding Principles

1. Operational expenses should not be financed long-term.
2. When practical, the useful life of the assets created by the CIP should match or exceed the debt service timeframe.
3. Debt service should be borne by the taxing entity that is responsible for the project.
4. Total Debt Service (less Hotel Occupancy and Toll Road Subordinate Lien Debt Service) to constituent ratio should be equal to or less than $600 per constituent.
5. The CIP process should identify and alert Commissioners Court on any proposal or aggregate of the program that, if approved, would negatively impact the County's credit rating or financial outlook.

Financing

The funding source for an individual project in the CIP depends on numerous variables, but the primary consideration is matching the taxing entity requesting and benefitting from the project with the appropriate financial responsibility and financing mechanism. For instance, typically, Harris County Flood Control District (HCFCD) projects are funded through HCFCD property tax revenues, Harris County Hospital District (HCHD) projects are funded with HCHD revenues, toll road projects are funded from Harris County Toll Road Authority revenues, and Office of the County Engineer, Universal Services, and miscellaneous projects benefiting Harris County are funded with Harris County revenues.

Regardless of the funding source, CIP projects are typically initially funded through short-term debt called commercial paper. Commercial paper allows the entity funding the project to avoid incurring long term debt at higher interest rates during the design and construction phase of the project. As most CIP projects take multiple years to complete, if projects were funded exclusively through long-term bonds, the entity would pay higher long-term interest on money that would not be spent for several years. Commercial paper also provides a timing buffer to help ensure the best long-term financing option can be considered against the current and future portfolio of projects before long-term financing decisions are made.

The CIP also includes other funding sources such as fee revenue, grants, asset sales, and philanthropic funding.

Affordability

Determining the affordability of the CIP could involve multiple factors, including assumptions on tax rates, interest rates, bond ratings, liquidity, debt management, cash financing available, and the timing of projects and their cash flows. However, as this list is not all-inclusive of the multiple inputs that can be used to determine affordability, it is imperative to have a practical and target-based methodology. Assuming no change in the projected tax rate, two reasonable guideposts to consider when budgeting the capital improvements program are:

a. Total Debt Service (less Hotel Occupancy and Toll Road Subordinate Lien Debt Service) per Constituent: Debt service to constituent ratio of $600 or less per constituent in the past has been considered fiscally prudent by major credit rating agencies.
b. Debt Principal Rate of Replacement: Over the long-term, Harris County General Fund debt principal projected balance increases should generally not outpace the projected growth in assessed taxable property value in Harris County.

Though the more typical debt to constituent ratio is not inclusive of the debt service, Harris County does include the full debt service in order to capture the interest as a part of the ratio. Budget Management recommends this because it makes the County more aware of the impacts of financing options and interest rates toward our total portfolio of debt.

Based on these targets, the current calculation used when considering affordability of the Harris County CIP is to ensure the CIP's annual cash flows are within a range calculated by:

Last FY Principal Payment X (1 + Percentage Taxable Value Growth from Auditor's Final Estimate Available Resources). This number is then checked against the remaining Total Debt Service (less Hotel Occupancy and Toll Road Subordinate Lien Debt Service), then divided by the population to be ≤ $600. The range is then calculated by adding cash flows of projects that did not get approved from the prior CIP, and subtracting approved "off-CIP" projects that were not anticipated on the CIP.

Example – Principle Paid off Last FY = $303M, Anticipated Principle to be Paid in current FY = $306M, Growth from Auditors Estimate – 4%, Current Population - 4.7M, Total Debt Service (less Hotel Occupancy and Toll Road Subordinate Lien Debt Service) = $2.6B. In the last year, a $10M CIP renovation project was canceled, and a $5M emergency electrical upgrade was conducted by engineering.

First Calculation…$303M x (1.04) = **$315M**, 20 Years of Debt Service on $315M is approx. $441M.

Second Calculation…$2.6B + $441M (added debt service) – $306M (Current FY principal retired) = $2.71B/ 4.7M (population) = **$596.4** per constituent.

Range – Renovation Project Canceled (+$10M), Emergency Electrical (-$5M) = **+$5M**

Based on this example, Harris County could afford to add a range between $310M – $320M in projects, and in doing so, it should not increase our debt service to population ratio above $600, and depending on interest rates and financing, this should have little to no impact on the debt service tax rate.

Managerial Assessment – Regardless of the calculation, a managerial assessment should be made on the affordability of the CIP. Issues such as economic outlook, the will of the Court, interest rate and volatility should all be assessed prior to setting the affordability of the CIP.

Harris County FY 2020 CIP Readers' Guide

Project Name:

Category: 1

Priority:

Estimated Project Cost:

Operating Cost Impact:

Spent to Date: 2

Expected Completion:

Funding Source:

Project Description/ Justification:

3

Funding Plan:

4

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug. 31, 2020	Sept.1, 2019-Aug. 31, 2020	Sept.1, 2019-Aug. 31, 2020	Sept.1, 2019-Aug. 31, 2020	Sept.1, 2019-Aug. 31, 2020
$X	$X	$X	$X	$X	$X	$X

Annual Operating Budget Impact:

5

Operating Impacts	Sept.1, 2019-Aug. 31, 2020	Sept.1, 2019-Aug. 31, 2020	Sept.1, 2019-Aug. 31, 2020	Sept.1, 2019-Aug. 31, 2020	Sept.1, 2019-Aug. 31, 2020
Utilities	$x	$x	$x	$x	$x
Maintenance	$x	$x	$x	$x	$x
Total	$x	$x	$x	$x	$x

<Optional graphic>

6

Harris County FY 2020 CIP Readers' Guide

1. **Project Identification** – This section identifies the departmental category the project falls into and how it is prioritized. Please note that project prioritization is determined by Commissioner's Court. In order to assist Commissioner's Court with this prioritization, each CIP project will be assigned a prioritization that denotes the impact of the project. These prioritization categories scale from projects that are critical to preventing death/injury to projects that are important and have value, but can be delayed with minimal impacts. Please see the Harris County Capital Improvements Program Standing Operating Procedures for a more detailed description of the Project Prioritization categories.

2. **Project Financial Highlights** – This section identifies the total capital costs of the project (Estimated Project Cost), how this project will impact the operating budget (Operating Cost Impact), and what has already been funded to date. This section also identifies when the project is anticipated to be completed and where the funding will come from (i.e. property tax or other revenue sources).

3. **Project Description/Justification** – This section describes the project and provides a brief justification for its overall purpose.

4. **Funding Plan** – This section summarizes the past, present, and future expenditure information for the project.

5. **Annual Operating Budget Impacts** – This section contains all the financial impacts on the operating budget. The impacts are listed by fiscal year and at times do not begin until after completion of the capital project.

6. Department managing the project.



FY2020
Capital Improvements Program

Office of the County Engineer

John R. Blount, P.E.
County Engineer

HARRIS COUNTY
OFFICE OF THE COUNTY ENGINEER

1001 Preston, Suite 500
Houston, Texas 77002
(713) 755-5370

August 28, 2019

Honorable County Judge
& Commissioners

SUBJECT: Capital Improvement Program FY 2020 and Funding Recommendations

Dear Court Members:

The Office of the County Engineer (OCE) has coordinated with the Budget Office and other County Departments to prepare Harris County's FY 2020 Capital Improvements Program. OCE is recommending the approval of the attached program including authorizing the Budget Office to fund up to $167.6 Million. Individual projects will be presented at future Commissioners Court sessions for approval.

Attached you will find a listing of each project and initiative that include brief descriptions and estimated costs.

Should you have any questions, please contact my office.

Sincerely,

John R. Blount, P.E.
County Engineer

cc: William J. Jackson, Executive Director, HCBMD
Joshua Stuckey, HCBMD

2020 CIP - Office of the County Engineer 5 Year Funding Plan

Project Category	Project Prioritization*	Project Name/Description	Total Project Estimate	Reimbursements	HC Capital Funding	Funded To Date	Sept. 1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug. 31, 2021	Sept. 1, 2021-Aug. 31, 2022	Sept. 1, 2022-Aug.31, 2023	Sept. 1, 2023-Aug.31, 2024
Capital Repair and Maintenance											
	1	Countywide Annex Security Upgrades	$ 1,000,000	$ -	$ 1,000,000	$ -	$ 1,000,000	TBD	TBD	TBD	TBD
	1	Countywide Traffic Signal Additions, Rebuilds and Other	$ 16,000,000	$ -	$ 16,000,000	$ 1,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000
	1	Elevator projects - 5 Year Plan	$ 26,000,000	$ -	$ 26,000,000	$ 1,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000
	1	Fire, Life Safety and Electrical Systems - 5 Year Plan	$ 25,000,000	$ -	$ 25,000,000	$ 1,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 4,000,000
	1	Plumbing Systems - 5 Year Plan	$ 12,000,000	$ -	$ 12,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000
	2	Adult County Detention Facility Repair/Upgrades	$ 108,000,000	$ -	$ 108,000,000	$ 8,000,000	$ 20,000,000	$ 20,000,000	$ 20,000,000	$ 20,000,000	$ 20,000,000
	2	Heating Ventilation Air Conditioning (HVAC) projects - 5 Year Plan	$ 26,000,000	$ -	$ 26,000,000	$ 1,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000
	2	Juvenile Probation Department Facility Repairs	$ 21,000,000	$ -	$ 21,000,000	$ 1,000,000	$ 4,000,000	$ 4,000,000	$ 4,000,000	$ 4,000,000	$ 4,000,000
	3	Countywide Stormwater Quality Maintenance - 5 Year Plan	$ 1,000,000	$ -	$ 1,000,000	$ -	$ 1,000,000	TBD	TBD	TBD	TBD
	3	Underground fuel tank study and replacement	$ 7,000,000		$ 7,000,000	$ -	$ 2,000,000	$ 3,000,000	$ -	$ -	$ 2,000,000
	4	Countywide Facility LED Lighting Conversion	$ 10,000,000	$ -	$ 10,000,000	$ -	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000
	4	Miscellaneous Repair, Painting, Flooring and Other - 5 Year Plan	$ 26,000,000	$ -	$ 26,000,000	$ 1,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000
	4	Parking Facilities - 5 Year Plan	$ 18,000,000	$ -	$ 18,000,000	$ 1,000,000	$ 5,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000
	4	Roofing Projects - 5 Year Plan	$ 27,000,000	$ -	$ 27,000,000	$ 2,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000	$ 5,000,000
		Sub-Total (Capital Repair and Maintenance)	**$ 324,000,000**	**$ -**	**$ 324,000,000**	**$ 19,000,000**	**$ 65,000,000**	**$ 62,000,000**	**$ 59,000,000**	**$ 59,000,000**	**$ 60,000,000**
New Facilities											
	2	CSCD Phase II Administrative Area Upgrades, Atascocita	$ 31,615,000	$ -	$ 31,615,000	$ 16,615,000	$ 10,000,000	$ 5,000,000	$ -	$ -	$ -
	2	Universal Services Radio Network Core Building	$ 2,250,000	$ -	$ 2,250,000	$ 250,000	$ 1,500,000	$ 500,000	$ -	$ -	$ -
	4	CSD New Facility (New Markets Tax Credit Program) Planning and Programming	$ 250,000	$ -	$ 250,000	$ -	$ 250,000	TBD	TBD	TBD	TBD
	4	Downtown Court Support Building Planning and Programming	$ 1,000,000	$ -	$ 1,000,000	$ -	$ 1,000,000	TBD	TBD	TBD	TBD
	4	HCFCD, OCE and PHES Replacement Facility @ Pinemont	$ 101,000,000	$ 30,000,000	$ 71,000,000	$ 1,000,000	$ 35,000,000	$ 65,000,000	$ -	$ -	$ -
	4	HCSO and other County Departments Replacement Facilities @ Navigation	$ -	$ -	$ -		TBD	TBD	TBD	TBD	TBD
	4	Quebedeaux Park (old DA Building site) Planning and Programming	$ 250,000	$ -	$ 250,000	$ -	$ 250,000	TBD	TBD	TBD	TBD
	4	Riverside Hospital Future Site Planning and Programming	$ 500,000	$ -	$ 500,000	$ -	$ 500,000	TBD	TBD	TBD	TBD
		Sub-Total (New Facilities)	**$ 136,865,000**	**$ 30,000,000**	**$ 106,865,000**	**$ 17,865,000**	**$ 48,500,000**	**$ 70,500,000**	**$ -**	**$ -**	**$ -**
Renovation and Demo											
	2	Universal Services Facilities @ 406 Caroline and Crites Street MEP Repairs	$ 2,500,000	$ -	$ 2,500,000	$ 500,000	$ 1,000,000	$ 1,000,000	$ -	$ -	$ -
	2	Upgrade Preston Street Central Plant	$ 61,000,000	$ -	$ 61,000,000	$ 1,000,000	$ 20,000,000	$ 25,000,000	$ 15,000,000	$ -	$ -
	3	Expansion and relocation of Commissioners Court	$ 4,000,000		$ 4,000,000	$ -	$ 4,000,000	$ -	$ -	$ -	$ -
	4	Demolition of Lomas Nettleton / Coffee Pot Buildings and build parking lot	$ 11,500,000	$ -	$ 11,500,000	$ 3,500,000	$ -	$ 5,000,000	$ 3,000,000	$ -	$ -
	4	Renovation of Atascocita Branch Library	$ 1,000,000		$ 1,000,000		$ 1,000,000				
	4	Renovation of Freeman Branch Library	$ 200,000		$ 200,000		$ 200,000				
	4	Renovation of the Institute of Forensic Sciences Facility	$ 1,000,000		$ 1,000,000		$ 1,000,000	TBD	TBD	TBD	TBD
	4	Repurpose of Thomas Street Clinic	$ 250,000		$ 250,000		$ 250,000				
		Sub-Total (Renovation and Demo)	**$ 81,450,000**	**$ -**	**$ 81,450,000**	**$ 5,000,000**	**$ 27,450,000**	**$ 31,000,000**	**$ 18,000,000**	**$ -**	**$ -**
Studies											
	1	Justice of the Peace Court Security Study	$ 1,000,000	$ -	$ 1,000,000	$ -	$ 1,000,000	$ -	$ -	$ -	$ -
	4	Buildings Disposition Study (1307 Baker Jail, Wilson and IPC Facilities)	$ 500,000	$ -	$ 500,000	$ -	$ 500,000	$ -	$ -	$ -	$ -
	4	Institute of Forensic Sciences Long Term Masterplan	$ 1,000,000	$ -	$ 1,000,000	$ -	$ 1,000,000	$ -	$ -	$ -	$ -
	4	Other Court Directed Masterplans and Studies	$ 10,350,000	$ -	$ 10,350,000	$ 350,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 2,000,000
		Sub-Total (Studies)	**$ 12,850,000**	**$ -**	**$ 12,850,000**	**$ 350,000**	**$ 4,500,000**	**$ 2,000,000**	**$ 2,000,000**	**$ 2,000,000**	**$ 2,000,000**

2020 CIP - Office of the County Engineer 5 Year Funding Plan

Project Category	Project Prioritization*	Project Name/Description	Total Project Estimate	Reimbursements	HC Capital Funding	Funded To Date	Sept. 1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug. 31, 2021	Sept. 1, 2021-Aug. 31, 2022	Sept. 1, 2022-Aug.31, 2023	Sept. 1, 2023-Aug.31, 2024
Disaster Recovery: Hurricane Harvey											
	2	Baldwin Boettcher Library Renovation	$ -	$ -	$ -	$ -	TBD	TBD	TBD	TBD	TBD
	2	Criminal Justice Center FF&E	$ -	$ -	$ -	$ -	TBD	TBD	TBD	TBD	TBD
	2	Criminal Justice Center Renovation	$ 86,000,000	$ 13,900,000	$ 72,100,000	$ 86,000,000	$ -	$ -	$ -	$ -	$ -
	2	Downtown Complex Tunnel System Repairs	$ -	$ -	$ -	$ -	TBD	TBD	TBD	TBD	TBD
	2	Jury Assembly Renovation	$ 15,000,000	$ 8,200,000	$ 6,800,000	$ 13,000,000	$ 2,000,000	$ -	$ -	$ -	$ -
	2	Peden Building Renovation	$ -	$ -	$ -	$ -	TBD	TBD	TBD	TBD	TBD
		Sub-Total (Disaster Recovery)	**$ 101,000,000**	**$ 22,100,000**	**$ 78,900,000**	**$ 99,000,000**	**$ 2,000,000**	**$ -**	**$ -**	**$ -**	**$ -**
Other Projects											
	1	HCTRA Provided Funding for Traffic and Outfall Projects	$ 90,000,000	$ 90,000,000	$ -	$ 15,000,000	$ 15,000,000	$ 15,000,000	$ 15,000,000	$ 15,000,000	$ 15,000,000
	4	Engineering Records Management (Open Text) Implementation	$ 1,500,000	$ -	$ 1,500,000	$ 1,000,000	$ 500,000	$ -	$ -	$ -	
	4	Facilities Management System (Tririga) Inventory of Precinct Facilities	$ 4,000,000	$ -	$ 4,000,000	$ 3,000,000	$ -	$ 250,000	$ 250,000	$ 250,000	$ 250,000
	4	Implementation of Interagency Coordination Assessment Tool (ICAT)	$ 400,000	$ -	$ 400,000	$ -	$ 200,000	$ 200,000	$ -	$ -	$ -
	4	Property Acquisition for Canal Street Expansion	$ 1,500,000	$ -	$ 1,500,000	$ -	$ 1,500,000	$ -	$ -	$ -	$ -
	4	HCSO Marine Division Land Acquisition for Expansion	$ 150,000	$ -	$ 150,000	$ -	$ 150,000	$ -	$ -	$ -	$ -
		Sub-Total (Other)	**$ 97,550,000**	**$ 90,000,000**	**$ 7,550,000**	**$ 19,000,000**	**$ 17,350,000**	**$ 15,450,000**	**$ 15,250,000**	**$ 15,250,000**	**$ 15,250,000**
		Office of the County Engineer Projects Total	**$ 753,715,000**	**$ 142,100,000**	**$ 611,615,000**	**$ 160,215,000**	**$ 164,800,000**	**$ 180,950,000**	**$ 94,250,000**	**$ 76,250,000**	**$ 77,250,000**
US Vehicle Projects**											
	4	Hugh Road Building Renovation	$ 1,500,000	$ 1,500,000	$ -	$ -	$ 1,500,000	TBD	TBD	TBD	TBD
	4	Meadowfern Building Renovation	$ 315,000	$ 315,000	$ -	$ -	$ 315,000	$ -	$ -	$ -	$ -
	4	Orem Building Study and Demo	$ 1,000,000	$ 1,000,000	$ -	$ -	$ 1,000,000	TBD	TBD	TBD	TBD
	4	VMC S. 66th Building Renovation	$ -	$ -	$ -	$ -	TBD	TBD	TBD	TBD	TBD
		Sub-Total (US Vehicle Projects)	**$ 2,815,000**	**$ 2,815,000**	**$ -**	**$ -**	**$ 2,815,000**	**$ -**	**$ -**	**$ -**	**$ -**
		Total Capital Cost	**$ 756,530,000**	**$ 144,915,000**	**$ 611,615,000**	**$ 160,215,000**	**$ 167,615,000**	**$ 180,950,000**	**$ 94,250,000**	**$ 76,250,000**	**$ 77,250,000**

***Project Prioritization:** (1) - Fire/Life Safety, (2) - Continuity of Government, (3) - Regulatory or Legal Mandate, (4) - Operational Savings or Value Enhancement
Total Project Estimate - Funded to date and estimated funding required over the next 5 fiscal years.
Reimbursements - Anticipated Federal, State, or other funding that can offset the potential debt incurred from the project. This could include proceeds from the sale of other assets.
HC Capital Funding - The remaining cost of the project after reimbursements are realized.
Funded to Date - Total funding the project has received in prior fiscal years.
** All Estimates were provided by Universal Services

Capital Repair and Maintenance

Project Name:	Countywide Annex Security Upgrades	**Estimated Project Cost:**	$1,000,000
Precinct Location:	Countywide	**Funded to Date:**	$-
Category:	Fire-Life Safety	**Expected Completion:**	2nd Quarter, FY 2021
		Funding Source:	Capital Funding

Project Description/ Justification:

Countywide Annex Security Upgrades are intended to provide enhanced facility security, as well as identify and address all required repairs and/or replacements of existing security systems in County facilities that are currently maintained by FPM.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$1,000,000	$-	$1,000,000	TBD	TBD	TBD	TBD

Capital Repair and Maintenance

Project Name:	Countywide Traffic Signal Additions, Rebuilds and Other	**Estimated Project Cost:**	$16,000,000
Precinct Location:	Countywide	**Funded to Date:**	$1,000,000
Category:	Fire-Life Safety	**Expected Completion:**	2nd Quarter, FY 2025
		Funding Source:	Capital Funding

Project Description/ Justification:

The objective for the Countywide Traffic Signal Additions and Rebuilds is to establish the funds needed to support program management of over 800 traffic signal systems and to identify all required replacements and rebuilds of obsolete traffic signals.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$16,000,000	$1,000,000	$3,000,000	$3,000,000	$3,000,000	$3,000,000	$3,000,000

Office of the County Engineer

Capital Repair and Maintenance

Project Name:	Elevator projects – 5 Year Plan	**Estimated Project Cost:**	$26,000,000
Precinct Location:	Countywide	**Funded to Date:**	$1,000,000
Category:	Fire-Life Safety	**Expected Completion:**	2nd Quarter, FY 2025
		Funding Source:	Capital Funding

Project Description/ Justification:
The objective for the Elevator Projects – 5 Year Plan is to identify and address all required repairs and/or modernization of elevators in County facilities that are currently maintained by FPM.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$26,000,000	$1,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000

Office of the County Engineer

Capital Repair and Maintenance

Project Name:	Fire, Life Safety and Electrical Systems – 5 Year Plan	**Estimated Project Cost:**	$25,000,000
Precinct Location:	Countywide	**Funded to Date:**	$1,000,000
Category:	Fire-Life Safety	**Expected Completion:**	2nd Quarter, FY 2025
		Funding Source:	Capital Funding

Project Description/ Justification:

The objective for the Fire, Life Safety and Electrical Systems – 5 Year Plan is to identify and address all required repairs and/or replacements needed in County facilities that are currently maintained by FPM.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$25,000,000	$1,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$4,000,000

Capital Repair and Maintenance

Project Name:	Plumbing Systems – 5 Year Plan	**Estimated Project Cost:**	$12,000,000
Precinct Location:	Countywide	**Funded to Date:**	$2,000,000
Category:	Fire-Life Safety	**Expected Completion:**	2nd Quarter, FY 2025
		Funding Source:	Capital Funding

Project Description/ Justification:

The objective for the Plumbing Systems – 5 Year Plan is to identify and address all required repairs and/or replacements of plumbing systems in County facilities that are currently maintained by FPM.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$12,000,000	$2,000,000	$2,000,000	$2,000,000	$2,000,000	$2,000,000	$2,000,000

Capital Repair and Maintenance

Project Name:	Adult County Detention Facility Repair/Upgrades	**Estimated Project Cost:**	$108,000,000
Precinct Location:	Countywide	**Funded to Date:**	$8,000,000
Category:	Continuity of Government	**Expected Completion:**	2nd Quarter, FY 2025
		Funding Source:	Capital Funding

Project Description/ Justification:

The objective for the Adult County Detention Facility Repair/Upgrades is to identify and address all required repairs and/or replacements for County detention facilities.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$108,000,000	$8,000,000	$20,000,000	$20,000,000	$20,000,000	$20,000,000	$20,000,000

Office of the County Engineer

Capital Repair and Maintenance

Project Name:	Heating Ventilation Air Conditioning (HVAC) projects – 5 Year Plan	**Estimated Project Cost:**	$26,000,000
Precinct Location:	Countywide	**Funded to Date:**	$1,000,000
Category:	Continuity of Government	**Expected Completion:**	2nd Quarter, FY 2025
		Funding Source:	Capital Funding

Project Description/ Justification:
HVAC projects are intended to repair and/or replace existing HVAC issues for all facilities maintained by FPM.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$26,000,000	$1,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000

Office of the County Engineer

Capital Repair and Maintenance

Project Name:	Juvenile Probation Department Facility Repairs	**Estimated Project Cost:**	$21,000,000
Precinct Location:	Countywide	**Funded to Date:**	$1,000,000
Category:	Continuity of Government	**Expected Completion:**	2nd Quarter, FY 2025
		Funding Source:	Capital Funding

Project Description/ Justification:

The Juvenile Probation Department Facility Repairs Project is intended to identify repairs and/or replacements needed for known damages and deficiencies that currently exist in the juvenile facilities.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$21,000,000	$1,000,000	$4,000,000	$4,000,000	$4,000,000	$4,000,000	$4,000,000

Office of the County Engineer

Capital Repair and Maintenance

Project Name:	Countywide Stormwater Quality Maintenance – 5 Year Plan	**Estimated Project Cost:**	$1,000,000
Precinct Location:	Countywide	**Funded to Date:**	$-
Category:	Regulatory/Legal	**Expected Completion:**	2nd Quarter, FY 2021
		Funding Source:	Capital Funding

Project Description/ Justification:

The objective for the Countywide Stormwater Quality Maintenance – 5 Year Plan is to identify and address all required repairs and/or replacements of stormwater quality facilities Countywide.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$1,000,000	$-	$1,000,000	TBD	TBD	TBD	TBD

Capital Repair and Maintenance

Project Name:	Underground Fuel Tank Study and Replacement	**Estimated Project Cost:**	$7,000,000
Precinct Location:	Countywide	**Funded to Date:**	$-
Category:	Regulatory/Legal	**Expected Completion:**	2nd Quarter, FY 2025
		Funding Source:	Capital Funding

Project Description/ Justification:
To review and evaluate all county owned underground fuel tanks and repair and/or replace as needed.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$7,000,000	$-	$2,000,000	$3,000,000	$-	$-	$2,000,000

Office of the County Engineer

Capital Repair and Maintenance

Project Name:	Countywide Facility LED Lighting Conversion	**Estimated Project Cost:**	$10,000,000
Precinct Location:	Countywide	**Funded to Date:**	$-
Category:	Operational Savings/Value Enhancement	**Expected Completion:**	2nd Quarter, FY 2025
		Funding Source:	Capital Funding

Project Description/ Justification:

The objective for the Countywide Facility LED Lighting Conversion Project is to identify and convert lighting to LED for all County facilities that are currently maintained by FPM.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$10,000,000	$-	$2,000,000	$2,000,000	$2,000,000	$2,000,000	$2,000,000

Capital Repair and Maintenance

Project Name:	Miscellaneous Repair, Painting, Flooring and Other - 5 Year Plan	**Estimated Project Cost:**	$26,000,000
Precinct Location:	Countywide	**Funded to Date:**	$1,000,000
Category:	Operational Savings/Value Enhancement	**Expected Completion:**	2nd Quarter, FY 2025
		Funding Source:	Capital Funding

Project Description/ Justification:

The objective for the Miscellaneous Repair, Painting, Flooring and Other – 5 Year Plan is to identify and address all required repairs and/or replacements in County facilities that are currently maintained by FPM.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$26,000,000	$1,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000

Capital Repair and Maintenance

Project Name:	Parking Facilities - 5 Year Plan	**Estimated Project Cost:**	$18,000,000
Precinct Location:	Countywide	**Funded to Date:**	$1,000,000
Category:	Operational Savings/Value Enhancement	**Expected Completion:**	2nd Quarter, FY 2025
		Funding Source:	Capital Funding

Project Description/ Justification:
The objective for the Parking Facilities – 5 Year Plan is to identify, repair, and construct new parking facilities.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$18,000,000	$1,000,000	$5,000,000	$3,000,000	$3,000,000	$3,000,000	$3,000,000

Office of the County Engineer

Capital Repair and Maintenance

Project Name:	Roofing Projects - 5 Year Plan	**Estimated Project Cost:**	$27,000,000
Precinct Location:	Countywide	**Funded to Date:**	$2,000,000
Category:	Operational Savings/Value Enhancement	**Expected Completion:**	2nd Quarter, FY 2025
		Funding Source:	Capital Funding

Project Description/ Justification:

The objective for the Roofing Projects – 5 Year Plan is to identify and construct all required repairs and/or replacements for County facilities that are currently maintained by FPM.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$27,000,000	$2,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000

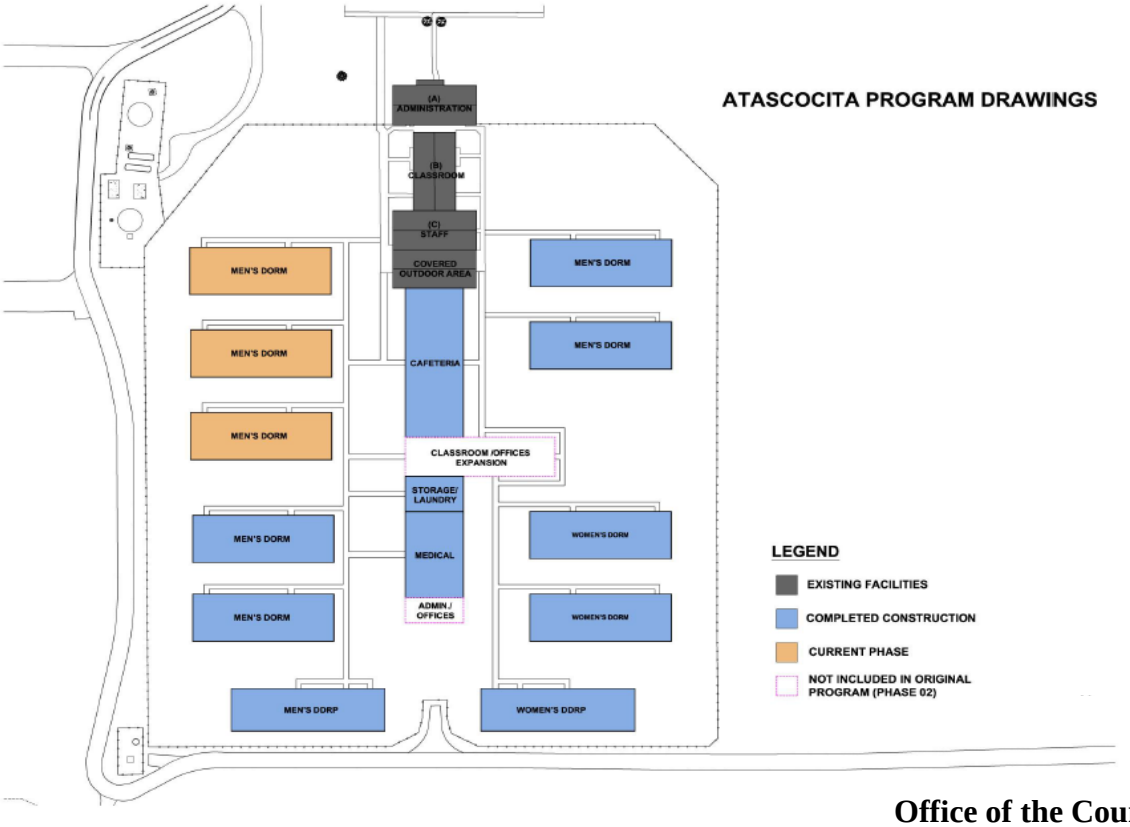
New Facilities

Project Name:	CSCD Phase II Administrative Area Upgrades, Atascocita	**Estimated Project Cost:**	$31,615,000
Precinct Location:	4	**Funded to Date:**	$16,615,000
Category:	Continuity of Government	**Expected Completion:**	FY 2022
		Funding Source:	Capital Funding

Project Description/ Justification:
Repurposing of the existing administration, classroom, and staff buildings in the center of the complex. The new program includes configuring the buildings into a reception center and administration building for current staff.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$31,615,000	$16,615,000	$10,000,000	$5,000,000	$-	$-	$-



Office of the County Engineer

New Facilities

Project Name:	Universal Services Radio Network Core Building	**Estimated Project Cost:**	$2,250,000
Precinct Location:	4	**Funded to Date:**	$250,000
Category:	Continuity of Government	**Expected Completion:**	TBD
		Funding Source:	Capital Funding

Project Description/ Justification:

Universal Services is requesting a replacement facility that will house 80,000+ Land Mobile Radio two-way radio systems for Harris County.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$2,250,000	$250,000	$1,500,000	$500,000	$-	$-	**$-**

Office of the County Engineer

New Facilities

Project Name:	CSD New Facility (New Markets Tax Credit Program) Planning and Programming	**Estimated Project Cost:**	$250,000
Precinct Location:	TBD	**Funded to Date:**	$-
Category:	Operational Savings/Value Enhancement	**Expected Completion:**	TBD
		Funding Source:	Capital Funding

Project Description/ Justification:

The Community Services Department is requesting a new facility that would ultimately replace the Department's current buildings. The proposal would be inclusive of leveraging CDBG-DR and HUD entitlement funds in combination with the potential of New Markets Tax Credits.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$250,000	$-	$250,000	TBD	TBD	TBD	TBD

New Facilities

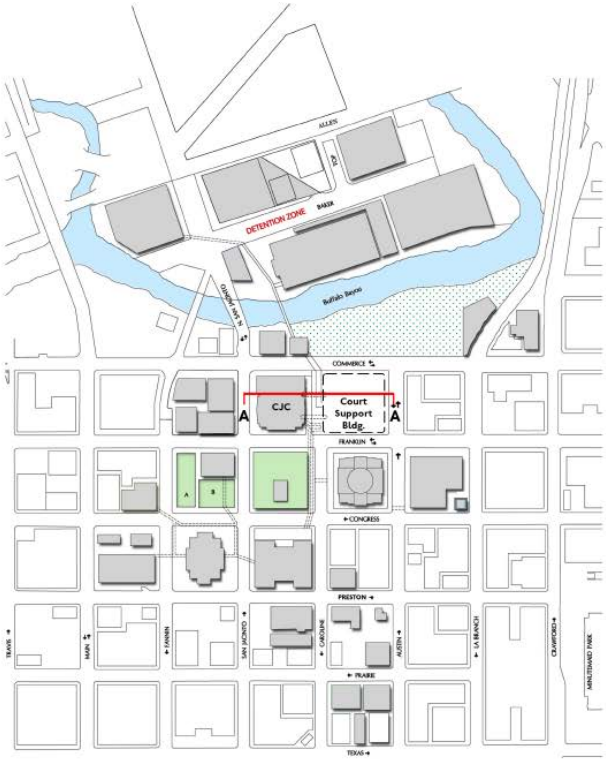
Project Name:	Downtown Court Support Building Planning and Programming	**Estimated Project Cost:**	$1,000,000
Precinct Location:	1	**Funded to Date:**	$-
Category:	Operational Savings/Value Enhancement	**Expected Completion:**	TBD
		Funding Source:	Capital Funding

Project Description/ Justification:

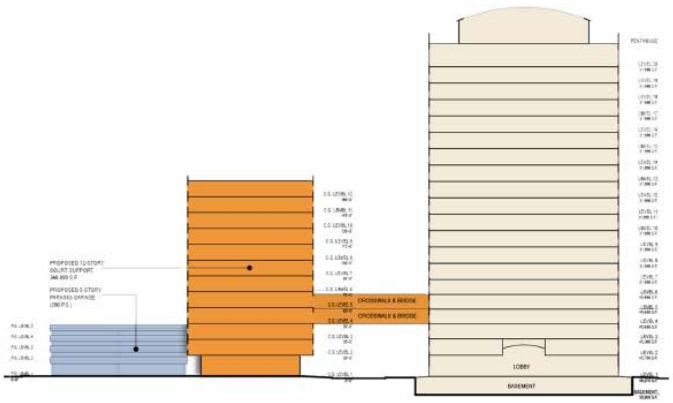
Due to increased operations and the need for more space across multiple departments, it is recommended that a new court support facility be planned and constructed.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$1,000,000	$-	$1,000,000	TBD	TBD	TBD	TBD



Downtown Site Plan



A. Court Support Bldg. / Parking Diagram
360,000 SF. Building with Parking Garage

New Facilities

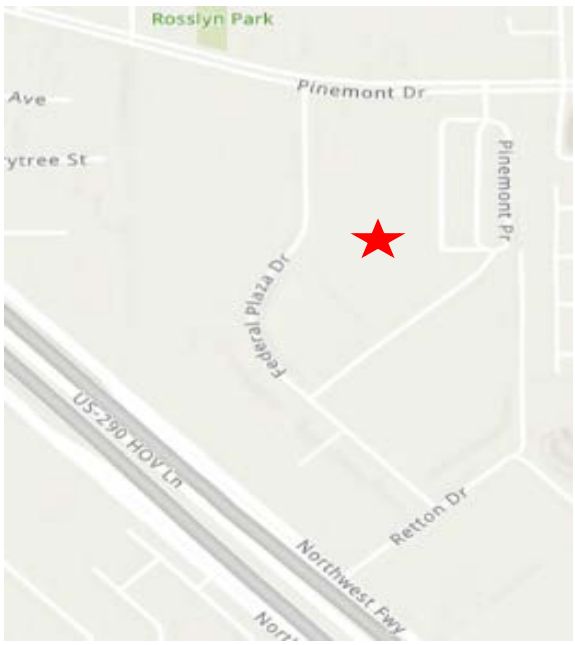
Project Name:	Flood Control, Engineering Public Health, Replacement Facility @ Pinemont	**Estimated Project Cost:**	$101,000,000
Precinct Location:	4	**Funded to Date:**	$1,000,000
Category:	Operational Savings/Value Enhancement	**Expected Completion:**	FY 2022,
		Funding Source:	Capital Funding

Project Description/ Justification:
Design and Construction of a multi-purpose facility that will house the Flood Control District, Engineering Department, and the Public Health Department

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$101,000,000	$1,000,000	$35,000,000	$65,000,000	$-	$-	$-





Office of the County Engineer

New Facilities

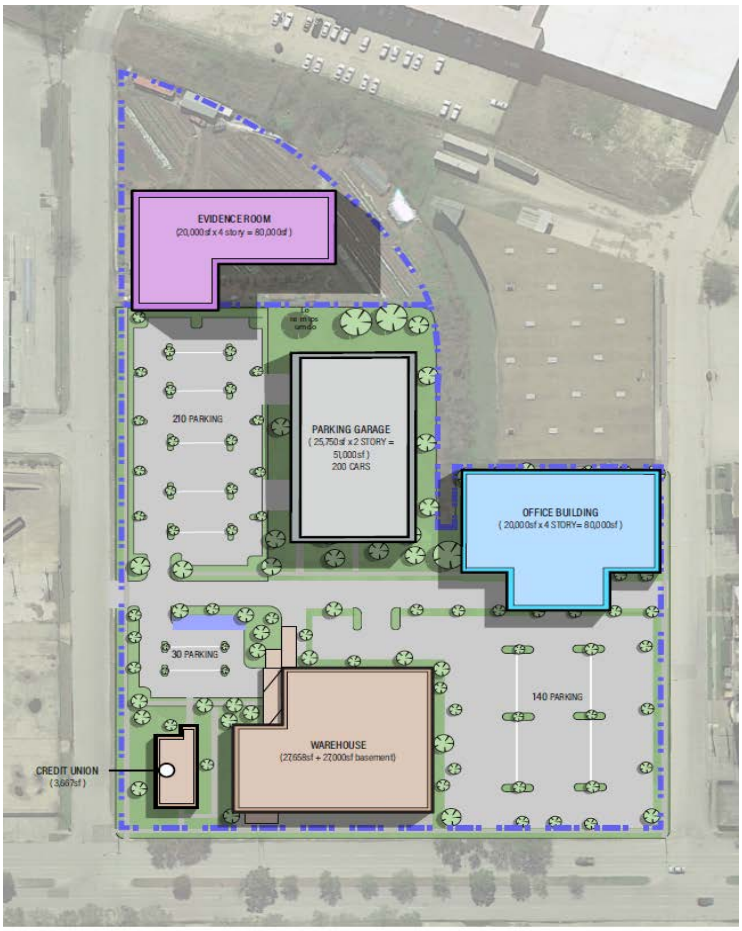
Project Name:	HCSO and other County Departments Replacement Facilities @ Navigation	**Estimated Project Cost:**	TBD
Precinct Location:	2	**Funded to Date:**	$-
Category:	Operational Savings/Value Enhancement	**Expected Completion:**	TBD
		Funding Source:	Capital Funding

Project Description/ Justification:

Plan, Program, and Design of an approximate 5 acre tract which will be utilized to relocate HCSO operations currently located at 601 Lockwood and potentially other County Departments.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
TBD	$-	TBD	TBD	TBD	TBD	TBD



Office of the County Engineer

New Facilities

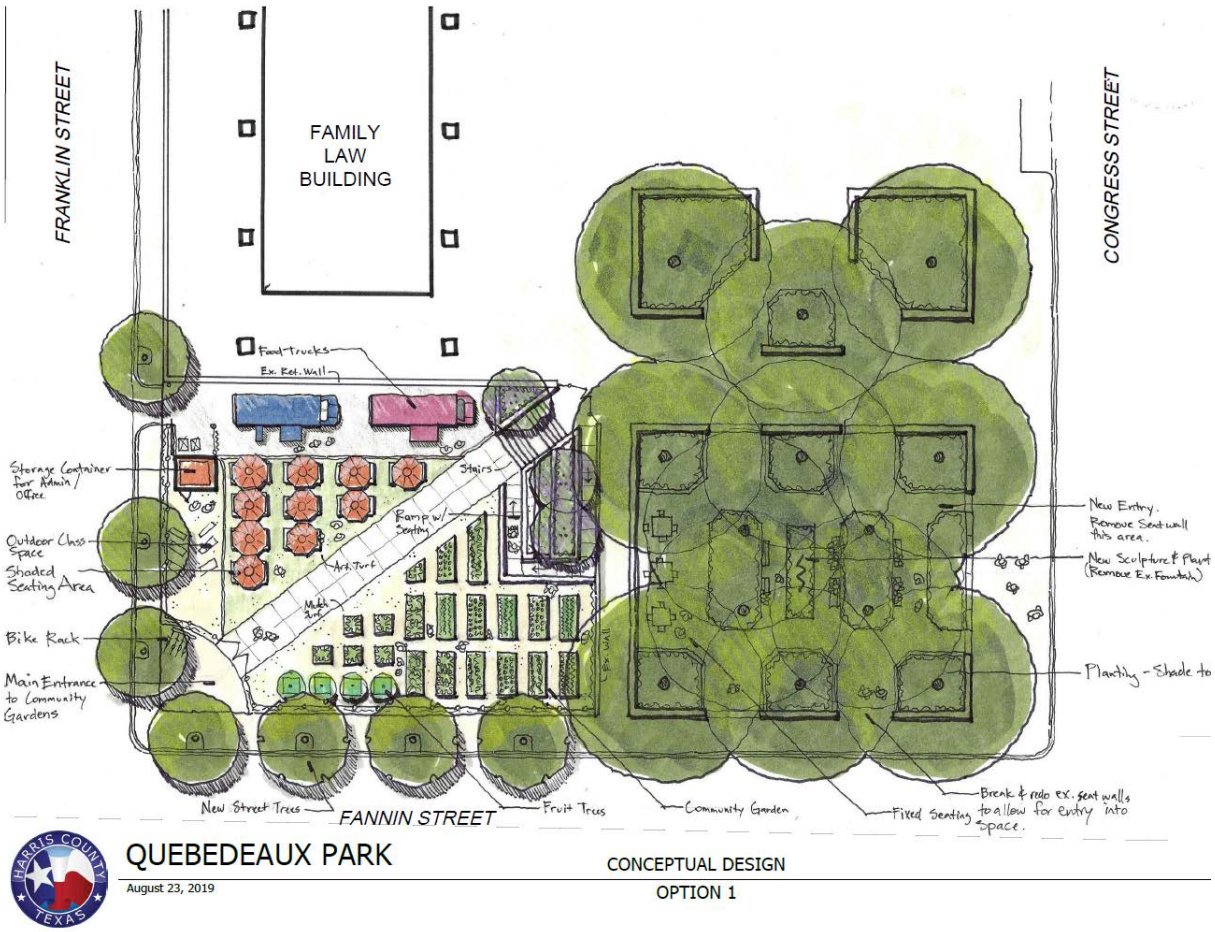
Project Name:	Quebedeaux Park (former DA Building site) Planning and Programming	**Estimated Project Cost:**	$250,000
Precinct Location:	1	**Funded to Date:**	$-
Category:	Operational Savings/Value Enhancement	**Expected Completion:**	TBD
		Funding Source:	Capital Funding

Project Description/ Justification:

A proposed improvement and expansion of the existing Quebedeaux Park at the former District Attorney Building Site.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$250,000	$-	$250,000	TBD	TBD	TBD	TBD



Office of the County Engineer

New Facilities

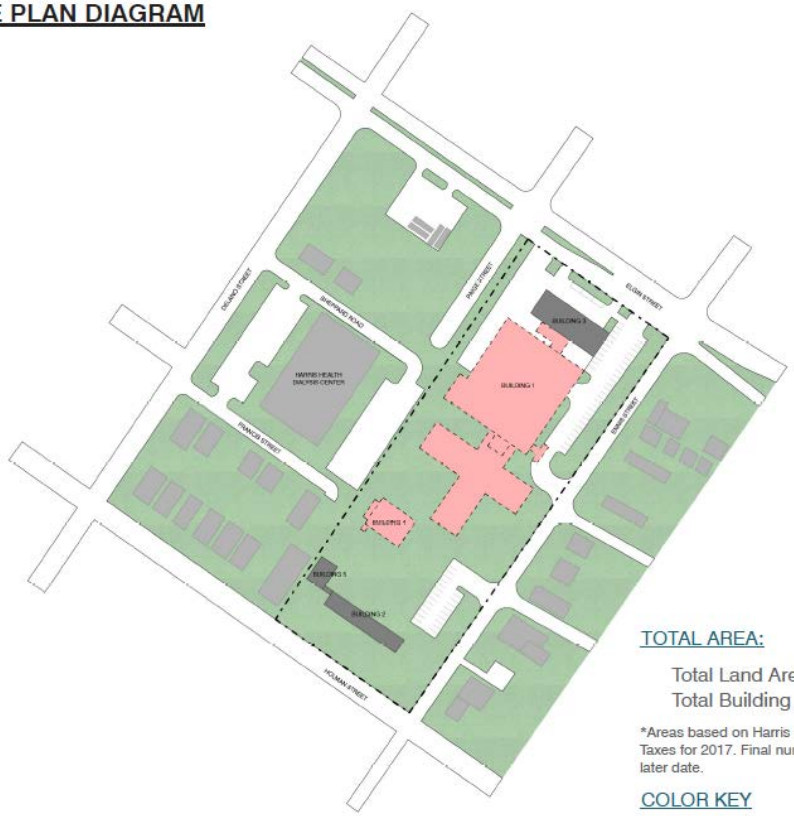
Project Name:	Riverside Hospital Future Site Planning and Programming	**Estimated Project Cost:**	$500,000
Precinct Location:	1	**Funded to Date:**	$-
Category:	Operational Savings/Value Enhancement	**Expected Completion:**	TBD
		Funding Source:	Capital Funding

Project Description/ Justification:
Preparation of a Plan and Program to determine the appropriate use of the approximate 5-acre site.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$500,000	$-	$500,000	TBD	TBD	TBD	TBD

SITE PLAN DIAGRAM



TOTAL AREA:

Total Land Area - 187,482 SF
Total Building Area - 70,280 SF

*Areas based on Harris County Appraisal District Taxes for 2017. Final numbers to be confirmed at a later date.

COLOR KEY

- Buildings 1 & 4 to be demolished
- Historic Buildings 2, 3 & 5 to be preserved

Office of the County Engineer

Renovation and Demo

Project Name:	Universal Services Facilities @ 406 Caroline and Crites Street MEP Repairs	**Estimated Project Cost:**	$2,500,000
Precinct Location:	1 & 2	**Funded to Date:**	$500,000
Category:	Continuity of Government	**Expected Completion:**	FY 2022
		Funding Source:	Capital Funding

Project Description/ Justification:
Renovate and/or replace MEP components at 406 Caroline and Crites Street facilities.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$2,500,000	$500,000	$1,000,000	$1,000,000	$-	$-	$-

Office of the County Engineer

Renovation and Demo

Project Name:	Upgrade Preston Street Central Plant	**Estimated Project Cost:**	$61,000,000
Precinct Location:	1	**Funded to Date:**	$1,000,000
Category:	Continuity of Government	**Expected Completion:**	2nd Quarter, FY 2023
		Funding Source:	Capital Funding

Project Description/ Justification:
Repair and upgrade of the Central Plant that provides utility services to a number of facilities in the Downtown Complex.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$61,000,000	$1,000,000	$20,000,000	$25,000,000	$15,000,000	$-	$-

Office of the County Engineer

Renovation and Demo

Project Name:	Expansion and Relocation of Commissioners Court	**Estimated Project Cost:**	$4,000,000
Precinct Location:	1	**Funded to Date:**	$-
Category:	Regulatory/Legal	**Expected Completion:**	2nd Quarter, FY 2021
		Funding Source:	Capital Funding

Project Description/ Justification:
Relocate and expand the Commissioners Court Room. Operations will move from the 9th floor to 1st floor of the administration building.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$4,000,000	$-	$4,000,000	$-	$-	$-	$-

Office of the County Engineer

Renovation and Demo

Project Name:	Demolition of Lomas Nettleton / Coffee Pot Buildings and build parking lot	**Estimated Project Cost:**	$11,500,000
Precinct Location:	1	**Funded to Date:**	$3,500,000
Category:	Operational Savings/Value Enhancements	**Expected Completion:**	TBD
		Funding Source:	Capital Funding

Project Description/ Justification:
Demolition of the Lomas Nettleton Garage, the Coffee Pot building, and construction of a surface parking lot.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$11,500,000	$3,500,000	$-	$5,000,000	$3,000,000	$-	$-

Office of the County Engineer

Renovation and Demo

Project Name:	Renovation of Atascocita Branch Library	**Estimated Project Cost:**	$1,000,000
Precinct Location:	2	**Funded to Date:**	$-
Category:	Operational Savings/Value Enhancement	**Expected Completion:**	TBD
		Funding Source:	Capital Funding

Project Description/ Justification:
Expansion of the facility will add additional meeting rooms that will serve as multi-functional space, including increased capacity to accomodate additional voting booths.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$1,000,000	$-	$1,000,000	$-	$-	$-	$-

Renovation and Demo

Project Name:	Renovation of Freeman Branch Library	**Estimated Project Cost:**	$200,000
Precinct Location:	2	**Funded to Date:**	$-
Category:	Operational Savings/Value Enhancement	**Expected Completion:**	TBD
		Funding Source:	Capital Funding

Project Description/ Justification:

Expansion of the Innovation Lab at the Freeman Clear Lake Library to increase the area for additional class and instruction space

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$200,000	$-	$200,000	$-	$-	$-	$-

Renovation and Demo

Project Name:	Institute of Forensic Sciences Facility Modifications	**Estimated Project Cost:**	$1,000,000
Precinct Location:	1	**Funded to Date:**	$-
Category:	Operational Savings/Value Enhancement	**Expected Completion:**	FY 2021
		Funding Source:	Capital Funding

Project Description/ Justification:
Expansion of the 8th floor to accomodate additional capacity needed for the training room and partial build-out of shell space.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$1,000,000	$-	$1,000,000	$-	$-	$-	$-

Renovation and Demo

Project Name:	Repurpose of Thomas Street Clinic	**Estimated Project Cost:**	$250,000
Precinct Location:	2	**Funded to Date:**	$-
Category:	Operational Savings/Value Enhancement	**Expected Completion:**	TBD
		Funding Source:	Capital Funding

Project Description/ Justification:
To conduct and initial programming study in order develop design documents, which will be used to renovate the facility.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$250,000	$-	$250,000	$-	$-	$-	$-

Office of the County Engineer

Studies

Project Name:	Masterplan and Studies	**Estimated Cost:**	$12,850,000
Precinct Location:	Countywide	**Funded to Date:**	$350,000
Category:	All	**Expected Completion:**	2nd Quarter, FY 2025
		Funding Source:	Capital Funding

Project Description/ Justification:

- Justice of the Peace Court Security Study
- Buildings Disposition Study (1307 Baker Jail, Wilson and IPC Facilities)
- Institute of Forensic Sciences Long Term Masterplan
- Other Court Directed Masterplans and Studies

Masterplan and studies will be requested for the operational and space evaluation of various needs including security needs at the JP courts, disposition of the above mentioned facilities and assessment of the long-term plans for the IFS facility, as well as any other studies directed by the Court.

Funding Plan:

Total Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$12,850,000	$350,000	$4,500,000	$2,000,000	$2,000,000	$2,000,000	$2,000,000

Disaster Recovery: Hurricane Harvey

Project Name:	Hurricane Harvey Recovery	**Estimated Project Cost:**	$101,000,000
Precinct Location:	Countywide	**Funded to Date:**	$99,000,000
Category:	Continuity of Government	**Funding Source:**	Capital Funding & FEMA

Project Description/ Justification:

- Baldwin Boettcher Library Renovation
- Criminal Justice Center Furniture, Fixtures and Equipment (FF&E)
- Criminal Justice Center Renovation
- Downtown Complex Tunnel System Repairs
- Jury Assembly Renovation
- Peden Building Renovation

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$101,000,000	$99,000,000	$2,000,000	TBD	TBD	TBD	TBD

Other Projects

Project Name:	Other Projects	**Estimated Cost:**	$97,550,000
Precinct Location:	Countywide	**Funded to Date:**	$19,000,000
Category:	All	**Expected Completion:**	2nd Quarter, FY 2025
		Funding Source:	Capital Funding and *HCTRA

Project Description/ Justification:

- *HCTRA Provided Funding for Traffic and Outfall Projects
- Engineering Records Management (Open Text) Implementation
- Facilities Management System (Tririga) Inventory of Precinct Facilities
- Implementation of Interagency Coordination Assessment Tool (ICAT)
- Property Acquisition for Canal Street Expansion
- HCSO Marine Division Land Acquisition for Expansion

Funding Plan:

Total Estimate	Funded to Date	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025
$97,550,000	$19,000,000	$17,350,000	$15,450,000	$15,250,000	$15,250,000	$15,250,000

FY2020
Capital Improvements Program

Harris County Universal Services

Bruce High
Executive Director – Chief Information Officer

September 24, 2019

Executive Summary

In partnership with the departments we support, Elected Officials of Harris County, and the Technology Committees recognized by Commissioners Court, Harris County Universal Services appreciates the opportunity to participate in the Capital Improvement Program (CIP) to address critical information technology, facility security technology, and emergency preparedness and response initiatives.

The table below reflects a summary of the FY2020 funds and PCNs requested, and the financial impact each project will have on the FY2021 Universal Services (US) operational budget.

To summarize:

- ~ $ 56M in US CIP requests are submitted for FY2020
- These CIP requests include thirty-four (34) additional PCNs
- ~ $ 13M increase in the US "FY 2021 Operating Budget" will be needed to cover ongoing expenses associated with these CIP projects

Project Category	Project Name	FY2020 CIP Funding Request	FY2020 PCN's Requested	FY2021 Operating Budget Impact
Capital Repair and Maintenance	Application Repair Replace	$ 1,752,008	3	$ 609,158
	Fleet Services Equipment	$ 645,370	-	$ -
	Infrastructure Enhance Replace	$ 3,770,272	-	$ 337,582
	Networking Repair Replace	$ 3,282,000	-	$ 388,850
	Telephone System Repair Replace	$ 1,037,960	-	$ 37,100
	Sub-Total:	**$ 10,487,610**	**3**	**$ 1,372,690**
Cybersecurity & Data Center	Cybersecurity	$ 2,263,492	1	$ 1,937,892
	Data Center Expansion	$ 660,000	-	$ -
	Sub-Total:	**$ 2,923,492**	**1**	**$ 1,937,892**
Public Safety	AFIS Replacement	$ 6,082,076	-	$ 567,518
	Cite & Release *	$ 1,566,776	5	$ 588,387
	Detention Control System Upgrade	$ 10,076,026	1	$ 135,200
	Emergency Preparedness & Response	$ 3,751,727	6	$ 2,443,166
	Radio Replacement Program	$ 7,243,660	-	$ (133,066)
	Security Infrastructure Installation & Upgrades	$ 2,890,000	1	$ 304,200
	Sub-Total:	**$ 31,610,265**	**13**	**$ 3,905,405**
Business Enablement	311 Implementation	$ 5,664,957	7	$ 2,677,202
	Enterprise Document Management	$ 2,019,130	4	$ 1,542,530
	Enterprise Scanning Service	$ 686,518	6	$ 396,018
	GIS Enterprise Agreement	$ 1,104,700	-	$ 931,450
	Pretrial Case Management System	$ 1,102,060	-	$ 206,140
	Sub-Total:	**$ 10,577,365**	**17**	**$ 5,753,340**
	TOTAL	**$ 55,598,732**	**34**	**$ 12,969,327**

* - Budget Impact and PCNs Requested for Cite & Release are for the HCSO

2020 CIP - Harris County Universal Services 5 Year Funding Plan

Project Category	Project Prioritization*	Project Name/Description	Total Project Estimate	Reimbursements	HC Capital Funding	Funded To Date	Sept. 1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug. 31, 2021	Sept. 1, 2021-Aug. 31, 2022	Sept. 1, 2022-Aug.31, 2023	Sept. 1, 2023-Aug.31, 2024
Capital Repair & Replace											
	1	Fleet Services Equipment	$ 975,370	$ -	$ 975,370	$ -	$ 645,370	$ 82,500	$ 82,500	$ 82,500	$ 82,500
	2	Application Repair & Replace	$ 8,247,816	$ -	$ 8,247,816	$ -	$ 1,752,008	$ 2,552,308	$ 1,314,500	$ 1,314,500	$ 1,314,500
	2	Infrastructure Enhance Replace	$ 16,854,232	$ -	$ 16,854,232	$ 870,000	$ 3,770,272	$ 5,936,480	$ 3,083,300	$ 2,007,500	$ 1,186,680
	2	Networking Repair Replace	$ 15,970,000	$ -	$ 15,970,000	$ 2,100,000	$ 3,282,000	$ 3,847,000	$ 2,247,000	$ 2,247,000	$ 2,247,000
	2	Telephone System Repair Replace	$ 9,012,840	$ -	$ 9,012,840	$ 2,540,000	$ 1,037,960	$ 1,403,270	$ 1,343,870	$ 1,453,870	$ 1,233,870
		Sub-Total (Capital Repair & Replace)	**$ 51,060,258**	**$ -**	**$ 51,060,258**	**$ 5,510,000**	**$ 10,487,610**	**$ 13,821,558**	**$ 8,071,170**	**$ 7,105,370**	**$ 6,064,550**
Cybersecurity & Data Center											
	2	Cybersecurity	$ 13,289,016	$ -	$ 13,289,016	$ 5,980,000	$ 2,263,492	$ 1,522,972	$ 2,774,112	$ 748,440	$ -
	2	Data Center Expansion	$ 3,300,000	$ -	$ 3,300,000	$ 880,000	$ 660,000	$ 440,000	$ 440,000	$ 440,000	$ 440,000
		Sub-Total (Cybersecurity & Data Center)	**$ 16,589,016**	**$ -**	**$ 16,589,016**	**$ 6,860,000**	**$ 2,923,492**	**$ 1,962,972**	**$ 3,214,112**	**$ 1,188,440**	**$ 440,000**
Public Safety											
	1	Detention Control System Upgrade	$ 21,383,953	$ -	$ 21,383,953	$ 1,770,000	$ 10,076,026	$ 9,537,927	$ -	$ -	$ -
	1	Emergency Preparedness & Response	$ 17,250,601	$ -	$ 17,250,601	$ 950,000	$ 3,751,727	$ 4,778,692	$ 4,389,170	$ 1,124,771	$ 2,256,241
	1	Security Infrastructure Installation & Upgrades	$ 16,757,000	$ -	$ 16,757,000	$ 7,410,000	$ 2,890,000	$ 1,551,250	$ 1,593,250	$ 1,703,500	$ 1,609,000
	2	AFIS Replacement	$ 6,701,335	$ -	$ 6,701,335	$ -	$ 6,082,076	$ 619,259	$ -	$ -	$ -
	2	Cite & Release	$ 2,160,859	$ -	$ 2,160,859	$ -	$ 1,566,776	$ 594,083	$ -	$ -	$ -
	1	Radio Replacement Program	$ 41,276,128	$ -	$ 41,276,128	$ -	$ 7,243,660	$ 8,472,627	$ 8,496,287	$ 8,519,947	$ 8,543,607
		Sub-Total (Public Safety)	**$ 105,529,876**	**$ -**	**$ 105,529,876**	**$ 10,130,000**	**$ 31,610,265**	**$ 25,553,838**	**$ 14,478,707**	**$ 11,348,218**	**$ 12,408,848**
Business Enablement											
	2	311 Implementation	$ 5,664,957	$ -	$ 5,664,957	$ -	$ 5,664,957	$ -	$ -	$ -	$ -
	2	Pretrial Case Management System	$ 1,308,200	$ -	$ 1,308,200	$ -	$ 1,102,060	$ 206,140	$ -	$ -	$ -
	4	Enterprise Document Management	$ 21,738,715	$ -	$ 21,738,715	$ -	$ 2,019,130	$ 3,797,650	$ 4,321,020	$ 3,606,680	$ 7,994,235
	4	Enterprise Scanning Service	$ 2,449,465	$ -	$ 2,449,465	$ -	$ 686,518	$ 669,946	$ 601,549	$ 397,540	$ 93,912
	4	GIS Enterprise Agreement	$ 2,036,150	$ -	$ 2,036,150		$ 1,104,700	$ 931,450	$ -	$ -	$ -
		Sub-Total (Business Enablement)	**$ 33,197,487**	**$ -**	**$ 33,197,487**	**$ -**	**$ 10,577,365**	**$ 5,605,186**	**$ 4,922,569**	**$ 4,004,220**	**$ 8,088,147**
		Total Capital Cost	**$ 206,376,637**	**$ -**	**$ 206,376,637**	**$ 22,500,000**	**$ 55,598,732**	**$ 46,943,554**	**$ 30,686,558**	**$ 23,646,248**	**$ 27,001,545**
		Estimated Operating Impact:					**$ -**	**$ 12,969,327**	**$ 12,969,327**	**$ 12,969,327**	**$ 12,969,327**

***Project Prioritization:** (1) - Fire/Life Safety, (2) - Continuity of Government, (3) - Regulatory or Legal Mandate, (4) - Operational Savings or Value Enhancement
Total Project Estimate - Funded to date and estimated funding required over the next 5 fiscal years.
Reimbursements - Anticipated Federal, State, or other funding that can offset the potential debt incurred from the project. This could include proceeds from the sale of other assets.
HC Capital Funding - The remaining cost of the project after reimbursements are realized.
Funded to Date - Total funding the project has received in prior fiscal years.

Harris County FY 2020 Capital Improvement Program

Project Name:	Fleet Services – Equipment Repair Replace	**Estimated Project Cost:**	$975,370
		Operating Cost Impact:	$0
Category:	Repair and Replace	**Funded to Date:**	$0
Priority:	Fire/Life Safety	**Expected Completion:**	TBD
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:
Repair and replacement of shop equipment that has reached the end of its useful asset life. This year's request includes shop equipment needed for the new central shop located at South 66th Street.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$975,370	$0	$645,370	$82,500	$82,500	$82,500	$82,500

Annual Operating Budget Impact:
N/A. This project is to replace equipment that is maintained by an existing budget.

Harris County FY 2020 Capital Improvement Program

Project Name:	Application Repair & Replace	**Estimated Project Cost:**	$8,247,816
		Operating Cost Impact:	$609,158
Category:	Repair and Replace	**Funded to Date:**	$0
Priority:	Continuity of Government Operations	**Expected Completion:**	TBD
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

This Repair and Replace CIP request is to address the updates, replacement, or redevelopment of end-of-life applications/software packages.

Much like physical infrastructure, applications and software packages have a defined shelf life. Technology and development methodologies change over time to improve capabilities and efficiencies. Software packages become obsolete as vendors stop supporting them or as the underlying technologies are replaced.

A number of applications in use in Harris County are in need of a technology refresh. Many of these applications were developed in outdated technology (Microsoft Access for example) and are becoming difficult to support. These systems and applications require a disproportionate amount of support to keep running. Outdated technology also presents challenges from a cybersecurity perspective.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$8,247,816	$0	$1,752,008	$2,552,308	$1,314,500	1,314,500	$1,314,500

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Non-Labor	$0	$156,500	$156,500	$156,500	$156,500
Labor	$0	$397,280	$397,280	$397,280	$397,280
Contingency	$0	$55,378	$55,378	$55,378	$55,378
Total	**$0**	**$609,158**	**$609,158**	**$609,158**	**$609,158**

Harris County FY 2020 Capital Improvement Program

Project Name:	Infrastructure Enhancements - Replacements	**Estimated Project Cost:**	$16,854,232
		Operating Cost Impact:	$337,582
Category:	Repair and Replace	**Funded to Date:**	$870,000
Priority:	Continuity of Government Operations	**Expected Completion:**	TBD
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

This project is for the ongoing refresh, replacement, and expansion of our compute, storage, and backup IT infrastructure that supports all of our enterprise-class services.

The growing need for long term storage of electronic and scanned documents, email etc. is creating an increasing need for Storage in our Storage Area Network (SAN). This, in turn, causes increased need for Backup Storage in our Backup to disk (B2D) environment. We have also seen an upsurge in the size of attachments in email and will have to increase the average size per user mailbox to keep up with user demand. All of this requires Server equipment that also must be replaced as it ages out.

- Support for the increase in size and number of email mailboxes and personal and workgroup storage drives.
- Enhancements to the redundancy/availability of all systems supported.
- Increase the effectiveness of agencies to stay up to date with current technology by refreshing underlying infrastructure.
- Ongoing refresh for compute, storage and other data center infrastructure to ensure vendor support and security updates.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$16,854,232	$870,000	$3,770,272	$5,936,480	$3,083,300	$2,007,500	$1,186,680

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Non-Labor	$0	$306,893	$306,893	$306,893	$306,893
Contingency	$0	$30,689	$30,689	$30,689	$30,689
Total	**$0**	**$337,582**	**$337,582**	**$337,582**	**$337,582**

Harris County FY 2020 Capital Improvement Program

Project Name:	Networking Repair Replace	**Estimated Project Cost:**	$15,970,000
		Operating Cost Impact:	$338,850
Category:	Repair and Replace	**Funded to Date:**	$2,100,000
Priority:	Continuity of Government Operations	**Expected Completion:**	TBD
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

The objective of this project is to address the ongoing repair, replacement, and refresh of core data center and perimeter networking components. It also includes provisions for the support of various microwave and wireless links for remote site connectivity, enabling Harris County to maintain a regular asset replacement lifecycle that makes sense by network equipment type.

Harris County has a large population of network gear including but not limited to switches, wireless access points and microwave infrastructure that is currently or soon will be no longer supported by the vendor. Most of this equipment is located in sites outside the data center and some is already unsupported by the vendor. In addition to support concerns, much of our network switches do not support power over ethernet (PoE) which is required to power devices such as cameras and phones which are now an integral part of our network and way of doing business. Some refresh and capacity increases are required in the data centers to support the branch office refresh described.

This project is structured so we can replace all end of life equipment over the next few years and then get on a regular refresh cycle moving forward. We expect to continue a lifecycle refresh approach that will flatten out funding needs on an annual basis. Having a lifecycle based repair and replace strategy will keep us from having equipment that is no longer supported by the vendor as well as ensure security and software updates continue to be provided as technology evolves. This in turn helps ensure scalability, reliability and the security of the network that supports access to all internal and external Harris County applications, the Internet and connectivity to other agencies such as HPD, CJIS, OAG, etc.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$15,970,000	$2,100,000	$3,282,000	$3,847,000	$2,247,000	$2,247,000	$2,247,000

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Non-Labor	$0	$388,850	$388,850	$388,850	$388,850
Total	**$0**	**$388,850**	**$388,850**	**$388,850**	**$388,850**

Harris County FY 2020 Capital Improvement Program

Project Name:	Telephone System Repair Replace	**Estimated Project Cost:**	$9,012,840
		Operating Cost Impact:	$37,100
Category:	Repair and Replace	**Funded to Date:**	$2,540,000
Priority:	Continuity of Government Operations	**Expected Completion:**	TBD
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

The objective of this project is to support the ongoing repair, replacement, and refresh of business telephone systems throughout the county and the core telephony infrastructure that supports them.

Approximately 30% of existing telephone systems are manufacturer discontinued and not maintainable. This results in elongated outages and makes replacement parts difficult or impossible to obtain. In addition, these are standalone systems that do not utilize centralized voice mail, trunking or administration, increasing costs to Harris County.

- Replace/update business telephone and voice mail systems throughout the county
- Lower cost of teleco services for the county as whole (with SIP trunk service cost shifts from departments to US)
- Reduce time and man hours needed to perform moves and changes through remote centralized programing
- Enhance disaster recovery capabilities
- Enable Harris County with a more mobile communication environment

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$9,012,840	$2,540,000	$1,037,960	$1,403,270	$1,343,870	$1,453,870	$1,233,870

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Non-Labor	$0	$37,100	$37,100	$37,100	$37,100
Total	**$0**	**$37,100**	**$37,100**	**$37,100**	**$37,100**

Harris County FY 2020 Capital Improvement Program

Project Name:	Cybersecurity	**Estimated Project Cost:**	$13,289,016
		Operating Cost Impact:	$1,937,892
Category:	Cybersecurity and Data Center	**Funded to Date:**	$5,980,000
Priority:	Continuity of Government Operations	**Expected Completion:**	TBD
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

The objective of this project is to enhance Harris County's overall cybersecurity posture and focus on the development of a formal cybersecurity organization complete with people, policy, process and technology, improving our ability to proactively monitor, detect and address threats. This project includes the design and implementation of new protective controls and the expansion of existing security services, such as identity/access management, mobile device management, advanced malware protection, advanced authentication, security education and awareness, and network access controls.

Increased cyber security threats as well as compliance requirements underline the risk we have in this area. If Harris County does not continue the implementation and maturation of a formal program with supporting organization and technology solutions we will not be able to keep up with demand from our own departments and/or our taxpayers and we run the risk of compromise and/or non-compliance which can be extremely costly both financially and reputation wise.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$13,289,016	$5,980,000	$2,263,492	$1,522,972	$2,774,112	$748,440	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
Non-Labor	$0	$1,067,000	$1,067,000	$1,067,000	$1,067,000
Labor	$0	$694,720	$694,720	$694,720	$694,720
Contingency	$0	$176,172	$176,172	$176,172	$176,172
Total	**$0**	**$1,937,892**	**$1,937,892**	**$1,937,892**	**$1,937,892**

Harris County FY 2020 Capital Improvement Program

Project Name:	Data Center Expansion	**Estimated Project Cost:**	$3,300,000
		Operating Cost Impact:	$0
Category:	Cybersecurity and Data Center	**Funded to Date:**	$880,000
Priority:	Continuity of Government Operations	**Expected Completion:**	TBD
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

The data center expansion includes additional rack space for servers, data storage devices, switches and routers. It also provides for greater redundancy of the power, cooling, and structured cabling systems. In addition, real-time centralized control of the systems and subsystems will allow management 24/7 command and control of the data center, its systems, and subsystems from any location with a secure broadband connection. Finally, the project will include space to house our 24x7 Central Station staff in a facility where N+1 redundancy will help enable continued operations during weather events.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$3,300,000	$880,00	$660,000	$440,000	$440,000	$440,000	$440,000

Annual Operating Budget Impact:

N/A. This project enhances a facility with an existing maintenance budget.

Harris County Universal Services

Harris County FY 2020 Capital Improvement Program

Project Name:	Detention Control System Upgrade	**Estimated Project Cost:**	$21,383,953
		Operating Cost Impact:	$135,200
Category:	Public Safety	**Funded to Date:**	$1,770,000
Priority:	Fire/Life Safety	**Expected Completion:**	4th Quarter, FY 2021
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

This year's project is to upgrade the door control, audio system, and video system at the Harris County Jail located at 701 N. San Jacinto in addition to other various detention facilities or holding cells in the downtown district (Inmate Processing Center / Criminal Justice Center / Little Baker / Big Baker).

The current system was installed in 2000 and has reached the end of its useful life. The system is exhibiting issues and can present a safety issue. The door control replacement will ensure proper operations of the cells. The audio system will ensure proper communications in the jail facility. The video replacement will ensure safety of both the deputies and the inmates in the facility.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$21,383,953	$1,770,000	$10,076,026	$9,537,927	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Labor	$0	$135,200	$135,200	$135,200	$135,200
Total	**$0**	**$135,200**	**$135,200**	**$135,200**	**$135,200**

Harris County FY 2020 Capital Improvement Program

Project Name:	Emergency Preparedness Response (Flood Water Rescue)	**Estimated Project Cost:**	$17,250,601
		Operating Cost Impact:	$2,443,166
Category:	Public Safety	**Funded to Date:**	$950,000
Priority:	Fire/Life Safety	**Expected Completion:**	TBD
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

This project will allow first responders to operate in line with Federal standards and organization when responding to emergency situations to include; processes, procedures, equipment, training, and maintenance support of equipment. While maintaining the core standards, Harris County will enhance the capability to respond to emergency conditions and take the lead in the evacuation of residents when conditions are presented.

Harris County and surrounding counties have seen an increase in population, land use, and impact on both people and property due to rain events. County residents expect elected officials to respond to the flooding focusing first on protecting lives, protection of public safety infrastructure, and protection of private property. The initial request for funding in 2018 resulted in a unified approach to create standards for equipment, training, and maintenance of assets. To date, the program has seen the initial purchase of rescue equipment and is currently in the second phase that consists of training personnel within the participating agencies. At this time, there shows to be a requested growth in assistance with training, assets, and maintenance from all agencies in Harris County.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$17,250,601	$950,000	$3,751,727	$4,778,692	$4,389,170	$1,124,771	$2,256,241

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Non-Labor	$0	$1,702,951	$1,702,951	$1,702,951	$1,702,951
Labor	$0	$569,920	$569,920	$569,920	$569,920
Contingency	$0	$170,295	$170,295	$170,295	$170,295
Total	**$0**	**$2,443,166**	**$2,443,166**	**$2,443,166**	**$2,443,166**

Harris County FY 2020 Capital Improvement Program

Project Name:	Security Infrastructure Installation & Upgrades	**Estimated Project Cost:**	$16,757,000
		Operating Cost Impact:	$304,200
Category:	Public Safety	**Funded to Date:**	$7,410,000
Priority:	Fire/Life Safety	**Expected Completion:**	TBD
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

This project entails the installation of cameras and access control infrastructure at Harris County locations.

Install, replace or enhance security infrastructure at Harris County facilities. Installing, repairing or upgrading cameras and access control infrastructure will help enable security at these locations. This project includes addressing security infrastructure at or near end of life and can no longer be effectively supported and maintained. These systems will be replaced with the County's current enterprise platform.

Current camera and access control infrastructure are a mix of old and out of date technologies. These include analog cameras that are hard to manage and provide poor resolution. The successful completion of this project will enhance the security of Harris County employees and citizens at numerous County facilities.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$16,757,000	$7,410,000	$2,890,000	$1,551,250	$1,593,250	$1,703,500	$1,609,000

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Non-Labor	$0	$175,000	$175,000	$175,000	$175,000
Labor	$0	$104,000	$104,000	$104,000	$104,000
Contingency	$0	$25,200	$25,200	$25,200	$25,200
Total	**$0**	**$304,200**	**$304,200**	**$304,200**	**$304,200**

Harris County FY 2020 Capital Improvement Program

Project Name:	AFIS Replacement	**Estimated Project Cost:**	$6,701,335
		Operating Cost Impact:	$567,518
Category:	Public Safety	**Funded to Date:**	$0
Priority:	Continuity of Government Operations	**Expected Completion:**	4th Quarter, FY 2021
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

The Automated Fingerprint Identification System (AFIS) is biometric identification system used by Law Enforcement (LE) across Harris County. The system uses digital imaging to capture fingerprints and is used by LE for identification analysis. This request is for the funding of a project to replace the current AFIS implementation with current up-to-date technology that will provide better capabilities and improved effectiveness.

The current system has been in place for well over 10 years and the system's infrastructure and hardware is antiquated. While the system is still currently functioning, there are concerns about near term viability to keep the system running efficiently. The overhead required to support the system is becoming more and more costly as the hardware and other components are end of support with the manufacturers.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$6,701,335	$0	$6,082,076	$619,259	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Non-Labor	$0	$516,218	$516,218	$516,218	$516,218
Contingency	$0	$51,300	$51,300	$51,300	$51,300
Total	**$0**	**$567,518**	**$567,518**	**$567,518**	**$567,518**

Harris County FY 2020 Capital Improvement Program

Project Name:	Cite and Release	**Estimated Project Cost:**	$2,160,859
		Operating Cost Impact:	$588,387 (HCSO)
Category:	Business Enablement	**Funded to Date:**	$0
Priority:	Continuity of Government Operations	**Expected Completion:**	4th Quarter, FY 2021
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

Identify, document, design, develop and manage the technology and business needs required to implement a Cite and Release program in Harris County.

Currently, any individuals accused of a class B misdemeanor or above in Harris County are arrested and taken to the Inmate Processing Center in downtown. Texas state law now allows law enforcement to issue class B misdemeanor citations for a set of seven (7) offenses rather than incarcerating the accused individuals. Implementing Cite and Release in Harris County will impact approximately 4,800 persons arrested yearly on this set of offenses.

- Reduce time spent by law enforcement processing and transporting low level offenders
- Allow officers to return more quickly to duty
- Decrease jail population
- Reduce spending for housing, feeding and medical care
- Improve the well-being of accused individuals without jeopardizing public safety

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$2,160,859	$0	$1,566,776	$594,083	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Non-Labor	$0	$5,178	$5,178	$5,178	$5,178
Labor	$0	$554,944	$554,944	$554,944	$554,944
Contingency	$0	$28,265	$28,265	$28,265	$28,265
Total	**$0**	**$588,387**	**$588,387**	**$588,387**	**$588,387**

Harris County FY 2020 Capital Improvement Program

Project Name:	Radio Replacement Program	**Estimated Project Cost:**	$41,276,128
		Operating Cost Impact:	($133,066)
Category:	Public Safety	**Funded to Date:**	$0
Priority:	Fire/Life Safety, Operational Savings or Value Enhancement	**Expected Completion:**	TBD
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

The purpose of this program is to replace old and outdated radio equipment used by Harris County agencies. The Harris County Radio Replacement Program includes a hardware refresh for the aging fleet of radio subscriber units in order of oldest radios on our system. Radios have an ideal useful life span of seven years. Aging equipment is difficult to support, and replacement parts are scarce. This program ensures the units are replaced to avoid loss of service.

The existing fleet of radios range in age from new to over fifteen years old. This mix includes non-standardized features and models, which increases programming, support, and training complexity. Some of the existing fleet of radios are not only end of life, but are also end of service - meaning they are not repairable due to things such as parts no longer being available.

The goal of this program is to provide an annual replacement of radios older than seven years. While it may take a few years to reach this goal, doing so will give us the ability to double our frequency capacity on the regional radio network without buying additional system hardware. This would provide several benefits:

- Equipment will be easier to maintain as it will be within its intended asset life.
- Users are able to take advantage of up to date technology on the network to improve communications.
- Capabilities such as extra capacity can be realized on the network with up to date radio.
- Ensure that radios are able to perform within the design parameters.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$41,276,128	$0	$7,243,660	$8,472,627	$8,496,287	$8,519,947	$8,543,607

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Non-Labor	$0	($55,252)	($55,252)	($55,252)	($55,252)
Labor	$0	($77,814)	($77,814)	($77,814)	($77,814)
Total	**$0**	**($133,066)**	**($133,066)**	**($133,066)**	**($133,066)**

Harris County FY 2020 Capital Improvement Program

Project Name:	311 Implementation	**Estimated Project Cost:**	$5,664,957
		Operating Cost Impact:	$2,677,202
Category:	Business Enablement	**Funded to Date:**	$0
Priority:	Continuity of Government Operations	**Expected Completion:**	4th Quarter, FY 2021
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

Requesting to develop a new enterprise 311/Citizen Relationship Management (CRM) solution for Harris County that will provide the ability for users to request currently-defined services from Commissioner Precincts, offering internal value-adds, such as data reporting and user feedback. The solution will include a single 311 website, mobile app, customer ticket tracking, reporting capabilities, and public access to specific data.

This project will allow our County departments to respond efficiently and effectively when its citizens need assistance for non-emergency use and reduce the burden of the 911 dispatch center handling non-emergency matters.

By installing the NE311 system for non-emergencies, customer relations will be greatly improved by offering an easy-to-remember number for Harris County non-emergency calls and provide ease to residents in reaching Harris County information services. Most importantly, it will reduce the potential burden of non-emergency calls being received into the 911 dispatch lines and allow public safety communicators to focus their resources solely on emergency calls.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$5,664,957	$0	$5,664,957	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Non-Labor	$0	$1,888,860	$1,888,860	$1,888,860	$1,888,860
Labor	$0	$544,960	$544,960	$544,960	$544,960
Contingency	$0	$243,382	$243,382	$243,382	$243,382
Total	**$0**	**$2,677,202**	**$2,677,202**	**$2,677,202**	**$2,677,202**

Harris County FY 2020 Capital Improvement Program

Project Name:	Pretrial Case Management System	**Estimated Project Cost:**	$1,308,200
		Operating Cost Impact:	$206,140
Category:	Business Enablement	**Funded to Date:**	$0
Priority:	Continuity of Government Operations	**Expected Completion:**	TBD, FY 2021
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

The objective of this project is to license and implement a Case Management System (CMS), including a fee accounting/reporting module, for use by Pretrial Services. The CMS is used to support department efforts to monitor supervisee compliance with standard and court-ordered release conditions related to release on a personal bond. The fee module will replace the dated module currently used to receipt and account for fees collected by Pretrial Services and may offer an opportunity for integration with the County's financial accounting system.

The existing Pretrial Services CMS is a Department-developed system written 15-plus years ago. The underlying technology is a dated version of FileMaker Pro that can no longer be simply upgraded due to the complexity of the application. Extensibility is limited, as is direct data integration with other County systems, such as the existing pretrial interview application and the court case management system (JWeb). Benefits include:

- Retire the risk presented by an application that relies on outdated technology
- Provide new case management functionality
- Improve the efficiency of Department employees while reducing errors and omissions
- Improve accountability of employees and managers
- Improve Department reporting processes
- Provide Department managers with reliable, timely information for decision making

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$1,308,200	$0	$1,102,060	$206,140	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Non-Labor	$0	$187,400	$187,400	$187,400	$187,400
Contingency	$0	$18,470	$18,470	$18,470	$18,470
Total	**$0**	**$206,140**	**$206,140**	**$206,140**	**$206,140**

Harris County FY 2020 Capital Improvement Program

Project Name:	Enterprise Document Management	**Estimated Project Cost:**	$21,738,715
		Operating Cost Impact:	$1,542,530
Category:	Business Enablement	**Funded to Date:**	$0
Priority:	Operational Savings or Value Enhancement	**Expected Completion:**	TBD
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

Develop and implement a strategy to provide an enterprise document management system for Harris County This initiative will consist of multiple phases that implement enterprise-wide and department-specific solutions using a shared document management infrastructure and a set of document management-related technology services. These services include document and image management, records management and information archiving, search and usage analytics, scanning and optical character recognition, electronic signature, and record auditing capabilities. Each phase will deliver these services to specific Harris County departments using a standard approach to implementation and ongoing support by Universal Services.

Currently, there is no 'enterprise' document management strategy. Each Harris County department maintains their own document/content management strategy. This has resulted in multiple environments across the County basically doing the same processes. As document and content management need grow, the cost for supporting multiple environments will also increase. By moving toward an enterprise approach to document management, Harris County will be able to ultimately reduce cost and provide better collaboration and information analytics not currently available. Benefits include:

- Reduced cost due to the elimination of multiple environments
- More effective management for security, compliance, archiving, scalability and analytics
- County-wide approach to digital signatures and auditing of records throughout their entire lifecycle
- Improved capabilities to save, store, or search for content in compliance with business rules, regulatory requirements, and/or to meet litigation demands.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$21,738,715	$0	$2,019,130	$3,797,650	$4,321,020	$3,606,680	$7,994,235

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Non-Labor	$0	$840,700	$840,700	$840,700	$840,700
Labor	$0	$561,600	$561,600	$561,600	$561,600
Contingency	$0	$140,230	$140,230	$140,230	$140,230
Total	**$0**	**$1,542,530**	**$1,542,530**	**$1,542,530**	**$1,542,530**

Harris County Universal Services

Harris County FY 2020 Capital Improvement Program

Project Name:	Enterprise Scanning Service	**Estimated Project Cost:**	$2,449,465
		Operating Cost Impact:	$396,018
Category:	Business Enablement	**Funded to Date:**	$0
Priority:	Operational Savings or Value Enhancement	**Expected Completion:**	4th Quarter, FY 2024
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

This project is to create the Harris County Scanning Service to convert the Records Center to a predominately electronic document and records management system. The system will reduce the storage and maintenance of paper records, decrease record storage space requirements while increasing the ability for quickly locating electronic documents.

The Records Center has 30,000 boxes of paper that must be kept indefinitely. Most, if not all county departments also have countless boxes of paper that must be maintained from 10 to hundreds of years. The cost to maintain paper is very expensive and is subject to unintended destruction through fire, flood, or man-made disaster. Permanent records are expensive to maintain. In addition to the cost of maintaining physical paper in a climate-controlled setting, permanent records will eventually require preservation. Paper files are subject to inadvertent destruction through natural or human disasters such as fire, flood, or failure of the physical plant. Electronic storage is best practice to eliminate these risks. Benefits include:

- The Records Center receives over 10,000 annual requests for records to be sent back to the customer. This process is repeated many times over throughout the county where old paper records are needed. The ability to electronically pull a record for work related tasks, or to fill public information requests saves labor costs.
- The electronic world allows for the search of documents on multiple criteria for easier retrieval without the burden of physical search and reduces filing errors.
- Paper records must be categorized and boxed with like documents, assigned a retention period, then destroyed after the period is met. The current process of destruction takes more than a month to complete. Electronic records that meet retention can be gathered in under a minute. A fully operational scan team can convert thousands of boxes per year into digital image.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$2,449,465	$0	$686,518	$669,946	$601,549	$397,540	$93,912

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Non-Labor	$0	$10,100	$10,100	$10,100	$10,100
Labor	$0	$350,480	$350,480	$350,480	$350,480
Contingency	$0	$35,438	$35,438	$35,438	$35,438
Total	**$0**	**$396,018**	**$396,018**	**$396,018**	**$396,018**

Harris County Universal Services

Harris County FY 2020 Capital Improvement Program

Project Name:	GIS Enterprise Agreement	**Estimated Project Cost:**	$2,036,150
		Operating Cost Impact:	$931,450
Category:	Business Enablement	**Funded to Date:**	$0
Priority:	Operational Savings or Value Enhancement	**Expected Completion:**	4th Quarter, FY 2021
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

The objective is to procure a single "Enterprise Agreement" with ESRI to obtain better pricing for the County. ESRI produces Geographic Information Systems (GIS) software that many agencies utilize to create maps and other critical systems needed to conduct county business. The software suites include the ability to produce detailed interactive maps based on geospatial information and the ability to build predictive analytics. Agencies such as Public Health, Engineering, Flood Control District, Universal Services, and many others use the software daily to fulfill their business functions.

Currently, each department has a separate purchasing agreement with the vendor. Over time, this has led to disparate capabilities within each organization as teams purchase based on available funds. This reduces each team's ability to leverage all the capabilities in the system and can lead to difficulty in cross organization collaboration.

This CIP seeks to procure a single "Enterprise Agreement" with ESRI. With an Enterprise Agreement in place, all agencies current and future will be able to leverage a full suite of capabilities with ESRI. It would ensure a better negotiated deal for the County as the pricing would be negotiated across the County, instead of per department.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$2,036,150	$0	$1,104,700	$931,450	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Non-Labor	$0	$849,900	$849,900	$849,900	$849,900
Contingency	$0	$82,450	$82,450	$82,450	$82,450
Total	**$0**	**$931,450**	**$931,450**	**$931,450**	**$931,450**









nrg park

Interim Capital Improvement Program Funding Request

Fiscal Year 2019-2020

PRESENTED TO:

HARRIS COUNTY COMMISSIONERS COURT

Lina Hidalgo, Harris County Judge
Rodney Ellis, Commissioner, Precinct 1
Adrian Garcia, Commissioner, Precinct 2
Steve Radack, Commissioner, Precinct 3
R. Jack Cagle, Commissioner, Precinct 4

HARRIS COUNTY
SPORTS & CONVENTION
CORPORATION

HARRIS COUNTY
SPORTS & CONVENTION
CORPORATION

One NRG Park
Houston, TX
77054

832.667.1841
Fax: 832.667.1410

August 23, 2019

Harris County Commissioners Court
1001 Preston, 9th Floor
Houston, TX 77002

Executive Summary – 2019 Harris County CIP Request

Judge and Commissioners:

From its opening in 2001, NRG Center has hosted millions of visitors to a wide variety of events. It has become an integral part of our community and brings people from around the world and around the corner. Since NRG Park opened, more than 120 million people have come through our doors and is the most-visited sports and entertainment complex in the country.

With the 2019 CIP Request, the Harris County Sports & Convention Corporation (HCSCC) will refresh the interior of NRG Center with a more modern look, cleaner finishes and energy efficiency/sustainability initiatives. Most of the finishes are original to the building's opening and need replacement. Included in this project are new paint schemes, new carpet, replacement coverings for the operable walls used to separate meeting rooms, updated ceiling tiles with better energy and sound ratings and new LED lighting fixtures in the exhibit halls, meeting rooms and common areas.

This project will extend the life of NRG Center interior, reduce maintenance costs and reduce the overall electric utility usage at NRG Park. This project will also keep NRG Center in peak revenue-generating condition by improving its marketability and consistency with industry standards.

HCSCC is requesting $6 million for this project. The funds are available from an existing, dedicated "Reliant Park" Harris County fund specifically for Capital Improvement at NRG Park. HCSCC has also dedicated an additional $1.2 million from capital contributions provided by SMG, HCSCC's contracted facility manager.

Thank you for your consideration, please let me know if I can answer any questions or be of any help to you.

Sincerely,

Ryan M. Walsh
Executive Director, HCSCC

2020 CIP - Harris County Sports & Convention Corporation 5 Year Funding Plan

Project Category	Project Prioritization*	Project Name	Total Project Estimate	Reimbursements	HC Capital Funding	HCSCC Funding	Funded To Date	Sept. 1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug. 31, 2021	Sept. 1, 2021-Aug. 31, 2022	Sept. 1, 2022-Aug.31, 2023	Sept. 1, 2023-Aug.31, 2024
Capital Repair and Maintenance												
	4	NRG Park: NRG Center Interior Refresh	$ 7,200,000	$ -	$ 6,000,000	$ 1,200,000	$ -	$ 4,200,000	$ 3,000,000	$ -	$ -	$ -
		Sub-Total (Repair and Maintenance)	**$ 7,200,000**	**$ -**	**$ 6,000,000**	**$ 1,200,000**	**$ -**	**$ 4,200,000**	**$ 3,000,000**	**$ -**	**$ -**	**$ -**
		Total Capital Cost	**$ 7,200,000**	**$ -**	**$ 6,000,000**	**$ 1,200,000**	**$ -**	**$ 4,200,000**	**$ 3,000,000**	**$ -**	**$ -**	**$ -**

***Project Prioritization:** (1) - Fire/Life Safety, (2) - Continuity of Government, (3) - Regulatory or Legal Mandate, (4) - Operational Savings or Value Enhancement
HCSCC has engaged a design consultant and more specific budget estimates will be availabe once that review is complete. (est. Jan/2019)
FUNDED TO DATE: HCSCC has a budgeted line item of $1.5M designated for the NRG Center Renovation Project

Harris County FY 2020 Capital Improvement Program

Project Name:	NRG Center Interior Refresh	**Estimated Project Cost:**	$7,200,000
		Operating Cost Impact:	$0
Category:	Capital Repair & Maintenance	**Funded to Date:**	$0
Priority:	Operational Savings/Value Enhancement	**Expected Completion:**	1st Quarter, FY 2022
		Funding Sources:	Multiple

Project Description/ Justification:

A refresh of the interior of NRG Center finishes including paint, carpet, wall coverings, ceiling tiles and LED lighting. Maintains the aesthetic appearance of NRG Center, keeping the facility up-to-date, marketable and in line with market and industry standards. Most current finishes are original to the building's opening in 2002.

This project will result in a reduction of maintenance costs and an overall reduction in electrical utility costs due to the installation of high performance and energy efficient ceiling tiles and LED lighting in the exhibit halls, meetings rooms and common areas.

The Harris County portion of the project funding will be from an existing, dedicated "Reliant Park" Capital Improvement fund as listed in Harris County's CAFR and not through general fund revenue. HCSCC/NRG Park has an allocated budget line item of $1.2M from SMG Capital Contributions that will be used in addition to the CIP request to Harris County for this project.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$7,200,000	$0	$4,200,000	$3,000,000	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	
Utilities	HCSCC-NRG Park anticipates a reduction in both maintenance and utility costs due to the new finishes and the installation of high-performance, energy efficient LED lighting in all five exhibit halls, meeting rooms and common areas.
Maintenance	

HARRIS COUNTY TOLL ROAD AUTHORITY

FY 2020 Capital Improvement Program

Harris County Toll Road Authority (HCTRA)

Gary K. Trietsch
Executive Director

September 24, 2019

EXECUTIVE SUMMARY

Introduction

The Harris County Toll Road Authority's (HCTRA or the Authority) Capital Improvement Program (CIP) is designed to reflect the agency's willingness to undertake bold initiatives to address the Greater Houston region's growing transportation challenges. The CIP's goals aim to improve mobility with minimal disruptions in traffic flow while maintaining a diverse portfolio of infrastructure improvements. HCTRA's CIP supports the responsible development of projects while maintaining, improving, and developing Harris County's current toll road system.

Financial Priorities: HCTRA's ongoing system-wide improvements have significantly contributed to the region's sustained growth and economic sustainability. To ensure the agency continues to deliver results, a combination of fiscal prudence and long-term strategic planning is necessary.

Debt Structure: Recent Fitch's credit ratings reflect the Authority's robust financial metrics with a very high Fitch-calculated average 10-year gross senior debt service coverage ratio (DSCR) of 5.6x, and low Fitch-calculated senior leverage (net debt to cash flow) averaging 0.7x over the next 10 years. These strengths are modestly offset by the Authority's large capital plan that is expected to require additional debt issuances[1].

Aggressive Infrastructure Renewal and Replacement: The maintenance of our assets is handled promptly after identification, either by annual inspection or by daily maintenance observations, in order to maximize the life of the system. Items involving public safety are addressed immediately. Others are grouped together and repaired as part of larger maintenance construction packages. As a general rule HCTRA does not defer maintenance, rather, the Authority opts for an aggressive annual maintenance schedule based on inspections of all HCTRA roads and facilities.

Toll System Revenues: Projected stable revenues combined with conservative project development provide HCTRA with the short and long-term flexibility to undertake projects without relying solely on debt financing.

Toll Rate Policy: The County has had a toll policy in place since 2007, which establishes a process for the adjustment of toll rates based on changes to the consumer price index ("CPI") that correlates with the Greater Houston region's economy. HCTRA recommends that toll rate adjustments – based on measured changes in inflation – continue, allowing for prudent financial planning and project development in the future. Each spring, a recommendation on toll rate adjustments will be made to the Commissioners Court based on existing HCTRA financial conditions.

Capital Program Priorities: HCTRA's capital program priorities include Roadway Projects, Toll System Infrastructure Improvements, and Facility Improvements. The cornerstone of HCTRA's CIP is predicated on several factors:

A) Harris County continues to authorize the responsible funding of operations, maintenance, and expansion of the toll road system at levels which maintain a responsible leverage ratio (outstanding debt to annual gross revenue). This allows HCTRA to develop new projects and maintain the existing toll road system—an aging urban highway system—in superior condition, with a strong emphasis on capital maintenance requirements, and keep pace with the information technology and customer service demands of the growing EZ TAG program, without an over-reliance on debt.

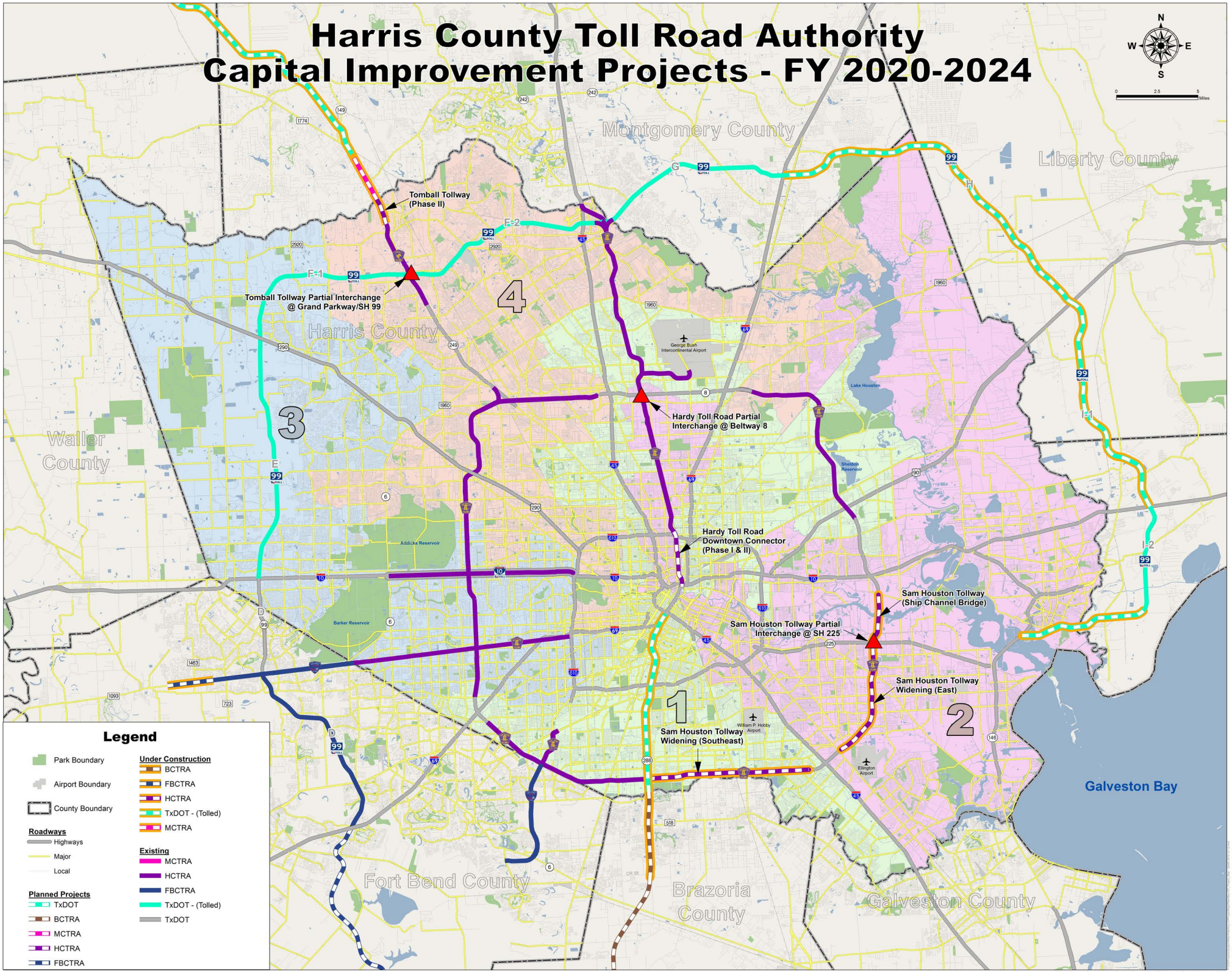
B) HCTRA's mobility transfer for funding of the Harris County road and bridge program will continue at a minimum of $120 million dollars (annually) for the foreseeable future. This annual allotment provides substantial funding for transportation improvements throughout Harris County without the need to support these improvements through the use of tax dollars.

C) Not every regional mobility problem is best served with a toll road. Development of toll roads requires extensive use of public funds, and Harris County is best served by having HCTRA develop enterprising projects that have an expectation of support for the HCTRA system.

Future Outlook: As HCTRA continues to deliver its ambitious CIP, we recommend a measured approach that balances HCTRA's project planning with county needs that will benefit the region as a whole. Prudent planning and prudent fiscal stewardship will allow Harris County to deliver on its promise to improve mobility in the Greater Houston region.

[1] Fitch Ratings, July 2019. "Fitch Affirms Harris County, TX's Sr. Toll Revs 'AA'; Outlook Stable".

Harris County Toll Road Authority
Capital Improvement Projects - FY 2020-2024



Legend

- Park Boundary
- Airport Boundary
- County Boundary

Roadways
- Highways
- Major
- Local

Planned Projects
- TxDOT
- BCTRA
- MCTRA
- HCTRA
- FBCTRA

Under Construction
- BCTRA
- FBCTRA
- HCTRA
- TxDOT - (Tolled)
- MCTRA

Existing
- MCTRA
- HCTRA
- FBCTRA
- TxDOT - (Tolled)
- TxDOT

Harris County Commissioner Precinct Boundaries (Revised A1 Final) - August 1, 2013
July 29, 2019

2020 CIP - Harris County Toll Road Authority 5 Year Funding Plan

Project Category	Project Prioritization*	Project Name	Total Project Estimate	Reimbursements	HC Capital Funding	Funded to Date[1]	Sept. 1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug. 31, 2021	Sept. 1, 2021-Aug. 31, 2022	Sept. 1, 2022-Aug.31, 2023	Sept. 1, 2023-Aug.31, 2024	Anticipated Additional Project Costs
Roadway Projects												
	2	Hardy Toll Road Downtown Connector (Phase I)	$ 207,000,000	$ -	$ -	$ 186,700,000	$ 20,300,000	$ -	$ -	$ -	$ -	$ -
	2	Hardy Toll Road Downtown Connector (Phase II) [2]	$ 213,000,000	$ -	$ -	$ 24,700,000	$ 160,000,000	$ 2,000,000	$ 12,750,000	$ -	$ -	$ 13,550,000
	2	Hardy Toll Road Partial Interchange at Beltway 8	$ 110,000,000	$ -	$ -	$ 4,100,000	$ 11,800,000	$ 89,000,000	$ -	$ -	$ -	$ 5,100,000
	2	Sam Houston Tollway (Ship Channel Bridge) [3]	$ 962,000,000	$ -	$ -	$ 490,100,000	$ 100,000,000	$ 80,000,000	$ 104,000,000	$ 58,000,000	$ 40,000,000	$ 89,900,000
	2	Sam Houston Tollway Widening (East)	$ 276,000,000	$ -	$ -	$ 275,300,000	$ 700,000	$ -	$ -	$ -	$ -	$ -
	2	Sam Houston Tollway Widening (Southeast)	$ 248,000,000	$ -	$ -	$ 247,300,000	$ 700,000	$ -	$ -	$ -	$ -	$ -
	2	SH225 Partial Interchange at the Sam Houston Tollway	$ 135,000,000	$ -	$ -	$ 14,100,000	$ 2,000,000	$ 11,000,000	$ 107,900,000	$ -	$ -	$ -
	2	Tomball Tollway (Phase II)	$ 200,000,000	$ -	$ -	$ 146,600,000	$ 18,000,000	$ -	$ -	$ -	$ -	$ 35,400,000
	2	Tomball Tollway Partial Interchange at the Grand Parkway	$ 75,000,000	$ -	$ -	$ 6,100,000	$ 64,500,000	$ 2,000,000	$ 2,400,000	$ -	$ -	$ -
		Sub-Total (Roadway Projects)	**$ 2,426,000,000**	**$ -**	**$ -**	**$ 1,395,000,000**	**$ 378,000,000**	**$ 184,000,000**	**$ 227,050,000**	**$ 58,000,000**	**$ 40,000,000**	**$ 143,950,000**
Roadway Improvements[4]												
	2	County-wide Traffic Safety Improvements	$ 75,000,000	$ -	$ -	$ -	$ 15,000,000	$ 15,000,000	$ 15,000,000	$ 15,000,000	$ 15,000,000	$ -
	2	System-wide Roadway Improvements	$ 100,000,000	$ -	$ -	$ -	$ 20,000,000	$ 20,000,000	$ 20,000,000	$ 20,000,000	$ 20,000,000	$ -
	2	Toll Plaza Conversion(s) and Improvements	$ 44,000,000	$ -	$ -	$ -	$ 10,000,000	$ 9,000,000	$ 25,000,000		$ -	$ -
		Sub-Total (Roadway Improvements)	**$ 219,000,000**	**$ -**	**$ -**	**$ -**	**$ 45,000,000**	**$ 44,000,000**	**$ 60,000,000**	**$ 35,000,000**	**$ 35,000,000**	**$ -**
System Projects[4]												
	2	HCTRA Facility Improvements	$ 110,000,000	$ -	$ -	$ -	$ 46,000,000	$ 8,000,000	$ 46,000,000	$ 5,000,000	$ 5,000,000	$ -
	2	Lynchburg Ferry	$ 14,900,000	$ -	$ -	$ -	$ 10,600,000	$ 4,300,000	$ -	$ -	$ -	$ -
	2	Toll System Upgrades, Maintenance, and Capital Support	$ 70,000,000	$ -	$ -	$ -	$ 38,000,000	$ 21,000,000	$ 11,000,000		$ -	$ -
	2	Washburn Tunnel	$ 10,800,000	$ -	$ -	$ -	$ 7,100,000	$ 2,300,000	$ 1,400,000	$ -	$ -	$ -
		Sub-Total (System Projects)	**$ 205,700,000**	**$ -**	**$ -**	**$ -**	**$ 101,700,000**	**$ 35,600,000**	**$ 58,400,000**	**$ 5,000,000**	**$ 5,000,000**	**$ -**
		Total Capital Cost	**$ 2,850,700,000**	**$ -**	**$ -**	**$ 1,395,000,000**	**$ 524,700,000**	**$ 263,600,000**	**$ 345,450,000**	**$ 98,000,000**	**$ 80,000,000**	**$ 143,950,000**
		Estimated Operating Impact:					**$ 47,677,000**	**$ 52,062,000**	**$ 56,850,000**	**$ 59,773,000**	**$ 65,266,000**	**TBD**

***Project Prioritization:** (1) - Fire/Life Safety, (2) - Continuity of Government, (3) - Regulatory or Legal Mandate, (4) - Operational Savings or Value Enhancement
Total Project Estimate - Total estimated funding required.
1. Funded to Date - Total estimated project expenses and open encumbrances through August 2019.
2. Hardy Downtown Connector (Phase II) - Future costs contingent upon TxDOT's North Houston Highway Improvement Project (IH45).
3. Ship Channel Bridge - Programmed future costs beyond August 31, 2024.
4. Roadway Improvements and System Projects - These are perennial projects.

Harris County FY 2020 Capital Improvement Program

Project Name:	Hardy Downtown Connector (Phase I)	**Estimated Project Cost:**	$207,000,000
		Operating Cost Impact:	$0
Category:	Roadway Project	**Funded to Date:**	$186,700,000
Priority:	Continuity of Government Operations	**Expected Completion:**	3rd Quarter, FY 2021
		Funding Source:	Revenue – Toll Road Authority

Project Description/ Justification:

There are three components to Phase I: the purchase of all remaining right-of-way necessary to construct the Hardy Downtown Connector, including right-of-way necessary for the IH 69 (U.S. 59) and Elysian Viaduct connectors, the upgraded railroad trackage in the corridor for enhanced freight rail movements, and the construction of grade separations at Quitman, Collingsworth, and Lorraine streets. The Collingsworth overpass is complete and opened in September 2018. The Lorraine underpass is currently under construction and is expected to be complete by mid-2020. The construction of the Quitman overpass is expected to begin in early 2020. All three grade separation projects will be complete prior to the construction of Phase II of the Hardy Toll Road Downtown Connector.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$207,000,000	$186,700,000	$20,300,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
Operating Expenses	$0	$0	$0	$0	$0



Harris County Toll Road Authority

Harris County FY 2020 Capital Improvement Program

Project Name:	Hardy Downtown Connector (Phase II)	**Estimated Project Cost:**	$213,000,000*
		Operating Cost Impact:	$5,140,000
Category:	Roadway Project	**Funded to Date:**	$24,700,000
Priority:	Continuity of Government Operations	**Expected Completion:**	3rd Quarter, FY 2023
		Funding Source:	Revenue – Toll Road Authority

Project Description/ Justification:
Phase II of the Hardy Connector involves the development and construction of the toll road's mainlanes from the current southern terminus of the Hardy Toll Road to the newly rebuilt Elysian Viaduct.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$213,000,000*	$24,700,000	$160,000,000	$2,000,000	$12,750,000	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
Operating Expenses	$5,140,000	$5,612,000	$6,128,000	$6,692,000	$7,307,000

*Includes anticipated additional project costs



Harris County Toll Road Authority

Harris County FY 2020 Capital Improvement Program

Project Name:	Hardy Toll Road Partial Interchange at Beltway 8	**Estimated Project Cost:**	$110,000,000*
		Operating Cost Impact:	$833,000
Category:	Roadway Project	**Funded to Date:**	$4,100,000
Priority:	Continuity of Government Operations	**Expected Completion:**	3rd Quarter, FY 2022
		Funding Source:	Revenue – Toll Road Authority

Project Description/ Justification:

Development of an enhanced interchange at the Hardy Toll Road and Beltway 8 will entail the proposed construction of direct connectors between southbound Hardy Toll Road and westbound Sam Houston Parkway, northbound Hardy Toll Road and westbound Sam Houston Parkway, and eastbound Sam Houston Parkway to southbound Hardy Toll Road. This project aligns with HCTRA's overall planning efforts for greater connectivity between SH 249/Sam Houston Tollway/Hardy Toll Road.

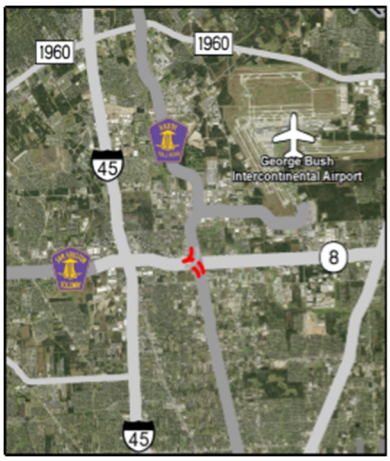
Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$110,000,000*	$4,100,000	$11,800,000	$89,000,000	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Operating Expenses	$833,000	$910,000	$993,000	$1,085,000	$1,185,000

*Includes anticipated additional project costs



Harris County FY 2020 Capital Improvement Program

Project Name:	Sam Houston Tollway (Ship Channel Bridge)	**Estimated Project Cost:**	$962,000,000*
		Operating Cost Impact:	$4,688,000
Category:	Roadway Project	**Funded to Date:**	$490,100,000
Priority:	Continuity of Government Operations	**Expected Completion:**	TBD
		Funding Source:	Revenue – Toll Road Authority

Project Description/ Justification:

Construction of the Ship Channel Bridge project has begun and once complete, the ultimate project will accommodate four lanes in each direction, with full safety shoulders, from SH 225 to IH 10. During the construction phase of the project, at least two travel lanes in each direction across the Ship Channel will be maintained. When this project is complete and open to traffic in 2024, two new bridge spans will replace the existing bridge, will include four 12-foot traffic lanes with 10-foot inside and outside shoulders for both northbound and southbound traffic, for a total of eight traffic lanes, and the bridge support columns will reside outside of the Ship Channel's navigable waterway.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$962,000,000*	$490,100,000	$100,000,000	$80,000,000	$104,000,000	$58,000,000	$40,000,000

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Operating Expenses	$4,688,000	$5,119,000	$5,590,000	$6,104,000	$6,665,000

*Includes anticipated additional project costs. Programmed future costs beyond August 31, 2024.



Harris County FY 2020 Capital Improvement Program

Project Name:	Sam Houston Tollway Widening (East)	**Estimated Project Cost:**	$276,000,000
		Operating Cost Impact:	$11,739,000
Category:	Roadway Project	**Funded to Date:**	$275,300,000
Priority:	Continuity of Government Operations	**Expected Completion:**	3rd Quarter, FY 2021
		Funding Source:	Revenue – Toll Road Authority

Project Description/ Justification:

This project is under reconstruction and will include the construction of full safety shoulders, will reconstruct tolled entrance and exit ramps, will improve roadway corridor drainage, and will reconstruct bridge overpasses to bring these crossings up to modern standards. Once complete, this section of the tollway will have four mainlanes in each direction, for a total of eight mainlanes between IH 45 and SH 225.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2022-Aug.31, 2023	Sept.1, 2023-Aug. 31, 2024	Sept.1, 2024-Aug. 31, 2025
$276,000,000	$275,300,000	$700,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2022-Aug.31, 2023	Sept.1, 2023-Aug. 31, 2024	Sept.1, 2024-Aug. 31, 2025
Operating Expenses	$11,739,000	$12,818,000	$13,997,000	$15,283,000	$16,688,000



Harris County Toll Road Authority

Harris County FY 2020 Capital Improvement Program

Project Name:	Sam Houston Tollway Widening (Southeast)	**Estimated Project Cost:**	$248,000,000
		Operating Cost Impact:	$14,518,000
Category:	Roadway Project	**Funded to Date:**	$247,300,000
Priority:	Continuity of Government Operations	**Expected Completion:**	3rd Quarter, FY 2021
		Funding Source:	Revenue – Toll Road Authority

Project Description/ Justification:

The Sam Houston Tollway-Southeast extends for an approximate distance of 10 miles and is currently under reconstruction. When reconstruction is complete in mid-2019, this section will have eight mainlanes with full safety shoulders, from SH 288 east to IH 45 (Gulf Freeway). HCTRA is also coordinating with the Blue Ridge Transportation Group and TxDOT to construct the interchange at SH288 at Beltway 8.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$248,000,000	$247,300,000	$700,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Operating Expenses	$14,518,000	$15,852,000	$17,310,000	$18,901,000	$20,638,000



Harris County FY 2020 Capital Improvement Program

Project Name:	SH225 Partial Interchange at the Sam Houston Tollway	**Estimated Project Cost:**	$135,000,000
		Operating Cost Impact:	$2,743,000
Category:	Roadway Project	**Funded to Date:**	$14,100,000
Priority:	Continuity of Government Operations	**Expected Completion:**	3rd Quarter, FY 2023
		Funding Source:	Revenue – Toll Road Authority

Project Description/ Justification:

Construction of an interchange at the Sam Houston Tollway and SH 225 is being designed in coordination with TxDOT and in conjunction with the Sam Houston Tollway East and the Sam Houston Tollway Ship Channel Bridge projects. This project develops eight direct connectors at the Sam Houston Tollway and SH 225.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$135,000,000	$14,100,000	$2,000,000	$11,000,000	$107,900,000	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Operating Expenses	$2,743,000	$2,996,000	$3,271,000	$3,572,000	$3,900,000



Harris County Toll Road Authority

Harris County FY 2020 Capital Improvement Program

Project Name:	Tomball Tollway (Phase II)	**Estimated Project Cost:**	$200,000,000*
		Operating Cost Impact:	$3,264,000
Category:	Roadway Project	**Funded to Date:**	$146,600,000
Priority:	Continuity of Government Operations	**Expected Completion:**	3rd Quarter, FY 2021
		Funding Source:	Revenue – Toll Road Authority

Project Description/ Justification:

The Authority is currently constructing Phase II of the Tomball Tollway, which will be an extension from the current northern terminus of the Tomball Tollway at FM 2920, to Spring Creek (Harris County Line), for a distance of 1.6 miles. Phase I opened to traffic in April 2015, and Phase II will continue this project as a six-lane, all-ETC toll road within the SH249 corridor. When Phase II is complete, the Tomball Tollway will cover a distance of approximately 7 miles on the northwest side of Harris County.

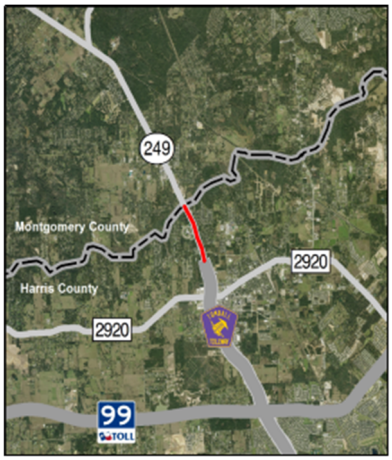
Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$200,000,000*	$146,600,000	$18,000,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Operating Expenses	$3,264,000	$3,564,000	$3,892,000	$4,250,000	$4,641,000

*Includes anticipated additional project costs



Harris County FY 2020 Capital Improvement Program

Project Name:	Tomball Tollway Partial Interchange at the Grand Parkway	**Estimated Project Cost:**	$75,000,000
		Operating Cost Impact:	$1,771,000
Category:	Roadway Project	**Funded to Date:**	$6,100,000
Priority:	Continuity of Government Operations	**Expected Completion:**	3rd Quarter, FY 2023
		Funding Source:	Revenue – Toll Road Authority

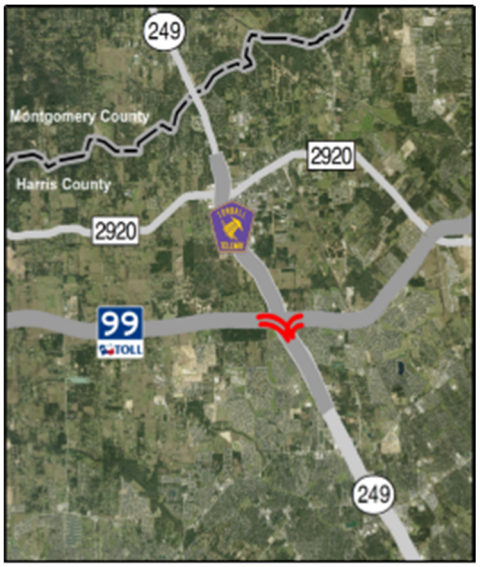
Project Description/ Justification:
In partnership with TxDOT, HCTRA is developing a partial interchange that will connect the Tomball Tollway with the Grand Parkway (SH99).

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$75,000,000	$6,100,000	$64,500,000	$2,000,000	$2,400,000	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Operating Expenses	$1,771,000	$1,934,000	$2,111,000	$0	$0



Harris County Toll Road Authority

Harris County FY 2020 Capital Improvement Program

Project Name:	County-wide Traffic Safety Improvements	**Estimated Project Cost:**	$75,000,000
		Operating Cost Impact:	$0
Category:	Roadway Improvement	**Funded to Date:**	Ongoing
Priority:	Continuity of Government Operations	**Expected Completion:**	TBD
		Funding Source:	Revenue – Toll Road Authority

Project Description/ Justification:
These projects are ongoing structural improvements that should improve traffic and pedestrian safety on streets and thoroughfares in Harris County.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug.31, 2023	Sept.1, 2023-Aug.31, 2024
$75,000,000	Ongoing	$15,000,000	$15,000,000	$15,000,000	$15,000,000	$15,000,000

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug.31, 2023	Sept.1, 2023-Aug. 31, 2024
Operating Expenses	$0	$0	$0	$0	$0



Harris County FY 2020 Capital Improvement Program

Project Name:	System-wide Roadway Improvements	**Estimated Project Cost:**	$100,000,000
		Operating Cost Impact:	$0
Category:	Roadway Improvement	**Funded to Date:**	Ongoing
Priority:	Continuity of Government Operations	**Expected Completion:**	TBD
		Funding Source:	Revenue – Toll Road Authority

Project Description/ Justification:

These projects are continuous and routine upgrades to the HCTRA system inclusive of system inspections, heavy maintenance, on-call construction, utility coordination, infrastructure replacement, materials testing, and drainage improvements. Ongoing upgrades are needed to maximize the life of HCTRA's roadways while addressing and improving mobility and roadway safety.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$100,000,000	Ongoing	$20,000,000	$20,000,000	$20,000,000	$20,000,000	$20,000,000

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Operating Expenses	$0	$0	$0	$0	$0



Harris County FY 2020 Capital Improvement Program

Project Name:	Toll Plaza Conversion(s) and Improvements	**Estimated Project Cost:**	$44,000,000
		Operating Cost Impact:	$0
Category:	Roadway Improvements	**Funded to Date:**	Ongoing
Priority:	Continuity of Government Operations	**Expected Completion:**	TBD
		Funding Source:	Revenue – Toll Road Authority

Project Description/ Justification:

In keeping with HCTRA's long-term goal of the eventual conversion of the Sam Houston Tollway to all-ETC, three mainline toll plazas are set for reconfigurations. The Sam Houston Tollway Central plaza will be the first to be reconfigured, followed by the South and then the North Sam Houston Tollway plazas.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$44,000,000	Ongoing	$10,000,000	$9,000,000	$25,000,000	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
Operating Expenses	$0	$0	$0	$0	$0



Harris County FY 2020 Capital Improvement Program

Project Name:	HCTRA Facility Improvements	**Estimated Project Cost:**	$110,000,000
		Operating Cost Impact:	$1,581,000
Category:	System Project	**Funded to Date:**	Ongoing
Priority:	Continuity of Government Operations	**Expected Completion:**	TBD
		Funding Source:	Revenue – Toll Road Authority

Project Description/ Justification:

Almost 36 years after HCTRA was initially created, the Authority's various EZ TAG stores, call center, administrative campus, and incident management building continue to require renovations and upgrades as the Authority's needs and responsibilities grow. In general, upgrades are needed to improve customer experience while ensuring facilities are fully functional and safe for staff.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug.31, 2023	Sept.1, 2023-Aug.31, 2024
$110,000,000	Ongoing	$46,000,000	$8,000,000	$46,000,000	$5,000,000	$5,000,000

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug.31, 2023	Sept.1, 2023-Aug. 31, 2024
Operating Expenses	$1,581,000	$1,727,000	$1,886,000	$2,060,000	$2,248,000



Harris County FY 2020 Capital Improvement Program

Project Name:	Lynchburg Ferry	**Estimated Project Cost:**	$14,900,000
		Operating Cost Impact:	$700,000
Category:	System Project	**Funded to Date:**	$0
Priority:	Continuity of Government Operations	**Expected Completion:**	3rd Quarter, FY 2022
		Funding Source:	Revenue – Toll Road Authority

Project Description/ Justification:

The Lynchburg Ferry's origins trace back to the beginning of the Republic of Texas. In 1888, Harris County became the steward of the Ferry and continues to this day. On June 25, 2019 the Harris County Commissioners Court voted unanimously to authorize the transfer of responsibility for current and future Operations, Maintenance, and Capital Improvements of the Lynchburg Ferry to HCTRA, without the imposition of tolls for use of such facility, effective March 1, 2020.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug.31, 2023	Sept.1, 2023-Aug.31, 2024
$14,900,000	$0	$10,600,000	$4,300,000	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug.31, 2023	Sept.1, 2023-Aug. 31, 2024
Operating Expenses	$700,000	$765,000	$836,000	$913,000	$997,000



Harris County FY 2020 Capital Improvement Program

Project Name:	Toll System Upgrades, Maintenance, and Capital Support	**Estimated Project Cost:**	$70,000,000
		Operating Cost Impact:	$0
Category:	System Project	**Funded to Date:**	Ongoing
Priority:	Continuity of Government Operations	**Expected Completion:**	TBD
		Funding Source:	Revenue – Toll Road Authority

Project Description/ Justification:

As HCTRA's services and customer base grows, so must our back office equipment and systems. This requires ongoing enhancements to existing toll collection equipment and software housed within the Roadside Toll Collection System, Back Office System and Data Center. The Authority has implemented and expanded upon its use of an electronic toll collection interoperability service in partnership with other regional tolling agencies, including toll agencies outside the State of Texas, with other states set to become interoperable in 2020 and beyond.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31, 2023	Sept.1, 2023-Aug. 31, 2024
$70,000,000	Ongoing	$38,000,000	$21,000,000	$11,000,000	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug.31, 2023	Sept.1, 2023-Aug. 31, 2024
Operating Expenses	$0	$0	$0	$0	$0





Harris County FY 2020 Capital Improvement Program

Project Name:	Washburn Tunnel	**Estimated Project Cost:**	$10,800,000
		Operating Cost Impact:	$700,000
Category:	System Project	**Funded to Date:**	$0
Priority:	Continuity of Government Operations	**Expected Completion:**	3rd Quarter, FY 2023
		Funding Source:	Revenue – Toll Road Authority

Project Description/ Justification:

Built in 1950, the Washburn Tunnel is one of five north-south conduits across the Houston Ship Channel and is one of the largest toll-free, underground tunnels in the Southern United States. On June 25, 2019 the Harris County Commissioners Court voted unanimously to authorize the transfer of responsibility for current and future Operations, Maintenance, and Capital Improvements of the Washburn Tunnel to HCTRA, without the imposition of tolls for use of such facility, effective March 1, 2020.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug.31, 2023	Sept.1, 2023-Aug.31, 2024
$10,800,000	$0	$7,100,000	$2,300,000	$1,400,000	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug.31, 2023	Sept.1, 2023-Aug. 31, 2024
Operating Expenses	$700,000	$765,000	$836,000	$913,000	$997,000



HARRISHEALTH SYSTEM

FY 2020
Capital Improvements Program

Harris County Hospital District
d/b/a Harris Health System

George Masi
President and Chief Executive Officer

Michael Norby
Executive Vice President and Chief Financial Officer

David Attard
Associate Administrator – Health Care System Engineering

September 24, 2019

HARRISHEALTH SYSTEM

August 26, 2019

The Honorable County Judge Lina Hidalgo
Commissioner Rodney Ellis, Precinct 1
Commissioner Adrian Garcia, Precinct 2
Commissioner Steve Radack, Precinct 3
Commissioner Jack Cagle, Precinct 4

Re: Fiscal Year 2020 Mid-Year Capital Improvement Projects (CIP) Review for Harris Health System

Dear Judge Hidalgo and Commissioners:

During the first half of the fiscal year ending February 29, 2020, Harris County Hospital District, d/b/a Harris Health System, continued to focus on improving our community's health by delivering high quality healthcare to Harris County residents, maintaining financial strength to ensure our ability to serve our patients, and positioning Harris Health to succeed in the evolving healthcare reform environment.

Overview:

Using our Bridge to 2020 Strategic Plan as a roadmap, despite the many uncertainties attendant to the funding of safety net healthcare systems, we continue to remain in a financially stable condition and, with cautious optimism, project the same for the coming years. This is not coincidental but rather the result of the unwavering support of this community's taxpayers and the leadership of our Board of Trustees and the Commissioners Court.

Harris Health with its two hospitals and many community clinics and other points of access to care continues to be the major safety net provider for all of Harris County. Our hospital beds are always full and our Ben Taub and LBJ Trauma Centers are stretched to the limit – and the patients keep coming. Notwithstanding the pressures that these patient volumes bring to bear on our facilities and our staff, patient safety remains our number one priority. In response to this challenge, Harris Health is working diligently to engineer our delivery platforms so that we maximize every asset and opportunity at our disposal to insure that we are able to continue providing high quality, safe patient care.

Behavioral health remains one of the great challenges in our community. Harris Health is currently engaged in meaningful dialog and planning with our sister behavioral health agencies – Harris Center, the Harris County Psychiatric Center and the Recovery Center, as well as Harris County Jail Health – to find new and innovative ways of collaborating to leverage resources to the maximum benefit of the patients we serve.

A significant component of our strategic plan is to transform Harris Health from a Sickness System to a Wellness System. Today, we are working diligently with multiple agencies in our community to better understand and leverage the determinants of health beyond what our hospitals and clinics contribute to the health of our community. Our long-term goal is to transform our hospitals and clinics from safety nets that break the fall for those who have become seriously ill, to facilities that are community hubs of wellness – preventing illness or intersecting disease processes well before they fulminate into serious medical conditions – this while we coordinate with other community partners to link resources like transportation, access to nutritious food, schools, safe housing and the like – all contributing to a Live Well Harris County

Status of Capital Projects:

The foundation for Harris Health System's Annual Capital Budget is a continuous assessment of facilities, equipment and technology to determine the priorities for replacement, repair and any new acquisitions. The quarterly review process includes representatives of the medical staff from both Baylor College of Medicine and UT Health. Assessment and prioritization address patient safety, obsolescence, new technology, building safety and code compliance requirements. The approved capital budget for Fiscal Year 2020 is $81.5 million. Project and cash flow projections beyond Fiscal Year 2020 are based on estimates related to specific projects identified needs, or in the case of general replacement and refresh projects, are based on a combination of projected needs and historical expenditures. Key projects are summarized below.

New Ben Taub Operating Rooms: The Ben Taub operating room (OR) project, which was funded by a 2016 bond issue, is nearing completion. The $70 million project provides the necessary expansion of operative suites and supporting services on the second floor to support Level 1 trauma services at Ben Taub Hospital. The construction of 7 new rooms has a projected opening in September, 2019. The commitments for construction and equipment have already been made. The remaining bond project fund at July 31, 2019, is $24.1 million, reflecting the remaining expected cash outflows.

Renovation of Ben Taub Emergency Center: The architectural and engineering planning has begun to modernize and renovate the emergency center at Ben Taub Hospital. This project is the next step in the continuing effort to improve emergency

and trauma services at Ben Taub. Harris Health and the Harris County Hospital District Foundation are working on a $25 million philanthropic funding campaign to support most of the cost of the project, planned to begin in Fiscal Year 2020. Another $10 million of funding is expected to be provided via tax and revenue bonds.

Renovation of Quentin Mease: After evaluating the cost to renovate the inpatient floors at Quentin Mease Hospital to bring them into compliance with current inpatient codes and retain an appropriate number of licensed inpatient beds, it was decided that Quentin Mease is best suited to be programmed and designated as an outpatient facility. As a result, Physical Medicine & Rehabilitation and Skilled Nursing inpatient services are now being coordinated through community partners and outside medical services contracts, and the 49 inpatient beds have been decommissioned. Construction is expected to occur over a 12-24 month period, and cost about $39.5 million. There are no changes planned for the outpatient Physical Therapy and Occupational Therapy service at Quentin Mease. After completion of construction, in addition to physical therapy and occupational therapy, the facility will become home to the services currently provided at the Riverside Dialysis Center and Thomas Street Health Center.

EPIC Electronic Medical Record (EMR) Implementation at Harris Center and Harris County Jail Health: The Information Technology team at Harris Health will be working to extend the Epic EMR to the Harris Center and Jail Health facilities during FY 2020, bringing more of the electronic health infrastructure on to the same EMR platform, substantially improving care coordination and collaboration among the County related health care providers. The estimated capital cost of both projects is $23.2 million. Funding options are currently being evaluated for these projects.

The attached report summarizes the projected capital improvements for Harris Health as we move forward. Feel free to contact me should you have any questions or need additional information.

Sincerely,

George Masi, President
and Chief Executive Officer

2020 CIP - Harris County Hospital District 5 Year Funding Plan

Project Category	Project Prioritization*	Project Name	Total Project Estimate	Reimbursements	HC Capital Funding	Harris Health Capital Funding	Funded to Date	Sept. 1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug. 31, 2021	Sept. 1, 2021-Aug. 31, 2022	Sept. 1, 2022-Aug.31, 2023	Sept. 1, 2023-Aug.31, 2024
Capital Repair and Maintenance												
	1	Hospitals Glazing System Replacement	$ 16,000,000	$ -	$ -	$ 16,000,000	$ 1,500,000	$ 5,000,000	$ 5,000,000	$ 4,500,000	$ -	$ -
	1	Hospitals/Clinics Repair and Maintenance/Replacement: Other	$ 2,608,138	$ -	$ -	$ 2,608,138	$ -	$ 608,138	$ 500,000	$ 500,000	$ 500,000	$ 500,000
	2	Hospitals/Clinics Repair and Maintenance/Replacement : MEP	$ 19,400,000	$ -	$ -	$ 19,400,000	$ -	$ 5,800,000	$ 4,900,000	$ 2,700,000	$ 3,000,000	$ 3,000,000
	2	Hospitals/Clinics Repair and Maintenance: Vertical Transport	$ 4,357,101	$ -	$ -	$ 4,357,101	$ 21,501	$ 3,585,600	$ 750,000	$ -	$ -	$ -
	2	Central Plant Conversion Thermal Energy (TECO) - Ben Taub	$ 20,503,976	$ -	$ -	$ 20,503,976	$ 20,303,976	$ 200,000	$ -	$ -	$ -	$ -
	2	Hospitals Repair and Maintenance: Roofing	$ 1,751,224	$ -	$ -	$ 1,751,224	$ -	$ 1,751,224	$ -	$ -	$ -	
		Sub-Total (Capital Repair and Maintenance)	**$ 64,620,439**	**$ -**	**$ -**	**$ 64,620,439**	**$ 21,825,477**	**$ 16,944,962**	**$ 11,150,000**	**$ 7,700,000**	**$ 3,500,000**	**$ 3,500,000**
Renovation and Demo												
	1	Holly Hall Demo and Build-Out	$ 4,600,000	$ -	$ -	$ 4,600,000	$ -	$ 2,100,000	$ 2,500,000	$ -	$ -	$ -
	1	LBJ Lab Renovation	$ 5,316,905	$ -	$ -	$ 5,316,905	$ 2,442,826	$ 2,374,079	$ 500,000	$ -	$ -	$ -
	1	LBJ Pharmacy USP 800	$ 4,030,714	$ -	$ -	$ 4,030,714	$ 142,437	$ 3,888,277	$ -	$ -	$ -	$ -
	1	Smith Clinic Pharmacy USP 800	$ 1,341,159	$ -	$ -	$ 1,341,159	$ 901,159	$ 440,000	$ -	$ -	$ -	$ -
	2	BT EC Renovation Project	$ 47,222,036	$ 25,000,000	$ 10,000,000	$ 12,222,036	$ 9,583,811	$ 21,975,365	$ 11,662,860	$ 4,000,000	$ -	$ -
	4	LBJ Optimization/Redesign	$ 28,500,000	$ -	$ -	$ 28,500,000	$ 250,000	$ 10,000,000	$ 10,000,000	$ 8,250,000	$ -	$ -
		Sub-Total (Renovation and Demo)	**$ 91,010,814**	**$ 25,000,000**	**$ 10,000,000**	**$ 56,010,814**	**$ 13,320,233**	**$ 40,777,721**	**$ 24,662,860**	**$ 12,250,000**	**$ -**	**$ -**
New Facilities / Expansion												
	4	Casa de Amigos Clinic Expansion	$ 10,000,000	$ -	$ -	$ 10,000,000	$ 156,000	$ 7,844,000	$ 2,000,000	$ -	$ -	$ -
	4	Danny Jackson Clinic Specialty Clinic Expansion	$ 7,409,474	$ -	$ -	$ 7,409,474	$ 3,495,224	$ 3,914,250	$ -	$ -	$ -	$ -
	4	QM Redesign	$ 39,500,000	$ -	$ -	$ 39,500,000	$ 2,057,083	$ 10,016,338	$ 20,500,000	$ 6,926,579	$ -	$ -
		Sub-Total (New Facilities / Expansion)	**$ 56,909,474**	**$ -**	**$ -**	**$ 56,909,474**	**$ 5,708,307**	**$ 21,774,588**	**$ 22,500,000**	**$ 6,926,579**	**$ -**	**$ -**
Medical Equipment												
	2	Medical Equipment: Routine Replace	$ 51,351,600	$ -	$ -	$ 51,351,600	$ -	$ 9,881,500	$ 10,107,000	$ 11,363,100	$ 10,000,000	$ 10,000,000
	2	Medical Equipment: Strategic	$ 32,248,400	$ -	$ -	$ 32,248,400	$ -	$ 4,118,500	$ 6,693,000	$ 7,436,900	$ 7,000,000	$ 7,000,000
	4	Medical Equipment: New	$ 7,300,000	$ -	$ -	$ 7,300,000	$ -	$ 1,300,000	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 1,500,000
	4	Harris County Jail Health - CT Scanner and Other	$ 9,560,000	$ -	$ 8,060,000	$ 1,500,000	$ -	$ -	$ 8,060,000	$ 500,000	$ 500,000	$ 500,000
		Sub-Total (Medical Equipment)	**$ 100,460,000**	**$ -**	**$ 8,060,000**	**$ 92,400,000**	**$ -**	**$ 15,300,000**	**$ 26,360,000**	**$ 20,800,000**	**$ 19,000,000**	**$ 19,000,000**
Other												
	2	HHS Non-clinical Other	$ 3,850,000	$ -	$ -	$ 3,850,000	$ -	$ 1,250,000	$ 650,000	$ 650,000	$ 650,000	$ 650,000
	2	HHS Vehicle Replacement	$ 3,363,600	$ -	$ -	$ 3,363,600	$ -	$ 863,600	$ 625,000	$ 625,000	$ 625,000	$ 625,000
		Sub-Total (Other)	**$ 7,213,600**	**$ -**	**$ -**	**$ 7,213,600**	**$ -**	**$ 2,113,600**	**$ 1,275,000**	**$ 1,275,000**	**$ 1,275,000**	**$ 1,275,000**
Information Technology Tech Refresh												
	2	Network technology refresh	$ 2,800,000	$ -	$ -	$ 2,800,000	$ -	$ 450,000	$ 762,000	$ 388,000	$ 799,000	$ 401,000
	2	Server technology refresh	$ 17,500,000	$ -	$ -	$ 17,500,000	$ -	$ 3,500,000	$ 3,500,000	$ 3,500,000	$ 3,500,000	$ 3,500,000
	2	Storage technology refresh	$ 4,500,000	$ -	$ -	$ 4,500,000	$ -	$ 700,000	$ 700,000	$ 700,000	$ 1,700,000	$ 700,000
	2	Telephone System	$ 1,000,000	$ -	$ -	$ 1,000,000	$ -	$ 200,000	$ 200,000	$ 200,000	$ 200,000	$ 200,000
		Sub-Total (Repair and Maintenance)	**$ 25,800,000**	**$ -**	**$ -**	**$ 25,800,000**	**$ -**	**$ 4,850,000**	**$ 5,162,000**	**$ 4,788,000**	**$ 6,199,000**	**$ 4,801,000**
Information Technology New Projects												
	2	Financial & Admin System	$ 6,140,200	$ -	$ -	$ 6,140,200	$ -	$ 2,800,200	$ 340,000	$ 1,000,000	$ 1,000,000	$ 1,000,000
	2	Harris Center Epic Electronic Health Record Implementation	$ 16,680,389	$ 5,242,559	$ 11,437,830	$ -	$ -	$ -	$ 16,680,389	$ -	$ -	$ -
	2	Harris County Jail Epic Electronic Health Record Implementation	$ 6,538,029	$ -	$ 6,538,029	$ -	$ -	$ -	$ 6,538,029	$ -	$ -	$ -
	4	Health Information System	$ 15,216,890	$ -	$ -	$ 15,216,890	$ -	$ 8,278,700	$ 6,488,190	$ 250,000	$ 200,000	$ -
	4	IT Infrastructure	$ 18,234,538	$ -	$ -	$ 18,234,538	$ -	$ 6,371,202	$ 2,500,512	$ 4,034,338	$ 4,028,486	$ 1,300,000
		Sub-Total (New Projects)	**$ 62,810,046**	**$ 5,242,559**	**$ 17,975,859**	**$ 39,591,628**	**$ -**	**$ 17,450,102**	**$ 32,547,120**	**$ 5,284,338**	**$ 5,228,486**	**$ 2,300,000**
		Total Capital Cost	**$ 408,824,373**	**$ 30,242,559**	**$ 36,035,859**	**$ 342,545,955**	**$ 40,854,017**	**$ 119,210,973**	**$ 123,656,980**	**$ 59,023,917**	**$ 35,202,486**	**$ 30,876,000**
		Estimated Operating Impact:						**$ 40,000**	**$ 7,272,805**	**$ 9,053,856**	**$ 10,232,290**	**$ 10,910,139**

***Project Prioritization:** (1) - Fire/Life Safety, (2) - Continuity of Government, (3) - Regulatory or Legal Mandate, (4) - Operational Savings or Value Enhancement
Total Project Estimate - Total estimated funding required over the next 5 fiscal years.
Reimbursements - Anticipated Federal, State, or other funding that can offset the potential debt incurred from the project. This could include proceeds from the sale of other assets.
HC Capital Funding - The remaining cost of the project after reimbursements are realized.
Funded to Date - Total funding the project has received in prior fiscal years.

Harris County FY 2020 Capital Improvement Program

Project Name:	Hospitals Glazing System Replacement	**Estimated Project Cost:**	$16,000,000
		Operating Cost Impact:	$0
Category:	Capital Repair and Maintenance	**Funded to Date:**	$1,500,000
Priority:	Fire-Life Safety	**Expected Completion:**	2nd Quarter, FY 2023
		Funding Source:	Harris Health Capital Funding

Project Description/ Justification:

Current glazing systems are aged and compromised creating moisture and mold risk to patient care areas. Installation of new electrochromic glazing systems will meet current City of Houston code compliant condition, elimination of moisture intrusion, wind, impact, and energy requirements. As an added benefit, the self-tinting glass eliminates the necessity for binds. The tint level in the glass can be manually controlled to provide patient privacy or dynamically controlled based on the ambient light level conditions.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$16,000,000	$1,500,000	$5,000,000	$5,000,000	$4,500,000	$0	$0

Annual Operating Budget Impact:

N/A. This project repairs infrastructure for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name:	Hospitals/Clinics Repair and Maintenance/Replacement: Other	**Estimated Project Cost:**	$2,608,138
		Operating Cost Impact:	$0
Category:	Capital Repair and Maintenance	**Funded to Date:**	$0
Priority:	Fire-Life Safety	**Expected Completion:**	2nd Quarter, FY 2022
		Funding Source:	Harris Health Capital Funding

Project Description/ Justification:

Ongoing programmed replacement for facilities major repair/replacement of systems that cannot be categorized as MEP/roofing. Examples of these items include liquid oxygen tanks, sprinkler systems, fire doors, exterior façade replacement, parking structures, etc.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$2,608,138	$0	$608,138	$500,000	$500,000	$500,000	$500,000

Annual Operating Budget Impact:

N/A. This project repairs infrastructure for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name:	Hospitals/Clinics Repair and Maintenance/Replacement : MEP	**Estimated Project Cost:**	$19,400,000
		Operating Cost Impact:	$0
Category:	Capital Repair and Maintenance	**Funded to Date:**	$0
Priority:	Continuity of Government	**Expected Completion:**	Ongoing program
		Funding Source:	Harris Health Capital Funding

Project Description/ Justification:

Ongoing programmed replacement for facilities mechanical, electrical, and plumbing (MEP) systems. Replacement includes design and modernization of systems.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$19,400,000	$0	$5,800,000	$4,900,000	$2,700,000	$3,000,000	$3,000,000

Annual Operating Budget Impact:

N/A. This project replaces infrastructure for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name:	Hospitals/Clinics Repair and Maintenance: Vertical Transport	**Estimated Project Cost:**	$4,357,101
		Operating Cost Impact:	$0
Category:	Capital Repair and Maintenance	**Funded to Date:**	$21,501
Priority:	Continuity of Government	**Expected Completion:**	2nd Quarter, FY 2022
		Funding Source:	Harris Health Capital Funding

Project Description/ Justification:

Four year strategic project to modernize and refresh existing vertical transportation systems at Ben Taub and LBJ Hospitals. Current year and remaining costs (projected) are noted for budget review.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$4,357,101	$21,501	$3,585,600	$750,000	$0	$0	$0

Annual Operating Budget Impact:

N/A. This project repairs infrastructure for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name:	Central Plant Conversion Thermal Energy (TECO) – Ben Taub	**Estimated Project Cost:**	$20,503,976
		Operating Cost Impact:	$0
Category:	Capital Repair and Maintenance	**Funded to Date:**	$20,303,976
Priority:	Continuity of Government	**Expected Completion:**	4th Quarter, FY 2020
		Funding Source:	Harris Health Capital Funding

Project Description/ Justification:

Ben Taub Central Plant transition from internally generated utilities to a delivered utilities model from TECO Corporation, providing improved reliability, quality and reduction of future capital expenditures and creating electrical capacity for operating room expansion and future growth. Project consists of TECO connection fees and lateral costs, design fees, construction costs.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$20,503,976	$20,303,976	$200,000	$0	$0	$0	$0

Annual Operating Budget Impact:

N/A. This project replaces infrastructure for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name:	Hospitals Repair and Maintenance: Roofing	**Estimated Project Cost:**	$1,751,224
		Operating Cost Impact:	$0
Category:	Capital Repair and Maintenance	**Funded to Date:**	$0
Priority:	Continuity of Government	**Expected Completion:**	2nd Quarter, FY 2021
		Funding Source:	Harris Health Capital Funding

Project Description/ Justification:

Ongoing programmed replacement for Ben Taub and LBJ Hospital roofing components. Replacement includes design and modification to current building code requirements, i.e., slope/curbing.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$1,751,224	$0	$1,751,224	$0	$0	$0	$0

Annual Operating Budget Impact:

N/A. This project repairs infrastructure for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name:	Holly Hall Demo and Build-Out	**Estimated Project Cost:**	$4,600,000
		Operating Cost Impact:	$0
Category:	Renovation and Demo	**Funded to Date:**	$0
Priority:	Fire-Life Safety	**Expected Completion:**	2nd Quarter, FY 2022
		Funding Source:	Harris Health Capital Funding

Project Description/ Justification:

In 2017 a study for the renovation of the Holly Hall administration building was completed and determined the cost to renovate and modernize the facility exceeded the value of the building. This project is to fund the relocation of the Harris Health System Administrative functions located at Holly Hall and 9240/9250 Kirby locations and demolition of the existing structure after the property is vacated. Various population health initiatives to support and improve the health of Harris County residents are being considered for future development of this property.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$4,600,000	$0	$2,100,000	$2,500,000	$0	$0	$0

Annual Operating Budget Impact:

N/A. This project retrofits infrastructure for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name: LBJ Lab Renovation

Category: Renovation and Demo

Priority: Fire-Life Safety

Estimated Project Cost: $5,316,905

Operating Cost Impact: $0

Funded to Date: $2,442,826

Expected Completion: 4th Quarter, FY 2021

Funding Source: Harris Health Capital Funding

Project Description/ Justification:

Lab reconfiguration is required to accommodate installation of new analyzers, replacement of installed non-repairable equipment items, and to create better efficiency of office space & storage to the central core for better efficiency. The current layout prevents installation of current standard of practice automated chemistry analyzer which requires a much more open area. Work load has increased and there is demand for faster turnaround time from our clinicians, mostly from the emergency center. The current laboratory arrangement in the space we have adversely affects our ultimate goal of providing good quality and effective patient care in a timely manner.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$5,316,905	$2,442,826	$2,374,079	$500,000	$0	$0	$0

Annual Operating Budget Impact:

N/A. This project renovates infrastructure for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name: LBJ Pharmacy USP 800

Category: Renovation and Demo

Priority: Fire-Life Safety

Estimated Project Cost: $4,030,714

Operating Cost Impact: $0

Funded to Date: $142,437

Expected Completion: 2nd Quarter, FY 2021

Funding Source: Harris Health Capital Funding

Project Description/ Justification:

Renovation of existing hospital pharmacy to meet all USP 800, 797, & 795 compliance regulations; and, will also include modifications to the HVAC system and layout which is required to accommodate a new USP-800 compliant HD compounding pharmacy: Inpatient Pharmacy - renovation of the existing pharmacy space to include expanded inpatient pharmacy work space; Pharmacy Administration - relocation to existing inpatient pharmacy for improved workflow; Outpatient Pharmacy – relocate and build-out of shell space in connector to accommodate outpatient pharmacy program which includes pharmacy work area, queuing area, and waiting area; corridor - renovation of corridor/waiting space adjacent to the affected existing spaces as required to provide access; chapel - relocation of chapel that is displaced to accommodate the USP 800 compounding pharmacy into renovated existing space; HR office space: relocation of HR office space that will be displaced by USP 800 compounding pharmacy; identify services for future build-out of the remaining shell space in the connector to selected office, registration, or physical therapy space. Architect for this project is Page, Inc, CMAR for the construction phase of the project is Linbeck Group, LLC.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$4,030,714	$142,437	$3,888,277	$0	$0	$0	$0

Annual Operating Budget Impact:

N/A. This project renovates infrastructure for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name: Smith Clinic Pharmacy USP 800

Estimated Project Cost: $1,341,159

Operating Cost Impact: $0

Category: Renovation and Demo

Funded to Date: $901,159

Priority: Fire-Life Safety

Expected Completion: 3rd Quarter, FY 2020

Funding Source: Harris Health Capital Funding

Project Description/ Justification:

Renovation of existing pharmacy to meet all USP 800, 797, & 795 compliance regulations; and, will also include modifications to the HVAC system and layout which is required to accommodate a new USP-800 compliant HD compounding pharmacy.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$1,341,159	$901,159	$440,000	$0	$0	$0	$0

Annual Operating Budget Impact:

N/A. This project renovates infrastructure for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name: BT EC Renovation Project

Category: Renovation and Demo

Priority: Continuity of Government

Estimated Project Cost: $47,222,036

Operating Cost Impact: $0

Funded to Date: $9,583,811

Expected Completion: 2nd Quarter, FY 2023

Funding Source: Debt Service; Harris Health Capital Funding; HCHD Foundation

Project Description/ Justification:

This project will renovate and expand the existing Emergency Department, to improve patient and staff satisfaction; improve efficiency to provide care and improve accessibility to services. The renovations will focus on creating efficient flows within the department and other departments in the Hospital and improve flexibility. The renovation will take place within the existing footprint on Level 1, which will remain operational 24/7. Phasing will be required to accomplish the renovation and minimized disruption to the existing Emergency and Radiology departments and provide the required support spaces in accordance with applicable codes and standards. The renovation includes: 102 new private treatment spaces (increase of approx. 20% in the number of treatment spaces); all code required support spaces (staff areas, supply storage, public spaces, work areas) associated with the emergency department; reconfiguration of the existing inpatient radiology department, resulting in the consolidation of spaces for a more efficient footprint and proximity of certain functions to the emergency department; reconfiguration of the existing drop-off entry, consisting on the replacement of the existing entry door, with a new vestibule and automatic sliding glass doors; modifications to the drive for additional support columns and paving extension required for the removal of the existing accessible parking spots; renovation to the existing prisoner waiting area, including entry door relocation, and relocation of waiting areas for male and female.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$47,222,036	$9,583,811	$21,975,365	$11,662,860	$4,000,000	$0	$0

Annual Operating Budget Impact:

N/A. This project renovates infrastructure for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name: LBJ Optimization/Redesign

Category: Renovation and Demo

Priority: Operational Savings or Value Enhancement

Estimated Project Cost: $28,500,000

Operating Cost Impact: $1,000,000

Funded to Date: $250,000

Expected Completion: 2nd Quarter, FY 2023

Funding Source: Harris Health Capital Funding

Project Description/ Justification:

LBJ Campus redesign initiative budget estimate was increased to include design/build of a vertical parking structure to accommodate current staff. The parking structure is necessary to create space on the campus to accommodate near term initiatives and identified future expansion options; high level analysis of Civil, MEP infrastructure requirements; evaluate two (2) Central Plant Mechanical growth strategies via narrative; pedestrian and automotive site circulation studies; key growth area stacking diagrams which may include bed towers, OR, Sterile Core, Imaging; soil analysis in the key future building locations; high-level budget and phasing/schedule strategies; departmental growth projections for key departments (ORs, ED, radiology, infusion, pharmacy, inpatient beds) identifying 5-10 year needs; this project will also address critical needs for the facility that are must do/short lead items over the next 24 months that will impact regulatory and life safety compliance.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$28,500,000	$250,000	$10,000,000	$10,000,000	$8,250,000	TBD	TBD

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
Maintenance	$0	$0	$0	$500,000	$500,000
Total	$0	$0	$0	$500,000	$500,000

Harris County FY 2020 Capital Improvement Program

Project Name:	Casa de Amigos Clinic Expansion	**Estimated Project Cost:**	$10,000,000
		Operating Cost Impact:	$0
Category:	New Facility/Expansion	**Funded to Date:**	$156,000
Priority:	Operational Savings or Value Enhancement	**Expected Completion:**	2nd Quarter, FY 2022
		Funding Source:	Harris Health Capital Funding

Project Description/ Justification:

Casa de Amigos clinic is being expanded and updated to meet facility guidelines institute (FGI) 2018 design standards for outpatient clinics. Harris Health is consolidating services performed at Casa de Amigos Health Center and La Nueva Casa (leased site) clinic to improve services provided and reduce safety risks and patient inconvenience created by travel between the two clinic sites. The design firm for the project is Philo Wilke architects and has completed the programming phase for the clinical service lines. Harris Health System is currently in review of the final schematic design package to consolidate all services within one campus. The design development phase is scheduled to begin in October 2019.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$10,000,000	$156,000	$7,844,000	$2,000,000	$0	$0	$0

Annual Operating Budget Impact:

N/A. This project renovates infrastructure for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name: Danny Jackson Clinic Specialty Clinic Expansion

Category: New Facility/Expansion

Priority: Operational Savings or Value Enhancement

Estimated Project Cost: $7,409,474

Operating Cost Impact: $5,500,000

Funded to Date: $3,495,224

Expected Completion: 2nd Quarter, FY 2021

Funding Source: Harris Health Capital Funding

Project Description/ Justification:

This project included the procurement of the Danny Jackson Clinic (Jan 2018) and adjacent lot located at 5503 N. Fry Road, Katy,77449 for the purpose of building out the clinic's shelled 2nd floor to support specialty clinic services and required parking for patients and staff. The project design performed by HDR, Inc has been completed. Construction for the parking lot and services was awarded to Wade Con and is in progress; clinic construction package is pending final Harris Health Board of Trustees approval and is expected to begin 4th Qtr, FY 2020.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$7,409,474	$3,495,224	$3,914,250	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
Utilities	$0	$25,000	$25,000	$25,000	$25,000
Maintenance	$0	$975,000	$1,475,000	$1,475,000	$1,475,000
Total	$0	**$1,000,000**	**$1,500,000**	**$1,500,000**	**$1,500,000**

Harris County FY 2020 Capital Improvement Program

Project Name: QM Redesign

Category: New Facility/Expansion

Priority: Value to Constituents

Estimated Project Cost: $39,500,000

Operating Cost Impact: $0

Funded to Date: $2,057,083

Expected Completion: 2nd Quarter, FY 2023

Funding Source: Harris Health Capital Funding

Project Description/ Justification:

Quentin Mease Health Center is being renovated to accommodate the relocation of services provided at the Thomas Street and Riverside Dialysis Health Centers, continue rehabilitation and physical therapy services, and provide outpatient endoscopy services. The facilities entire infrastructure and life safety systems are being replaced and updated to meet current NFPA 2012 Life Safety code and designed to meet facility guidelines institute (FGI) 2018 design standards for outpatient clinics. The project architect is HDR and has completed the programming and schematic design phases for the clinical service lines and support infrastructure and is currently in review of the final design development package to consolidate all services within one campus. The project construction phase will be executed through a CMAR agreement with Linbeck Group, LLC and is estimated to begin 4th quarter, FY 2020.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$39,500,000	$2,057,083	$10,016,338	$20,500,000	$6,926,579	$0	$0

Annual Operating Budget Impact:

N/A. This project renovates infrastructure for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name: Medical Equipment – Routine Replacement

Category: Medical Equipment

Priority: Continuity of Government

Estimated Project Cost: $51,351,600

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: Ongoing

Funding Source: Harris Health Capital Funding

Project Description/ Justification:

Ongoing cyclic replacement of medical equipment devices that have reached their end of life, are obsolete, or are problematic to maintain and continue support.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$51,351,600	$0	$9,881,500	$10,107,000	$11,363,100	$10,000,000	$10,000,000

Annual Operating Budget Impact:

N/A. This project replaces equipment for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name: Medical Equipment – Strategic

Estimated Project Cost: $32,248,400

Operating Cost Impact: $0

Category: Medical Equipment

Funded to Date: $0

Priority: Continuity of Government

Expected Completion: Ongoing

Funding Source: Harris Health Capital Funding

Project Description/ Justification:

Strategic, programmed implementation of critical, complex medical equipment devices and systems that are typically staged over several fiscal years. Examples include physiological monitoring systems replacement and upgrade projects, intensive care bed fleets, ultrasound devices and probes, and operating room devices.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$32,248,400	$0	$4,118,500	$6,693,000	$7,436,900	$7,000,000	$7,000,000

Annual Operating Budget Impact:

N/A. This equipment procured by this project will be serviced by the existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name: Medical Equipment – New/Expansion

Category: Medical Equipment

Priority: Operational Savings or Value Enhancement

Estimated Project Cost: $7,300,000

Operating Cost Impact: $2,130,000

Funded to Date: $0

Expected Completion: Ongoing

Funding Source: Harris Health Capital Funding

Project Description/ Justification:

Ongoing program for procurement of identified new items of medical equipment required due to growth, expansion of facilities, renovation and implementation of state of the art devices to improve quality of care.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$7,300,000	$0	$1,300,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
Maintenance	$0	$195,000	$420,000	$645,000	$870,000
Total	**$0**	$195,000	$420,000	$645,000	$870,000

Harris County FY 2020 Capital Improvement Program

Project Name: Harris County Jail Health – CT Scanner and Other items

Category: Medical Equipment

Priority: Operational Savings or Value Enhancement

Estimated Project Cost: $9,560,000

Operating Cost Impact: $2,568,000

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service, Harris Health Capital Funding

Project Description/ Justification:

Evaluation and possible installation of a Computed Tomography (CT) device and associated infrastructure modifications for use at the County jail. The project is pending evaluation of need and assessment of a proposed location for the device.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$9,560,000	$0	$0	$8,060,000	$500,000	$500,000	$500,000

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
Maintenance	$0	$0	$806,000	$856,000	$906,800
Total	$0	$0	$806,000	$856,000	$906,000

Harris County FY 2020 Capital Improvement Program

Project Name:	HHS Non-Clinical Other	**Estimated Project Cost:**	$3,850,000
		Operating Cost Impact:	$0
Category:	Other	**Funded to Date:**	$0
Priority:	Continuity of Government	**Expected Completion:**	Ongoing
		Funding Source:	Harris Health Capital Funding

Project Description/ Justification:
Ongoing programmed replacement for equipment and devices that are not categorized as facility infrastructure or medical equipment. This includes various items required for housekeeping, food and nutrition, pharmacy, and security services that are beyond useful life, modernized and replaced as required.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$3,850,000	$0	$1,250,000	$650,000	$650,000	$650,000	$650,000

Annual Operating Budget Impact:
N/A. This project replaces equipment for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name:	HHS Vehicle Replacement	**Estimated Project Cost:**	$3,363,600
		Operating Cost Impact:	$0
Category:	Capital Repair and Maintenance	**Funded to Date:**	$0
Priority:	Continuity of Government	**Expected Completion:**	Ongoing
		Funding Source:	Harris Health Capital Funding

Project Description/ Justification:
Cyclic replacement of various high mileage and end of life vehicles that are required to support Harris Health System clinical, administrative, and support functions.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$3,363,600	$0	$863,600	$625,000	$625,000	$625,000	$625,000

Annual Operating Budget Impact:
N/A. This project replaces vehicles for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name:	Network Technology Refresh	**Estimated Project Cost:**	$2,800,000
		Operating Cost Impact:	$0
Category:	Information Technology	**Spent to Date:**	$0
Priority:	Continuity of Government	**Expected Completion:**	4th Quarter, FY 2024
		Funding Source:	Harris Health Capital Funding

Project Description/ Justification:

The configuration of the network infrastructure for all of Harris Health System currently includes approximately 500 Cisco devices (routers and switches). Depending on the device, the router or switch needs to be replaced every 5 to 7 years, which follows Cisco's industry best practice of PPDIOO or Prepare, Plan, Design, Implement, Operate, and Optimize. This methodology lowers the total cost of network ownership, increases network availability, improves business agility and speeds access to applications and services.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$2,800,000	$0	$450,000	$762,000	$388,000	$799,000	$401,000

Annual Operating Budget Impact:

N/A. This project replaces infrastructure for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name: Server Technology Refresh

Estimated Project Cost: $17,500,000

Operating Cost Impact: $0

Category: Information Technology

Spent to Date: $0

Priority: Continuity of Government

Expected Completion: 4th Quarter, FY 2024

Funding Source: Harris Health Capital Funding

Project Description/ Justification:

We currently have the following number of servers:

- 127 Unix servers
- 2,137 Windows servers
- 22 application servers
- 2,286 total servers

It is our policy to replace our servers every 4 years. This is to ensure the servers have not reached their end of life and support is available from the manufacturer. We intend to renew 25% of the servers each year.

We pay maintenance on the existing servers so when new servers are purchased, the maintenance on the old servers is replaced with maintenance on the new servers.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$17,500,000	$0	$3,500,000	$3,500,000	$3,500,000	$3,500,000	$3,500,000

Annual Operating Budget Impact:

N/A. This project replaces infrastructure for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name:	Storage Technology Refresh	**Estimated Project Cost:**	$4,500,000
		Operating Cost Impact:	$0
Category:	Information Technology	**Spent to Date:**	$0
Priority:	Continuity of Government	**Expected Completion:**	4th Quarter, FY 2024
		Funding Source:	Harris Health Capital Funding

Project Description/ Justification:

IT data storage environments are integrated hardware and software systems used to capture, manage and prioritize the data generated by applications such as Epic, PeopleSoft, PACS and other enterprise systems. It is our policy to refresh each data storage system every four to five years. The $700,000 included in FY21, FY22 and FY24 allows us to refresh the storage system with similar updated technology. The $1,700,000 included in FY23 allows us to replace an entire storage system with the most current technology.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$4,500,000	$0	$700,000	$700,000	$1,700,000	$700,000	$700,000

Annual Operating Budget Impact:

N/A. This project replaces infrastructure for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name: Telephone System

Category: Information Technology

Priority: Continuity of Government

Estimated Project Cost: $1,000,000

Operating Cost Impact: $200,000

Spent to Date: $0

Expected Completion: 4th Quarter, FY 2024

Funding Source: Harris Health Capital Funding

Project Description/ Justification:

The replacement of the old antiquate PBX telephone system will be replaced by the beginning of 2020 with a new state of the art Voice Over IP telephone system. The additional money needed over the next 5 years will be used for organic growth and enhancements.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$1,000,000	$0	$200,000	$200,000	$200,000	$200,000	$200,000

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
Maintenance	$40,000	$40,000	$40,000	$40,000	$40,000
Total	$40,000	$40,000	$40,000	$40,000	$40,000

Harris County FY 2020 Capital Improvement Program

Project Name:	Financial and Administrative Systems	**Estimated Project Cost:**	$6,140,200
		Operating Cost Impact:	$0
Category:	Information Technology	**Spent to Date:**	$0
Priority:	Continuity of Government	**Expected Completion:**	4th Quarter, FY 2024
		Funding Source:	Harris Health Capital Funding

Project Description/ Justification:

To stay current and annual upgrade of software and hardware for PeopleSoft, Kronos, Identity Management System, Learning Management System and Visual Cactus

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$6,140,200	$0	$2,800,200	$340,000	$1,000,000	$1,000,000	$1,000,000

Annual Operating Budget Impact:

N/A. This project upgrades software for which there is an existing maintenance budget.

Harris County FY 2020 Capital Improvement Program

Project Name:	Harris Center Epic Electronic Health Record Implementation	**Estimated Project Cost:**	$16,680,389
		Operating Cost Impact:	$16,061,004
Category:	Information Technology	**Spent to Date:**	$0
Priority:	Continuity of Government	**Expected Completion:**	3rd Quarter, FY 2021
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

The Information Technology team at Harris Health will be working to extend the Epic Electronic Medical Record or "EMR" to the Harris Center, bringing more of the electronic health infrastructure on to the same EMR platform, substantially improving care coordination and collaboration among the County related health care providers.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$16,680,389	$0	$16,680,389	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
Maintenance	$0	$4,015,251	$4,015,251	$4,015,251	$4,015,251
Total	$0	$4,015,251	$4,015,251	$4,015,251	$4,015,251

Harris County FY 2020 Capital Improvement Program

Project Name:	Harris County Jail Epic Electronic Health Record Implementation	**Estimated Project Cost:**	$6,538,029
		Operating Cost Impact:	$5,541,736
Category:	Information Technology	**Spent to Date:**	$0
Priority:	Continuity of Government	**Expected Completion:**	3rd Quarter, FY 2021
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

The Information Technology team at Harris Health will be working to extend the Epic Electronic Medical Record or "EMR" to the Harris County Jail Health, bringing more of the electronic health infrastructure on to the same EMR platform, substantially improving care coordination and collaboration among the County related health care providers.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$6,538,029	$0	$6,538,029	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
Maintenance	$0	$1,385,434	$1,385,434	$1,385,434	$1,385,434
Total	$0	$1,385,434	$1,385,434	$1,385,434	$1,385,434

Harris County FY 2020 Capital Improvement Program

Project Name:	Health Information Systems	**Estimated Project Cost:**	$15,216,890
		Operating Cost Impact:	$5,327,937
Category:	Information Technology	**Spent to Date:**	$0
Priority:	Operational Savings or Value Enhancement	**Expected Completion:**	4th Quarter, FY 2024
		Funding Source:	Harris Health Capital Funding

Project Description/ Justification:

Health Information Systems or "HIS" are systems that captures, stores, transmits, or otherwise manages health data or activities. Examples of HIS that the organization would like to implement over the next four years are the following: Enterprise Imaging for Radiology and Dental, Epic Inpatient Inventory, Pharmacy Robotics, Willow Ambulatory Point of Sale, Real Time Analytics, Artificial Intelligence Stroke Triage, Radiation Oncology Treatment Planning System, EpicCare Rehab, Learning Management System replacement, Quality Management System, and an Intranet Analytics tool.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$15,216,890	$0	$8,278,700	$6,488,190	$250,000	$200,000	$0

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
Maintenance	$0	$827,870	$1,476,689	$1,501,689	$1,521,689
Total	$0	$827,870	$1,476,689	$1,501,689	$1,521,689

Harris County FY 2020 Capital Improvement Program

Project Name: IT Infrastructure

Category: Information Technology

Priority: Operational Savings or Value Enhancement

Estimated Project Cost: $18,234,539

Operating Cost Impact: $4,508,350

Spent to Date: $0

Expected Completion: 4th Quarter, FY 2024

Funding Source: Harris Health Capital Funding

Project Description/ Justification:

This would be our strategic projects related to infrastructure, which would include the following: Inpatient Digital Experience, call center agent, SQL AlwaysOn, Tableau, HANAish (InMem Real Time Analytics) – Business Intelligence, Clinical Practice Model, Emporos replacement, Enterprise Scanning storage, Upgrade to MS Sharepoint 2019 (additional hardware), InfoPath replacement, Database real time application refresh, Gateway to control API data, and Healthy Planet link.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
$18,234,539	$0	$6,371,202	$2,500,513	$4,034,338	$4,028,486	$1,300,000

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
Maintenance	$0	$637,120	$887,171	$1,290,605	$1,693,454
Total	$0	$637,120	$887,171	$1,290,605	$1,693,454



PORT HOUSTON℠
THE INTERNATIONAL PORT OF TEXAS

Capital Improvement Program

Port Houston

Mid-year CIP Update for Calendar year 2020

Roger D. Guenther
Executive Director
August 23, 2019

August 23, 2019

PORT HOUSTON
THE INTERNATIONAL PORT OF TEXAS

Harris County Commissioners Court
Port of Houston Authority Capital Improvement Program
Mid-year update for Calendar Year 2020

On behalf of the Port Commission and Port of Houston Authority ("Port Houston") staff, I am pleased to present this Capital Improvement Program ("CIP") overview for the upcoming calendar year 2020. This CIP is aligned with our mission to promote economic development and job creation while ensuring safe and efficient navigable waterways for commerce along the Houston Ship Channel (the "Channel").

Port Houston plans and executes its **Capital Asset Strategy** in a manner which maximizes safety, efficient growth for Port Houston and the region, and Channel productivity for all our stakeholders. By reinvesting 100% of the cash generated by operations into the CIP and carefully prioritizing capital projects and community spend, Port Houston has been able to avoid new debt issuance since 2010. Additionally, last year we executed the most recent bond refunding, which generated $48 million in debt service savings for the Harris County taxpayers.

Harris County property taxes will fund $50 million in debt service payments in calendar year 2020 against principal and interest outstanding of $970 million as of December 31, 2018.

All capital projects, other than Harris County's Port Road which will be funded by State grant and Port funds, will be supported exclusively from the Port's cash generated by operations. This includes funding, perhaps as early as next year, of design costs associated with the Channel widening and deepening project (the "project"). Sources of funding the construction costs for the project, which could begin as early as 2021 and for which timing and amounts are still evolving, are being evaluated.

Following is a summary of the major projects we have planned for calendar year 2020; this is considered preliminary information pending approval by the Port Commission in November of the operating and capital budgets for next year.

If you have any questions on this material, please contact my office.

Sincerely,

Roger D. Guenther
Executive Director

Port of Houston Authority ("PHA") 2020 CIP

Category	Location, Entity	Project Description	Project Cost	Funding Source	PHA Funding	Other Funding
Strategic Growth	**Barbours Cut Container Terminal**	Rebuild Maintenance Facility	$20,300,000	PHA	$20,300,000	-
		Construction of Container Yard ("CY") 2 Mid-South	20,030,000	PHA	20,030,000	-
		Administration Building	10,000,000	PHA	10,000,000	-
		Gate Expansion	1,800,000	PHA	1,800,000	-
		Subtotal Barbours Cut Terminal	**52,130,000**		**52,130,000**	
	Bayport Container Terminal	CY2 South Construction	22,800,000	PHA	22,800,000	-
		9 Rubber Tired Gantry cranes for CY2 South	17,145,000	PHA	17,145,000	-
		Port Road Phase 3	16,361,345	PHA/TxDOT	16,361,345	$9,675,000
		Manage Dredge Placement Area Material	6,835,000	PHA	6,835,000	-
		Subtotal Bayport Terminal	**63,141,345**		**63,141,345**	**9,675,000**
	Channel Development	Accelerated Channel Expansion Design	40,000,000	PHA	40,000,000	-
	Project & Construction Management	Project Management Support	5,000,000	PHA	5,000,000	-
	Bayport Railroad	PTRA Track, Mainline Red Bluff to Bayport-ROW	4,600,000	PHA	4,600,000	-
	Container Terminals	Various Wharf and Wharf crane design and rebuild	4,420,000	PHA	4,420,000	-
	Real Estate Admin	Development of Bayport South	2,700,000	PHA	2,700,000	-
	Fire	Construction of Fireboat Dock at Bayport	2,000,000	PHA	2,000,000	-
	Information Technology	JD Edwards (ERP) Enhancements	1,100,000	PHA	1,100,000	-
		Strategic Growth Total	**175,091,345**		**175,091,345**	**9,675,000**
Recapitalization						
	Turning Basin - Northside	Wharf Rehabilitation for Manchester Wharf 2	10,000,000	PHA	10,000,000	-
		Rehabilitate Wharf City Dock ("CD") 9	6,000,000	PHA	6,000,000	-
		Transit Shed Restrooms Construction	5,000,000	PHA	5,000,000	-
		Transit Shed Roof at CD 30-31	1,600,000	PHA	1,600,000	-
		Design of Rehabilitation of Wharf 8	500,000	PHA	500,000	-
		Dock Lighting for CD17/CD20	465,000	PHA	465,000	-
		Fender System CD1W Design	150,000	PHA	150,000	-
		Subtotal Turning Basin - Northside Terminal	**23,715,000**		**23,715,000**	
	Information Technology	Container Terminal Wireless Upgrade	800,000	PHA	800,000	-
		IT Infrastructure Refresh & Expansion	300,000	PHA	300,000	-
		Storage Upgrade & Refresh	200,000	PHA	200,000	-
		Turning Basin Wireless implementation	200,000	PHA	200,000	-
		VmWare NSX	180,000	PHA	180,000	-
		Subtotal Information Technology	**1,680,000**		**1,680,000**	
	Real Estate Admin	Pavilion Redevelopment for Sam Houston	1,200,000	PHA	1,200,000	-
		Spilman Island Bridge	1,000,000	PHA	1,000,000	-
		Subtotal Real Estate	**2,200,000**		**2,200,000**	
	Various Locations	Vehicles	1,785,000	PHA	1,785,000	-
	Fire	Fire Engine Bayport	550,000	PHA	550,000	-
		Recapitalization Total	**29,930,000**		**29,930,000**	
Channel Development						
	Channel Development	Turning Basin Maintenance Dredging (multiple terminals)	7,657,000	PHA	7,657,000	-
		PHA Cost Share for HSC Placement Area maintenance	4,540,000	PHA	4,540,000	-
		Turning Basin Maintenance Dredge Placement Fees	3,175,500	PHA	3,175,500	-
		PHA Cost Share for HSC Levee Raise construction	2,500,000	PHA	2,500,000	-
		Bayport Auto Terminal Maintenance Dredging	1,320,000	PHA	1,320,000	-
		Environmental Lab Testing	120,000	PHA	120,000	-
		Channel Development Total	**19,312,500**		**19,312,500**	
Other Infrastructure						
	Container Operations Maintenance	Maintenance Projects - Equipment, Dock & Yard Projects	5,902,350	PHA	5,902,350	-
	Turning Basin Maintenance	Maintenance Projects - Equipment, Dock & Yard Projects	1,395,000	PHA	1,395,000	-
	Port Security	Fence, Gate, Emergency Management	868,000	PHA	868,000	-
	Information Technology	Data Warehouse & SharePort Assessment	215,000	PHA/DHS	215,000	326,667
		Other Infrastructure Total	**8,380,350**		**8,380,350**	**326,667**
		Port of Houston Authority 2020 CIP	**$232,714,195**		**$232,714,195**	**$10,001,667**

"HSC" - Houston Ship Channel

HARRIS COUNTY, TEXAS

BUDGET MANAGEMENT DEPARTMENT

Administration Building
1001 Preston, Suite 500
Houston, TX 77002
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September 24, 2019

To: County Judge Hidalgo and
Commissioners Ellis, Garcia,
Radack, and Cagle

Subject: Miscellaneous Capital Projects

The Budget Management Department is submitting for review and discussion the attached miscellaneous capital projects in the amount of $8,223,907. These miscellaneous capital projects are initiatives that do not fall within the framework of the departments that normally participate in CIP.

2020 CIP - Miscellaneous 5 Year Funding Plan

Project Category	Project Prioritization*	Project Name	Total Project Estimate	Reimbursements	HC Capital Funding	Funded To Date	Sept. 1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug. 31, 2021	Sept. 1, 2021-Aug. 31, 2022	Sept. 1, 2022-Aug.31, 2023	Sept. 1, 2023-Aug.31, 2024
New Projects											
	1	HazMat Response Equipment - HCFMO	$ 2,120,000	$ -	$ 2,120,000	$ -	$ 2,120,000	$ -	$ -	$ -	$ -
	1	HazMat Response Equipment - HCPCO	$ 3,274,207	$ -	$ 3,274,207	$ -	$ 3,274,207	$ -	$ -	$ -	$ -
	2	New Voting System	TBD	$ -	TBD	$ -	TBD	TBD	TBD	TBD	TBD
	4	Street-level photography/LIDAR project	$ 2,829,700	$ -	$ 2,829,700	$ -	$ 2,829,700	$ -	$ -	$ -	$ -
		Sub-Total (New Projects)	**$ 8,223,907**	**$ -**	**$ 8,223,907**	**$ -**	**$ 8,223,907**	**$ -**	**$ -**	**$ -**	**$ -**
		Total Capital Cost	**$ 8,223,907**	**$ -**	**$ 8,223,907**	**$ -**	**$ 8,223,907**	**$ -**	**$ -**	**$ -**	**$ -**
						Estimated Operating Impact:	**$ 168,245**	**$ 168,245**	**$ 378,245**	**$ 378,245**	**$ 378,245**

***Project Prioritization:** (1) - Fire/Life Safety, (2) - Continuity of Government, (3) - Regulatory or Legal Mandate, (4) - Operational Savings or Value Enhancement
Total Project Estimate - Total estimated funding required over the next 5 fiscal years.
HC Capital Funding - The remaining cost of the project after reimbursements are realized.
Funded to Date - Total funding the project has received in prior fiscal years.

Harris County FY 2020 Capital Improvement Program

Project Name:	HazMat Response Equipment - HCFMO	**Estimated Project Cost:**	$2,120,000
		Operating Cost Impact:	$72,574
Category:	New Project	**Funded to Date:**	$0
Priority:	Fire/Life Safety	**Expected Completion:**	3rd Quarter, FY 2020
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

This request from the Harris County Fire Marshal's Office (HCFMO) for Hazardous Materials (HazMat) response equipment totals $2.12 million. This includes a total of three vehicles, two foam response vehicles ($435,000 each) and one HazMat quick response vehicle for $350,000, for a total of $1,220,000. Additionally, $407,000 would be utilized to provide an additional facility to provide enhanced response training for first responders throughout Harris County. Finally, $493,000 is for miscellaneous response equipment including: personnel protective equipment (respiratory, chemical protective clothing, etc.), air monitoring equipment, offensive and defensive mitigation implements, and miscellaneous parts, materials, and supplies.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
$2,120,000	$0	$2,120,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Maintenance	$57,050	$57,050	$57,050	$57,050	$57,050
Consumables and Other	$15,524	$15,524	$15,524	$15,524	$15,524
Total	$72,574	$72,574	$72,574	$72,574	$72,574

Harris County FY 2020 Capital Improvement Program

Project Name:	Community Monitoring and Emergency Response Equipment - HCPCS	**Estimated Project Cost:**	$3,274,207
		Operating Cost Impact:	$95,671
Category:	New Project	**Funded to Date:**	$0
Priority:	Fire/Life Safety	**Expected Completion:**	3rd Quarter, FY 2020
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

This request from the Harris County Pollution Control Services (HCPCS) for Hazardous Materials (HazMat) response equipment totals $3.27 million. This includes:

- $1,949,208 for monitoring and testing equipment.
- $1,143,000 is for vehicles ($185k for an aroma mobile air monitoring unit, $90k for a boat, and $860k for 28 miscellaneous vehicles).
- $181,999 for office equipment to support expanded operations.

These capital costs support 29 new positions that will help provide enhanced emergency response capabilities in the future.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
$3,274,207	$0	$3,274,207	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Maintenance	$89,623	$89,623	$89,623	$89,623	$89,623
Consumables and Other	$6,048	$6,048	$6,048	$6,048	$6,048
Total	$95,671	$95,671	$95,671	$95,671	$95,671

Harris County FY 2020 Capital Improvement Program

Project Name:	New Voting System	**Estimated Project Cost:**	TBD
		Operating Cost Impact:	$210,000
Category:	New Project	**Funded to Date:**	$0
Priority:	Regulatory or Legal Mandate	**Expected Completion:**	4th Quarter, FY 2024
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

This project replaces the 20 year-old voting system with new voting machines with greatly improved technology for a to-be-determined amount over the next five years. The technology would be federally and State certified. This project includes approximately 8,500 voting equipment units, e-poll books, storage carts to store voting equipment, and booths to house and provide stands for the voting machines.

Funding Plan:

Total Project Estimate	Funded to Date	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
TBD	$0	TBD	TBD	TBD	TBD	TBD

Annual Operating Budget Impact:

Operating Impacts	Sept.1, 2019-Aug.31, 2020	Sept. 1, 2020-Aug.31, 2021	Sept.1, 2021-Aug.31, 2022	Sept.1, 2022-Aug. 31,2023	Sept.1, 2023-Aug. 31, 2024
Maintenance	$0	$0	$210,000	$210,000	$210,000
Total	$0	$0	$210,000	$210,000	$210,000

The County Clerk has an existing budget of $790,000 to maintain voting machines. The County Clerk estimates that this maintenance budget will need to grow by $210,000, to a total of $1,000,000, to maintain the new replacement voting machines.

Harris County FY 2020 Capital Improvement Program

Project Name:	Street-level photography/LIDAR project	**Estimated Project Cost:**	$2,829,700
		Operating Cost Impact:	$0
Category:	New Project	**Funded to Date:**	$0
Priority:	Fire/Life Safety, Operational Savings or Value Enhancement	**Expected Completion:**	1st Quarter, FY 2020
		Funding Source:	Debt Service - HC Property Tax

Project Description/ Justification:

This project generates high-resolution street-level imagery with light detection and ranging (LIDAR) data acquisition and data extraction (1st floor elevations) services for all of Harris County. The resulting data will be incorporated into several studies and analyses that will be critical for emergency management, engineering, and flood control projects in the future.

Funding Plan:

Total Project Estimate	Funded to Date	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
$2,829,700	$0	$2,829,700	$0	$0	$0	$0

Annual Operating Budget Impact: N/A

FY 2020 – 2021
Capital Improvements Program

Harris County Flood Control District

Russell A. Poppe, P.E.
Executive Director

August 30, 2019

Executive Summary

The Harris County Flood Control District (District) is a special purpose district created by the Texas Legislature in 1937 and governed by Harris County Commissioners Court. The mission of the District is to "**provide flood damage reduction projects that work, with appropriate regard for community and natural values.**"

While the District does not have sole jurisdiction over all drainage and flood-related issues in the county, we partner with other agencies and municipalities to devise and implement more comprehensive plans to reduce flood risk. The scale of this mission is large, and covers:

- 22 watersheds, some of which originate outside of Harris County
- Approximately 1,500 channels totaling more than 2,500 miles in length
- 34 incorporated cities
- 1,777 square miles of territory with more than 443 square miles of defined 1% (100-year) floodplain (25% of the area of Harris County). The amount of area in the county covered by the 1% floodplain is expected to increase when new data from Atlas 14 is taken into consideration.

FLOODING

Flooding is our region's number one natural threat. Devastating floods have impacted Harris County every decade after the District was established. Since 2000, Harris County has experienced more than 23 house-flooding incidents including Tropical Storm Allison, Hurricane Ike, Memorial Day Flood 2015 and Tax Day Flood 2016. In 2017, Hurricane Harvey set new records in Harris County's flooding history. Statistically, we experience some type of structural flooding once every 9 months.

CAPITAL IMPROVEMENT PROGRAM

One year after Harvey, Harris County voters approved $2.5 billion in bonds to finance flood risk reduction projects. The bond program contains a list of needed projects totaling approximately $4.9 billion in value. This value includes $2.4 billion in potential partnership funding that would help leverage District dollars, which is an important part of implementing the bond program.

Since the August 25, 2018, bond election, priority has been given to implementing the bond program projects. Current activities include:

- Over 60% of the bond projects have been initiated
- Roughly $220 million has been encumbered as of July 31, 2019, and $50 million of that expense is bond funds

- Current financial commitments to the active bond program projects amount to approximately $1.7 billion of local funds
- Prioritization guidance for the remaining non-initiated projects has been finalized

The FY 2019/20 District's Five-Year Capital Improvement Program (CIP) outlines an aggressive program to implement approximately $4 billion in projects over the next 5 years, in which 37% of that value is anticipated partner funding. Types of projects funded in this CIP include:

- Channel modifications to improve stormwater conveyance
- Regional stormwater detention basins
- Major repairs to flood-damaged drainage infrastructure
- Removing large amounts of sediment and silt from drainage channels
- Voluntary buyouts of flood-prone properties
- Wetland mitigation banks
- Property acquisition to preserve the natural floodplains
- Drainage improvements in partnership with other cities, other local government agencies, and the federal government
- Upgrading the Harris County Flood Warning System

Each project will continue to include providing community information and engagement via our website, www.hcfcd.org and through public meetings. The actual rate at which the projects listed in the Five-Year CIP can be executed is dependent on many factors including partnership funding, available construction and professional service resources which effects market prices for goods and services provided, property acquisition, and environmental permitting.

Due to growth in the County's tax base, the District expects to see about $135 million per year starting in year 2020 from our tax rate, which is currently set at $0.02877 (out of a maximum of $0.30). These funds will be primarily directed toward our operations and maintenance costs, such as employee salaries and benefits, maintenance activities, infrastructure repairs, and contingency reserve. The majority, if not all of the District capital projects, are anticipated to be funded out of the $2.5 billion in available bonds. The District continues to evaluate our bond project portfolio for efficiencies such as combining projects, pursuing alternative project delivery methods like design-build, and securing partnership funding as more details become available, all of which help minimize our administrative and financial overhead. We will be providing Commissioners Court and the Budget Management Office with periodic updates as appropriate once these efficiencies are identified.

2020 CIP - Harris County Flood Control District 5 Year Funding Plan

Watershed	Project Name (Map ID and Project Title)	Total Project Estimate	Reimbursements	HC Capital Funding	Funded to Date	CIP 2019-2020	CIP 2020-2021	CIP 2021-2022	CIP 2022-2023	CIP 2023-2024	Anticipated Additional Project Costs
Addicks Reservoir											
	C-36 Right-Of-Way Acquisition, Design and Construction of Channel Conveyance Improvements and Bypass Channel for South Mayde Creek	$ 10,000,000	$ 9,000,000	$ 1,000,000	$ -	$ 3,084,029	$ 2,740,224	$ 1,303,544	$ 2,568,838	$ 303,365	$ -
	C-37 Design and Construction of Little York Stormwater Detention Basin	$ 3,000,000	$ 2,500,000	$ 500,000	$ -	$ 1,357,776	$ 1,642,224	$ -	$ -	$ -	$ -
	C-38 Design and Construction of Dinner Creek Stormwater Detention Basin	$ 15,000,000	$ 11,250,000	$ 3,750,000	$ -	$ 2,102,857	$ 4,975,446	$ 7,895,864	$ 25,833	$ -	$ -
	C-40 Corps of Engineers Section 216 Study - Addicks and Barker Reservoirs	$ 3,000,000	$ 3,000,000	$ -	$ -	$ 878,022	$ 1,065,829	$ 1,017,397	$ 38,752	$ -	$ -
	C-46 Right-Of-Way Acquisition, Design and Construction of a Stormwater Detention Basin on South Mayde Creek	$ 16,000,000	$ 14,400,000	$ 1,600,000	$ 478,238	$ 760,074	$ 1,137,504	$ 1,137,504	$ 4,070,365	$ 4,307,210	$ 4,109,105
	C-47 Design and Construction of a Bridge Replacement for Greenhouse Road at South Mayde Creek	$ 15,000,000	$ 13,500,000	$ 1,500,000	$ -	$ -	$ 256,341	$ 1,981,962	$ 2,935,707	$ 6,244,350	$ 3,581,640
	C-48 Right-Of-Way Acquisition, Design and Construction of a Stormwater Detention Basin on South Mayde Creek near the Grand Parkway	$ 94,000,000	$ 84,600,000	$ 9,400,000	$ -	$ 22,287,485	$ 32,580,509	$ 17,630,713	$ 21,501,293	$ -	$ -
	C-52 Rehabilitation of Channels Inside of Addicks Reservoir to Restore Channel Conveyance Capacity	$ 10,000,000	$ -	$ 10,000,000	$ -	$ -	$ -	$ -	$ 3,865,678	$ 2,922,206	$ 3,212,116
	E-01 Addicks Reservoir Subdivision Drainage Improvements	$ 83,770,000	$ 62,827,500	$ 20,942,500	$ 373,110	$ 4,607,443	$ 6,544,189	$ 7,757,864	$ 9,228,985	$ 11,807,970	$ 43,450,439
	F-112 Right-Of-Way Acquisition, Design, and Construction of Wetland Mitigation Bank	$ 20,000,000	$ -	$ 20,000,000	$ 66,023	$ 6,429,754	$ 6,336,911	$ 3,854,500	$ 423,923	$ 2,888,889	$ -
	F-53 Rehabilitation of Channels Upstream of Addicks Reservoir to Restore Channel Conveyance Capacity	$ 30,000,000	$ -	$ 30,000,000	$ 18,952,378	$ 7,680,609	$ 3,367,013	$ -	$ -	$ -	$ -
	F-54 Right-Of-Way Acquisition, Design and Construction of Control Structures and Stormwater Quality Features for the Upper Langham Creek Program	$ 10,000,000	$ -	$ 10,000,000	$ -	$ 2,295,952	$ 5,358,897	$ 600,977	$ 834,747	$ 909,427	$ -
	F-55 Planning, Right-Of-Way Acquisition, Design, and Construction for Ultimate Conveyance on Bear Creek	$ 25,000,000	$ -	$ 25,000,000	$ -	$ -	$ 62,313	$ 4,506,761	$ 6,766,086	$ 4,831,433	$ 8,833,407
	F-56 Right-Of-Way Acquisition, Design, and Construction of a Retention Area	$ 15,000,000	$ -	$ 15,000,000	$ 360,000	$ 5,560,550	$ 4,270,306	$ 4,804,977	$ 4,167	$ -	$ -
	F-83 Right-Of-Way Acquisition, Design and Construction of a Stormwater Detention Basin North of John Pauls Landing for the Upper Langham Creek Program	$ 21,000,000	$ -	$ 21,000,000	$ -	$ 7,743,202	$ 3,871,766	$ 906,037	$ 8,478,995	$ -	$ -
	F-84 Design and Construction of Secondary Outfall for John Pauls Landing for the Upper Langham Creek Program	$ 5,000,000	$ -	$ 5,000,000	$ -	$ -	$ -	$ -	$ -	$ 1,263,095	$ 3,736,905
	Sub-Total (Addicks Reservoir)	**$ 375,770,000**	**$ 201,077,500**	**$ 174,692,500**	**$ 20,229,749**	**$ 64,787,753**	**$ 74,209,472**	**$ 53,398,100**	**$ 60,743,369**	**$ 35,477,945**	**$ 66,923,612**
Armand Bayou											
	C-06 Right-Of-Way Acquisition, Design and Construction of B112-00-00 and Tributaries Conveyance Improvements	$ 10,000,000	$ 8,000,000	$ 2,000,000	$ -	$ 602,420	$ 2,644,626	$ 2,812,253	$ 2,773,070	$ 1,167,631	$ -
	C-07 Design and Construction of the B509-03-00 and B509-04-00 Stormwater Detention Basins	$ 15,000,000	$ 11,250,000	$ 3,750,000	$ -	$ 537,160	$ 1,911,974	$ 2,578,944	$ 3,729,049	$ 4,333,827	$ 1,909,046
	C-44 Armand Bayou Right-of-Way Acquisition and Floodplain Preservation	$ 4,000,000	$ 2,000,000	$ 2,000,000	$ -	$ 490,705	$ 1,729,647	$ 1,729,648	$ 50,000	$ -	$ -
	CI-021 Brookglen Flooding Mitigation Analysis	$ 250,000	$ -	$ 250,000	$ 159,015	$ 90,985	$ -	$ -	$ -	$ -	$ -
	CI-023 Right-Of-Way, Design and Construction of Conveyance Improvements along Horsepen Bayou	$ 6,000,000	$ -	$ 6,000,000	$ 603,661	$ 1,400,544	$ 3,985,269	$ 10,526	$ -	$ -	$ -
	F-72 Design and Construction of the Baywood Stormwater Detention Basin	$ 2,000,000	$ -	$ 2,000,000	$ 173,050	$ -	$ 1,813,616	$ 13,334	$ -	$ -	$ -
	F-96 Investigations of General Drainage Improvements in Armand Bayou Watershed	$ 950,000	$ 950,000	$ -	$ -	$ 950,000	$ -	$ -	$ -	$ -	$ -
	F-99 Right-Of-Way, Design and Construction of Conveyance Improvements along Armand Bayou	$ 10,000,000	$ -	$ 10,000,000	$ -	$ -	$ 2,253,283	$ 3,261,875	$ 1,226,301	$ 2,314,725	$ 943,816
	Sub-Total (Armand Bayou)	**$ 48,200,000**	**$ 22,200,000**	**$ 26,000,000**	**$ 935,726**	**$ 4,071,814**	**$ 14,338,415**	**$ 10,406,580**	**$ 7,778,420**	**$ 7,816,183**	**$ 2,852,862**
Barker Reservoir											
	C-53 Rehabilitation of Channels Inside of Barker Reservoir to Restore Channel Conveyance Capacity	$ 10,000,000	$ -	$ 10,000,000	$ -	$ -	$ -	$ -	$ 3,865,678	$ 2,922,206	$ 3,212,116
	E-02 Barker Reservoir Subdivision Drainage Improvements	$ 33,170,000	$ 24,877,500	$ 8,292,500	$ 610	$ 2,685,405	$ 3,573,524	$ 4,935,912	$ 6,648,157	$ 7,919,489	$ 7,406,903
	F-52 Rehabilitation of Approximately 20 Miles of Channels Upstream of Barker Reservoir to Restore Channel Conveyance Capacity	$ 30,000,000	$ -	$ 30,000,000	$ 3,674,443	$ 16,221,561	$ 7,503,671	$ 1,306,356	$ 1,268,136	$ 25,833	$ -
	Sub-Total (Barker Reservoir)	**$ 73,170,000**	**$ 24,877,500**	**$ 48,292,500**	**$ 3,675,053**	**$ 18,906,966**	**$ 11,077,195**	**$ 6,242,268**	**$ 11,781,971**	**$ 10,867,528**	**$ 10,619,019**

2020 CIP - Harris County Flood Control District 5 Year Funding Plan

Watershed	Project Name (Map ID and Project Title)	Total Project Estimate	Reimbursements	HC Capital Funding	Funded to Date	CIP 2019-2020	CIP 2020-2021	CIP 2021-2022	CIP 2022-2023	CIP 2023-2024	Anticipated Additional Project Costs
Brays Bayou											
	C-11 Design and Construction of Project Brays Corps of Engineers (Section 211(f) Project)	$ 95,000,000	$ 75,000,000	$ 20,000,000	$ -	$ 6,871,277	$ 7,424,642	$ 9,310,662	$ 10,470,648	$ 14,448,594	$ 46,474,177
	C-12 Right-Of-Way, Design and Construction of Conveyance Improvements along Poor Farm Ditch	$ 18,000,000	$ 13,500,000	$ 4,500,000	$ -	$ 1,043,478	$ 5,267,205	$ 5,565,022	$ 6,118,317	$ 5,978	$ -
	C-13 Planning, Right-Of-Way, Design and Construction of Conveyance Improvements along Bintliff Ditch	$ 30,000,000	$ 22,500,000	$ 7,500,000	$ -	$ 7,408,115	$ 6,153,182	$ 6,279,859	$ 7,784,237	$ 2,374,607	$ -
	CI-025 Investigation of Additional Stormwater Detention Basins in the Brays Bayou Watershed	$ 200,000	$ -	$ 200,000	$ -	$ -	$ 5,772	$ 194,228	$ -	$ -	$ -
	CI-034 Investigation of Channel Improvements Upstream of Fondren Road on Brays Bayou	$ 250,000	$ -	$ 250,000	$ -	$ -	$ 7,215	$ 242,785	$ -	$ -	$ -
	CI-038 Restore Channel Conveyance Capacity Along D115-00-00	$ 30,000,000	$ 15,000,000	$ 15,000,000	$ -	$ -	$ 83,089	$ 12,077,314	$ 7,217,812	$ 7,684,888	$ 2,936,897
	F-07 Planning, Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on Keegans Bayou	$ 32,500,000	$ -	$ 32,500,000	$ -	$ 2,959,203	$ 5,996,643	$ 7,479,692	$ 4,776,419	$ 7,031,588	$ 4,256,455
	F-08 Planning, Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on Fondren Diversion Channel	$ 30,500,000	$ -	$ 30,500,000	$ -	$ 1,900,531	$ 9,502,566	$ 8,650,103	$ 10,397,633	$ 49,167	$ -
	Sub-Total (Brays Bayou)	**$ 236,450,000**	**$ 126,000,000**	**$ 110,450,000**	**$ -**	**$ 20,182,604**	**$ 34,440,314**	**$ 49,799,665**	**$ 46,765,066**	**$ 31,594,822**	**$ 53,667,529**
Buffalo Bayou											
	CI-009 Partnership Project with Fort Bend County on Right-of-Way Acquisition, Design, and Construction of General Drainage Improvements along Clodine Ditch	$ 30,000,000	$ 15,000,000	$ 15,000,000	$ -	$ -	$ 8,123,602	$ 9,751,399	$ 6,017,672	$ 6,107,327	$ -
	CI-016 Investigations of Bridges and Potential Channel Bypasses over Buffalo Bayou	$ 500,000	$ -	$ 500,000	$ 90,633	$ 382,039	$ 27,328	$ -	$ -	$ -	$ -
	CI-017 Design & Construction of Replacement Bridges Along Buffalo Bayou	$ 30,000,000	$ -	$ 30,000,000	$ -	$ -	$ 55,999	$ 2,189,707	$ 2,189,707	$ 2,195,706	$ 23,368,881
	CI-018 Rehabilitation of W140-00-00 to Restore Channel Conveyance Capacity	$ 2,000,000	$ -	$ 2,000,000	$ -	$ -	$ 51,869	$ 859,465	$ 1,088,666	$ -	$ -
	CI-024 Investigation of Effectiveness of Micro-Detention in the Buffalo Bayou Watershed	$ 200,000	$ -	$ 200,000	$ -	$ -	$ 5,772	$ 194,228	$ -	$ -	$ -
	F-58 Construction of Linear Detention on Buffalo Bayou	$ 10,000,000	$ -	$ 10,000,000	$ -	$ 1,716,534	$ 3,952,806	$ 4,330,660	$ -	$ -	$ -
	F-79 Planning, Right-Of-Way Acquisition, Design and Construction Along W157-00-00	$ 10,000,000	$ -	$ 10,000,000	$ -	$ -	$ 55,940	$ 2,367,155	$ 3,180,804	$ 2,286,762	$ 2,109,339
	F-80 Planning, Right-Of-Way Acquisition, Design and Construction Along Soldiers Creek	$ 10,000,000	$ -	$ 10,000,000	$ -	$ -	$ 55,940	$ 2,367,155	$ 3,180,804	$ 2,286,762	$ 2,109,339
	F-81 Planning, Right-Of-Way Acquisition, Design and Construction Along W151-00-00 and W153-00-00	$ 20,000,000	$ -	$ 20,000,000	$ 1,010,000	$ 2,525,332	$ 6,218,741	$ 4,166,326	$ 6,079,601	$ -	$ -
	F-82 Demolition of 1119 Commerce Street and Slope Stabilization Along Buffalo Bayou	$ 2,500,000	$ -	$ 2,500,000	$ 31,458	$ 2,468,542	$ -	$ -	$ -	$ -	$ -
	Sub-Total (Buffalo Bayou)	**$ 115,200,000**	**$ 15,000,000**	**$ 100,200,000**	**$ 1,132,091**	**$ 7,092,447**	**$ 18,547,997**	**$ 26,226,095**	**$ 21,737,254**	**$ 12,876,557**	**$ 27,587,559**
Carpenters Bayou											
	E-03 Carpenters Bayou Subdivision Drainage Improvements	$ 6,650,000	$ 4,987,500	$ 1,662,500	$ 75,261	$ 1,081,309	$ 2,359,472	$ 3,105,625	$ 28,333	$ -	$ -
	F-124 Investigations of General Drainage Improvements along Carpenters Bayou	$ 500,000	$ -	$ 500,000	$ -	$ 500,000	$ -	$ -	$ -	$ -	$ -
	F-125 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Carpenters Bayou Watershed	$ 5,000,000	$ -	$ 5,000,000	$ -	$ 18,333	$ 1,771,939	$ 1,218,122	$ 1,212,181	$ 779,425	$ -
	Sub-Total (Carpenters Bayou)	**$ 12,150,000**	**$ 4,987,500**	**$ 7,162,500**	**$ 75,261**	**$ 1,599,642**	**$ 4,131,411**	**$ 4,323,747**	**$ 1,240,514**	**$ 779,425**	**$ -**

2020 CIP - Harris County Flood Control District 5 Year Funding Plan

Watershed	Project Name (Map ID and Project Title)	Total Project Estimate	Reimbursements	HC Capital Funding	Funded to Date	CIP 2019-2020	CIP 2020-2021	CIP 2021-2022	CIP 2022-2023	CIP 2023-2024	Anticipated Additional Project Costs
Cedar Bayou											
	E-04 Cedar Bayou Subdivision Drainage Improvements	$ 2,000,000	$ 1,500,000	$ 500,000	$ 60,298	$ 573,564	$ 1,339,471	$ 26,667	$ -	$ -	$ -
	F-123 Management, Right-of-Way Acquisition, Design and Construction in Cedar Bayou Watershed	$ 3,000,000	$ -	$ 3,000,000	$ 450,000	$ 2,550,000	$ -	$ -	$ -	$ -	$ -
	F-41 Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along Clawson Ditch and Q124-00-00	$ 19,000,000	$ -	$ 19,000,000	$ -	$ 3,134,864	$ 7,562,403	$ 6,362,733	$ 1,940,000	$ -	$ -
	F-42 Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along Magee Gully	$ 33,000,000	$ -	$ 33,000,000	$ -	$ -	$ 75,093	$ 10,811,472	$ 10,876,041	$ 11,237,394	$ -
	F-43 Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along Adlong Ditch	$ 23,000,000	$ -	$ 23,000,000	$ -	$ 1,674,347	$ 8,339,285	$ 6,951,834	$ 6,034,534	$ -	$ -
	F-44 Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along Q130-00-00	$ 18,000,000	$ -	$ 18,000,000	$ 651,412	$ 2,168,885	$ 7,818,620	$ 6,976,950	$ 384,133	$ -	$ -
	F-45 Planning, Right-Of-Way Acquisition, Design and Construction of Channel Conveyance Improvements on Q134-00-00 and Q134-00-01	$ 22,000,000	$ -	$ 22,000,000	$ 717,336	$ 2,305,864	$ 4,507,758	$ 7,094,679	$ 7,374,363	$ -	$ -
	F-46 Right-Of-Way Acquisition, Design and Construction of the Q500-01 Stormwater Detention Basin	$ 26,000,000	$ -	$ 26,000,000	$ -	$ 3,572,116	$ 6,461,631	$ 5,798,176	$ 5,585,577	$ 4,582,500	$ -
	F-47 Right-Of-Way Acquisition, Design and Construction of Stormwater Detention Basins near Coastal Water Authority canals and IH 10	$ 23,000,000	$ -	$ 23,000,000	$ -	$ 3,164,148	$ 5,713,180	$ 5,126,572	$ 4,938,599	$ 4,057,501	$ -
	F-48 Design and Construction of Crosby Eastgate Environmental Mitigation Bank	$ 1,000,000	$ -	$ 1,000,000	$ -	$ -	$ -	$ 447,071	$ 552,929	$ -	$ -
	F-69 Right-Of-Way Acquisition, Design and Construction of channel conveyance improvements on Q136-00-00 - Part of the Upstream Cedar Bayou Project	$ 10,500,000	$ -	$ 10,500,000	$ -	$ -	$ 2,017,603	$ 4,089,516	$ 3,718,881	$ 674,000	$ -
	F-70 Upstream Cedar Bayou Project - Right-Of-Way Acquisition, Design and Construction of Channel Conveyance Improvements and Stormwater Detention Basin Upstream of FM 1960	$ 74,000,000	$ -	$ 74,000,000	$ -	$ -	$ 8,966,725	$ 17,864,219	$ 17,305,279	$ 14,970,070	$ 14,893,707
	Sub-Total (Cedar Bayou)	**$ 254,500,000**	**$ 1,500,000**	**$ 253,000,000**	**$ 1,879,046**	**$ 19,143,788**	**$ 52,801,769**	**$ 71,549,889**	**$ 58,710,336**	**$ 35,521,465**	**$ 14,893,707**
Clear Creek											
	C-03 Design and Construction of Corps of Engineers Clear Creek Federal Flood Risk Management Project	$ 295,000,000	$ 147,500,000	$ 147,500,000	$ 2,350,000	$ 19,914,802	$ 24,214,762	$ 24,218,939	$ 24,222,200	$ 25,327,148	$ 174,752,149
	C-05 Construction of South Belt Stormwater Detention Basin and Channel Conveyance Improvements Along Beamer Road Ditch (A120-00-00)	$ 13,300,000	$ -	$ 13,300,000	$ 92,072	$ 4,832,213	$ 8,186,123	$ 150,474	$ 39,118	$ -	$ -
	CI-001 Rehabilitation of the Clear Creek channel to Restore Channel Conveyance Capacity	$ 25,000,000	$ -	$ 25,000,000	$ 47,127	$ -	$ -	$ 6,165,314	$ 10,220,109	$ 8,502,010	$ 65,440
	CI-003 Rehabilitation of the A214-00-00 channel to Restore Channel Conveyance Capacity	$ 1,000,000	$ 500,000	$ 500,000	$ -	$ -	$ 25,934	$ 429,732	$ 544,334	$ -	$ -
	CI-013 Restore Channel Conveyance Capacity on A104-00-00	$ 5,000,000	$ -	$ 5,000,000	$ -	$ -	$ -	$ -	$ 348,820	$ 2,597,625	$ 2,053,555
	CI-62 Construction of Stormwater Detention Basins Near FM 528 and Dixie Farm Road in Friendswood	$ 20,000,000	$ 15,000,000	$ 5,000,000	$ 167,677	$ 7,700,639	$ 5,707,452	$ 6,415,898	$ 8,334	$ -	$ -
	E-05 Clear Creek Subdivision Drainage Improvements	$ 12,060,000	$ 9,045,000	$ 3,015,000	$ 6,416	$ 1,516,270	$ 2,474,456	$ 3,905,383	$ 4,128,308	$ 29,167	$ -
	F-01 Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on A135-00-00	$ 2,500,000	$ -	$ 2,500,000	$ -	$ -	$ 873,733	$ 770,672	$ 825,595	$ 30,000	$ -
	F-02 Right-Of-Way Acquisition, Design and Construction of Hughes Stormwater Detention Basin on Clear Creek	$ 9,400,000	$ -	$ 9,400,000	$ 30,049	$ 6,558,141	$ 2,542,089	$ 241,388	$ 28,333	$ -	$ -
	F-03 Design and Construction of Dagg Road Stormwater Detention Basin on Clear Creek	$ 7,400,000	$ -	$ 7,400,000	$ 245,594	$ 6,580,342	$ 553,397	$ 20,667	$ -	$ -	$ -
	F-76 Identification, Design and Construction of the A700-01 Environmental Mitigation Bank	$ 6,000,000	$ -	$ 6,000,000	$ 73,756	$ 2,059,108	$ 1,908,608	$ 413,622	$ 161,271	$ 1,383,635	$ -
	Sub-Total (Clear Creek)	**$ 396,660,000**	**$ 172,045,000**	**$ 224,615,000**	**$ 3,012,691**	**$ 49,161,515**	**$ 46,486,554**	**$ 42,732,089**	**$ 40,526,422**	**$ 37,869,585**	**$ 176,871,144**
Cypress Creek											
	CI-012 Major Maintenance of Cypress Creek and Tributaries	$ 60,000,000	$ -	$ 60,000,000	$ 1,920,000	$ 33,611,250	$ 24,468,750	$ -	$ -	$ -	$ -
	CI-035 Update to 2003 Texas Water Development Board Cypress Creek Tributary Study and Investigate Expanding Stormwater Detention Basins in Cypress Creek Watershed	$ 900,000	$ -	$ 900,000	$ 479,229	$ 420,771	$ -	$ -	$ -	$ -	$ -
	E-06 Cypress Creek Subdivision Drainage Improvements	$ 134,940,000	$ 101,205,000	$ 33,735,000	$ 165,377	$ 6,187,342	$ 8,365,427	$ 8,365,427	$ 11,287,465	$ 11,827,142	$ 88,741,820
	F-20 Cypress Creek Right-of-Way Acquisition and Floodplain Preservation	$ 100,000,000	$ -	$ 100,000,000	$ -	$ 4,536,094	$ 17,606,712	$ 17,606,712	$ 17,606,712	$ 17,654,950	$ 24,988,820
	F-22 Restore Channel Conveyance Capacity Along Pillot Gully	$ 2,200,000	$ -	$ 2,200,000	$ 50,000	$ 2,150,000	$ -	$ -	$ -	$ -	$ -
	F-23 Construction of Channel Conveyance Improvements Along K163-00-00	$ 10,400,000	$ -	$ 10,400,000	$ -	$ 2,707,099	$ 7,692,901	$ -	$ -	$ -	$ -
	F-24 Identification, Design and Construction of the K700-01 Environmental Mitigation Bank	$ 9,300,000	$ -	$ 9,300,000	$ 150,000	$ 3,182,147	$ 3,424,429	$ 1,920,478	$ 622,946	$ -	$ -
	Sub-Total (Cypress Creek)	**$ 317,740,000**	**$ 101,205,000**	**$ 216,535,000**	**$ 2,764,606**	**$ 52,794,703**	**$ 61,558,219**	**$ 27,892,617**	**$ 29,517,123**	**$ 29,482,092**	**$ 113,730,640**

2020 CIP - Harris County Flood Control District 5 Year Funding Plan

Watershed	Project Name (Map ID and Project Title)	Total Project Estimate	Reimbursements	HC Capital Funding	Funded to Date	CIP 2019-2020	CIP 2020-2021	CIP 2021-2022	CIP 2022-2023	CIP 2023-2024	Anticipated Additional Project Costs
Galveston Bay											
	C-57 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements Along F216-00-00	$ 10,000,000	$ 2,000,000	$ 8,000,000	$ -	$ -	$ 2,723,199	$ 3,228,725	$ 1,992,473	$ 2,055,603	$ -
	C-58 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements Along F101-06-00	$ 20,000,000	$ 4,000,000	$ 16,000,000	$ -	$ 11,463,941	$ 6,956,059	$ 1,580,000	$ -	$ -	$ -
	E-07 Galveston Bay Subdivision Drainage Improvements	$ 10,100,000	$ 7,575,000	$ 2,525,000	$ 9,103	$ 1,272,241	$ 2,068,943	$ 3,265,369	$ 3,455,177	$ 29,167	$ -
	F-101 Investigations of General Drainage Improvements in Galveston Bay Watershed	$ 450,000	$ 450,000	$ -	$ -	$ 450,000	$ -	$ -	$ -	$ -	$ -
	F-98 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Galveston Bay Watershed	$ 4,000,000	$ -	$ 4,000,000	$ -	$ -	$ 54,316	$ 1,575,302	$ 941,454	$ 1,002,377	$ 426,551
	Sub-Total (Galveston Bay)	**$ 44,550,000**	**$ 14,025,000**	**$ 30,525,000**	**$ 9,103**	**$ 13,186,182**	**$ 11,802,517**	**$ 9,649,396**	**$ 6,389,104**	**$ 3,087,147**	**$ 426,551**
Goose Creek											
	E-08 Spring Gully & Goose Creek Subdivision Drainage Improvements	$ 8,650,000	$ 6,487,500	$ 2,162,500	$ 354,814	$ 1,139,640	$ 3,079,921	$ 4,047,292	$ 28,333	$ -	$ -
	F-109 Right-Of-Way Acquisition, Design, and Construction of General Drainage Improvements on Spring Gully	$ 5,000,000	$ -	$ 5,000,000	$ -	$ -	$ 1,731,790	$ 1,573,455	$ 1,664,755	$ 30,000	$ -
	F-120 Right-Of-Way Acquisition, Design, and Construction of General Drainage Improvements in Goose Creek watershed	$ 25,000,000	$ -	$ 25,000,000	$ -	$ -	$ 4,887,537	$ 8,289,677	$ 3,440,863	$ 5,535,098	$ 2,846,825
	F-121 Investigations of General Drainage Improvements in Goose Creek watershed	$ 550,000	$ 550,000	$ -	$ -	$ 550,000	$ -	$ -	$ -	$ -	$ -
	F-39 Investigations of General Drainage Improvements on Spring Gully	$ 500,000	$ 500,000	$ -	$ 476,631	$ -	$ 23,369	$ -	$ -	$ -	$ -
	Sub-Total (Goose Creek)	**$ 39,700,000**	**$ 7,537,500**	**$ 32,162,500**	**$ 831,445**	**$ 1,689,640**	**$ 9,722,617**	**$ 13,910,424**	**$ 5,133,951**	**$ 5,565,098**	**$ 2,846,825**
Greens Bayou											
	C-20 Mid-Reach Greens Bayou Project - Design and Construction of Channel Conveyance Improvements along Greens Bayou	$ 20,000,000	$ 18,000,000	$ 2,000,000	$ 217,831	$ 1,785,463	$ 3,119,355	$ 2,144,356	$ 1,274,724	$ 10,112,230	$ 1,346,041
	C-31 Design and Construction of the Smith Road Channel Diversion	$ 6,500,000	$ -	$ 6,500,000	$ -	$ 240,005	$ 1,173,768	$ 3,188,605	$ 1,897,622	$ -	$ -
	C-32 Design and Construction of the Cutten Road Stormwater Detention Basin Improvements	$ 17,600,000	$ -	$ 17,600,000	$ 336,925	$ 11,359,961	$ 5,903,114	$ -	$ -	$ -	$ -
	C-33 Design and Construction of Aldine-Westfield Stormwater Detention Basin Improvements	$ 15,300,000	$ -	$ 15,300,000	$ 6,666,468	$ -	$ 3,787,551	$ 4,688,851	$ 157,130	$ -	$ -
	C-34 Design and Construction of Lauder Stormwater Detention Basin Improvements	$ 16,000,000	$ 14,400,000	$ 1,600,000	$ 904,638	$ 1,759,839	$ 3,979,487	$ 3,856,679	$ 2,086,434	$ 1,937,359	$ 1,475,564
	C-43 Planning, Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along P138-01-01	$ 5,000,000	$ 5,000,000	$ -	$ -	$ 1,257,411	$ 2,231,553	$ 1,511,036	$ -	$ -	$ -
	CI-022 ROW, Design, and Construction of Stormwater Detention Basin Near P130-05	$ 3,000,000	$ -	$ 3,000,000	$ -	$ 883,343	$ 2,086,657	$ 30,000	$ -	$ -	$ -
	E-09 Greens Bayou Subdivision Drainage Improvements	$ 92,640,000	$ 69,480,000	$ 23,160,000	$ 278,929	$ 4,592,891	$ 6,399,871	$ 6,796,059	$ 9,029,116	$ 9,053,854	$ 56,489,280
	F-40 Repairs and Enhancements to the Lower Greens Bayou Regional Detention Embankment and Control Structure	$ 2,600,000	$ -	$ 2,600,000	$ 1,685,045	$ 240,991	$ 673,964	$ -	$ -	$ -	$ -
	Sub-Total (Greens Bayou)	**$ 178,640,000**	**$ 106,880,000**	**$ 71,760,000**	**$ 10,089,836**	**$ 22,119,904**	**$ 29,355,320**	**$ 22,215,586**	**$ 14,445,026**	**$ 21,103,443**	**$ 59,310,885**
Halls Bayou											
	C-01 Construction of P518-26 Stormwater Detention Basin	$ 750,000	$ 750,000	$ -	$ -	$ 740,312	$ 9,688	$ -	$ -	$ -	$ -
	C-02 Aldine Westfield Stormwater Detention Basin and Channel Improvments	$ 14,000,000	$ 10,000,000	$ 4,000,000	$ 435,032	$ 1,125,446	$ 1,640,846	$ 4,490,831	$ 5,191,167	$ 1,116,678	$ -
	C-23 Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-08-00	$ 25,000,000	$ 22,500,000	$ 2,500,000	$ -	$ -	$ 6,250,782	$ 10,283,017	$ 6,860,803	$ 1,605,398	$ -
	C-24 Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-09-00	$ 12,000,000	$ 10,800,000	$ 1,200,000	$ -	$ -	$ 2,711,522	$ 4,713,565	$ 3,727,220	$ 847,693	$ -
	C-25 Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-21-00	$ 14,000,000	$ 12,600,000	$ 1,400,000	$ -	$ 2,167,285	$ 2,031,373	$ 2,031,374	$ 393,459	$ 2,796,997	$ 4,579,512
	C-26 Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-23-00 and P118-23-02	$ 22,000,000	$ 19,800,000	$ 2,200,000	$ 795,500	$ 2,880,562	$ 7,052,394	$ 4,600,319	$ 6,671,225	$ -	$ -
	C-28 Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-25-00 & P118-25-01	$ 17,000,000	$ 15,300,000	$ 1,700,000	$ -	$ 2,836,639	$ 5,453,385	$ 3,557,276	$ 5,152,700	$ -	$ -
	C-30 Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-27-00	$ 12,000,000	$ 10,800,000	$ 1,200,000	$ -	$ -	$ 2,711,522	$ 4,713,565	$ 3,727,220	$ 847,693	$ -
	C-35 Design and Construction of Stormwater Detention Basin and Associated Channel Improvements	$ 8,000,000	$ 7,200,000	$ 800,000	$ -	$ 1,261,121	$ 2,900,356	$ 3,838,523	$ -	$ -	$ -
	CI-006 Design and Construction of a Stormwater Detention Basin in Brock Park	$ 10,000,000	$ 5,000,000	$ 5,000,000	$ -	$ 822,084	$ 1,316,872	$ 3,310,700	$ 4,137,596	$ 412,748	$ -
	E-11 Halls Bayou Subdivision Drainage Improvements	$ 9,500,000	$ 7,125,000	$ 2,375,000	$ 119,698	$ 1,087,765	$ 1,944,807	$ 3,069,448	$ 3,249,115	$ 29,167	$ -
	F-122 Management, Right-of-Way Acquisition, Design and Construction in Halls Bayou Watershed	$ 3,000,000	$ -	$ 3,000,000	$ 232,000	$ 2,768,000	$ -	$ -	$ -	$ -	$ -
	Sub-Total (Halls Bayou)	**$ 147,250,000**	**$ 121,875,000**	**$ 25,375,000**	**$ 1,582,230**	**$ 15,689,214**	**$ 34,023,547**	**$ 44,608,618**	**$ 39,110,505**	**$ 7,656,374**	**$ 4,579,512**

2020 CIP - Harris County Flood Control District 5 Year Funding Plan

Watershed	Project Name (Map ID and Project Title)	Total Project Estimate	Reimbursements	HC Capital Funding	Funded to Date	CIP 2019-2020	CIP 2020-2021	CIP 2021-2022	CIP 2022-2023	CIP 2023-2024	Anticipated Additional Project Costs
Hunting Bayou											
	C-18 Design and Construction of Corps of Engineers Hunting Bayou, Section 211(f) Project	$ 65,000,000	$ 65,000,000	$ -	$ 1,397,688	$ 21,240,767	$ 15,971,086	$ 10,623,429	$ 5,643,600	$ 5,982,599	$ 4,140,831
	CI-031 HCFCD Cost Share of Study with the City of Houston on Wallisville Outfall	$ 500,000	$ -	$ 500,000	$ -	$ 425,711	$ 74,289	$ -	$ -	$ -	$ -
	CI-59 Planning, Right-Of-Way, Design and Construction of a Diversion Channel from H102-00-00 to H100-00-00 through Galena Park	$ 10,000,000	$ -	$ 10,000,000	$ -	$ -	$ 57,551	$ 3,253,299	$ 3,272,730	$ 3,416,420	$ -
	F-17 Right-Of-Way Acquisition, Design and Construction of Wallisville Outfall	$ 10,000,000	$ -	$ 10,000,000	$ -	$ -	$ 3,016,202	$ 3,449,760	$ 3,407,884	$ 126,154	$ -
	Sub-Total (Hunting Bayou)	**$ 85,500,000**	**$ 65,000,000**	**$ 20,500,000**	**$ 1,397,688**	**$ 21,666,478**	**$ 19,119,128**	**$ 17,326,488**	**$ 12,324,214**	**$ 9,525,173**	**$ 4,140,831**
Jackson Bayou											
	E-12 Jackson Bayou Subdivision Drainage Improvements	$ 3,000,000	$ 2,250,000	$ 750,000	$ 45,220	$ 895,937	$ 2,032,176	$ 26,667	$ -	$ -	$ -
	F-107 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Jackson Bayou Watershed	$ 10,000,000	$ -	$ 10,000,000	$ -	$ -	$ 63,926	$ 5,082,928	$ 2,420,618	$ 2,432,528	$ -
	F-73 Investigations of General Drainage Improvements in Jackson Bayou Watershed	$ 450,000	$ 450,000	$ -	$ -	$ 450,000	$ -	$ -	$ -	$ -	$ -
	Sub-Total (Jackson Bayou)	**$ 13,450,000**	**$ 2,700,000**	**$ 10,750,000**	**$ 45,220**	**$ 1,345,937**	**$ 2,096,102**	**$ 5,109,595**	**$ 2,420,618**	**$ 2,432,528**	**$ -**
Little Cypress Creek											
	E-13 Little Cypress Creek Subdivision Drainage Improvements	$ 14,590,000	$ 10,942,500	$ 3,647,500	$ 274,217	$ 1,176,672	$ 2,126,317	$ 2,833,041	$ 4,203,059	$ 3,947,527	$ 29,167
	F-26 Management, Right-of-Way Acquisition, Design and Construction of the Little Cypress Creek Frontier Program	$ 43,000,000	$ -	$ 43,000,000	$ 8,641,630	$ 9,456,253	$ 12,143,222	$ 8,859,577	$ 3,817,230	$ 82,088	$ -
	F-27 Design and Construction of Zube Park Stormwater Detention Basin	$ 2,900,000	$ -	$ 2,900,000	$ 418,605	$ 853,449	$ 1,104,244	$ 523,702	$ -	$ -	$ -
	F-28 Right-Of-Way Acquisition, Design, and Construction of Kluge Stormwater Detention Basin	$ 8,400,000	$ -	$ 8,400,000	$ 2,000,000	$ -	$ -	$ 2,009,898	$ 4,088,729	$ 301,373	$ -
	F-29 Right-Of-Way Acquisition, Design, and Construction of Mueschke East Stormwater Detention Basin	$ 15,200,000	$ -	$ 15,200,000	$ 10,000	$ 3,401,324	$ 3,115,000	$ 2,413,564	$ 530,165	$ 465,908	$ 5,264,039
	F-30 Right-Of-Way Acquisition, Design, and Construction of Schiel Stormwater Detention Basin	$ 13,500,000	$ -	$ 13,500,000	$ 6,633,347	$ -	$ -	$ 6,866,653	$ -	$ -	$ -
	F-31 Construction of Mueschke West Stormwater Detention Basin Improvements	$ 15,900,000	$ -	$ 15,900,000	$ 1,799,502	$ 2,148,486	$ 3,283,503	$ 248,914	$ 247,923	$ 248,914	$ 7,922,758
	F-32 Construction of Hegar Stormwater Detention Basin Improvements	$ 16,500,000	$ -	$ 16,500,000	$ 7,844,800	$ 50,257	$ 4,534,651	$ -	$ -	$ 2,325,173	$ 1,745,119
	F-33 Construction of Kleb Woods Stormwater Detention Basin Improvements	$ 10,500,000	$ -	$ 10,500,000	$ -	$ 110,994	$ -	$ 511,041	$ 6,724,218	$ 3,153,747	$ -
	F-34 ROW, Design, and Construction of Mason Stormwater Detention Basin in Little Cypress Creek watershed	$ 15,800,000	$ -	$ 15,800,000	$ 7,964,264	$ -	$ 4,950,879	$ 1,131,116	$ 305,432	$ 903,817	$ 544,492
	F-35 Construction of Bauer-Hockley Stormwater Detention Basin Improvements	$ 4,300,000	$ -	$ 4,300,000	$ 4,273,218	$ 26,782	$ -	$ -	$ -	$ -	$ -
	F-89 Design and Construction of Additional Volume in Little Cypress Creek Stormwater Detention Basins	$ 3,000,000	$ -	$ 3,000,000	$ -	$ 206,693	$ 1,077,756	$ 1,077,756	$ 637,795	$ -	$ -
	Sub-Total (Little Cypress Creek)	**$ 163,590,000**	**$ 10,942,500**	**$ 152,647,500**	**$ 39,859,583**	**$ 17,430,910**	**$ 32,335,572**	**$ 26,475,262**	**$ 20,554,551**	**$ 11,428,547**	**$ 15,505,575**
Luce Bayou											
	F-108 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Luce Bayou Watershed	$ 10,000,000	$ -	$ 10,000,000	$ -	$ -	$ 2,723,199	$ 3,228,725	$ 1,992,473	$ 2,055,603	$ -
	F-51 Luce Bayou Right-of-Way Acquisition and Floodplain Preservation	$ 10,000,000	$ -	$ 10,000,000	$ -	$ 100,717	$ 3,702,357	$ 3,702,356	$ 2,494,570	$ -	$ -
	F-85 Investigations of General Drainage Improvements along Luce Bayou	$ 450,000	$ 450,000	$ -	$ -	$ 450,000	$ -	$ -	$ -	$ -	$ -
	Sub-Total (Luce Bayou)	**$ 20,450,000**	**$ 450,000**	**$ 20,000,000**	**$ -**	**$ 550,717**	**$ 6,425,556**	**$ 6,931,081**	**$ 4,487,043**	**$ 2,055,603**	**$ -**

2020 CIP - Harris County Flood Control District 5 Year Funding Plan

Watershed	Project Name (Map ID and Project Title)	Total Project Estimate	Reimbursements	HC Capital Funding	Funded to Date	CIP 2019-2020	CIP 2020-2021	CIP 2021-2022	CIP 2022-2023	CIP 2023-2024	Anticipated Additional Project Costs
San Jacinto River											
	C-17 San Jacinto River Watershed Study	$ 2,738,098	$ 2,031,156	$ 706,942	$ 2,672,191	$ 3,373	$ 62,534	$ -	$ -	$ -	$ -
	C-50 Funding for Future Partnership Projects Based on Results of Study - for Right-of-Way Acquisition, Design, and Construction of General Drainage Improvements in San Jacinto River Watershed Study	$ 75,000,000	$ 56,250,000	$ 18,750,000	$ -	$ -	$ 2,836,280	$ 19,300,979	$ 22,216,091	$ 19,792,260	$ 10,854,390
	CI-019 Investigations of Potential Detention Sites Around Glendale Dredge Site in Partnership with the City of Houston	$ 100,000	$ 50,000	$ 50,000	$ -	$ -	$ 96,728	$ 3,272	$ -	$ -	$ -
	CI-028 Design and Construction of Additional Gates on Lake Houston in Partnership with the City of Houston	$ 70,000,000	$ 50,000,000	$ 20,000,000	$ -	$ -	$ 4,934,193	$ 7,306,272	$ 11,640,989	$ 23,034,273	$ 23,084,273
	CI-60 Planning, Right-Of-Way, Design and Construction of Conveyance Improvements along Panther Creek	$ 10,000,000	$ -	$ 10,000,000	$ -	$ 752,229	$ 3,605,193	$ 3,005,378	$ 2,637,200	$ -	$ -
	CI-61 East Fork, West Fork and Lake Houston Dredging	$ 50,000,000	$ 40,000,000	$ 10,000,000	$ -	$ -	$ 79,250	$ 10,676,143	$ 10,676,143	$ 10,705,392	$ 17,863,072
	E-14 San Jacinto River Subdivision Drainage Improvements	$ 6,450,000	$ 4,837,500	$ 1,612,500	$ -	$ 1,122,781	$ 2,287,427	$ 3,011,459	$ 28,333	$ -	$ -
	F-110 Planning , Right-Of-Way Acquisition, design and Construction of General Drainage Improvements Near Huffman	$ 10,000,000	$ -	$ 10,000,000	$ 130,833	$ 5,639,166	$ 4,230,001	$ -	$ -	$ -	$ -
	F-111 Planning , Right-Of-Way Acquisition, design and Construction of General Drainage Improvements East of Lake Houston	$ 10,000,000	$ -	$ 10,000,000	$ -	$ -	$ 2,959,076	$ 4,582,326	$ 2,458,598	$ -	$ -
	F-14 Planning , Right-Of-Way Acquisition, design and Construction of General Drainage Improvements Near Kingwood	$ 10,000,000	$ -	$ 10,000,000	$ 350,000	$ 3,094,345	$ 4,658,459	$ 1,897,196	$ -	$ -	$ -
	F-15 Planning , Right-Of-Way Acquisition, design and Construction of General Drainage Improvements Near Atascocita	$ 10,000,000	$ -	$ 10,000,000	$ -	$ -	$ 60,360	$ 4,808,486	$ 4,881,947	$ 249,207	$ -
	Sub-Total (San Jacinto River)	**$ 254,288,098**	**$ 153,168,656**	**$ 101,119,442**	**$ 3,153,024**	**$ 10,611,894**	**$ 25,809,501**	**$ 54,591,511**	**$ 54,539,301**	**$ 53,781,132**	**$ 51,801,735**
Sims Bayou											
	C-08 Right-Of-Way Acquisition, Design, and Construction of Stormwater Detention Basin and Channel Conveyance Improvements along Salt Water Ditch	$ 50,000,000	$ 37,500,000	$ 12,500,000	$ -	$ 6,457,160	$ 15,169,405	$ 11,731,685	$ 16,602,583	$ 39,167	$ -
	C-09 Right-Of-Way Acquisition, Design, and Construction of South Post Oak Stormwater Detention Basin and Channel Conveyance Improvements along C147-00-00	$ 18,170,000	$ 13,627,500	$ 4,542,500	$ -	$ 6,934,350	$ 5,171,999	$ 5,219,194	$ 844,457	$ -	$ -
	C-10 Design and Construction of South Shaver Stormwater Detention Basin	$ 15,000,000	$ 11,250,000	$ 3,750,000	$ -	$ 2,008,867	$ 4,663,356	$ 7,553,471	$ 774,306	$ -	$ -
	CI-027 Planning, Right-Of-Way Acquisition, Design, and Construction of Improvements for the Tributaries of C106-00-00	$ 2,000,000	$ -	$ 2,000,000	$ -	$ -	$ -	$ 894,143	$ 1,105,857	$ -	$ -
	CI-029 Restore Channel Conveyance Capacity Along C102-00-00	$ 30,000,000	$ 15,000,000	$ 15,000,000	$ -	$ -	$ 8,123,602	$ 9,751,399	$ 6,017,672	$ 6,107,327	$ -
	CI-037 Restore Channel Conveyance Capacity Along C146-00-00	$ 30,000,000	$ 15,000,000	$ 15,000,000	$ -	$ -	$ 58,562	$ 3,125,286	$ 3,125,286	$ 7,246,117	$ 16,444,749
	E-15 Sims Bayou Subdivision Drainage Improvements	$ 880,000	$ 660,000	$ 220,000	$ 48,470	$ 230,429	$ 589,368	$ 11,733	$ -	$ -	$ -
	F-92 Planning, Right-Of-Way Acquisition, Design and Construction Along C116-00-00	$ 10,000,000	$ -	$ 10,000,000	$ -	$ 2,489,461	$ 4,508,648	$ 3,001,891	$ -	$ -	$ -
	F-93 Planning, Right-Of-Way Acquisition, Design and Construction Along C124-00-00	$ 10,000,000	$ -	$ 10,000,000	$ -	$ -	$ 2,959,076	$ 4,582,326	$ 2,458,598	$ -	$ -
	F-94 Planning, Right-Of-Way Acquisition, Design and Construction Along C143-00-00	$ 10,000,000	$ -	$ 10,000,000	$ -	$ 1,013,523	$ 4,930,430	$ 4,056,047	$ -	$ -	$ -
	F-95 Planning, Right-Of-Way Acquisition, Design and Construction Along C144-00-00	$ 10,000,000	$ -	$ 10,000,000	$ -	$ 2,489,461	$ 4,508,648	$ 3,001,891	$ -	$ -	$ -
	Sub-Total (Sims Bayou)	**$ 186,050,000**	**$ 93,037,500**	**$ 93,012,500**	**$ 48,470**	**$ 21,623,251**	**$ 50,683,094**	**$ 52,929,066**	**$ 30,928,759**	**$ 13,392,611**	**$ 16,444,749**
Spring Creek											
	C-118 Planning, Right-of-Way Acquisition, Design and Construction of a Reservoir along Spring Creek	$ 25,000,000	$ 12,500,000	$ 12,500,000	$ -	$ -	$ 2,672,709	$ 5,826,257	$ 6,087,435	$ 4,696,702	$ 5,716,897
	E-16 Spring Creek Subdivision Drainage Improvements	$ 6,285,000	$ 4,713,750	$ 1,571,250	$ 49,500	$ 1,045,407	$ 2,227,990	$ 2,933,770	$ 28,333	$ -	$ -
	F-119 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements along Spring Creek	$ 10,000,000	$ -	$ 10,000,000	$ -	$ -	$ 1,315,220	$ 3,006,545	$ 2,331,535	$ 3,307,532	$ 39,168
	F-19 Spring Creek Right-of-Way Acquisition and Floodplain Preservation	$ 50,000,000	$ -	$ 50,000,000	$ -	$ 3,510,626	$ 13,582,028	$ 13,582,029	$ 13,582,028	$ 5,743,289	$ -
	F-75 Investigations of General Drainage Improvements along Spring Creek	$ 450,000	$ 450,000	$ -	$ -	$ 450,000	$ -	$ -	$ -	$ -	$ -
	Sub-Total (Spring Creek)	**$ 91,735,000**	**$ 17,663,750**	**$ 74,071,250**	**$ 49,500**	**$ 5,006,033**	**$ 19,797,947**	**$ 25,348,601**	**$ 22,029,331**	**$ 13,747,523**	**$ 5,756,065**
Vince Bayou											
	F-104 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Vince Bayou Watershed	$ 15,000,000	$ -	$ 15,000,000	$ -	$ 1,583,471	$ 6,018,461	$ 2,644,745	$ 4,433,582	$ 319,741	$ -
	F-78 Investigations of General Drainage Improvements in Vince Bayou Watershed	$ 550,000	$ 550,000	$ -	$ -	$ 550,000	$ -	$ -	$ -	$ -	$ -
	Sub-Total (Vince Bayou)	**$ 15,550,000**	**$ 550,000**	**$ 15,000,000**	**$ -**	**$ 2,133,471**	**$ 6,018,461**	**$ 2,644,745**	**$ 4,433,582**	**$ 319,741**	**$ -**

2020 CIP - Harris County Flood Control District 5 Year Funding Plan

Watershed	Project Name (Map ID and Project Title)	Total Project Estimate	Reimbursements	HC Capital Funding	Funded to Date	CIP 2019-2020	CIP 2020-2021	CIP 2021-2022	CIP 2022-2023	CIP 2023-2024	Anticipated Additional Project Costs
White Oak Bayou											
	C-14 Design and Construction of Corps of Engineers White Oak Bayou Section 211(f) Project	$ 45,000,000	$ 45,000,000	$ -	$ 4,847,788	$ 8,563,969	$ 14,140,518	$ 9,709,277	$ 6,132,943	$ 1,605,505	$ -
	C-15 Design and Construction of Arbor Oaks Stormwater Detention Basin	$ 10,000,000	$ 7,500,000	$ 2,500,000	$ -	$ 2,394,528	$ 3,435,006	$ 1,858,829	$ 2,311,637	$ -	$ -
	C-16 Design and Construction of Woodland Trails Stormwater Detention Basin	$ 31,000,000	$ 23,250,000	$ 7,750,000	$ 750,000	$ -	$ 6,650,954	$ 5,319,504	$ 4,070,149	$ 6,188,846	$ 8,020,547
	C-39 Right-of-Way Acquisition, Design and Construction of the North Canal	$ 100,000,000	$ 80,000,000	$ 20,000,000	$ -	$ 5,020,705	$ 19,508,683	$ 19,508,683	$ 14,136,772	$ 7,273,884	$ 34,551,273
	C-59 Construction of Inwood Forest Stormwater Detention Basin	$ 47,000,000	$ 35,000,000	$ 12,000,000	$ 1,288,009	$ 3,406,746	$ 6,101,257	$ 14,624,389	$ 16,301,069	$ 5,278,530	$ -
	CI-010 Partnership Project with Jersey Village on Right-of-Way Acquisition, Design, and Construction of General Drainage Improvements along E127-00-00	$ 3,000,000	$ 1,500,000	$ 1,500,000	$ -	$ 447,479	$ 1,346,649	$ 1,205,872	$ -	$ -	$ -
	CI-011 Partnership Project with the City of Houston for Feasibility Study of General Drainage Improvements around Hidden Lake Townhomes	$ 350,000	$ 175,000	$ 175,000	$ -	$ 350,000	$ -	$ -	$ -	$ -	$ -
	CI-030 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements along Turkey Gully	$ 40,000,000	$ 30,000,000	$ 10,000,000	$ -	$ -	$ 10,823,803	$ 13,012,735	$ 8,030,272	$ 8,133,190	$ -
	CI-032 Investigation of Additional Stormwater Detention Basins in the White Oak Bayou Watershed	$ 250,000	$ 125,000	$ 125,000	$ -	$ -	$ 241,819	$ 8,181	$ -	$ -	$ -
	CI-033 Partnership Project with City of Houston on Planning, Right-of-Way Acquisition, Design, and Construction of General Drainage Improvements along E105-00-00	$ 2,000,000	$ 1,000,000	$ 1,000,000	$ -	$ 1,238,573	$ 358,440	$ 360,254	$ 42,733	$ -	$ -
	E-17 White Oak Bayou Subdivision Drainage Improvements	$ 36,250,000	$ 27,187,500	$ 9,062,500	$ 195,400	$ 2,453,209	$ 3,824,565	$ 5,361,189	$ 7,027,830	$ 8,657,078	$ 8,730,729
	F-09 Planning, Right-Of-Way Acquisition, Design and Construction of Little White Oak Bayou Channel Conveyance Improvements	$ 30,000,000	$ -	$ 30,000,000	$ 1,394,455	$ 7,097,096	$ 4,965,389	$ 4,808,286	$ 6,450,017	$ 5,284,310	$ 447
	F-10 Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on Brickhouse Gully	$ 35,000,000	$ -	$ 35,000,000	$ -	$ -	$ 4,510,220	$ 10,598,832	$ 8,219,249	$ 11,632,533	$ 39,166
	Sub-Total (White Oak Bayou)	**$ 379,850,000**	**$ 250,737,500**	**$ 129,112,500**	**$ 8,475,652**	**$ 30,972,305**	**$ 75,907,303**	**$ 86,376,031**	**$ 72,722,671**	**$ 54,053,876**	**$ 51,342,162**
Willow Creek											
	F-106 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Willow Creek Watershed	$ 15,000,000	$ -	$ 15,000,000	$ -	$ -	$ 5,164,015	$ 4,784,586	$ 5,021,399	$ 30,000	$ -
	F-36 Willow Creek Right-of-Way Acquisition and Floodplain Preservation	$ 30,000,000	$ -	$ 30,000,000	$ -	$ 2,899,078	$ 11,181,865	$ 11,181,864	$ 4,737,193	$ -	$ -
	F-37 Design and Construction of Channel Conveyance Improvements on M124-00-00 Downstream of SH 249	$ 34,600,000	$ -	$ 34,600,000	$ 503,050	$ 9,710,305	$ 9,658,942	$ 12,899,250	$ 1,828,453	$ -	$ -
	F-38 Design and Construction of Cypress Rosehill Stormwater Detention Basin	$ 3,500,000	$ -	$ 3,500,000	$ 116,834	$ 3,315,909	$ 67,257	$ -	$ -	$ -	$ -
	F-71 Investigations of General Drainage Improvements in Willow Creek Watershed	$ 800,000	$ 800,000	$ -	$ -	$ 800,000	$ -	$ -	$ -	$ -	$ -
	Sub-Total (Willow Creek)	**$ 83,900,000**	**$ 800,000**	**$ 83,100,000**	**$ 619,884**	**$ 16,725,292**	**$ 26,072,079**	**$ 28,865,700**	**$ 11,587,045**	**$ 30,000**	**$ -**
Countywide											
	CI-026 Investigation of City of Houston Properties for Conversion to Stormwater Detention Basins	$ 500,000	$ 250,000	$ 250,000	$ -	$ 87,449	$ 177,638	$ 177,638	$ 57,275	$ -	$ -
	F-88 ROW Acquisition, Design and Construction of Stormwater Detention Basins in Large Buyout Areas	$ 25,000,000	$ -	$ 25,000,000	$ -	$ 2,162,164	$ 8,289,677	$ 5,152,209	$ 4,407,254	$ 4,988,696	$ -
	Z-01 Countywide Floodplain Preservation and Right of Way Acquisition	$ 50,000,000	$ -	$ 50,000,000	$ 20,257,820	$ 2,241,131	$ 7,602,827	$ 7,309,420	$ 5,590,054	$ 5,612,414	$ 1,386,334
	Z-02 Partnership Projects with Municipalities, Authorities, and Other Districts in Harris County	$ 175,000,000	$ -	$ 175,000,000	$ 3,596,765	$ 14,232,101	$ 18,526,441	$ 26,928,391	$ 26,928,391	$ 18,450,030	$ 66,337,881
	Z-03 Countywide Ongoing Planning	$ 9,500,000	$ -	$ 9,500,000	$ 200,000	$ 1,027,259	$ 2,012,207	$ 2,012,207	$ 2,012,207	$ 2,017,720	$ 218,400
	Z-04 Partnership Projects with the Harris County Engineering Department	$ 100,000,000	$ -	$ 100,000,000	$ -	$ 12,023,147	$ 23,498,820	$ 23,498,820	$ 23,498,820	$ 17,461,061	$ 19,332
	Z-05 Advanced Emerging Technologies for Flood Damage Reduction	$ 25,000,000	$ -	$ 25,000,000	$ 719,135	$ 4,198,919	$ 5,254,161	$ 5,059,935	$ 5,059,935	$ 4,682,913	$ 25,002
	Z-06 Bond Administration	$ 10,000,000	$ -	$ 10,000,000	$ 11,500	$ 878,642	$ 707,043	$ 707,043	$ 704,226	$ 1,221,328	$ 5,770,218
	Z-07 Contingency	$ 500,000,000	$ -	$ 500,000,000	$ -	$ 51,799,007	$ 56,606,700	$ 56,606,700	$ 56,606,700	$ 56,761,787	$ 221,619,106
	Z-08 Preliminary Engineering for Large Diameter Tunnels for Stormwater Conveyance	$ 20,000,000	$ 2,820,000	$ 17,180,000	$ 235,130	$ 2,291,260	$ 7,576,818	$ 6,264,792	$ 3,632,000	$ -	$ -
	Z-09 Upgrades and Expansion of the Harris County Flood Warning System	$ 5,000,000	$ 3,750,000	$ 1,250,000	$ 2,332,312	$ 1,100,765	$ 1,394,652	$ 172,271	$ -	$ -	$ -
	Z-10 Maapnext - Harris County Floodplain Mapping Updates	$ 28,500,000	$ 11,500,000	$ 17,000,000	$ 11,529,507	$ 3,024,205	$ 7,825,538	$ 3,303,390	$ 2,817,360	$ -	$ -
	Z-11 Countywide Communications Relating to 2018 Bond and CIP Projects	$ 10,000,000	$ -	$ 10,000,000	$ -	$ 1,035,980	$ 1,132,134	$ 1,132,134	$ 1,132,134	$ 1,135,236	$ 4,432,382
	Z-Buyout Federal Grant-Funded Volunteer Home Buyouts	$ 306,618,000	$ 214,632,600	$ 91,985,400	$ 158,186,960	$ -	$ -	$ -	$ -	$ 13,240,160	$ 135,190,880
	Z-StormRep Countywide Storm Repairs in Harris County	$ 100,350,000	$ 80,280,000	$ 20,070,000	$ 76,470,669	$ 23,879,331	$ -	$ -	$ -	$ -	$ -
	Sub-Total (Countywide)	**$ 1,365,468,000**	**$ 313,232,600**	**$ 1,052,235,400**	**$ 273,539,798**	**$ 119,981,360**	**$ 140,604,656**	**$ 138,324,950**	**$ 132,446,356**	**$ 125,571,345**	**$ 434,999,535**
	Total Capital Cost	**$ 4,899,811,098**	**$ 1,827,492,506**	**$ 3,072,318,592**	**$ 373,405,656**	**$ 538,473,820**	**$ 807,364,746**	**$ 827,878,104**	**$ 712,352,532**	**$ 526,035,743**	**$ 1,114,300,497**
	Estimated Operating Impact:					**$ 47,677,000**	**$ 52,062,000**	**$ 56,850,000**	**$ 59,773,000**	**$ 65,266,000**	**TBD**

Total Project Estimate - Total estimated funding required over the next 5 fiscal years.
Reimbursements - Anticipated Federal, State, or other funding that can offset the potential debt incurred from the project. This could include proceeds from the sale of other assets.
HC Capital Funding - The remaining cost of the project after reimbursements are realized.
Funded to Date -Total funding the project has received in prior fiscal years.

Harris County FY 2020 Capital Improvement Program

Project Name: C-36 Right-Of-Way Acquisition, Design and Construction of Channel Conveyance Improvements and Bypass Channel for South Mayde Creek

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 4th Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

The South Mayde Creek project could reduce the risk of flooding for over 70 structures and the 1% floodplain is removed from an estimated 19 miles of roads near several schools.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$3,084,029	$2,740,224	$1,303,544	$2,568,838	$303,365

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: C-37 Design and Construction of Little York Stormwater Detention Basin

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $3,000,000

Operating Cost Impact: $4,200

Funded to Date: $0

Expected Completion: 1st Quarter, FY 2022

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Project would provide additional stormwater detention in support of flood damage reduction in Addicks Reservoir Watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$3,000,000	$0	$1,357,776	$1,642,224	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$4,200	$4,200

Harris County FY 2020 Capital Improvement Program

Project Name: C-38 Design and Construction of Dinner Creek Stormwater Detention Basin

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $15,000,000

Operating Cost Impact: $6,300

Funded to Date: $0

Expected Completion: 3rd Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Project would provide additional stormwater detention in support of flood damage reduction in Addicks Reservoir Watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$15,000,000	$0	$2,102,857	$4,975,446	$7,895,864	$25,833	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$1,575	$6,300

Harris County FY 2020 Capital Improvement Program

Project Name: C-40 Corps of Engineers Section 216 Study - Addicks and Barker Reservoirs

Category: Harris County Support Projects

Estimated Project Cost: $3,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 3rd Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

This study partnership with the Corps of Engineers will evaluate the effectiveness and operation of the Addicks and Barker Reservoirs.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$3,000,000	$0	$878,022	$1,065,829	$1,017,397	$38,752	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	C-46 Right-Of-Way Acquisition, Design and Construction of a Stormwater Detention Basin on South Mayde Creek	**Estimated Project Cost:**	$16,000,000
		Operating Cost Impact:	$0
Category:	Main Channel Flood Damage Reduction Projects	**Funded to Date:**	$478,238
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

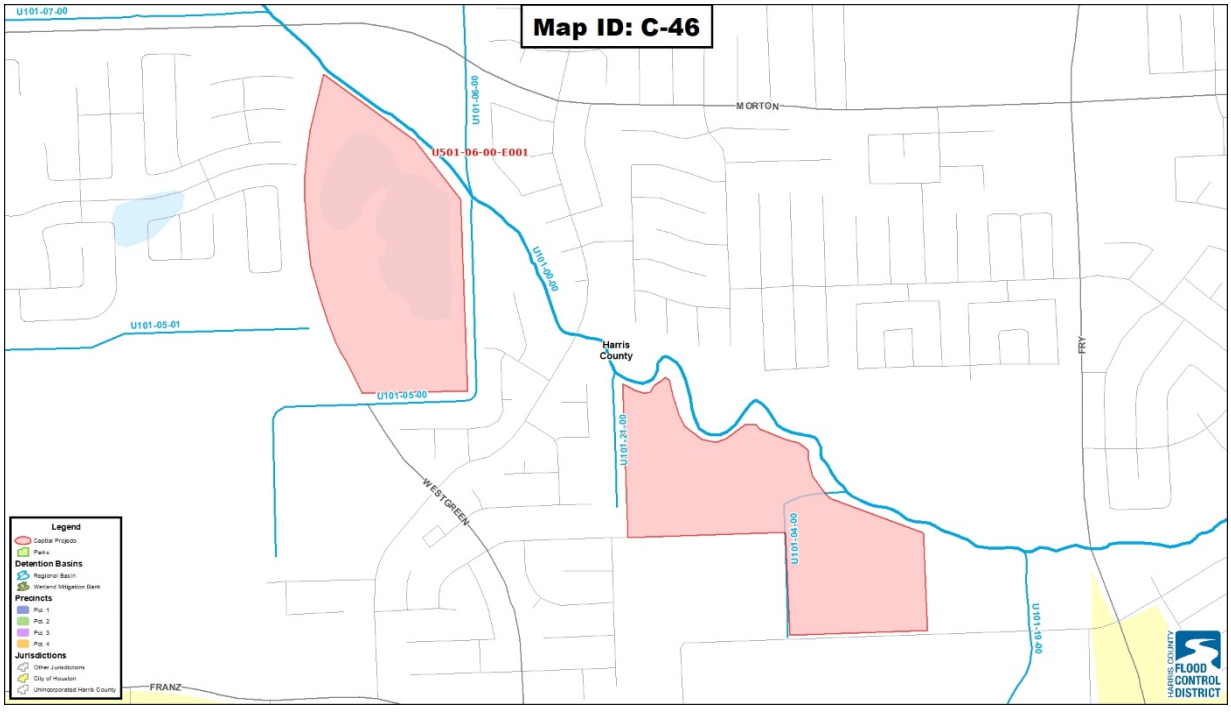
Project Description/ Justification:
This project will reduce the risk of flooding along South Mayde Creek.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$16,000,000	$478,238	$760,074	$1,137,504	$1,137,504	$4,070,365	$4,307,210

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: C-47 Design and Construction of a Bridge Replacement for Greenhouse Road at South Mayde Creek

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $15,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
This project will reduce the risk of flooding along South Mayde Creek.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$15,000,000	$0	$0	$256,341	$1,981,962	$2,935,707	$6,244,350

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	C-48 Right-Of-Way Acquisition, Design and Construction of a Stormwater Detention Basin on South Mayde Creek near the Grand Parkway	**Estimated Project Cost:**	$94,000,000
		Operating Cost Impact:	$33,600
Category:	Main Channel Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	2nd Quarter, FY 2024
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:
This project will reduce the risk of flooding along South Mayde Creek.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$94,000,000	$0	$22,287,485	$32,580,509	$17,630,713	$21,501,293	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$16,800

Harris County FY 2020 Capital Improvement Program

Project Name: C-52 Rehabilitation of Channels Inside of Addicks Reservoir to Restore Channel Conveyance Capacity

Estimated Project Cost: $10,000,000

Operating Cost Impact: $0

Category: Major Maintenance Projects

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Major maintenance to restore channel conveyance capacity. Partnership project with USACE with HCFCD providing project funding.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$0	$0	$0	$3,865,678	$2,922,206

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: E-01 Addicks Reservoir Subdivision Drainage Improvements

Category: Harris County Support Projects

Estimated Project Cost: $83,770,000

Operating Cost Impact: $0

Funded to Date: $373,110

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

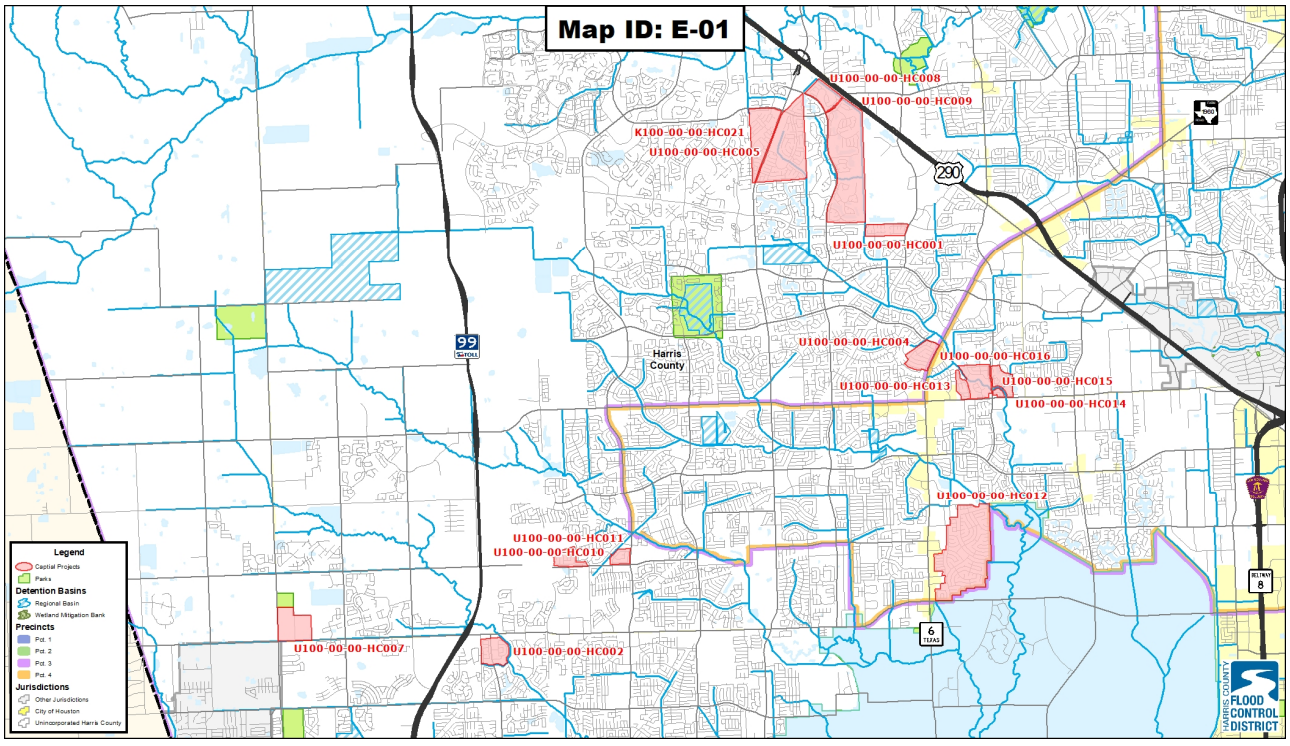
Design and construction of these projects could reduce the risk of flooding for over 6,600 homes during a 1% rain or flood event.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$83,770,000	$373,110	$4,607,443	$6,544,189	$7,757,864	$9,228,985	$11,807,970

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-112 Right-Of-Way Acquisition, Design, and Construction of Wetland Mitigation Bank

Category: Harris County Support Projects

Estimated Project Cost: $20,000,000

Operating Cost Impact: $0

Funded to Date: $66,023

Expected Completion: 4th Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

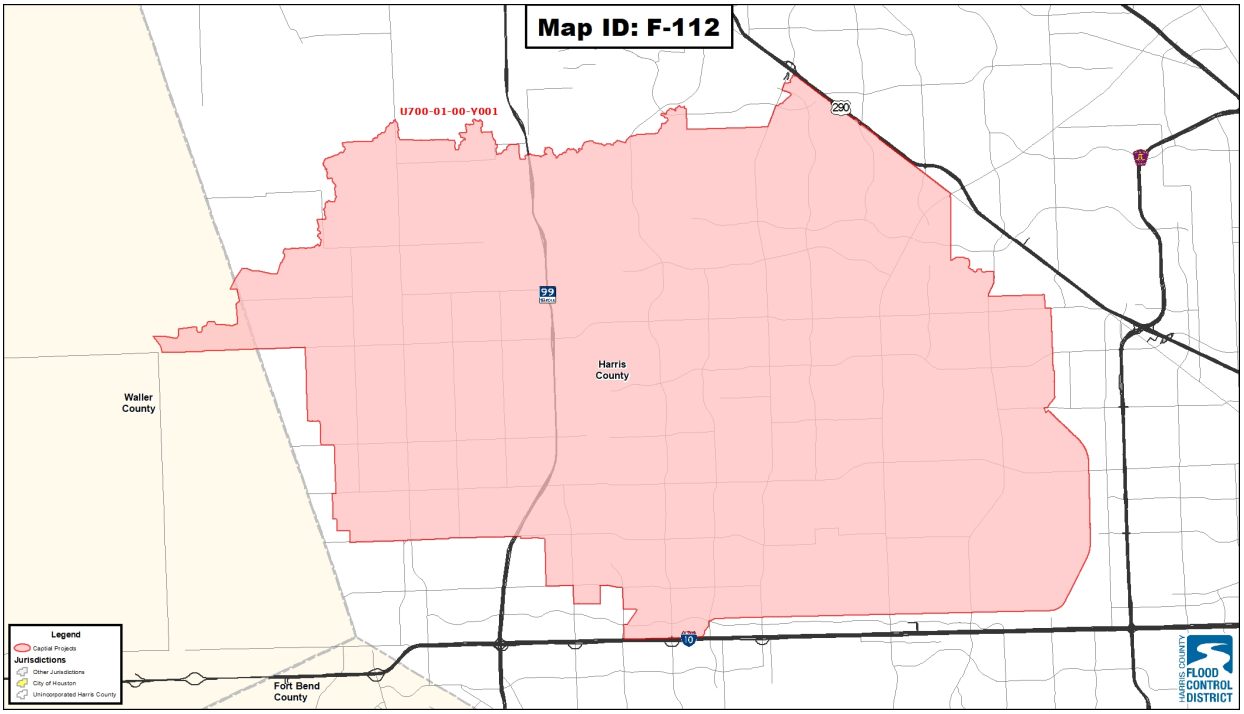
Restoration and enhancement of wetlands to create credits for wetland mitigation supporting construction of District projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$20,000,000	$66,023	$6,429,754	$6,336,911	$3,854,500	$423,923	$2,888,889

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-53 Rehabilitation of Channels Upstream of Addicks Reservoir to Restore Channel Conveyance Capacity

Category: Major Maintenance Projects

Estimated Project Cost: $30,000,000

Operating Cost Impact: $0

Funded to Date: $18,952,378

Expected Completion: 1st Quarter, FY 2022

Funding Source: Debt Service - FCD Property Tax

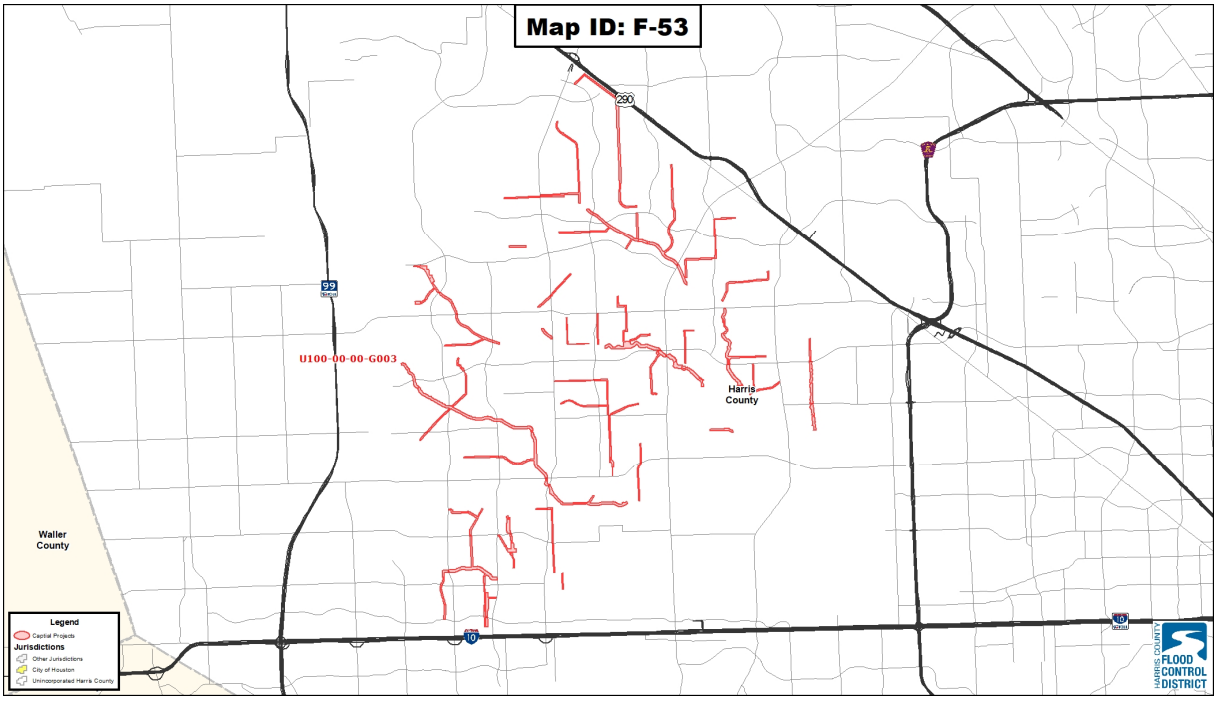
Project Description/ Justification:
Major maintenance to restore channel conveyance capacity.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$30,000,000	$18,952,378	$7,680,609	$3,367,013	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-54 Right-Of-Way Acquisition, Design and Construction of Control Structures and Stormwater Quality Features for the Upper Langham Creek Program

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

The Upper Langham Creek project could remove the 1% floodplain from all structures in the Upper Langham Creek watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$2,295,952	$5,358,897	$600,977	$834,747	$909,427

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-55 Planning, Right-Of-Way Acquisition, Design, and Construction for Ultimate Conveyance on Bear Creek

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $25,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

The project could reduce the risk of flooding for over 30 structures in the 1% floodplain and create depth for more effective drainage.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$25,000,000	$0	$0	$62,313	$4,506,761	$6,766,086	$4,831,433

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-56 Right-Of-Way Acquisition, Design, and Construction of a Retention Area

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $15,000,000

Operating Cost Impact: $4,200

Funded to Date: $360,000

Expected Completion: 3rd Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Provides regional retention in accordance w/ Cypress Creek Overflow Guidelines

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$15,000,000	$360,000	$5,560,550	$4,270,306	$4,804,977	$4,167	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$1,050	$4,200

Harris County FY 2020 Capital Improvement Program

Project Name:	F-83 Right-Of-Way Acquisition, Design and Construction of a Stormwater Detention Basin North of John Pauls Landing for the Upper Langham Creek Program	**Estimated Project Cost:**	$21,000,000
		Operating Cost Impact:	$12,600
Category:	Frontier Projects	**Funded to Date:**	$0
		Expected Completion:	1st Quarter, FY 2024
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:
This project will reduce the risk of flooding along Upper Langham Creek.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$21,000,000	$0	$7,743,202	$3,871,766	$906,037	$8,478,995	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$9,450

Harris County FY 2020 Capital Improvement Program

Project Name: F-84 Design and Construction of Secondary Outfall for John Pauls Landing for the Upper Langham Creek Program

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $5,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
This project will reduce the risk of flooding along Upper Langham Creek.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$5,000,000	$0	$0	$0	$0	$0	$1,263,095

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	C-06 Right-Of-Way Acquisition, Design and Construction of B112-00-00 and Tributaries Conveyance Improvements	**Estimated Project Cost:**	$10,000,000
		Operating Cost Impact:	$0
Category:	Main Channel Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:
Provides general drainage improvements along B112-00-00

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$602,420	$2,644,626	$2,812,253	$2,773,070	$1,167,631

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	C-07 Design and Construction of the B509-03-00 and B509-04-00 Stormwater Detention Basins	**Estimated Project Cost:**	$15,000,000
		Operating Cost Impact:	$0
Category:	Tributary Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

Construction of this stormwater detention basin will reduce the risk of flooding in the Armand Bayou watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$15,000,000	$0	$537,160	$1,911,974	$2,578,944	$3,729,049	$4,333,827

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: C-44 Armand Bayou Right-of-Way Acquisition and Floodplain Preservation

Category: Floodplain Acquisition and Preservation Projects

Estimated Project Cost: $4,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 3rd Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Right of way acquisition along Armand Bayou for project support, to preserve channel conveyance and / or restore natural floodplains in areas subject to frequent flooding.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$4,000,000	$0	$490,705	$1,729,647	$1,729,648	$50,000	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: CI-021 Brookglen Flooding Mitigation Analysis

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $250,000

Operating Cost Impact: $0

Funded to Date: $159,015

Expected Completion: 1st Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Effort will investigate flooding problems and evaluate potential solutions to flooding problems to reduce the risk of flooding in the Brookglen area.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$250,000	$159,015	$90,985	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	CI-023 Right-Of-Way, Design and Construction of Conveyance Improvements along Horsepen Bayou	**Estimated Project Cost:**	$6,000,000
		Operating Cost Impact:	$4,200
Category:	Tributary Flood Damage Reduction Projects	**Funded to Date:**	$603,661
		Expected Completion:	3rd Quarter, FY 2022
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

Project could reduce the risk of flooding for structures in the watershed. Some project costs will be determined based on partnership with NASA.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$6,000,000	$603,661	$1,400,544	$3,985,269	$10,526	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$1,050	$4,200	$4,200

Harris County FY 2020 Capital Improvement Program

Project Name:	F-72 Design and Construction of the Baywood Stormwater Detention Basin	**Estimated Project Cost:**	$2,000,000
		Operating Cost Impact:	$6,300
Category:	Tributary Flood Damage Reduction Projects	**Funded to Date:**	$173,050
		Expected Completion:	3rd Quarter, FY 2022
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

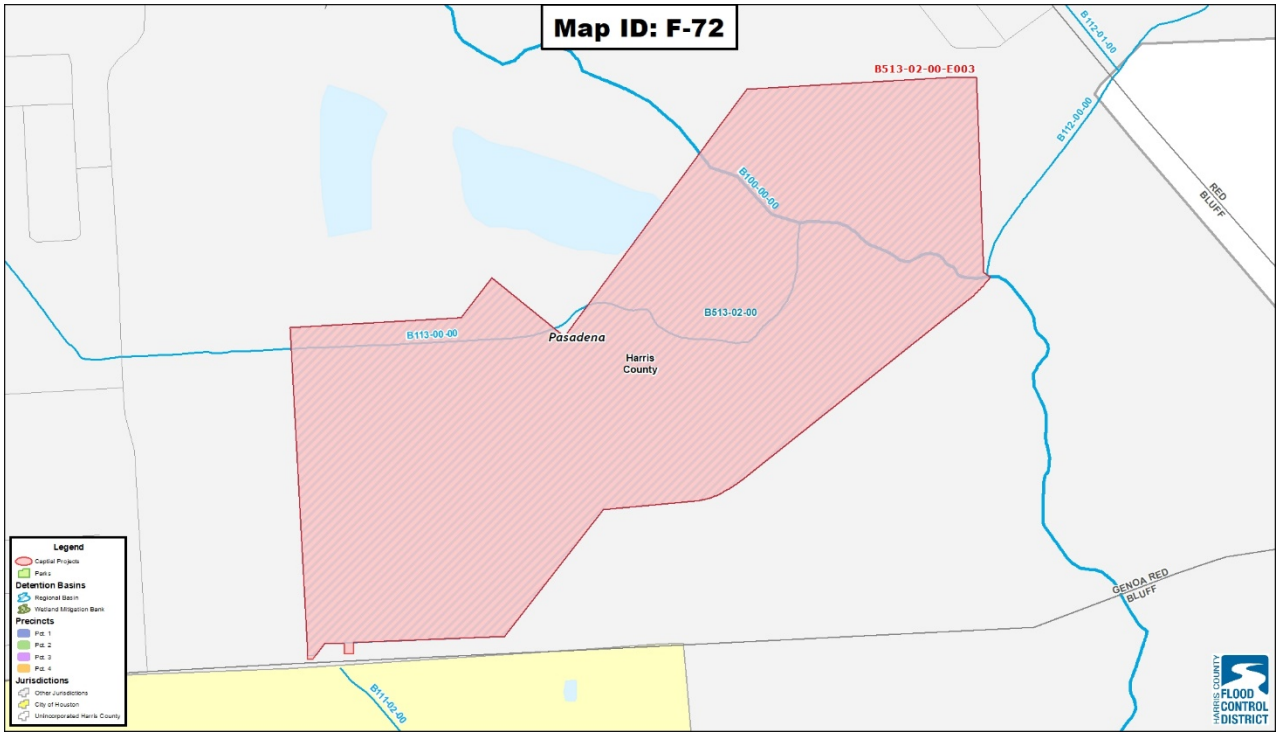
Construction of additional volume in this stormwater detention basin will help reduce the risk of flooding along Armand Bayou.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$2,000,000	$173,050	$0	$1,813,616	$13,334	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$1,575	$6,300	$6,300



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-96 Investigations of General Drainage Improvements in Armand Bayou Watershed

Category: Local Participation Projects

Estimated Project Cost: $950,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

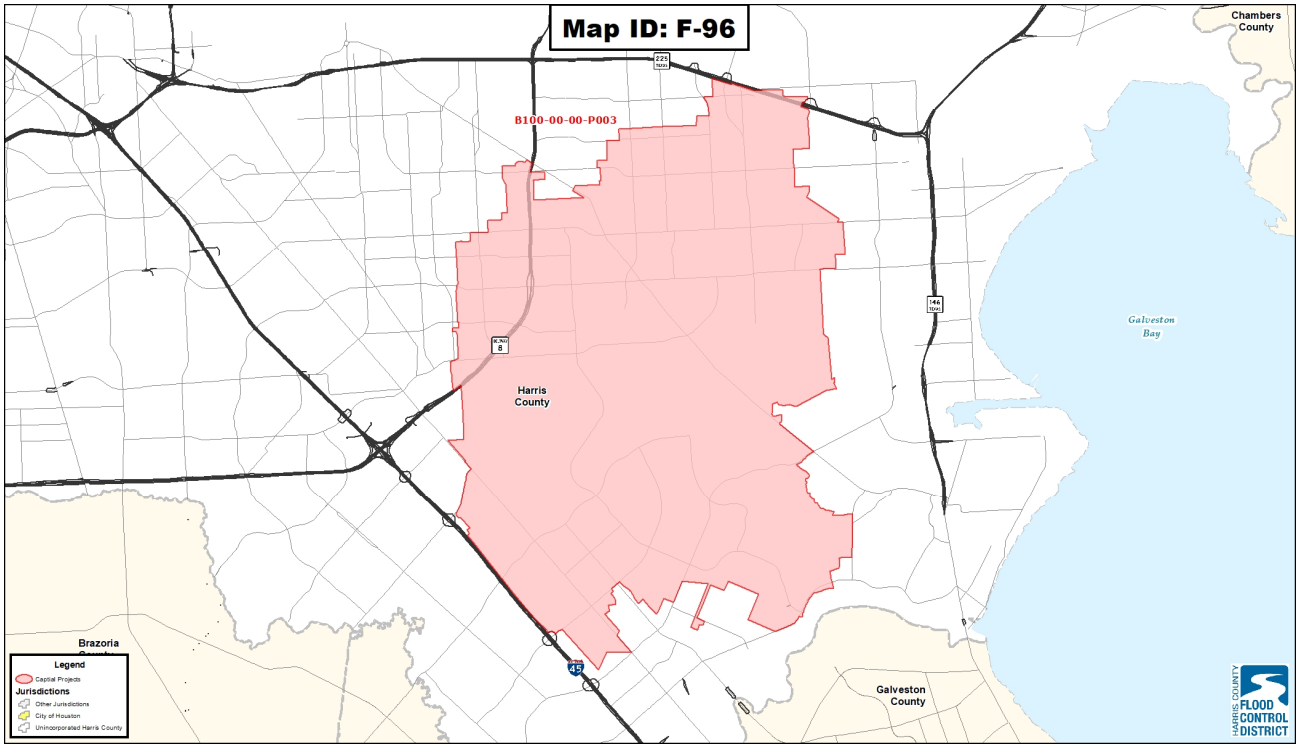
Effort will investigate flooding problems and evaluate potential solutions to flooding problems to reduce the risk of flooding in the Armand Bayou watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$950,000	$0	$950,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name:	F-99 Right-Of-Way, Design and Construction of Conveyance Improvements along Armand Bayou	**Estimated Project Cost:**	$10,000,000
		Operating Cost Impact:	$0
Category:	Main Channel Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:
Design and construction of projects to reduce the risk of flooding in the Armand Bayou watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$0	$2,253,283	$3,261,875	$1,226,301	$2,314,725

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: C-53 Rehabilitation of Channels Inside of Barker Reservoir to Restore Channel Conveyance Capacity

Estimated Project Cost: $10,000,000

Operating Cost Impact: $0

Category: Major Maintenance Projects

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Major maintenance to restore channel conveyance capacity. Partnership project with USACE with HCFCD providing project funding.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$0	$0	$0	$3,865,678	$2,922,206

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: E-02 Barker Reservoir Subdivision Drainage Improvements

Category: Harris County Support Projects

Estimated Project Cost: $33,170,000

Operating Cost Impact: $0

Funded to Date: $610

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

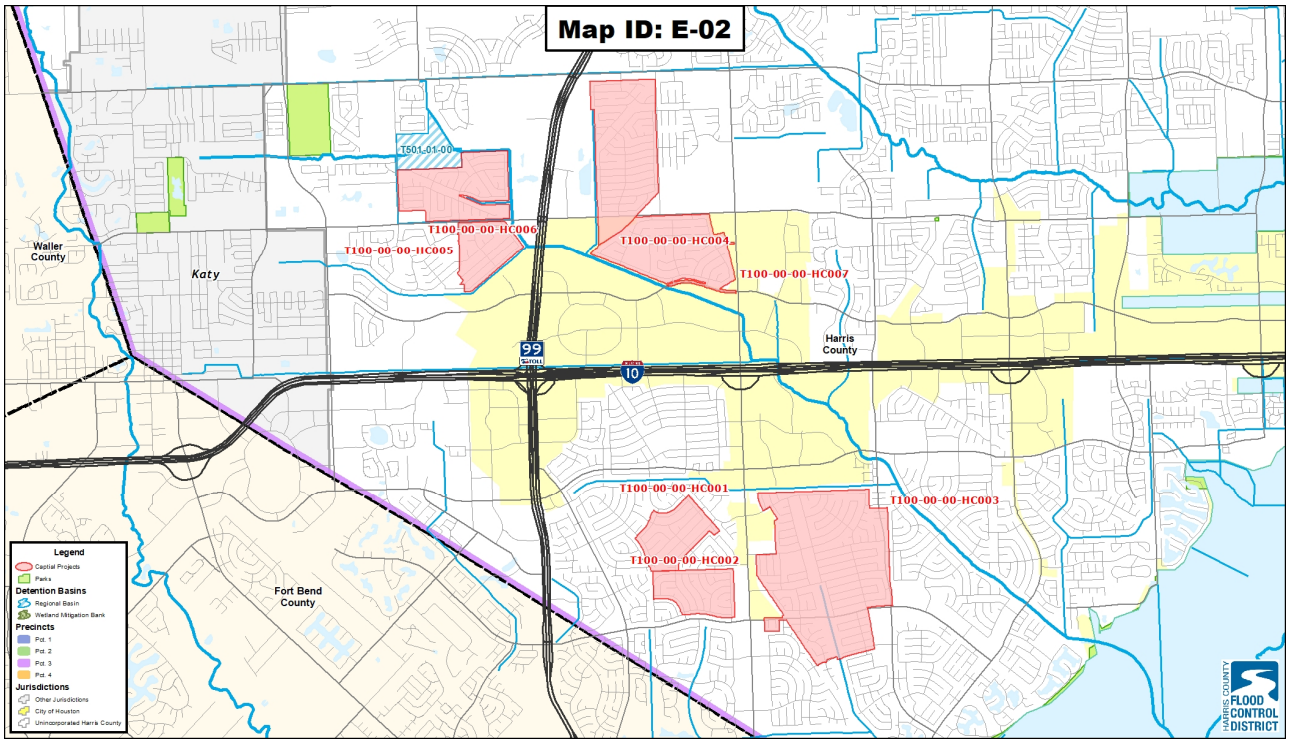
Design and construction of these projects could reduce the risk of flooding for over 1,900 homes during a 1% rain or flood event.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$33,170,000	$610	$2,685,405	$3,573,524	$4,935,912	$6,648,157	$7,919,489

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-52 Rehabilitation of Approximately 20 Miles of Channels Upstream of Barker Reservoir to Restore Channel Conveyance Capacity

Category: Major Maintenance Projects

Estimated Project Cost: $30,000,000

Operating Cost Impact: $0

Funded to Date: $3,674,443

Expected Completion: 3rd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

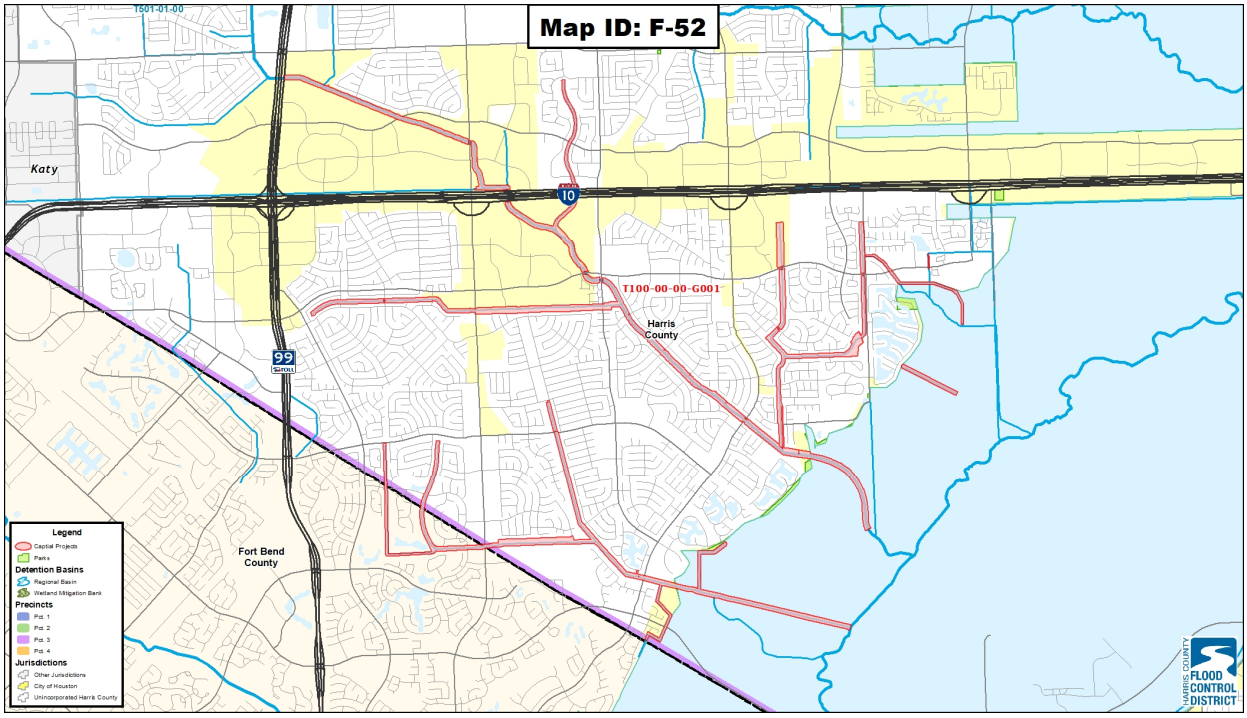
Project Description/ Justification:
Major maintenance to restore channel conveyance capacity.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$30,000,000	$3,674,443	$16,221,561	$7,503,671	$1,306,356	$1,268,136	$25,833

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name:	C-11 Design and Construction of Project Brays Corps of Engineers (Section 211(f) Project)	**Estimated Project Cost:**	$95,000,000
		Operating Cost Impact:	$0
Category:	Major Partnership Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:
The 1% floodplain could be removed from up to 15,000 structures.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$95,000,000	$0	$6,871,277	$7,424,642	$9,310,662	$10,470,648	$14,448,594

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: C-12 Right-Of-Way, Design and Construction of Conveyance Improvements along Poor Farm Ditch

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $18,000,000

Operating Cost Impact: $8,400

Funded to Date: $0

Expected Completion: 3rd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
The project could reduce the risk of flooding for over 270 structures in the 1% floodplain.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$18,000,000	$0	$1,043,478	$5,267,205	$5,565,022	$6,118,317	$5,978

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$2,100

Harris County FY 2020 Capital Improvement Program

Project Name: C-13 Planning, Right-Of-Way, Design and Construction of Conveyance Improvements along Bintliff Ditch

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $30,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

The project could reduce the risk of flooding for over 720 structures in the 1% floodplain. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$30,000,000	$0	$7,408,115	$6,153,182	$6,279,859	$7,784,237	$2,374,607

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	CI-025 Investigation of Additional Stormwater Detention Basins in the Brays Bayou Watershed	**Estimated Project Cost:**	$200,000
		Operating Cost Impact:	$0
Category:	Major Partnership Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	2nd Quarter, FY 2023
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

The project could reduce the risk of flooding for structures in the watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$200,000	$0	$0	$5,772	$194,228	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	CI-034 Investigation of Channel Improvements Upstream of Fondren Road on Brays Bayou	**Estimated Project Cost:**	$250,000
		Operating Cost Impact:	$0
Category:	Major Partnership Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	2nd Quarter, FY 2023
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:
This project could reduce the risk of flooding along Brays Bayou.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$250,000	$0	$0	$7,215	$242,785	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	CI-038 Restore Channel Conveyance Capacity Along D115-00-00	**Estimated Project Cost:**	$30,000,000
		Operating Cost Impact:	$0
Category:	Major Maintenance Projects	**Funded to Date:**	$0
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

Major maintenance to restore channel conveyance capacity in partnership with the City of Houston. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$30,000,000	$0	$0	$83,089	$12,077,314	$7,217,812	$7,684,888

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-07 Planning, Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on Keegans Bayou

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $32,500,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Right of way acquisition, design and construction of this project could reduce the risk flooding for over 900 structures in the 1% floodplain. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$32,500,000	$0	$2,959,203	$5,996,643	$7,479,692	$4,776,419	$7,031,588

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-08 Planning, Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on Fondren Diversion Channel

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $30,500,000

Operating Cost Impact: $6,300

Funded to Date: $0

Expected Completion: 3rd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Right of way acquisition, design and construction of this project could reduce the risk of flooding for over 400 structures in the 1% floodplain. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$30,500,000	$0	$1,900,531	$9,502,566	$8,650,103	$10,397,633	$49,167

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$1,575

Harris County FY 2020 Capital Improvement Program

Project Name:	CI-009 Partnership Project with Fort Bend County on Right-of-Way Acquisition, Design, and Construction of General Drainage Improvements along Clodine Ditch	**Estimated Project Cost:**	$30,000,000
		Operating Cost Impact:	$0
Category:	Partnership Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

Planning, right of way acquisition, design and construction of this project could reduce the risk of flooding for homes along Buffalo Bayou downstream of Highway 6.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$30,000,000	$0	$0	$8,123,602	$9,751,399	$6,017,672	$6,107,327

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: CI-016 Investigations of Bridges and Potential Channel Bypasses over Buffalo Bayou

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $500,000

Operating Cost Impact: $0

Funded to Date: $90,633

Expected Completion: 4th Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

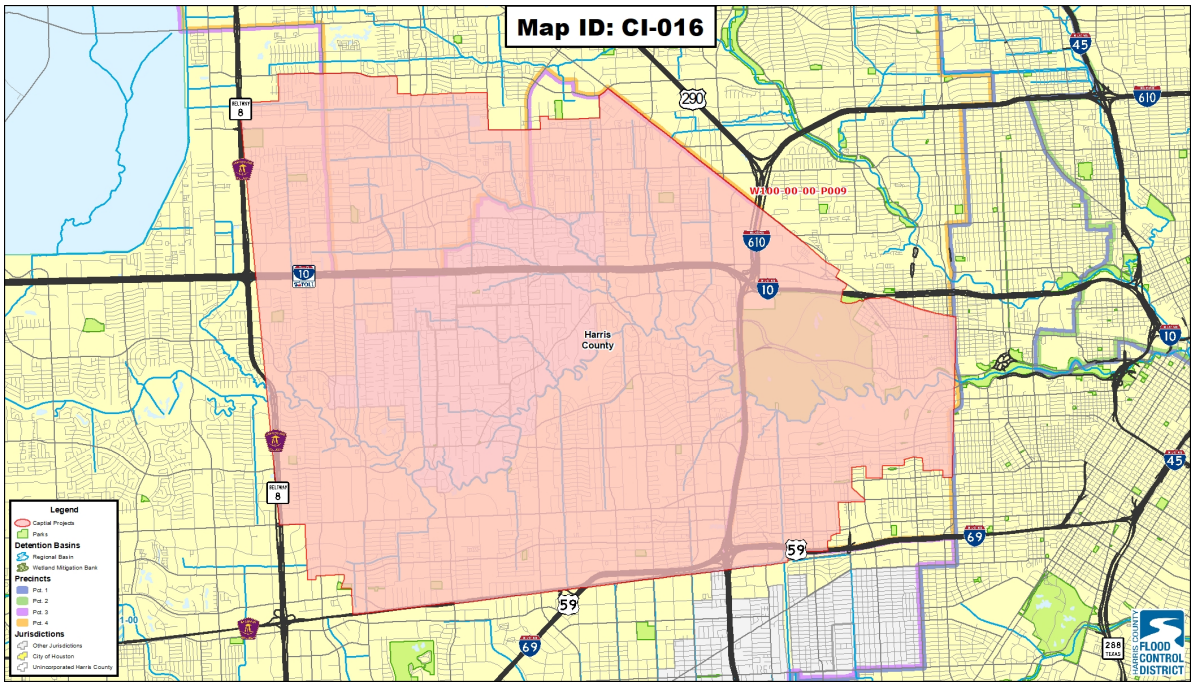
Investigations of bridges over Buffalo Bayou, the channel conveyance capacity around Beltway 8, Rummel Creek Road bridge and potential high flow bypasses at various locations along the bayou for the purpose of reducing the risk of flooding along the channel.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$500,000	$90,633	$382,039	$27,328	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name:	CI-017 Design & Construction of Replacement Bridges Along Buffalo Bayou	**Estimated Project Cost:**	$30,000,000
		Operating Cost Impact:	$0
Category:	Main Channel Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

Design and construction of replacement bridges along Buffalo Bayou that could reduce the risk of flooding along the channel.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$30,000,000	$0	$0	$55,999	$2,189,707	$2,189,707	$2,195,706

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: CI-018 Rehabilitation of W140-00-00 to Restore Channel Conveyance Capacity

Category: Major Maintenance Projects

Estimated Project Cost: $2,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Major maintenance to restore channel conveyance capacity.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$2,000,000	$0	$0	$51,869	$859,465	$1,088,666	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	CI-024 Investigation of Effectiveness of Micro-Detention in the Buffalo Bayou Watershed	**Estimated Project Cost:**	$200,000
		Operating Cost Impact:	$0
Category:	Local Participation Projects	**Funded to Date:**	$0
		Expected Completion:	2nd Quarter, FY 2023
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

Investigations regarding the effectiveness of small detention sites in the Buffalo Bayou watershed for the purpose of reducing the risk of flooding.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$200,000	$0	$0	$5,772	$194,228	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-58 Construction of Linear Detention on Buffalo Bayou

Category: Local Participation Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $6,300

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Reduce the risk of flooding along Buffalo Bayou with construction of additional stormwater detention volume on land already owned by the District.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$1,716,534	$3,952,806	$4,330,660	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$3,150	$6,300

Harris County FY 2020 Capital Improvement Program

Project Name: F-79 Planning, Right-Of-Way Acquisition, Design and Construction Along W157-00-00

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Could reduce the risk of flooding and could improve local drainage issues for buildings along the channel.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$0	$55,940	$2,367,155	$3,180,804	$2,286,762

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-80 Planning, Right-Of-Way Acquisition, Design and Construction Along Soldiers Creek

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Could reduce the risk of flooding and could improve local drainage issues for buildings along the channel.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$0	$55,940	$2,367,155	$3,180,804	$2,286,762

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-81 Planning, Right-Of-Way Acquisition, Design and Construction Along W151-00-00 and W153-00-00

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $20,000,000

Operating Cost Impact: $12,600

Funded to Date: $1,010,000

Expected Completion: 3rd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

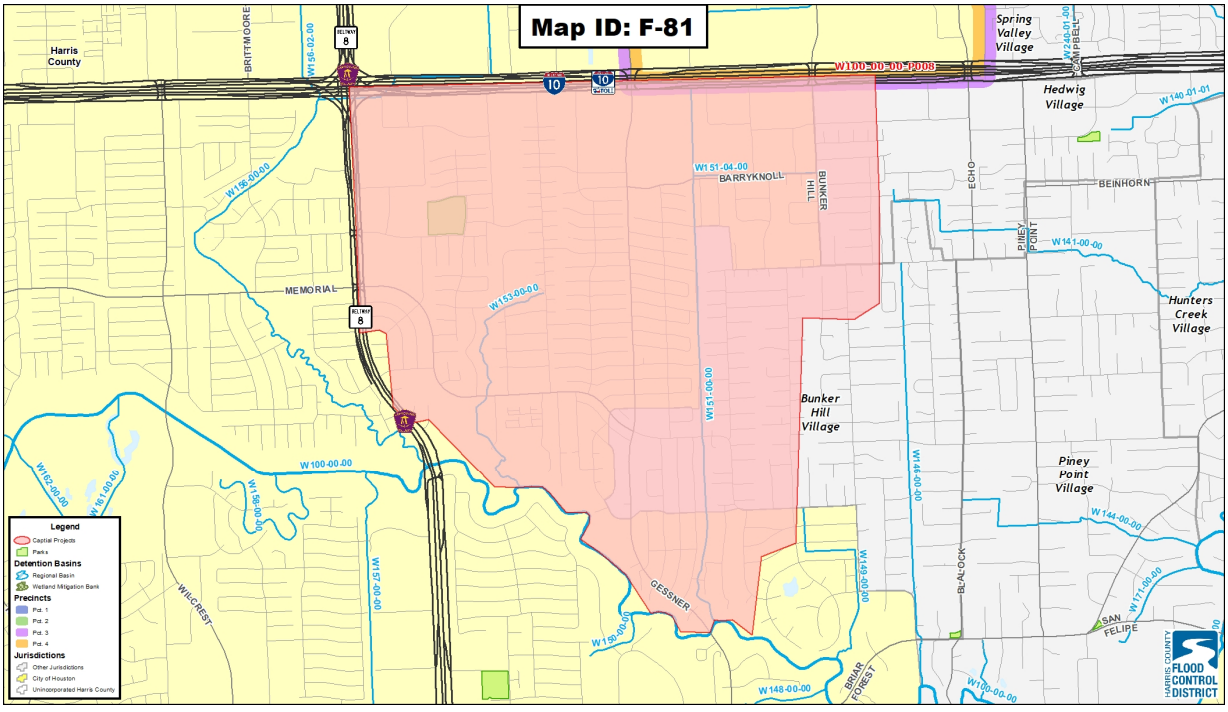
Could reduce the risk of flooding and could improve local drainage issues for buildings along the channel. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$20,000,000	$1,010,000	$2,525,332	$6,218,741	$4,166,326	$6,079,601	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$3,150



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-82 Demolition of 1119 Commerce Street and Slope Stabilization Along Buffalo Bayou

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $2,500,000

Operating Cost Impact: $0

Funded to Date: $31,458

Expected Completion: 1st Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

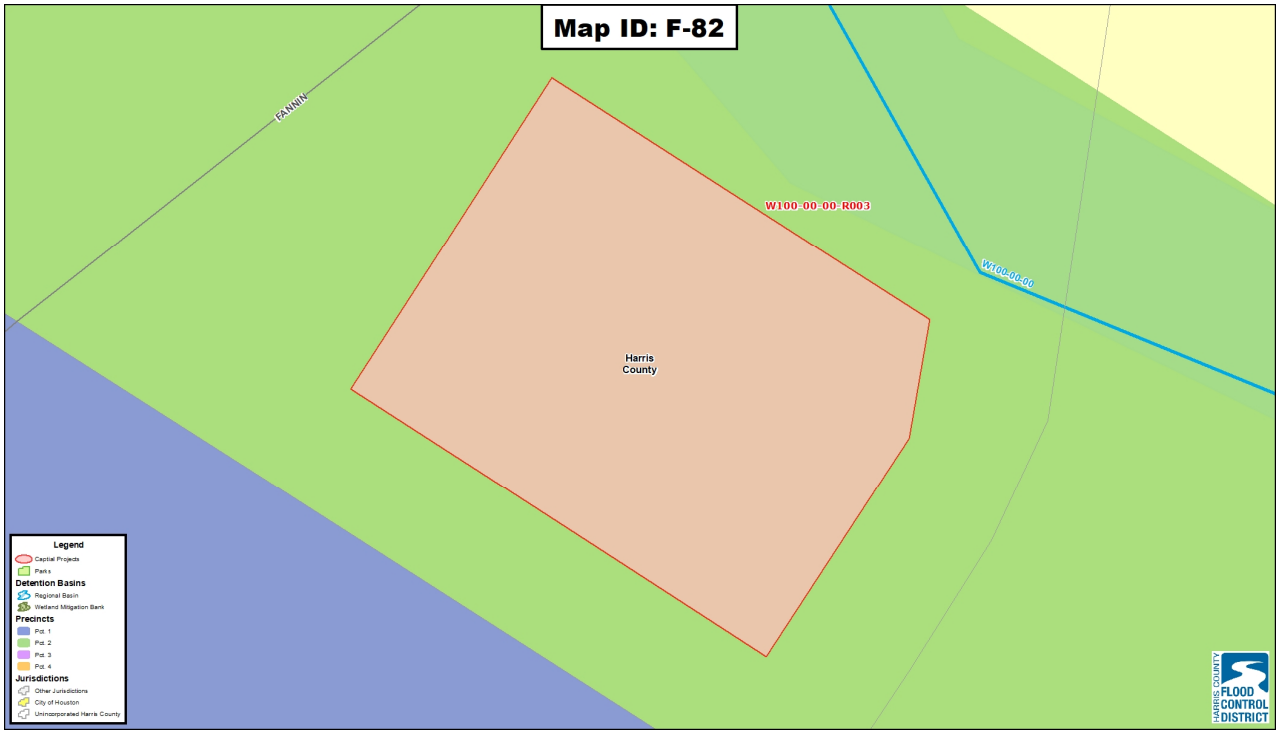
Improving the channel conveyance along Buffalo Bayou near downtown Houston.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$2,500,000	$31,458	$2,468,542	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: E-03 Carpenters Bayou Subdivision Drainage Improvements

Category: Harris County Support Projects

Estimated Project Cost: $6,650,000

Operating Cost Impact: $0

Funded to Date: $75,261

Expected Completion: 3rd Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

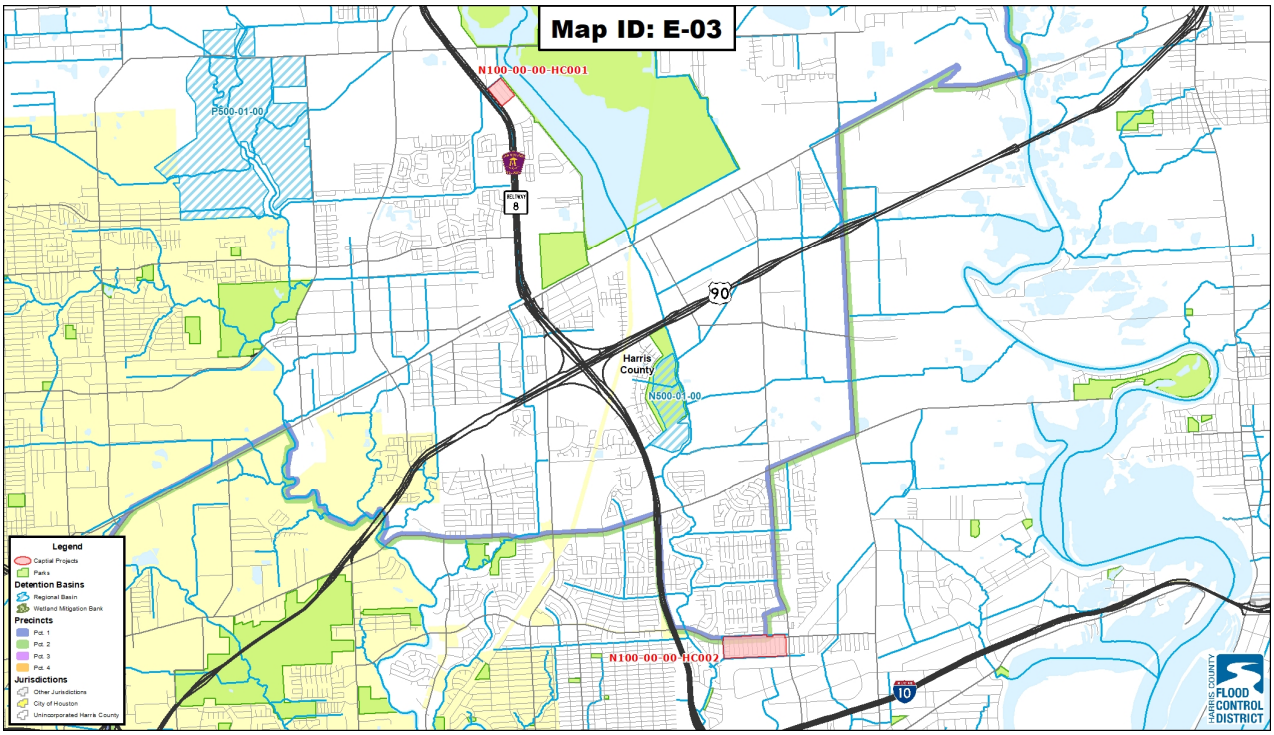
Design and construction of these projects could reduce the risk of flooding for over 600 homes during a 1% rain or flood event.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$6,650,000	$75,261	$1,081,309	$2,359,472	$3,105,625	$28,333	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-124 Investigations of General Drainage Improvements along Carpenters Bayou

Category: Local Participation Projects

Estimated Project Cost: $500,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 3rd Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Effort will investigate flooding problems and evaluate potential solutions to flooding problems to reduce the risk of flooding in the Carpenters Bayou watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$500,000	$0	$500,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	F-125 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Carpenters Bayou Watershed	**Estimated Project Cost:**	$5,000,000
		Operating Cost Impact:	$0
Category:	Main Channel Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:
Design and construction of projects to reduce the risk of flooding in the Carpenters Bayou watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$5,000,000	$0	$18,333	$1,771,939	$1,218,122	$1,212,181	$779,425

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: E-04 Cedar Bayou Subdivision Drainage Improvements

Category: Harris County Support Projects

Estimated Project Cost: $2,000,000

Operating Cost Impact: $0

Funded to Date: $60,298

Expected Completion: 3rd Quarter, FY 2022

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

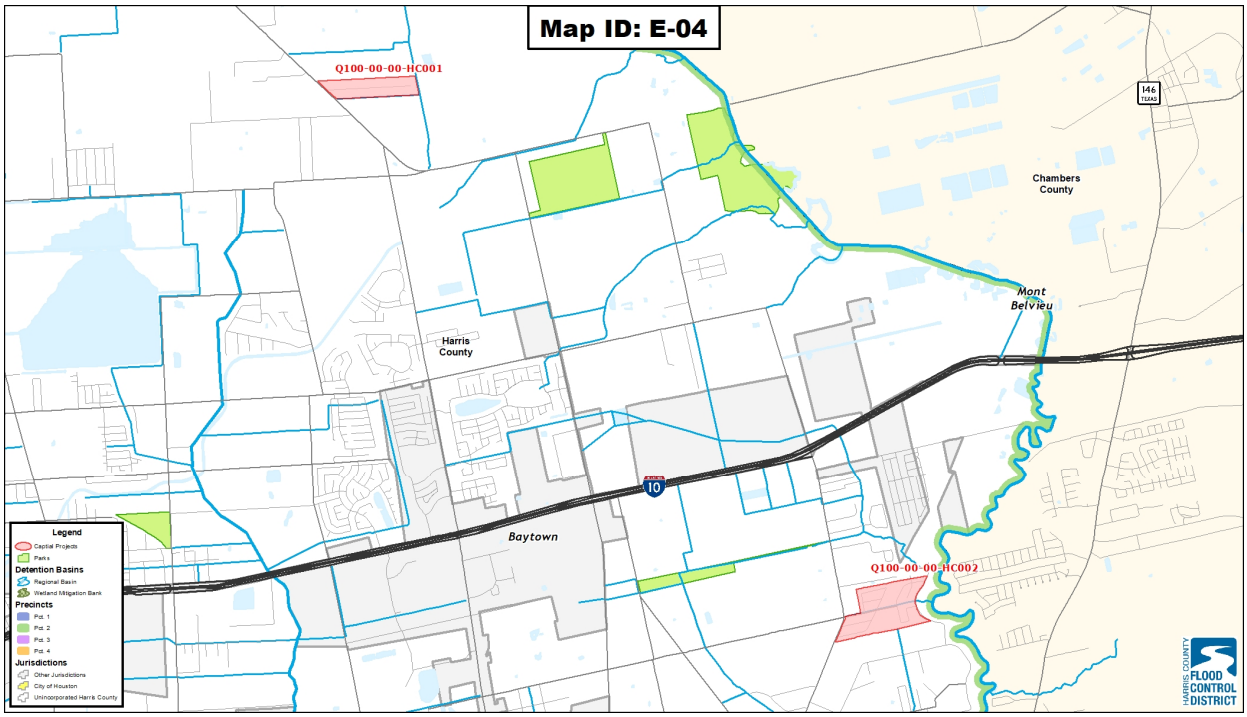
Design and construction of these projects could reduce the risk of flooding for over 150 homes during a 1% rain or flood event.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$2,000,000	$60,298	$573,564	$1,339,471	$26,667	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-123 Management, Right-of-Way Acquisition, Design and Construction in Cedar Bayou Watershed

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $3,000,000

Operating Cost Impact: $0

Funded to Date: $450,000

Expected Completion: 4th Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Implementation and construction of projects that will reduce the risk of flooding Cedar Bayou watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$3,000,000	$450,000	$2,550,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-41 Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along Clawson Ditch and Q124-00-00

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $19,000,000

Operating Cost Impact: $8,400

Funded to Date: $0

Expected Completion: 4th Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
The 1% floodplain could be reduced in size from approximately 2,700 acres to less than 800 acres.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$19,000,000	$0	$3,134,864	$7,562,403	$6,362,733	$1,940,000	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$8,400

Harris County FY 2020 Capital Improvement Program

Project Name: F-42 Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along Magee Gully

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $33,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
The 1% floodplain could be reduced in size.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$33,000,000	$0	$0	$75,093	$10,811,472	$10,876,041	$11,237,394

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-43 Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along Adlong Ditch

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $23,000,000

Operating Cost Impact: $8,400

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
The 1% floodplain could be reduced in size from approximately 2,300 acres to less than 200 acres.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$23,000,000	$0	$1,674,347	$8,339,285	$6,951,834	$6,034,534	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$4,200

Harris County FY 2020 Capital Improvement Program

Project Name: F-44 Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along Q130-00-00

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $18,000,000

Operating Cost Impact: $12,600

Funded to Date: $651,412

Expected Completion: 4th Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

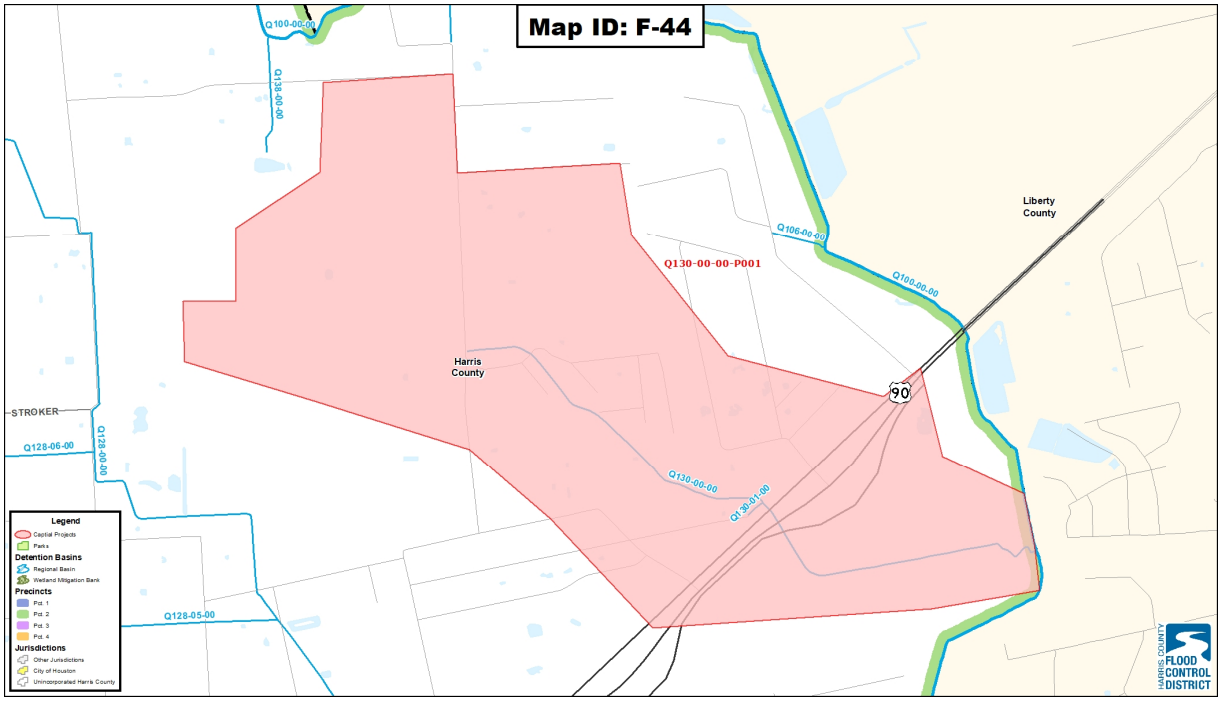
Project Description/ Justification:
The 1% floodplain could be reduced in size from approximately 1,100 acres to less than 100 acres.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$18,000,000	$651,412	$2,168,885	$7,818,620	$6,976,950	$384,133	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$12,600



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-45 Planning, Right-Of-Way Acquisition, Design and Construction of Channel Conveyance Improvements on Q134-00-00 and Q134-00-01

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $22,000,000

Operating Cost Impact: $16,800

Funded to Date: $717,336

Expected Completion: 3rd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

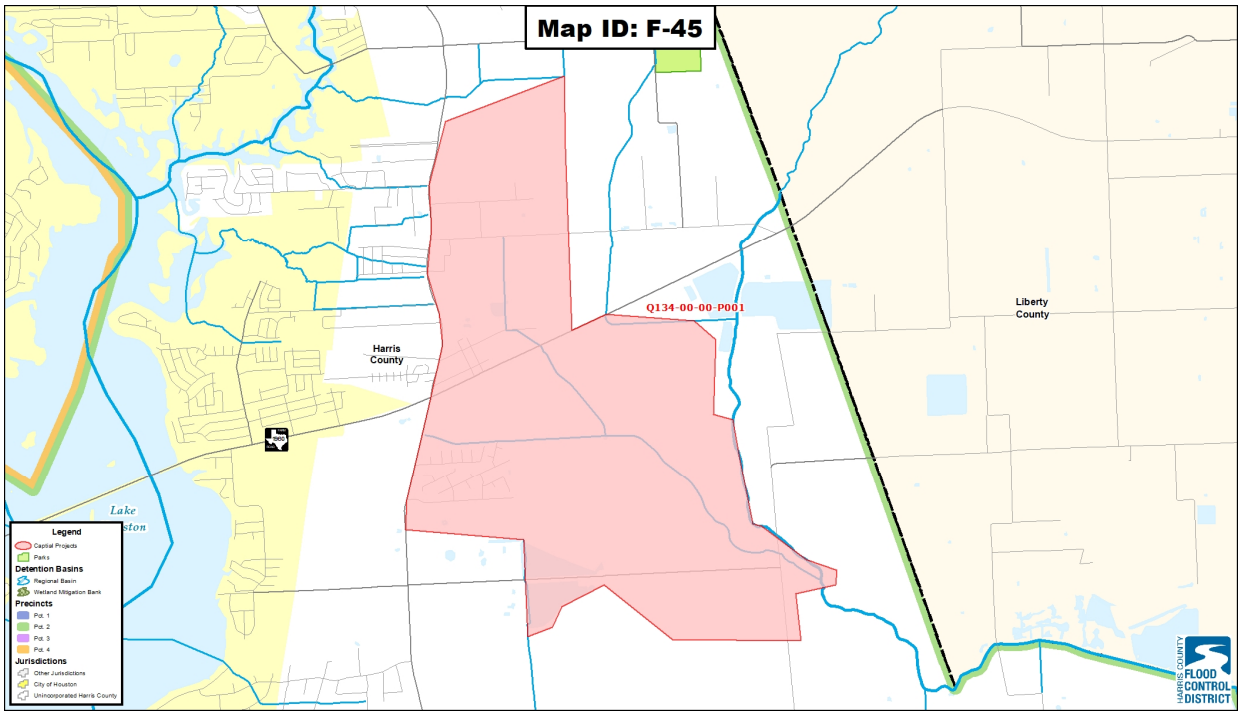
Project Description/ Justification:
The 1% floodplain could be reduced in size.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$22,000,000	$717,336	$2,305,864	$4,507,758	$7,094,679	$7,374,363	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$4,200



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-46 Right-Of-Way Acquisition, Design and Construction of the Q500-01 Stormwater Detention Basin

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $26,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
The 1% floodplain could be reduced in size.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$26,000,000	$0	$3,572,116	$6,461,631	$5,798,176	$5,585,577	$4,582,500

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-47 Right-Of-Way Acquisition, Design and Construction of Stormwater Detention Basins near Coastal Water Authority canals and IH 10

Estimated Project Cost: $23,000,000

Operating Cost Impact: $0

Category: Partnership Flood Damage Reduction Projects

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
The 1% floodplain could be reduced in size.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$23,000,000	$0	$3,164,148	$5,713,180	$5,126,572	$4,938,599	$4,057,501

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-48 Design and Construction of Crosby Eastgate Environmental Mitigation Bank

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $1,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Restoration and enhancement of wetlands to create credits for wetland mitigation supporting construction of District projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$1,000,000	$0	$0	$0	$447,071	$552,929	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	F-69 Right-Of-Way Acquisition, Design and Construction of channel conveyance improvements on Q136-00-00 - Part of the Upstream Cedar Bayou Project	**Estimated Project Cost:**	$10,500,000
		Operating Cost Impact:	$0
Category:	Main Channel Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	4th Quarter, FY 2024
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:
This project will reduce the risk of flooding along upper Cedar Bayou.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,500,000	$0	$0	$2,017,603	$4,089,516	$3,718,881	$674,000

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	F-70 Upstream Cedar Bayou Project - Right-Of-Way Acquisition, Design and Construction of Channel Conveyance Improvements and Stormwater Detention Basin Upstream of FM 1960	**Estimated Project Cost:**	$74,000,000
		Operating Cost Impact:	$0
Category:	Main Channel Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

The 1% floodplain could be reduced in size from approximately 1,500 acres to less than 100 acres.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$74,000,000	$0	$0	$8,966,725	$17,864,219	$17,305,279	$14,970,070

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: C-03 Design and Construction of Corps of Engineers Clear Creek Federal Flood Risk Management Project

Category: Major Partnership Flood Damage Reduction Projects

Estimated Project Cost: $295,000,000

Operating Cost Impact: $0

Funded to Date: $2,350,000

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

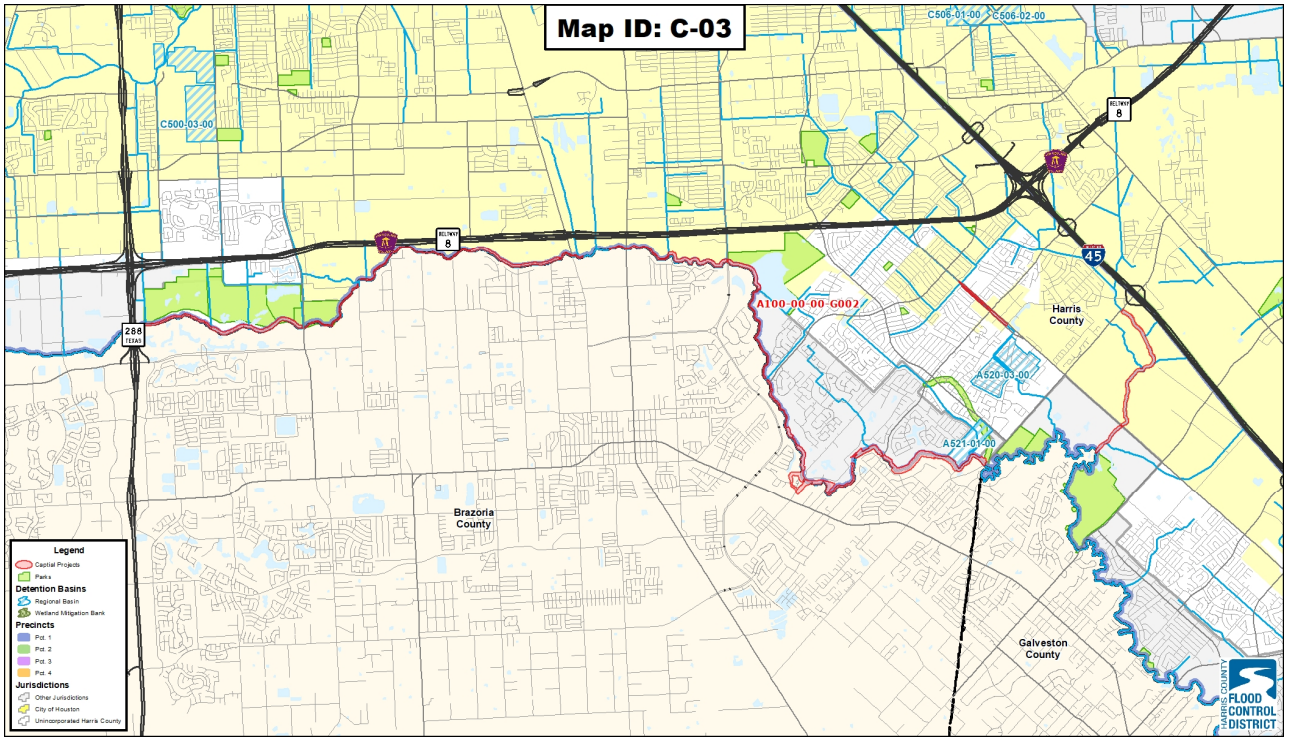
Project Description/ Justification:
The 1% floodplain could be removed from up to 2,100 structures.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$295,000,000	$2,350,000	$19,914,802	$24,214,762	$24,218,939	$24,222,200	$25,327,148

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: C-05 Construction of South Belt Stormwater Detention Basin and Channel Conveyance Improvements Along Beamer Road Ditch (A120-00-00)

Category: Partnership Flood Damage Reduction Projects

Estimated Project Cost: $13,300,000

Operating Cost Impact: $12,600

Funded to Date: $92,072

Expected Completion: 3rd Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

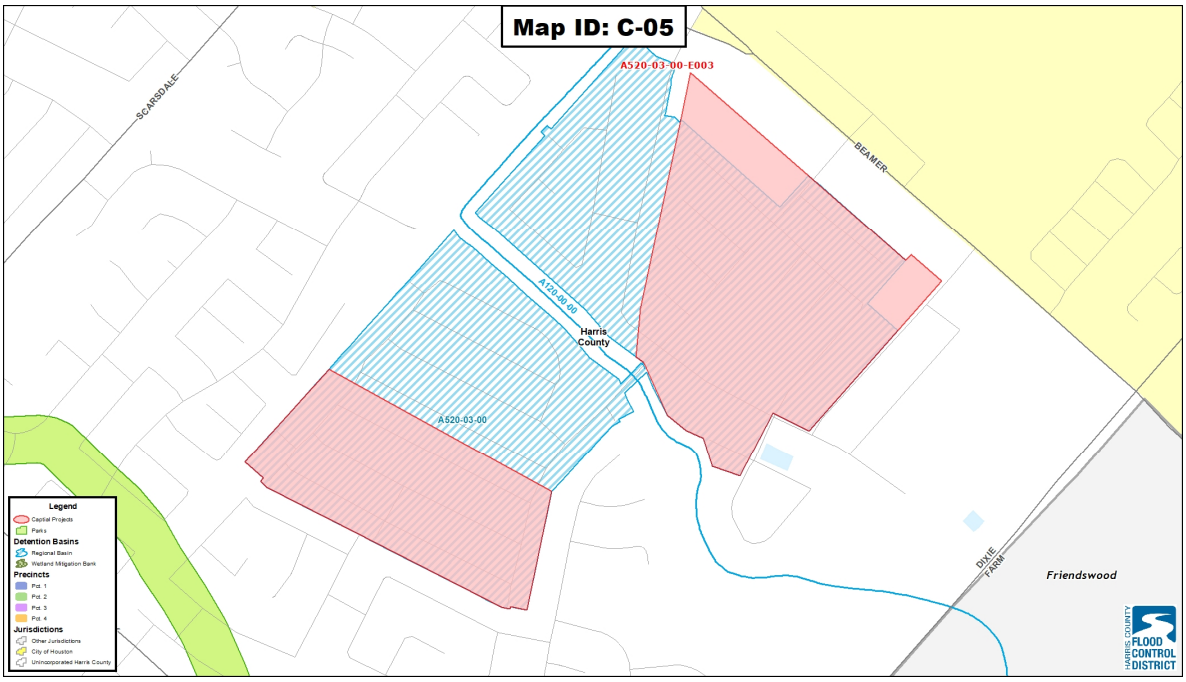
Project Description/ Justification:
Complements the Clear Creek Federal Project that could reduce the risk of flooding for over 2,100 structures

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$13,300,000	$92,072	$4,832,213	$8,186,123	$150,474	$39,118	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$3,150	$12,600



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: CI-001 Rehabilitation of the Clear Creek channel to Restore Channel Conveyance Capacity

Category: Major Maintenance Projects

Estimated Project Cost: $25,000,000

Operating Cost Impact: $0

Funded to Date: $47,127

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Major maintenance to restore channel conveyance capacity.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$25,000,000	$47,127	$0	$0	$6,165,314	$10,220,109	$8,502,010

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: CI-003 Rehabilitation of the A214-00-00 channel to Restore Channel Conveyance Capacity

Category: Major Maintenance Projects

Estimated Project Cost: $1,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Major maintenance to restore channel conveyance capacity.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$1,000,000	$0	$0	$25,934	$429,732	$544,334	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: CI-013 Restore Channel Conveyance Capacity on A104-00-00

Category: Major Maintenance Projects

Estimated Project Cost: $5,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Major maintenance to restore channel conveyance capacity.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$5,000,000	$0	$0	$0	$0	$348,820	$2,597,625

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: CI-62 Construction of Stormwater Detention Basins Near FM 528 and Dixie Farm Road in Friendswood

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $20,000,000

Operating Cost Impact: $12,600

Funded to Date: $167,677

Expected Completion: 3rd Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

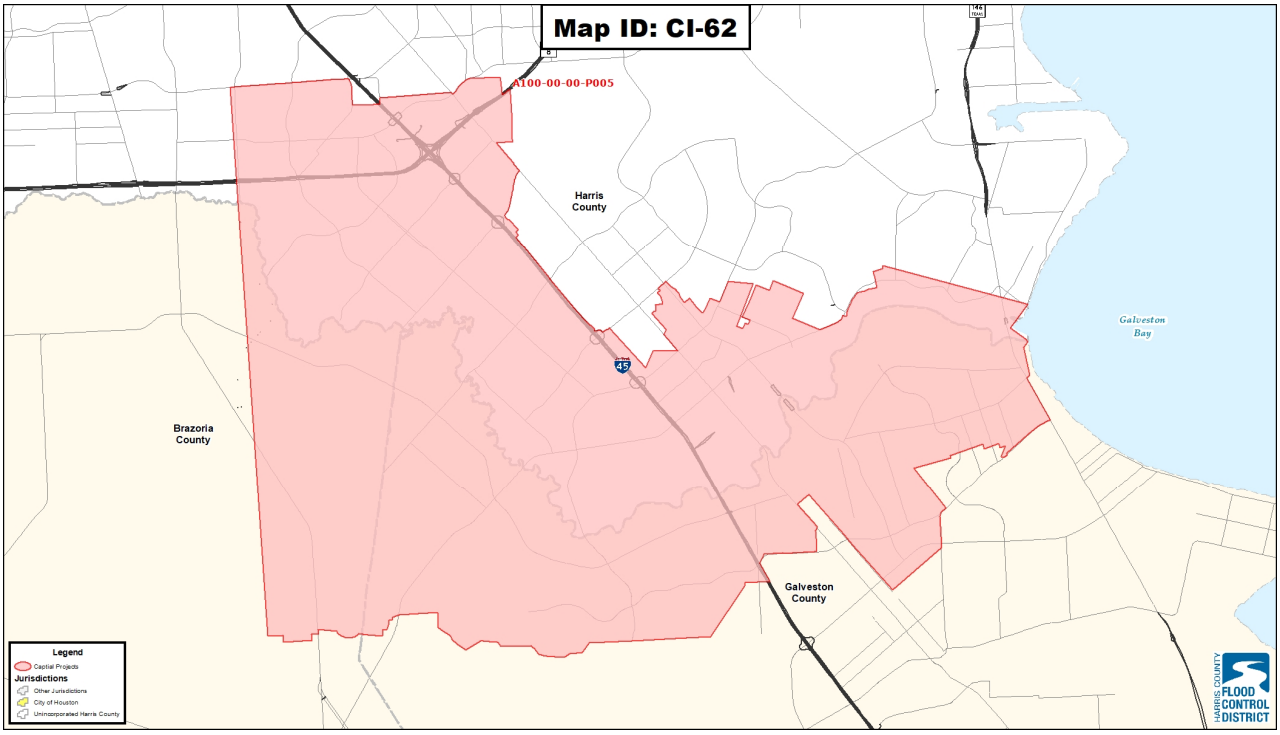
Complements the Clear Creek Federal Project that could reduce the risk of flooding for over 2,100 structures

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$20,000,000	$167,677	$7,700,639	$5,707,452	$6,415,898	$8,334	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$3,150	$12,600



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: E-05 Clear Creek Subdivision Drainage Improvements

Category: Harris County Support Projects

Estimated Project Cost: $12,060,000

Operating Cost Impact: $0

Funded to Date: $6,416

Expected Completion: 3rd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

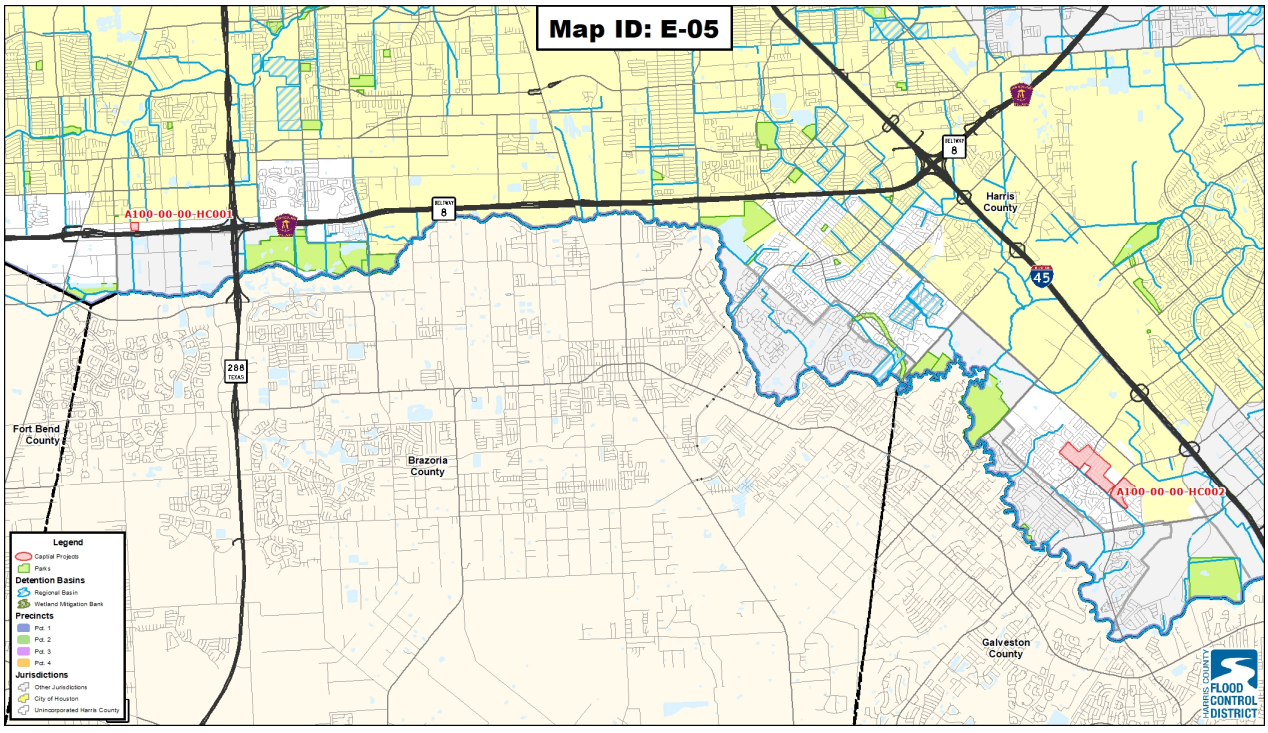
Design and construction of these projects could reduce the risk of flooding for over 900 homes during a 1% rain or flood event.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$12,060,000	$6,416	$1,516,270	$2,474,456	$3,905,383	$4,128,308	$29,167

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-01 Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on A135-00-00

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $2,500,000

Operating Cost Impact: $4,200

Funded to Date: $0

Expected Completion: 3rd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Could reduce the risk of flooding and could improve local drainage issues for over 350 buildings.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$2,500,000	$0	$0	$873,733	$770,672	$825,595	$30,000

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$1,050

Harris County FY 2020 Capital Improvement Program

Project Name: F-02 Right-Of-Way Acquisition, Design and Construction of Hughes Stormwater Detention Basin on Clear Creek

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $9,400,000

Operating Cost Impact: $6,300

Funded to Date: $30,049

Expected Completion: 3rd Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Complements the Clear Creek Federal Project that could reduce the risk of flooding for over 2,100 structures

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$9,400,000	$30,049	$6,558,141	$2,542,089	$241,388	$28,333	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$1,575	$6,300

Harris County FY 2020 Capital Improvement Program

Project Name: F-03 Design and Construction of Dagg Road Stormwater Detention Basin on Clear Creek

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $7,400,000

Operating Cost Impact: $4,200

Funded to Date: $245,594

Expected Completion: 3rd Quarter, FY 2022

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

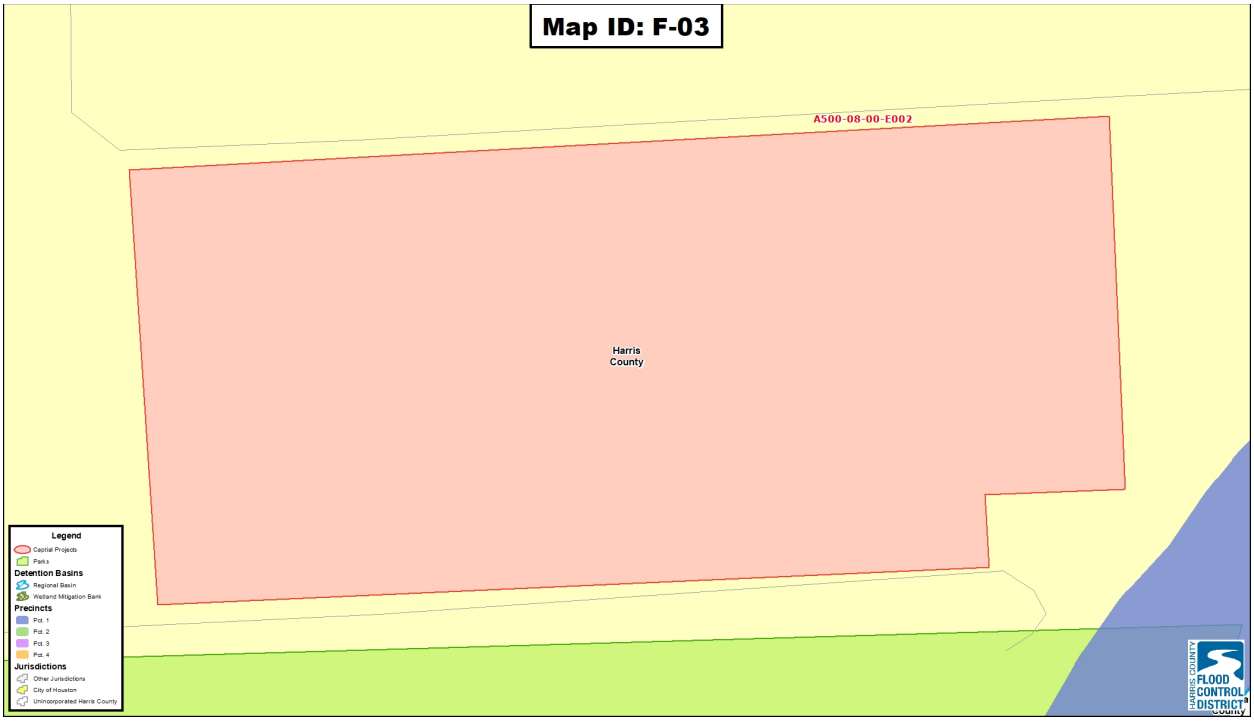
Complements the Clear Creek Federal Project that could reduce the risk of flooding for over 2,100 structures

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$7,400,000	$245,594	$6,580,342	$553,397	$20,667	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$1,050	$4,200	$4,200



Harris County FY 2020 Capital Improvement Program

Project Name: F-76 Identification, Design and Construction of the A700-01 Environmental Mitigation Bank

Category: Harris County Support Projects

Estimated Project Cost: $6,000,000

Operating Cost Impact: $0

Funded to Date: $73,756

Expected Completion: 4th Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

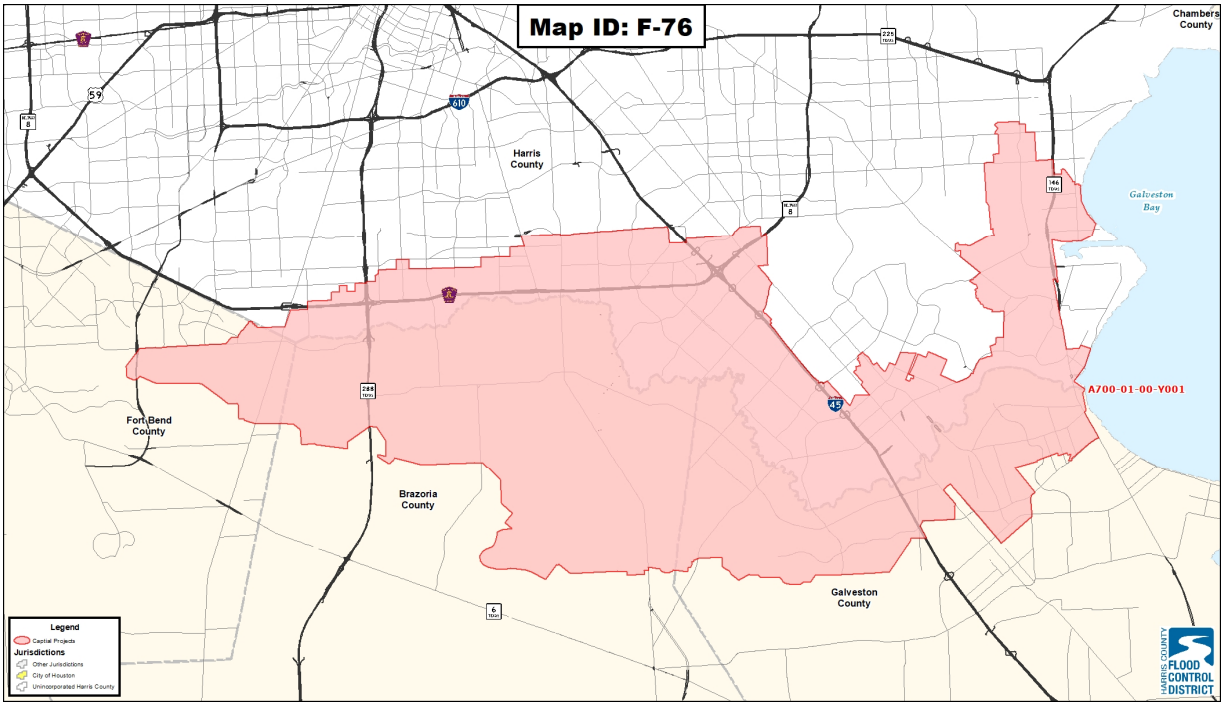
Restoration and enhancement of wetlands to create credits for wetland mitigation supporting construction of District projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$6,000,000	$73,756	$2,059,108	$1,908,608	$413,622	$161,271	$1,383,635

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: CI-012 Major Maintenance of Cypress Creek and Tributaries

Category: Major Maintenance Projects

Estimated Project Cost: $60,000,000

Operating Cost Impact: $0

Funded to Date: $1,920,000

Expected Completion: 4th Quarter, FY 2022

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

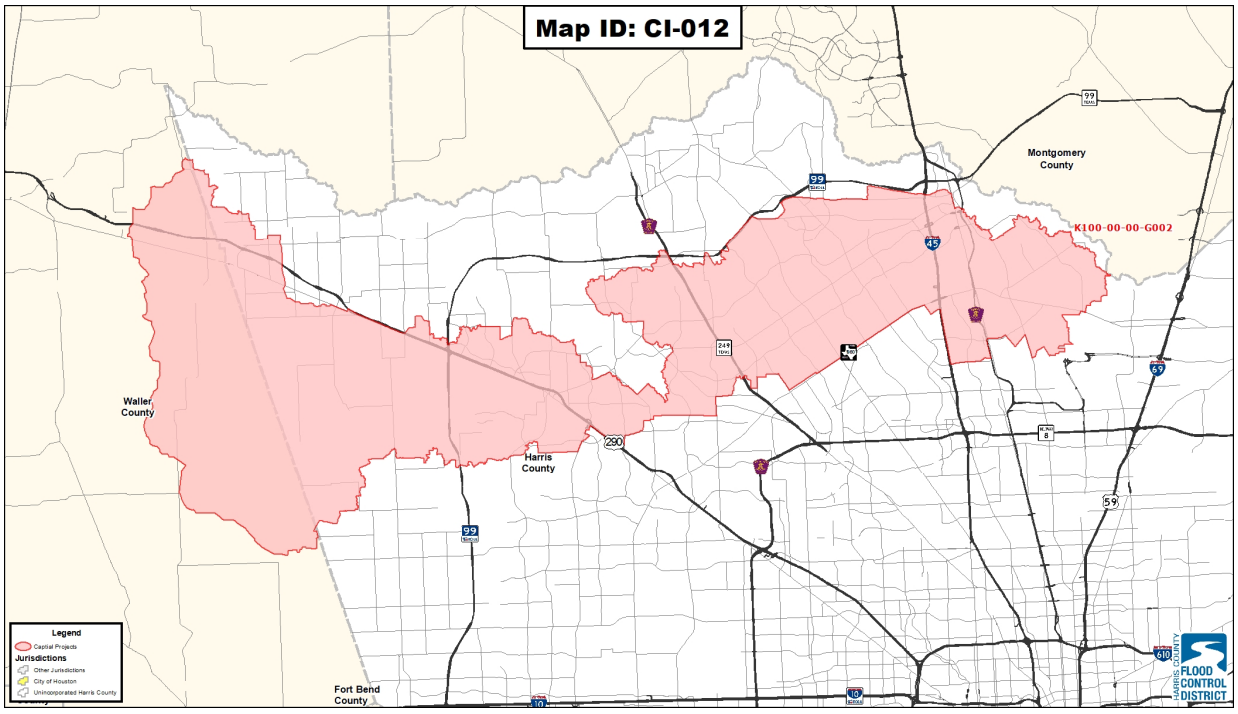
Major maintenance to restore channel conveyance capacity. May include right of way acquisition, design, and construction along tributaries.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$60,000,000	$1,920,000	$33,611,250	$24,468,750	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name:	CI-035 Update to 2003 Texas Water Development Board Cypress Creek Tributary Study and Investigate Expanding Stormwater Detention Basins in Cypress Creek Watershed	**Estimated Project Cost:**	$900,000
		Operating Cost Impact:	$0
Category:	Tributary Flood Damage Reduction Projects	**Funded to Date:**	$479,229
		Expected Completion:	4th Quarter, FY 2020
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

Update of 2003 Study to consider current conditions and update recommendations. Study will also investigate expanding stormwater detention basins in the watershed

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$900,000	$479,229	$420,771	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: E-06 Cypress Creek Subdivision Drainage Improvements

Category: Harris County Support Projects

Estimated Project Cost: $134,940,000

Operating Cost Impact: $0

Funded to Date: $165,377

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

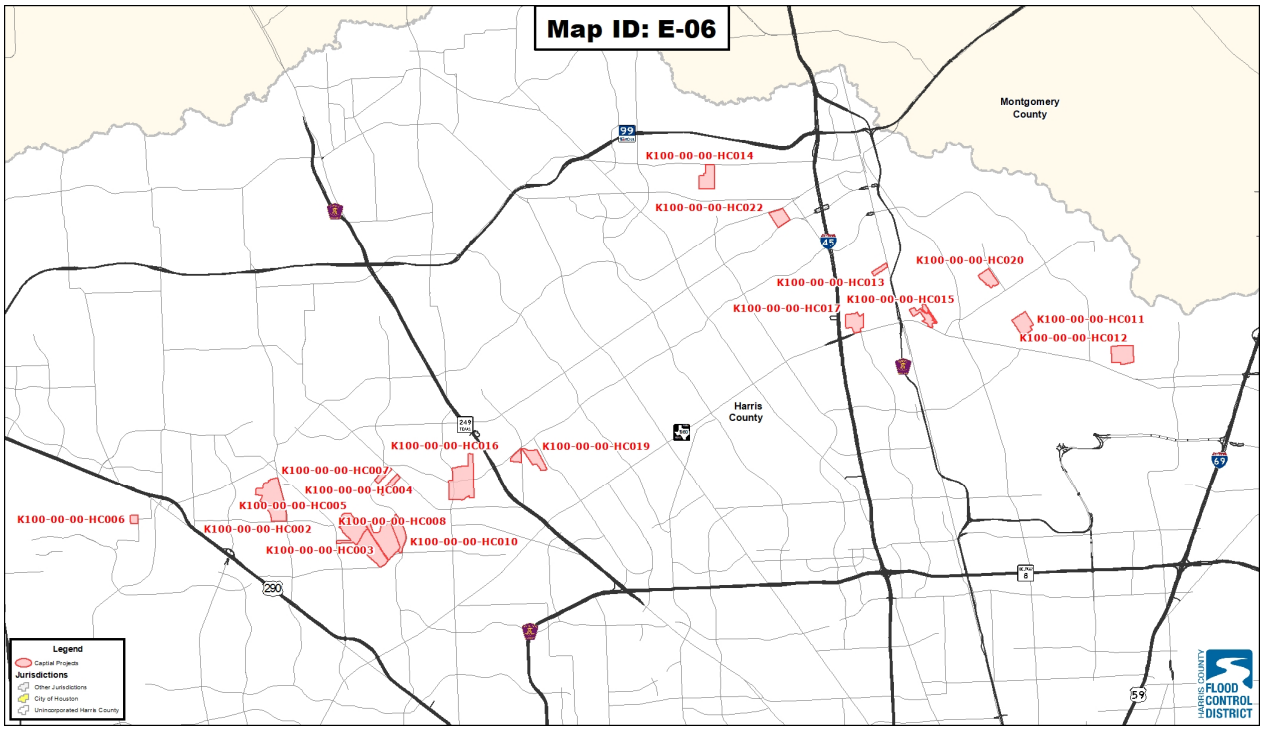
Design and construction of these projects could reduce the risk of flooding for over 3,900 homes during a 1% rain or flood event.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$134,940,000	$165,377	$6,187,342	$8,365,427	$8,365,427	$11,287,465	$11,827,142

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-20 Cypress Creek Right-of-Way Acquisition and Floodplain Preservation

Category: Floodplain Acquisition and Preservation Projects

Estimated Project Cost: $100,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Right of way acquisition along Cypress Creek for project support, to preserve channel conveyance and / or restore natural floodplains in areas subject to frequent flooding.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$100,000,000	$0	$4,536,094	$17,606,712	$17,606,712	$17,606,712	$17,654,950

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-22 Restore Channel Conveyance Capacity Along Pillot Gully

Category: Major Maintenance Projects

Estimated Project Cost: $2,200,000

Operating Cost Impact: $0

Funded to Date: $50,000

Expected Completion: 2nd Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

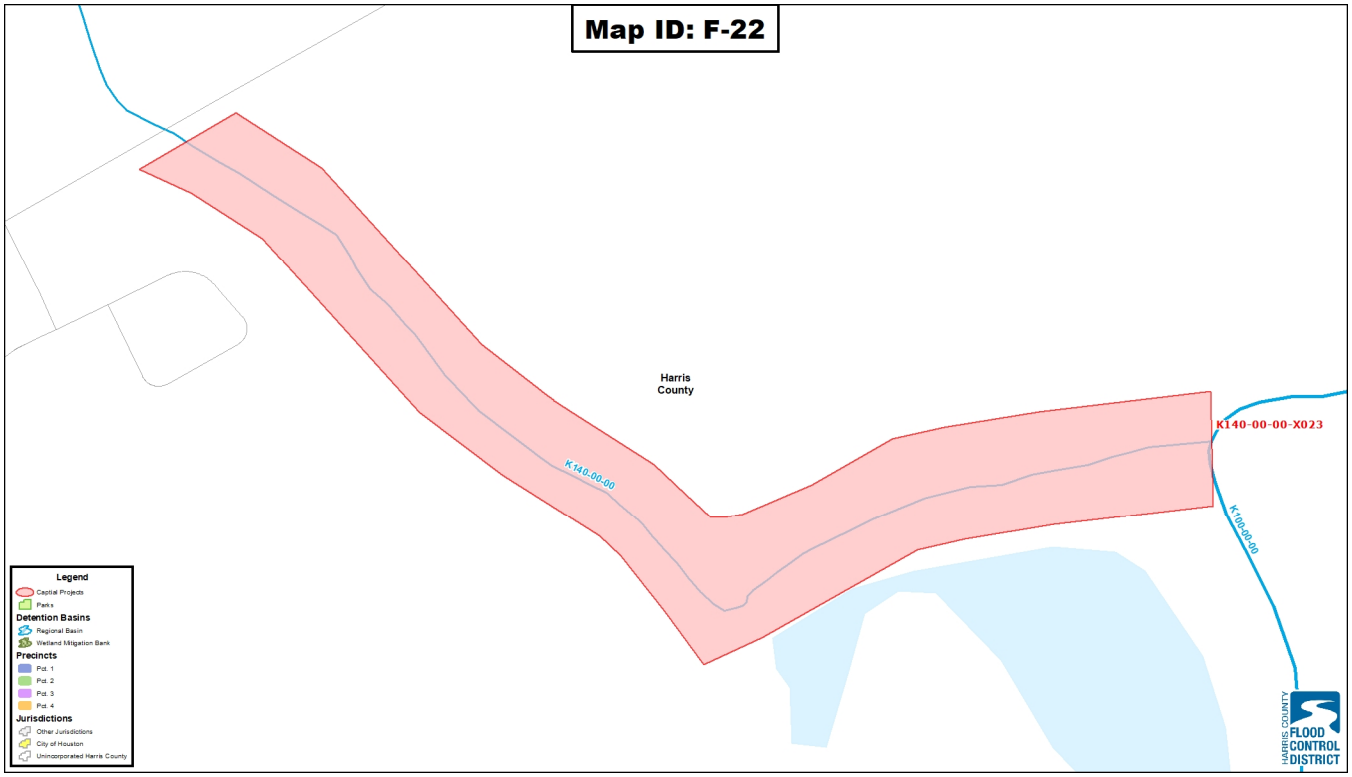
Project Description/ Justification:
Major maintenance to restore channel conveyance capacity.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$2,200,000	$50,000	$2,150,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-23 Construction of Channel Conveyance Improvements Along K163-00-00

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $10,400,000

Operating Cost Impact: $6,300

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2022

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Provides joint-benefits of facilitating local drainage improvements and reducing the risk of flooding along the channel.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,400,000	$0	$2,707,099	$7,692,901	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$6,300	$6,300

Harris County FY 2020 Capital Improvement Program

Project Name: F-24 Identification, Design and Construction of the K700-01 Environmental Mitigation Bank

Category: Harris County Support Projects

Estimated Project Cost: $9,300,000

Operating Cost Impact: $0

Funded to Date: $150,000

Expected Completion: 2nd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

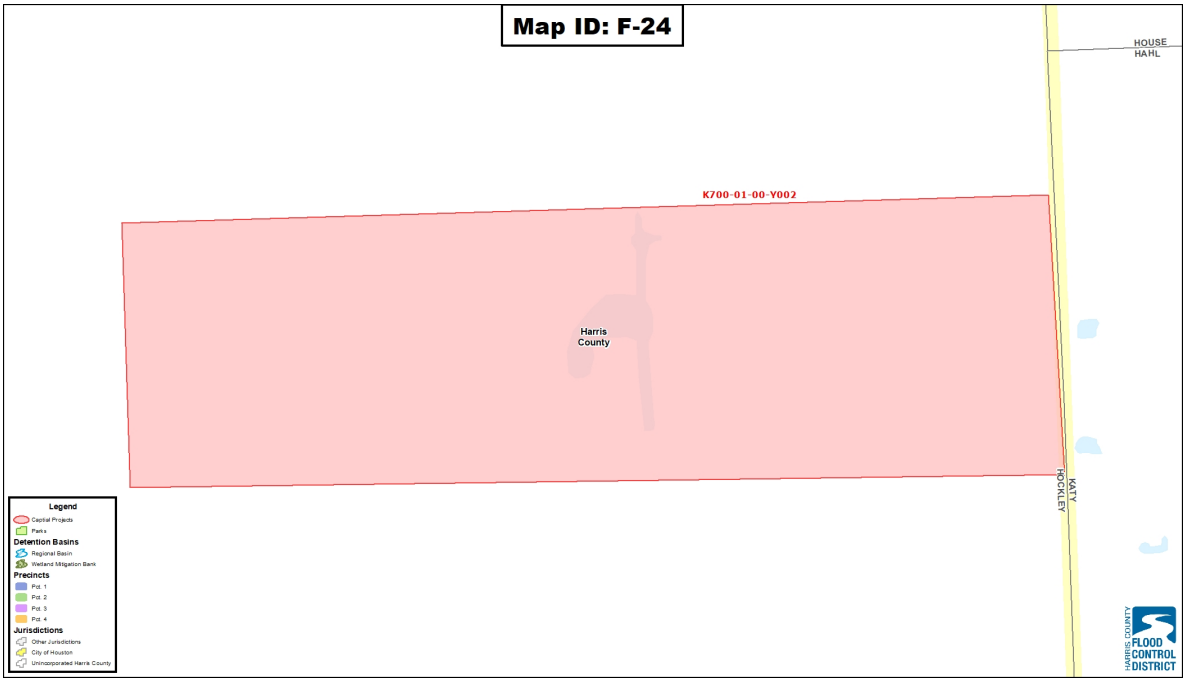
Restoration and enhancement of wetlands to create credits for wetland mitigation supporting construction of District projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$9,300,000	$150,000	$3,182,147	$3,424,429	$1,920,478	$622,946	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County FY 2020 Capital Improvement Program

Project Name:	C-57 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements Along F216-00-00	**Estimated Project Cost:**	$10,000,000
		Operating Cost Impact:	$0
Category:	Main Channel Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:
Design and construction of projects to reduce the risk of flooding along F216-00-00

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$0	$2,723,199	$3,228,725	$1,992,473	$2,055,603

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: C-58 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements Along F101-06-00

Category: Partnership Flood Damage Reduction Projects

Estimated Project Cost: $20,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 4th Quarter, FY 2022

Funding Source: Debt Service - FCD Property Tax

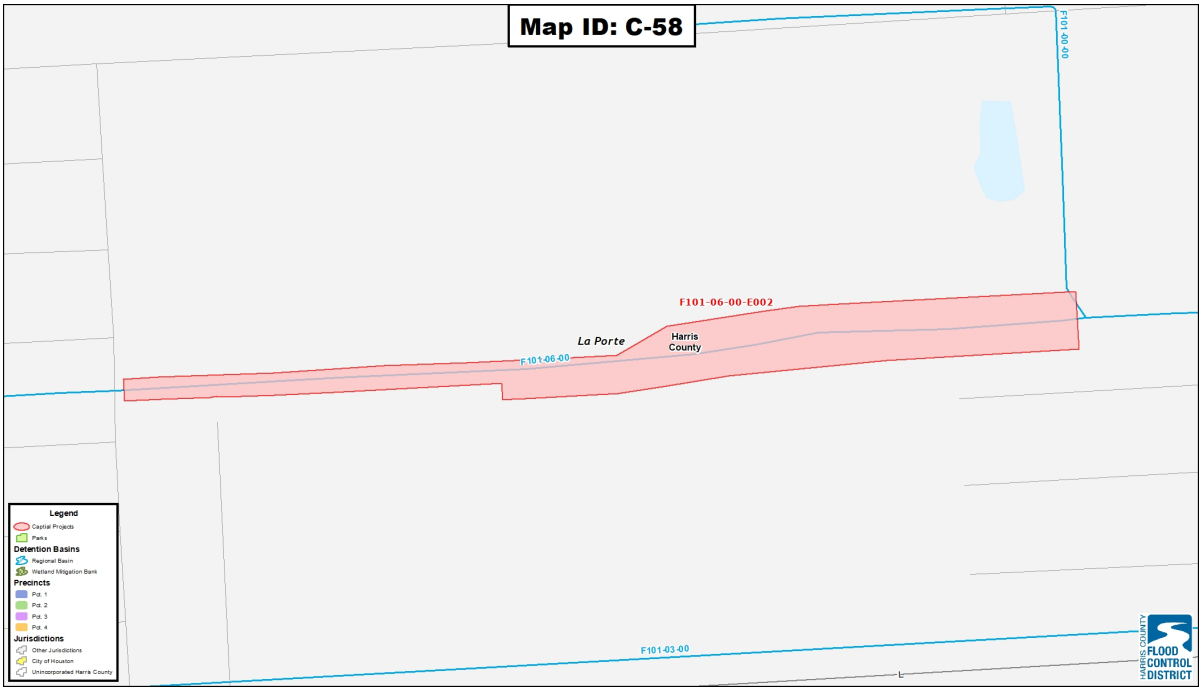
Project Description/ Justification:
Design and construction of projects to reduce the risk of flooding along F101-06-00.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$20,000,000	$0	$11,463,941	$6,956,059	$1,580,000	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: E-07 Galveston Bay Subdivision Drainage Improvements

Category: Harris County Support Projects

Estimated Project Cost: $10,100,000

Operating Cost Impact: $0

Funded to Date: $9,103

Expected Completion: 3rd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

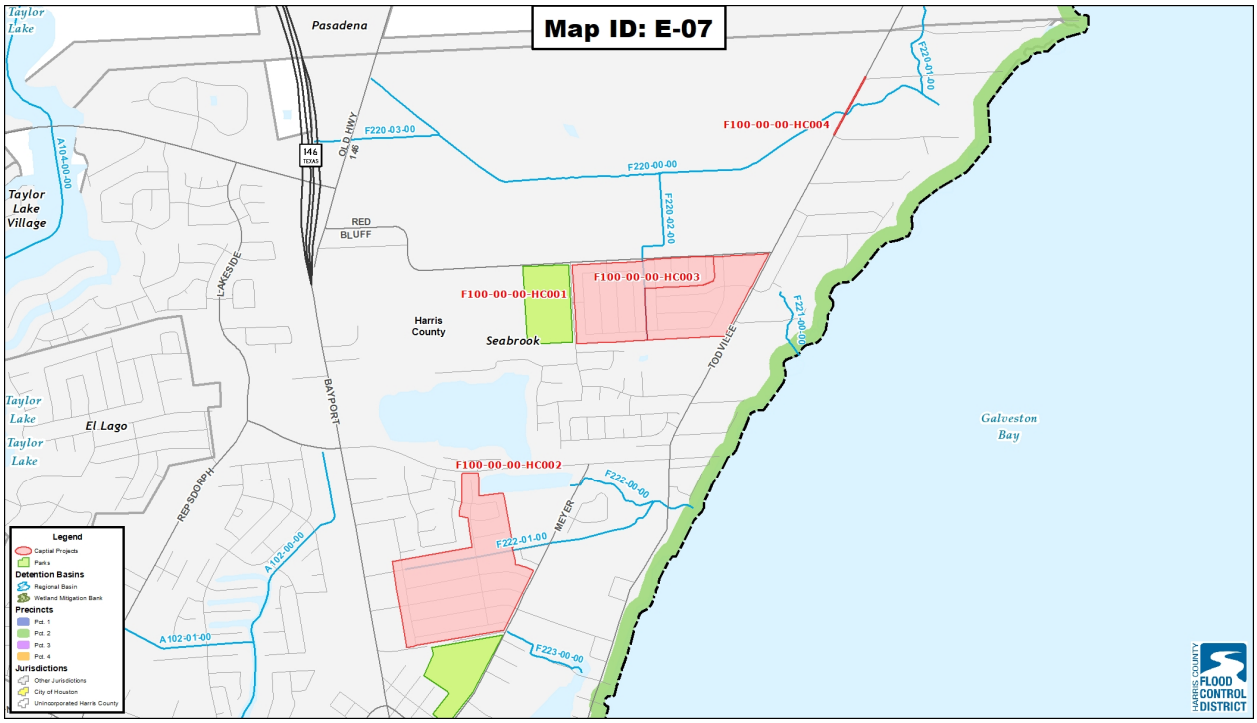
Design and construction of these projects could reduce the risk of flooding for over 9,600 homes during a 1% rain or flood event.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,100,000	$9,103	$1,272,241	$2,068,943	$3,265,369	$3,455,177	$29,167

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-101 Investigations of General Drainage Improvements in Galveston Bay Watershed

Category: Local Participation Projects

Estimated Project Cost: $450,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

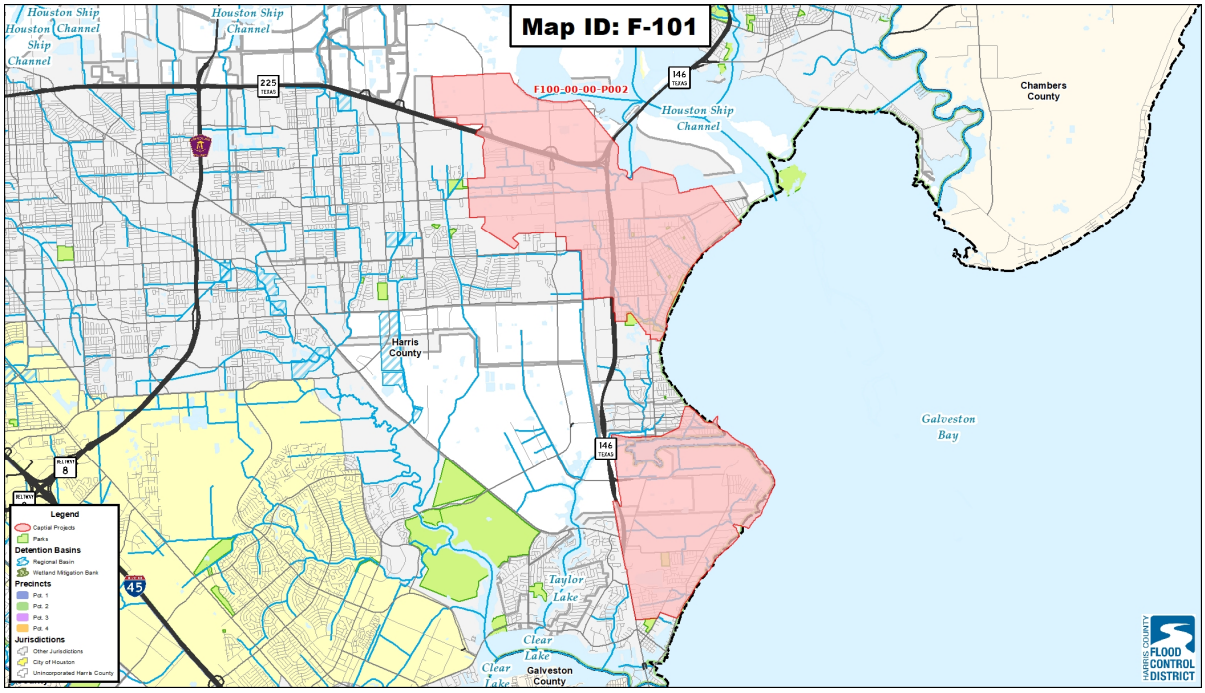
Effort will investigate flooding problems and evaluate potential solutions to flooding problems to reduce the risk of flooding in the Galveston Bay watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$450,000	$0	$450,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-98 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Galveston Bay Watershed

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $4,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Design and construction of projects to reduce the risk of flooding in the Galveston Bay watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$4,000,000	$0	$0	$54,316	$1,575,302	$941,454	$1,002,377

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: E-08 Spring Gully & Goose Creek Subdivision Drainage Improvements

Category: Harris County Support Projects

Estimated Project Cost: $8,650,000

Operating Cost Impact: $0

Funded to Date: $354,814

Expected Completion: 3rd Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

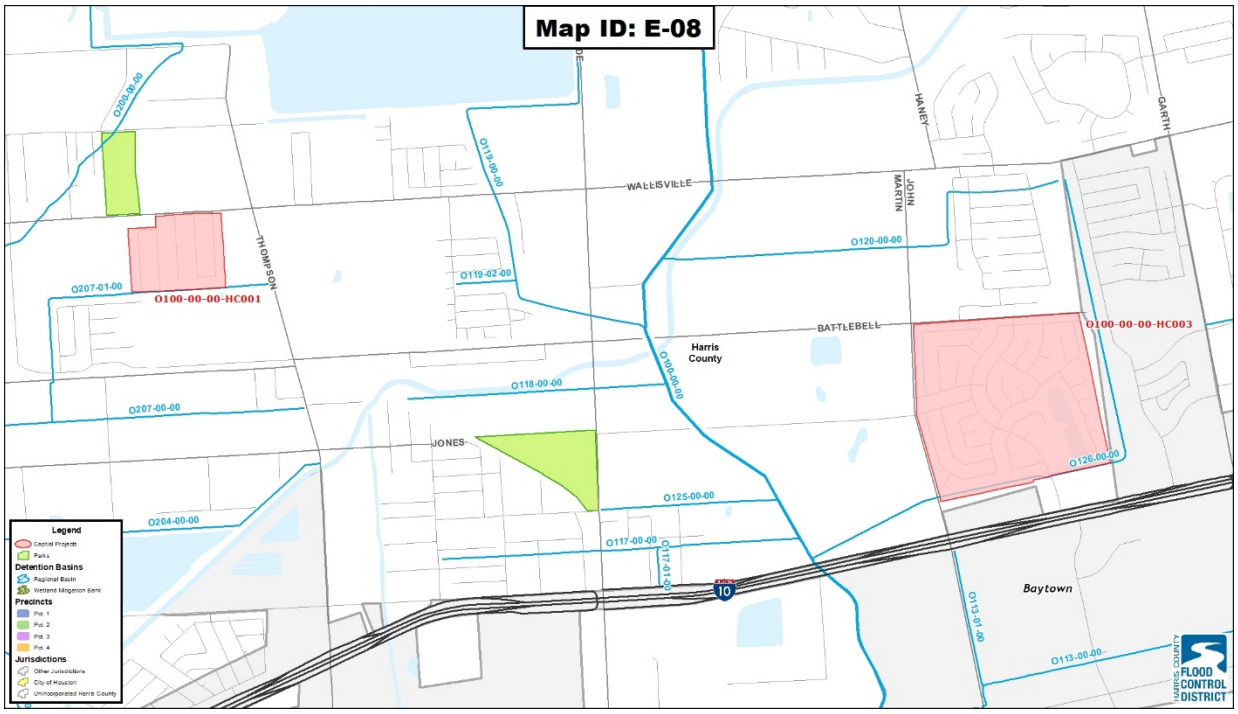
Design and construction of these projects could reduce the risk of flooding for over 650 homes during a 1% rain or flood event.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$8,650,000	$354,814	$1,139,640	$3,079,921	$4,047,292	$28,333	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-109 Right-Of-Way Acquisition, Design, and Construction of General Drainage Improvements on Spring Gully

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $5,000,000

Operating Cost Impact: $4,200

Funded to Date: $0

Expected Completion: 3rd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Design and construction of projects to reduce the risk of flooding in the Goose Bayou watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$5,000,000	$0	$0	$1,731,790	$1,573,455	$1,664,755	$30,000

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$1,050

Harris County FY 2020 Capital Improvement Program

Project Name: F-120 Right-Of-Way Acquisition, Design, and Construction of General Drainage Improvements in Goose Creek watershed

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $25,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Design and construction of projects to reduce the risk of flooding in the Goose Creek watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$25,000,000	$0	$0	$4,887,537	$8,289,677	$3,440,863	$5,535,098

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-121 Investigations of General Drainage Improvements in Goose Creek watershed

Category: Local Participation Projects

Estimated Project Cost: $550,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

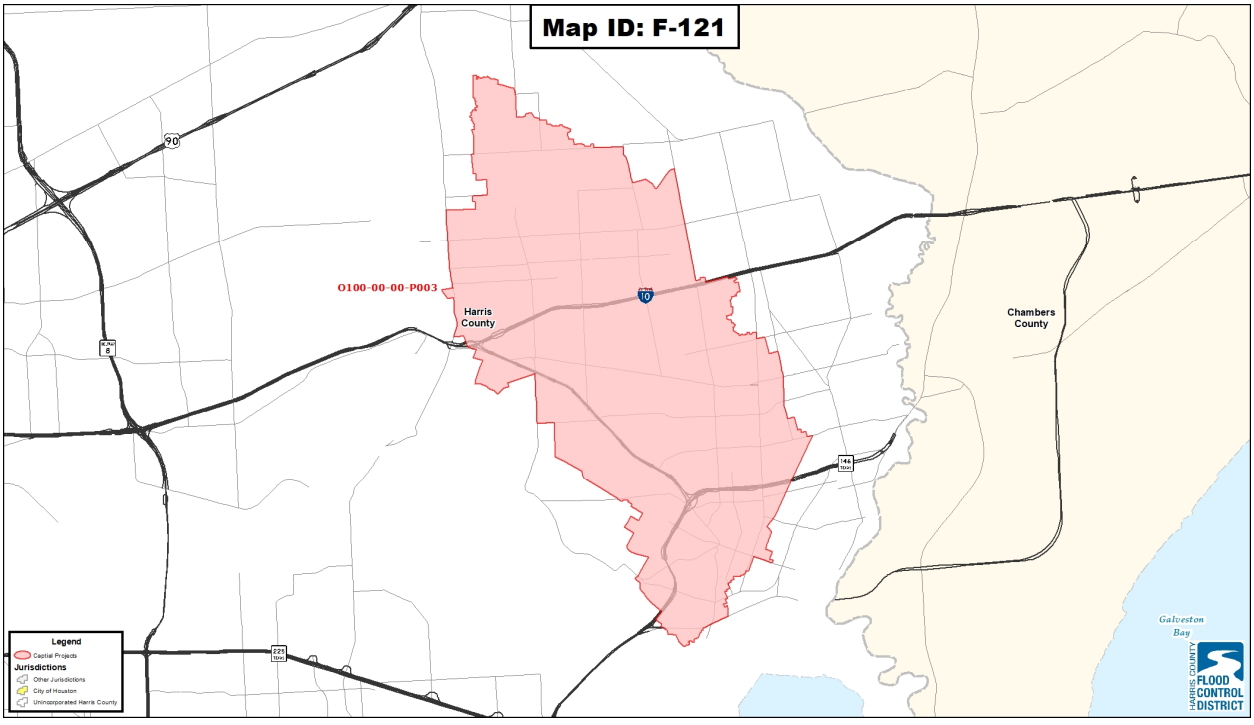
Effort will investigate flooding problems and evaluate potential solutions to flooding problems to reduce the risk of flooding in Goose Creek watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$550,000	$0	$550,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-39 Investigations of General Drainage Improvements on Spring Gully

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $500,000

Operating Cost Impact: $0

Funded to Date: $476,631

Expected Completion: 2nd Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

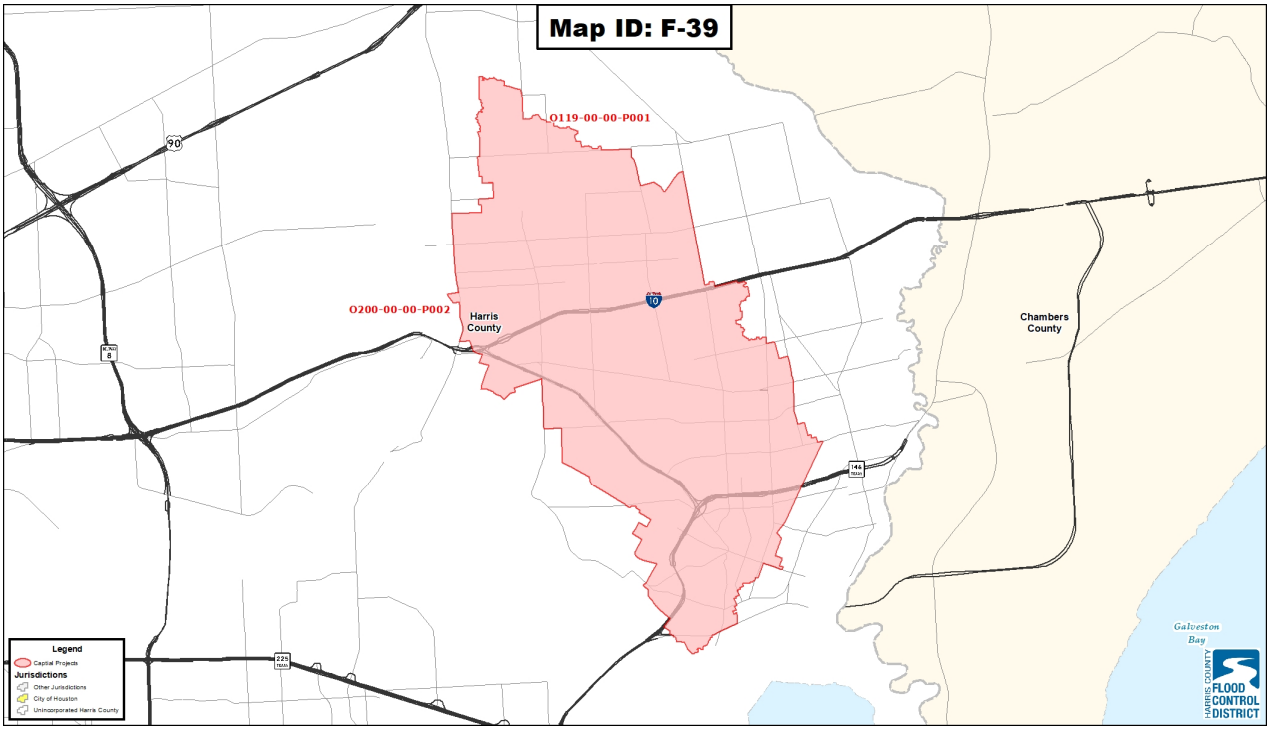
Effort will investigate flooding problems and evaluate potential solutions to flooding problems to reduce the risk of flooding along Spring Gully.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$500,000	$476,631	$0	$23,369	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: C-20 Mid-Reach Greens Bayou Project - Design and Construction of Channel Conveyance Improvements along Greens Bayou

Category: Major Partnership Flood Damage Reduction Projects

Estimated Project Cost: $20,000,000

Operating Cost Impact: $0

Funded to Date: $217,831

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

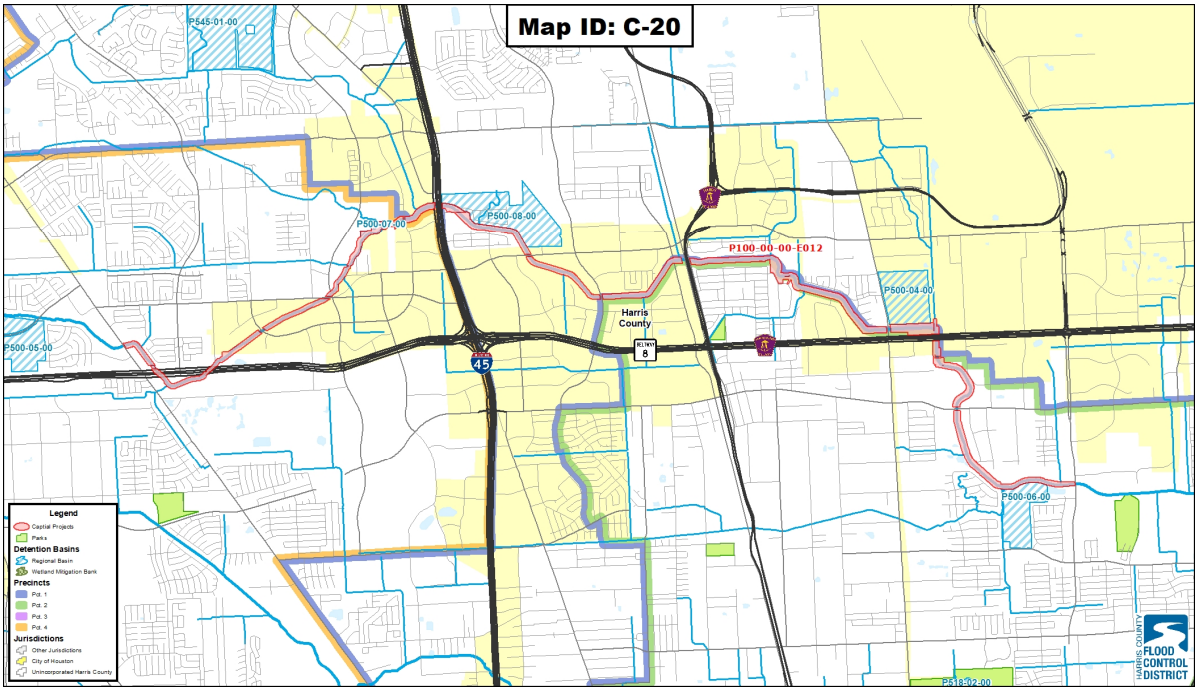
Project Description/ Justification:
Project could reduce the risk of flooding for over 720 structures in the 10% floodplain.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$20,000,000	$217,831	$1,785,463	$3,119,355	$2,144,356	$1,274,724	$10,112,230

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: C-31 Design and Construction of the Smith Road Channel Diversion

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $6,500,000

Operating Cost Impact: $4,200

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

This project could reduce the risk of flooding for over 440 buildings along P133-00-00 and secondary benefits could include reduced erosion.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$6,500,000	$0	$240,005	$1,173,768	$3,188,605	$1,897,622	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$2,100

Harris County FY 2020 Capital Improvement Program

Project Name: C-32 Design and Construction of the Cutten Road Stormwater Detention Basin Improvements

Category: Partnership Flood Damage Reduction Projects

Estimated Project Cost: $17,600,000

Operating Cost Impact: $6,300

Funded to Date: $336,925

Expected Completion: 1st Quarter, FY 2022

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

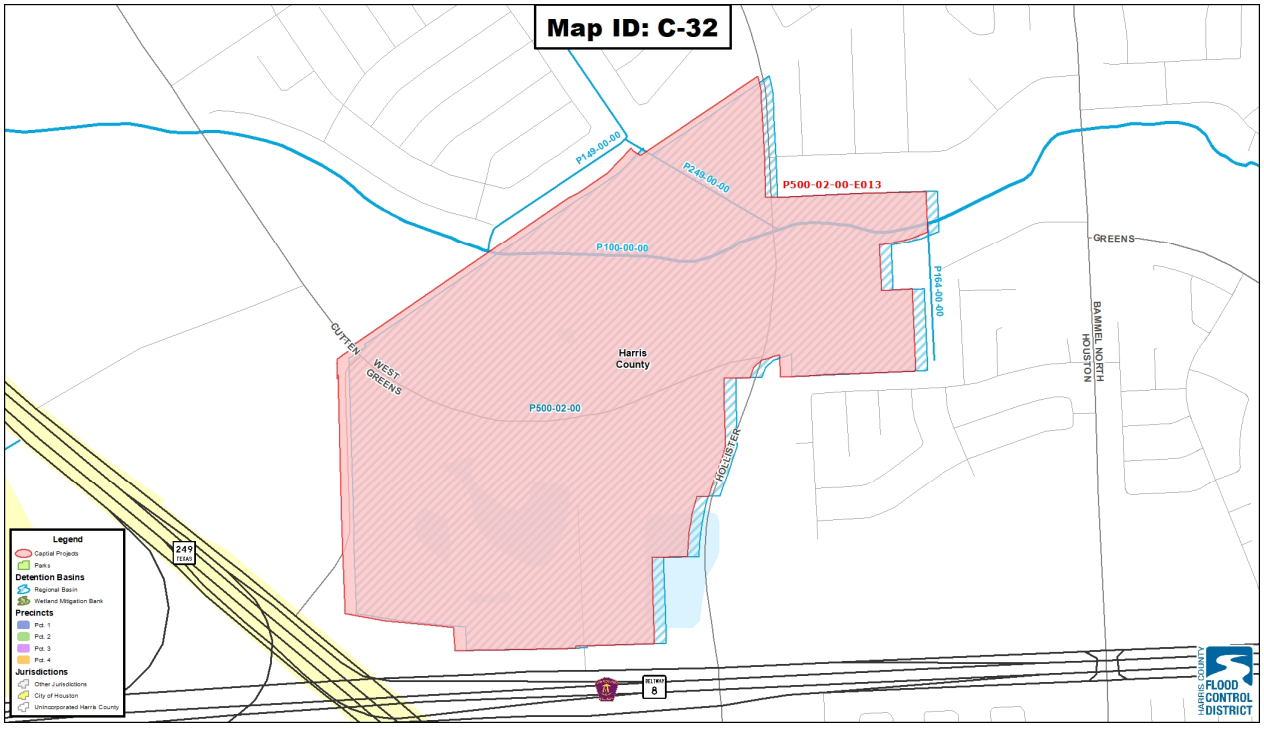
This project could reduce the risk of flooding in the Greens Bayou watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$17,600,000	$336,925	$11,359,961	$5,903,114	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$4,725	$6,300	$6,300



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: C-33 Design and Construction of Aldine-Westfield Stormwater Detention Basin Improvements

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $15,300,000

Operating Cost Impact: $8,400

Funded to Date: $6,666,468

Expected Completion: 4th Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

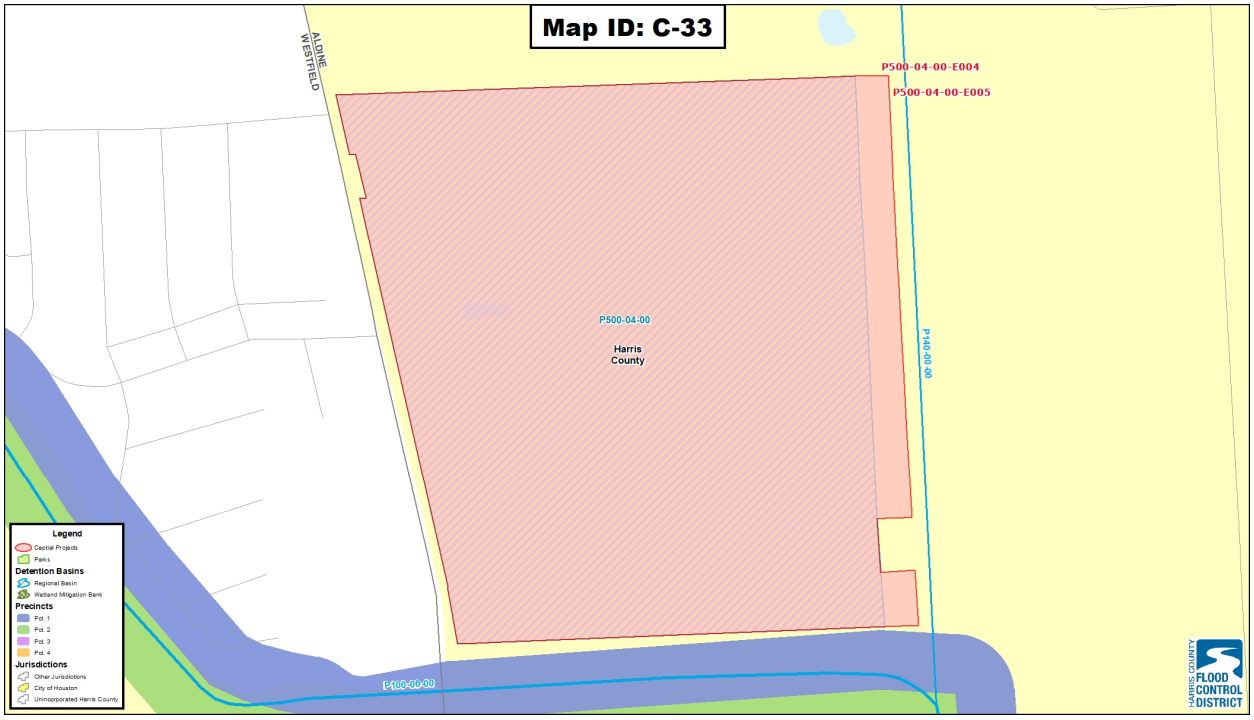
This project could reduce the risk of flooding in the Greens Bayou watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$15,300,000	$6,666,468	$0	$3,787,551	$4,688,851	$157,130	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$8,400



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: C-34 Design and Construction of Lauder Stormwater Detention Basin Improvements

Category: Major Partnership Flood Damage Reduction Projects

Estimated Project Cost: $16,000,000

Operating Cost Impact: $0

Funded to Date: $904,638

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

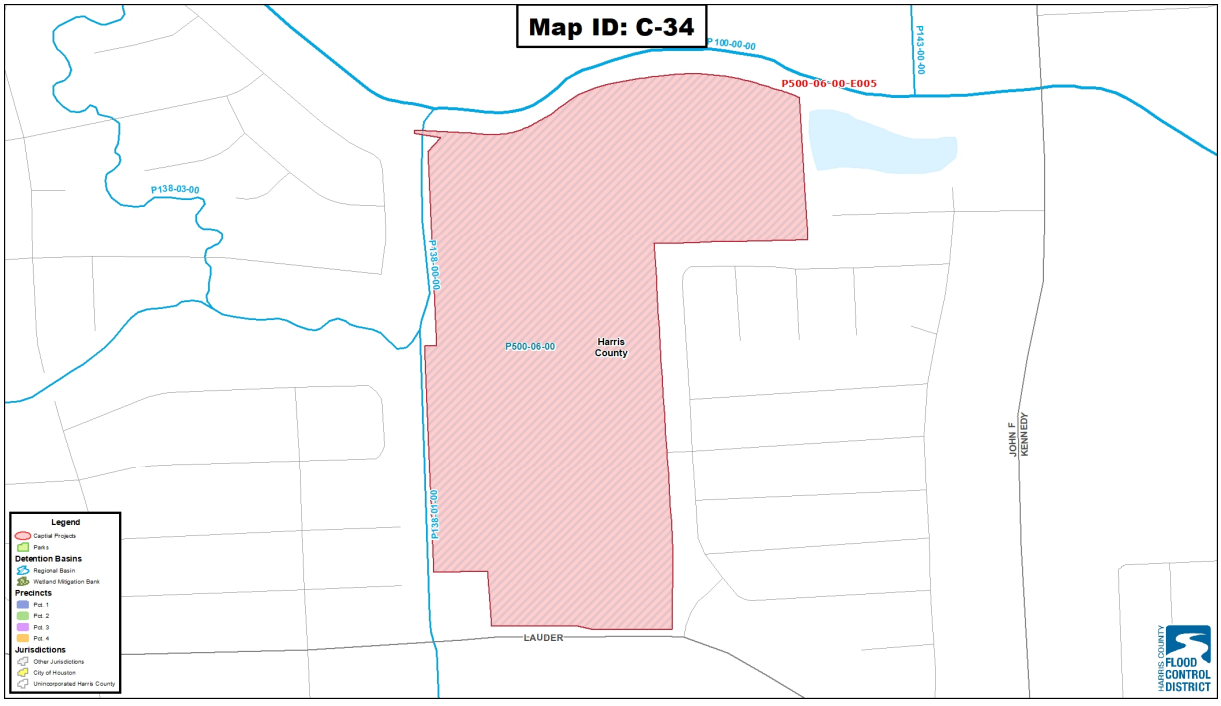
This project could reduce the risk of flooding in the Greens Bayou watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$16,000,000	$904,638	$1,759,839	$3,979,487	$3,856,679	$2,086,434	$1,937,359

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County FY 2020 Capital Improvement Program

Project Name: C-43 Planning, Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along P138-01-01

Category: Partnership Flood Damage Reduction Projects

Estimated Project Cost: $5,000,000

Operating Cost Impact: $4,200

Funded to Date: $0

Expected Completion: 1st Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Potential federal funded project, the risk of flooding could be reduced for approximately 100 buildings.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$5,000,000	$0	$1,257,411	$2,231,553	$1,511,036	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$4,200

Harris County FY 2020 Capital Improvement Program

Project Name: CI-022 ROW, Design, and Construction of Stormwater Detention Basin Near P130-05

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $3,000,000

Operating Cost Impact: $2,100

Funded to Date: $0

Expected Completion: 3rd Quarter, FY 2022

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Project could reduce the risk of flooding for structures near P130-05-01

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$3,000,000	$0	$883,343	$2,086,657	$30,000	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$525	$2,100	$2,100

Harris County FY 2020 Capital Improvement Program

Project Name: E-09 Greens Bayou Subdivision Drainage Improvements

Category: Harris County Support Projects

Estimated Project Cost: $92,640,000

Operating Cost Impact: $0

Funded to Date: $278,929

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

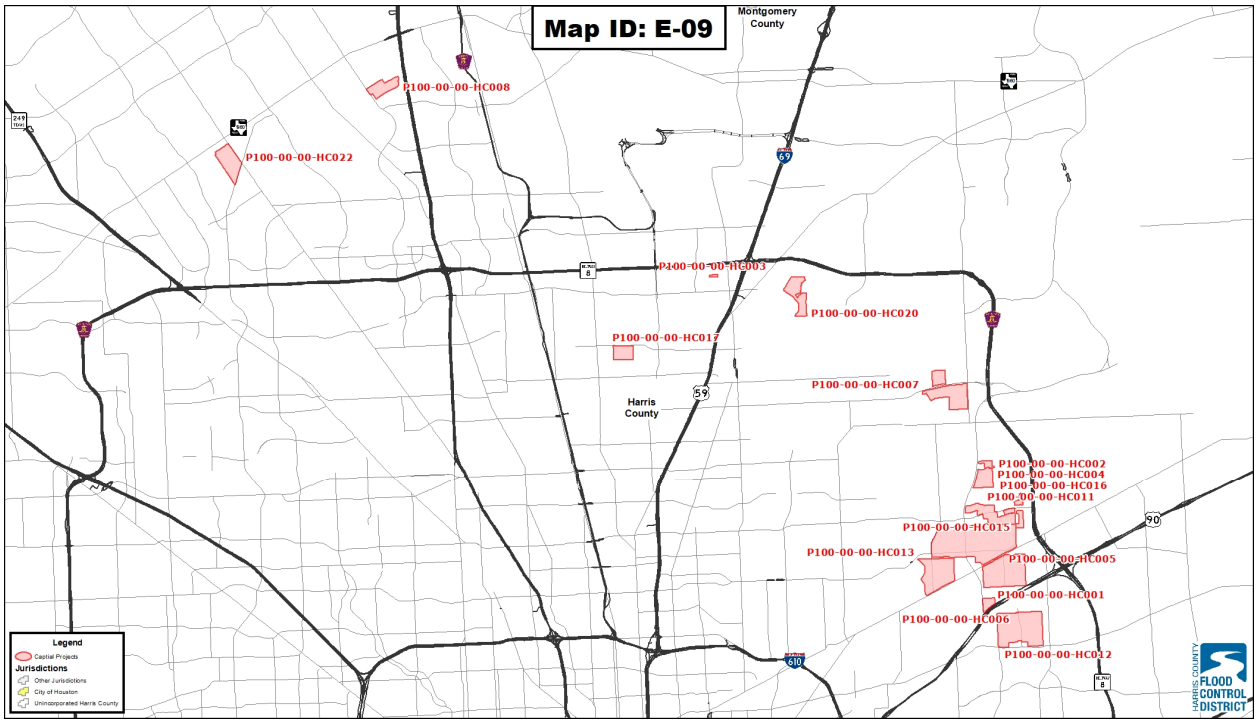
Design and construction of these projects could reduce the risk of flooding for over 3,900 homes during a 1% rain or flood event.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$92,640,000	$278,929	$4,592,891	$6,399,871	$6,796,059	$9,029,116	$9,053,854

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County FY 2020 Capital Improvement Program

Project Name: F-40 Repairs and Enhancements to the Lower Greens Bayou Regional Detention Embankment and Control Structure

Category: Major Maintenance Projects

Estimated Project Cost: $2,600,000

Operating Cost Impact: $0

Funded to Date: $1,685,045

Expected Completion: 3rd Quarter, FY 2022

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

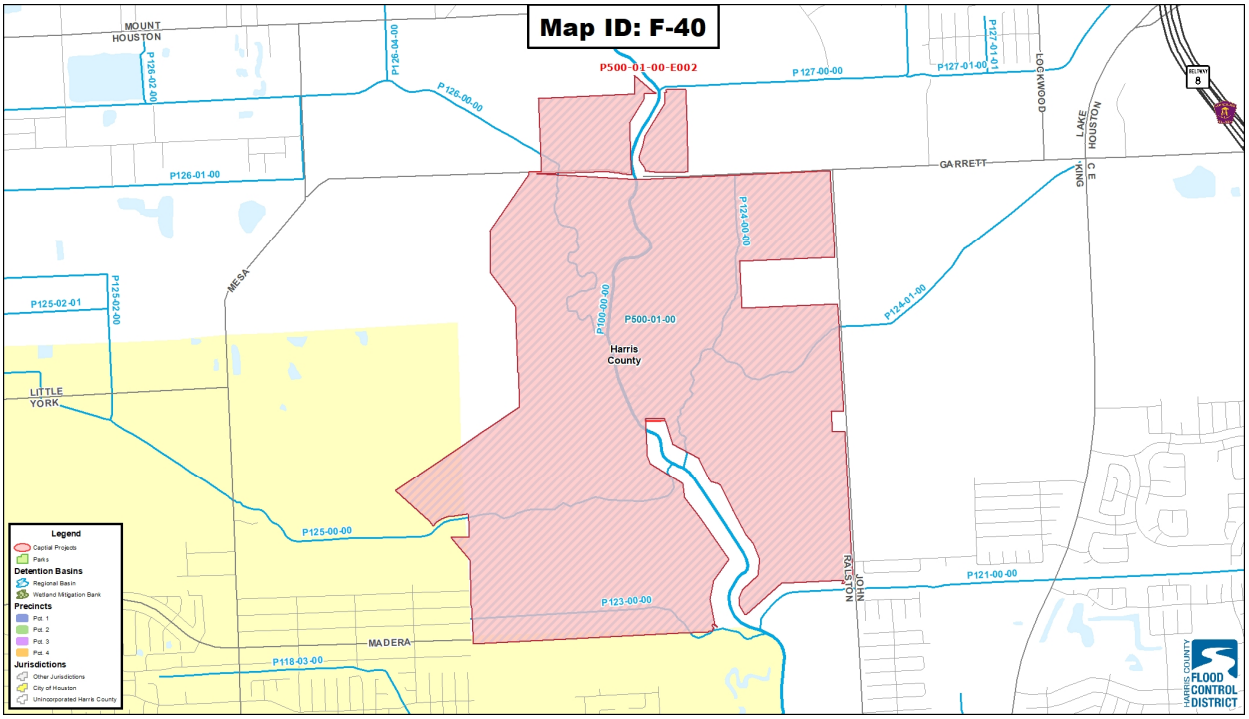
Major maintenance of existing detention facilities in Lower Greens Bayou.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$2,600,000	$1,685,045	$240,991	$673,964	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: C-01 Construction of P518-26 Stormwater Detention Basin

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $750,000

Operating Cost Impact: $2,100

Funded to Date: $0

Expected Completion: 3rd Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Provides additional stormwater detention in support of flood damage reduction in Halls Bayou Watershed

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$750,000	$0	$740,312	$9,688	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$525	$2,100	$2,100	$2,100

Harris County FY 2020 Capital Improvement Program

Project Name: C-02 Aldine Westfield Stormwater Detention Basin and Channel Improvments

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $14,000,000

Operating Cost Impact: $0

Funded to Date: $435,032

Expected Completion: 4th Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Provides joint-benefits of facilitating local drainage improvements and could reduce the risk of flooding for over 50 structures. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$14,000,000	$435,032	$1,125,446	$1,640,846	$4,490,831	$5,191,167	$1,116,678

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	C-23 Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-08-00	**Estimated Project Cost:**	$25,000,000
		Operating Cost Impact:	$0
Category:	Tributary Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	4th Quarter, FY 2024
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

This project could reduce the risk of flooding for over 210 buildings and could reduce the 1% floodplain for over 170 acres

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$25,000,000	$0	$0	$6,250,782	$10,283,017	$6,860,803	$1,605,398

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	C-24 Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-09-00	**Estimated Project Cost:**	$12,000,000
		Operating Cost Impact:	$0
Category:	Tributary Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	4th Quarter, FY 2024
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

This project could reduce the risk of flooding for over 200 buildings and could reduce the 1% floodplain for over 160 acres

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$12,000,000	$0	$0	$2,711,522	$4,713,565	$3,727,220	$847,693

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: C-25 Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-21-00

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $14,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

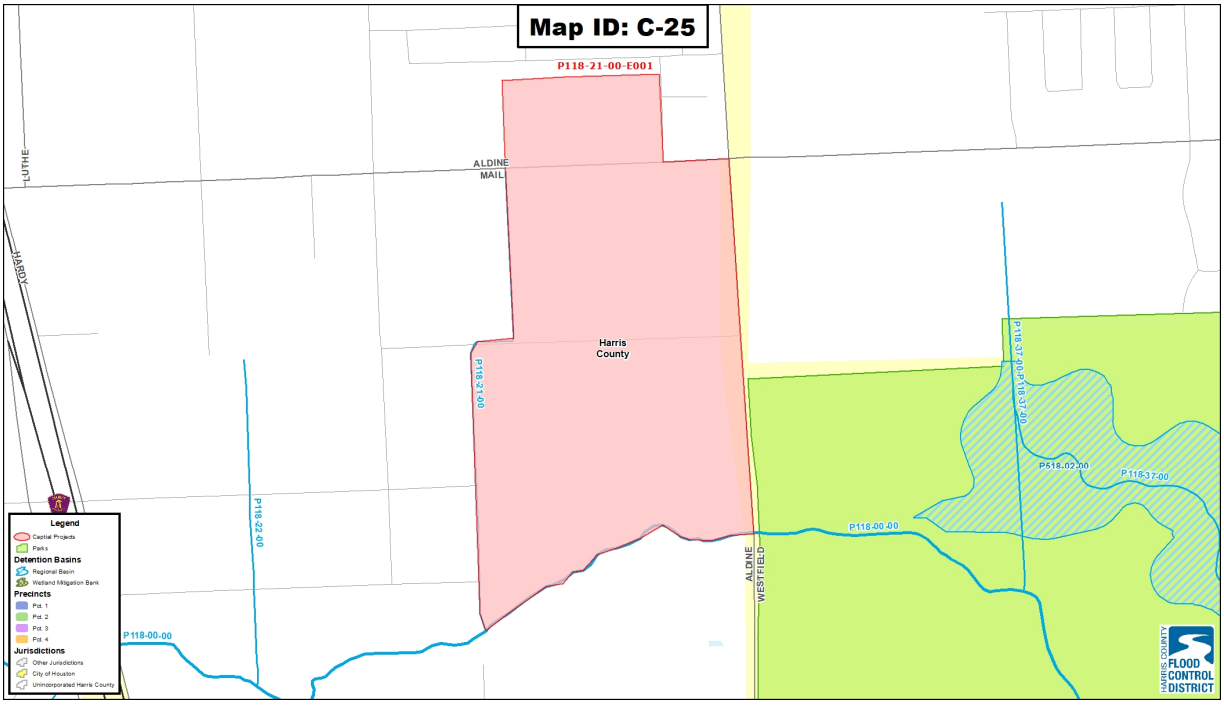
This project could reduce the risk of flooding for over 90 buildings and could reduce the 1% floodplain for over 100 acres

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$14,000,000	$0	$2,167,285	$2,031,373	$2,031,374	$393,459	$2,796,997

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name:	C-26 Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-23-00 and P118-23-02	**Estimated Project Cost:**	$22,000,000
		Operating Cost Impact:	$16,800
Category:	Main Channel Flood Damage Reduction Projects	**Funded to Date:**	$795,500
		Expected Completion:	3rd Quarter, FY 2024
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

This project could reduce the risk of flooding for over 380 buildings and could reduce the 1% floodplain for over 430 acres

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$22,000,000	$795,500	$2,880,562	$7,052,394	$4,600,319	$6,671,225	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$4,200

Harris County FY 2020 Capital Improvement Program

Project Name:	C-28 Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-25-00 & P118-25-01	**Estimated Project Cost:**	$17,000,000
		Operating Cost Impact:	$12,600
Category:	Tributary Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	3rd Quarter, FY 2024
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

This project could reduce the risk of flooding for over 170 buildings and could reduce the 1% floodplain for over 200 acres

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$17,000,000	$0	$2,836,639	$5,453,385	$3,557,276	$5,152,700	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$3,150

Harris County FY 2020 Capital Improvement Program

Project Name:	C-30 Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-27-00	**Estimated Project Cost:**	$12,000,000
		Operating Cost Impact:	$0
Category:	Tributary Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	4th Quarter, FY 2024
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

This project could reduce the risk of flooding for over 140 buildings and could reduce the 1% floodplain for over 200 acres

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$12,000,000	$0	$0	$2,711,522	$4,713,565	$3,727,220	$847,693

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: C-35 Design and Construction of Stormwater Detention Basin and Associated Channel Improvements

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $8,000,000

Operating Cost Impact: $4,200

Funded to Date: $0

Expected Completion: 3rd Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Provides additional stormwater detention in support of flood damage reduction in Halls Bayou Watershed. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$8,000,000	$0	$1,261,121	$2,900,356	$3,838,523	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$1,050	$4,200

Harris County FY 2020 Capital Improvement Program

Project Name: CI-006 Design and Construction of a Stormwater Detention Basin in Brock Park

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 4th Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Provides additional stormwater detention in support of flood damage reduction in Halls Bayou Watershed. The project costs are to be determined based on partnership with the City of Houston.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$822,084	$1,316,872	$3,310,700	$4,137,596	$412,748

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: E-11 Halls Bayou Subdivision Drainage Improvements

Category: Harris County Support Projects

Estimated Project Cost: $9,500,000

Operating Cost Impact: $0

Funded to Date: $119,698

Expected Completion: 3rd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

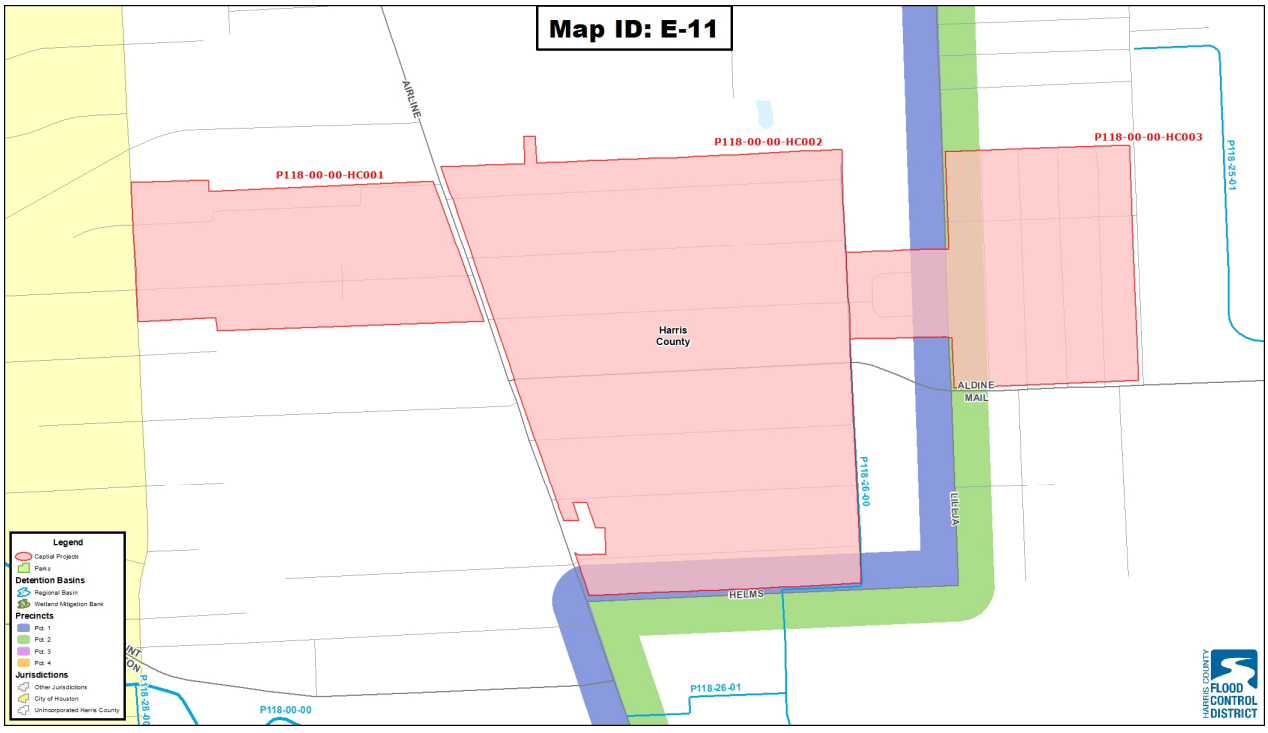
Design and construction of these projects could reduce the risk of flooding for over 700 homes during a 1% rain or flood event.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$9,500,000	$119,698	$1,087,765	$1,944,807	$3,069,448	$3,249,115	$29,167

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-122 Management, Right-of-Way Acquisition, Design and Construction in Halls Bayou Watershed

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $3,000,000

Operating Cost Impact: $0

Funded to Date: $232,000

Expected Completion: 4th Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Management of effort to identify and construct a project that will reduce the risk of flooding along Halls Bayou for over 2,800 structures in the 1% floodplain

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$3,000,000	$232,000	$2,768,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: C-18 Design and Construction of Corps of Engineers Hunting Bayou, Section 211(f) Project

Category: Major Partnership Flood Damage Reduction Projects

Estimated Project Cost: $65,000,000

Operating Cost Impact: $0

Funded to Date: $1,397,688

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

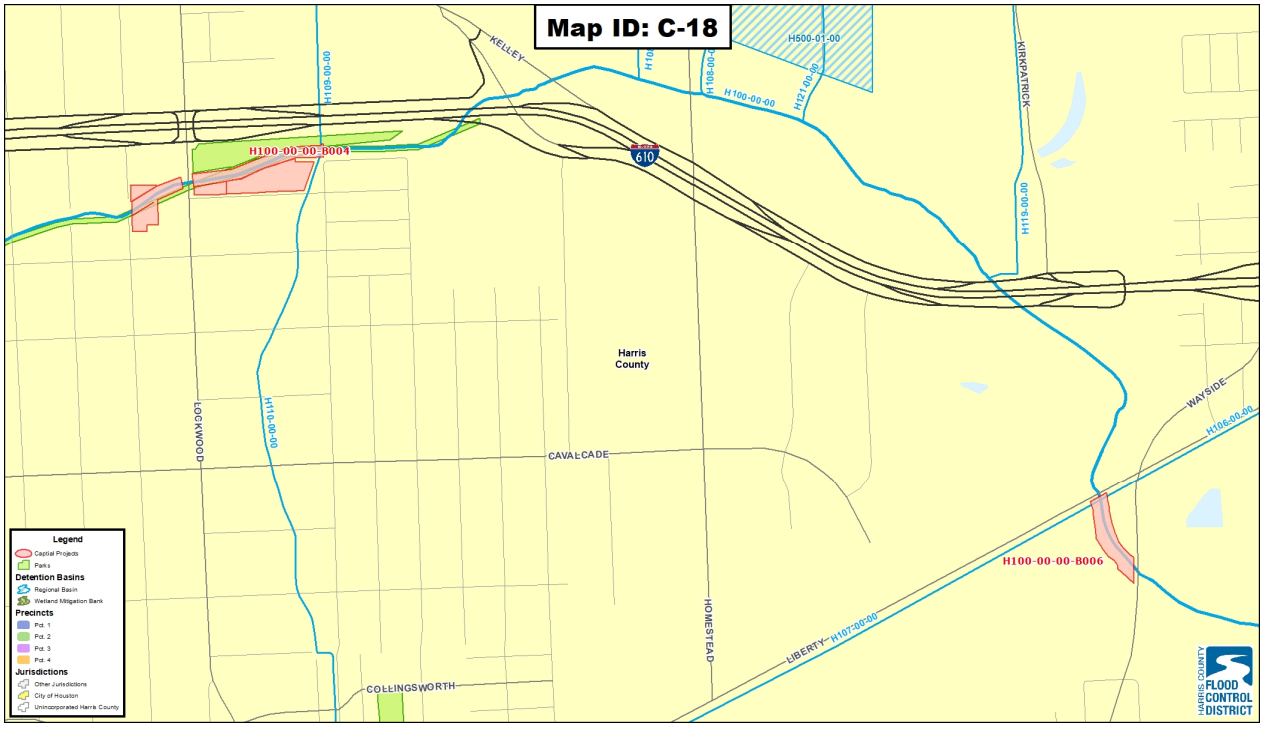
The 1% floodplain could be removed from up to 4,450 structures.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$65,000,000	$1,397,688	$21,240,767	$15,971,086	$10,623,429	$5,643,600	$5,982,599

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County FY 2020 Capital Improvement Program

Project Name:	CI-031 HCFCD Cost Share of Study with the City of Houston on Wallisville Outfall	**Estimated Project Cost:**	$500,000
		Operating Cost Impact:	$0
Category:	Partnership Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	4th Quarter, FY 2021
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

Study will investigate flooding problems and identify potential solutions to flooding problems along the H103-00-00 channel. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$500,000	$0	$425,711	$74,289	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	CI-59 Planning, Right-Of-Way, Design and Construction of a Diversion Channel from H102-00-00 to H100-00-00 through Galena Park	**Estimated Project Cost:**	$10,000,000
		Operating Cost Impact:	$0
Category:	Main Channel Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:
The project could reduce the risk of flooding for structures in lower Hunting Bayou.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$0	$57,551	$3,253,299	$3,272,730	$3,416,420

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-17 Right-Of-Way Acquisition, Design and Construction of Wallisville Outfall

Category: Partnership Flood Damage Reduction Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 4th Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

The project could reduce the risk of flooding for over 140 structures in the 1% floodplain.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$0	$3,016,202	$3,449,760	$3,407,884	$126,154

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: E-12 Jackson Bayou Subdivision Drainage Improvements

Category: Harris County Support Projects

Estimated Project Cost: $3,000,000

Operating Cost Impact: $0

Funded to Date: $45,220

Expected Completion: 3rd Quarter, FY 2022

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

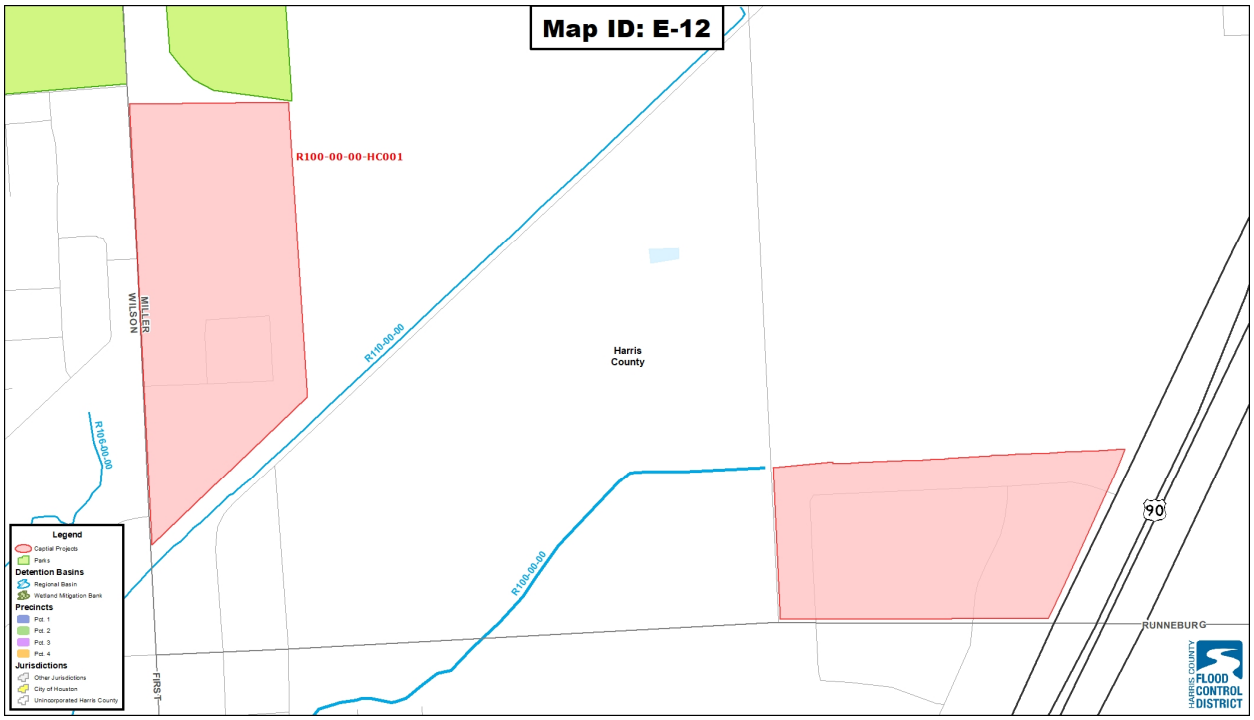
Design and construction of these projects could reduce the risk of flooding for over 1,900 homes during a 1% rain or flood event.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$3,000,000	$45,220	$895,937	$2,032,176	$26,667	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name:	F-107 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Jackson Bayou Watershed	**Estimated Project Cost:**	$10,000,000
		Operating Cost Impact:	$0
Category:	Main Channel Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:
Design and construction of projects to reduce the risk of flooding in the Jackson Bayou watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$0	$63,926	$5,082,928	$2,420,618	$2,432,528

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-73 Investigations of General Drainage Improvements in Jackson Bayou Watershed

Category: Local Participation Projects

Estimated Project Cost: $450,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

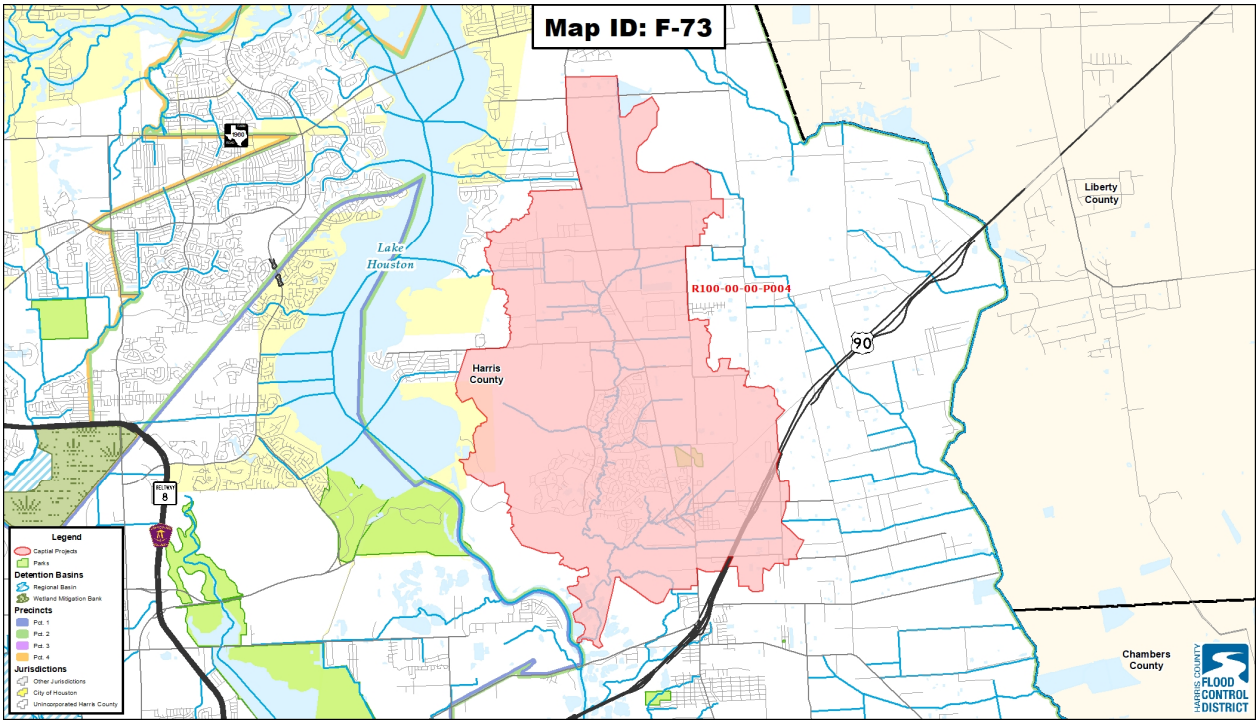
Efforts will investigate flooding problems and evaluate potential solutions to flooding problems to reduce the risk of flooding for up to 4,200 structures in the Jackson Bayou watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$450,000	$0	$450,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: E-13 Little Cypress Creek Subdivision Drainage Improvements

Category: Harris County Support Projects

Estimated Project Cost: $14,590,000

Operating Cost Impact: $0

Funded to Date: $274,217

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

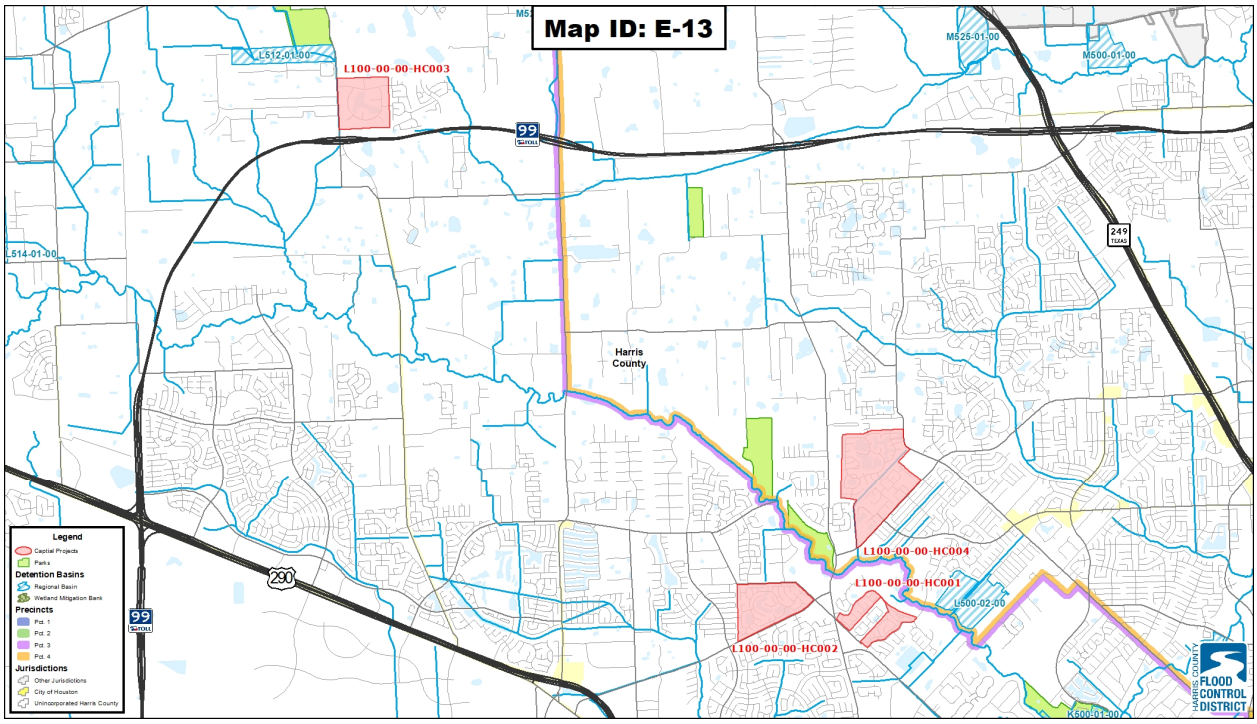
Design and construction of these projects could reduce the risk of flooding for over 200 homes during a 1% rain or flood event.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$14,590,000	$274,217	$1,176,672	$2,126,317	$2,833,041	$4,203,059	$3,947,527

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-26 Management, Right-of-Way Acquisition, Design and Construction of the Little Cypress Creek Frontier Program

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $43,000,000

Operating Cost Impact: $16,800

Funded to Date: $8,641,630

Expected Completion: 3rd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

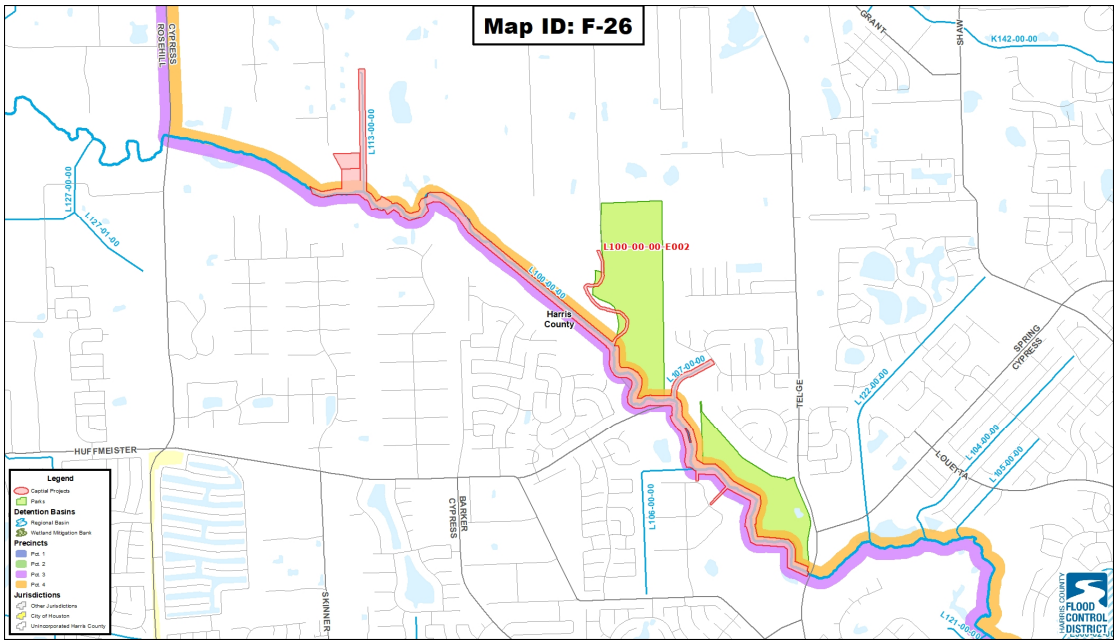
Implementation and construction of the Little Cypress Creek Frontier Program could remove the 1% floodplain for over 730 acres in the watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$43,000,000	$8,641,630	$9,456,253	$12,143,222	$8,859,577	$3,817,230	$82,088

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$4,200



Harris County FY 2020 Capital Improvement Program

Project Name:	F-27 Design and Construction of Zube Park Stormwater Detention Basin	**Estimated Project Cost:**	$2,900,000
		Operating Cost Impact:	$4,200
Category:	Main Channel Flood Damage Reduction Projects	**Funded to Date:**	$418,605
		Expected Completion:	4th Quarter, FY 2022
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

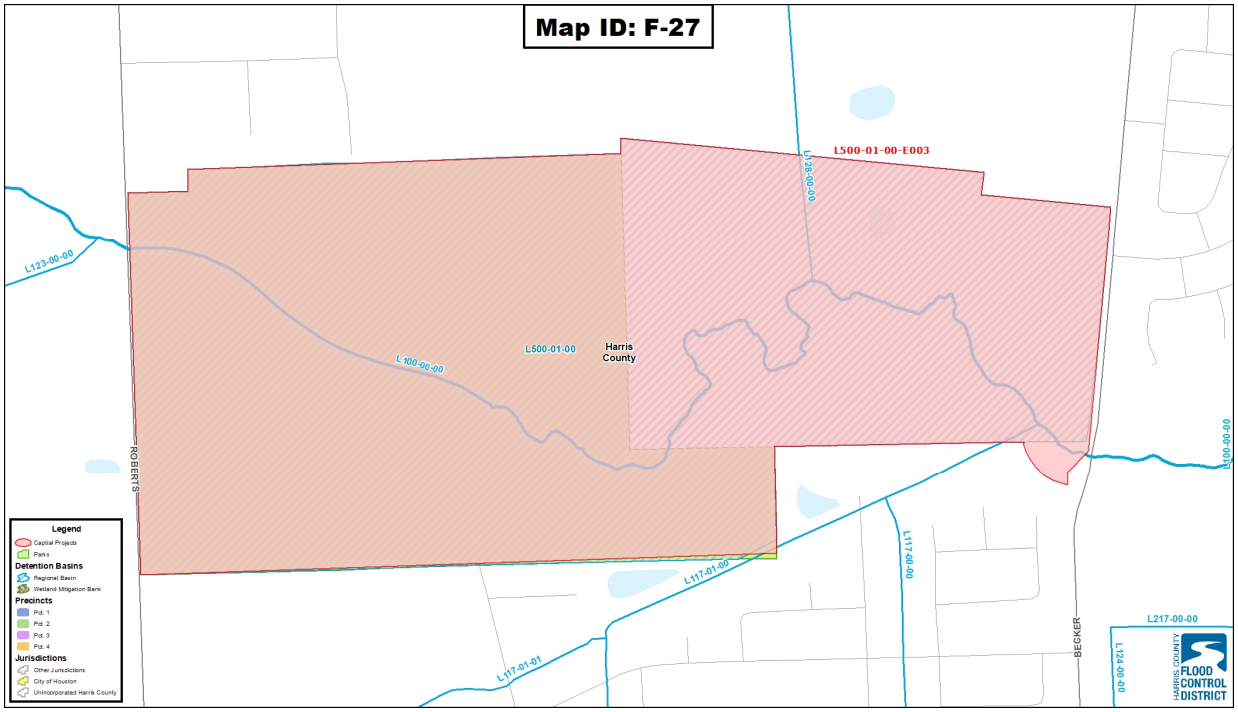
This project will reduce the risk of flooding in the Little Cypress Creek watershed. Projects could include, but not limited to, detention, sediment control, vegetation management, and other flood risk management projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$2,900,000	$418,605	$853,449	$1,104,244	$523,702	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$4,200	$4,200



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-28 Right-Of-Way Acquisition, Design, and Construction of Kluge Stormwater Detention Basin

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $8,400,000

Operating Cost Impact: $6,300

Funded to Date: $2,000,000

Expected Completion: 3rd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

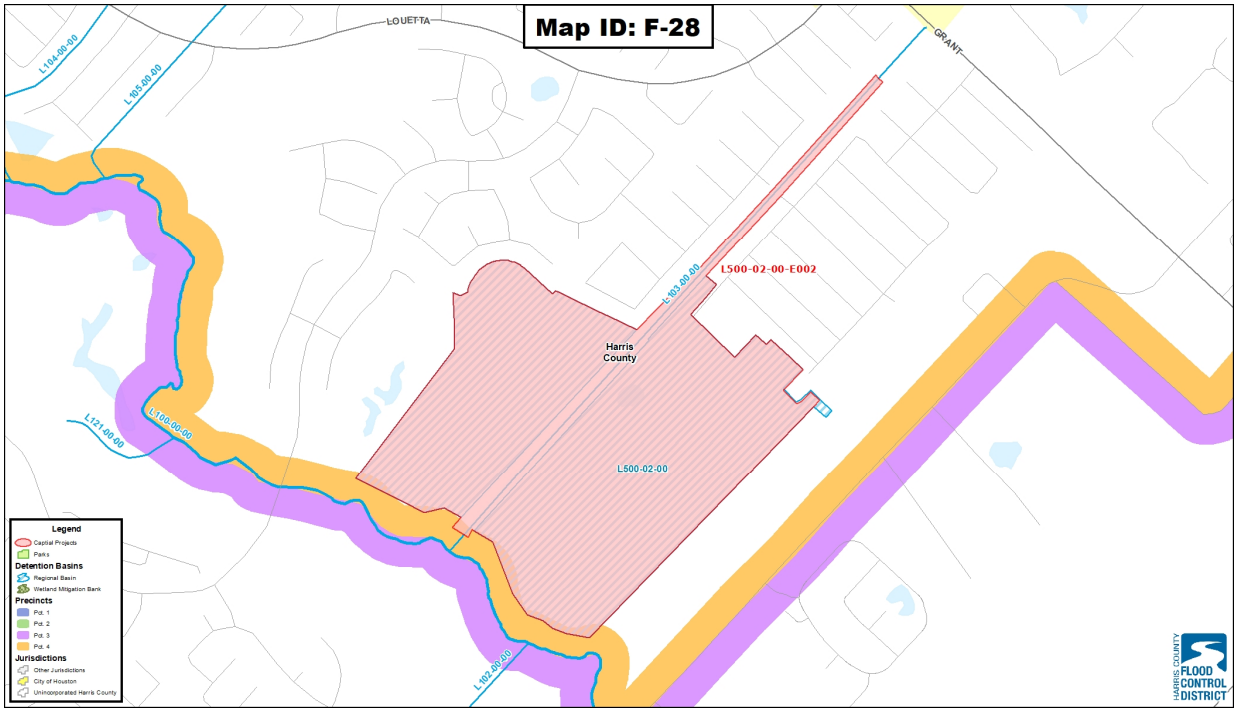
This project will reduce the risk of flooding in the Little Cypress Creek watershed. Projects could include, but not limited to, detention, sediment control, vegetation management, and other flood risk management projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$8,400,000	$2,000,000	$0	$0	$2,009,898	$4,088,729	$301,373

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$1,575



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name:	F-29 Right-Of-Way Acquisition, Design, and Construction of Mueschke East Stormwater Detention Basin	**Estimated Project Cost:**	$15,200,000
		Operating Cost Impact:	$0
Category:	Frontier Projects	**Funded to Date:**	$10,000
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

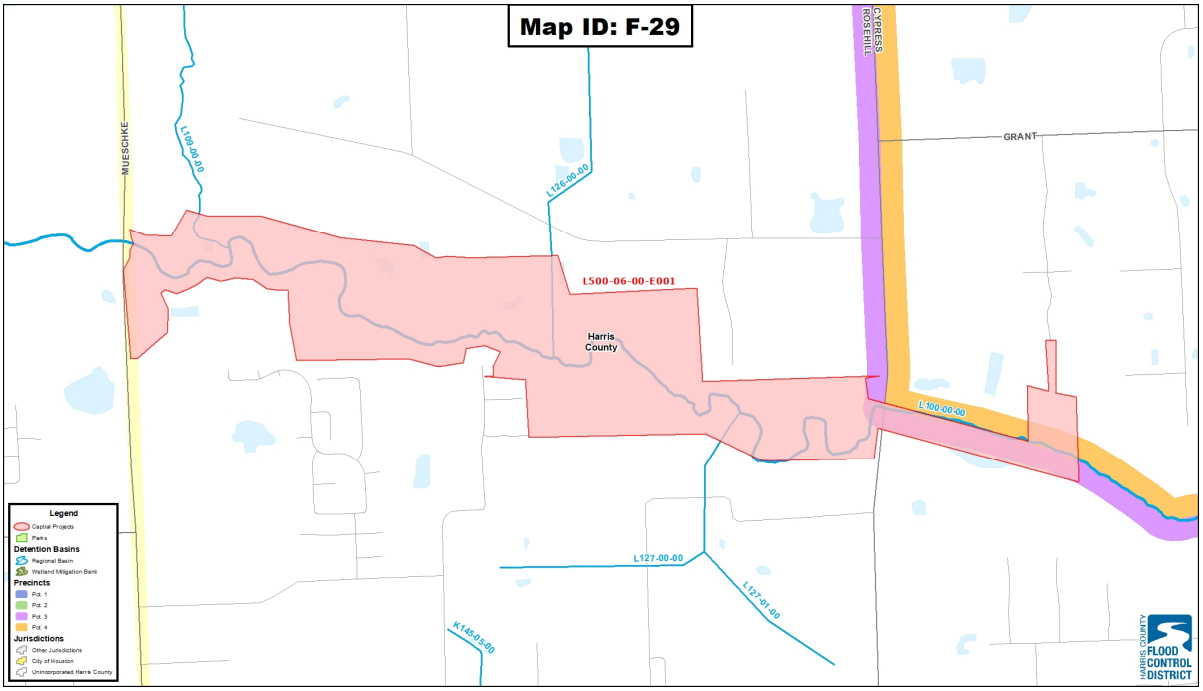
This project will reduce the risk of flooding in the Little Cypress Creek watershed. Projects could include, but not limited to, detention, sediment control, vegetation management, and other flood risk management projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$15,200,000	$10,000	$3,401,324	$3,115,000	$2,413,564	$530,165	$465,908

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-30 Right-Of-Way Acquisition, Design, and Construction of Schiel Stormwater Detention Basin

Category: Frontier Projects

Estimated Project Cost: $13,500,000

Operating Cost Impact: $12,600

Funded to Date: $6,633,347

Expected Completion: 3rd Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

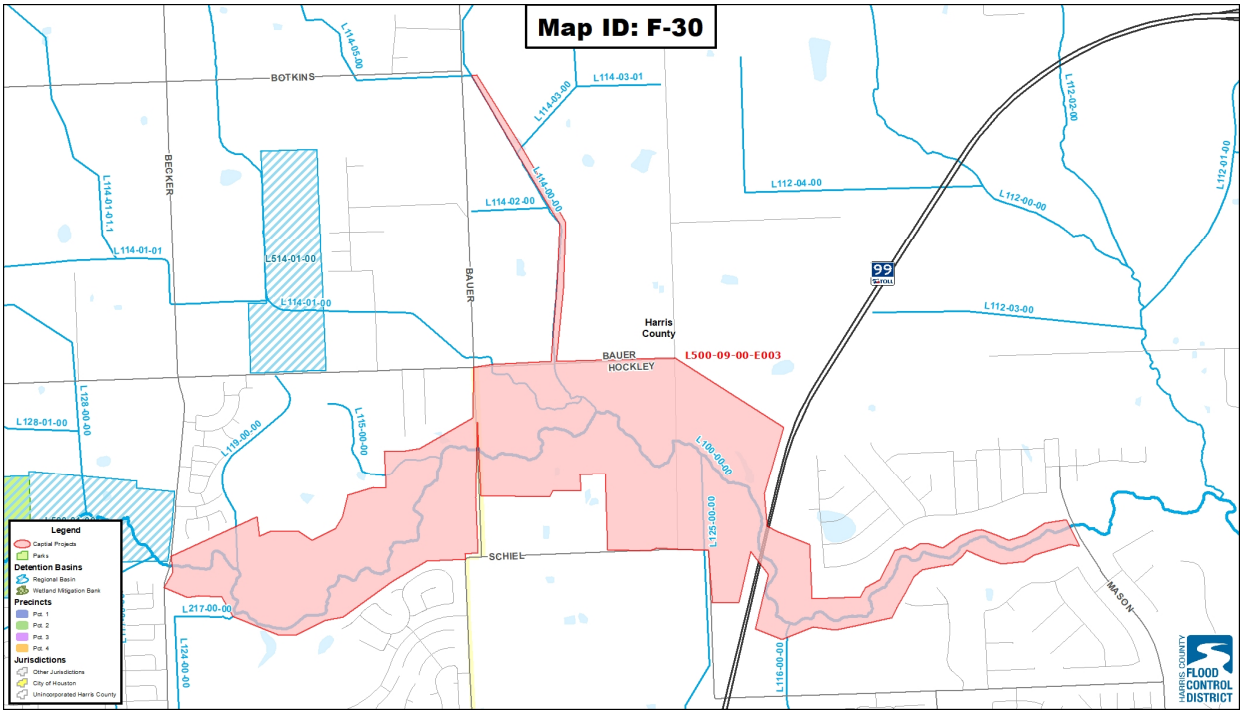
This project will reduce the risk of flooding in the Little Cypress Creek watershed. Projects could include, but not limited to, detention, sediment control, vegetation management, and other flood risk management projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$13,500,000	$6,633,347	$0	$0	$6,866,653	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$3,150	$12,600



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-31 Construction of Mueschke West Stormwater Detention Basin Improvements

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $15,900,000

Operating Cost Impact: $0

Funded to Date: $1,799,502

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

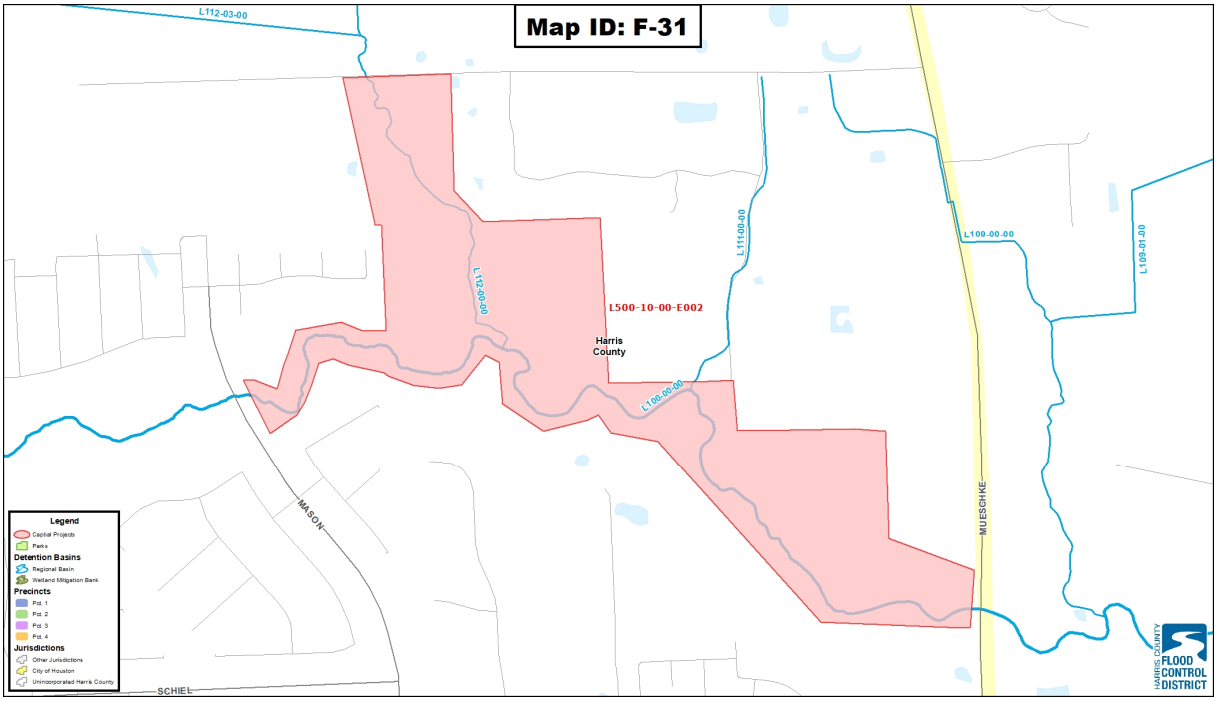
This project will reduce the risk of flooding in the Little Cypress Creek watershed. Projects could include, but not limited to, detention, sediment control, vegetation management, and other flood risk management projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$15,900,000	$1,799,502	$2,148,486	$3,283,503	$248,914	$247,923	$248,914

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-32 Construction of Hegar Stormwater Detention Basin Improvements

Category: Frontier Projects

Estimated Project Cost: $16,500,000

Operating Cost Impact: $0

Funded to Date: $7,844,800

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

This project will reduce the risk of flooding in the Little Cypress Creek watershed. Projects could include, but not limited to, detention, sediment control, vegetation management, and other flood risk management projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$16,500,000	$7,844,800	$50,257	$4,534,651	$0	$0	$2,325,173

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-33 Construction of Kleb Woods Stormwater Detention Basin Improvements

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $10,500,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

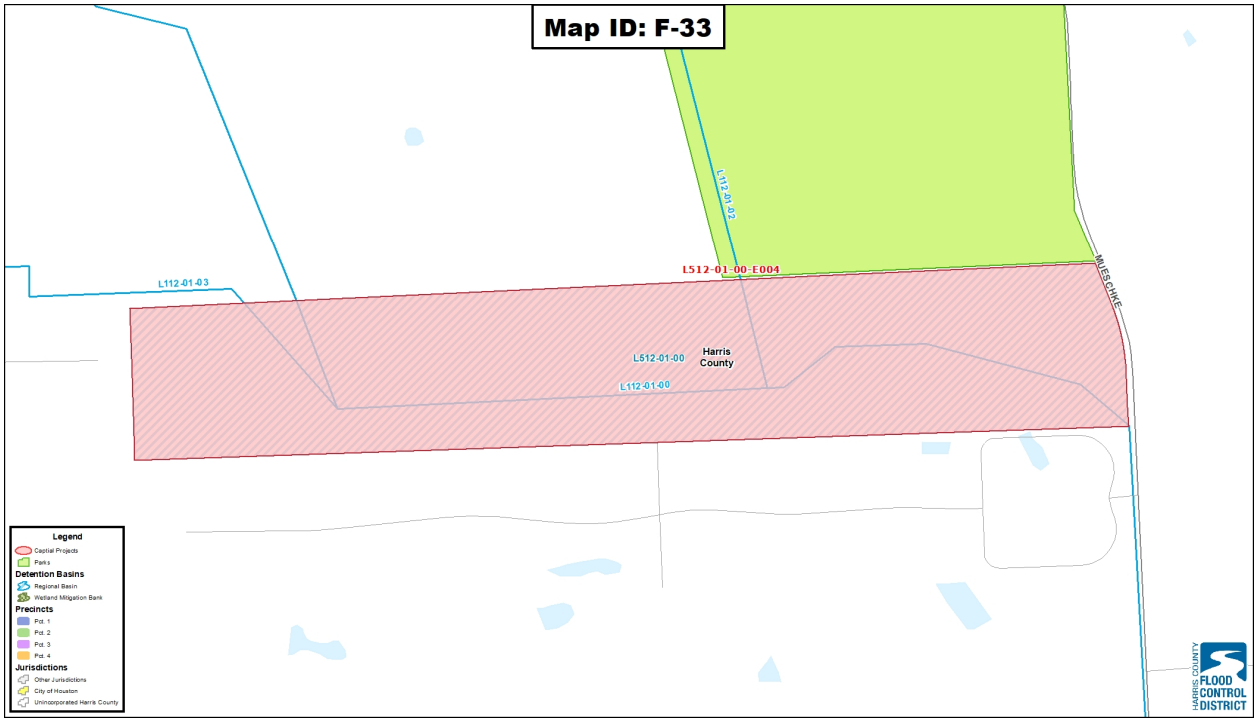
This project will reduce the risk of flooding in the Little Cypress Creek watershed. Projects could include, but not limited to, detention, sediment control, vegetation management, and other flood risk management projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,500,000	$0	$110,994	$0	$511,041	$6,724,218	$3,153,747

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name:	F-34 ROW, Design, and Construction of Mason Stormwater Detention Basin in Little Cypress Creek watershed	**Estimated Project Cost:**	$15,800,000
		Operating Cost Impact:	$0
Category:	Frontier Projects	**Funded to Date:**	$7,964,264
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

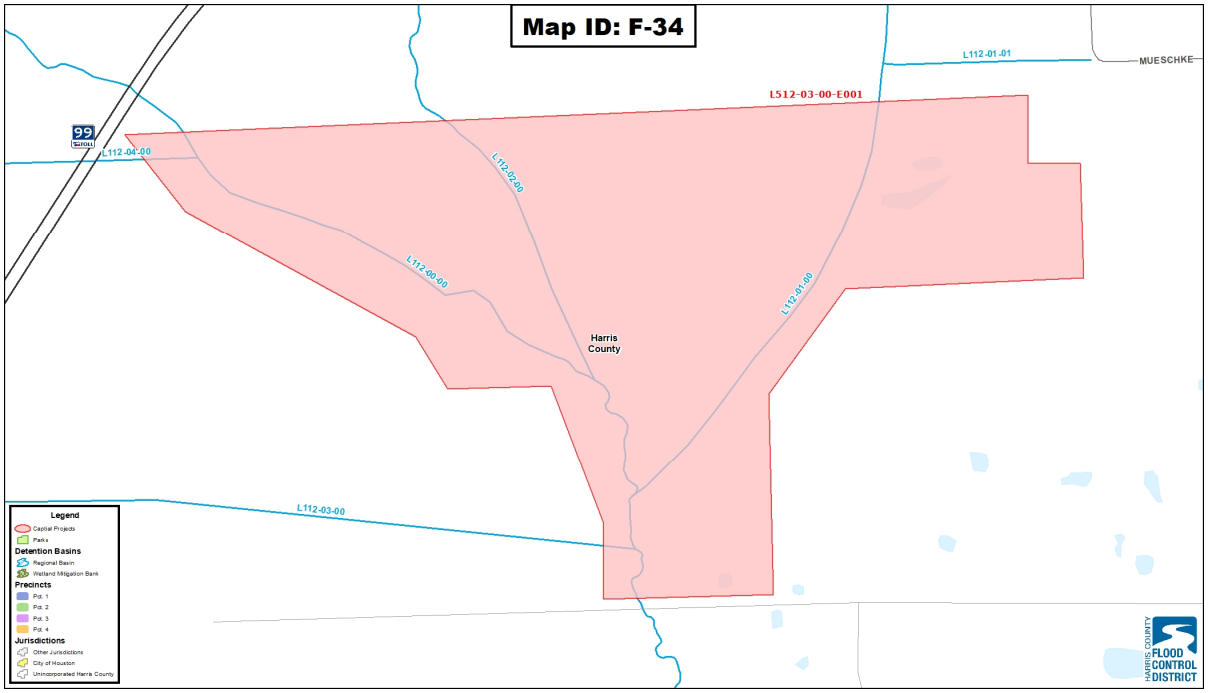
This project will reduce the risk of flooding in the Little Cypress Creek watershed. Projects could include, but not limited to, detention, sediment control, vegetation management, and other flood risk management projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$15,800,000	$7,964,264	$0	$4,950,879	$1,131,116	$305,432	$903,817

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-35 Construction of Bauer-Hockley Stormwater Detention Basin Improvements

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $4,300,000

Operating Cost Impact: $4,200

Funded to Date: $4,273,218

Expected Completion: 2nd Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

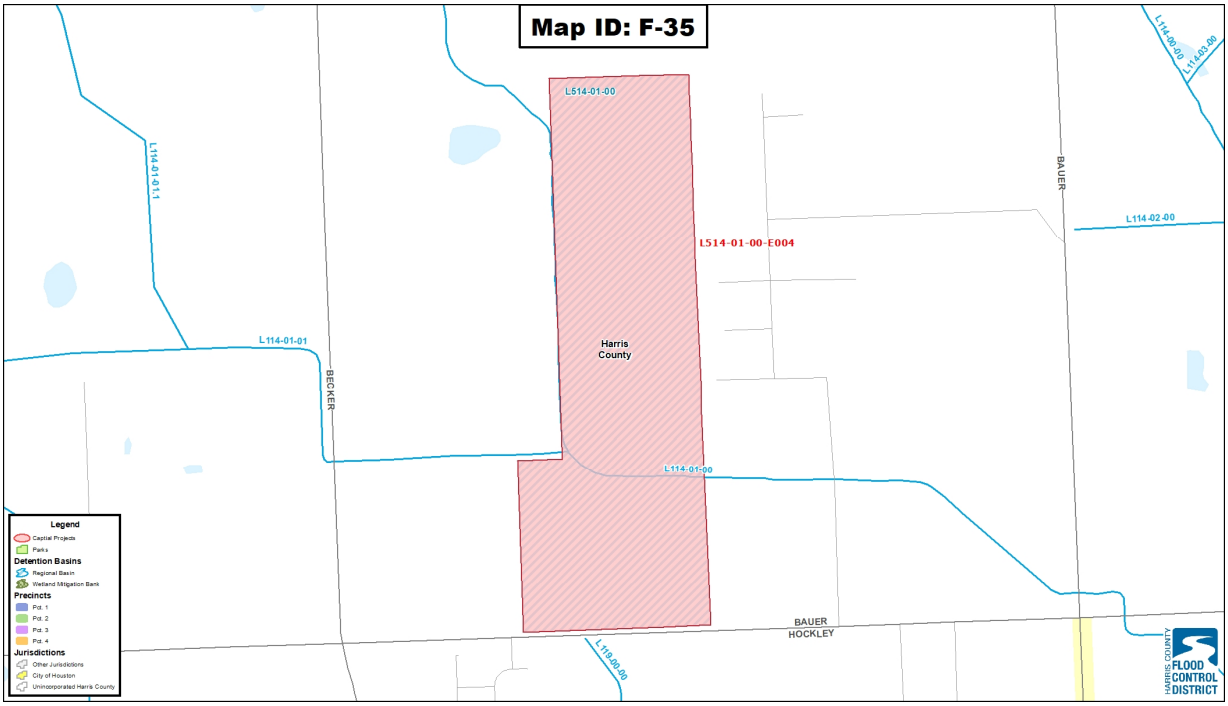
This project will reduce the risk of flooding in the Little Cypress Creek watershed. Projects could include, but not limited to, detention, sediment control, vegetation management, and other flood risk management projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$4,300,000	$4,273,218	$26,782	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$4,200	$4,200	$4,200



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-89 Design and Construction of Additional Volume in Little Cypress Creek Stormwater Detention Basins

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $3,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Design and Construction of additional volume in existing stormwater detention basins to reduce the risk of flooding in the watershed. Projects could include, but not limited to, detention, sediment control, vegetation management, and other flood risk management projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$3,000,000	$0	$206,693	$1,077,756	$1,077,756	$637,795	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-108 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Luce Bayou Watershed

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Design and construction of projects to reduce the risk of flooding in the Luce Bayou watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$0	$2,723,199	$3,228,725	$1,992,473	$2,055,603

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-51 Luce Bayou Right-of-Way Acquisition and Floodplain Preservation

Category: Floodplain Acquisition and Preservation Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Right of way acquisition along Luce Bayou for project support, to preserve channel conveyance and / or restore natural floodplains in areas subject to frequent flooding.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$100,717	$3,702,357	$3,702,356	$2,494,570	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-85 Investigations of General Drainage Improvements along Luce Bayou

Category: Local Participation Projects

Estimated Project Cost: $450,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

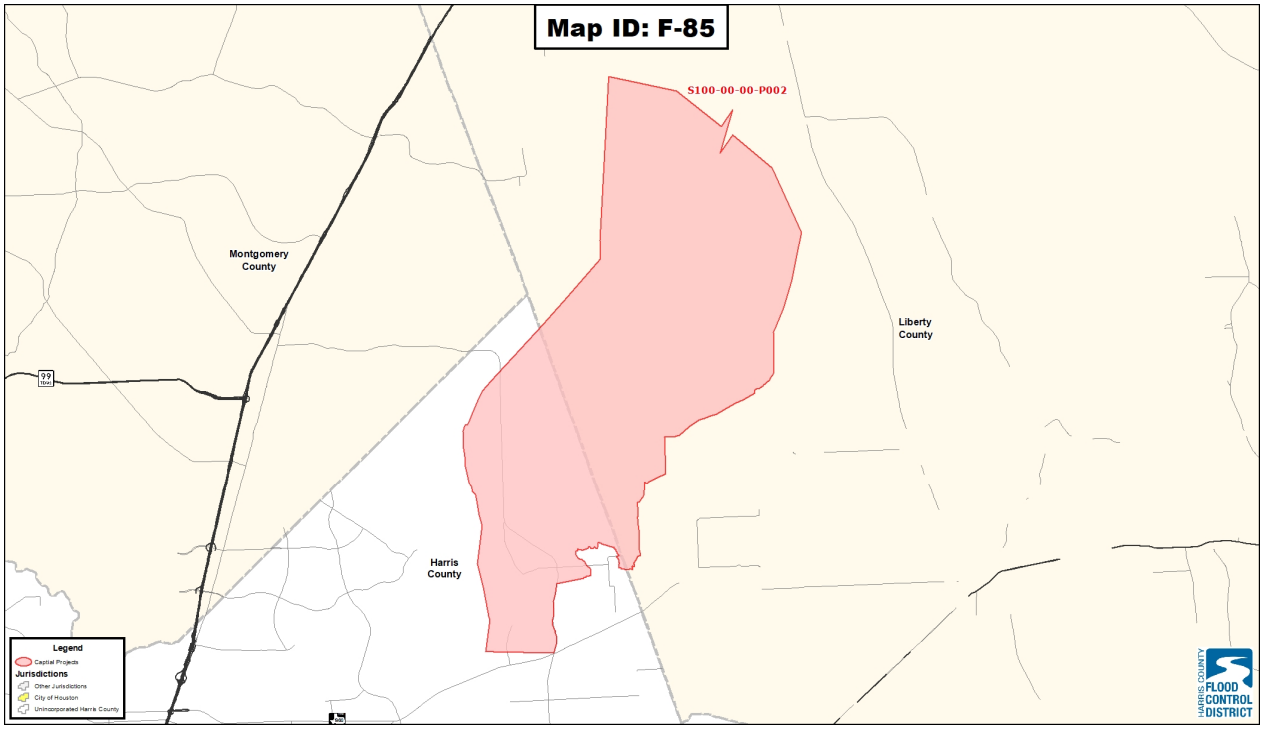
Effort will investigate flooding problems and evaluate potential solutions to flooding problems to reduce the risk of flooding in the Luce Bayou watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$450,000	$0	$450,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: C-17 San Jacinto River Watershed Study

Category: Major Partnership Flood Damage Reduction Projects

Estimated Project Cost: $2,738,098

Operating Cost Impact: $0

Funded to Date: $2,672,191

Expected Completion: 3rd Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

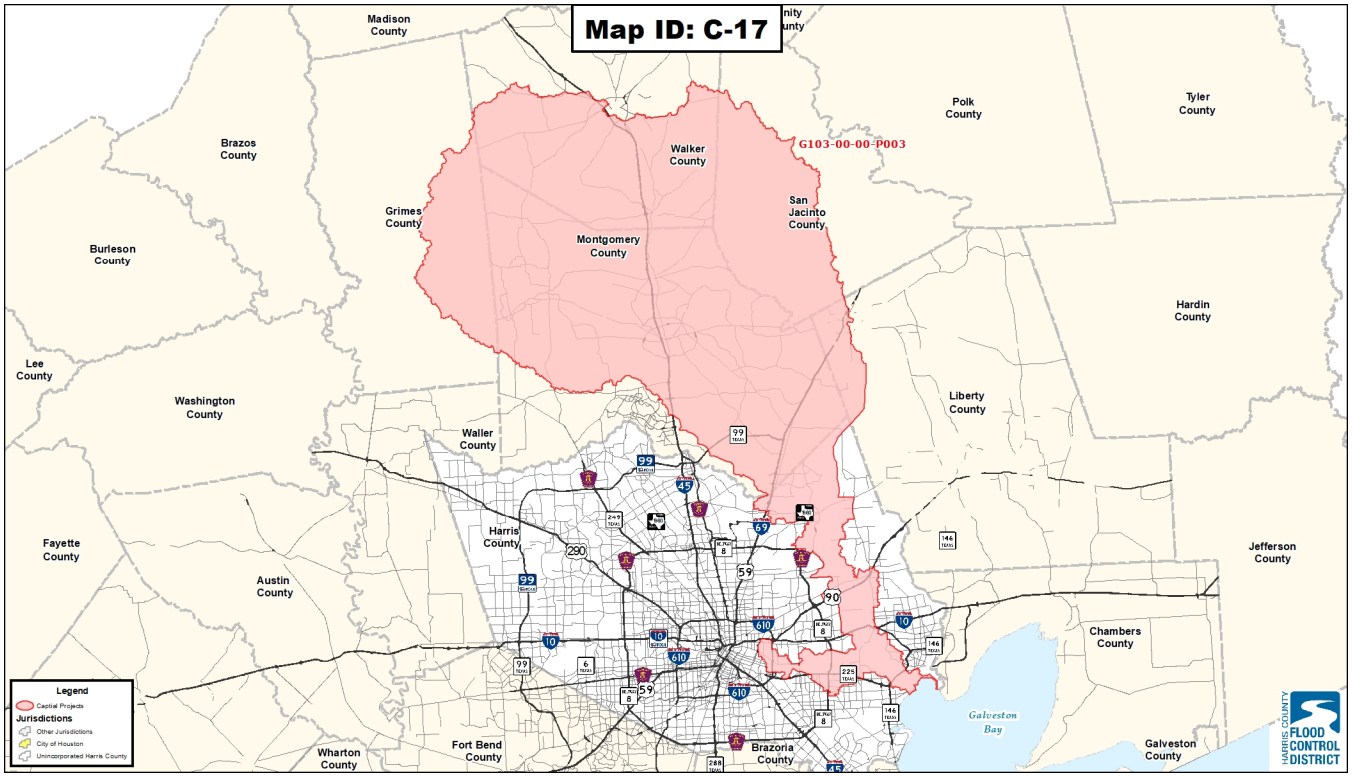
Study will investigate flooding problems and identify potential solutions to flooding from the San Jacinto River.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$2,738,098	$2,672,191	$3,373	$62,534	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: C-50 Funding for Future Partnership Projects Based on Results of Study - for Right-of-Way Acquisition, Design, and Construction of General Drainage Improvements in San Jacinto River Watershed Study

Estimated Project Cost: $75,000,000

Operating Cost Impact: $0

Category: Main Channel Flood Damage Reduction Projects

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Design and construction of partnership projects to reduce the risk of flooding along the San Jacinto River. Projects could include, but not limited to, detention, sediment control, vegetation management, and other flood risk management projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$75,000,000	$0	$0	$2,836,280	$19,300,979	$22,216,091	$19,792,260

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	CI-019 Investigations of Potential Detention Sites Around Glendale Dredge Site in Partnership with the City of Houston	**Estimated Project Cost:**	$100,000
		Operating Cost Impact:	$0
Category:	Partnership Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	4th Quarter, FY 2022
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

Study will investigate potential sites and benefits for detention in and around Glendale Dredge site in partnership with the City of Houston.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$100,000	$0	$0	$96,728	$3,272	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	CI-028 Design and Construction of Additional Gates on Lake Houston in Partnership with the City of Houston	**Estimated Project Cost:**	$70,000,000
		Operating Cost Impact:	$0
Category:	Partnership Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

Design and construction of additional gates which could enhance the operation of Lake Houston for reduction of flood risk along the San Jacinto River. The partnership and project costs are to be determined.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$70,000,000	$0	$0	$4,934,193	$7,306,272	$11,640,989	$23,034,273

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: CI-60 Planning, Right-Of-Way, Design and Construction of Conveyance Improvements along Panther Creek

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $6,300

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Planning, right of way acquisition, design and construction of projects to reduce the risk of flooding along Panther Creek.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$752,229	$3,605,193	$3,005,378	$2,637,200	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$3,150

Harris County FY 2020 Capital Improvement Program

Project Name:	CI-61 East Fork, West Fork and Lake Houston Dredging	**Estimated Project Cost:**	$50,000,000
		Operating Cost Impact:	$0
Category:	Partnership Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

Potential partnership project with the City of Houston, Coastal Water Authority, and the State of Texas to permit, design, and complete dredging of the East Fork, West Fork and Lake Houston area waterways to reduce flooding risks.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$50,000,000	$0	$0	$79,250	$10,676,143	$10,676,143	$10,705,392

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: E-14 San Jacinto River Subdivision Drainage Improvements

Category: Harris County Support Projects

Estimated Project Cost: $6,450,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 3rd Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

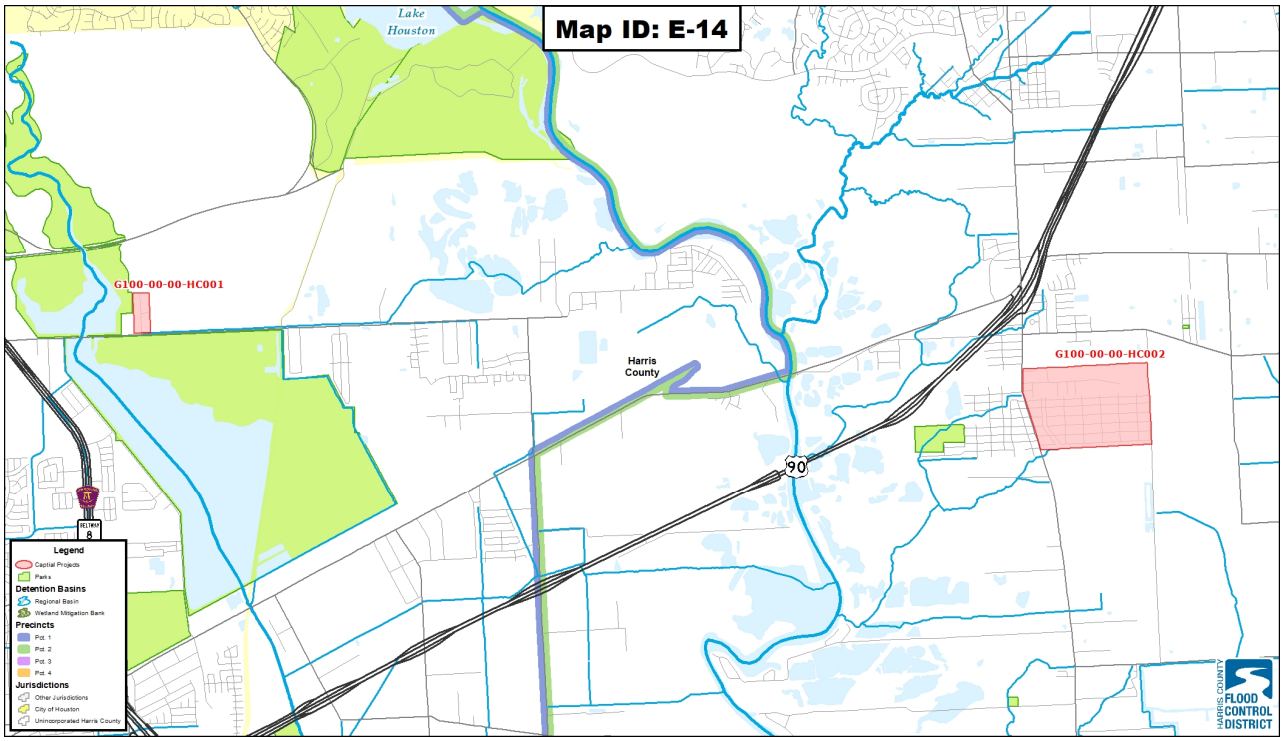
Design and construction of these projects could reduce the risk of flooding for over 500 homes during a 1% rain or flood event.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$6,450,000	$0	$1,122,781	$2,287,427	$3,011,459	$28,333	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-110 Planning , Right-Of-Way Acquisition, design and Construction of General Drainage Improvements Near Huffman

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $6,300

Funded to Date: $130,833

Expected Completion: 2nd Quarter, FY 2022

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

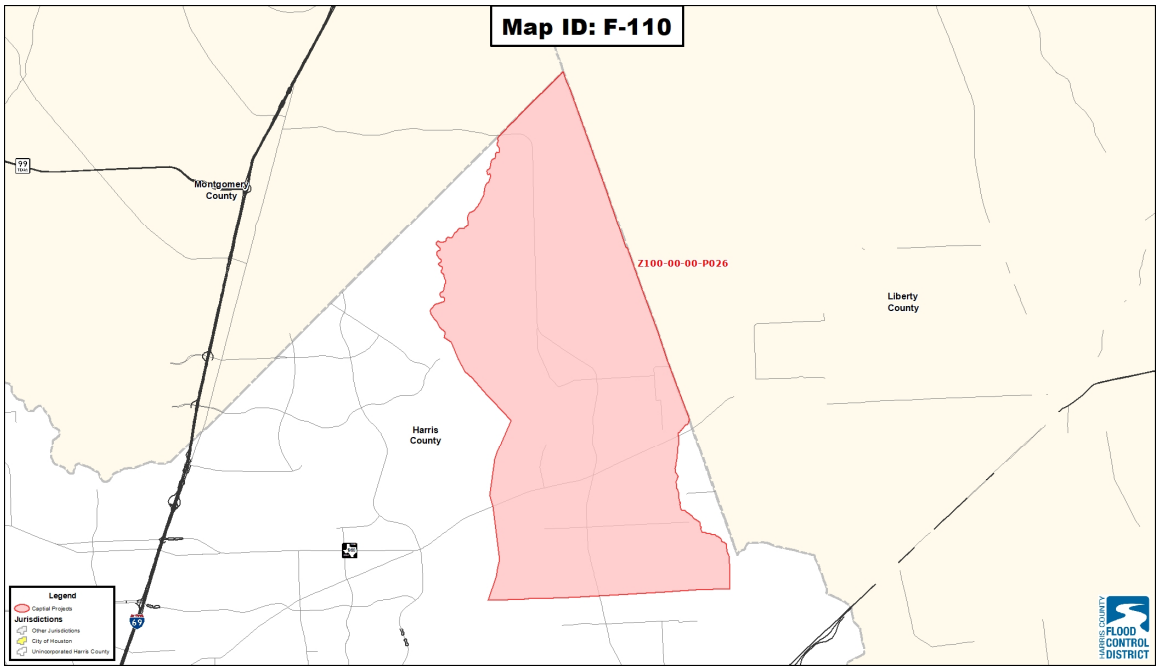
This project could reduce the risk of flooding and facilitate drainage improvements in the area of Huffman in the San Jacinto River watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$130,833	$5,639,166	$4,230,001	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$3,150	$6,300	$6,300



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-111 Planning , Right-Of-Way Acquisition, design and Construction of General Drainage Improvements East of Lake Houston

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $6,300

Funded to Date: $0

Expected Completion: 1st Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

This project could reduce the risk of flooding and facilitate drainage improvements in the area east of Lake Houston in the San Jacinto River watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$0	$2,959,076	$4,582,326	$2,458,598	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$3,150

Harris County FY 2020 Capital Improvement Program

Project Name:	F-14 Planning , Right-Of-Way Acquisition, design and Construction of General Drainage Improvements Near Kingwood	**Estimated Project Cost:**	$10,000,000
		Operating Cost Impact:	$4,200
Category:	Tributary Flood Damage Reduction Projects	**Funded to Date:**	$350,000
		Expected Completion:	1st Quarter, FY 2023
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

This project could reduce the risk of flooding and facilitate drainage improvements in the area of Kingwood in the San Jacinto River watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$350,000	$3,094,345	$4,658,459	$1,897,196	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$4,200	$4,200

Harris County FY 2020 Capital Improvement Program

Project Name: F-15 Planning , Right-Of-Way Acquisition, design and Construction of General Drainage Improvements Near Atascocita

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 4th Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

This project could reduce the risk of flooding and facilitate drainage improvements in the area of Atascocita in the San Jacinto River watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$0	$60,360	$4,808,486	$4,881,947	$249,207

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: C-08 Right-Of-Way Acquisition, Design, and Construction of Stormwater Detention Basin and Channel Conveyance Improvements along Salt Water Ditch

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $50,000,000

Operating Cost Impact: $25,200

Funded to Date: $0

Expected Completion: 3rd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

The project could reduce the risk of flooding for over 1,900 structures near C118-00-00 in the 1% floodplain. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$50,000,000	$0	$6,457,160	$15,169,405	$11,731,685	$16,602,583	$39,167

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$6,300

Harris County FY 2020 Capital Improvement Program

Project Name:	C-09 Right-Of-Way Acquisition, Design, and Construction of South Post Oak Stormwater Detention Basin and Channel Conveyance Improvements along C147-00-00	**Estimated Project Cost:**	$18,170,000
		Operating Cost Impact:	$6,300
Category:	Main Channel Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	4th Quarter, FY 2023
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

The project could reduce the risk of flooding for over 210 structures in the 1% floodplain.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$18,170,000	$0	$6,934,350	$5,171,999	$5,219,194	$844,457	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$6,300

Harris County FY 2020 Capital Improvement Program

Project Name: C-10 Design and Construction of South Shaver Stormwater Detention Basin

Category: Tributary Flood Damage Reduction Projects

Estimated Project Cost: $15,000,000

Operating Cost Impact: $8,400

Funded to Date: $0

Expected Completion: 4th Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Provides additional stormwater detention in support of flood damage reduction in Sims Bayou Watershed. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$15,000,000	$0	$2,008,867	$4,663,356	$7,553,471	$774,306	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$8,400

Harris County FY 2020 Capital Improvement Program

Project Name:	CI-027 Planning, Right-Of-Way Acquisition, Design, and Construction of Improvements for the Tributaries of C106-00-00	**Estimated Project Cost:**	$2,000,000
		Operating Cost Impact:	$2,100
Category:	Tributary Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	2nd Quarter, FY 2024
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

The project could reduce the risk of flooding for structures along tributaries of C106-00-00. Project will be coordinated with existing City of South Houston and City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$2,000,000	$0	$0	$0	$894,143	$1,105,857	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$1,050

Harris County FY 2020 Capital Improvement Program

Project Name: CI-029 Restore Channel Conveyance Capacity Along C102-00-00

Category: Major Maintenance Projects

Estimated Project Cost: $30,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Major maintenance to restore channel conveyance capacity in partnership with the City of Houston. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$30,000,000	$0	$0	$8,123,602	$9,751,399	$6,017,672	$6,107,327

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: CI-037 Restore Channel Conveyance Capacity Along C146-00-00

Category: Major Maintenance Projects

Estimated Project Cost: $30,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Major maintenance to restore channel conveyance capacity in partnership with the City of Houston. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$30,000,000	$0	$0	$58,562	$3,125,286	$3,125,286	$7,246,117

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: E-15 Sims Bayou Subdivision Drainage Improvements

Category: Harris County Support Projects

Estimated Project Cost: $880,000

Operating Cost Impact: $0

Funded to Date: $48,470

Expected Completion: 3rd Quarter, FY 2022

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

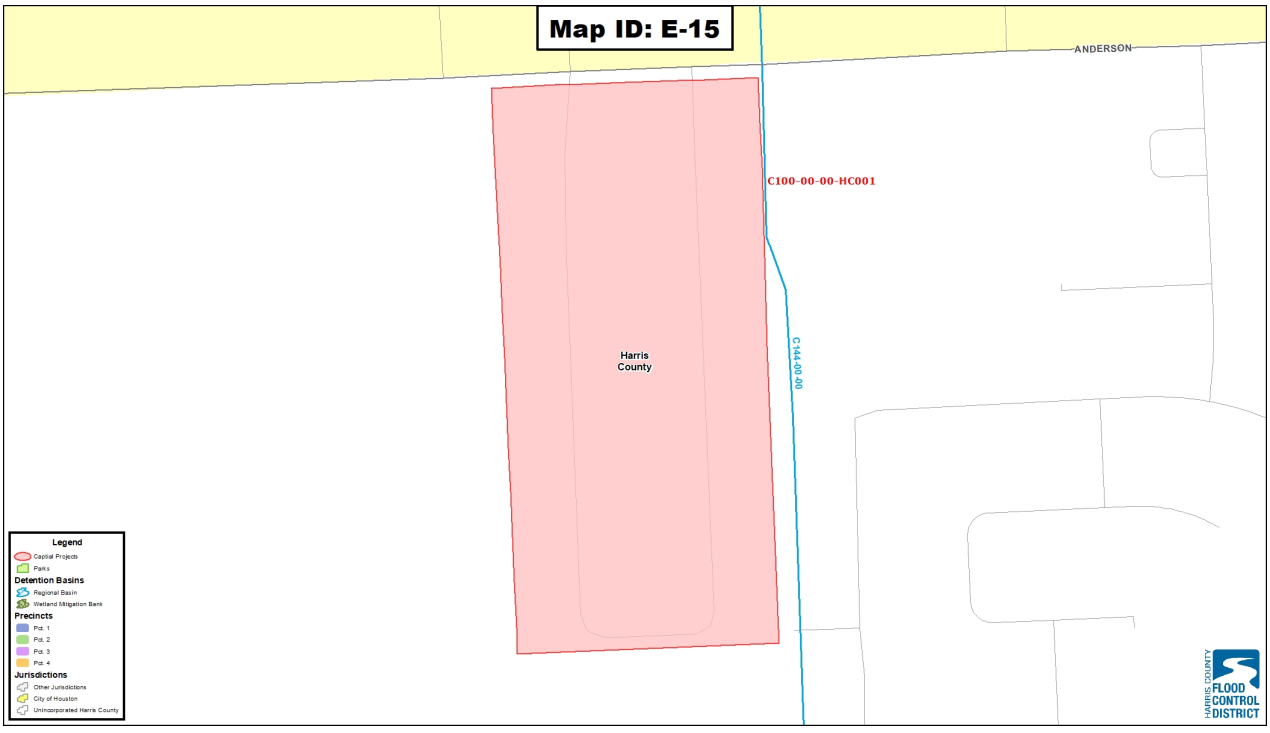
Design and construction of these projects could reduce the risk of flooding for over 50 homes during a 1% rain or flood event.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$880,000	$48,470	$230,429	$589,368	$11,733	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County FY 2020 Capital Improvement Program

Project Name: F-92 Planning, Right-Of-Way Acquisition, Design and Construction Along C116-00-00

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $8,400

Funded to Date: $0

Expected Completion: 1st Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Could reduce the risk of flooding and could improve local drainage issues for buildings along the channel. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$2,489,461	$4,508,648	$3,001,891	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$8,400

Harris County FY 2020 Capital Improvement Program

Project Name: F-93 Planning, Right-Of-Way Acquisition, Design and Construction Along C124-00-00

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $6,300

Funded to Date: $0

Expected Completion: 1st Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Could reduce the risk of flooding and could improve local drainage issues for buildings along the channel.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$0	$2,959,076	$4,582,326	$2,458,598	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$3,150

Harris County FY 2020 Capital Improvement Program

Project Name: F-94 Planning, Right-Of-Way Acquisition, Design and Construction Along C143-00-00

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $8,400

Funded to Date: $0

Expected Completion: 3rd Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Could reduce the risk of flooding and could improve local drainage issues for buildings along the channel.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$1,013,523	$4,930,430	$4,056,047	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$2,100	$8,400

Harris County FY 2020 Capital Improvement Program

Project Name: F-95 Planning, Right-Of-Way Acquisition, Design and Construction Along C144-00-00

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $8,400

Funded to Date: $0

Expected Completion: 1st Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Could reduce the risk of flooding and could improve local drainage issues for buildings along the channel.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$2,489,461	$4,508,648	$3,001,891	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$8,400

Harris County FY 2020 Capital Improvement Program

Project Name: C-118 Planning, Right-of-Way Acquisition, Design and Construction of a Reservoir along Spring Creek

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $25,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

This partnership will evaluate the effectiveness, construction, and operation of a reservoir in the Spring Creek watershed. Projects could include, but not limited to, detention, sediment control, vegetation management, and other flood risk management projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$25,000,000	$0	$0	$2,672,709	$5,826,257	$6,087,435	$4,696,702

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: E-16 Spring Creek Subdivision Drainage Improvements

Category: Harris County Support Projects

Estimated Project Cost: $6,285,000

Operating Cost Impact: $0

Funded to Date: $49,500

Expected Completion: 3rd Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

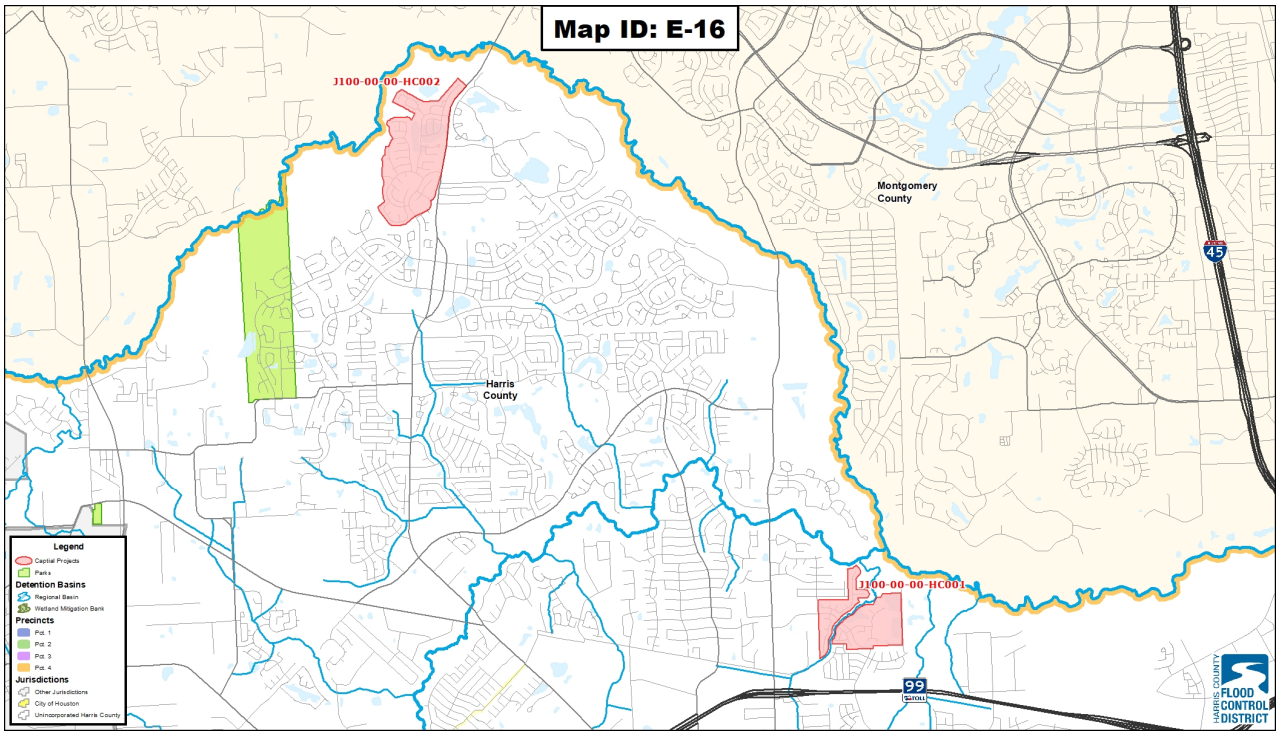
Design and construction of these projects could reduce the risk of flooding for over 500 homes during a 1% rain or flood event.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$6,285,000	$49,500	$1,045,407	$2,227,990	$2,933,770	$28,333	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-119 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements along Spring Creek

Estimated Project Cost: $10,000,000

Operating Cost Impact: $0

Category: Main Channel Flood Damage Reduction Projects

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Design and construction of a project to reduce the risk of flooding in the Spring Creek watershed. Projects could include, but not limited to, detention, sediment control, vegetation management, and other flood risk management projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$0	$1,315,220	$3,006,545	$2,331,535	$3,307,532

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-19 Spring Creek Right-of-Way Acquisition and Floodplain Preservation

Category: Floodplain Acquisition and Preservation Projects

Estimated Project Cost: $50,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Right of way acquisition along Spring Creek for project support, to preserve channel conveyance and / or restore natural floodplains in areas subject to frequent flooding.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$50,000,000	$0	$3,510,626	$13,582,028	$13,582,029	$13,582,028	$5,743,289

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-75 Investigations of General Drainage Improvements along Spring Creek

Category: Local Participation Projects

Estimated Project Cost: $450,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

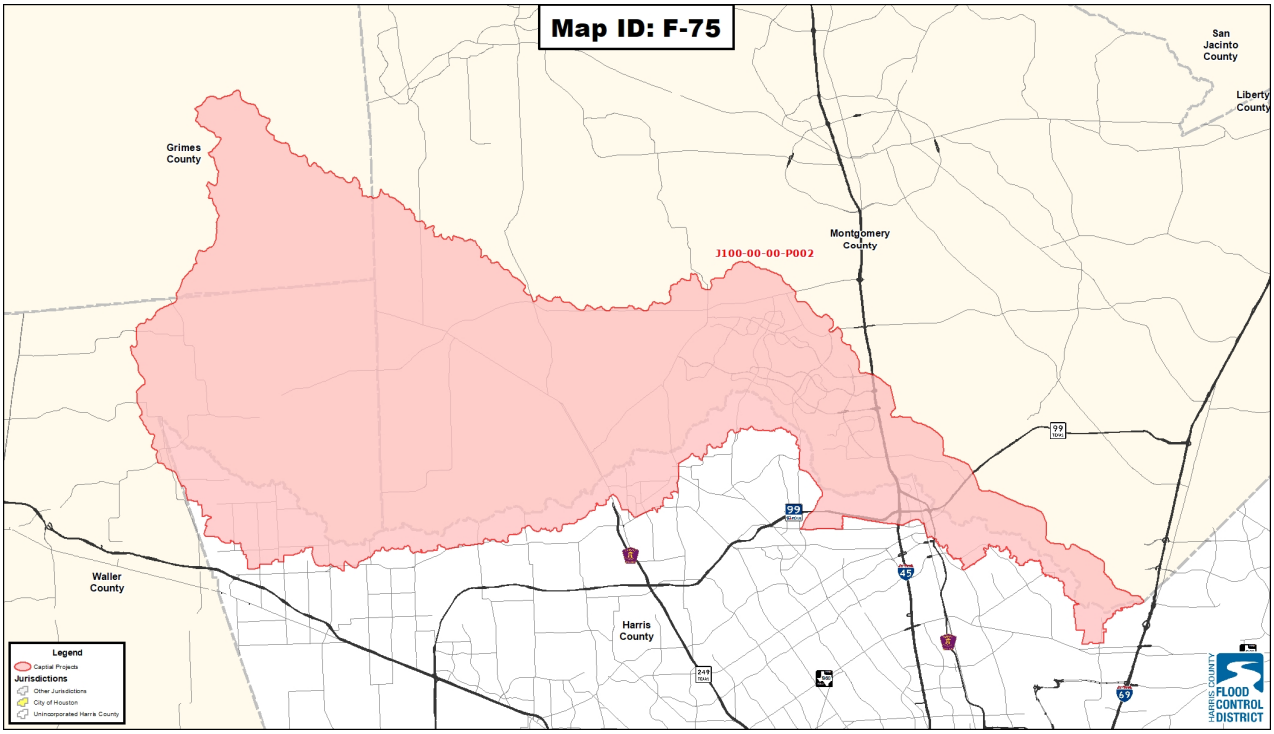
Effort will investigate flooding problems and evaluate potential solutions to flooding problems to reduce the risk of flooding in the Spring Creek watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$450,000	$0	$450,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-104 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Vince Bayou Watershed

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $15,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 4th Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Design and construction of projects to reduce the risk of flooding in the Vince Bayou watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$15,000,000	$0	$1,583,471	$6,018,461	$2,644,745	$4,433,582	$319,741

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-78 Investigations of General Drainage Improvements in Vince Bayou Watershed

Category: Local Participation Projects

Estimated Project Cost: $550,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

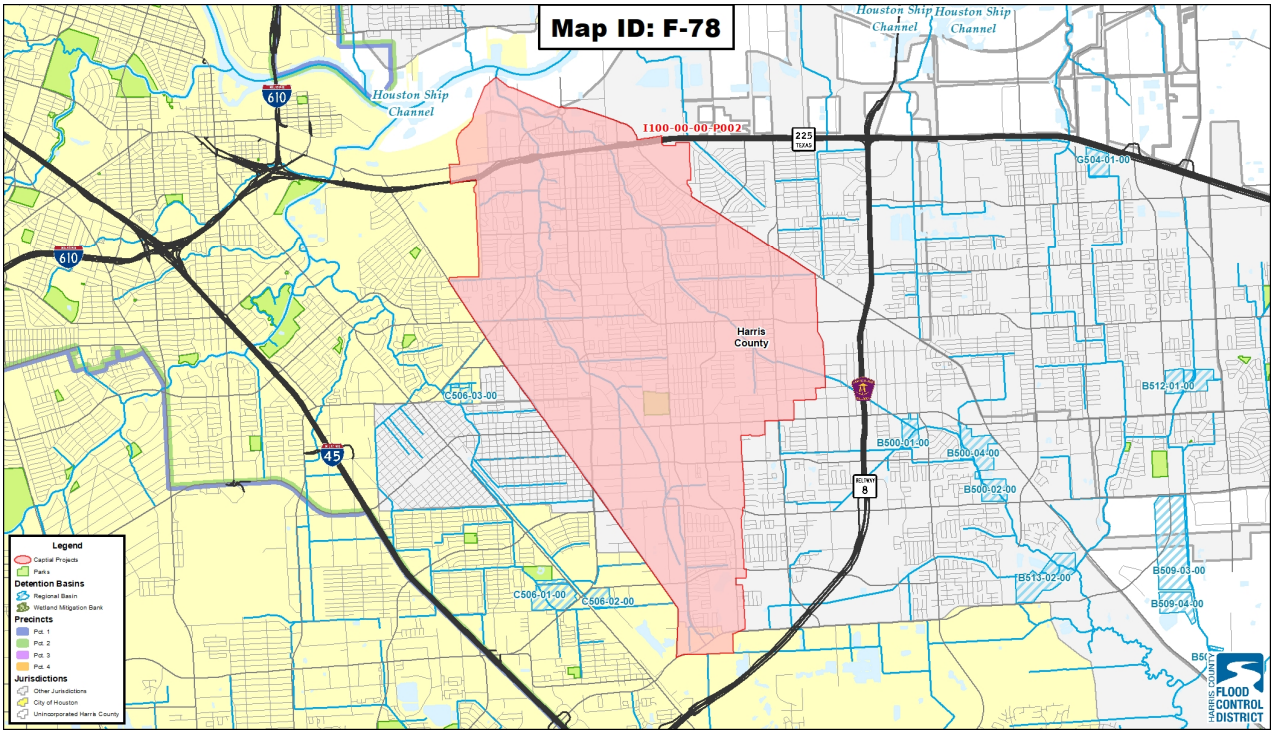
Effort will investigate flooding problems and evaluating potential solutions to flooding problems to reduce the risk of flooding in the Vince Bayou watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$550,000	$0	$550,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: C-14 Design and Construction of Corps of Engineers White Oak Bayou Section 211(f) Project

Category: Major Partnership Flood Damage Reduction Projects

Estimated Project Cost: $45,000,000

Operating Cost Impact: $0

Funded to Date: $4,847,788

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

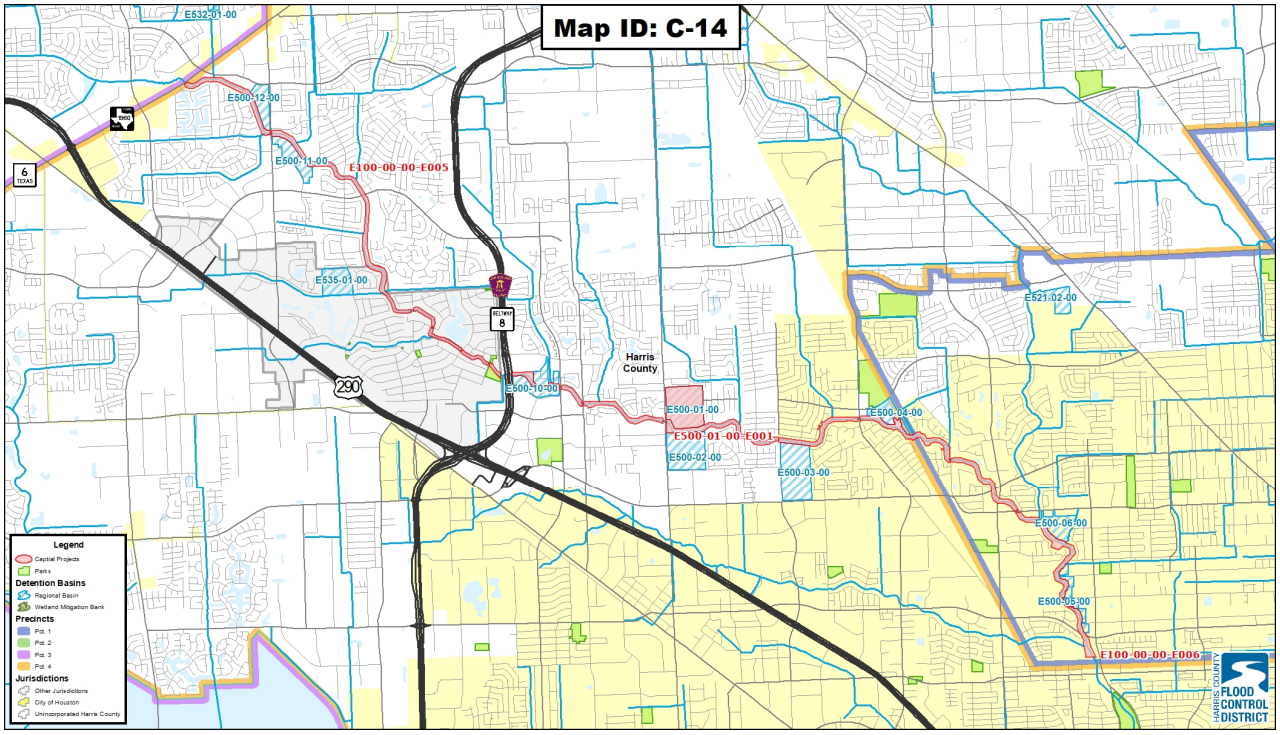
This project could reduce the risk of flooding for over 1,800 buildings in the 2% floodplain.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$45,000,000	$4,847,788	$8,563,969	$14,140,518	$9,709,277	$6,132,943	$1,605,505

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: C-15 Design and Construction of Arbor Oaks Stormwater Detention Basin

Category: Major Partnership Flood Damage Reduction Projects

Estimated Project Cost: $10,000,000

Operating Cost Impact: $6,300

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

This stormwater detention basin facilitates completion of the federal project on White Oak Bayou which could reduce the risk of flooding for 1,800 structures in the 2% floodplain. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$2,394,528	$3,435,006	$1,858,829	$2,311,637	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$3,150

Harris County FY 2020 Capital Improvement Program

Project Name: C-16 Design and Construction of Woodland Trails Stormwater Detention Basin

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $31,000,000

Operating Cost Impact: $0

Funded to Date: $750,000

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

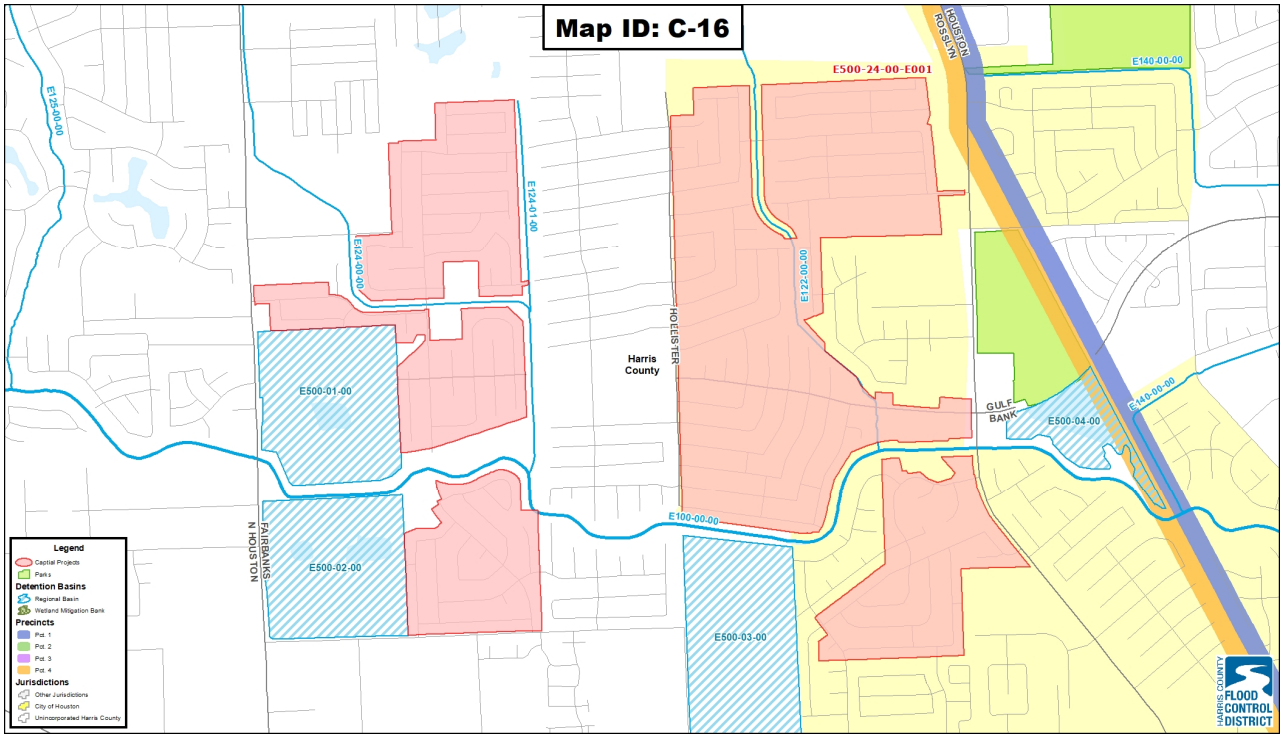
This stormwater detention basin facilitates completion of the federal project on White Oak Bayou which could reduce the risk of flooding for 1,800 structures in the 2% floodplain.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$31,000,000	$750,000	$0	$6,650,954	$5,319,504	$4,070,149	$6,188,846

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: C-39 Right-of-Way Acquisition, Design and Construction of the North Canal

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $100,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Design and construction of this project could reduce the risk of flooding upstream and downstream of downtown Houston. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$100,000,000	$0	$5,020,705	$19,508,683	$19,508,683	$14,136,772	$7,273,884

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	C-59 Construction of Inwood Forest Stormwater Detention Basin	**Estimated Project Cost:**	$47,000,000
		Operating Cost Impact:	$0
Category:	Partnership Flood Damage Reduction Projects	**Funded to Date:**	$1,288,009
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

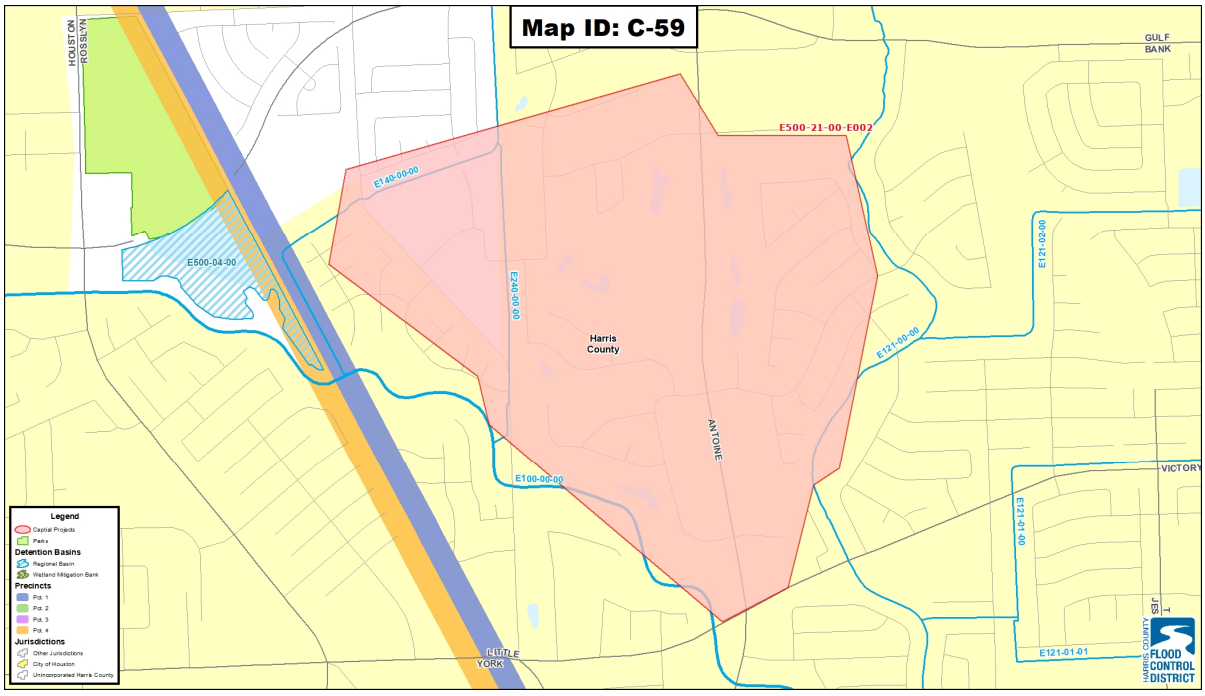
Design and construction of this project and Inwood Forest East Stormwater Detention Basin could reduce the risk of flooding for over 950 structures in the 1% floodplain. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$47,000,000	$1,288,009	$3,406,746	$6,101,257	$14,624,389	$16,301,069	$5,278,530

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: CI-010 Partnership Project with Jersey Village on Right-of-Way Acquisition, Design, and Construction of General Drainage Improvements along E127-00-00

Estimated Project Cost: $3,000,000

Operating Cost Impact: $0

Category: Partnership Flood Damage Reduction Projects

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Planning, right of way acquisition, design and construction of this project could reduce the risk of flooding for homes along E127-00-00.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$3,000,000	$0	$447,479	$1,346,649	$1,205,872	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: CI-011 Partnership Project with the City of Houston for Feasibility Study of General Drainage Improvements around Hidden Lake Townhomes

Category: Partnership Flood Damage Reduction Projects

Estimated Project Cost: $350,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 3rd Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

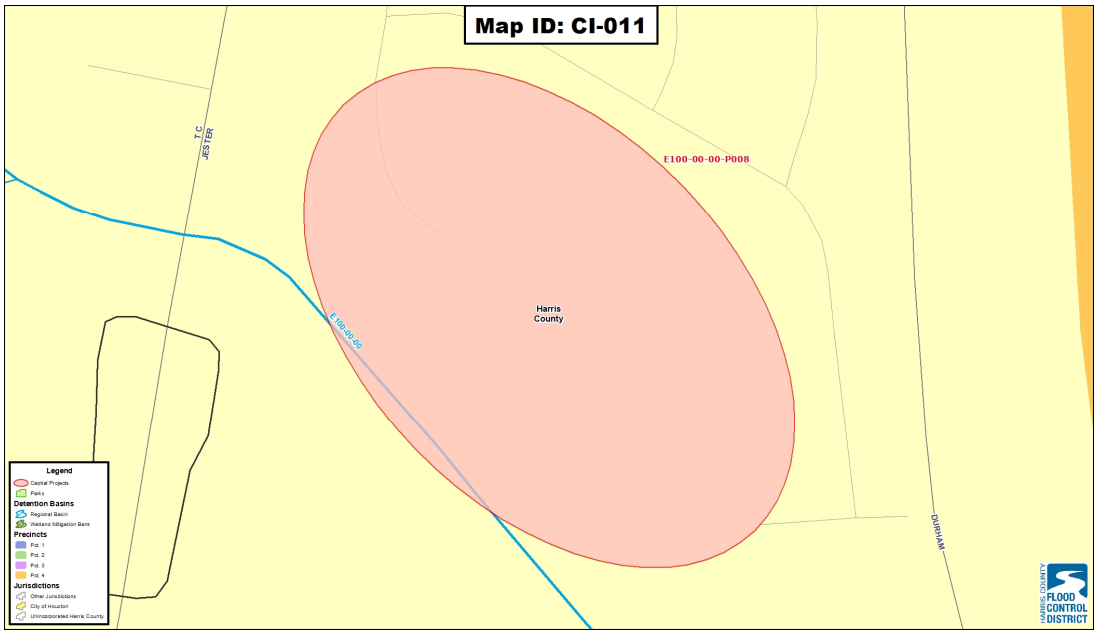
Feasibility study in partnership with the City of Houston will evaluate general drainage improvements that could reduce the risk of flooding for homes in Hidden Lakes Townhomes.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$350,000	$0	$350,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County FY 2020 Capital Improvement Program

Project Name:	CI-030 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements along Turkey Gully	**Estimated Project Cost:**	$40,000,000
		Operating Cost Impact:	$0
Category:	Main Channel Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:
Project could reduce the risk of flooding for structures along Turkey Gully in partnership with the City of Houston.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$40,000,000	$0	$0	$10,823,803	$13,012,735	$8,030,272	$8,133,190

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: CI-032 Investigation of Additional Stormwater Detention Basins in the White Oak Bayou Watershed

Category: Major Partnership Flood Damage Reduction Projects

Estimated Project Cost: $250,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 4th Quarter, FY 2022

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

The project could reduce the risk of flooding for structures in the watershed. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$250,000	$0	$0	$241,819	$8,181	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	CI-033 Partnership Project with City of Houston on Planning, Right-of-Way Acquisition, Design, and Construction of General Drainage Improvements along E105-00-00	**Estimated Project Cost:**	$2,000,000
		Operating Cost Impact:	$2,100
Category:	Partnership Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	4th Quarter, FY 2023
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

Planning, right of way acquisition, design and construction of this project could reduce the risk of flooding for homes along E105-00-00.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$2,000,000	$0	$1,238,573	$358,440	$360,254	$42,733	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$2,100

Harris County FY 2020 Capital Improvement Program

Project Name: E-17 White Oak Bayou Subdivision Drainage Improvements

Category: Harris County Support Projects

Estimated Project Cost: $36,250,000

Operating Cost Impact: $0

Funded to Date: $195,400

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

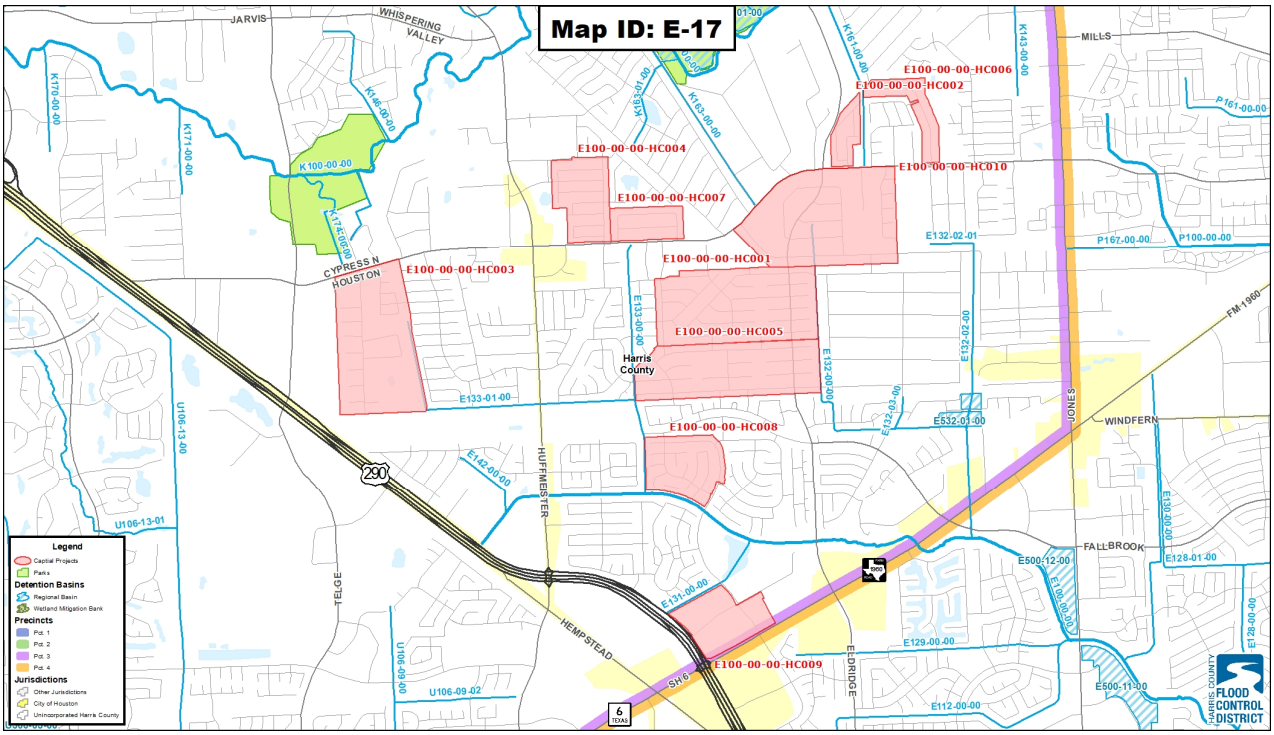
Design and construction of these projects could reduce the risk of flooding for over 2,400 homes during a 1% rain or flood event.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$36,250,000	$195,400	$2,453,209	$3,824,565	$5,361,189	$7,027,830	$8,657,078

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-09 Planning, Right-Of-Way Acquisition, Design and Construction of Little White Oak Bayou Channel Conveyance Improvements

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $30,000,000

Operating Cost Impact: $0

Funded to Date: $1,394,455

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

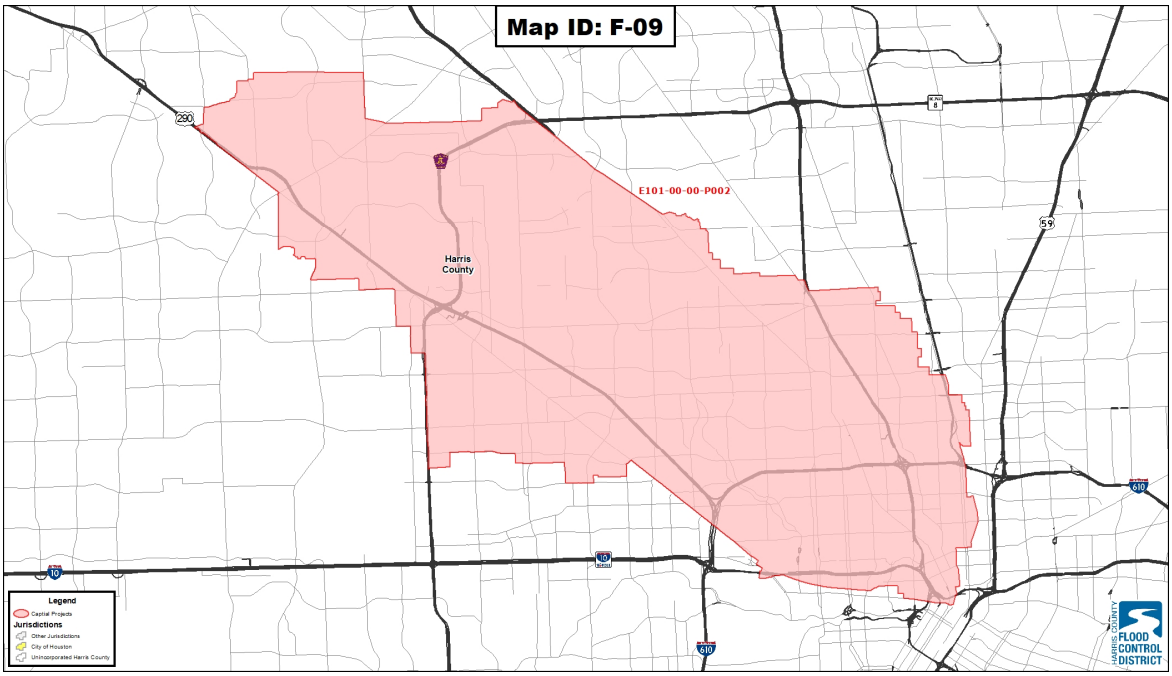
Planning, right of way acquisition, design and construction of this project could reduce the risk of flooding for over 1,150 structures in the 1% floodplain.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$30,000,000	$1,394,455	$7,097,096	$4,965,389	$4,808,286	$6,450,017	$5,284,310

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-10 Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on Brickhouse Gully

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $35,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Right of way acquisition, design and construction of this project could reduce the risk of flooding for over 1,300 structures in the 1% floodplain. Project will be coordinated with existing City of Houston plans.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$35,000,000	$0	$0	$4,510,220	$10,598,832	$8,219,249	$11,632,533

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-106 Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Willow Creek Watershed

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $15,000,000

Operating Cost Impact: $8,400

Funded to Date: $0

Expected Completion: 3rd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Design and construction of projects to reduce the risk of flooding in the Willow Creek watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$15,000,000	$0	$0	$5,164,015	$4,784,586	$5,021,399	$30,000

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$2,100

Harris County FY 2020 Capital Improvement Program

Project Name: F-36 Willow Creek Right-of-Way Acquisition and Floodplain Preservation

Category: Floodplain Acquisition and Preservation Projects

Estimated Project Cost: $30,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 1st Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Right of way acquisition along Willow Creek for project support, to preserve channel conveyance and / or restore natural floodplains in areas subject to frequent flooding.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$30,000,000	$0	$2,899,078	$11,181,865	$11,181,864	$4,737,193	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-37 Design and Construction of Channel Conveyance Improvements on M124-00-00 Downstream of SH 249

Category: Major Partnership Flood Damage Reduction Projects

Estimated Project Cost: $34,600,000

Operating Cost Impact: $16,800

Funded to Date: $503,050

Expected Completion: 4th Quarter, FY 2023

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

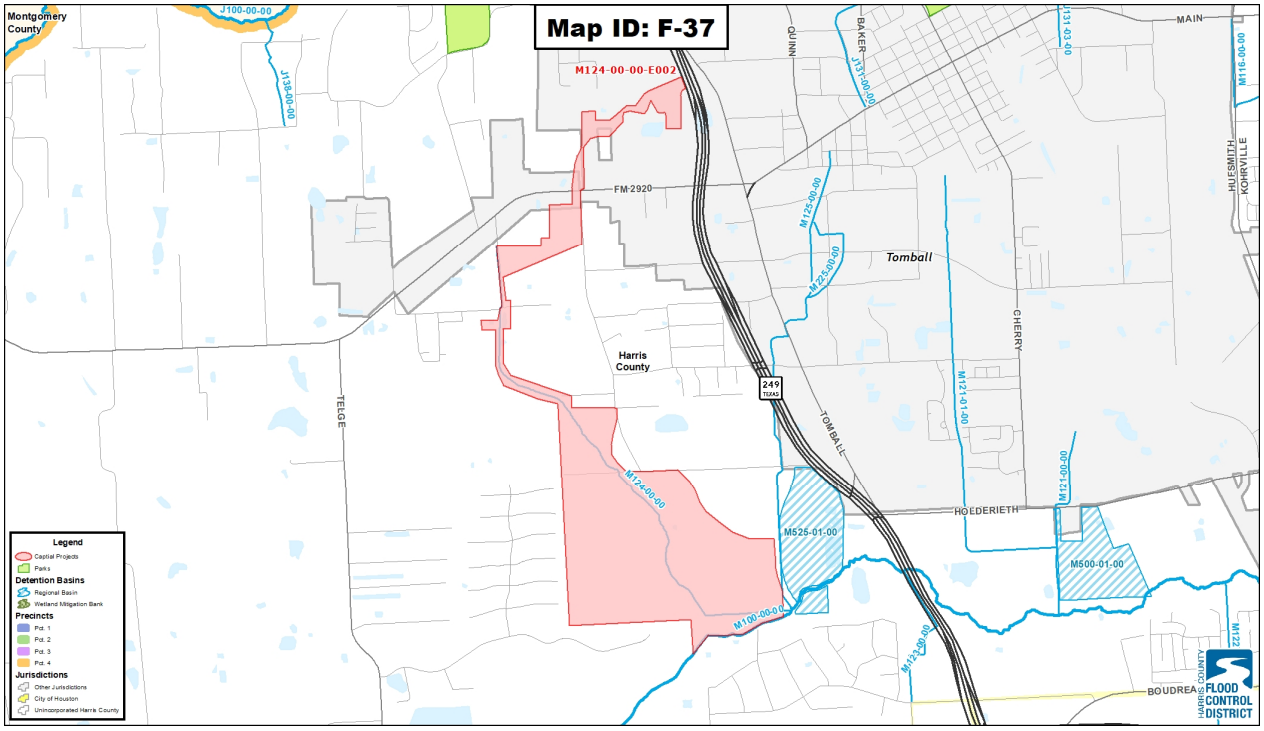
The project could reduce the risk of flooding for structures in the 1% floodplain and increase drainage efficiency.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$34,600,000	$503,050	$9,710,305	$9,658,942	$12,899,250	$1,828,453	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$16,800



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-38 Design and Construction of Cypress Rosehill Stormwater Detention Basin

Category: Local Participation Projects

Estimated Project Cost: $3,500,000

Operating Cost Impact: $4,200

Funded to Date: $116,834

Expected Completion: 3rd Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

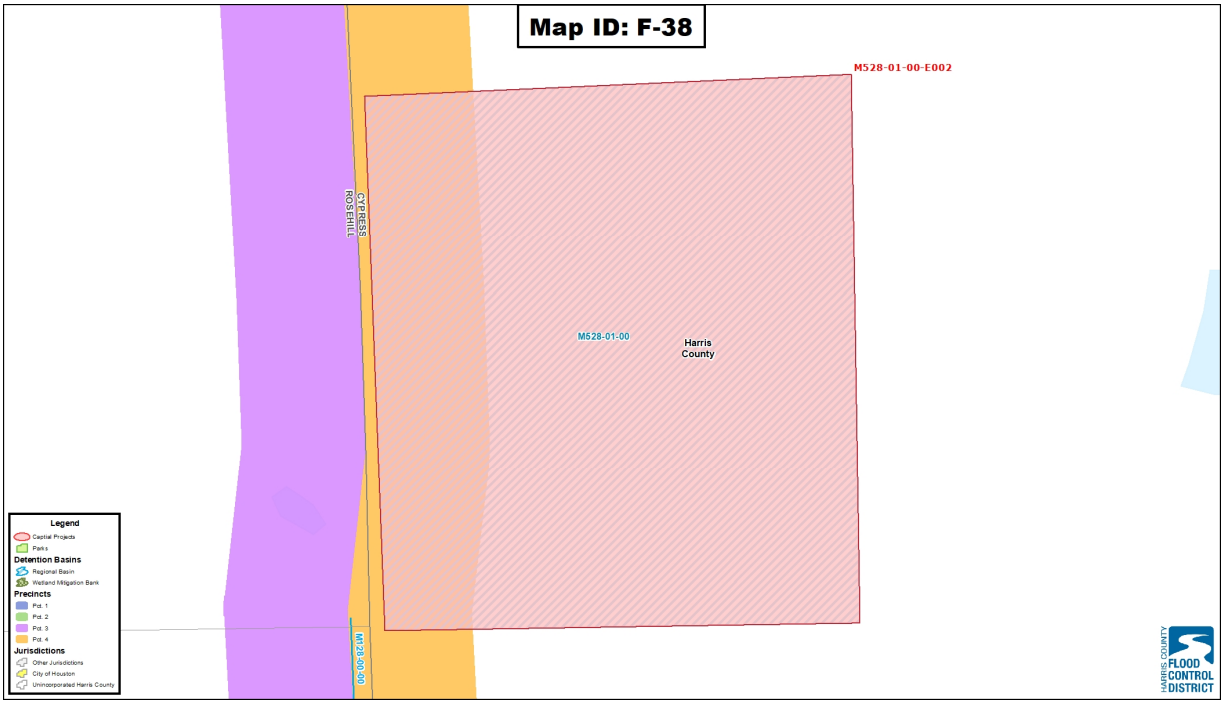
Providing joint-benefits of mitigating impacts of roadway construction and could reduce the risk of flooding for homes in the surrounding area. Projects could include, but not limited to, detention, sediment control, vegetation management, and other flood risk management projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$3,500,000	$116,834	$3,315,909	$67,257	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$1,050	$4,200	$4,200	$4,200



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: F-71 Investigations of General Drainage Improvements in Willow Creek Watershed

Category: Local Participation Projects

Estimated Project Cost: $800,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: 2nd Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

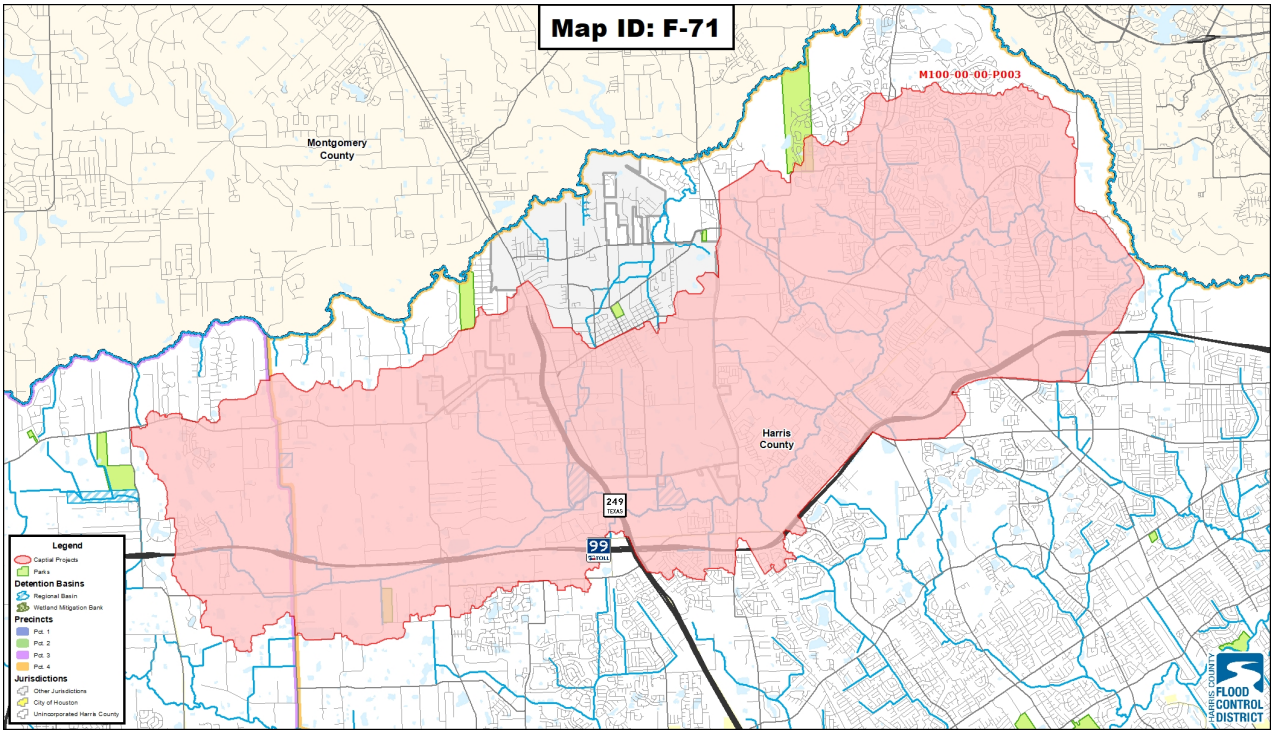
Effort will investigate flooding problems and evaluate potential solutions to flooding problems to reduce the risk of flooding in the Willow Creek watershed.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$800,000	$0	$800,000	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name:	CI-026 Investigation of City of Houston Properties for Conversion to Stormwater Detention Basins	**Estimated Project Cost:**	$500,000
		Operating Cost Impact:	$0
Category:	Partnership Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	1st Quarter, FY 2024
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

Evaluation of converting City of Houston properties into stormwater detention basins.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$500,000	$0	$87,449	$177,638	$177,638	$57,275	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: F-88 ROW Acquisition, Design and Construction of Stormwater Detention Basins in Large Buyout Areas

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $25,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

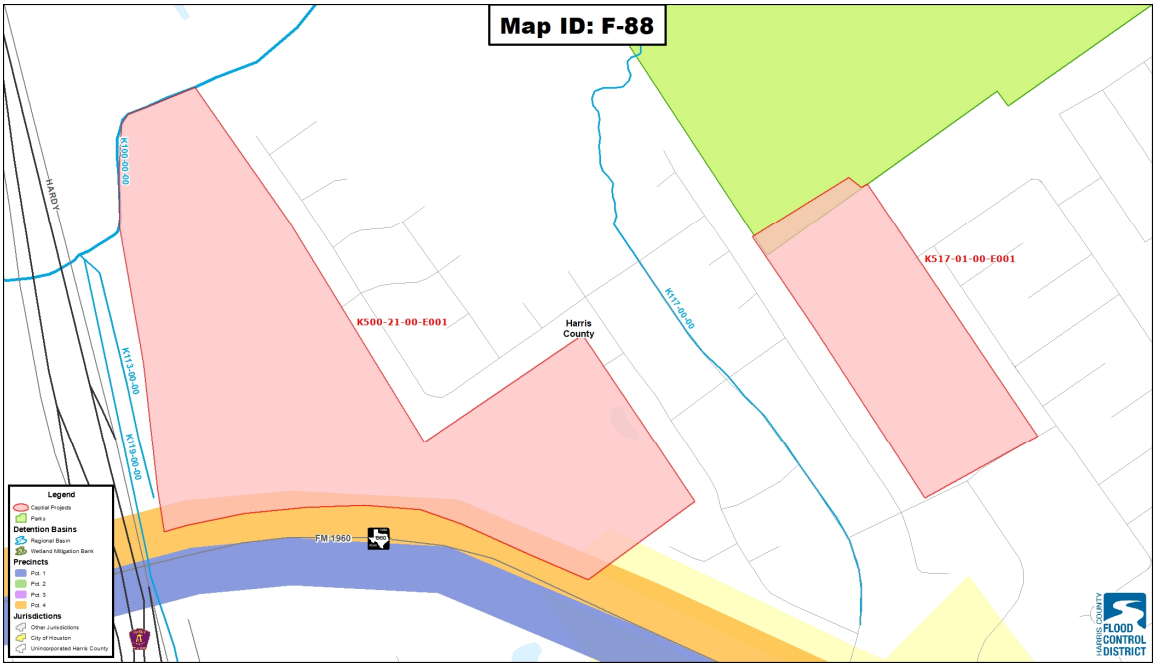
Design and Construction of stormwater detention basins in large areas of complete buyout could reduce the risk of flooding in the area. Projects could include, but not limited to, detention, sediment control, vegetation management, and other flood risk management projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$25,000,000	$0	$2,162,164	$8,289,677	$5,152,209	$4,407,254	$4,988,696

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: Z-01 Countywide Floodplain Preservation and Right of Way Acquisition

Category: Floodplain Acquisition and Preservation Projects

Estimated Project Cost: $50,000,000

Operating Cost Impact: $0

Funded to Date: $20,257,820

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Right of way acquisition along various channels in Harris County in support of District projects and preserve channel conveyance and / or restore natural floodplains in areas subject to frequent flooding.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$50,000,000	$20,257,820	$2,241,131	$7,602,827	$7,309,420	$5,590,054	$5,612,414

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: Z-02 Partnership Projects with Municipalities, Authorities, and Other Districts in Harris County

Category: Major Partnership Flood Damage Reduction Projects

Estimated Project Cost: $175,000,000

Operating Cost Impact: $63,630

Funded to Date: $3,596,765

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

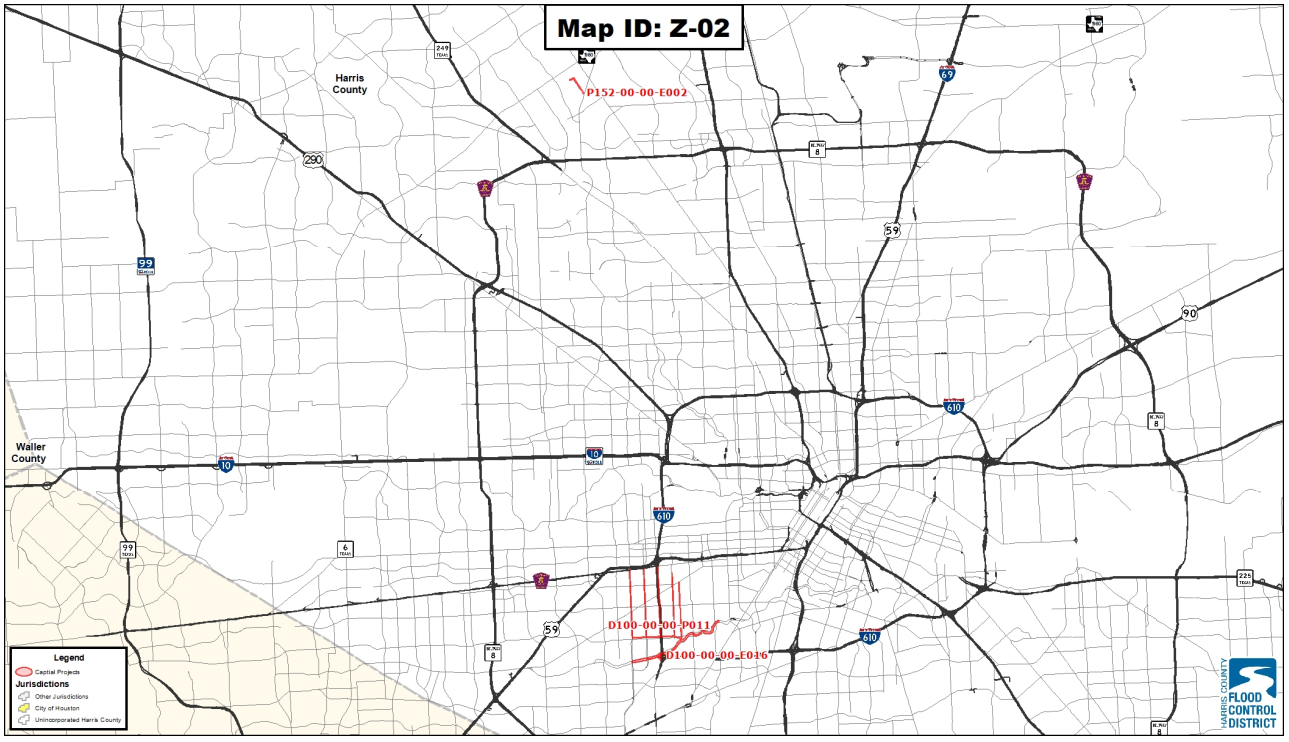
Jointly funded projects to address flooding with multi-jurisdictional projects..

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$175,000,000	$3,596,765	$14,232,101	$18,526,441	$26,928,391	$26,928,391	$18,450,030

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$5,178	$16,908	$31,363	$48,328	$63,630



Harris County Flood Control District

Harris County FY 2020 Capital Improvement Program

Project Name: Z-03 Countywide Ongoing Planning

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $9,500,000

Operating Cost Impact: $0

Funded to Date: $200,000

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Ongoing efforts to identify future projects and work efforts to reduce flooding in Harris County watersheds.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$9,500,000	$200,000	$1,027,259	$2,012,207	$2,012,207	$2,012,207	$2,017,720

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	Z-04 Partnership Projects with the Harris County Engineering Department	**Estimated Project Cost:**	$100,000,000
		Operating Cost Impact:	$0
Category:	Partnership Flood Damage Reduction Projects	**Funded to Date:**	$0
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

Jointly funded projects that could reduce the risk of flooding in conjunction with Harris County Engineering Department projects.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$100,000,000	$0	$12,023,147	$23,498,820	$23,498,820	$23,498,820	$17,461,061

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	Z-05 Advanced Emerging Technologies for Flood Damage Reduction	**Estimated Project Cost:**	$25,000,000
		Operating Cost Impact:	$0
Category:	Partnership Flood Damage Reduction Projects	**Funded to Date:**	$719,135
		Expected Completion:	TBD
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

Investigations of new methods to reduce the risk of flooding and associated damages in Harris County. This can include the use of native vegetation to stabilize channel banks and reduce erosion.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$25,000,000	$719,135	$4,198,919	$5,254,161	$5,059,935	$5,059,935	$4,682,913

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: Z-06 Bond Administration

Category: Bond Administration

Estimated Project Cost: $10,000,000

Operating Cost Impact: $0

Funded to Date: $11,500

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Bond administration with legal and financial professional services

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$11,500	$878,642	$707,043	$707,043	$704,226	$1,221,328

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: Z-07 Contingency

Category: Contingency

Estimated Project Cost: $500,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Unallocated funding for variations in project costs and opportunities identified through public input.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$500,000,000	$0	$51,799,007	$56,606,700	$56,606,700	$56,606,700	$56,761,787

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: Z-08 Preliminary Engineering for Large Diameter Tunnels for Stormwater Conveyance

Category: Main Channel Flood Damage Reduction Projects

Estimated Project Cost: $20,000,000

Operating Cost Impact: $0

Funded to Date: $235,130

Expected Completion: 1st Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Preliminary engineering for implementation of large diameter tunnels to reduce the risk of flooding across Harris County.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$20,000,000	$235,130	$2,291,260	$7,576,818	$6,264,792	$3,632,000	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name:	Z-09 Upgrades and Expansion of the Harris County Flood Warning System	**Estimated Project Cost:**	$5,000,000
		Operating Cost Impact:	$3,000
Category:	Local Participation Projects	**Funded to Date:**	$2,332,312
		Expected Completion:	4th Quarter, FY 2022
		Funding Source:	Debt Service - FCD Property Tax

Project Description/ Justification:

Improving existing flood monitoring systems to provide additional near-real time information on flooding in Harris County.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$5,000,000	$2,332,312	$1,100,765	$1,394,652	$172,271	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$3,000	$3,000

Harris County FY 2020 Capital Improvement Program

Project Name: Z-10 Maapnext - Harris County Floodplain Mapping Updates

Category: Local Participation Projects

Estimated Project Cost: $28,500,000

Operating Cost Impact: $0

Funded to Date: $11,529,507

Expected Completion: 3rd Quarter, FY 2024

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Providing more accurate information on the risks of flooding in Harris County including a web-based flood education tool.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$28,500,000	$11,529,507	$3,024,205	$7,825,538	$3,303,390	$2,817,360	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: Z-11 Countywide Communications Relating to 2018 Bond and CIP Projects

Category: Bond Administration

Estimated Project Cost: $10,000,000

Operating Cost Impact: $0

Funded to Date: $0

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

Providing transparency with county and watershed level communications by engaging with the public about 2018 Bond and other District proejcts.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$10,000,000	$0	$1,035,980	$1,132,134	$1,132,134	$1,132,134	$1,135,236

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0

Harris County FY 2020 Capital Improvement Program

Project Name: Z-Buyout Federal Grant-Funded Volunteer Home Buyouts

Category: Major Partnership Flood Damage Reduction Projects

Estimated Project Cost: $306,618,000

Operating Cost Impact: $96,616

Funded to Date: $158,186,960

Expected Completion: TBD

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:
Purchase of approximately 1000 buildings.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$306,618,000	$158,186,960	$0	$0	$0	$0	$13,240,160

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$5,736	$28,440	$51,145	$73,849	$96,616

Harris County FY 2020 Capital Improvement Program

Project Name: Z-StormRep Countywide Storm Repairs in Harris County

Category: Major Maintenance Projects

Estimated Project Cost: $100,350,000

Operating Cost Impact: $0

Funded to Date: $76,470,669

Expected Completion: 3rd Quarter, FY 2021

Funding Source: Debt Service - FCD Property Tax

Project Description/ Justification:

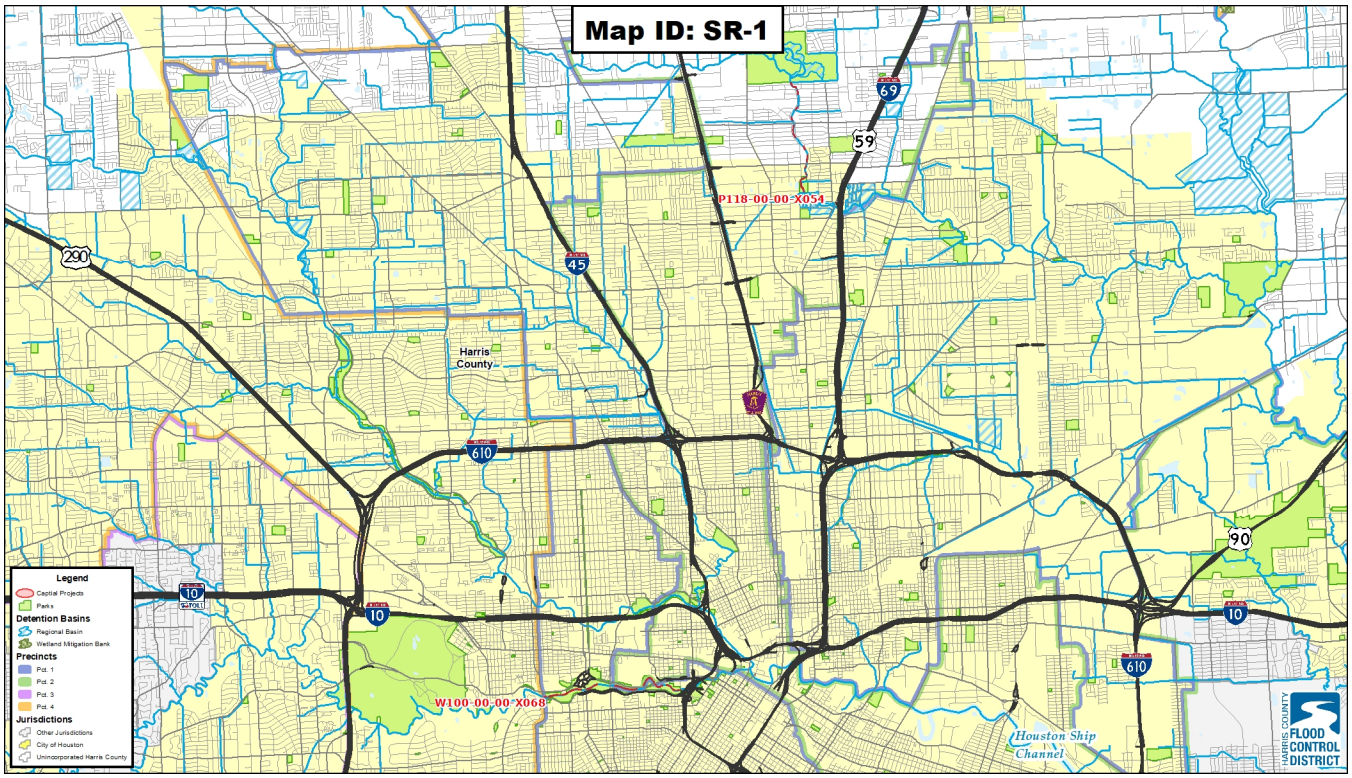
Support for approximately 1,500 repair projects of erosion and infrastructure in Harris County.

Funding Plan:

Total Project Estimate	Funded to Date	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
$100,350,000	$76,470,669	$23,879,331	$0	$0	$0	$0

Annual Operating Budget Impact:

Operating Impacts	Sept 1, 2019-Aug 31, 2020	Sept 1, 2020-Aug 31, 2021	Sept 1, 2021-Aug 31, 2022	Sept 1, 2022-Aug 31, 2023	Sept 1, 2023-Aug 31, 2024
Maintenance	$0	$0	$0	$0	$0



Harris County Flood Control District