

To: Harris County Commissioners Court

Through: David Berry, Budget Management

Prepared By: William McGuinness, Manager of Capital Projects & Infrastructure, Budget Management

Subject: Harris County Capital Improvements Program FY 2021-2022

Project ID (If applicable):

Purpose and Request: Approval of the FY 2021-2022 Capital Improvements Program (CIP) update and acceptance of the new CIP Policy and Procedures

Background and Discussion:

The Budget Management Department is pleased to present the FY 2021-2022 Capital Improvements Program (CIP) for your consideration. Unlike in past years we ask that Commissioners Court approve the plan, rather than just accept it as a transmittal. BMD is also submitting a new CIP process for approval. In this process capital projects would present focused investment memos with clear goals and metrics to Court in order to obtain capital funding at fixed stages.

Fiscal Impact:

This CIP covers \$8.8B in investment over 285 capital projects, which the County are planning, designing and implementing over the next five fiscal years.

| Expenditures | FY 21-22 Projected | FY 23-26 Projected [4 additional years] |
|--|---------------------------------------|--|
| Total Expenditures | <u>\$1,355,326,518</u> | <u>\$5,178,207,279</u> |
| Funding Sources | | |
| Please Identify Funding Source (General Fund, PIC, Special Revenue, Grant, Etc.) | <u>Various (Bond, Grant, Partner)</u> | <u>Various (Bond, Grant, Partner)</u> |
| Total Amount from Sources | <u>TBD</u> | <u>\$1.2-1.7B</u> |

Alternatives: N/A

Alignment with Strategic Objective:

- SO1: Transform the County budget process to increase accountability, transparency, promote long term planning, and measure the performance of departments and their programs.
- SO2: Ensure that all Harris County Department budgets are aligned with Commissioners Court vision and goals
- SO3: Build the tools and capabilities to provide multiyear, comprehensive financial projections.
- SO6: Create reporting and framework for more transparency and accountability in spending and progress on capital projects.

Attachments: Proposed CIP Report

HARRIS COUNTY

PROPOSED CAPITAL IMPROVEMENTS PROGRAM

3/9/2021



DOCUMENT CONTROL

| Date | Version | Section | Comment |
|----------|---------|-------------------|--|
| 3/4/2021 | 1 | Appendix C | <ul style="list-style-type: none">• Corrected various non-FCD project sheets that said 'Non-County Funding' to 'Expenditures to Date' (The amount listed was \$0 for all affected project sheets).• Updated project sheet to match summary table for following projects: Downtown Complex System Repairs, Fire/Life Safety, Misc. Repairs, Plumbing, IFS Masterplan, Badge Card Access System, Civil Courthouse AV Systems Upgrade, VOIP Phone Upgrade, and Juvenile Probation Facilities Repair/ Renovation.• Corrected contingency line item for Radio Replacement project (line items did not sum to Year 1 total).• Corrected rounding error in Total Project Estimate, Public Safety & Justice Equipment subtotal. |
| 3/5/2021 | 2 | Main Report | <ul style="list-style-type: none">• Deleted repeated pages. |
| | | Director's Letter | <ul style="list-style-type: none">• Updated Director's Letter, fifth paragraph, removing the word 'free' from the second sentence (supporting 'free' infrastructure). |
| | | Appendix C | <ul style="list-style-type: none">• Updated Toll Plaza Conversion project expenditure timeline (no change in total project cost). |

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DIRECTOR'S NOTE

March 9, 2021

Dear County Judge Hidalgo, Commissioners Ellis, Garcia, Ramsey and Cagle,

The Budget Management Department is pleased to present this FY 2021-2022 Capital Improvements Program (CIP) for your consideration. This CIP covers capital projects which the County is planning, designing and implementing over the next five fiscal years. Not included are the parks, roads and other projects managed by each of the Commissioner's precincts.

This CIP is different from previous years'. We ask that Commissioners Court approve the plan, rather than just accept it as a transmittal. Approval of CIP would set a strategic direction and framework for how projects advance. Individual projects would come back to Court with investment memos to obtain capital funding, in accordance with the proposed policies and procedures.

This CIP raises the bar for justifying projects. To be funded, projects should be well-documented, with clear objectives and outcomes. The framework proposed—a two-stage Commissioners Court approval for each project based on a focused memo—has been developed working with our partners at Engineering, Flood Control, the Toll Road Authority and Universal Services. I have used something similar in the private sector for years. I think it will promote better decisions without layers of red tape.

The County has embarked on a historic investment in flood control projects, based on the \$2.5 billion bond issuance overwhelmingly approved by voters in 2018. Next year's projected capital expenditures for flood control are approximately ten times what they were three years ago. The County has secured \$1.2B of Federal, State and local partner funding, but an additional ~\$1.4B of additional funds is needed to complete the flood control projects in this CIP.

The Harris County Toll Road continues to invest in a major capital program, including a reconstruction of the Ship Channel Bridge that will enable the deepening of the channel. However, the focus of the agency is shifting from expanding the toll system to maintaining it and supporting infrastructure countywide. Outside of flood control and roads, I believe there are many opportunities for the County to invest smarter—in buildings, maintenance, vehicles and technology. Saving money in these areas can free up funds to provide more direct services. Moreover, the right workplaces, vehicles and technology can help County employees succeed. I hope this CIP can be a guide to make smart investments on behalf of the County's residents.

I appreciate your consideration.

Sincerely,



David Berry
Harris County Budget Officer
Executive Director, Budget Management Department

- ***New policies and procedures can bring transparency and accountability to capital planning*** – These policies and procedures will allow Commissioners Court, County Departments and the public to follow planned projects through a defined set of stages that include approvals by Commissioners Court.
- ***This CIP sets a higher bar for projects to obtain funding*** – Harris County departments proposed 285 projects totaling \$8.8B in investment. BMD recommends that 42 of these projects with a cost of \$204M need to be further justified before any capital funding is committed.
- ***The County continues to invest heavily in its infrastructure*** – The recommended CIP includes major investments in County assets including County Detention facilities, the Harris County Toll Road System, the refurbishment of the Criminal Justice Center, renovating the South Central Plant and planning for the revitalization of the Riverside Hospital site.
- ***The County has room to invest smarter based on multiyear strategic plans*** – The County's investments in buildings, systems and vehicles should all be part of an overall strategy. This CIP begins to set forth these strategies, with much more work to do over the coming twelve months before capital funding is approved for future fiscal years.
- ***The County's capital plan for flood control must evolve based on available partner funding*** – Federal and State flood control funds, which were always a key part of the 2018 bond program, have been widely disbursed and have become highly competitive. Even assuming a reasonable success rate obtaining additional partner funds, another \$900M-1.35B will be needed to complete all flood control capital projects currently underway. The County will need to explore new funding sources and potentially re-scoping projects.

EXECUTIVE SUMMARY – POLICIES AND PROCEDURES

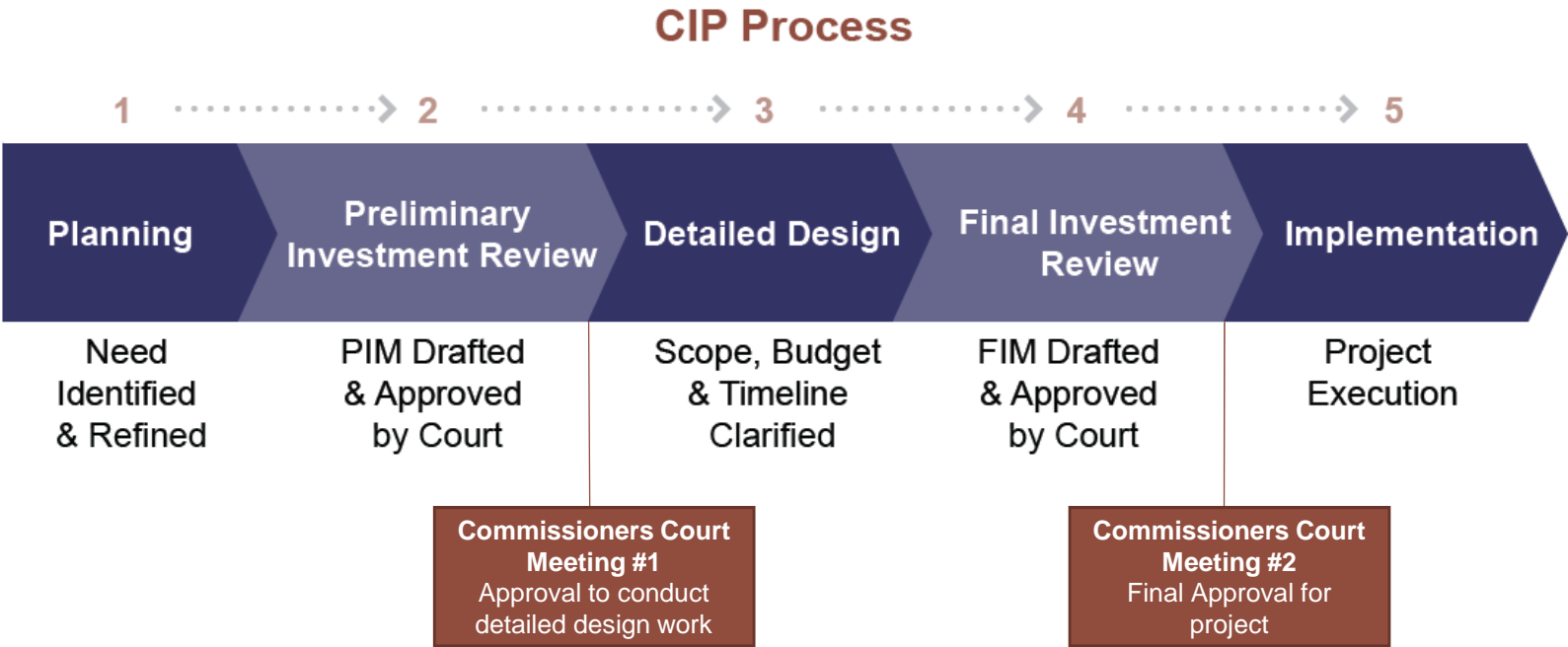
Included in this year’s CIP is a new set of proposed policies and procedures, whose goals are:

- 1. to increase transparency and standardization
- 2. to ensure the allocation of capital resources is aligned with Commissioners Court’s goals and objectives

The proposed policies and procedures incorporate a five-stage capital project development lifecycle, shown below. Most projects would come before Commissioners Court for approval at least twice, submitting a Preliminary Investment Memo after the second stage and a Final Investment Memo following the fourth stage.

Projects in the first two stages, Planning and Preliminary Investment Review, would use internal County resources to develop a clear project scope and investigate alternatives. Following Commissioners Court approval of a Preliminary Investment Memo (PIM), capital funding could be spent with third parties during the Detailed Design phase. Each project would ultimately return to Commissioners Court with a Final Investment Memo (FIM) that would have complete information on costs, timelines, and schedules for proposed projects. If approved, the projects would move to Implementation. Projects in the latter three stages would be eligible for capital funding.

BMD is recommending that several projects previously reviewed by Court, prepare an Investment Memo before additional funds are allocated. This does not mean the projects cannot proceed, but that, in BMD’s judgment, additional work is needed before third-party expenditures are incurred. BMD will work with Departments on affected projects.



EXECUTIVE SUMMARY – CIP NEXT STEPS

Moving forward, there are additional areas where the CIP can be improved. Below are some of the next steps that can help ensure that capital funding is used to meet County goals.

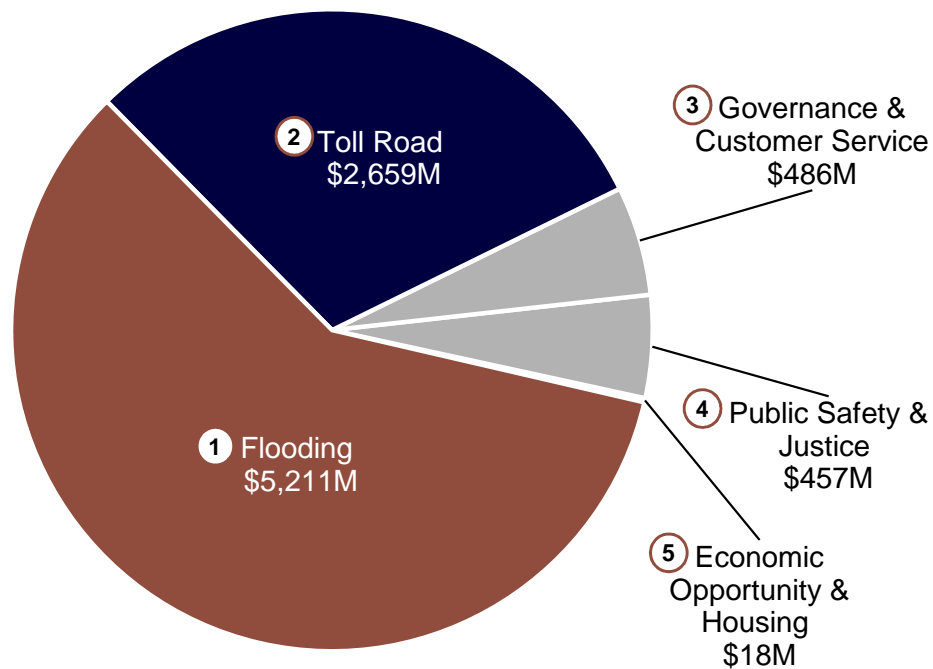
| Initiative | Next Steps | |
|-------------------------------------|--|--|
| | <u>Short term (<6 mo.)</u> | <u>Long term (> 6 months)</u> |
| 1. Policies & Procedures | <ul style="list-style-type: none">• Implement new CIP policies. | <ul style="list-style-type: none">• Define target size for CIP categories- for example, building maintenance, vehicles and IT. |
| 2. Tracking & Reporting | <ul style="list-style-type: none">• Institute quarterly updates on changes to CIP projects. | <ul style="list-style-type: none">• Invest in budgeting software that automates data transfers and reporting. |
| 3. Flood Control | <ul style="list-style-type: none">• Evaluate feasibility of securing additional Federal funds for bond projects.• Focus on cost controls for projects and operating expenses. | <ul style="list-style-type: none">• Consider new sources of revenue to complete flood control projects.• Study the scope and schedule of underfunded projects. |
| 4. Buildings | <ul style="list-style-type: none">• Define county needs for public-facing services and office space.• Evaluate overall deferred maintenance needs. | <ul style="list-style-type: none">• Develop countywide strategic plan for real property assets. A strategic plan could include property sales, consolidation of office space, increased focus on public facing services, and options for long-term investment in sustainability and intergovernmental collaboration. |
| 5. Vehicles | <ul style="list-style-type: none">• Evaluate overall county vehicle needs. | <ul style="list-style-type: none">• Consider capital programs to transition these assets to capital financing. If the County moves forward on a green fleet strategy, it could be financed through the CIP. |

EXECUTIVE SUMMARY – PROPOSED CAPITAL PROJECTS

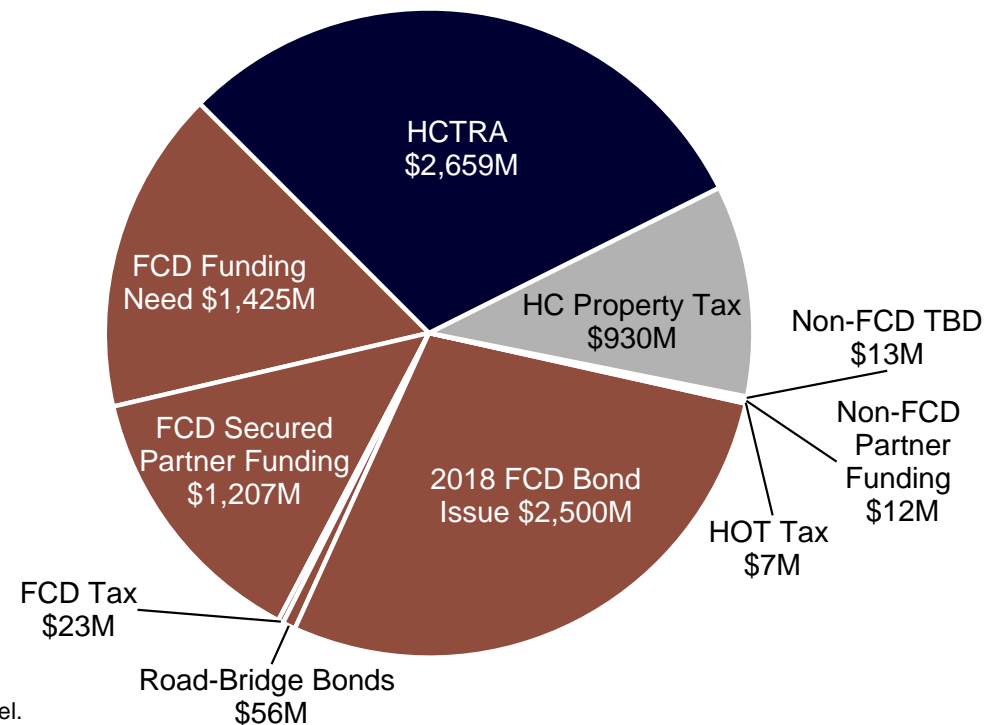
Harris County departments have submitted proposals for over 280 capital projects with a total cost of over \$8.8 billion, of which \$6.2 billion is funding from County sources (taxes, bonds) over the next five years. These projects principally fall into five categories:

- ① Flood Control- projects to minimize the risk of flooding, including projects from the \$2.5 billion bond approved in 2018, which assumed a further \$2.5 billion in partner funding. The status of partner funding should receive increased attention as the majority of the projects move into the latter stages of their development.
- ② Toll Road- projects for the Harris County Toll Road Authority, including the Ship Channel Bridge
- ③ Governance and Customer Service- buildings, maintenance, technology and equipment for Harris County departments for the delivery of services to the public
- ④ Public Safety and Justice- buildings, maintenance, technology and equipment for Harris County's criminal justice system
- ⑤ Economic Opportunity and Housing- capital projects for the library system, affordable housing and other economic development

Projects by Investment Area



Projects by Funding Source



Note: These figures do not include roads, parks and other projects executed at the precinct level.

EXECUTIVE SUMMARY – HIGHLIGHTS OF COUNTY PROPERTY TAX-FUNDED PROJECTS

Under 10% of the \$8.8 billion in projects is anticipated to be funded through debt backed by Harris County property taxes. Presented below are the ten largest of these projects.

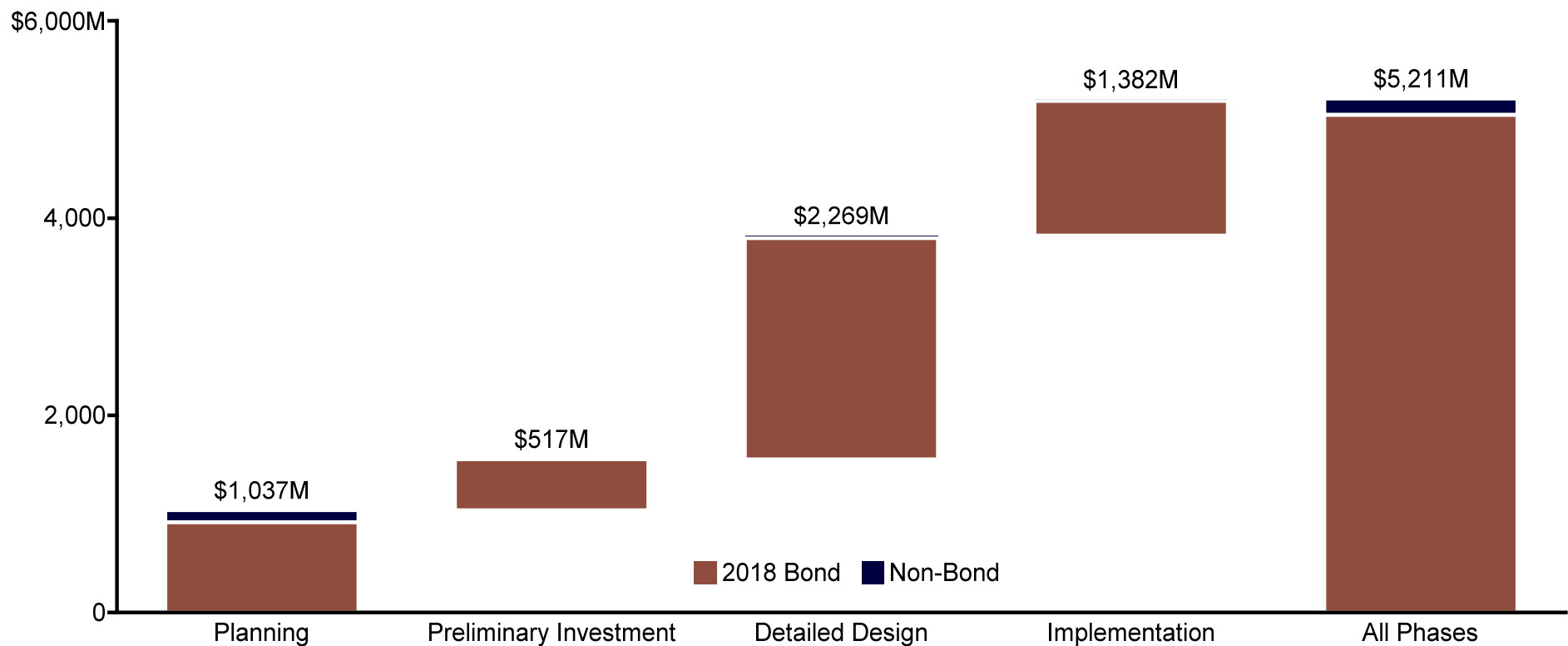
The bulk of these projects are investments in the County's Public Safety & Justice infrastructure and for repairs to aging County facilities.

| Name | Goal Area | Total County Funding (\$M) | FY2022 Expenditure (\$M) | Stage |
|--|-------------------------------|----------------------------|--------------------------|------------------------------|
| Adult Detention Facilities Upgrades and Repairs | Public Safety & Justice | \$185.5 | \$47.5 | Detailed Design |
| Criminal Justice Center (CJC) Restoration | Public Safety & Justice | \$84.8 | \$35.2 | Implementation |
| CSCD Atascocita Phase II | Public Safety & Justice | \$58.6 | \$30.0 | Implementation |
| South Central Plant Renovations | Governance & Customer Service | \$53.3 | \$1.1 | Implementation |
| Riverside Hospital Project | Governance & Customer Service | \$49.7 | TBD | Detailed Design |
| Radio Replacement Program | Public Safety & Justice | \$41.7 | \$8.2 | Implementation (1 Year Only) |
| Fire, Life Safety, and Electrical System Repair and Renovations Countywide | Governance & Customer Service | \$40.4 | \$7.9 | Implementation (1 Year Only) |
| Voting Machines | Governance & Customer Service | \$33.0 | \$33.0 | Implementation |
| Heating, Ventilation Air Conditioning (HVAC) Repair and Replacement Countywide | Governance & Customer Service | \$29.3 | \$6.5 | Implementation (1 Year Only) |
| Miscellaneous Repairs, Painting, Flooring and Other Projects | Governance & Customer Service | \$22.1 | \$3.4 | Implementation (1 Year Only) |

① FLOODING – PROJECTS BY STAGE

The total value of Flood Control projects in the proposed CIP is \$5.2B. In 2018, voters approved a \$2.5 billion bond package which, along with anticipated support from local, State and Federal partners, would fund approximately over 180 projects across 23 watersheds. Since 2018, the original suite of projects has seen costs escalate by a net \$37M after accounting for re-scoping. The Flood Control District (FCD) continues to work on project execution and seek partner funding from the Federal, State and other local governments. Current Flood Control projects in the proposed CIP are currently in the following stages.

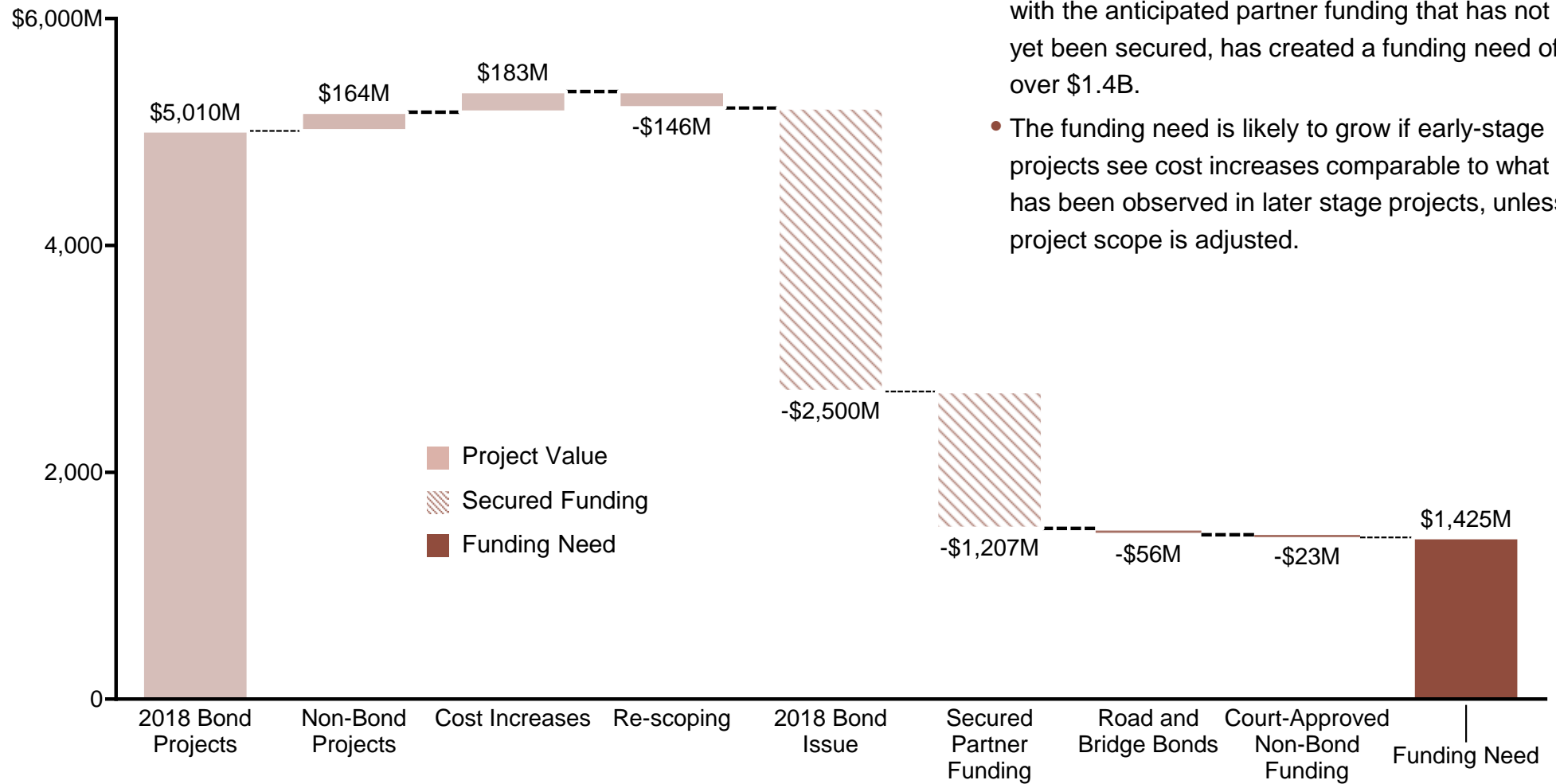
Flood Control Projects by Stage



Note: The amount in "All Phases" includes \$6M in completed 2018 Bond projects that are not included in the other columns.

① FLOODING – FUNDING NEED

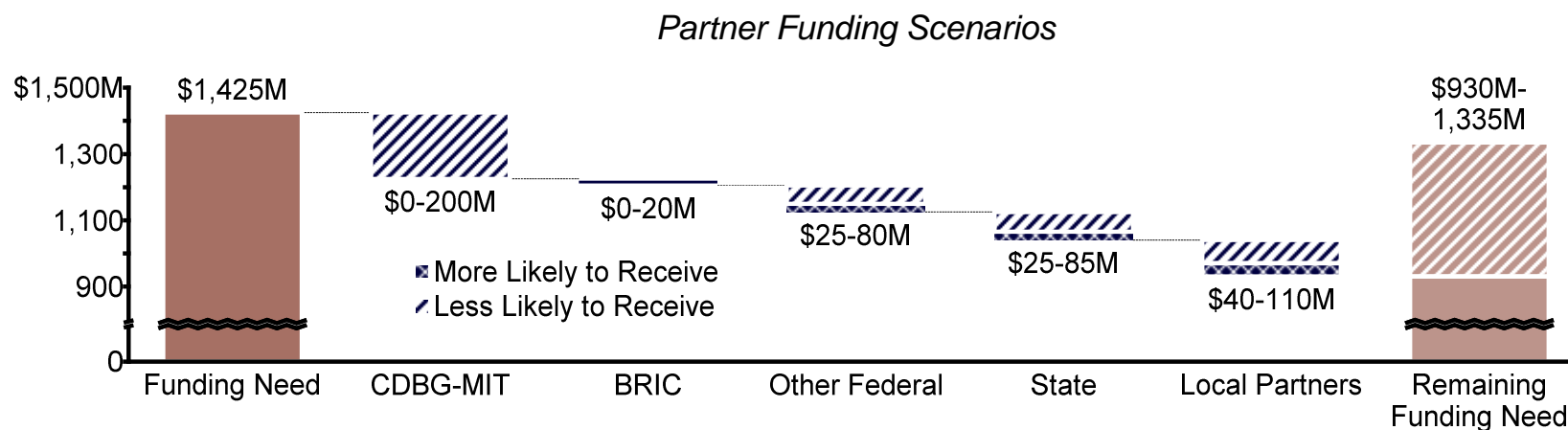
Anticipated Flood Control Projects Funding Needed



- While over \$1.2B in partner funding has already been secured through legal agreements, additional partner funding opportunities remain unsecured.
- New projects as well as cost increases, combined with the anticipated partner funding that has not yet been secured, has created a funding need of over \$1.4B.
- The funding need is likely to grow if early-stage projects see cost increases comparable to what has been observed in later stage projects, unless project scope is adjusted.

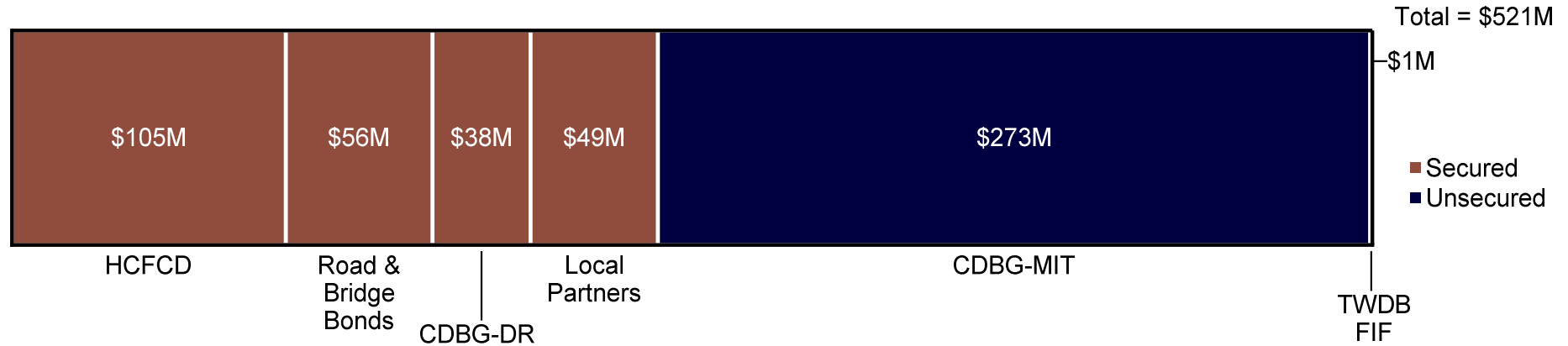
① FLOODING – REMAINING PARTNER FUNDING OPPORTUNITIES

- The chart below shows a **best case scenario** of securing \$495M in additional partner funding. A worst case scenario could lead to only \$90M of additional partner funding.
- To complete all capital projects as currently constituted, Harris County must find an additional **\$900M-1.35B** in funding.



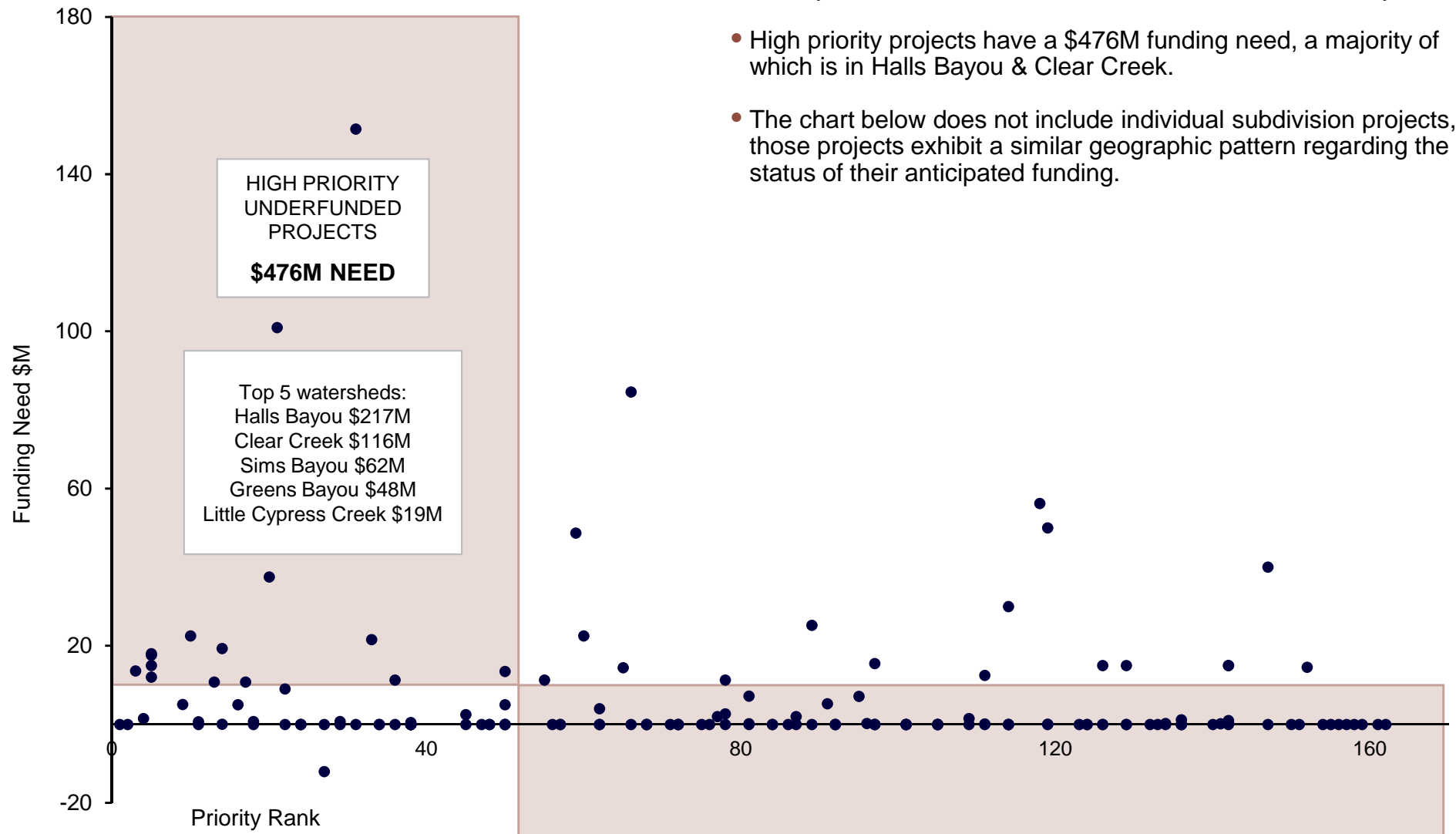
| Funding Source | Program Description | Anticipated Funds |
|-----------------------|---|-------------------|
| CDBG-MIT | Competitive HUD grants for projects related to Federal declared disasters. Money to be allocated for Texas was appropriated after Harvey. \$6B in applications for \$2B in funding statewide in 2 rounds. 9 open applications across bond projects. Maximum of 1 large project (\$100M) can be awarded per round. | \$0-200M |
| BRIC | Nationwide, highly-competitive FEMA program for disaster mitigation projects | \$0-20M |
| Other Federal | Sources include USACE, DOI through Gulf of Mexico Energy Security Act (GOMESA) and FEMA's HMGP Hazard Mitigation Assistance Grants (FEMA) | \$25-80M |
| State | Funding available through TWDB-FIF (Flood Infrastructure Fund) and TIRF (Texas Infrastructure Resiliency Fund) | \$25-85M |
| Local Partners | Partnerships with other local entities (e.g., COH, La Porte) that are providing their own funding or have secured external partner funding | \$40-110M |
| Total | | \$90-495M |

① FLOODING – COUNTYWIDE SUBDIVISION DRAINAGE PROJECT FUNDING SOURCES & OPPORTUNITIES



- A key project that has not yet secured the needed partner funding is the Countywide Subdivision Drainage Improvement project. Different from channel improvements, these projects are neighborhood-specific and represent targeted efforts to reduce street flooding in over 70 subprojects across the County. This is one of the largest of the 2018 Bond Projects.
- The total cost to complete these projects is \$521M of which \$248M is a combination of bond funds, secured partner funding and secured Federal grants.
- The largest outstanding funding opportunity for Subdivision projects is CDBG-MIT. \$273M in CDBG-MIT applications have been submitted on behalf of Subdivision projects. These applications fall into the same limitations as the CDBG-MIT applications submitted for other 2018 Bond projects. No more than \$200M in total for all CDBG-MIT can be granted.
- OCE – Recovery & Resilience Division (RRD) has secured \$49M from local partners for subdivision drainage, mostly from Harris County utility districts in precincts 3 & 4.
- The utility districts located within the 32 projects that make up the CDBG-MIT applications have declined to provide partner funding for these projects, primarily due to insufficient funding available. These MUDs are older districts, many with a history of financial challenges. The combination of the Winter Storm Uri and the needs associated with funding flood control may create positive conditions for MUD reform. More than half of these projects are in Greens Bayou (14) and Halls Bayou (4) watersheds with the remainder in White Oak Bayou (7), Cypress Creek (5), Jackson Bayou (1) and San Jacinto River (1) watersheds.

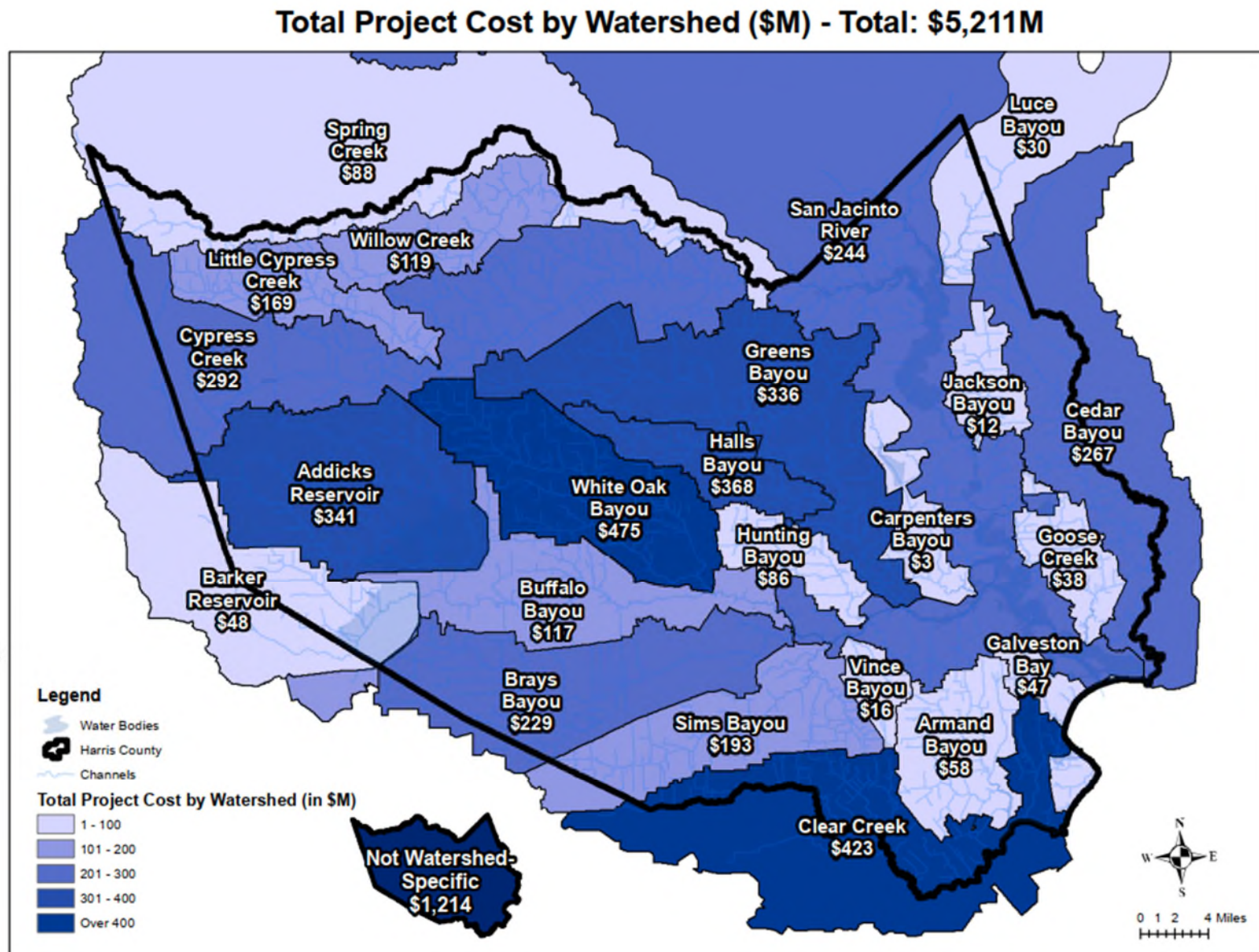
① FLOODING – HIGH PRIORITY 2018 BOND PROJECTS ARE UNDERFUNDED



- As a result of Federal funding not contributing at the levels that were anticipated in 2018 or 2020, many projects that rated highly in the County Prioritization Framework are not on track to be fully funded.
- High priority projects have a \$476M funding need, a majority of which is in Halls Bayou & Clear Creek.
- The chart below does not include individual subdivision projects, but those projects exhibit a similar geographic pattern regarding the status of their anticipated funding.

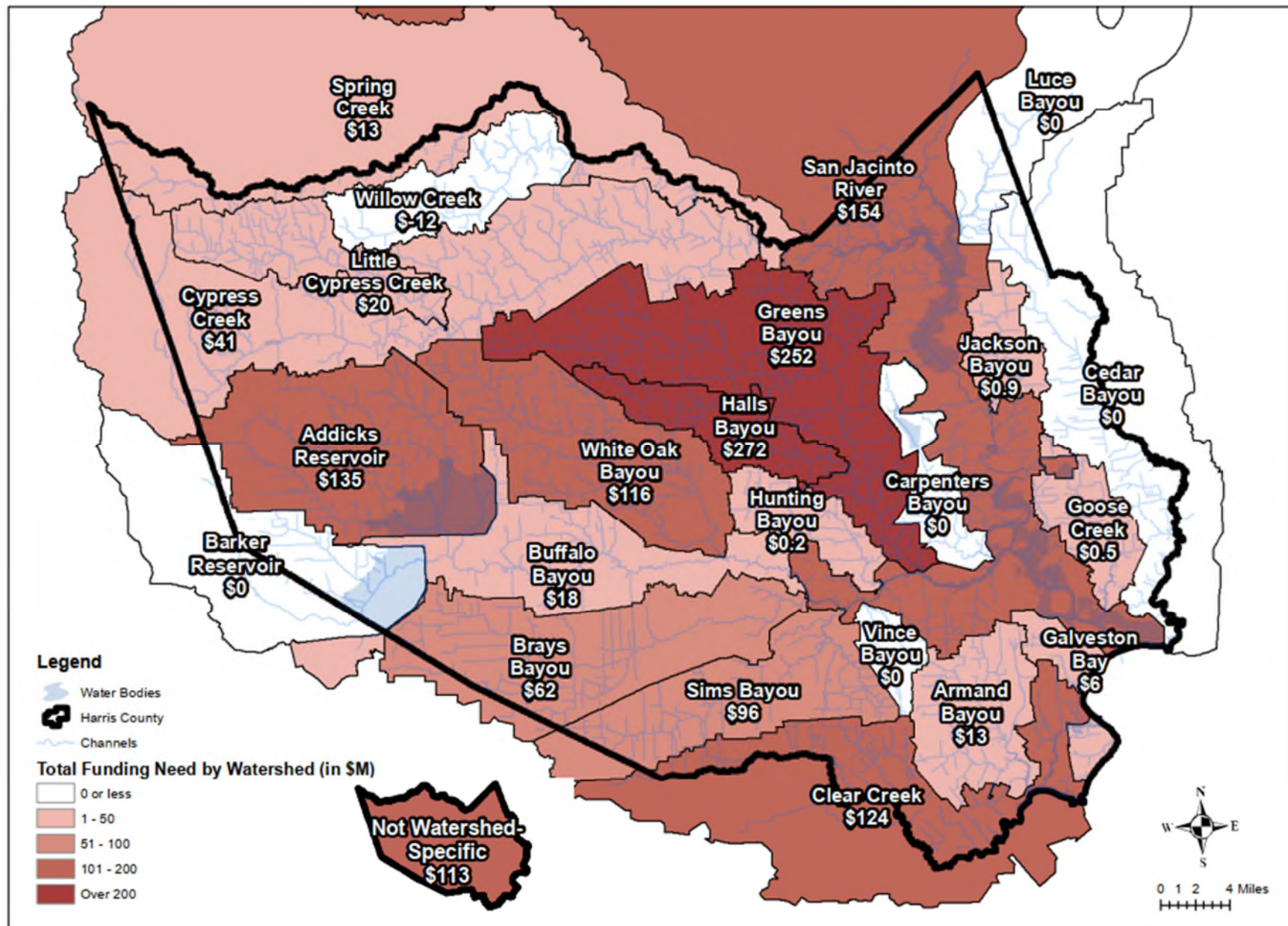
① FLOODING – TOTAL PROJECT COST BY WATERSHED

- Flood Control's projects are divided among 23 separate watersheds. Each watershed represents a set of creeks, channels, or bayous and presents its own flooding issues.
- The map shows the total cost of all proposed Flood Control CIP projects as currently scoped.
- FCD continues to work with the Corps of Engineers on implementing the Clear Creek Federal project within available local and Federal budgets.



① FLOODING – COUNTY FUNDING NEEDS

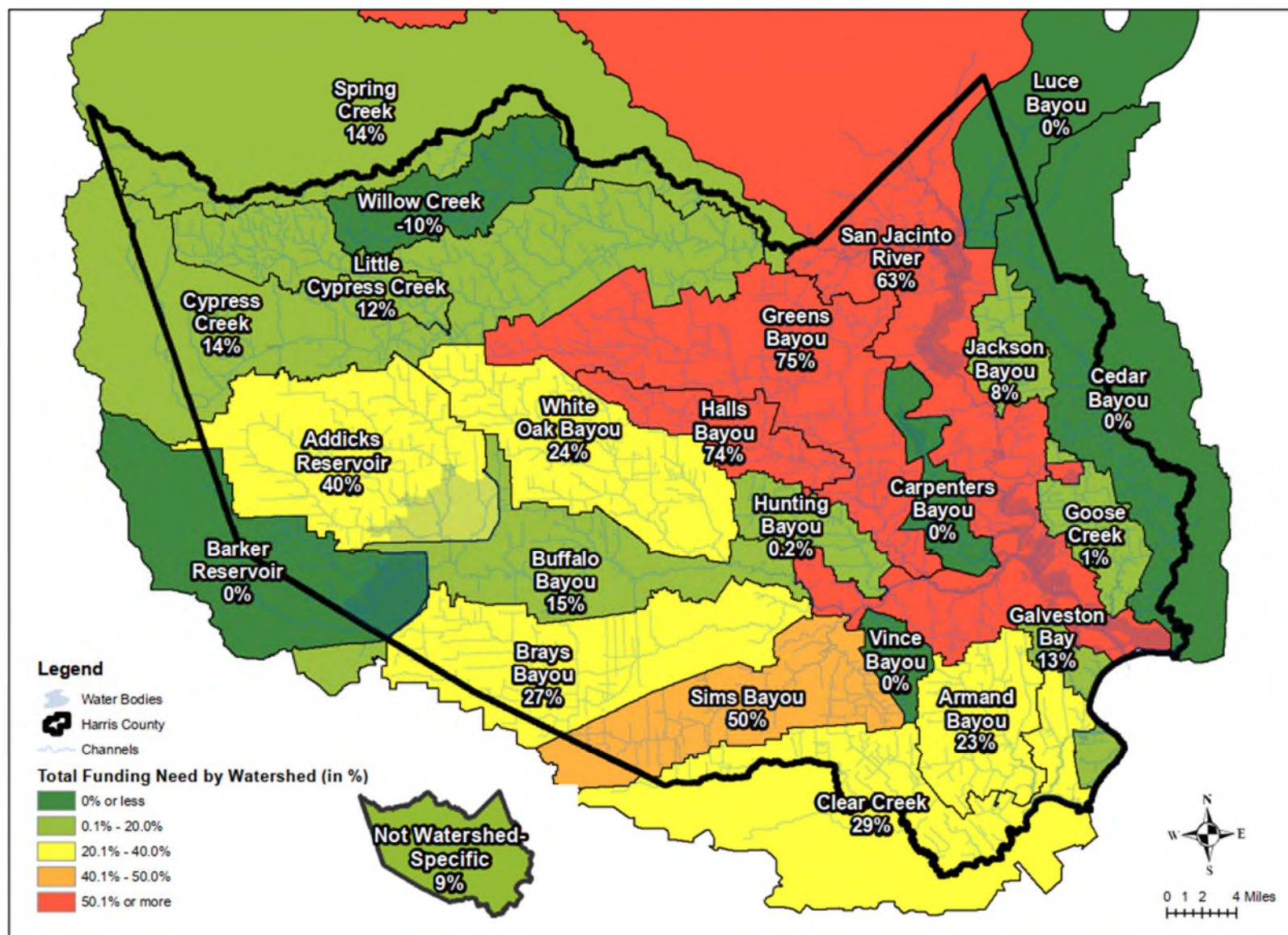
Funding Need by Watershed (\$M) - Total: \$1,425M



① FLOODING – COUNTY FUNDING NEEDS

Funding Need by Watershed- Countywide: 27%

- 3 watersheds currently more than 50% unfunded
- 6 watersheds 20-50% funded
- 8 watersheds less than 20% funded
- 6 watersheds fully funded



① FLOODING – NEXT STEPS FOR COUNTY FLOOD CONTROL PROJECTS

The County's flood control program will need to evolve based on limitations of available partner funding. Below are some possible solutions. We ask that Commissioners Court provide guidance to FCD and BMD to develop a plan including these options or others.

Outreach and Lobbying

- The County could increase outreach and lobbying efforts to secure partner funding at the Federal, State and local levels. This effort would require concrete requests and identifying the right County employees or officials to make these requests.

Re-scope and Phase Projects

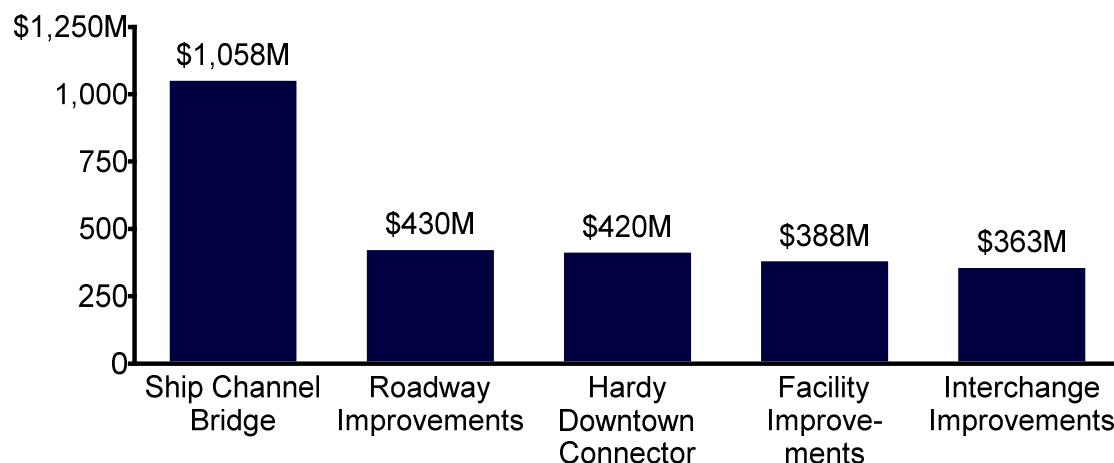
- FCD could investigate re-scoping or phasing projects to ensure that secured funding provides the highest benefit to County residents. Court could also consider breaking some projects into phases, which would be funded as soon as additional funding is secured by new county funds or grant applications from new appropriations.

Existing Funding Sources

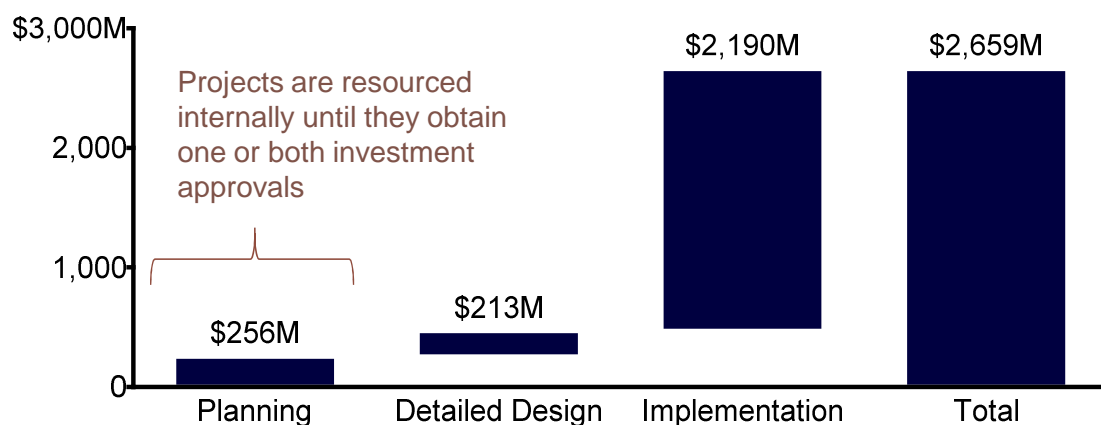
- The County could use existing funding sources—such as HCTRA funds or road bonds—to free up flood control bonding authority to complete more of the projects.

② TOLL ROAD – CAPITAL PROJECTS

Project Value by Investment Area (\$M)



Project Value by Current Project Stage (\$M)

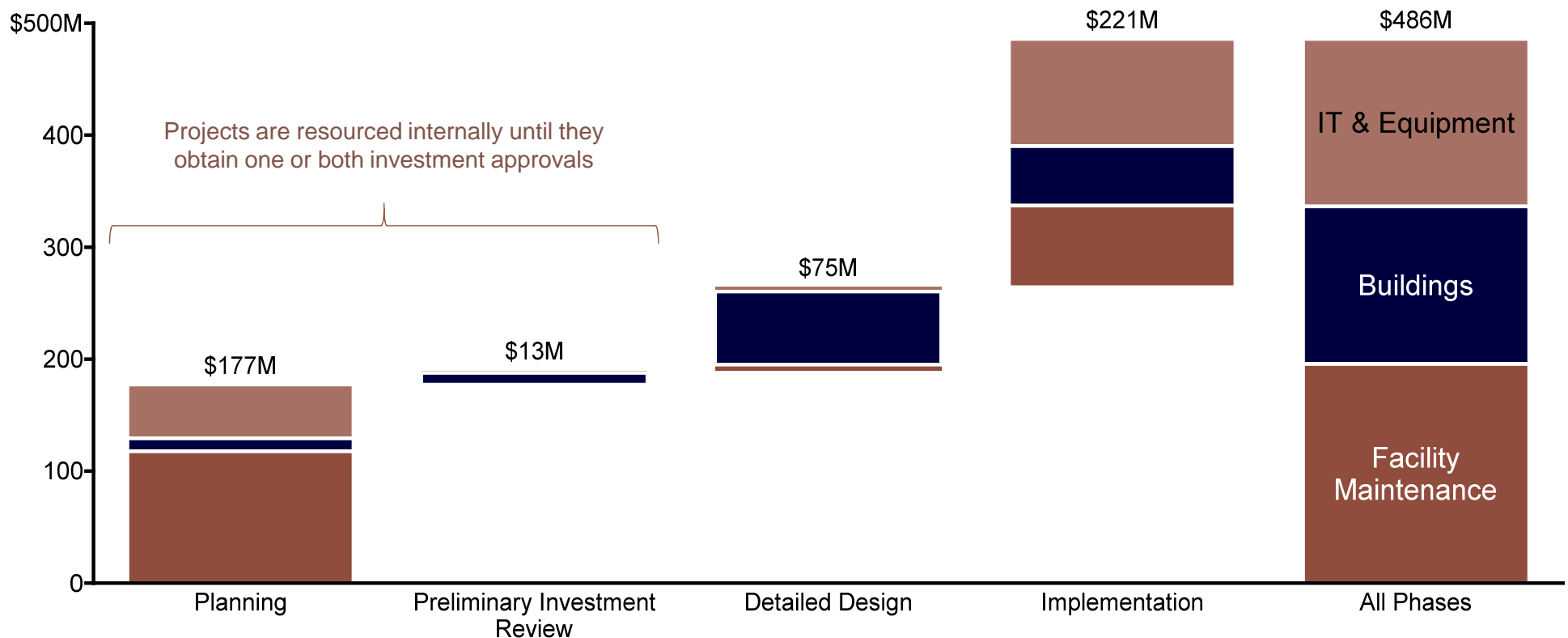


- HCTRA projects are largely in the latter stages of execution. The only remaining early-stage projects are the Hardy Toll Road-Beltway 8 Interchange, and the Hardy Downtown Connector which has been returned for re-scoping and redesign.
- HCTRA is making significant investments over the next five years to complete large projects, like the Ship Channel Bridge and converting all toll lanes to 'cashless'.
- The Hardy Downtown Connector project is under review as HCTRA engages with the impacted communities to redesign the project for minimal impacts.
- After these projects are completed, HCTRA's capital investments are anticipated to scale back to focus on maintaining existing assets.

③ GENERAL GOVERNANCE & CUSTOMER SERVICE – PROJECTS BY STAGES

- **Buildings:** Projects approved for capital funding include Commissioners Court relocation and the renovation of the South Central Plant. Early stage projects that will come before Court with additional details include the Riverside Hospital project and County office building consolidation.
- **Facility Maintenance:** Facility Maintenance projects including investments in HVAC, plumbing, roofing, and other repairs of county facilities that have been previously approved for capital funding. The projects scheduled for FY22 are recommended to move forward as scheduled while projects scheduled for FY23-FY26 will return to Court once the financial impact of these projects are quantified.
- **IT and Equipment:** IT & Equipment projects include replacing aging voting equipment and law enforcement radios. This category also includes software efforts, such as improving cybersecurity and moving more County systems to the cloud.

General Governance & Customer Service Projects by Stage



③ GENERAL GOVERNANCE & CUSTOMER SERVICE – BUILDINGS PROJECT REQUESTS

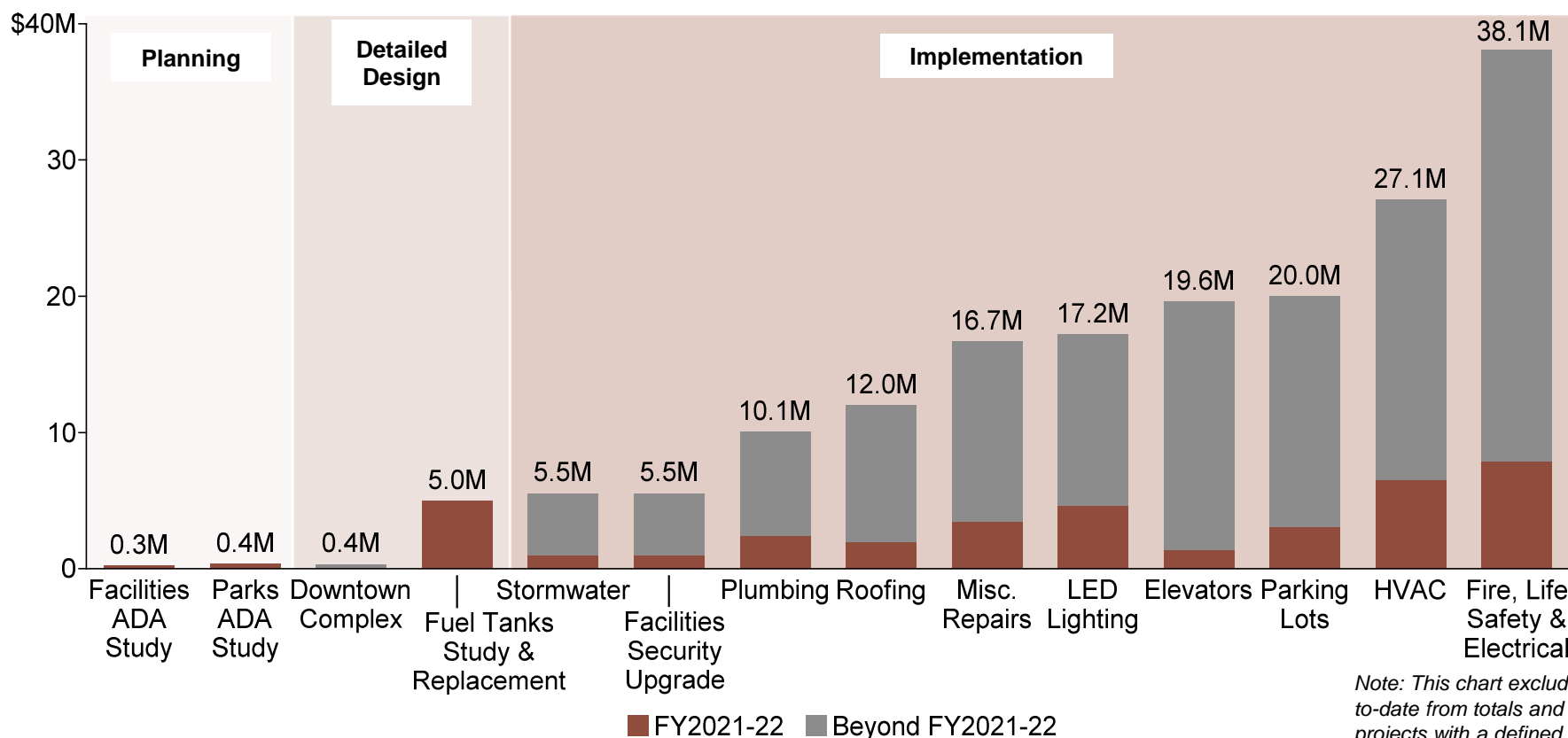
- Below is a summary of proposed building projects for general government purposes. Justice and Safety-related buildings are discussed in that goal area. Library buildings are addressed in the “Economic Development” goal area.
- Currently high labor and materials prices, coupled with a distressed commercial real estate market, favor purchasing buildings instead of new construction. The County is in the design/diligence phase of purchasing a central office location for Flood Control, Engineering, Community Services and potentially other needs.
- Other projects include the renovation of the South Central Plant and the renovation of the Riverside Hospital to headquarter the Public Health department.
- The Sports Authority has asked the County to contribute \$6.5M to renovate the interior of the NRG Center convention hall. BMD recommends holding off until hotel tax revenue has recovered, which can be a potential source of funding.

| Stage | Project Name | Total Cost (\$M) | Spent to Date (\$M) | Comments |
|---|--------------------------|------------------|---------------------|---|
| Implementation <i>(Projects eligible for full capital funding)</i> | South Central Plant | 53.3 | 0.2 | |
| | Other projects | 1.6 | 1.6 | |
| | Subtotal | 54.9 | 1.8 | |
| Detailed Design <i>(Projects eligible for partial capital funding)</i> | Building Consolidation | 0.6 | 0.3 | This is a preliminary investment for inspection and consulting fees. The actual building purchase is in negotiation and will come to Court later this year. |
| | Riverside | 55.0 | - | \$5.3M in partner funding from the Houston Endowment has been identified to offset the total project cost. The facility is anticipated to be 80,000 sqft. |
| | Other projects | 24.6 | 8.8 | |
| | Subtotal | 80.2 | 9.1 | |
| Planning and Preliminary Investment Review <i>(Projects resourced internally)</i> | NRG Center Refresh | 7.8 | 1.3 | The \$1.3M in expenditures is from the Sports Corp. The County's contribution may be funded out of Hotel Tax revenue. |
| | 701 Lockwood Parking Lot | 3.0 | - | |
| | Other Projects | 10.7 | 0.1 | |
| | Subtotal | 21.5 | 1.5 | |
| Grand Total | | 156.7 | 12.4 | |

③ GENERAL GOVERNANCE & CUSTOMER SERVICE - FACILITY MAINTENANCE PROJECT REQUESTS

- County facilities are in highly varied states of repair, with a perception that many buildings have substantial deferred maintenance. Several recent analyses by the Engineering Department suggest fully addressing deferred maintenance issues may be uneconomic at some buildings.
- BMD recommends that buildings be classified into “keep” and “tear-down” properties. The “keep” properties, should have a maintenance plan that restores them to safe, professional condition over a number of years. The “tear-down” properties should be evaluated for potential sale or building demolition and redevelopment to serve other public facing goals such as housing, transportation or recreation. The County should invest as little as possible in major maintenance of “tear-down” properties.
- Absent this classification, BMD recommends full approval of the FY 2021-22 maintenance budgets requested by OCE, but future years’ budget would not be approved until a strategic plan is in place.
- There are large opportunities for sustainability investments in LED lights, more efficient heating and cooling, energy efficiency and distributed solar. These investments need to be coordinated, planned and financially evaluated as part of the County’s sustainability efforts.

Facility Maintenance Projects by Project Stage

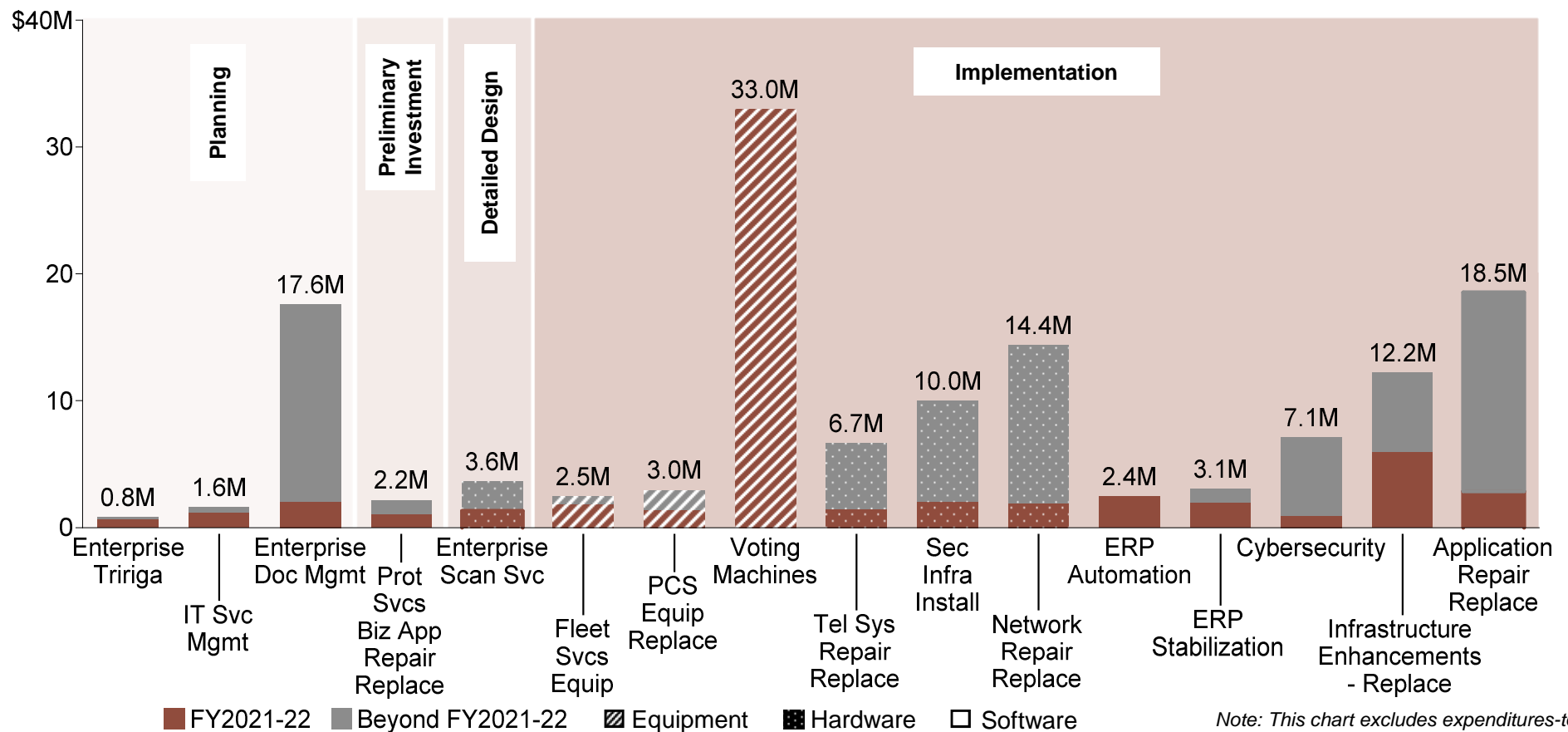


Note: This chart excludes expenditures-to-date from totals and includes only projects with a defined yearly expenditure forecast.

③ GENERAL GOVERNANCE & CUSTOMER SERVICE – IT & EQUIPMENT PROJECTS

- The IT & Equipment category is subdivided into Hardware, Software, and Equipment. Hardware relates to physical technology infrastructure, such as the Networking project to repair/replace data cables or components of the data center, or the Security Infrastructure project, which installs cameras and electronic locks.
- Substantial investments are planned in new elections machines, stabilizing and improving PeopleSoft and cybersecurity. The County is also investing in reducing manual tasks for its employees.
- Over time, Universal Services has indicated they intend to move more data and services to the cloud. This may increase annual license fees, but should decrease hardware costs.
- In the past, annual software licenses have been debt financed. This is not a best practice and will be phased out.

IT & Equipment Projects by Project Stage

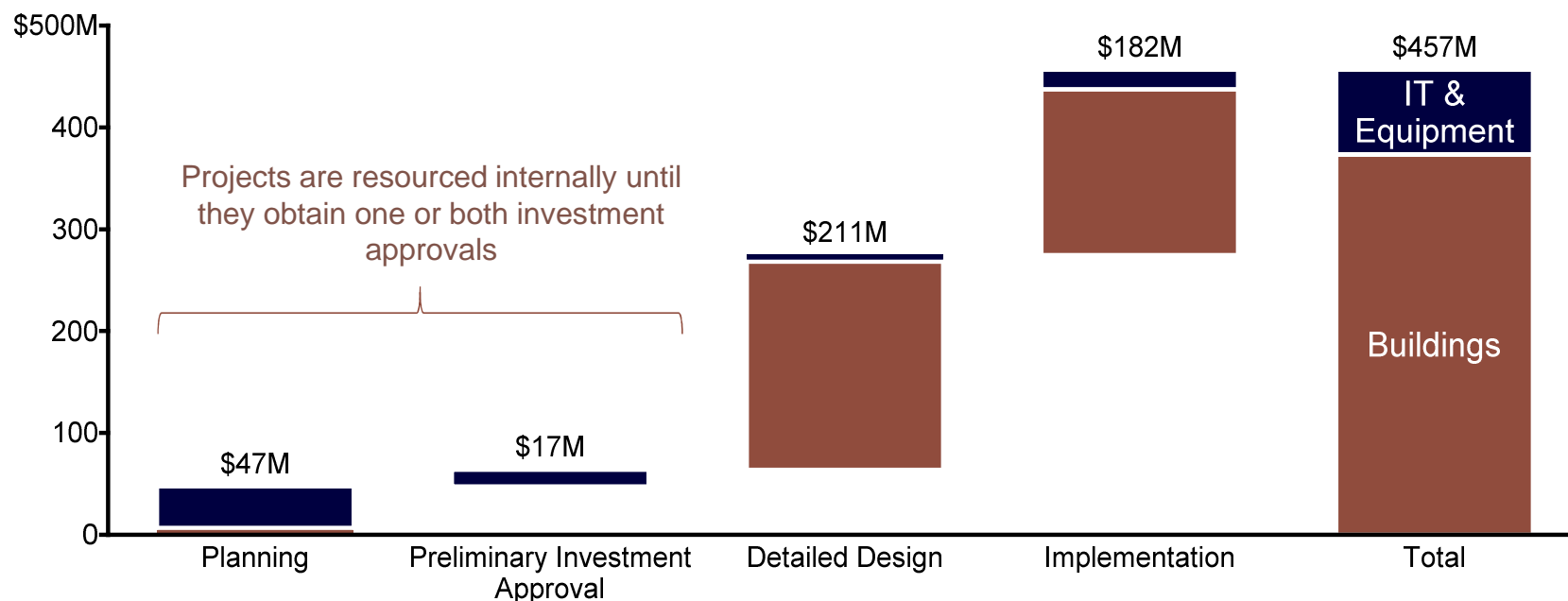


Note: This chart excludes expenditures-to-date from totals and includes only projects with a defined yearly expenditure forecast.

④ PUBLIC SAFETY & JUSTICE – PROJECTS BY STAGES

- **Buildings:** The vast majority of project costs in the Public Safety & Justice area fall into the buildings category. Planning for the renovation of the County's detention facilities has been underway for some time and is nearing completion. Taken together, the renovation plans include more than 80 separate projects ranging from a few thousand dollars to the \$16M water system upgrade. Two such projects are beginning in FY22: the water system upgrade, which includes replacement of the sanitary sewer piping, and a generator replacement.
- **IT and Equipment:** 12 projects are included in the IT & Equipment category. As with the maintenance projects in Governance & Customer Service, BMD is recommending that capital funding for the FY22 programs for radio replacement and IFS Equipment be approved while later years come back to Court with a defined scope and objectives.

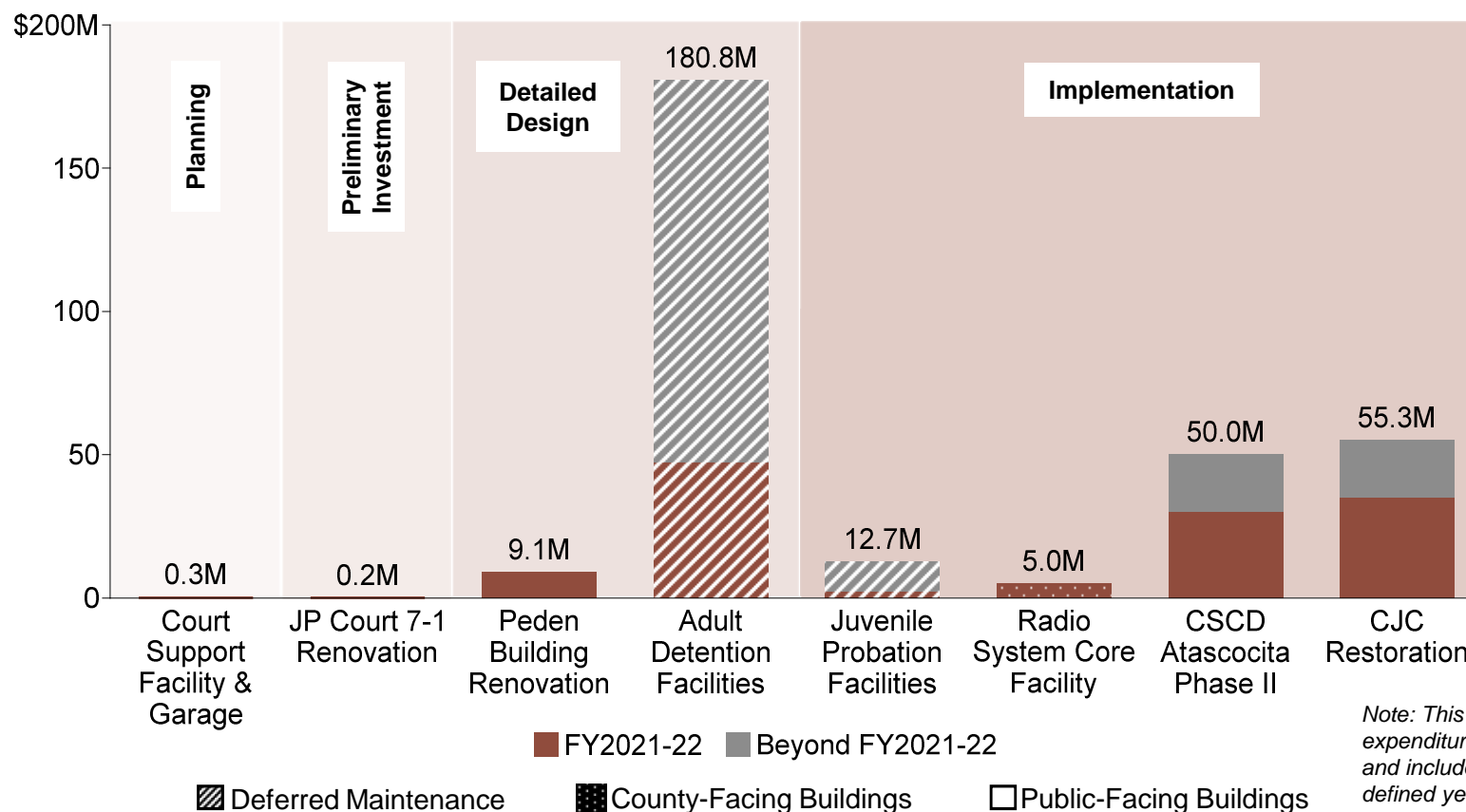
Justice & Safety Projects by Stages



④ PUBLIC SAFETY & JUSTICE – BUILDINGS PROJECT REQUESTS

- Two large projects in “implementation” are the CSCD Atascocita project and the CJC restoration. These projects are both slated to be completed in FY23.
- The largest proposed investment is a renovation of the County jail. The County is not considering construction of a new jail due to the cost and Commissioners Court’s direction. The renovation will be a complicated project which may require relocating some inmates. More details should be provided in a Final Investment Memo before implementation begins. Given the pandemic and high jail population, BMD recommends that the project be phased to minimize relocations and reductions in jail capacity.
- The Navigation building project for the Sheriff’s Office is included as in the early planning stage while it is re-scoped.

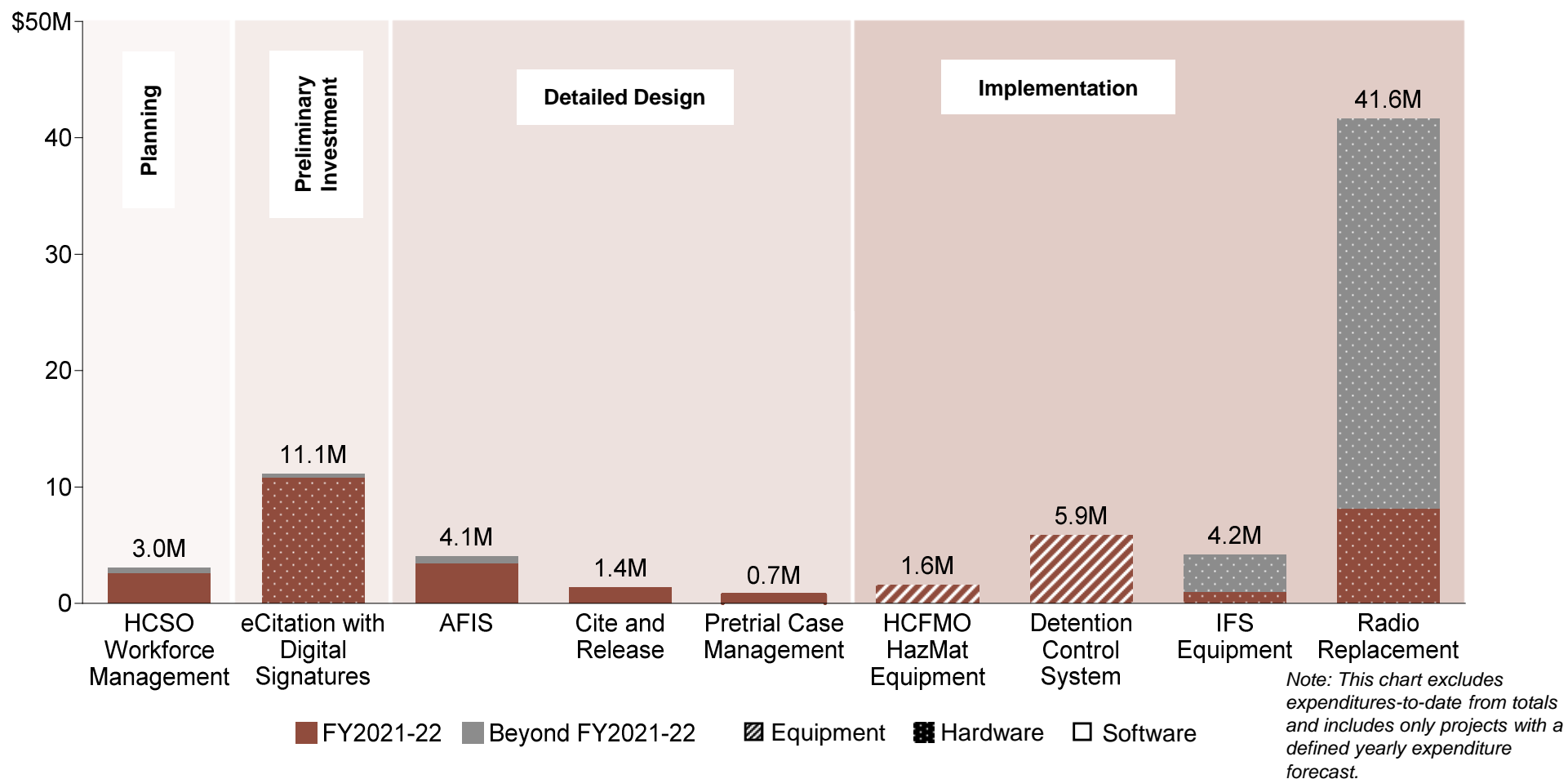
Building Projects by Project Stage



④ PUBLIC SAFETY & JUSTICE – IT & EQUIPMENT PROJECTS

- The major projects planned include radio replacement and detention control system upgrades. Overall, the radio replacement aims to provide new up to date radios to all Harris County law enforcement agencies.
- The eCitation system will reduce the time needed for County law enforcement officers to issue citations. This project should provide increased operational efficiency for law enforcement. This project is in the Preliminary Investment Review stage and will return to Court with a Preliminary Investment Memo to receive approval for capital funding.

IT & Equipment Projects by Project Stage



⑤ ECONOMIC OPPORTUNITY AND HOUSING – CAPITAL FUND PROJECT VALUE

- Economic Opportunity project requests include a \$250K downtown art project and numerous renovations and additions to the County's Library system. Many of the Library proposals appear to be in line with the County's objectives, but they need further refinement. BMD will work with the library to do an overall review of its facilities' condition and use, to prioritize projects, and to submit to Court Preliminary Investment Memos.
- Housing projects are intended to develop affordable housing. \$500K is for a pilot project to develop affordable residential prototypes that can then be cost-effectively replicated. Before the project is approved, Engineering should provide a justification on the value created. \$5M is a request from Community Services to buy land or build infrastructure to support an affordable housing partner.

| | Project | Project Stage | Cost (\$M) |
|---------|---|---|------------|
| Library | Library Expansion/Renovation (multiple sites) | Varies by site (Planning, Preliminary Investment Memo or Detailed Design) | \$9.1 |
| | Library Furniture | Planning | \$0.4 |
| Housing | Community Services – Investment in Affordable Housing | Planning | \$5.0 |
| | Affordable Housing Program | Planning | \$0.5 |
| Art | El Franco Lee Public Service Plaza | Planning | \$2.7 |
| | Downtown Civic Art Program | Planning | \$0.3M |

APPENDIX A: CIP POLICY MEMO



PROPOSED CAPITAL IMPROVEMENT PLAN POLICY & PROCEDURES

Introduction:

Harris County Budget Management Department (“BMD”) is proposing a new set of policies and procedures for the scoping and approval of the County’s Capital Improvements Plan (“CIP”).

The aim of these changes is to promote:

- i. Increased transparency and standardization in the approval and reporting on the status of capital projects, individually and in totality, by Commissioners Court and the public
- ii. Consistency and accountability for each CIP project throughout its development lifecycle and across departments
- iii. Alignment in the allocation of capital resources with Commissioners Court strategic objectives
- iv. Understanding financial ramifications of a given project individually and within the broader context of the County’s financial resources and commitments

The proposed new process would apply to general fund departments seeking CIP funds as well as the Harris County Flood Control District “FCD” and the Harris County Toll Road Authority (HCTRA). If adopted, these procedures could be implemented for new capital projects immediately. The process for evaluating existing projects in the CIP is discussed below.

Background:

Commissioners Court has identified increased transparency and accountability in the CIP as areas in need of review. There is little consistency in how projects become part of the CIP. Further, there is not presently a standard to which a project must adhere before consideration and no consistent process for ensuring that projects are formally approved by Commissioners Court. Further, outside of the Mid-Year and annual transmittals, there is not presently a regular cadence of transmitting summary CIP updates to Commissioners Court for informational or approval purposes. A standardized manner of monitoring and reporting to Commissioners Court as to the status (timing and budget) of capital projects would provide policy makers with better information to make informed decisions on the need for, proper scope and financial consequences of a capital investment.

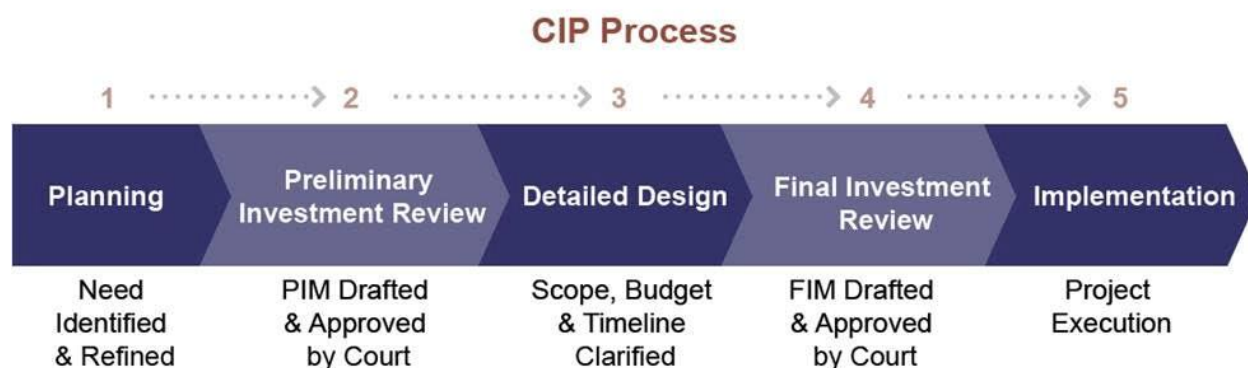
Proposed Policy Framework for CIP

Today, the countywide CIP program is largely used for flood control, the toll road system, and to support County owned buildings. The CIP process should focus capital spending towards strategic projects that help the county meet the goals and objectives set out by Commissioners Court.

The proposed framework envisions a five-stage capital project development lifecycle: Planning, Preliminary Investment Review, Detailed Design, Final Investment Review, and Implementation. Most projects would come before Commissioners Court for approval at least twice.¹ A proposed

project would come before Commissioners Court for approval first on the basis of a Preliminary Investment Memo (“PIM”), which could include authorization to spend a limited budget to develop a complete project development plan and costing during the Detailed Design phase. If the sponsoring department, after study during the Detailed Design phase and in conjunction with the relevant County departments (e.g., OCE, US, Purchasing, etc.) and BMD, continues to believe the project is necessary and proper, it will present a Final Investment Memo (“FIM”) to Commissioners Court for consideration and approval.¹ At this point, the project will be considered approved and would move into the implementation phase.

FCD already uses a similar development lifecycle for their capital projects (<https://www.hcfc.org/Activity/2018-Bond-Program/Project-Lifecycle>). The process described below is comparable to how FCD projects come to court.



I. Planning:

Once a department has identified a potential need for resources that might result in a capital project, it would initiate a planning process leveraging in-house County resources at minimal cost. The requesting department would be encouraged to utilize the relevant expertise of the Office of County Engineer (“OCE”) for standard construction costs, Universal Services (“US”) for consultation regarding enterprise software purchasing, IT/datacom or fleet needs, and BMD for financial analysis. Sponsoring departments would receive the support of relevant departments to describe the need for a project and produce a preliminary scope, timeline and cost for a project they would like to be considered for the CIP. The end result of this Planning phase would be an informed decision to either forgo the potential project, pursue an alternative that does not require a County capital expenditure or, if the project continues be necessary in the view of the sponsoring department, the production of a PIM for consideration by Commissioners Court.

II. Preliminary Investment Review:

Following consultation with internal stakeholders, the requesting department would produce a Preliminary Investment Memo (“PIM”), using a template provided by BMD, that describes the departmental need, the County goals being met through the project, project requirements, alternatives considered, preliminary project budget based on informed estimates, development timeline as well as proposed next steps, which may include a request for approval to engage outside expertise on some aspects of detailed design. This document would describe these needs

¹ Capital projects that do not require outside funding for design, such as equipment purchases, may progress directly to producing an FIM for Commissioners Court consideration. Due to the size and nature of the 2018 Bond projects, Court has authorized staff augmentation and FCD may spend capital dollars on preliminary design work prior to a Preliminary Investment Memo.

in 1-2 pages, and Commissioners Court would consider the proposal and could vote to approve a project for Preliminary Approval. Departments would be able to submit PIMs and related requests for approval as a Commissioners Court item at any time throughout the year.

| Document | Responsible Party | Contents |
|-----------------------------|-----------------------|---|
| Preliminary Investment Memo | Sponsoring Department | <ul style="list-style-type: none"> • Project Description • Justification • Project Scope • Alternatives and Engagement • Anticipated Project Expenditures and Timeline |

Projects receiving PIM approval would proceed to Detailed Design, with the any authorization to spend the amount approved in the memo on external vendors as needed. Departments must follow County purchasing guidelines regarding third-party spending including in terms of MWBE participation and purchasing, and it is suggested that the Purchasing Department be consulted during the development of the PIM. Coincident with the submission of the PIM, BMD will submit for Commissioners Court approval the proposed funding source(s) to complete the Detailed Design Phase (e.g., Commercial Paper (“CP”) program, PIC Fund, General Fund, etc.). Consistent with current practice, any issuance of Commercial Paper would require Commissioners Court approval of a CP letter authorizing such.

III. Detailed Design:

Upon approval of a PIM, the sponsoring department would be authorized to proceed to the Detailed Design phase, which would be defined in terms of time and cost in the PIM. The purpose of Detailed Design is to further refine the scope, budget, and timeline for a project and solicit community and stakeholder input. The Detailed Design phase should ultimately result in the production of a Final Investment Memo (“FIM”). Final Investment Memos should build upon the work done during Project Scoping and should solidify the estimates developed during the prior stage, refined estimates for any necessary vendors and include outreach to impacted stakeholders including community impact. Any procurement efforts needed to obtain detailed scoping or cost estimates for a project approved in a PIM should take place during this stage. Subject to Purchasing rules, Commissioners Court approval may be required to publish an RFP or otherwise seek bids from vendors during the Detailed Design Phase. Where necessary, costs included in a FIM should be construction ready and as the result of a competitive bid.

IV. Final Investment Review:

The end result of the Detailed Design Phase would be the production of a FIM for Commissioners Court review and approval. Similar to the PIM, priority would be placed on succinctness and relevancy for Commissioners Court, with an individual project memo targeted as 3-5 pages in length. The FIM would be subdivided into three sections: Project Overview, Technical Assessment and Financial Impact with supporting addenda, including third-party reports, as appropriate.

| Section | Responsible Party | Contents |
|----------------------|---|---|
| Project Overview | Sponsoring Department | <ul style="list-style-type: none"> • Project description • Needs assessment • County strategic objectives met • Stakeholder input • Equity considerations • Project Scope PIM vs FIM |
| Technical Assessment | OCE, US, Purchasing and others as appropriate | <ul style="list-style-type: none"> • Alternatives considered • County human and financial resource requirements • External resource requirements • Environmental impact • Project timeline • Project development budget breakdown • Maintenance capital expenditure estimate • Result of any acquisition and/or procurement plan • Estimated impacts to operating budgets when project is completed. |
| Financial Impact | BMD | <ul style="list-style-type: none"> • Sources of funding • Impact to affordability model • Credit rating considerations • Ongoing operating budget impact |

Coincident with the submission of the FIM, BMD will submit for Commissioners Court approval the proposed funding source(s) for the Project.

V. Implementation:

Upon approval of the FIM, the prospective project would be considered authorized by Court to proceed to a contracting and, ultimately, construction/implementation phases with the appropriate departments operationally involved: sponsoring department, OCE, US, and Purchasing. The process of approving and awarding of contracts through Commissioners Court would be unchanged and consistent with current law and practice. Upon project delivery, Commissioners Court approval would be sought to designate the project as “substantially complete” in accordance with County Auditor rules. At this point, BMD’s role would be to incorporate the project’s financial impact into the County’s long-term capital plan, monitor the project’s progress for inclusion for regularly scheduled CIP updates for Commissioners Court, and incorporate the operations and maintenance costs into the County’s operating budget once the project is completed.

Reporting & Oversight:

Once the new process has been implemented, departments would continue to be able to bring their projects for Preliminary or Final Investment Review approval to Commissioners Court throughout the fiscal year. CIP will remain a ‘living document’, if a sponsoring department has a project that is ready for consideration of Preliminary Investment Approval, that can come before any Commissioners Court meeting.

In addition to the individual project approval process outlined above, BMD is recommending a new cadence of regular quarterly updates and annual approval of the overall CIP. BMD will transmit quarterly updates to Commissioners Court outlining any newly approved projects or significant changes to previously approved projects. Alongside the annual operating budget approval process, BMD will submit a five-year CIP for approval by court that will consider overall debt levels, affordability, and the division of capital investment by goal area.

| Activity | Frequency | Description |
|---------------------------------|--|---|
| Preliminary Investment Approval | Ad Hoc – PIM may be brought to any Commissioners Court | <ul style="list-style-type: none"> 1-2 page PIM document acting as stage gate to Detailed Design phase <i>PIM requires Commissioners Court approval</i> |
| Final Investment Approval | Ad Hoc – FIM may be brought to any Commissioners Court | <ul style="list-style-type: none"> 3-5 page FIM document acting as stage gate to Implementation phase <i>FIM requires Commissioners Court approval</i> |
| Quarterly Update | Quarterly – In between annual CIP approvals | <ul style="list-style-type: none"> Status of all PIM-approved and FIM-approved projects, including comparison to approved timeline and budget Escalation of any project impediments requiring resolution by Commissioners Court action Assessment of resource availability relative to annually approved CIP capital allocation targets Summary of utilization of financing sources by type <i>Quarterly update is a transmittal to Commissioners Court not requiring approval</i> |
| Annual CIP Approval | Annually – Aligned with annual Operating Budget beginning FY'21-22 | <ul style="list-style-type: none"> All content provided in Quarterly Update BMD recommendation on next fiscal year's total capital project allocation informed by debt service affordability model Summary of all projects in Planning phase <i>Annually revised 5-year CIP budget would require Commissioners Court approval</i> |

A rolling individual project approval process with quarterly CIP update transmittals and an annually approved five-year CIP budget weighs the practical need to load balance execution-oriented departments' (e.g., OCE, US) project management capacity throughout the year with a desire to provide Commissioners Court with comprehensive and regular review and oversight of the CIP.

Change Management:

I. Departmental Impact

Should this new process be approved, and after an initial transition phase of several weeks, the practical impact to departments should be minimal and the consistent approach to all potential capital projects is designed to create a clear, repeatable process for all departments to navigate while fostering fairness and transparency to the process of resource allocation across departments. From a practical perspective, CIP will remain a 'living document' as departments

would continue to be able to bring their projects for Preliminary or Final approval to Commissioners Court throughout the fiscal year.

II. New Projects

Should these new policies and procedures be approved by Court, all proposed new capital projects would be subject to this new process effective immediately.

III. Existing Projects

The transition to the new procedure would require scoring and categorizing the 280+ projects that reside within the existing CIP. This process would involve evaluating each project and assessing, in BMD's judgment in consultation with sponsoring departments, OCE and US, where in each of the five stages a given project falls. Considerations for determining the stage of a given project would include, but would not be limited to:

- Has the project been formally approved by Commissioners Court?
- Is the project required by law, election (e.g., 2018 HCFC Bond Program) or court order?
- Is construction/implementation already underway?
- Have binding contracts with vendors been executed?
- Have financial encumbrances been incurred?
- Are projects underway within acceptable variances to originally approved budget?

The result of the scoring process would be to define the stage for each existing project, which likely would require multiple current projects to return to Commissioners Court for approval of a PIM or FIM as appropriate. Included in the CIP package, all CIP projects have been grouped into the following categories:

- Planning. These projects are in their initial conception phase and would require the production of a PIM to seek Commissioners Court authorization to progress.
- Detailed Design. These projects have met some of the scoring criteria above, community input has been solicited and outside experts have been engaged. These projects would require the production of an FIM to seek Commissioners Court authorization to progress.
- Implementation. These projects are sufficiently advanced that an FIM would be redundant. These projects would be incorporated into the regular CIP reporting and annual approval framework for Commissioners Court awareness and oversight.

Moving forward, BMD would work with relevant departments to produce the necessary PIMs and FIMs for Commissioners Court consideration. If approved, BMD proposes hosting a series of teach-ins as to how the new procedure impacts the project development process from the perspective of sponsoring departments.

APPENDIX B: PRELIMINARY INVESTMENT MEMO TEMPLATE/ SAMPLE

Harris County CIP Preliminary Investment Memo

Project Name: <name should identify location and/or major project element>

Investment Area: <Choose from one of Court's goal areas>

Managing Entity: <Department doing the work>

Total Estimated Cost: \$X

Requesting Entity: <your department>

Preliminary Investment: \$X

Project Description:

< Where is the project being done? What are the major project elements (detailed scope of work to be explained below). What is the end benefit of the project? What is the project timeline? When does the project need to be completed?>

Justification:

<Explain why this project is needed. What is the problem to be solved by doing this project? Is there a cost savings or increase in operational efficiency that will be achieved as a result of this project? Explain if the project must be completed to satisfy a legal mandate or to address a fire/life safety issue.>

This project supports the following Strategic Objectives:

- X.
- X.

Note any of the Requesting department's relevant strategic objectives.

The success of the project can be measured through the following performance metrics:

- X.
- X.

What will we measure to determine if the project was successful? It's ok if this data is not available for the Preliminary Investment approval, but the data should be ready to be collected for Final Investment approval.

Project Scope:

< Identification of overall project purpose, key tasks, desired end state and anticipated benefits. What is the projected size and/or scope of the project? This is distinct from Project Description, the overview/narrative of the project, and should describe the project details. For a building note how many gross square feet of space are affected? What is the number of employees impacted? Is there a comparable project? Provide detailed numbers, such as number of light fixtures to be replaced. >

Alternatives and Engagement:

< Why is this project the best solution to addressing the problem(s) identified in the sections above? What are other possible alternatives to addressing the problem(s)? In addition to any alternatives, discuss the impacts of delaying this project for a year or not doing the project.>

< Identify stakeholders. Who are the groups impacted by the project? Explain the plan to engage these groups (dates and specific names not needed). Universal Services and Facilities & Property Maintenance must be consulted to evaluate the project before it is approved.>

Anticipated Project Expenditures and Timeline:

<Explain what the total estimated project cost is, any expenditures to date, and how much funding Court is being asked to approve now. For the funding being requested now, provide a detailed scope of work in the table below, noting the costs and estimated completion times. If more than two sentences are needed to explain how costs were estimated, explain that here. Finally, explain if any non-County funding, such as grants, are anticipated to be secured for this project.>

Harris County CIP Preliminary Investment Memo

Round to the nearest \$1,000.

Month/Year if work to be done within 12 months of the Court date this item is presented. Quarter/Year for any work 12 months or after this item is presented to Court.

| Scope of Work | Estimated Cost* | Estimated Completion |
|---------------|-----------------|----------------------|
| | X | |
| | X | |
| Total | \$X | |

*<Explain how costs were estimated (i.e. vendor quotes). If this requires more than two sentences to explain, explain in the paragraph above the table.>

<Discuss any risks to project completion. Is there anything that might come up during the project that would significantly delay the project or add additional costs?>

<Explain what the anticipated operating impacts will be when this project is completed. Consider the Total Cost of Ownership; what costs are associated with operating the asset? For example, will there be a reduction in operating costs from lower utilities? Will the project require new personnel or software licenses to operate?>

<Explain any relevant Court action related to this project. Explain if certain things must be done before the project can advance. For example, if this was a demolition project, the buildings occupants would first need to be relocated. >

Harris County CIP Preliminary Investment Memo

Project Name: Building Consolidation

Investment Area: Governance & Customer Service

Managing Entity: Office of County Engineer

Co-Managing Entity: Budget Management

Requesting Entity: Budget Management

Total Estimated Cost: \$[REDACTED]

Preliminary Investment: \$300k

Project Description:

Harris County employees are situated in offices throughout the County. Some departments have divisions split across multiple buildings and many locations are in need of major maintenance. A new construction office complex was designed as an option to house the Office of the County Engineer (OCE), the Flood Control District (FCD), and the Community Services Department (CSD) and consolidate more County employees in a single campus. Due to the current weakness in the commercial office space market, the Budget Management Department (BMD) and OCE were asked to investigate the purchase of an existing building as a more attractive financial alternative to new construction. A downtown location was favored to take advantage of transit options and proximity to other County facilities, as well as downtown amenities. OCE & BMD identified two potential locations and request funds to hire third-party consultants to examine the preferred option and determine the total cost to occupy, including purchasing, renovation, and operating costs. For comparison purposes, OCE & BMD looked into the cost of a 20-year lease for downtown office space meeting the project's requirements.

Justification:

OCE, FCD, and CSD currently occupy eleven separate locations. Many of the current locations are old, nearing the end of their useful life and require major upgrades with significant capital investment. Moving these and potentially other County employees to a single, centralized location will maximize operational, maintenance, and construction efficiencies. Building consolidation will allow for a more collaborative work environment within and between departments, creating increased employee engagement.

The financial success of the project will be measured:

- By the projected net savings between the final estimate of financial resources needed to acquire and occupy a downtown building compared to the estimated cost to build a new building.
- By lowering the long-term cost to operate departments in a single, consolidated location versus the status quo.

Project Scope:

The project's goal was to find a facility accessible by mass transit that contained at least 275k gross square feet (GSF) for the current employees and an allowance for future growth of OCE, FCD, and CSD. The downtown options that are available significantly exceed 275k GSF. Both potential purchase options identified exceed 440k GSF. OCE has provided a capital estimate to update both options that included interior and exterior renovation, floor configuration & furnishing, building systems, backup power generation & resilience, and other systems. A high-level view of the initial estimates is included below.

| Consolidating Depts | FTEs | ~GSF Needs | GSF in Alternatives | | |
|--|--------------|----------------|---------------------|----------------|----------------|
| Office of County Engineer | 602 | 57,978 | Pur Opt 1 | Pur Opt 2 | Lease Option |
| Flood Control District | 241 | 29,517 | | | |
| Community Services Dept | 341 | 47,900 | | | |
| Building Common Area | | 35,394 | | | |
| Totals | 1,184 | 170,789 | 440,943 | 458,001 | 275,000 |
| Available GSF for Growth + Addl Depts | | | 270,154 | 287,212 | 104,211 |

Harris County CIP Preliminary Investment Memo

The detailed design stage will confirm initial capital and operating estimates with third-party validation, recommend a preferred building option, and provide a final capital and operating plan for that option. Before the third-party engineers can begin their assessment, the County and the seller must agree to transaction terms. The analysis completed to date informs the scale of the total project in the case of both downtown options.

Alternatives and Engagement:

The first options considered were (i) to build a new building at Pinemont for an estimated cost of over \$84M, or (ii) to renovate eight current locations for an estimated capital cost of over \$142M. The three options explored had a lower capital cost and a lower 20-year cost than the new build option. The estimated costs were compiled after preliminary tours were taken of both potential purchase options as well as a property that was considered for lease by the County. The tours included County employees from OCE and BMD in collaboration with real estate/construction firm CBRE. The tours and financial analysis lead the team to conclude that the purchase options were more attractive than the lease option. The lease option does not require an initial capital investment as the landlord offers a tenant improvement allowance to cover the initial buildout; however, the estimated operating and parking costs were far higher than any of the other options. Additionally, the leased GSF would not allow for any future growth or expansion. Further evaluation and analysis of the alternatives has led the team to recommend Purchase Option 1 as the best option for this project. Commissioners Court is requested to approve \$300,000 to do more in-depth inspections on Purchase Option 1. Inspections will begin once a Letter of Intent (LOI) has been executed.

| | Pinemont | Purchase Option 1 [REDACTED] | Purchase Option 2 [REDACTED] |
|------------------|----------------|---------------------------------|---------------------------------|
| GSF | 274,000 | | |
| FTEs | 1,370 | | |
| | | | |
| Purch./Construct | \$73.2m | | |
| Improvements | N/A | | |
| FF&E | \$8.2m | | |
| IT | \$2.0m | | |
| Move | \$0.8m | | |
| Total | \$84.2m | | |
| Cost/GSF | \$307.3 | | |

Anticipated Project Expenditures and Timeline:

Following an approval of \$300,000 to confirm the investment case, BMD & OCE, supported by CBRE, will initiate negotiations to reach a non-binding LOI for the preferred property. An agreed purchase price and LOI is anticipated to be reached by the end of March. Following that agreement, OCE would engage in due diligence on the building while a Purchase and Sale Agreement (PSA) is negotiated. Within 45 day of the PSA execution, BMD & OCE will return to Court with due diligence complete. Should the due diligence confirm the preliminary analysis, the team would recommend that the County close on the acquisition. Once closed, the team estimates 18 months until the County is able to occupy the building, though this and other details would be confirmed in a Final Investment Memo presented to Commissioner's Court.

APPENDIX C: DETAILED PROJECT SHEETS

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Project Map

An interactive map of all capital projects can be found at <https://budget.harriscountytexas.gov/>

Project Sheet Reader's Guide

Provides project identification, description and justification, financial summary, and estimated operating budget impacts.

1) Project Identification: This section provides the name of entity managing the project, the name of the entity requesting the project and what strategic objectives the project works towards, and what Strategic Objective(s) from the requesting entity the project works toward. More information about the managing entity's strategic objectives can be found in the budget materials presented to Court during the January 2021 Budget Hearings.

2) Project Description/Justification: This section describes the project and provides a brief justification for its overall purpose.

3) Alternatives & Engagement: This section examines project alternatives and stakeholder engagement has been considered, if any.

4) Anticipated Project Expenditures and Timeline: This section summarizes the past, present, and future expenditure information for the project. It also estimates potential impacts to the requesting entity's operating budget once the project is complete, and identifies when project milestones will be completed.

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Washburn Tunnel

Investment Area: Toll Road – Facility Improvements

Approval Status: Implementation

1

Total Estimated Cost: \$ 23,000,000

Managing Entity: Toll Road Authority

Expenditures to Date: \$ 610,000

Requesting Entity: Toll Road Authority

Strategic Objective(s): ENG-SO1, SO2, SO5
MACE-SO1, SO2
FIN-SO1

Project Description:

The Washburn Tunnel, one of only five vehicular crossings of the 50-mile Houston Ship Channel (HSC), is in need of modernization and upgrades. On June 25, 2019, Harris County Commissioners Court authorized the transfer of responsibility for current and future Operations, Maintenance, and Capital Improvements of the Washburn Tunnel to HCTRA, without the imposition of tolls, effective March 1, 2020. Capital improvement expenditures planned for this facility include a comprehensive program to preserve, maintain, repair, and improve the existing Washburn Tunnel, which includes the tunnel's approaches, Intelligent Transportation System components, and facilities. Expected projects include modernization of the electrical and ventilation systems, and geotechnical evaluation of the tunnel bedding and cover material.

Justification: 2

Built in 1950, the Washburn Tunnel is one of the largest toll-free tunnels in the Southern United States. This project will address the mobility needs of the community by creating greater access to transportation options. This falls in line with the strategic objectives noted above. This project provides the residents of Harris County and other stakeholders a unique transportation asset, consistent with the Toll Road Authority's goal to improve mobility throughout the region and provide the community greater access to transportation options.

Alternatives and Engagement:

No alternatives have been identified for this project. 3

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|---------------------------------------|--|------------------------------|----------------------|
| Port of Houston Authority | Planning, Development, User of System/ Project | Collaboration/ Communication | Ongoing |
| The Houston Pilots | Planning, Development, User of System/ Project | Collaboration/ Communication | Ongoing |
| United States Army Corps of Engineers | Planning, Development, User of System/ Project | Collaboration/ Communication | Ongoing |
| United States Coast Guard | Planning, Development, User of System/ Project | Collaboration/ Communication | Ongoing |

Anticipated Project Expenditures and Timeline: 4

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 23,000,000 | \$ 2,420,000 | \$ 7,660,000 | \$ 9,310,000 | \$ 1,000,000 | \$ 720,000 | \$ 1,280,000 |

| Estimated Annual Operating Budget Impact: | |
|---|---------------------|
| O&M | \$ 3,750,000 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 3,750,000 |

Project Map

An interactive map of all capital projects can be found at <https://budget.harriscountytexas.gov/>

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Clear Creek Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|---|-------------------|-----------------|------------------------|----------------------|----------------------|-----------------------|----------------------|
| C-03: Right-Of-Way Acquisition, Design and Construction of Corps of Engineers Clear Creek Federal Flood Risk Management Project | Yes | Design | \$ 337,352,000 | \$ 4,676,342 | \$ 22,586,682 | \$ 244,581,456 | \$ 65,507,520 |
| C-05: Construction of South Belt Stormwater Detention Basin (A520-03-00) Along Beamer Road Ditch (A120-00-00) and Dagg Road Stormwater Detention Basin on Clear Creek | Yes | Implementation | 18,500,000 | 4,060,488 | 7,590,537 | 6,848,975 | - |
| CI-001: Rehabilitation of the Clear Creek channel to Restore Channel Conveyance Capacity | Yes | Planning | 25,000,000 | - | - | 18,750,000 | 6,250,000 |
| CI-003: Rehabilitation of the A214-00-00 channel to Restore Channel Conveyance Capacity | Yes | Planning | 1,000,000 | - | - | 1,000,000 | - |
| CI-013: Restore Channel Conveyance Capacity on A104-00-00 | Yes | Planning | 5,000,000 | - | - | 5,000,000 | - |
| CI-62: Construction of Stormwater Detention Basins Near FM 528 and Dixie Farm Road in Friendswood | Yes | Planning | 20,000,000 | 7,889,824 | - | 12,110,176 | - |
| F-01: Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on A135-00-00 | Yes | Design | 2,500,000 | 629,182 | 1,870,818 | - | - |
| F-02: Right-Of-Way Acquisition, Design and Construction of Hughes Stormwater Detention Basin on Clear Creek | Yes | Design | 6,100,000 | 2,896,011 | 1,284,753 | 1,919,236 | - |
| F-76: Identification, Design and Construction of the A700-01 Environmental Mitigation Bank | Yes | Design | 6,650,000 | 5,059,598 | 1,443,693 | 146,709 | - |
| Clear Creek Total | | | \$ 422,102,000 | \$ 25,211,445 | \$ 34,776,483 | \$ 290,356,552 | \$ 71,757,520 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-03: Right-Of-Way Acquisition, Design and Construction of Corps of Engineers Clear Creek Federal Flood Risk Management Project

Investment Area: A - Clear Creek **Total Estimated Cost:** \$337,352,000

Bond Project: Yes **Expenditures to Date:** \$4,676,342

Approval Status: Design **Non-County Funding – Secured:** \$166,352,000

Projected Completion: TBD **Funding Need:** \$101,000,000

Project Description:

Right-Of-Way Acquisition, Design and Construction of Corps of Engineers Clear Creek Federal Flood Risk Management Project.

Justification:

The pre-Atlas 14 1% AEP (100-year) floodplain could be removed from up to 2,100 structures.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$337,352,000 | \$22,586,682 | \$70,002,560 | \$65,334,118 | \$61,698,637 | \$47,546,141 | \$65,507,520 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-05: Construction of South Belt Stormwater Detention Basin (A520-03-00) Along Beamer Road Ditch (A120-00-00) and Dagg Road Stormwater Detention Basin on Clear Creek

Investment Area: A - Clear Creek **Total Estimated Cost:** \$18,500,000

Bond Project: Yes **Expenditures to Date:** \$4,060,488

Approval Status: Implementation **Non-County Funding – Secured:** \$0

Projected Completion: FY 2023 **Funding Need:** \$7,112,500

Project Description:

Construction of South Belt Stormwater Detention Basin (A520-03-00) Along Beamer Road Ditch (A120-00-00) and Dagg Road Stormwater Detention Basin on Clear Creek.

Justification:

This stormwater detention basin complements the Clear Creek Federal Project, which will reduce the risk of flooding for over 2,100 structures in the pre-Atlas 14 1% AEP (100-year) floodplain

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$18,500,000 | \$7,590,537 | \$6,848,975 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|----------------|
| O&M | \$5,000 |
| Labor | \$750 |
| Other | \$0 |
| Total | \$5,750 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-001: Rehabilitation of the Clear Creek channel to Restore Channel Conveyance Capacity

Investment Area: A - Clear Creek

Total Estimated Cost: \$25,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Rehabilitation of the Clear Creek channel to Restore Channel Conveyance Capacity.

Justification:

Major maintenance to restore channel conveyance capacity.

Maintenance projects return flood control facilities to their near intended state for optimal conveyance for the safety of the public. Maintenance projects return flood control facilities to their near intended state for optimal conveyance to allow for key county facilities and roads to be accessible. Maintenance projects return the facility to near intended state for optimal conveyance to reduce flooding risks. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$25,000,000 | \$0 | \$0 | \$6,250,000 | \$6,250,000 | \$6,250,000 | \$6,250,000 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-003: Rehabilitation of the A214-00-00 channel to Restore Channel Conveyance Capacity

Investment Area: A - Clear Creek

Total Estimated Cost: \$1,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$500,000

Project Description:

Rehabilitation of the A214-00-00 channel to Restore Channel Conveyance Capacity.

Justification:

Major maintenance to restore channel conveyance capacity.

Maintenance projects return flood control facilities to their near intended state for optimal conveyance for the safety of the public. Maintenance projects return flood control facilities to their near intended state for optimal conveyance to allow for key county facilities and roads to be accessible. Maintenance projects return the facility to near intended state for optimal conveyance to reduce flooding risks. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$1,000,000 | \$0 | \$0 | \$668,498 | \$331,502 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-013: Restore Channel Conveyance Capacity on A104-00-00

Investment Area: A - Clear Creek

Total Estimated Cost:

\$5,000,000

Bond Project: Yes

Expenditures to Date:

\$0

Approval Status: Planning

Non-County Funding – Secured:

\$0

Projected Completion: TBD

Funding Need:

\$0

Project Description:

Restore Channel Conveyance Capacity on A104-00-00.

Justification:

Major maintenance to restore channel conveyance capacity in the city of Shoreacres

Maintenance projects return flood control facilities to their near intended state for optimal conveyance for the safety of the public. Maintenance projects return flood control facilities to their near intended state for optimal conveyance to allow for key county facilities and roads to be accessible. Maintenance projects return the facility to near intended state for optimal conveyance to reduce flooding risks. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$5,000,000 | \$0 | \$0 | \$2,503,429 | \$2,496,571 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-62: Construction of Stormwater Detention Basins Near FM 528 and Dixie Farm Road in Friendswood

Investment Area: A - Clear Creek

Total Estimated Cost: \$20,000,000

Bond Project: Yes

Expenditures to Date: \$7,889,824

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$15,000,000

Project Description:

Construction of Stormwater Detention Basins Near FM 528 and Dixie Farm Road in Friendswood.

Justification:

For feasibility analysis, Bond ID CI-63 and CI-62 were evaluated together. Feasibility conclusions: (1) Proceed with the right-of-way acquisition, design, and construction of a 39-acre stormwater detention basin holding 500 acre-feet costing \$16.8 million near FM 528; (2) Additional stormwater management solutions beyond just regional detention are needed including buyouts, improving channel conveyance, and tributary detention.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$20,000,000 | \$0 | \$0 | \$9,006,943 | \$3,103,233 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-01: Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on A135-00-00

Investment Area: A - Clear Creek

Total Estimated Cost: \$2,500,000

Bond Project: Yes

Expenditures to Date: \$629,182

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: FY 2021

Funding Need: \$0

Project Description:

Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on A135-00-00.

Justification:

Could reduce the risk of flooding and could improve local drainage issues for over 350 structures in the pre-Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$2,500,000 | \$1,870,818 | \$0 | \$0 | \$0 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-02: Right-Of-Way Acquisition, Design and Construction of Hughes Stormwater Detention Basin on Clear Creek

Investment Area: A - Clear Creek

Total Estimated Cost: \$6,100,000

Bond Project: Yes

Expenditures to Date: \$2,896,011

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: FY 2023

Funding Need: \$0

Project Description:

Right-Of-Way Acquisition, Design and Construction of Hughes Stormwater Detention Basin on Clear Creek.

Justification:

This stormwater detention basin complements the Clear Creek Federal Project which will reduce the risk of flooding for over 2,100 structures in the pre-Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$6,100,000 | \$1,284,753 | \$1,919,236 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-----------------|
| O&M | \$19,000 |
| Labor | \$2,850 |
| Other | \$0 |
| Total | \$21,850 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-76: Identification, Design and Construction of the A700-01 Environmental Mitigation Bank

Investment Area: A - Clear Creek

Total Estimated Cost: \$6,650,000

Bond Project: Yes

Expenditures to Date: \$5,059,598

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: FY 2025

Funding Need: \$650,000

Project Description:

Identification, Design and Construction of the A700-01 Environmental Mitigation Bank.

Justification:

Restoration and enhancement of wetlands to create credits for wetland mitigation supporting construction of District projects and may be used for projects supporting District goals in coordination with other Harris County public agencies and municipalities.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$6,650,000 | \$1,443,693 | \$42,182 | \$73,490 | \$31,037 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Armand Bayou Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|---|-------------------|-----------------|------------------------|----------------------|----------------------|----------------------|-------------------|
| B100-00-00-E002: Widening and Deepening of Armand Bayou at Sam Houston Tollway East | No | Implementation | \$ 11,660,679 | \$ 5,904,235 | \$ 5,756,444 | \$ - | \$ - |
| C-06: Right-Of-Way Acquisition, Design and Construction of B112-00-00 and Tributaries Conveyance Improvements | Yes | Design | 7,700,000 | 504,650 | 1,426,259 | 5,769,091 | - |
| C-07: Design and Construction of the B509-03-00 and B509-04-00 Stormwater Detention Basins | Yes | Design | 15,000,000 | - | 3,350,000 | 11,650,000 | - |
| C-44: Armand Bayou Right-of-Way Acquisition and Floodplain Preservation | Yes | Design | 4,000,000 | 10,871 | - | 3,989,129 | - |
| CI-023: Right-Of-Way, Design and Construction of Conveyance Improvements along Horsepen Bayou | Yes | Design | 6,000,000 | 782,284 | 5,217,716 | - | - |
| F-72: Design and Construction of the Baywood Stormwater Detention Basin | Yes | Design | 2,000,000 | 528,270 | 1,471,730 | - | - |
| F-96: Investigations of General Drainage Improvements in Armand Bayou Watershed | Yes | Planning | 1,090,000 | 806,221 | 283,779 | - | - |
| F-99: Right-Of-Way, Design and Construction of Conveyance Improvements along Armand Bayou | Yes | Planning | 10,000,000 | - | - | 10,000,000 | - |
| Armand Bayou Total | | | \$ 57,450,679 | \$ 8,536,531 | \$ 17,505,928 | \$ 31,408,220 | - |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: B100-00-00-E002: Widening and Deepening of Armand Bayou at Sam Houston Tollway East

Investment Area: B - Armand Bayou **Total Estimated Cost:** \$11,660,679

Bond Project: No **Expenditures to Date:** \$5,904,235

Approval Status: Implementation **Non-County Funding – Secured:** \$0

Projected Completion: FY 2022 **Funding Need:** \$0

Project Description:

Widening and Deepening of Armand Bayou at Sam Houston Tollway East.

Justification:

Interlocal Agreement between HCFCD and HCTRA to take on the lead role in designing and constructing widening and deepening of Armand Bayou (B100-00-00) from Sam Houston Tollway East to Spencer Highway in Pasadena.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on projects to determine the best way to fulfill the District's mission to deliver flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$11,660,679 | \$5,756,444 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-06: Right-Of-Way Acquisition, Design and Construction of B112-00-00 and Tributaries Conveyance Improvements

Investment Area: B - Armand Bayou

Total Estimated Cost: \$7,700,000

Bond Project: Yes

Expenditures to Date: \$504,650

Approval Status: Design

Non-County Funding – Secured: \$5,700,000

Projected Completion: FY 2024

Funding Need: \$0

Project Description:

Right-Of-Way Acquisition, Design and Construction of B112-00-00 and Tributaries Conveyance Improvements.

Justification:

Design and Construction of a stormwater detention basin will reduce the risk of flooding for over 400 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$7,700,000 | \$1,426,259 | \$530,909 | \$5,238,182 | \$0 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|----------------|
| O&M | \$5,000 |
| Labor | \$750 |
| Other | \$0 |
| Total | \$5,750 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-07: Design and Construction of the B509-03-00 and B509-04-00 Stormwater Detention Basins

Investment Area: B - Armand Bayou

Total Estimated Cost: \$15,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$11,250,000

Project Description:

Design and Construction of the B509-03-00 and B509-04-00 Stormwater Detention Basins.

Justification:

Design and Construction of this stormwater detention basin could reduce the risk of flooding for over 400 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$15,000,000 | \$3,350,000 | \$4,667,673 | \$4,667,673 | \$2,314,654 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-----------------|
| O&M | \$13,000 |
| Labor | \$1,950 |
| Other | \$0 |
| Total | \$14,950 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: B - Armand Bayou

Total Estimated Cost: \$4,000,000

Bond Project: Yes

Expenditures to Date: \$10,871

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$2,000,000

Project Description:

Armand Bayou Right-of-Way Acquisition and Floodplain Preservation.

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.

Property acquisitions can benefit public safety by utilizing the land for floodplain preservation or using the land for future projects to construct levees, channels, or detention for flood mitigation and controls. This also has the potential to reduce flooding impacts by removing structures from floodways. This enhancement can be measured by considering the facilities constructed on the property or the acreage removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$4,000,000 | \$0 | \$0 | \$1,598,279 | \$1,598,279 | \$792,571 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-023: Right-Of-Way, Design and Construction of Conveyance Improvements along Horsepen Bayou

Investment Area: B - Armand Bayou **Total Estimated Cost:** \$6,000,000

Bond Project: Yes **Expenditures to Date:** \$782,284

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: FY 2022 **Funding Need:** \$0

Project Description:

Right-Of-Way, Design and Construction of Conveyance Improvements along Horsepen Bayou.

Justification:

Project could reduce the risk of flooding for more than 250 structures in the watershed in the Atlas 14 1% AEP (100-year) flooding. Some project costs will be determined based on partnership with NASA.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$6,000,000 | \$5,217,716 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-----------------|
| O&M | \$17,000 |
| Labor | \$2,550 |
| Other | \$0 |
| Total | \$19,550 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-72: Design and Construction of the Baywood Stormwater Detention Basin

Investment Area: B - Armand Bayou

Total Estimated Cost: \$2,000,000

Bond Project: Yes

Expenditures to Date: \$528,270

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: FY 2021

Funding Need: \$0

Project Description:

Design and Construction of the Baywood Stormwater Detention Basin.

Justification:

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

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$2,000,000 | \$1,471,730 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-----------------|
| O&M | \$21,000 |
| Labor | \$3,150 |
| Other | \$0 |
| Total | \$24,150 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: B - Armand Bayou **Total Estimated Cost:** \$1,090,000

Bond Project: Yes **Expenditures to Date:** \$806,221

Approval Status: Planning **Non-County Funding – Secured:** \$950,000

Projected Completion: TBD **Funding Need:** \$140,000

Project Description:

Investigations of General Drainage Improvements in Armand Bayou Watershed.

Justification:

Effort will investigate drainage deficiencies, flooding problems and evaluate potential solutions to reduce the risk of flooding in the Armand Bayou watershed for more than 1,200 structures in the Atlas 14 1% AEP (100-year) floodplain.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$1,090,000 | \$283,779 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-99: Right-Of-Way, Design and Construction of Conveyance Improvements along Armand Bayou

Investment Area: B - Armand Bayou **Total Estimated Cost:** \$10,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Right-Of-Way, Design and Construction of Conveyance Improvements along Armand Bayou.

Justification:

Design and construction of projects to reduce the risk of flooding in the Armand Bayou watershed for more than 400 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$0 | \$0 | \$3,336,380 | \$3,336,380 | \$3,327,240 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Sims Bayou Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|-------------------|------------------------|------------------------|----------------------|----------------------|-----------------------|-------------------|
| C-08: Right-Of-Way Acquisition, Design, and Construction of Stormwater Detention Basin and Channel Conveyance Improvements along Salt Water Ditch | Yes | Preliminary Investment | \$ 50,000,000 | \$ 936,326 | \$ 3,977,811 | \$ 45,085,863 | \$ - |
| C-09: Right-Of-Way Acquisition, Design, and Construction of South Post Oak Stormwater Detention Basin and Channel Conveyance Improvements along C147-00-00 | Yes | Preliminary Investment | 18,170,000 | 788,689 | 1,446,311 | 15,935,000 | - |
| C-10: Design and Construction of South Shaver Stormwater Detention Basin | Yes | Design | 15,000,000 | 6,358 | 3,782,077 | 11,211,565 | - |
| C106-03-00-C007: Phase 4 Channel Conveyance Improvements | No | Implementation | 6,783,158 | 1,187,225 | 5,595,933 | - | - |
| CI-027: Planning, Right-Of-Way Acquisition, Design, and Construction of Improvements for the Tributaries of C106-00-00 | Yes | Planning | 2,000,000 | - | - | 2,000,000 | - |
| CI-029: Restore Channel Conveyance Capacity Along C102-00-00 | Yes | Design | 30,000,000 | - | - | 30,000,000 | - |
| CI-037: Restore Channel Conveyance Capacity Along C146-00-00 | Yes | Planning | 30,000,000 | - | - | 30,000,000 | - |
| F-92: Planning, Right-Of-Way Acquisition, Design and Construction Along C116-00-00 | Yes | Planning | 10,000,000 | - | 550,000 | 9,450,000 | - |
| F-93: Planning, Right-Of-Way Acquisition, Design and Construction Along C124-00-00 | Yes | Planning | 10,000,000 | - | - | 10,000,000 | - |
| F-94: Planning, Right-Of-Way Acquisition, Design and Construction Along C143-00-00 | Yes | Planning | 10,000,000 | - | 350,000 | 9,650,000 | - |
| F-95: Planning, Right-Of-Way Acquisition, Design and Construction Along C144-00-00 | Yes | Planning | 10,000,000 | - | 250,000 | 9,750,000 | - |
| Sims Bayou Total | | | \$ 191,953,158 | \$ 2,918,598 | \$ 15,952,132 | \$ 173,082,428 | - |

Harris County FY 2021-2022 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

Investment Area: C - Sims Bayou **Total Estimated Cost:** \$50,000,000

Bond Project: Yes **Expenditures to Date:** \$936,326

Approval Status: Preliminary Investment **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$37,500,000

Project Description:

Right-Of-Way Acquisition, Design, and Construction of Stormwater Detention Basin and Channel Conveyance Improvements along Salt Water Ditch. The project will be coordinated with City of Houston.

Justification:

The project could reduce the risk of flooding for over 1,900 structures near C118-00-00 in the pre-Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$50,000,000 | \$3,977,811 | \$4,144,970 | \$15,952,319 | \$12,511,426 | \$12,477,148 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 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

Investment Area: C - Sims Bayou **Total Estimated Cost:** \$18,170,000

Bond Project: Yes **Expenditures to Date:** \$788,689

Approval Status: Preliminary Investment **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$13,627,500

Project Description:

Right-Of-Way Acquisition, Design, and Construction of South Post Oak Stormwater Detention Basin and Channel Conveyance Improvements along C147-00-00.

Justification:

The project could reduce the risk of flooding for over 210 structures in the pre-Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$18,170,000 | \$1,446,311 | \$2,658,261 | \$5,316,522 | \$5,316,522 | \$2,643,695 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-10: Design and Construction of South Shaver Stormwater Detention Basin

Investment Area: C - Sims Bayou

Total Estimated Cost: \$15,000,000

Bond Project: Yes

Expenditures to Date: \$6,358

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: FY 2025

Funding Need: \$11,250,000

Project Description:

Design and Construction of South Shaver Stormwater Detention Basin.

Justification:

This project could reduce the risk of flooding for more than 440 structures in the Atlas 14 1% AEP (100-year) floodplain. The project will be coordinated with City of Houston.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$15,000,000 | \$3,782,077 | \$4,492,010 | \$4,492,010 | \$2,227,545 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-----------------|
| O&M | \$20,000 |
| Labor | \$3,000 |
| Other | \$0 |
| Total | \$23,000 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C106-03-00-C007: Phase 4 Channel Conveyance Improvements

Investment Area: C - Sims Bayou

Total Estimated Cost: \$6,783,158

Bond Project: No

Expenditures to Date: \$1,187,225

Approval Status: Implementation

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$3,241,461

Project Description:

Phase 4 Channel conveyance improvements that will construct approximately 4,790 LF of channel conveyance improvements in Sims Bayou

Justification:

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$6,783,158 | \$5,595,933 | \$0 | \$0 | \$0 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-027: Planning, Right-Of-Way Acquisition, Design, and Construction of Improvements for the Tributaries of C106-00-00

Investment Area: C - Sims Bayou **Total Estimated Cost:** \$2,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Planning, Right-Of-Way Acquisition, Design, and Construction of Improvements for the Tributaries of C106-00-00.

Justification:

The project could reduce the risk of flooding for structures along tributaries of C106-00-00. Project will be coordinated with City of South Houston and City of Houston.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$2,000,000 | \$0 | \$0 | \$1,336,996 | \$663,004 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-029: Restore Channel Conveyance Capacity Along C102-00-00

Investment Area: C - Sims Bayou **Total Estimated Cost:** \$30,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$15,000,000

Project Description:

Restore Channel Conveyance Capacity Along C102-00-00.

Justification:

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

Maintenance projects return flood control facilities to their near intended state for optimal conveyance for the safety of the public. Maintenance projects return flood control facilities to their near intended state for optimal conveyance to allow for key county facilities and roads to be accessible. Maintenance projects return the facility to near intended state for optimal conveyance to reduce flooding risks. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$30,000,000 | \$0 | \$0 | \$10,009,141 | \$10,009,141 | \$9,981,718 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-037: Restore Channel Conveyance Capacity Along C146-00-00

Investment Area: C - Sims Bayou **Total Estimated Cost:** \$30,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$15,000,000

Project Description:

Restore Channel Conveyance Capacity Along C146-00-00.

Justification:

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

Maintenance projects return flood control facilities to their near intended state for optimal conveyance for the safety of the public. Maintenance projects return flood control facilities to their near intended state for optimal conveyance to allow for key county facilities and roads to be accessible. Maintenance projects return the facility to near intended state for optimal conveyance to reduce flooding risks. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$30,000,000 | \$0 | \$7,489,712 | \$7,510,288 | \$7,510,288 | \$7,489,712 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-92: Planning, Right-Of-Way Acquisition, Design and Construction Along C116-00-00

Investment Area: C - Sims Bayou

Total Estimated Cost: \$10,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Planning, Right-Of-Way Acquisition, Design and Construction Along C116-00-00.

Justification:

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

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$550,000 | \$3,152,879 | \$3,152,880 | \$3,144,241 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-93: Planning, Right-Of-Way Acquisition, Design and Construction Along C124-00-00

Investment Area: C - Sims Bayou

Total Estimated Cost: \$10,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Planning, Right-Of-Way Acquisition, Design and Construction Along C124-00-00.

Justification:

Could reduce the risk of flooding and could improve local drainage issues for buildings along the channel. Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$0 | \$0 | \$3,336,380 | \$3,336,380 | \$3,327,240 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-94: Planning, Right-Of-Way Acquisition, Design and Construction Along C143-00-00

Investment Area: C - Sims Bayou

Total Estimated Cost: \$10,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Planning, Right-Of-Way Acquisition, Design and Construction Along C143-00-00.

Justification:

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

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$350,000 | \$3,219,607 | \$3,219,607 | \$3,210,786 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-95: Planning, Right-Of-Way Acquisition, Design and Construction Along C144-00-00

Investment Area: C - Sims Bayou

Total Estimated Cost: \$10,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Planning, Right-Of-Way Acquisition, Design and Construction Along C144-00-00.

Justification:

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

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$250,000 | \$0 | \$3,252,971 | \$3,252,970 | \$3,244,059 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Brays Bayou Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|-------------------|------------------------|------------------------|----------------------|----------------------|-----------------------|----------------------|
| C-11: Design and Construction of Project Brays Corps of Engineers Section 211(f) Project | Yes | Implementation | \$ 76,500,000 | \$ 55,877,928 | \$ 20,507,347 | \$ 114,725 | \$ - |
| C-12: Right-Of-Way, Design and Construction of Conveyance Improvements along Poor Farm Ditch | Yes | Planning | 19,010,000 | - | - | 19,010,000 | - |
| C-13: Planning, Right-Of-Way, Design and Construction of Conveyance Improvements along Bintliff Ditch | Yes | Preliminary Investment | 30,000,000 | - | 90,000 | 29,910,000 | - |
| CI-025: Investigation of Additional Stormwater Detention Basins in the Brays Bayou Watershed | Yes | Planning | 200,000 | - | 200,000 | - | - |
| CI-034: Investigation of Channel Improvements Upstream of Fondren Road on Brays Bayou | Yes | Planning | 250,000 | - | 250,000 | - | - |
| CI-038: Restore Channel Conveyance Capacity Along D115-00-00 | Yes | Planning | 30,000,000 | - | - | 30,000,000 | - |
| D111-00-00-C001: Poor Farm Ditch Conveyance Improvements | No | Design | 9,600,000 | 1,188,226 | 3,201,518 | 5,210,256 | - |
| F-07: Planning, Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on Keegans Bayou | Yes | Design | 32,500,000 | 163,059 | 668,841 | 25,317,128 | 6,350,972 |
| F-08: Planning, Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on Fondren Diversion Channel | Yes | Planning | 30,500,000 | - | 750,000 | 26,031,250 | 3,718,750 |
| Brays Bayou Total | | | \$ 228,560,000 | \$ 57,229,213 | \$ 25,667,706 | \$ 135,593,359 | \$ 10,069,722 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-11: Design and Construction of Project Brays Corps of Engineers Section 211(f) Project

Investment Area: D - Brays Bayou

Total Estimated Cost: \$76,500,000

Bond Project: Yes

Expenditures to Date: \$55,877,928

Approval Status: Implementation

Non-County Funding – Secured: \$75,000,000

Projected Completion: FY 2022

Funding Need: \$1,500,000

Project Description:

Design and Construction of Project Brays Corps of Engineers Section 211(f) Project.

Justification:

The pre-Atlas 14 1% AEP (100-year) floodplain could be removed from up to 15,000 structures as part of Project Brays.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$76,500,000 | \$20,507,347 | \$114,725 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: D - Brays Bayou **Total Estimated Cost:** \$19,010,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$14,510,000

Project Description:

Right-Of-Way, Design and Construction of Conveyance Improvements along Poor Farm Ditch.

Justification:

The project could reduce the risk of flooding for over 270 structures in the 1% floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$19,010,000 | \$0 | \$0 | \$6,455,896 | \$6,455,896 | \$6,098,208 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: D - Brays Bayou

Total Estimated Cost: \$30,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Preliminary Investment

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$22,500,000

Project Description:

Planning, Right-Of-Way, Design and Construction of Conveyance Improvements along Bintliff Ditch.

Justification:

The project could reduce the risk of flooding for over 720 structures in the pre-Atlas 14 1% AEP (100-year) floodplain. The project will be coordinated with City of Houston.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$30,000,000 | \$90,000 | \$4,989,557 | \$9,979,113 | \$9,979,113 | \$4,962,218 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-025: Investigation of Additional Stormwater Detention Basins in the Brays Bayou Watershed

Investment Area: D - Brays Bayou

Total Estimated Cost: \$200,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Investigation of Additional Stormwater Detention Basins in the Brays Bayou Watershed.

Justification:

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

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$200,000 | \$200,000 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-034: Investigation of Channel Improvements Upstream of Fondren Road on Brays Bayou

Investment Area: D - Brays Bayou **Total Estimated Cost:** \$250,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Investigation of Channel Improvements Upstream of Fondren Road on Brays Bayou.

Justification:

This project could reduce the risk of flooding along Brays Bayou.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$250,000 | \$250,000 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-038: Restore Channel Conveyance Capacity Along D115-00-00

Investment Area: D - Brays Bayou

Total Estimated Cost:

\$30,000,000

Bond Project: Yes

Expenditures to Date:

\$0

Approval Status: Planning

Projected Completion: TBD

Non-County Funding – Secured:

\$0

Funding Need:

\$15,000,000

Project Description:

Restore Channel Conveyance Capacity Along D115-00-00.

Justification:

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

Maintenance projects return flood control facilities to their near intended state for optimal conveyance for the safety of the public. Maintenance projects return flood control facilities to their near intended state for optimal conveyance to allow for key county facilities and roads to be accessible. Maintenance projects return the facility to near intended state for optimal conveyance to reduce flooding risks. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$30,000,000 | \$0 | \$7,489,712 | \$7,510,288 | \$7,510,288 | \$7,489,712 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: D111-00-00-C001: Poor Farm Ditch Conveyance Improvements

Investment Area: D - Brays Bayou

Total Estimated Cost:

\$9,600,000

Bond Project: No

Expenditures to Date:

\$1,188,226

Approval Status: Design

Non-County Funding – Secured:

\$0

Projected Completion: FY 2021

Funding Need:

\$8,410,746

Project Description:

Poor Farm Ditch Conveyance Improvements.

Justification:

The improvements to Poor Farm Ditch Conveyance will greatly improve flood control in the Brays Bayou watershed.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$9,600,000 | \$3,201,518 | \$5,210,256 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: D - Brays Bayou **Total Estimated Cost:** \$32,500,000

Bond Project: Yes **Expenditures to Date:** \$163,059

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Planning, Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on Keegans Bayou.

Justification:

Right of way acquisition, design and construction of this project could reduce the risk flooding for over 900 structures in the pre-Atlas 14 1% AEP (100-year) floodplain. Project will be coordinated with City of Houston.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$32,500,000 | \$668,841 | \$6,316,268 | \$6,333,620 | \$6,333,620 | \$6,333,620 | \$6,350,972 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: D - Brays Bayou **Total Estimated Cost:** \$30,500,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Planning, Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on Fondren Diversion Channel.

Justification:

Right of way acquisition, design and construction of this project could reduce the risk of flooding for over 400 structures in the pre-Atlas 14 1% AEP (100-year) floodplain. Project will be coordinated with City of Houston.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$30,500,000 | \$750,000 | \$3,718,750 | \$7,437,500 | \$7,437,500 | \$7,437,500 | \$3,718,750 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - White Oak Bayou Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|-------------------|------------------------|------------------------|----------------------|----------------------|-----------------------|----------------------|
| C-14: Design and Construction of Corps of Engineers White Oak Bayou Section 211(f) Project | Yes | Implementation | \$ 45,000,000 | \$ 10,299,011 | \$ 30,830,048 | \$ 3,870,941 | \$ - |
| C-15: Design and Construction of Arbor Oaks Stormwater Detention Basin | Yes | Design | 13,300,000 | 300,670 | 5,245,006 | 7,754,324 | - |
| C-16: Design and Construction of Woodland Trails Stormwater Detention Basin | Yes | Preliminary Investment | 56,410,000 | - | 4,429,596 | 51,980,404 | - |
| C-39: Right-of-Way Acquisition, Design and Construction of the North Canal | Yes | Design | 131,249,359 | - | 1,840,106 | 82,116,058 | 47,293,195 |
| C-59: Construction of Inwood Forest Stormwater Detention Basin | Yes | Design | 47,000,000 | 1,083,956 | 23,641,557 | 22,274,487 | - |
| CI-010: Partnership Project with Jersey Village on Right-of-Way Acquisition, Design, and Construction of General Drainage Improvements along E127-00-00 | Yes | Planning | 3,000,000 | - | - | 3,000,000 | - |
| CI-011: Partnership Project with the City of Houston for Feasibility Study of General Drainage Improvements around Hidden Lake Townhomes | Yes | Planning | 350,000 | - | 350,000 | - | - |
| CI-030: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements along Turkey Gully | Yes | Design | 40,000,000 | - | - | 30,000,000 | 10,000,000 |
| CI-032: Investigation of Additional Stormwater Detention Basins in the White Oak Bayou Watershed | Yes | Planning | 250,000 | - | 250,000 | - | - |
| 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 | Yes | Planning | 2,000,000 | - | 154,559 | 1,845,441 | - |
| F-09: Planning, Right-Of-Way Acquisition, Design and Construction of Little White Oak Bayou Channel Conveyance Improvements | Yes | Design | 30,000,000 | 9,108,130 | 1,117,987 | 19,773,883 | - |
| F-10: Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on Brickhouse Gully | Yes | Design | 35,000,000 | - | - | 27,980,822 | 7,019,178 |
| White Oak Bayou Total | | | \$ 403,559,359 | \$ 20,791,767 | \$ 67,858,859 | \$ 250,596,360 | \$ 64,312,373 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-14: Design and Construction of Corps of Engineers White Oak Bayou Section 211(f) Project

Investment Area: E - White Oak Bayou **Total Estimated Cost:** \$45,000,000

Bond Project: Yes **Expenditures to Date:** \$10,299,011

Approval Status: Implementation **Non-County Funding – Secured:** \$45,000,000

Projected Completion: FY 2022 **Funding Need:** \$0

Project Description:

Design and Construction of Corps of Engineers White Oak Bayou Section 211(f) Project.

Justification:

The pre-Atlas 14 1% AEP (100-year) floodplain could be removed from up to 1,500 structures as part of this federal project.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$45,000,000 | \$30,830,048 | \$3,870,941 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-15: Design and Construction of Arbor Oaks Stormwater Detention Basin

Investment Area: E - White Oak Bayou **Total Estimated Cost:** \$13,300,000

Bond Project: Yes **Expenditures to Date:** \$300,670

Approval Status: Design **Non-County Funding – Secured:** \$10,800,000

Projected Completion: FY 2024 **Funding Need:** \$0

Project Description:

Design and Construction of Arbor Oaks Stormwater Detention Basin.

Justification:

This stormwater detention basin compliments the federal project on White Oak Bayou, which will reduce the risk of flooding for 1,800 structures in the Atlas 14 1% AEP (100-year) floodplain. The project will be coordinated with City of Houston.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$13,300,000 | \$5,245,006 | \$3,555,166 | \$4,199,158 | \$0 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|-----------------|
| O&M | \$14,000 |
| Labor | \$2,100 |
| Other | \$0 |
| Total | \$16,100 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-16: Design and Construction of Woodland Trails Stormwater Detention Basin

Investment Area: E - White Oak Bayou **Total Estimated Cost:** \$56,410,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Preliminary Investment **Non-County Funding – Secured:** \$0

Projected Completion: FY 2026 **Funding Need:** \$48,660,000

Project Description:

Design and Construction of Woodland Trails Stormwater Detention Basin.

Justification:

This stormwater detention basin compliments the federal project on White Oak Bayou which will reduce the risk of flooding for 1,800 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$56,410,000 | \$4,429,596 | \$13,253,933 | \$13,455,787 | \$25,270,684 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-39: Right-of-Way Acquisition, Design and Construction of the North Canal

Investment Area: E - White Oak Bayou

Total Estimated Cost: \$131,249,359

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Design

Non-County Funding – Secured: \$111,249,359

Projected Completion: TBD

Funding Need: \$0

Project Description:

Right-of-Way Acquisition, Design and Construction of the North Canal.

Justification:

Design and construction of this project will reduce the risk of flooding upstream and downstream of downtown Houston. The project will be led by City of Houston.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$100,000,000 | \$1,840,106 | \$25,384,843 | \$24,731,215 | \$16,000,000 | \$16,000,000 | \$47,293,195 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-----------------|
| O&M | \$66,825 |
| Labor | \$10,024 |
| Other | \$0 |
| Total | \$76,849 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-59: Construction of Inwood Forest Stormwater Detention Basin

Investment Area: E - White Oak Bayou **Total Estimated Cost:** \$47,000,000

Bond Project: Yes **Expenditures to Date:** \$1,083,956

Approval Status: Design **Non-County Funding – Secured:** \$35,000,000

Projected Completion: FY 2023 **Funding Need:** \$0

Project Description:

Construction of Inwood Forest Stormwater Detention Basin.

Justification:

Design and construction of this project will reduce the risk of flooding for over 130 structures in the pre-Atlas 14 1% AEP (100-year) floodplain. The project will be coordinated with City of Houston.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$47,000,000 | \$23,641,557 | \$22,274,487 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|----------------|
| O&M | \$8,000 |
| Labor | \$1,200 |
| Other | \$0 |
| Total | \$9,200 |

Harris County FY 2021-2022 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

Investment Area: E - White Oak Bayou **Total Estimated Cost:** \$3,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$1,500,000

Project Description:

Partnership Project with Jersey Village on Right-of-Way Acquisition, Design, and Construction of General Drainage Improvements along E127-00-00.

Justification:

Planning, right of way acquisition, design and construction of this project could reduce the risk of flooding for homes along E127-00-00.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$3,000,000 | \$0 | \$0 | \$1,502,058 | \$1,497,942 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 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

Investment Area: E - White Oak Bayou **Total Estimated Cost:** \$350,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$175,000

Project Description:

Partnership Project with the City of Houston for Feasibility Study of General Drainage Improvements around Hidden Lake Townhomes.

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.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$350,000 | \$350,000 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-030: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements along Turkey Gully

Investment Area: E - White Oak Bayou

Total Estimated Cost: \$40,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$30,000,000

Project Description:

Right-of-Way Acquisition, Design and Construction of General Drainage Improvements along Turkey Gully.

Justification:

Project could reduce the risk of flooding for structures along Turkey Gully in partnership with the City of Houston. Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$40,000,000 | \$0 | \$0 | \$10,000,000 | \$10,000,000 | \$10,000,000 | \$10,000,000 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-032: Investigation of Additional Stormwater Detention Basins in the White Oak Bayou Watershed

Investment Area: E - White Oak Bayou

Total Estimated Cost: \$250,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$125,000

Project Description:

Investigation of Additional Stormwater Detention Basins in the White Oak Bayou Watershed.

Justification:

The project could reduce the risk of flooding for structures in the watershed. Project will be coordinated with existing COH plans.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$250,000 | \$250,000 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 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

Investment Area: E - White Oak Bayou **Total Estimated Cost:** \$2,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$1,000,000

Project Description:

Partnership Project with City of Houston on Planning, Right-of-Way Acquisition, Design, and Construction of General Drainage Improvements along E105-00-00.

Justification:

Planning, right of way acquisition, design and construction of this project could reduce the risk of flooding for homes along E105-00-00. Project will be coordinated with the City of Houston.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$2,000,000 | \$154,559 | \$86,504 | \$1,267,644 | \$267,645 | \$223,648 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-09: Planning, Right-Of-Way Acquisition, Design and Construction of Little White Oak Bayou Channel Conveyance Improvements

Investment Area: E - White Oak Bayou **Total Estimated Cost:** \$30,000,000

Bond Project: Yes **Expenditures to Date:** \$9,108,130

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Planning, Right-Of-Way Acquisition, Design and Construction of Little White Oak Bayou Channel Conveyance Improvements.

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 pre-Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$30,000,000 | \$1,117,987 | \$412,741 | \$9,598,497 | \$5,447,397 | \$4,315,248 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|----------------|
| O&M | \$1,612 |
| Labor | \$242 |
| Other | \$0 |
| Total | \$1,854 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-10: Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on Brickhouse Gully

Investment Area: E - White Oak Bayou **Total Estimated Cost:** \$35,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on Brickhouse Gully.

Justification:

Right of way acquisition, design and construction of this project could reduce the risk of flooding for over 1,300 structures in the pre-Atlas 14 1% AEP (100-year) floodplain. Project will be coordinated with City of Houston.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$35,000,000 | \$0 | \$6,980,822 | \$7,000,000 | \$7,000,000 | \$7,000,000 | \$7,019,178 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Galveston Bay Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|--------------------------|------------------------|-------------------------------|-----------------------------|---------------------|----------------------|--------------------------|
| <u>C-57: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements Along F216-00-00</u> | Yes | Planning | \$ 10,000,000 | \$ - | \$ 378,378 | \$ 9,621,622 | \$ - |
| <u>C-58: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements Along F101-06-00</u> | Yes | Design | 20,000,000 | 142,723 | 1,800,638 | 18,056,639 | - |
| <u>F-101: Investigations of General Drainage Improvements in Galveston Bay Watershed</u> | Yes | Planning | 450,000 | 398,191 | 51,809 | - | - |
| <u>F-98: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Galveston Bay Watershed</u> | Yes | Planning | 4,000,000 | - | - | 4,000,000 | - |
| Galveston Bay Total | | | \$ 34,450,000 | \$ 540,914 | \$ 2,230,825 | \$ 31,678,261 | - |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-57: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements Along F216-00-00

Investment Area: F - Galveston Bay

Total Estimated Cost: \$10,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$2,000,000

Project Description:

Right-of-Way Acquisition, Design and Construction of General Drainage Improvements Along F216-00-00.

Justification:

This project is designed to reduce the risk of flooding along F216-00-00. Specific benefits will be determined once more of the project is scoped and planned.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$378,378 | \$21,622 | \$3,202,925 | \$3,202,925 | \$3,194,150 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-58: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements Along F101-06-00

Investment Area: F - Galveston Bay

Total Estimated Cost: \$20,000,000

Bond Project: Yes

Expenditures to Date: \$142,723

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: FY 2022

Funding Need: \$4,000,000

Project Description:

Right-of-Way Acquisition, Design and Construction of General Drainage Improvements Along F101-06-00.

Justification:

The project could reduce the risk of flooding for over 40 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$20,000,000 | \$1,800,638 | \$3,071,429 | \$4,999,636 | \$4,999,636 | \$4,985,938 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-101: Investigations of General Drainage Improvements in Galveston Bay Watershed

Investment Area: F - Galveston Bay

Total Estimated Cost: \$450,000

Bond Project: Yes

Expenditures to Date: \$398,191

Approval Status: Planning

Non-County Funding – Secured: \$450,000

Projected Completion: TBD

Funding Need: \$0

Project Description:

Investigations of General Drainage Improvements in Galveston Bay Watershed.

Justification:

Effort will investigate drainage deficiencies and flooding problems and evaluate potential solutions to reduce the risk of flooding in the Galveston Bay watershed for more than 300 structures in the Atlas 14 1% AEP (100-year) floodplain.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$450,000 | \$51,809 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-98: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Galveston Bay Watershed

| | | |
|---|--------------------------------------|-------------|
| Investment Area: F - Galveston Bay | Total Estimated Cost: | \$4,000,000 |
| Bond Project: Yes | Expenditures to Date: | \$0 |
| Approval Status: Planning | Non-County Funding – Secured: | \$0 |
| Projected Completion: TBD | Funding Need: | \$0 |

Project Description:

Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Galveston Bay Watershed.

Justification:

Design and construction of a project to reduce the risk of flooding in the Galveston Bay watershed for more than 50 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$4,000,000 | \$0 | \$0 | \$1,602,635 | \$1,602,634 | \$794,731 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - San Jacinto River Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|---|--------------------------|------------------------|-------------------------------|-----------------------------|---------------------|-----------------------|--------------------------|
| <u>C-17: San Jacinto River Watershed Study</u> | Yes | Planning | \$ 3,333,208 | \$ 2,619,800 | \$ 713,408 | \$ - | \$ - |
| <u>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</u> | Yes | Planning | 75,000,000 | - | - | 59,958,904 | 15,041,096 |
| <u>CI-019: Investigations of Potential Detention Sites Around Glendale Dredge Site in Partnership with the City of Houston</u> | Yes | Planning | 100,000 | - | 100,000 | - | - |
| <u>CI-028: Design and Construction of Additional Gates on Lake Houston in Partnership with the City of Houston</u> | Yes | Preliminary Investment | 70,000,000 | - | 1,500,000 | 54,762,466 | 13,737,534 |
| <u>CI-60: Planning, Right-Of-Way, Design and Construction of Conveyance Improvements along Panther Creek</u> | Yes | Planning | 10,000,000 | 269,629 | 330,372 | 9,399,999 | - |
| <u>CI-61: East Fork, West Fork and Lake Houston Dredging</u> | Yes | Planning | 50,000,000 | - | - | 39,972,603 | 10,027,397 |
| <u>F-111: Planning, Right-Of-Way Acquisition, Design and Construction of General Drainage Improvements East of Lake Houston</u> | Yes | Planning | 10,000,000 | - | - | 10,000,000 | - |
| <u>F-15: Planning, Right-Of-Way Acquisition, Design and Construction of General Drainage Improvements Near Atascocita</u> | Yes | Planning | 10,000,000 | - | - | 10,000,000 | - |
| San Jacinto River Total | | | \$ 228,433,208 | \$ 2,889,429 | \$ 2,643,780 | \$ 184,093,972 | \$ 38,806,027 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-17: San Jacinto River Watershed Study

Investment Area: G - San Jacinto River

Total Estimated Cost:

\$3,333,208

Bond Project: Yes

Expenditures to Date:

\$2,619,800

Approval Status: Planning

Non-County Funding – Secured:

\$2,031,156

Projected Completion: TBD

Funding Need:

\$0

Project Description:

San Jacinto River Watershed Study.

Justification:

This effort will investigate drainage deficiencies, flooding problems and evaluate potential solutions to reduce the risk of flooding in the San Jacinto River watershed for more than 18,500 structures in the Atlas 14 1% AEP (100-year) floodplain.

Planning projects help the District to determine the feasibility of further projects to improve flood mitigation and controls to benefit public safety. These future projects could include acquiring property for floodplain preservation, establishing sensitive habitats, or constructing levees, channels or detention. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects that are initiated from the feasibility study that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$3,333,208 | \$713,408 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 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

| | | |
|--|---|--------------|
| <u>Investment Area:</u> G - San Jacinto River | <u>Total Estimated Cost:</u> | \$75,000,000 |
| <u>Bond Project:</u> Yes | <u>Expenditures to Date:</u> | \$0 |
| <u>Approval Status:</u> Planning | <u>Non-County Funding – Secured:</u> | \$0 |
| <u>Projected Completion:</u> TBD | <u>Funding Need:</u> | \$56,250,000 |

Project Description:

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.

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.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$75,000,000 | \$0 | \$14,958,904 | \$15,000,000 | \$15,000,000 | \$15,000,000 | \$15,041,096 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-019: Investigations of Potential Detention Sites Around Glendale Dredge Site in Partnership with the City of Houston

Investment Area: G - San Jacinto River

Total Estimated Cost: \$100,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$50,000

Project Description:

Investigations of Potential Detention Sites Around Glendale Dredge Site in Partnership with the City of Houston.

Justification:

Study will investigate potential sites and benefits for detention in and around Glendale Dredge site in partnership with the City of Houston.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$100,000 | \$100,000 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-028: Design and Construction of Additional Gates on Lake Houston in Partnership with the City of Houston

Investment Area: G - San Jacinto River **Total Estimated Cost:** \$70,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Preliminary Investment **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$50,000,000

Project Description:

Design and Construction of Additional Gates on Lake Houston in Partnership with the City of Houston.

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. Project will be led by the City of Houston.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$70,000,000 | \$1,500,000 | \$13,662,466 | \$13,700,000 | \$13,700,000 | \$13,700,000 | \$13,737,534 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-60: Planning, Right-Of-Way, Design and Construction of Conveyance Improvements along Panther Creek

Investment Area: G - San Jacinto River

Total Estimated Cost: \$10,000,000

Bond Project: Yes

Expenditures to Date: \$269,629

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Planning, Right-Of-Way, Design and Construction of Conveyance Improvements along Panther Creek.

Justification:

Planning, right of way acquisition, design and construction of projects could reduce the risk of flooding along Panther Creek.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$330,372 | \$3,136,197 | \$3,136,197 | \$3,127,605 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-61: East Fork, West Fork and Lake Houston Dredging

Investment Area: G - San Jacinto River **Total Estimated Cost:** \$50,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$40,000,000

Project Description:

East Fork, West Fork and Lake Houston Dredging.

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.

Maintenance projects return flood control facilities to their near intended state for optimal conveyance for the safety of the public. Maintenance projects return flood control facilities to their near intended state for optimal conveyance to allow for key county facilities and roads to be accessible. Maintenance projects return the facility to near intended state for optimal conveyance to reduce flooding risks. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$50,000,000 | \$0 | \$9,972,603 | \$10,000,000 | \$10,000,000 | \$10,000,000 | \$10,027,397 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-111: Planning, Right-Of-Way Acquisition, Design and Construction of General Drainage Improvements East of Lake Houston

Investment Area: G - San Jacinto River **Total Estimated Cost:** \$10,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Planning, Right-Of-Way Acquisition, Design and Construction of General Drainage Improvements East of Lake Houston.

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.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$0 | \$0 | \$3,336,380 | \$3,336,380 | \$3,327,240 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-15: Planning, Right-Of-Way Acquisition, Design and Construction of General Drainage Improvements Near Atascocita

Investment Area: G - San Jacinto River

Total Estimated Cost: \$10,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Planning, Right-Of-Way Acquisition, Design and Construction of General Drainage Improvements Near Atascocita.

Justification:

This project could reduce the risk of flooding and facilitate drainage improvements in the area of Atascocita in the San Jacinto River watershed.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$0 | \$0 | \$3,336,380 | \$3,336,380 | \$3,327,240 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Hunting Bayou Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|--------------------------|------------------------|-------------------------------|-----------------------------|----------------------|----------------------|--------------------------|
| <u>C-18: Design and Construction of Corps of Engineers Hunting Bayou, Section 211(f) Project</u> | Yes | Implementation | \$ 65,000,000 | \$ 8,167,407 | \$ 20,903,699 | \$ 35,928,894 | \$ - |
| <u>CI-031: District Cost Share of Study with the City of Houston on Wallisville Outfall</u> | Yes | Planning | 700,000 | - | 700,000 | - | - |
| <u>CI-59: Planning, Right-Of-Way, Design and Construction of a Diversion Channel from H102-00-00 to H100-00-00 through Galena Park</u> | Yes | Planning | 10,000,000 | - | - | 7,500,000 | 2,500,000 |
| <u>F-17: Right-Of-Way Acquisition, Design and Construction of Wallisville Outfall</u> | Yes | Design | 10,000,000 | - | - | 7,500,000 | 2,500,000 |
| Hunting Bayou Total | | | \$ 85,700,000 | \$ 8,167,407 | \$ 21,603,699 | \$ 50,928,894 | \$ 5,000,000 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-18: Design and Construction of Corps of Engineers Hunting Bayou, Section 211(f) Project

Investment Area: H - Hunting Bayou **Total Estimated Cost:** \$65,000,000

Bond Project: Yes **Expenditures to Date:** \$8,167,407

Approval Status: Implementation **Non-County Funding – Secured:** \$65,000,000

Projected Completion: FY 2022 **Funding Need:** \$0

Project Description:

Design and Construction of Corps of Engineers Hunting Bayou, Section 211(f) Project.

Justification:

The pre-Atlas 14 1% AEP (100-year) floodplain will be removed from up to 4,450 structures as part of this federal project.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$65,000,000 | \$20,903,699 | \$20,153,356 | \$7,898,589 | \$7,876,949 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

| | | | |
|---|--------------------------------------|-----------|--|
| Project Name: CI-031: District Cost Share of Study with the City of Houston on Wallisville Outfall | | | |
| Investment Area: H - Hunting Bayou | Total Estimated Cost: | \$700,000 | |
| Bond Project: Yes | Expenditures to Date: | \$0 | |
| Approval Status: Planning | Non-County Funding – Secured: | \$0 | |
| Projected Completion: TBD | Funding Need: | \$200,000 | |

Project Description:

District Cost Share of Study with the City of Houston on Wallisville Outfall.

Justification:

Study will investigate flooding problems and identify potential solutions along the H103-00-00 channel. Project will be coordinated with City of Houston.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$700,000 | \$700,000 | \$0 | \$0 | \$0 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 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

Investment Area: H - Hunting Bayou **Total Estimated Cost:** \$10,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Planning, Right-Of-Way, Design and Construction of a Diversion Channel from H102-00-00 to H100-00-00 through Galena Park.

Justification:

The project could reduce the risk of flooding for structures in lower Hunting Bayou.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$0 | \$0 | \$2,500,000 | \$2,500,000 | \$2,500,000 | \$2,500,000 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-17: Right-Of-Way Acquisition, Design and Construction of Wallisville Outfall

Investment Area: H - Hunting Bayou

Total Estimated Cost: \$10,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Right-Of-Way Acquisition, Design and Construction of Wallisville Outfall.

Justification:

The project could reduce the risk of flooding for over 140 structures in the pre-Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$0 | \$0 | \$2,500,000 | \$2,500,000 | \$2,500,000 | \$2,500,000 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Vince Bayou Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|-------------------|-----------------|------------------------|----------------------|-------------------|----------------------|-------------------|
| F-104: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Vince Bayou Watershed | Yes | Design | \$ 15,000,000 | \$ - | \$ - | \$ 15,000,000 | \$ - |
| F-78: Investigations of General Drainage Improvements in Vince Bayou Watershed | Yes | Planning | 550,000 | 372,650 | 177,350 | - | - |
| Vince Bayou Total | | | \$ 15,550,000 | \$ 372,650 | \$ 177,350 | \$ 15,000,000 | - |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-104: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Vince Bayou Watershed

| | | |
|---|--------------------------------------|--------------|
| Investment Area: I - Vince Bayou | Total Estimated Cost: | \$15,000,000 |
| Bond Project: Yes | Expenditures to Date: | \$0 |
| Approval Status: Design | Non-County Funding – Secured: | \$0 |
| Projected Completion: TBD | Funding Need: | \$0 |

Project Description:

Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Vince Bayou Watershed.

Justification:

Right of way acquisition, design and construction of a project will reduce the risk of flooding for more than 75 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$15,000,000 | \$0 | \$0 | \$5,004,570 | \$5,004,570 | \$4,990,860 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

| | | | |
|---|--------------------------------------|-----------|--|
| Project Name: F-78: Investigations of General Drainage Improvements in Vince Bayou Watershed | | | |
| Investment Area: I - Vince Bayou | Total Estimated Cost: | \$550,000 | |
| Bond Project: Yes | Expenditures to Date: | \$372,650 | |
| Approval Status: Design | Non-County Funding – Secured: | \$550,000 | |
| Projected Completion: TBD | Funding Need: | \$0 | |

Project Description:

Investigations of General Drainage Improvements in Vince Bayou Watershed.

Justification:

Effort will investigate drainage deficiencies, flooding problems and evaluating potential solutions to reduce the risk of flooding in the Vince Bayou watershed for more than 230 structures in the Atlas 14 1% AEP (100-year) floodplain.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$550,000 | \$177,350 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Spring Creek Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|-------------------|-----------------|------------------------|----------------------|---------------------|----------------------|----------------------|
| C-118: Planning, Right-of-Way Acquisition, Design and Construction of a Reservoir along Spring Creek | Yes | Planning | \$ 25,000,000 | \$ - | \$ - | \$ 25,000,000 | \$ - |
| F-119: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements along Spring Creek | Yes | Planning | 10,000,000 | - | - | 10,000,000 | - |
| F-19: Spring Creek Right-of-Way Acquisition and Floodplain Preservation | Yes | Design | 50,000,000 | 828,354 | 5,561,714 | 22,246,856 | 21,363,076 |
| F-75: Investigations of General Drainage Improvements along Spring Creek | Yes | Planning | 450,000 | 356,681 | 93,319 | - | - |
| Spring Creek Total | | | \$ 85,450,000 | \$ 1,185,035 | \$ 5,655,033 | \$ 57,246,856 | \$ 21,363,076 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-118: Planning, Right-of-Way Acquisition, Design and Construction of a Reservoir along Spring Creek

Investment Area: J - Spring Creek

Total Estimated Cost: \$25,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$12,500,000

Project Description:

Planning, Right-of-Way Acquisition, Design and Construction of a Reservoir along Spring Creek.

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.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$25,000,000 | \$0 | \$0 | \$8,340,950 | \$8,340,950 | \$8,318,100 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-119: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements along Spring Creek

Investment Area: J - Spring Creek

Total Estimated Cost: \$10,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Right-of-Way Acquisition, Design and Construction of General Drainage Improvements along Spring Creek.

Justification:

Design and construction of a project to reduce the risk of flooding in the Spring Creek watershed for more than 130 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$0 | \$0 | \$3,336,380 | \$3,336,380 | \$3,327,240 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-19: Spring Creek Right-of-Way Acquisition and Floodplain Preservation

Investment Area: J - Spring Creek

Total Estimated Cost: \$50,000,000

Bond Project: Yes

Expenditures to Date: \$828,354

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Spring Creek Right-of-Way Acquisition and Floodplain Preservation.

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.

Property acquisitions can benefit public safety by utilizing the land for floodplain preservation, or using the land for future projects to construct levees, channels or detention for flood mitigation and controls. Property acquisitions allow land to be used for floodplain preservation, or for future projects to construct levees, channels and/or detention for flood mitigation and controls. This enhancement can be measured by facilities constructed on the property or acreage removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$50,000,000 | \$5,561,714 | \$5,561,714 | \$5,561,714 | \$5,561,714 | \$5,561,714 | \$21,363,076 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-75: Investigations of General Drainage Improvements along Spring Creek

Investment Area: J - Spring Creek

Total Estimated Cost: \$450,000

Bond Project: Yes

Expenditures to Date: \$356,681

Approval Status: Planning

Non-County Funding – Secured: \$450,000

Projected Completion: TBD

Funding Need: \$0

Project Description:

Investigations of General Drainage Improvements along Spring Creek.

Justification:

Effort will investigate Harris County watershed-portion drainage deficiencies, flooding problems and evaluate potential solutions to reduce the risk of flooding in the Spring Creek watershed for more than 190 structures in the Atlas 14 1% AEP (100-year) floodplain.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$450,000 | \$93,319 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Cypress Creek Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|---|-------------------|------------------------|------------------------|----------------------|----------------------|----------------------|----------------------|
| CI-012: Major Maintenance of Cypress Creek and Tributaries | Yes | Implementation | \$ 60,000,000 | \$ 1,639,781 | \$ 34,539,514 | \$ 19,043,512 | \$ 4,777,193 |
| F-20: Cypress Creek Right-of-Way Acquisition and Floodplain Preservation | Yes | Design | 100,000,000 | 16,477,204 | 9,447,109 | 37,788,436 | 36,287,251 |
| F-22: Restore Channel Conveyance Capacity Along Pillot Gully | Yes | Implementation | 3,400,000 | 2,602,350 | 797,650 | - | - |
| F-23: Construction of Channel Conveyance Improvements Along K163-00-00 | Yes | Implementation | 8,225,554 | 747,592 | 7,477,962 | - | - |
| F-24: Identification, Design and Construction of the K700-01 Environmental Mitigation Bank | Yes | Implementation | 9,300,000 | 200 | 2,122,398 | 7,177,402 | - |
| F-88: ROW Acquisition, Design and Construction of Stormwater Detention Basins in Large Buyout Areas | Yes | Preliminary Investment | 25,000,000 | - | 1,200,000 | 23,800,000 | - |
| Cypress Creek Total | | | \$ 205,925,554 | \$ 21,467,127 | \$ 55,584,633 | \$ 87,809,350 | \$ 41,064,444 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-012: Major Maintenance of Cypress Creek and Tributaries

Investment Area: K - Cypress Creek

Total Estimated Cost:

\$60,000,000

Bond Project: Yes

Expenditures to Date:

\$1,639,781

Approval Status: Implementation

Non-County Funding – Secured:

\$0

Projected Completion: FY 2021

Funding Need:

\$0

Project Description:

Major Maintenance of Cypress Creek and Tributaries.

Justification:

Major maintenance to restore channel conveyance capacity. May include right of way acquisition, design, and construction along tributaries.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$60,000,000 | \$34,539,514 | \$4,751,089 | \$4,764,141 | \$4,764,141 | \$4,764,141 | \$4,777,193 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------------|
| O&M | \$88,000 |
| Labor | \$13,200 |
| Other | \$0 |
| Total | \$101,200 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-20: Cypress Creek Right-of-Way Acquisition and Floodplain Preservation

Investment Area: K - Cypress Creek

Total Estimated Cost: \$100,000,000

Bond Project: Yes

Expenditures to Date: \$16,477,204

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Cypress Creek Right-of-Way Acquisition and Floodplain Preservation.

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.

Property acquisitions can benefit public safety by utilizing the land for floodplain preservation, or using the land for future projects to construct levees, channels or detention for flood mitigation and controls. Property acquisitions allow land to be used for floodplain preservation, or for future projects to construct levees, channels and/or detention for flood mitigation and controls. This enhancement can be measured by facilities constructed on the property or acreage removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$100,000,000 | \$9,447,109 | \$9,447,109 | \$9,447,109 | \$9,447,109 | \$9,447,109 | \$36,287,251 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-22: Restore Channel Conveyance Capacity Along Pillot Gully

Investment Area: K - Cypress Creek

Total Estimated Cost:

\$3,400,000

Bond Project: Yes

Expenditures to Date:

\$2,602,350

Approval Status: Implementation

Non-County Funding – Secured:

\$0

Projected Completion: FY 2020

Funding Need:

\$1,200,000

Project Description:

Restore Channel Conveyance Capacity Along Pillot Gully.

Justification:

Major maintenance to restore channel conveyance capacity.

Maintenance projects return flood control facilities to their near intended state for optimal conveyance for the safety of the public. Maintenance projects return flood control facilities to their near intended state for optimal conveyance to allow for key county facilities and roads to be accessible. Maintenance projects return the facility to near intended state for optimal conveyance to reduce flooding risks. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$3,400,000 | \$797,650 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-23: Construction of Channel Conveyance Improvements Along K163-00-00

Investment Area: K - Cypress Creek

Total Estimated Cost: \$8,225,554

Bond Project: Yes

Expenditures to Date: \$747,592

Approval Status: Implementation

Non-County Funding – Secured: \$0

Projected Completion: FY 2022

Funding Need: \$5,225,554

Project Description:

Construction of Channel Conveyance Improvements Along K163-00-00.

Justification:

Provides joint-benefits of facilitating local drainage improvements and reducing the risk of flooding along the channel.

Construction of flood control facilities benefits public safety by mitigating life threatening flooding events. Capital improvement projects create or improve flood control facilities to provide optimal conveyance allowing key county facilities, essential businesses, and roads to be accessible. Construction facilities provide the enhancement of current District infrastructure or development of new facilities to District infrastructure reducing flooding risk. This can be measured by structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$8,225,554 | \$7,477,962 | \$0 | \$0 | \$0 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-24: Identification, Design and Construction of the K700-01 Environmental Mitigation Bank

Investment Area: K - Cypress Creek

Total Estimated Cost: \$9,300,000

Bond Project: Yes

Expenditures to Date: \$200

Approval Status: Implementation

Non-County Funding – Secured: \$0

Projected Completion: FY 2021

Funding Need: \$0

Project Description:

Identification, Design and Construction of the K700-01 Environmental Mitigation Bank.

Justification:

Restoration and enhancement of wetlands to create credits for wetland mitigation supporting construction of District projects and may be used for projects supporting District goals in coordination with other Harris County public agencies and municipalities.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$9,300,000 | \$2,122,398 | \$2,399,490 | \$4,777,912 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-88: ROW Acquisition, Design and Construction of Stormwater Detention Basins in Large Buyout Areas

Investment Area: K - Cypress Creek **Total Estimated Cost:** \$25,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Preliminary Investment **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

ROW Acquisition, Design and Construction of Stormwater Detention Basins in Large Buyout Areas.

Justification:

Design and construction of stormwater detention basins in large areas of buyout to help reduce the risk of flooding in the area. Specific benefits will be determined as individual projects are initiated. Projects include detention, sediment control, vegetation management and other flood risk management projects.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$25,000,000 | \$1,200,000 | \$0 | \$7,940,585 | \$7,940,585 | \$7,918,830 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
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Flood Control - Little Cypress Creek Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|-------------------|------------------------|------------------------|----------------------|----------------------|----------------------|---------------------|
| F-26: Management, Right-of-Way Acquisition, Design and Construction of the Little Cypress Creek Frontier Program | Yes | Design | \$ 51,378,586 | \$ 8,325,654 | \$ 21,883,057 | \$ 21,169,875 | \$ - |
| F-27: Design and Construction of Zube Park Stormwater Detention Basin | Yes | Implementation | 10,798,475 | 1,760,513 | 8,937,962 | 100,000 | - |
| F-28: Right-Of-Way Acquisition, Design, and Construction of Kluge Stormwater Detention Basin | Yes | Design | 11,000,000 | - | 2,645,613 | 8,354,387 | - |
| F-29: Right-Of-Way Acquisition, Design, and Construction of Mueschke East Stormwater Detention Basin | Yes | Design | 15,900,000 | - | 3,686,817 | 12,213,183 | - |
| F-30: Right-Of-Way Acquisition, Design, and Construction of Schiel Stormwater Detention Basin | Yes | Design | 16,000,000 | 4,487,693 | 2,752,995 | 8,759,312 | - |
| F-31: Construction of Mueschke West Stormwater Detention Basin Improvements | Yes | Design | 10,600,000 | 1,323,589 | 5,018,799 | 4,257,612 | - |
| F-32: Construction of Hagar Stormwater Detention Basin Improvements | Yes | Design | 11,800,000 | 1,502,729 | 4,785,355 | 5,511,916 | - |
| F-33: Construction of Kleb Woods Stormwater Detention Basin Improvements | Yes | Implementation | 3,700,000 | 1,094,115 | 2,605,885 | - | - |
| F-34: ROW, Design, and Construction of Mason Stormwater Detention Basin in Little Cypress Creek watershed | Yes | Design | 13,000,000 | 8,926,003 | 1,507,088 | 2,566,909 | - |
| F-35: Construction of Bauer-Hockley Stormwater Detention Basin Improvements | Yes | Implementation | 4,590,000 | 4,323,513 | 266,487 | - | - |
| F-89: Design and Construction of Additional Volume in Little Cypress Creek Stormwater Detention Basins | Yes | Preliminary Investment | 16,750,000 | - | - | 13,407,345 | 3,342,655 |
| Little Cypress Creek Total | | | \$ 165,517,061 | \$ 31,743,809 | \$ 54,090,058 | \$ 76,340,539 | \$ 3,342,655 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-26: Management, Right-of-Way Acquisition, Design and Construction of the Little Cypress Creek Frontier Program

Investment Area: L - Little Cypress Creek **Total Estimated Cost:** \$51,378,586

Bond Project: Yes **Expenditures to Date:** \$8,325,654

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: FY 2025 **Funding Need:** \$19,303,586

Project Description:

Management, Right-of-Way Acquisition, Design and Construction of the Little Cypress Creek Frontier Program.

Justification:

This project is part of the Little Cypress Creek Frontier program that will reduce the risk of flooding in the Little Cypress Creek watershed for more than 3,200 structures in the Atlas 14 1% AEP (100-year) floodplain and will reduce that floodplain by more than 5,800 acres. Projects include detention, sediment control, vegetation management and other flood risk management projects

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$51,378,586 | \$21,883,057 | \$7,610,950 | \$4,498,750 | \$4,573,750 | \$4,486,425 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-27: Design and Construction of Zube Park Stormwater Detention Basin

Investment Area: L - Little Cypress Creek **Total Estimated Cost:** \$10,798,475

Bond Project: Yes **Expenditures to Date:** \$1,760,513

Approval Status: Implementation **Non-County Funding – Secured:** \$1,532,838

Projected Completion: FY 2022 **Funding Need:** \$15,637

Project Description:

Design and Construction of Zube Park Stormwater Detention Basin.

Justification:

This project is part of the Little Cypress Creek Frontier program that will reduce the risk of flooding in the Little Cypress Creek watershed for more than 3,200 structures in the Atlas 14 1% AEP (100-year) floodplain and will reduce that floodplain by more than 5,800 acres.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,798,475 | \$8,937,962 | \$100,000 | \$0 | \$0 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|-----------------|
| O&M | \$17,000 |
| Labor | \$2,550 |
| Other | \$0 |
| Total | \$19,550 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-28: Right-Of-Way Acquisition, Design, and Construction of Kluge Stormwater Detention Basin

Investment Area: L - Little Cypress Creek **Total Estimated Cost:** \$11,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: FY 2024 **Funding Need:** \$0

Project Description:

Right-Of-Way Acquisition, Design, and Construction of Kluge Stormwater Detention Basin.

Justification:

This project is part of the Little Cypress Creek Frontier program that will reduce the risk of flooding in the Little Cypress Creek watershed for more than 3,200 structures in the Atlas 14 1% AEP (100-year) floodplain and will reduce that floodplain by more than 5,800 acres.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$11,000,000 | \$2,645,613 | \$2,887,600 | \$5,466,787 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|----------------|
| O&M | \$4,000 |
| Labor | \$600 |
| Other | \$0 |
| Total | \$4,600 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-29: Right-Of-Way Acquisition, Design, and Construction of Mueschke East Stormwater Detention Basin

Investment Area: L - Little Cypress Creek **Total Estimated Cost:** \$15,900,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: FY 2025 **Funding Need:** \$0

Project Description:

Right-Of-Way Acquisition, Design, and Construction of Mueschke East Stormwater Detention Basin.

Justification:

This project is part of the Little Cypress Creek Frontier program that will reduce the risk of flooding in the Little Cypress Creek watershed for more than 3,200 structures in the Atlas 14 1% AEP (100-year) floodplain and will reduce that floodplain by more than 5,800 acres.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$15,900,000 | \$3,686,817 | \$3,820,909 | \$6,782,750 | \$1,609,524 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|----------------|
| O&M | \$1,000 |
| Labor | \$150 |
| Other | \$0 |
| Total | \$1,150 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-30: Right-Of-Way Acquisition, Design, and Construction of Schiel Stormwater Detention Basin

Investment Area: L - Little Cypress Creek **Total Estimated Cost:** \$16,000,000

Bond Project: Yes **Expenditures to Date:** \$4,487,693

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: FY 2023 **Funding Need:** \$0

Project Description:

Right-Of-Way Acquisition, Design, and Construction of Schiel Stormwater Detention Basin.

Justification:

This project is part of the Little Cypress Creek Frontier program that will reduce the risk of flooding in the Little Cypress Creek watershed for more than 3,200 structures in the Atlas 14 1% AEP (100-year) floodplain and will reduce that floodplain by more than 5,800 acres.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$16,000,000 | \$2,752,995 | \$8,459,312 | \$300,000 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------------|
| O&M | \$91,642 |
| Labor | \$13,746 |
| Other | \$0 |
| Total | \$105,389 |

Harris County FY 2021-2022 Capital Improvement Program

| | | | |
|--|--------------------------------------|--------------|--|
| Project Name: F-31: Construction of Mueschke West Stormwater Detention Basin Improvements | | | |
| Investment Area: L - Little Cypress Creek | Total Estimated Cost: | \$10,600,000 | |
| Bond Project: Yes | Expenditures to Date: | \$1,323,589 | |
| Approval Status: Design | Non-County Funding – Secured: | \$0 | |
| Projected Completion: FY 2024 | Funding Need: | \$0 | |

Project Description:

Construction of Mueschke West Stormwater Detention Basin Improvements.

Justification:

This project is part of the Little Cypress Creek Frontier program that will reduce the risk of flooding in the Little Cypress Creek watershed for more than 3,200 structures in the Atlas 14 1% AEP (100-year) floodplain and will reduce that floodplain by more than 5,800 acres.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,600,000 | \$5,018,799 | \$2,326,131 | \$160,983 | \$1,770,498 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|--------------|
| O&M | \$288 |
| Labor | \$43 |
| Other | \$0 |
| Total | \$331 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-32: Construction of Hegar Stormwater Detention Basin Improvements

Investment Area: L - Little Cypress Creek **Total Estimated Cost:** \$11,800,000

Bond Project: Yes **Expenditures to Date:** \$1,502,729

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: FY 2026 **Funding Need:** \$0

Project Description:

Construction of Hegar Stormwater Detention Basin Improvements.

Justification:

This project is part of the Little Cypress Creek Frontier program that will reduce the risk of flooding in the Little Cypress Creek watershed for more than 3,200 structures in the Atlas 14 1% AEP (100-year) floodplain and will reduce that floodplain by more than 5,800 acres.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$11,800,000 | \$4,785,355 | \$1,985,994 | \$154,792 | \$2,108,171 | \$1,262,959 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|-----------------|
| O&M | \$30,487 |
| Labor | \$4,573 |
| Other | \$0 |
| Total | \$35,060 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-33: Construction of Kleb Woods Stormwater Detention Basin Improvements

Investment Area: L - Little Cypress Creek **Total Estimated Cost:** \$3,700,000

Bond Project: Yes **Expenditures to Date:** \$1,094,115

Approval Status: Implementation **Non-County Funding – Secured:** \$0

Projected Completion: FY 2022 **Funding Need:** \$0

Project Description:

Construction of Kleb Woods Stormwater Detention Basin Improvements.

Justification:

This project is part of the Little Cypress Creek Frontier program that will reduce the risk of flooding in the Little Cypress Creek watershed for more than 3,200 structures in the Atlas 14 1% AEP (100-year) floodplain and will reduce that floodplain by more than 5,800 acres.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$3,700,000 | \$2,605,885 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-----------------|
| O&M | \$21,391 |
| Labor | \$3,209 |
| Other | \$0 |
| Total | \$24,600 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-34: ROW, Design, and Construction of Mason Stormwater Detention Basin in Little Cypress Creek watershed

Investment Area: L - Little Cypress Creek **Total Estimated Cost:** \$13,000,000

Bond Project: Yes **Expenditures to Date:** \$8,926,003

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: FY 2025 **Funding Need:** \$0

Project Description:

ROW, Design, and Construction of Mason Stormwater Detention Basin in Little Cypress Creek watershed.

Justification:

This project is part of the Little Cypress Creek Frontier program that will reduce the risk of flooding in the Little Cypress Creek watershed for more than 3,200 structures in the Atlas 14 1% AEP (100-year) floodplain and will reduce that floodplain by more than 5,800 acres.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$13,000,000 | \$1,507,088 | \$160,973 | \$388,889 | \$2,017,047 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-----------------|
| O&M | \$44,951 |
| Labor | \$6,743 |
| Other | \$0 |
| Total | \$51,693 |

Harris County FY 2021-2022 Capital Improvement Program

| | | | |
|--|--------------------------------------|-------------|--|
| Project Name: F-35: Construction of Bauer-Hockley Stormwater Detention Basin Improvements | | | |
| Investment Area: L - Little Cypress Creek | Total Estimated Cost: | \$4,590,000 | |
| Bond Project: Yes | Expenditures to Date: | \$4,323,513 | |
| Approval Status: Implementation | Non-County Funding – Secured: | \$0 | |
| Projected Completion: FY 2020 | Funding Need: | \$740,000 | |

Project Description:

Construction of Bauer-Hockley Stormwater Detention Basin Improvements.

Justification:

This project is part of the Little Cypress Creek Frontier program that will reduce the risk of flooding in the Little Cypress Creek watershed for more than 3,200 structures in the Atlas 14 1% AEP (100-year) floodplain and will reduce that floodplain by more than 5,800 acres.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$4,590,000 | \$266,487 | \$0 | \$0 | \$0 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|-----------------|
| O&M | \$20,599 |
| Labor | \$3,090 |
| Other | \$0 |
| Total | \$23,689 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-89: Design and Construction of Additional Volume in Little Cypress Creek Stormwater Detention Basins

| | | |
|--|--------------------------------------|--------------|
| Investment Area: L - Little Cypress Creek | Total Estimated Cost: | \$16,750,000 |
| Bond Project: Yes | Expenditures to Date: | \$0 |
| Approval Status: Preliminary Investment | Non-County Funding – Secured: | \$0 |
| Projected Completion: TBD | Funding Need: | \$0 |

Project Description:

Design and Construction of Additional Volume in Little Cypress Creek Stormwater Detention Basins.

Justification:

This project is part of the Little Cypress Creek Frontier program that will reduce the risk of flooding in the Little Cypress Creek watershed for more than 3,200 structures in the Atlas 14 1% AEP (100-year) floodplain and will reduce that floodplain by more than 5,800 acres.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$16,750,000 | \$0 | \$0 | \$4,469,115 | \$4,469,115 | \$4,469,115 | \$3,342,655 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Willow Creek Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|---|-------------------|------------------------|------------------------|----------------------|----------------------|----------------------|-------------------|
| F-106: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Willow Creek Watershed | Yes | Preliminary Investment | \$ 15,000,000 | \$ - | \$ - | \$ 15,000,000 | \$ - |
| F-36: Willow Creek Right-of-Way Acquisition and Floodplain Preservation | Yes | Design | 30,000,000 | - | 5,823,367 | 24,176,633 | - |
| F-37: Design and Construction of Channel Conveyance Improvements on M124-00-00 Downstream of SH 249 | Yes | Design | 72,000,000 | 17,119,176 | 40,954,361 | 13,926,463 | - |
| F-38: Design and Construction of Cypress Rosehill Stormwater Detention Basin | Yes | Implementation | 1,100,000 | 168,590 | 931,410 | - | - |
| F-71: Investigations of General Drainage Improvements in Willow Creek Watershed | Yes | Planning | 800,000 | 587,541 | 212,459 | - | - |
| M - Willow Creek Total | | | \$ 118,900,000 | \$ 17,875,307 | \$ 47,921,597 | \$ 53,103,096 | - |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-106: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Willow Creek Watershed

Investment Area: M - Willow Creek

Total Estimated Cost: \$15,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Preliminary Investment

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Willow Creek Watershed.

Justification:

Design and construction of projects to reduce the risk of flooding in the Willow Creek watershed for more than 170 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$15,000,000 | \$0 | \$0 | \$5,004,570 | \$5,004,570 | \$4,990,860 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-36: Willow Creek Right-of-Way Acquisition and Floodplain Preservation

Investment Area: M - Willow Creek

Total Estimated Cost:

\$30,000,000

Bond Project: Yes

Expenditures to Date:

\$0

Approval Status: Design

Non-County Funding – Secured:

\$0

Projected Completion: TBD

Funding Need:

\$0

Project Description:

Willow Creek Right-of-Way Acquisition and Floodplain Preservation.

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.

Property acquisitions can benefit public safety by utilizing the land for floodplain preservation, or using the land for future projects to construct levees, channels or detention for flood mitigation and controls. Property acquisitions allow land to be used for floodplain preservation, or for future projects to construct levees, channels and/or detention for flood mitigation and controls. This enhancement can be measured by facilities constructed on the property or acreage removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$30,000,000 | \$5,823,367 | \$10,073,597 | \$10,073,597 | \$4,029,439 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-37: Design and Construction of Channel Conveyance Improvements on M124-00-00 Downstream of SH 249

Investment Area: M - Willow Creek

Total Estimated Cost: \$72,000,000

Bond Project: Yes

Expenditures to Date: \$17,119,176

Approval Status: Design

Non-County Funding – Secured: \$63,000,000

Projected Completion: FY 2023

Funding Need: \$-12,000,000

Project Description:

Design and Construction of Channel Conveyance Improvements on M124-00-00 Downstream of SH 249.

Justification:

This partnership project will reduce the risk of flooding affecting roadways near M124-00-00 including SH 249, FM 2920 and other local roads.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$72,000,000 | \$40,954,361 | \$13,926,463 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-----------------|
| O&M | \$34,125 |
| Labor | \$5,119 |
| Other | \$0 |
| Total | \$39,244 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-38: Design and Construction of Cypress Rosehill Stormwater Detention Basin

Investment Area: M - Willow Creek

Total Estimated Cost:

\$1,100,000

Bond Project: Yes

Expenditures to Date:

\$168,590

Approval Status: Implementation

Non-County Funding – Secured:

\$0

Projected Completion: FY 2023

Funding Need:

\$0

Project Description:

Design and Construction of Cypress Rosehill Stormwater Detention Basin.

Justification:

Providing joint benefits: mitigating impacts of roadway construction and possible flood risk reduction for homes in the surrounding area. Projects could include, but are not limited to, detention, sediment control, vegetation management, and other flood risk management projects.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$1,100,000 | \$931,410 | \$0 | \$0 | \$0 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|----------------|
| O&M | \$5,000 |
| Labor | \$750 |
| Other | \$0 |
| Total | \$5,750 |

Harris County FY 2021-2022 Capital Improvement Program

| | | | |
|---|---|-----------|--|
| <u>Project Name:</u> F-71: Investigations of General Drainage Improvements in Willow Creek Watershed | | | |
| <u>Investment Area:</u> M - Willow Creek | <u>Total Estimated Cost:</u> | \$800,000 | |
| <u>Bond Project:</u> Yes | <u>Expenditures to Date:</u> | \$587,541 | |
| <u>Approval Status:</u> Planning | <u>Non-County Funding – Secured:</u> | \$800,000 | |
| <u>Projected Completion:</u> TBD | <u>Funding Need:</u> | \$0 | |

Project Description:

Investigations of General Drainage Improvements in Willow Creek Watershed.

Justification:

Effort will investigate drainage deficiencies, flooding problems and evaluate potential solutions to reduce the risk of flooding in the Willow Creek watershed for more than 1,700 structures in the Atlas 14 1% AEP (100-year) floodplain.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$800,000 | \$212,459 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
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Flood Control - Carpenters Bayou Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|---|-------------------|-----------------|------------------------|----------------------|-------------------|------------|-------------------|
| F-124: Investigations of General Drainage Improvements along Carpenters Bayou | Yes | Planning | \$ 500,000 | \$ 376,845 | \$ 123,155 | \$ - | \$ - |
| Carpenters Bayou Total | | | \$ 500,000 | \$ 376,845 | \$ 123,155 | - | - |

Harris County FY 2021-2022 Capital Improvement Program

| | | | |
|--|--------------------------------------|-----------|--|
| Project Name: F-124: Investigations of General Drainage Improvements along Carpenters Bayou | | | |
| Investment Area: N - Carpenters Bayou | Total Estimated Cost: | \$500,000 | |
| Bond Project: Yes | Expenditures to Date: | \$376,845 | |
| Approval Status: Planning | Non-County Funding – Secured: | \$0 | |
| Projected Completion: TBD | Funding Need: | \$0 | |

Project Description:

Investigations of General Drainage Improvements along Carpenters Bayou.

Justification:

Effort will investigate drainage deficiencies, flooding problems and evaluate potential solutions to reduce the risk of flooding in the Carpenters Bayou watershed for more than 550 structures in the Atlas 14 1% AEP (100-year) floodplain.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$500,000 | \$123,155 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Goose Creek Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|---|-------------------|------------------------|------------------------|----------------------|-------------------|----------------------|---------------------|
| F-109: Right-Of-Way Acquisition, Design, and Construction of General Drainage Improvements on Spring Gully | Yes | Planning | \$ 5,000,000 | \$ - | \$ - | \$ 5,000,000 | \$ - |
| F-120: Right-Of-Way Acquisition, Design, and Construction of General Drainage Improvements in Goose Creek watershed | Yes | Design | 25,000,000 | - | 77,128 | 21,807,513 | 3,115,359 |
| F-121: Investigations of General Drainage Improvements in Goose Creek watershed | Yes | Planning | 550,000 | 343,548 | 206,452 | - | - |
| F-39: Investigations of General Drainage Improvements on Spring Gully | Yes | Preliminary Investment | 950,000 | 634,152 | 315,848 | - | - |
| Goose Creek Total | | | \$ 31,500,000 | \$ 977,700 | \$ 599,428 | \$ 26,807,513 | \$ 3,115,359 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-109: Right-Of-Way Acquisition, Design, and Construction of General Drainage Improvements on Spring Gully

Investment Area: O - Goose Creek

Total Estimated Cost: \$5,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Right-Of-Way Acquisition, Design, and Construction of General Drainage Improvements on Spring Gully

Justification:

Design and construction of projects to reduce the risk of flooding in the Goose Bayou watershed for more than 30 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$5,000,000 | \$0 | \$0 | \$2,503,429 | \$2,496,571 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-120: Right-Of-Way Acquisition, Design, and Construction of General Drainage Improvements in Goose Creek watershed

Investment Area: O - Goose Creek

Total Estimated Cost: \$25,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Right-Of-Way Acquisition, Design, and Construction of General Drainage Improvements in Goose Creek watershed.

Justification:

Design and construction of projects to reduce the risk of flooding in the Goose Creek watershed for more than 500 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$25,000,000 | \$77,128 | \$3,115,359 | \$6,230,718 | \$6,230,718 | \$6,230,718 | \$3,115,359 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

| | |
|---|---|
| <u>Project Name:</u> F-121: Investigations of General Drainage Improvements in Goose Creek watershed | |
| <u>Investment Area:</u> O - Goose Creek | <u>Total Estimated Cost:</u> \$550,000 |
| <u>Bond Project:</u> Yes | <u>Expenditures to Date:</u> \$343,548 |
| <u>Approval Status:</u> Planning | <u>Non-County Funding – Secured:</u> \$550,000 |
| <u>Projected Completion:</u> TBD | <u>Funding Need:</u> \$0 |

Project Description:

Investigations of General Drainage Improvements in Goose Creek watershed.

Justification:

The project will investigate drainage deficiencies and flooding problems and evaluate potential solutions to reduce the risk of flooding in Goose Creek watershed for more than 640 structures in the Atlas 14 1% AEP (100-year) floodplain.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$550,000 | \$206,452 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-39: Investigations of General Drainage Improvements on Spring Gully

Investment Area: O - Goose Creek

Total Estimated Cost:

\$950,000

Bond Project: Yes

Expenditures to Date:

\$634,152

Approval Status: Preliminary Investment

Non-County Funding – Secured:

\$450,000

Projected Completion: TBD

Funding Need:

\$500,000

Project Description:

Investigations of General Drainage Improvements on Spring Gully.

Justification:

Effort will investigate drainage deficiencies, flooding problems and evaluate potential solutions to reduce the risk of flooding along Spring Gully for more than 70 structures in the Atlas 14 1% AEP (100-year) floodplain.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$950,000 | \$315,848 | \$0 | \$0 | \$0 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
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Flood Control - Greens Bayou Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|--------------------------|------------------------|-------------------------------|-----------------------------|----------------------|----------------------|--------------------------|
| <u>C-20: Mid-Reach Greens Bayou Project - Design and Construction of Channel Conveyance Improvements along Greens Bayou</u> | Yes | Design | \$ 20,000,000 | \$ 724,931 | \$ 7,049,800 | \$ 12,225,269 | \$ - |
| <u>C-31: Design and Construction of the Smith Road Channel Diversion</u> | Yes | Implementation | 8,000,000 | - | 2,855,037 | 5,144,963 | - |
| <u>C-32: Design and Construction of the Cutten Road Stormwater Detention Basin Improvements</u> | Yes | Implementation | 17,000,000 | 2,796,878 | 8,554,308 | 5,648,814 | - |
| <u>C-33: Design and Construction of Aldine-Westfield Stormwater Detention Basin Improvements</u> | Yes | Implementation | 19,100,000 | 5,053,071 | 6,430,943 | 7,615,986 | - |
| <u>C-34: Design and Construction of Lauder Stormwater Detention Basin Improvements</u> | Yes | Implementation | 38,692,428 | 2,549,380 | 14,909,943 | 21,233,105 | - |
| <u>C-43: Planning, Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along P138-01-01</u> | Yes | Preliminary Investment | 5,000,000 | - | 1,000,000 | 4,000,000 | - |
| <u>CI-022: ROW, Design, and Construction of Stormwater Detention Basin Near P130-05</u> | Yes | Planning | 3,000,000 | 33,639 | 1,494,962 | 1,471,399 | - |
| <u>F-40: Repairs and Enhancements to the Lower Greens Bayou Regional Detention Embankment and Control Structure</u> | Yes | Implementation | 5,000,000 | 2,411,343 | 247,218 | 2,341,439 | - |
| Greens Bayou Total | | | \$ 115,792,428 | \$ 13,569,242 | \$ 42,542,211 | \$ 59,680,975 | - |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-20: Mid-Reach Greens Bayou Project - Design and Construction of Channel Conveyance Improvements along Greens Bayou

Investment Area: P - Greens Bayou **Total Estimated Cost:** \$20,000,000

Bond Project: Yes **Expenditures to Date:** \$724,931

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: FY 2024 **Funding Need:** \$18,000,000

Project Description:

Mid-Reach Greens Bayou Project - Design and Construction of Channel Conveyance Improvements along Greens Bayou.

Justification:

This project is a component of the Greens Bayou Mid Reach Project that will reduce the risk of flooding for 4,500 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$20,000,000 | \$7,049,800 | \$5,833,551 | \$6,269,939 | \$121,779 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-31: Design and Construction of the Smith Road Channel Diversion

Investment Area: P - Greens Bayou **Total Estimated Cost:** \$8,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Implementation **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$7,200,000

Project Description:

Design and Construction of the Smith Road Channel Diversion.

Justification:

This project could reduce the risk of flooding for over 70 structures during the 10% AEP (10-year) event along P133-00-00 and secondary benefits could include reduced erosion.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$8,000,000 | \$2,855,037 | \$2,855,037 | \$2,289,926 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-32: Design and Construction of the Cutten Road Stormwater Detention Basin Improvements

Investment Area: P - Greens Bayou

Total Estimated Cost: \$17,000,000

Bond Project: Yes

Expenditures to Date: \$2,796,878

Approval Status: Implementation

Non-County Funding – Secured: \$0

Projected Completion: FY 2022

Funding Need: \$15,500,000

Project Description:

Design and Construction of the Cutten Road Stormwater Detention Basin Improvements.

Justification:

This project is a component of the Greens Bayou Mid Reach Project that will reduce the risk of flooding for 4,500 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$17,000,000 | \$8,554,308 | \$5,648,814 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-----------------|
| O&M | \$26,000 |
| Labor | \$3,900 |
| Other | \$0 |
| Total | \$29,900 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-33: Design and Construction of Aldine-Westfield Stormwater Detention Basin Improvements

Investment Area: P - Greens Bayou

Total Estimated Cost: \$19,100,000

Bond Project: Yes

Expenditures to Date: \$5,053,071

Approval Status: Implementation

Non-County Funding – Secured: \$0

Projected Completion: FY 2023

Funding Need: \$17,590,000

Project Description:

Design and Construction of Aldine-Westfield Stormwater Detention Basin Improvements.

Justification:

This project is a component of the Greens Bayou Mid Reach Project that will reduce the risk of flooding for 4,500 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$19,100,000 | \$6,430,943 | \$7,383,495 | \$232,491 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-----------------|
| O&M | \$11,385 |
| Labor | \$1,708 |
| Other | \$0 |
| Total | \$13,092 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-34: Design and Construction of Lauder Stormwater Detention Basin Improvements

Investment Area: P - Greens Bayou **Total Estimated Cost:** \$38,692,428

Bond Project: Yes **Expenditures to Date:** \$2,549,380

Approval Status: Implementation **Non-County Funding – Secured:** \$25,092,428

Projected Completion: FY 2024 **Funding Need:** \$12,000,000

Project Description:

Design and Construction of Lauder Stormwater Detention Basin Improvements.

Justification:

This project is a component of the Greens Bayou Mid Reach Project that will reduce the risk of flooding for 4,500 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$38,692,428 | \$14,909,943 | \$19,202,812 | \$339,461 | \$1,690,832 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-----------------|
| O&M | \$25,000 |
| Labor | \$3,750 |
| Other | \$0 |
| Total | \$28,750 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-43: Planning, Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along P138-01-01

| | | |
|--|--------------------------------------|-------------|
| Investment Area: P - Greens Bayou | Total Estimated Cost: | \$5,000,000 |
| Bond Project: Yes | Expenditures to Date: | \$0 |
| Approval Status: Preliminary Investment | Non-County Funding – Secured: | \$0 |
| Projected Completion: TBD | Funding Need: | \$5,000,000 |

Project Description:

Planning, Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along P138-01-01.

Justification:

Potential federally funded project, the risk of flooding could be reduced for approximately 100 structures in the pre-Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$5,000,000 | \$1,000,000 | \$1,000,000 | \$1,000,000 | \$1,000,000 | \$1,000,000 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|--|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-022: ROW, Design, and Construction of Stormwater Detention Basin Near P130-05

Investment Area: P - Greens Bayou

Total Estimated Cost: \$3,000,000

Bond Project: Yes

Expenditures to Date: \$33,639

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

ROW, Design, and Construction of Stormwater Detention Basin Near P130-05.

Justification:

Project is intended reduce the risk of flooding for structures near P130-05-01. More specific benefits will be determined as the projects scope and design are completed.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$3,000,000 | \$1,494,962 | \$1,401,741 | \$69,658 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-40: Repairs and Enhancements to the Lower Greens Bayou Regional Detention Embankment and Control Structure

Investment Area: P - Greens Bayou

Total Estimated Cost: \$5,000,000

Bond Project: Yes

Expenditures to Date: \$2,411,343

Approval Status: Implementation

Non-County Funding – Secured: \$0

Projected Completion: FY 2020

Funding Need: \$0

Project Description:

Repairs and Enhancements to the Lower Greens Bayou Regional Detention Embankment and Control Structure.

Justification:

Major maintenance of existing detention facilities in Lower Greens Bayou.

Maintenance projects return flood control facilities to their near intended state for optimal conveyance for the safety of the public. Maintenance projects return flood control facilities to their near intended state for optimal conveyance to allow for key county facilities and roads to be accessible. Maintenance projects return the facility to near intended state for optimal conveyance to reduce flooding risks. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$5,000,000 | \$247,218 | \$1,172,325 | \$1,169,114 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|----------------|
| O&M | \$5,000 |
| Labor | \$750 |
| Other | \$0 |
| Total | \$5,750 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Halls Bayou Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|---|-------------------|------------------------|------------------------|----------------------|----------------------|-----------------------|----------------------|
| C-01: Construction of P518-26 Stormwater Detention Basin | Yes | Implementation | \$ 975,853 | \$ 123,235 | \$ 852,618 | \$ - | \$ - |
| C-23: Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-08-00 | Yes | Planning | 25,000,000 | - | 262,250 | 24,737,750 | - |
| C-24: Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-09-00 | Yes | Planning | 12,000,000 | - | 262,500 | 11,737,500 | - |
| C-25: Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-21-00 | Yes | Implementation | 20,036,050 | 5,682,335 | 7,623,001 | 6,730,714 | - |
| C-26: Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-23-00 and P118-23-02 | Yes | Design | 28,000,000 | 766,784 | 3,042,744 | 24,190,472 | - |
| C-28: Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-25-00 & P118-25-01 | Yes | Design | 24,000,000 | 412,278 | 1,600,972 | 21,986,750 | - |
| C-30: Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-27-00 | Yes | Planning | 12,000,000 | 11,080 | 251,419 | 11,737,501 | - |
| C-35: Design and Construction of Stormwater Detention Basin and Associated Channel Improvements | Yes | Implementation | 7,909,960 | 108,986 | 7,800,974 | - | - |
| C-41: Planning, Right-Of-Way, Design and Construction of Halls Bayou Flood Risk Management Project | Yes | Design | 154,960,000 | - | 7,206,190 | 87,787,974 | 59,965,836 |
| CI-006: Design and Construction of a Stormwater Detention Basin in Brock Park | Yes | Preliminary Investment | 10,000,000 | - | - | 10,000,000 | - |
| F-122: Bond Implementation Management (BIM) of the Right-of-Way Acquisition, Design and Construction in Halls Bayou Watershed | Yes | Preliminary Investment | 48,040,000 | 2,104,614 | 9,171,959 | 36,763,427 | - |
| Halls Bayou Total | | | \$ 342,921,863 | \$ 9,209,312 | \$ 38,074,627 | \$ 235,672,088 | \$ 59,965,836 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-01: Construction of P518-26 Stormwater Detention Basin

Investment Area: P118 - Halls Bayou **Total Estimated Cost:** \$975,853

Bond Project: Yes **Expenditures to Date:** \$123,235

Approval Status: Implementation **Non-County Funding – Secured:** \$975,853

Projected Completion: FY 2023 **Funding Need:** \$0

Project Description:

Construction of P518-26 Stormwater Detention Basin.

Justification:

When complete with future funding, this project could reduce the risk of flooding for more than 230 structures and could reduce the 1% floodplain for over 100 acres as part of the Halls Ahead Bond Implementation Program.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$975,853 | \$852,618 | \$0 | \$0 | \$0 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|----------------|
| O&M | \$2,000 |
| Labor | \$300 |
| Other | \$0 |
| Total | \$2,300 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-23: Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-08-00

Investment Area: P118 - Halls Bayou

Total Estimated Cost: \$25,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$22,500,000

Project Description:

Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-08-00.

Justification:

This project could reduce the risk of flooding for over 210 structures and could reduce the 1% floodplain for over 170 acres as part of the Halls Ahead Bond Implementation Program.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$25,000,000 | \$262,250 | \$0 | \$8,253,454 | \$8,253,454 | \$8,230,842 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-24: Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-09-00

Investment Area: P118 - Halls Bayou **Total Estimated Cost:** \$12,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$10,800,000

Project Description:

Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-09-00.

Justification:

This project could reduce the risk of flooding for over 200 structures in the pre-Atlas 14 1% AEP (100-year) floodplain and could reduce that floodplain by more than 160 acres as part of the Halls Ahead Bond Implementation Program.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$12,000,000 | \$262,500 | \$4,702,730 | \$4,702,731 | \$2,332,039 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-25: Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-21-00

Investment Area: P118 - Halls Bayou **Total Estimated Cost:** \$20,036,050

Bond Project: Yes **Expenditures to Date:** \$5,682,335

Approval Status: Implementation **Non-County Funding – Secured:** \$9,582,886

Projected Completion: FY 2021 **Funding Need:** \$5,053,164

Project Description:

Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-21-00.

Justification:

This project could reduce the risk of flooding for over 140 structures in the pre-Atlas 14 1% AEP (100-year) floodplain and could reduce that floodplain by more than 100 acres as part of the Halls Ahead Bond Implementation Program.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$20,036,050 | \$7,623,001 | \$6,730,714 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 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

Investment Area: P118 - Halls Bayou **Total Estimated Cost:** \$28,000,000

Bond Project: Yes **Expenditures to Date:** \$766,784

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$25,200,000

Project Description:

Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-23-00 and P118-23-02.

Justification:

This project could reduce the risk of flooding for more than 380 structures in the pre-Atlas 14 1% AEP (100-year) floodplain and could reduce that floodplain by more than 430 acres as part of the Halls Ahead Bond Implementation Program.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$28,000,000 | \$3,042,744 | \$533,321 | \$7,892,925 | \$7,892,925 | \$7,871,301 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-28: Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-25-00 & P118-25-01

Investment Area: P118 - Halls Bayou **Total Estimated Cost:** \$24,000,000

Bond Project: Yes **Expenditures to Date:** \$412,278

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$21,600,000

Project Description:

Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-25-00 & P118-25-01.

Justification:

This project could reduce the risk of flooding for more than 600 structures in the pre-Atlas 14 1% AEP (100-year) floodplain and could reduce that floodplain by more than 200 acres as part of the Halls Ahead Bond Implementation Program.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$24,000,000 | \$1,600,972 | \$386,748 | \$7,206,582 | \$7,206,582 | \$7,186,838 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-30: Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-27-00

Investment Area: P118 - Halls Bayou

Total Estimated Cost: \$12,000,000

Bond Project: Yes

Expenditures to Date: \$11,080

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$10,800,000

Project Description:

Right-Of-Way, Design, and Construction of Channel Conveyance Improvements on P118-27-00.

Justification:

This project could reduce the risk of flooding for over 140 structures in the pre-Atlas 14 1% AEP (100-year) floodplain and could reduce that floodplain by more than 200 acres as part of the Halls Ahead Bond Implementation Program.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$12,000,000 | \$251,419 | \$4,702,731 | \$4,702,731 | \$2,332,039 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-35: Design and Construction of Stormwater Detention Basin and Associated Channel Improvements

| | | |
|--|--------------------------------------|-------------|
| Investment Area: P118 - Halls Bayou | Total Estimated Cost: | \$7,909,960 |
| Bond Project: Yes | Expenditures to Date: | \$108,986 |
| Approval Status: Implementation | Non-County Funding – Secured: | \$6,384,960 |
| Projected Completion: FY 2021 | Funding Need: | \$725,000 |

Project Description:

Design and Construction of Stormwater Detention Basin and Associated Channel Improvements.

Justification:

This project removes the Atlas 14 1% AEP (100-year) floodplain from more than 150 structures and reduces the risk of flooding for more than 300 other structures as part of the Halls Ahead Bond Implementation Program.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$7,908,392 | \$7,800,974 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|----------------|
| O&M | \$2,000 |
| Labor | \$300 |
| Other | \$0 |
| Total | \$2,300 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-41: Planning, Right-Of-Way, Design and Construction of Halls Bayou Flood Risk Management Project

Investment Area: P118 - Halls Bayou **Total Estimated Cost:** \$154,960,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$151,500,000

Project Description:

Planning, Right-Of-Way, Design and Construction of Halls Bayou Flood Risk Management Project.

Justification:

This project could reduce the risk of flooding for over 2,800 structures in the 1% floodplain as part of the Halls Ahead Bond Implementation Program.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$154,960,000 | \$7,206,190 | \$4,864,790 | \$7,301,385 | \$33,397,751 | \$42,224,048 | \$59,965,836 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-006: Design and Construction of a Stormwater Detention Basin in Brock Park

Investment Area: P118 - Halls Bayou **Total Estimated Cost:** \$10,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Preliminary Investment **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$5,000,000

Project Description:

Design and Construction of a Stormwater Detention Basin in Brock Park.

Justification:

Provides additional stormwater detention in support of flood damage reduction as part of the Halls Ahead Bond Implementation Program. The project will be a partnership with the City of Houston.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$0 | \$0 | \$3,336,380 | \$3,336,380 | \$3,327,240 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-122: Bond implementation Management (BIM) of the Right-of-Way Acquisition, Design and Construction in Halls Bayou Watershed

Investment Area: P118 - Halls Bayou **Total Estimated Cost:** \$48,040,000

Bond Project: Yes **Expenditures to Date:** \$2,104,614

Approval Status: Preliminary Investment **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Bond implementation Management (BIM) of the Right-of-Way Acquisition, Design and Construction in Halls Bayou Watershed.

Justification:

Bond implementation Management (BIM) of Halls Ahead Program could reduce the risk of flooding along Halls Bayou for over 2,800 structures in the pre-Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$48,040,000 | \$9,171,959 | \$9,197,156 | \$9,197,156 | \$9,197,156 | \$9,171,959 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Cedar Bayou Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|-------------------|------------------------|------------------------|----------------------|----------------------|-----------------------|----------------------|
| F-123: Bond implementation Management (BIM) of the Right-of-Way Acquisition, Design and Construction in Cedar Bayou Watershed | Yes | Planning | \$ 9,200,000 | \$ 984,276 | \$ 2,051,114 | \$ 6,164,610 | \$ - |
| F-41: Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along Clawson Ditch and Q124-00-00 | Yes | Preliminary Investment | 19,000,000 | 1,010,771 | 2,444,821 | 15,544,408 | - |
| F-42: Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along Magee Gully | Yes | Planning | 33,000,000 | - | - | 26,381,918 | 6,618,082 |
| F-43: Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along Adlong Ditch | Yes | Preliminary Investment | 20,000,000 | - | 2,129,372 | 17,870,628 | - |
| F-44: Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along Q130-00-00 | Yes | Preliminary Investment | 18,000,000 | 481,158 | 5,703,603 | 11,815,239 | - |
| F-45: Planning, Right-Of-Way Acquisition, Design and Construction of Channel Conveyance Improvements on Q134-00-00 and Q134-00-01 | Yes | Preliminary Investment | 22,000,000 | 663,515 | 2,476,516 | 18,859,969 | - |
| F-46: Right-Of-Way Acquisition, Design and Construction of the Q500-01 Stormwater Detention Basin | Yes | Preliminary Investment | 22,900,000 | - | 2,690,032 | 20,209,968 | - |
| F-47: Right-Of-Way Acquisition, Design and Construction of Stormwater Detention Basins near Coastal Water Authority canals and IH 10 | Yes | Preliminary Investment | 19,900,000 | - | 3,723,473 | 16,176,527 | - |
| F-48: Design and Construction of Crosby Eastgate Environmental Mitigation Bank | Yes | Design | 1,000,000 | 258,351 | 741,649 | - | - |
| F-69: Right-Of-Way Acquisition, Design and Construction of channel conveyance improvements on Q136-00-00 - Part of the Upstream Cedar Bayou Project | Yes | Planning | 10,500,000 | - | 986,384 | 5,294,560 | 4,219,056 |
| 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 | Yes | Planning | 74,000,000 | - | 1,301,006 | 59,442,775 | 13,256,219 |
| Cedar Bayou Total | | | \$ 249,500,000 | \$ 3,398,071 | \$ 24,247,970 | \$ 197,760,602 | \$ 24,093,357 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-123: Bond implementation Management (BIM) of the Right-of-Way Acquisition, Design and Construction in Cedar Bayou Watershed

Investment Area: Q - Cedar Bayou **Total Estimated Cost:** \$9,200,000

Bond Project: Yes **Expenditures to Date:** \$984,276

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: FY 2024 **Funding Need:** \$0

Project Description:

Bond implementation Management (BIM) of the Right-of-Way Acquisition, Design and Construction in Cedar Bayou Watershed.

Justification:

Bond implementation Management (BIM) for construction of projects that could reduce the risk of flooding Cedar Bayou watershed.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$9,200,000 | \$2,051,114 | \$2,056,748 | \$2,056,748 | \$2,051,114 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 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

Investment Area: Q - Cedar Bayou **Total Estimated Cost:** \$19,000,000

Bond Project: Yes **Expenditures to Date:** \$1,010,771

Approval Status: Preliminary Investment **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along Clawson Ditch and Q124-00-00.

Justification:

The pre-Atlas 14 1% AEP (100-year) floodplain could be reduced in size from approximately 2,700 acres to less than 800 acres.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$19,000,000 | \$2,444,821 | \$644,821 | \$5,382,481 | \$4,792,426 | \$4,724,680 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: Q - Cedar Bayou

Total Estimated Cost: \$33,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along Magee Gully.

Justification:

The improvements along Magee Gully will reduce the 1% floodplain area within the Cedar Bayou watershed.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$33,000,000 | \$0 | \$6,581,918 | \$6,600,000 | \$6,600,000 | \$6,600,000 | \$6,618,082 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: Q - Cedar Bayou **Total Estimated Cost:** \$20,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Preliminary Investment **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along Adlong Ditch.

Justification:

The pre-Atlas 14 1% AEP (100-year) floodplain could be reduced in size from approximately 2,300 acres to less than 200 acres.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$20,000,000 | \$2,129,372 | \$2,129,371 | \$6,666,830 | \$6,666,830 | \$2,407,597 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: Q - Cedar Bayou **Total Estimated Cost:** \$18,000,000

Bond Project: Yes **Expenditures to Date:** \$481,158

Approval Status: Preliminary Investment **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Right-of-Way Acquisition, Design and Construction of Channel Conveyance Improvements along Q130-00-00.

Justification:

This project is a component of a larger plan that could reduce the risk of flooding by more than 40 structures in the Atlas 14 1% AEP (100-year) floodplain and reduce that floodplain by more than 790 acres.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$18,000,000 | \$5,703,603 | \$2,149,524 | \$3,224,850 | \$3,224,850 | \$3,216,015 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 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

Investment Area: Q - Cedar Bayou **Total Estimated Cost:** \$22,000,000

Bond Project: Yes **Expenditures to Date:** \$663,515

Approval Status: Preliminary Investment **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Planning, Right-Of-Way Acquisition, Design and Construction of Channel Conveyance Improvements on Q134-00-00 and Q134-00-01.

Justification:

This project could reduce the risk of flooding and could reduce the pre-Atlas 14 1% AEP (100-year) floodplain by more than 510 acres.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$22,000,000 | \$2,476,516 | \$794,969 | \$6,027,171 | \$6,027,171 | \$6,010,658 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-46: Right-Of-Way Acquisition, Design and Construction of the Q500-01 Stormwater Detention Basin

Investment Area: Q - Cedar Bayou **Total Estimated Cost:** \$22,900,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Preliminary Investment **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Right-Of-Way Acquisition, Design and Construction of the Q500-01 Stormwater Detention Basin.

Justification:

This project is anticipated to reduce the size of the 1% floodplain in Cedar Bayou.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$22,900,000 | \$2,690,032 | \$8,938,513 | \$7,947,850 | \$3,323,605 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 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

Investment Area: Q - Cedar Bayou **Total Estimated Cost:** \$19,900,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Preliminary Investment **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Right-Of-Way Acquisition, Design and Construction of Stormwater Detention Basins near Coastal Water Authority canals and IH 10.

Justification:

This project is anticipated to reduce the size of the 1% floodplain in Cedar Bayou.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$19,900,000 | \$3,723,473 | \$9,304,677 | \$6,871,850 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

| | | | |
|---|--------------------------------------|-------------|--|
| Project Name: F-48: Design and Construction of Crosby Eastgate Environmental Mitigation Bank | | | |
| Investment Area: Q - Cedar Bayou | Total Estimated Cost: | \$1,000,000 | |
| Bond Project: Yes | Expenditures to Date: | \$258,351 | |
| Approval Status: Design | Non-County Funding – Secured: | \$0 | |
| Projected Completion: TBD | Funding Need: | \$0 | |

Project Description:

Design and Construction of Crosby Eastgate Environmental Mitigation Bank.

Justification:

Restoration and enhancement of wetlands to create credits for wetland mitigation supporting construction of District projects and may be used for projects supporting District goals in coordination with other Harris County public agencies and municipalities.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$1,000,000 | \$741,649 | \$0 | \$0 | \$0 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 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

Investment Area: Q - Cedar Bayou **Total Estimated Cost:** \$10,500,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Right-Of-Way Acquisition, Design and Construction of channel conveyance improvements on Q136-00-00 - Part of the Upstream Cedar Bayou Project.

Justification:

This project will reduce the risk of flooding along upper Cedar Bayou.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,500,000 | \$986,384 | \$1,323,640 | \$1,323,640 | \$1,323,640 | \$1,323,640 | \$4,219,056 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 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

| | | |
|---|--------------------------------------|--------------|
| Investment Area: Q - Cedar Bayou | Total Estimated Cost: | \$74,000,000 |
| Bond Project: Yes | Expenditures to Date: | \$0 |
| Approval Status: Planning | Non-County Funding – Secured: | \$0 |
| Projected Completion: TBD | Funding Need: | \$0 |

Project Description:

Upstream Cedar Bayou Project - Right-Of-Way Acquisition, Design and Construction of Channel Conveyance Improvements and Stormwater Detention Basin Upstream of FM 1960.

Justification:

The 1% floodplain could be reduced in size from approximately 1,500 acres to less than 100 acres. Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$74,000,000 | \$1,301,006 | \$15,821,933 | \$15,858,152 | \$14,542,690 | \$13,220,000 | \$13,256,219 |

| Estimated Annual Operating Budget Impact: | |
|--|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Jackson Bayou Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|-------------------|-----------------|------------------------|----------------------|---------------------|---------------------|-------------------|
| F-107: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Jackson Bayou Watershed | Yes | Planning | \$ 10,000,000 | \$ - | \$ 1,000,000 | \$ 9,000,000 | \$ - |
| F-73: Investigations of General Drainage Improvements in Jackson Bayou Watershed | Yes | Planning | 450,000 | 276,809 | 173,191 | - | - |
| Jackson Bayou Total | | | \$ 10,450,000 | \$ 276,809 | \$ 1,173,191 | \$ 9,000,000 | - |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-107: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Jackson Bayou Watershed

| | | |
|---|--------------------------------------|--------------|
| Investment Area: R - Jackson Bayou | Total Estimated Cost: | \$10,000,000 |
| Bond Project: Yes | Expenditures to Date: | \$0 |
| Approval Status: Planning | Non-County Funding – Secured: | \$0 |
| Projected Completion: TBD | Funding Need: | \$0 |

Project Description:

Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Jackson Bayou Watershed.

Justification:

Design and construction of a project to reduce the risk of flooding in the Jackson Bayou watershed for more than 90 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$1,000,000 | \$0 | \$3,002,742 | \$3,002,742 | \$2,994,516 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-73: Investigations of General Drainage Improvements in Jackson Bayou Watershed

Investment Area: R - Jackson Bayou **Total Estimated Cost:** \$450,000

Bond Project: Yes **Expenditures to Date:** \$276,809

Approval Status: Planning **Non-County Funding – Secured:** \$450,000

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Investigations of General Drainage Improvements in Jackson Bayou Watershed.

Justification:

Effort will investigate drainage deficiencies, flooding problems and evaluate potential solutions to reduce the risk of flooding in the Jackson Bayou watershed for more than 240 structures in the Atlas 14 1% AEP (100-year) floodplain.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$450,000 | \$173,191 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Luce Bayou Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|---|-------------------|------------------------|------------------------|----------------------|---------------------|----------------------|---------------------|
| F-108: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Luce Bayou Watershed | Yes | Planning | \$ 10,000,000 | \$ - | \$ - | \$ 10,000,000 | \$ - |
| F-110: Planning, Right-Of-Way Acquisition, Design and Construction of General Drainage Improvements Near Huffman | Yes | Preliminary Investment | 10,000,000 | 486,552 | 1,233,243 | 8,280,205 | - |
| F-51: Luce Bayou Right-of-Way Acquisition and Floodplain Preservation | Yes | Design | 10,000,000 | - | - | 7,865,229 | 2,134,771 |
| F-85: Investigations of General Drainage Improvements along Luce Bayou | Yes | Planning | 450,000 | 362,504 | 87,496 | - | - |
| Luce Bayou Total | | | \$ 30,450,000 | \$ 849,056 | \$ 1,320,739 | \$ 26,145,434 | \$ 2,134,771 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-108: Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Luce Bayou Watershed

Investment Area: S - Luce Bayou

Total Estimated Cost: \$10,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Right-of-Way Acquisition, Design and Construction of General Drainage Improvements in Luce Bayou Watershed

Justification:

Design and construction of projects to reduce the risk of flooding in the Luce Bayou watershed for more than 80 structures in the Atlas 14 1% AEP (100-year) floodplain).

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$0 | \$0 | \$3,336,380 | \$3,336,380 | \$3,327,240 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-110: Planning, Right-Of-Way Acquisition, Design and Construction of General Drainage Improvements Near Huffman

Investment Area: S - Luce Bayou

Total Estimated Cost: \$10,000,000

Bond Project: Yes

Expenditures to Date: \$486,552

Approval Status: Preliminary Investment

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Planning, Right-Of-Way Acquisition, Design and Construction of General Drainage Improvements Near Huffman.

Justification:

This project is component of plan that could reduce the risk of flooding for more than 120 structures and could reduce flooding for more than 330 acres in the pre-Atlas 14 1% AEP (100-year) floodplain and facilitate drainage improvements in the area of Huffman in the San Jacinto River watershed.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$1,233,243 | \$5,558,940 | \$2,721,265 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-51: Luce Bayou Right-of-Way Acquisition and Floodplain Preservation

Investment Area: S - Luce Bayou

Total Estimated Cost: \$10,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Luce Bayou Right-of-Way Acquisition and Floodplain Preservation.

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.

Property acquisitions can benefit public safety by utilizing the land for floodplain preservation, or using the land for future projects to construct levees, channels or detention for flood mitigation and controls. Property acquisitions allow land to be used for floodplain preservation, or for future projects to construct levees, channels and/or detention for flood mitigation and controls. This enhancement can be measured by facilities constructed on the property or acreage removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$0 | \$1,962,264 | \$1,967,655 | \$1,967,655 | \$1,967,655 | \$2,134,771 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-85: Investigations of General Drainage Improvements along Luce Bayou

Investment Area: S - Luce Bayou

Total Estimated Cost: \$450,000

Bond Project: Yes

Expenditures to Date: \$362,504

Approval Status: Planning

Non-County Funding – Secured: \$450,000

Projected Completion: TBD

Funding Need: \$0

Project Description:

Investigations of General Drainage Improvements along Luce Bayou.

Justification:

Effort will investigate drainage deficiencies, flooding problems and evaluate potential solutions to reduce the risk of flooding in the Harris County portion of Luce Bayou watershed for more than 260 structures in the Atlas 14 1% AEP (100-year) floodplain.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$450,000 | \$87,496 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Barker Reservoir Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|-------------------|-----------------|------------------------|----------------------|----------------------|----------------------|-------------------|
| C-53: Rehabilitation of Channels Inside of Barker Reservoir to Restore Channel Conveyance Capacity | Yes | Planning | \$ 10,000,000 | \$ - | \$ - | \$ 10,000,000 | \$ - |
| F-52: Rehabilitation of Approximately 20 Miles of Channels Upstream of Barker Reservoir to Restore Channel Conveyance Capacity | Yes | Design | 20,000,000 | 694,298 | 16,130,904 | 3,174,798 | - |
| Barker Reservoir Total | | | \$ 30,000,000 | \$ 694,298 | \$ 16,130,904 | \$ 13,174,798 | - |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: T - Barker Reservoir **Total Estimated Cost:** \$10,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Rehabilitation of Channels Inside of Barker Reservoir to Restore Channel Conveyance Capacity.

Justification:

Major maintenance to restore channel conveyance capacity. This project is being done by the Army Corps of Engineers, with the District providing project funding.

Maintenance projects return flood control facilities to their near intended state for optimal conveyance for the safety of the public. Maintenance projects return flood control facilities to their near intended state for optimal conveyance to allow for key county facilities and roads to be accessible. Maintenance projects return the facility to near intended state for optimal conveyance to reduce flooding risks. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$0 | \$0 | \$5,006,859 | \$4,993,141 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: T - Barker Reservoir **Total Estimated Cost:** \$20,000,000

Bond Project: Yes **Expenditures to Date:** \$694,298

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: FY 2025 **Funding Need:** \$0

Project Description:

Rehabilitation of Approximately 20 Miles of Channels Upstream of Barker Reservoir to Restore Channel Conveyance Capacity.

Justification:

Major maintenance to restore channel conveyance capacity.

Maintenance projects return flood control facilities to their near intended state for optimal conveyance for the safety of the public. Maintenance projects return flood control facilities to their near intended state for optimal conveyance to allow for key county facilities and roads to be accessible. Maintenance projects return the facility to near intended state for optimal conveyance to reduce flooding risks. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$20,000,000 | \$16,130,904 | \$0 | \$1,589,577 | \$1,585,221 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Addicks Reservoir Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|---|-------------------|------------------------|------------------------|----------------------|----------------------|-----------------------|----------------------|
| C-36: Right-Of-Way Acquisition, Design and Construction of Channel Conveyance Improvements and Bypass Channel for South Mayde Creek | Yes | Design | \$ 10,000,000 | \$ 666,927 | \$ 1,826,752 | \$ 7,506,321 | \$ - |
| C-37: Design and Construction of Little York Stormwater Detention Basin | Yes | Implementation | 3,000,000 | - | 936,847 | 2,063,153 | - |
| C-38: Design and Construction of Dinner Creek Stormwater Detention Basin | Yes | Design | 15,000,000 | 139,953 | 3,360,047 | 11,500,000 | - |
| C-46: Right-Of-Way Acquisition, Design and Construction of a Stormwater Detention Basin on South Mayde Creek | Yes | Design | 16,000,000 | 403,153 | 2,108,824 | 12,357,182 | 1,130,841 |
| C-47: Design and Construction of a Bridge Replacement for Greenhouse Road at South Mayde Creek | Yes | Preliminary Investment | 15,000,000 | - | 500,000 | 14,500,000 | - |
| C-48: Right-Of-Way Acquisition, Design and Construction of a Stormwater Detention Basin on South Mayde Creek near the Grand Parkway | Yes | Design | 94,000,000 | 549,919 | 3,133,020 | 73,307,196 | 17,009,865 |
| C-52: Rehabilitation of Channels Inside of Addicks Reservoir to Restore Channel Conveyance Capacity | Yes | Planning | 10,000,000 | - | 500,000 | 9,500,000 | - |
| F-112: Right-Of-Way Acquisition, Design, and Construction of Wetland Mitigation Bank | Yes | Design | 20,000,000 | 75,416 | 5,251,210 | 14,673,374 | - |
| F-53: Rehabilitation of Channels Upstream of Addicks Reservoir to Restore Channel Conveyance Capacity | Yes | Implementation | 40,000,000 | 24,957,957 | 11,297,731 | 3,744,312 | - |
| F-54: Right-Of-Way Acquisition, Design and Construction of Control Structures and Stormwater Quality Features for the Upper Langham Creek Program | Yes | Implementation | 10,000,000 | - | 2,953,311 | 7,046,689 | - |
| F-55: Planning, Right-Of-Way Acquisition, Design, and Construction for Ultimate Conveyance on Bear Creek | Yes | Planning | 25,000,000 | - | 2,472,529 | 20,054,944 | 2,472,527 |
| F-56: Right-Of-Way Acquisition, Design, and Construction of a Retention Area | Yes | Planning | 15,000,000 | 320,300 | 39,699 | 14,640,001 | - |
| 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 | Yes | Design | 21,000,000 | 2,946 | 2,742,498 | 18,254,556 | - |
| F-84: Design and Construction of Secondary Outfall for John Pauls Landing for the Upper Langham Creek Program | Yes | Planning | 5,000,000 | - | - | 5,000,000 | - |
| Addicks Reservoir Total | | | \$ 299,000,000 | \$ 27,116,571 | \$ 37,122,468 | \$ 214,147,728 | \$ 20,613,233 |

Harris County FY 2021-2022 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

Investment Area: U - Addicks Reservoir **Total Estimated Cost:** \$10,000,000

Bond Project: Yes **Expenditures to Date:** \$666,927

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: FY 2026 **Funding Need:** \$9,000,000

Project Description:

Right-Of-Way Acquisition, Design and Construction of Channel Conveyance Improvements and Bypass Channel for South Mayde Creek.

Justification:

This project is part of the South Mayde Creek Plan that could reduce the risk of flooding for more than 70 homes and reduce the floodplain by more than 340 acres for the pre-Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$1,826,752 | \$1,566,963 | \$611,778 | \$3,000,000 | \$2,327,580 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: U - Addicks Reservoir **Total Estimated Cost:** \$3,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Implementation **Non-County Funding – Secured:** \$0

Projected Completion: FY 2025 **Funding Need:** \$2,500,000

Project Description:

Design and Construction of Little York Stormwater Detention Basin.

Justification:

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

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$3,000,000 | \$936,847 | \$1,032,992 | \$1,030,161 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|----------------|
| O&M | \$2,217 |
| Labor | \$332 |
| Other | \$0 |
| Total | \$2,549 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: U - Addicks Reservoir **Total Estimated Cost:** \$15,000,000

Bond Project: Yes **Expenditures to Date:** \$139,953

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: FY 2025 **Funding Need:** \$11,250,000

Project Description:

Design and Construction of Dinner Creek Stormwater Detention Basin.

Justification:

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

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$15,000,000 | \$3,360,047 | \$4,607,574 | \$4,607,574 | \$2,284,852 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-----------------|
| O&M | \$45,000 |
| Labor | \$6,750 |
| Other | \$0 |
| Total | \$51,750 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: C-46: Right-Of-Way Acquisition, Design and Construction of a Stormwater Detention Basin on South Mayde Creek

Investment Area: U - Addicks Reservoir

Total Estimated Cost: \$16,000,000

Bond Project: Yes

Expenditures to Date: \$403,153

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$14,400,000

Project Description:

Right-Of-Way Acquisition, Design and Construction of a Stormwater Detention Basin on South Mayde Creek.

Justification:

This project is part of the South Mayde Creek Plan that could reduce the risk of flooding for more than 70 homes and reduce the floodplain by more than 340 acres for the pre-Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$16,000,000 | \$2,108,824 | \$1,826,912 | \$661,111 | \$4,934,580 | \$4,934,580 | \$1,130,841 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: U - Addicks Reservoir **Total Estimated Cost:** \$15,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Preliminary Investment **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$13,500,000

Project Description:

Design and Construction of a Bridge Replacement for Greenhouse Road at South Mayde Creek.

Justification:

This project is part of the South Mayde Creek Plan that could reduce the risk of flooding for more than 70 homes and reduce the floodplain by more than 340 acres for the pre-Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$15,000,000 | \$500,000 | \$1,000,000 | \$4,050,000 | \$5,400,000 | \$4,050,000 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 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

Investment Area: U - Addicks Reservoir **Total Estimated Cost:** \$94,000,000

Bond Project: Yes **Expenditures to Date:** \$549,919

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: FY 2024 **Funding Need:** \$84,600,000

Project Description:

Right-Of-Way Acquisition, Design and Construction of a Stormwater Detention Basin on South Mayde Creek near the Grand Parkway.

Justification:

This project is part of the South Mayde Creek Plan that could reduce the risk of flooding for more than 70 homes and reduce the floodplain by more than 340 acres for the pre-Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$94,000,000 | \$3,133,020 | \$19,618,854 | \$19,665,329 | \$17,059,623 | \$16,963,390 | \$17,009,865 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-----------------|
| O&M | \$80,000 |
| Labor | \$12,000 |
| Other | \$0 |
| Total | \$92,000 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: U - Addicks Reservoir **Total Estimated Cost:** \$10,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Rehabilitation of Channels Inside of Addicks Reservoir to Restore Channel Conveyance Capacity.

Justification:

Major maintenance to restore channel conveyance capacity. Partnership project with Corps of Engineers. District providing project funding.

Maintenance projects return flood control facilities to near their intended state for optimal water flow to reduce flooding risks and for the safety of the public. They allow for key county facilities and roads to be accessible. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$500,000 | \$3,000,000 | \$3,500,000 | \$3,000,000 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: U - Addicks Reservoir **Total Estimated Cost:** \$20,000,000

Bond Project: Yes **Expenditures to Date:** \$75,416

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: FY 2024 **Funding Need:** \$0

Project Description:

Right-Of-Way Acquisition, Design, and Construction of Wetland Mitigation Bank.

Justification:

Restoration and enhancement of wetlands to create wetland mitigation credits, supporting construction of District projects. The credits may be used for projects supporting District goals in coordination with other Harris County public agencies and municipalities.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$20,000,000 | \$5,251,210 | \$2,711,097 | \$8,248,006 | \$3,714,271 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: U - Addicks Reservoir **Total Estimated Cost:** \$40,000,000

Bond Project: Yes **Expenditures to Date:** \$24,957,957

Approval Status: Implementation **Non-County Funding – Secured:** \$0

Projected Completion: FY 2022 **Funding Need:** \$0

Project Description:

Rehabilitation of Channels Upstream of Addicks Reservoir to Restore Channel Conveyance Capacity.

Justification:

Major maintenance to restore channel conveyance capacity.

Maintenance projects return flood control facilities to their near intended state for optimal conveyance for the safety of the public. Maintenance projects return flood control facilities to their near intended state for optimal conveyance to allow for key county facilities and roads to be accessible. Maintenance projects return the facility to near intended state for optimal conveyance to reduce flooding risks. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$40,000,000 | \$11,297,731 | \$3,744,312 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 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

Investment Area: U - Addicks Reservoir **Total Estimated Cost:** \$10,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Implementation **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Right-Of-Way Acquisition, Design and Construction of Control Structures and Stormwater Quality Features for the Upper Langham Creek Program.

Justification:

This project is part of the Upper Langham Creek Program that will reduce the risk of flooding for over 2,500 structures pre-Atlas 14 1% AEP (100-year) floodplain

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$2,953,311 | \$3,963,084 | \$3,083,605 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: U - Addicks Reservoir

Total Estimated Cost: \$25,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Planning, Right-Of-Way Acquisition, Design, and Construction for Ultimate Conveyance on Bear Creek.

Justification:

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

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$25,000,000 | \$2,472,529 | \$5,013,736 | \$5,013,736 | \$5,013,736 | \$5,013,736 | \$2,472,527 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: U - Addicks Reservoir **Total Estimated Cost:** \$15,000,000

Bond Project: Yes **Expenditures to Date:** \$320,300

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Right-Of-Way Acquisition, Design, and Construction of a Retention Area.

Justification:

Provides regional retention in accordance w/ Cypress Creek Overflow Guidelines that could reduce the risk of flooding for more than 460 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$15,000,000 | \$39,699 | \$4,884,461 | \$4,884,461 | \$4,871,079 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 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

Investment Area: U - Addicks Reservoir **Total Estimated Cost:** \$21,000,000

Bond Project: Yes **Expenditures to Date:** \$2,946

Approval Status: Design **Non-County Funding – Secured:** \$0

Projected Completion: FY 2025 **Funding Need:** \$0

Project Description:

Right-Of-Way Acquisition, Design and Construction of a Stormwater Detention Basin North of John Pauls Landing for the Upper Langham Creek Program.

Justification:

This project is part of the Upper Langham Creek Program that could reduce the risk of flooding for over 2,500 structures in the pre-Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$21,000,000 | \$2,742,498 | \$4,533,398 | \$6,674,907 | \$7,046,251 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-----------------|
| O&M | \$64,000 |
| Labor | \$9,600 |
| Other | \$0 |
| Total | \$73,600 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: U - Addicks Reservoir **Total Estimated Cost:** \$5,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Design and Construction of Secondary Outfall for John Pauls Landing for the Upper Langham Creek Program.

Justification:

This project is part of the Upper Langham Creek Program that will reduce the risk of flooding for over 2,500 structures pre-Atlas 14 1% AEP (100-year) floodplain

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$5,000,000 | \$0 | \$0 | \$2,503,429 | \$2,496,571 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Buffalo Bayou Watershed Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|---|--------------------------|------------------------|-------------------------------|-----------------------------|---------------------|----------------------|--------------------------|
| <u>CI-009: Partnership Project with Fort Bend County on Right-of-Way Acquisition, Design, and Construction of General Drainage Improvements along Clodine Ditch</u> | Yes | Planning | \$ 30,000,000 | \$ - | \$ - | \$ 23,983,562 | \$ 6,016,438 |
| <u>CI-017: Phased Implementation of Additional Storage and Conveyance Improvements per Recommendations of the W100- Buffalo Bayou Study</u> | Yes | Planning | 30,000,000 | - | - | 23,983,562 | 6,016,438 |
| <u>CI-018: Rehabilitation of W140-00-00 to Restore Channel Conveyance Capacity</u> | Yes | Planning | 2,000,000 | - | - | 2,000,000 | - |
| <u>CI-024: Investigation of Effectiveness of Micro-Detention in the Buffalo Bayou Watershed</u> | Yes | Planning | 200,000 | - | 200,000 | - | - |
| <u>F-58: Construction of Linear Detention on Buffalo Bayou</u> | Yes | Preliminary Investment | 10,000,000 | - | - | 10,000,000 | - |
| <u>F-79: Planning, Right-Of-Way Acquisition, Design and Construction Along W157-00-00</u> | Yes | Planning | 10,000,000 | - | - | 10,000,000 | - |
| <u>F-80: Planning, Right-Of-Way Acquisition, Design and Construction Along Soldiers Creek</u> | Yes | Planning | 10,000,000 | - | - | 10,000,000 | - |
| <u>F-81: Planning, Right-Of-Way Acquisition, Design and Construction Along W151-00-00 and W153-00-00</u> | Yes | Planning | 20,000,000 | - | 1,010,000 | 18,990,000 | - |
| <u>F-82: Demolition of 1119 Commerce Street and Slope Stabilization Along Buffalo Bayou</u> | Yes | Design | 4,665,700 | 1,838,318 | 2,827,382 | - | - |
| Buffalo Bayou Total | | | \$ 116,865,700 | \$ 1,838,318 | \$ 4,037,382 | \$ 98,957,124 | \$ 12,032,876 |

Harris County FY 2021-2022 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

Investment Area: W - Buffalo Bayou **Total Estimated Cost:** \$30,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$15,000,000

Project Description:

Partnership Project with Fort Bend County on Right-of-Way Acquisition, Design, and Construction of General Drainage Improvements along Clodine Ditch.

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.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$30,000,000 | \$0 | \$5,983,562 | \$6,000,000 | \$6,000,000 | \$6,000,000 | \$6,016,438 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-017: Phased Implementation of Additional Storage and Conveyance Improvements per Recommendations of the W100-Buffer Bayou Study

Investment Area: W - Buffalo Bayou **Total Estimated Cost:** \$30,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Phased Implementation of Additional Storage and Conveyance Improvements per Recommendations of the W100-Buffer Bayou Study.

Justification:

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

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$30,000,000 | \$0 | \$5,983,562 | \$6,000,000 | \$6,000,000 | \$6,000,000 | \$6,016,438 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: W - Buffalo Bayou

Total Estimated Cost: \$2,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Rehabilitation of W140-00-00 to Restore Channel Conveyance Capacity.

Justification:

Major maintenance to restore channel conveyance capacity.

Maintenance projects return flood control facilities to their near intended state for optimal conveyance for the safety of the public. Maintenance projects return flood control facilities to their near intended state for optimal conveyance to allow for key county facilities and roads to be accessible. Maintenance projects return the facility to near intended state for optimal conveyance to reduce flooding risks. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$2,000,000 | \$0 | \$0 | \$1,336,996 | \$663,004 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-024: Investigation of Effectiveness of Micro-Detention in the Buffalo Bayou Watershed

Investment Area: W - Buffalo Bayou

Total Estimated Cost: \$200,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Investigation of Effectiveness of Micro-Detention in the Buffalo Bayou Watershed.

Justification:

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

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$200,000 | \$200,000 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: W - Buffalo Bayou

Total Estimated Cost:

\$10,000,000

Bond Project: Yes

Expenditures to Date:

\$0

Approval Status: Preliminary Investment

Non-County Funding – Secured:

\$0

Projected Completion: TBD

Funding Need:

\$0

Project Description:

Construction of Linear Detention on Buffalo Bayou.

Justification:

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

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$0 | \$0 | \$3,336,380 | \$3,336,380 | \$3,327,240 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: W - Buffalo Bayou **Total Estimated Cost:** \$10,000,000

Bond Project: Yes **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$0

Project Description:

Planning, Right-Of-Way Acquisition, Design and Construction Along W157-00-00.

Justification:

Could reduce the risk of flooding and could improve local drainage issues for buildings along the channel. Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$0 | \$0 | \$3,336,380 | \$3,336,380 | \$3,327,240 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: W - Buffalo Bayou

Total Estimated Cost:

\$10,000,000

Bond Project: Yes

Expenditures to Date:

\$0

Approval Status: Planning

Non-County Funding – Secured:

\$0

Projected Completion: TBD

Funding Need:

\$0

Project Description:

Planning, Right-Of-Way Acquisition, Design and Construction Along Soldiers Creek.

Justification:

Could reduce the risk of flooding and could improve local drainage issues for buildings along the channel. Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$0 | \$0 | \$3,336,380 | \$3,336,380 | \$3,327,240 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: W - Buffalo Bayou

Total Estimated Cost: \$20,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Planning, Right-Of-Way Acquisition, Design and Construction Along W151-00-00 and W153-00-00.

Justification:

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

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$20,000,000 | \$1,010,000 | \$0 | \$6,335,786 | \$6,335,786 | \$6,318,428 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|--|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: W - Buffalo Bayou

Total Estimated Cost: \$4,665,700

Bond Project: Yes

Expenditures to Date: \$1,838,318

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: FY 2021

Funding Need: \$2,665,700

Project Description:

Demolition of 1119 Commerce Street and Slope Stabilization Along Buffalo Bayou.

Justification:

Improving the channel conveyance along Buffalo Bayou near downtown Houston and addressing public safety concerns on adjacent public streets.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$4,665,700 | \$2,827,382 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Flood Control - Z-Countywide Projects

| Project Name | 2018 Bond Project | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|-------------------|------------------------|-------------------------|-----------------------|-----------------------|-------------------------|-----------------------|
| C-40: Corps of Engineers Section 216 Study - Addicks and Barker Reservoirs | Yes | Planning | \$ 6,000,000 | \$ - | \$ - | \$ 6,000,000 | \$ - |
| CI-026: Investigation of City of Houston Properties for Conversion to Stormwater Detention Basins | Yes | Planning | 500,000 | - | - | 500,000 | - |
| Countywide Federal Concrete Lined Channel Maintenance Program | No | Planning | 5,875,000 | - | 5,875,000 | - | - |
| Countywide Natural Channel Maintenance Program | No | Planning | 10,100,000 | - | 10,100,000 | - | - |
| Countywide Non-Federal Concrete Lined Channel Maintenance Program | No | Planning | 40,000,000 | - | 40,000,000 | - | - |
| Countywide Right of Way Acquisition for Maintenance Projects | No | Planning | 1,000,000 | - | 1,000,000 | - | - |
| District Facility and Service Center Construction | No | Planning | 60,000,000 | - | 5,000,000 | 50,000,000 | 5,000,000 |
| F-14: Planning, Right-Of-Way Acquisition, Design and Construction of General Drainage Improvements Near Kingwood | Yes | Planning | 10,000,000 | 620,677 | 179,323 | 9,200,000 | - |
| Z-01: Countywide Floodplain Preservation and Right of Way Acquisition | Yes | Design | 50,000,000 | 41,140,458 | 389,441 | 8,470,101 | - |
| Z-02: Partnership Projects with Municipalities, Authorities, and Other Districts in Harris County | Yes | Implementation | 175,000,000 | 7,669,360 | 33,830,253 | 112,787,451 | 20,712,936 |
| Z-03: Countywide Ongoing Planning | Yes | Planning | 11,900,000 | 407,330 | 3,379,245 | 8,113,425 | - |
| Z-04: Partnership Projects with the Harris County Engineering Department | Yes | Implementation | 100,000,000 | 1,830,065 | 3,729,067 | 76,103,035 | 18,337,833 |
| Z-05: Advanced Emerging Technologies for Flood Damage Reduction | Yes | Planning | 25,000,000 | 1,223,731 | 414,097 | 23,362,172 | - |
| Z-06: Bond Administration | Yes | Preliminary Investment | 10,000,000 | 151,400 | 1,314,347 | 5,257,388 | 3,276,865 |
| Z-08: Preliminary Engineering for Large Diameter Tunnels for Stormwater Conveyance | Yes | Planning | 22,820,000 | 1,034,672 | 1,865,328 | 19,920,000 | - |
| Z-09: Upgrades and Expansion of the Harris County Flood Warning System | Yes | Preliminary Investment | 5,000,000 | 362,336 | 1,969,976 | 2,667,688 | - |
| Z-10: Maapnext - Harris County Floodplain Mapping Updates | Yes | Planning | 28,300,000 | 13,625,207 | 7,429,242 | 7,245,551 | - |
| Z100-00-00-H058: Flood Mitigation Assistance (FMA) Buyout Grant 2016 (application year) | No | Design | 14,827,538 | 3,192,275 | 3,871,331 | 7,763,932 | - |
| Z100-00-00-P013: LOMR Delegation Program | No | Planning | 2,534,490 | 1,843,208 | 72,091 | 288,364 | 330,827 |
| Z100-00-00-Y102: Harris County Flood Forecasting System | No | Design | 1,820,000 | 725,024 | 1,094,976 | - | - |
| Z100-00-00-Y105: Regional Public Education Services Program | No | Design | 170,000 | 5,703 | 164,297 | - | - |
| Z-11: Countywide Communications Relating to 2018 Bond and CIP Projects | Yes | Design | 10,000,000 | 1,694,540 | - | 8,305,460 | - |
| Z-Buyout: Federal Grant-Funded Volunteer Home Buyouts | Yes | Design | 531,425,000 | 100,427,761 | 23,190,823 | 317,593,991 | 90,212,425 |
| Z-StormRep: Countywide Storm Repairs in Harris County | Yes | Implementation | 91,491,009 | 80,273,703 | 11,217,306 | - | - |
| Z-Subdiv: Harris County Engineering Department Countywide Subdivision Drainage Improvement Projects | Yes | Implementation | 521,455,946 | 17,444,673 | 79,666,883 | 357,185,239 | 67,159,151 |
| Countywide Total | | | \$ 1,735,218,983 | \$ 273,672,123 | \$ 235,753,026 | \$ 1,020,763,797 | \$ 205,030,037 |

Harris County FY 2021-2022 Capital Improvement Program

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

Investment Area: Z - Countywide

Total Estimated Cost: \$6,000,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$6,000,000

Projected Completion: TBD

Funding Need: \$0

Project Description:

Corps of Engineers Section 216 Study - Addicks and Barker Reservoirs.

Justification:

This study partnership with the Corps of Engineers will recommend projects and/or operational changes to improve the effectiveness and safety of the Addicks and Barker Reservoirs.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$6,000,000 | \$0 | \$0 | \$3,004,115 | \$2,995,885 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CI-026: Investigation of City of Houston Properties for Conversion to Stormwater Detention Basins

Investment Area: Z - Countywide

Total Estimated Cost: \$500,000

Bond Project: Yes

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$250,000

Project Description:

Investigation of City of Houston Properties for Conversion to Stormwater Detention Basins.

Justification:

Design and construction of stormwater detention basins on various City of Houston properties could reduce the risk of flooding in the area. Specific benefits will be determined as individual projects are initiated. Projects include detention, sediment control, vegetation management and other flood risk management projects.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$500,000 | \$0 | \$500,000 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Countywide Federal Concrete Lined Channel Maintenance Program

Investment Area: Z - Countywide

Total Estimated Cost: \$5,875,000

Bond Project: No

Expenditures to Date: \$0

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$5,875,000

Project Description:

Countywide Federal Concrete Lined Channel Maintenance Program

Justification:

Major maintenance to restore channel conveyance capacity.

Maintenance projects return flood control facilities to their near intended state for optimal conveyance for the safety of the public. Maintenance projects return flood control facilities to their near intended state for optimal conveyance to allow for key county facilities and roads to be accessible. Maintenance projects return the facility to near intended state for optimal conveyance to reduce flooding risks. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$5,875,000 | \$5,875,000 | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Countywide Natural Channel Maintenance Program

Investment Area: Z - Countywide

Total Estimated Cost:

\$10,100,000

Bond Project: No

Expenditures to Date:

\$0

Approval Status: Planning

Non-County Funding – Secured:

\$0

Projected Completion: TBD

Funding Need:

\$10,100,000

Project Description:

Countywide Natural Channel Maintenance Program

Justification:

Major maintenance to restore channel conveyance capacity.

Maintenance projects return flood control facilities to their near intended state for optimal conveyance for the safety of the public. Maintenance projects return flood control facilities to their near intended state for optimal conveyance to allow for key county facilities and roads to be accessible. Maintenance projects return the facility to near intended state for optimal conveyance to reduce flooding risks. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,100,000 | \$10,100,000 | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Countywide Non-Federal Concrete Lined Channel Maintenance Program

Investment Area: Z - Countywide **Total Estimated Cost:** \$40,000,000

Bond Project: No **Expenditures to Date:** \$0

Approval Status: Planning **Non-County Funding – Secured:** \$0

Projected Completion: TBD **Funding Need:** \$40,000,000

Project Description:

Countywide Non-Federal Concrete Lined Channel Maintenance Program

Justification:

Major maintenance to restore channel conveyance capacity.

Maintenance projects return flood control facilities to their near intended state for optimal conveyance for the safety of the public. Maintenance projects return flood control facilities to their near intended state for optimal conveyance to allow for key county facilities and roads to be accessible. Maintenance projects return the facility to near intended state for optimal conveyance to reduce flooding risks. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$40,000,000 | \$40,000,000 | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Countywide Right of Way Acquisition for Maintenance Projects

Investment Area: Z - Countywide

Total Estimated Cost:

\$1,000,000

Bond Project: No

Expenditures to Date:

\$0

Approval Status: Planning

Non-County Funding – Secured:

\$0

Projected Completion: TBD

Funding Need:

\$1,000,000

Project Description:

Countywide Right of Way Acquisition for Maintenance Projects

Justification:

Property acquisition for project site access and other right of way necessities for maintenance activities.

Property acquisitions can benefit public safety by utilizing the land for floodplain preservation, or using the land for future projects to construct levees, channels or detention for flood mitigation and controls. Property acquisitions allow land to be used for floodplain preservation, or for future projects to construct levees, channels and/or detention for flood mitigation and controls. This enhancement can be measured by facilities constructed on the property or acreage removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$1,000,000 | \$1,000,000 | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: District Facility and Service Center Construction

Investment Area: Z - Countywide

Total Estimated Cost:

\$60,000,000

Bond Project: No

Expenditures to Date:

\$0

Approval Status: Planning

Non-County Funding – Secured:

\$0

Projected Completion: FY 2025

Funding Need:

\$60,000,000

Project Description:

Facilities for the District Construction and Maintenance Division to expand service capabilities and future office space for Operations.

Justification:

This project would provide needed facilities for District operations and provide an additional location in the southern region of Harris county for construction and infrastructure services. Adding new facilities would increase operational efficiency and provide savings with travel time to sites, proximity to tools and equipment, and workplace collaboration. By constructing facilities that enhance the productivity of operations and construction staff, this would benefit any projects that address continuity of government.

Alternatives and Engagement:

An alternative to building the new facility is leasing facilities to accommodate the anticipated increase in staff. Options for leasing were considered when the District staff size grew after the 2018 Bond passed. Leasing additional space would result in a recurring operational cost, which may exceed the cost of building a new facility in the long-term. Building a new facility was deemed to be the preferable option, with the long term goal to join other county departments with construction of new facilities for operations and construction staff.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$60,000,000 | \$5,000,000 | \$10,000,000 | \$10,000,000 | \$20,000,000 | \$10,000,000 | \$5,000,000 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: F-14: Planning, Right-Of-Way Acquisition, Design and Construction of General Drainage Improvements Near Kingwood

Investment Area: Z - Countywide

Total Estimated Cost: \$10,000,000

Bond Project: Yes

Expenditures to Date: \$620,677

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Planning, Right-Of-Way Acquisition, Design and Construction of General Drainage Improvements Near Kingwood.

Justification:

This planning effort will identify watershed wide drainage deficiencies, evaluate alternatives, conduct right of way acquisition, design and construction of a project to reduce the risk of flooding for more than 380 structures in the Atlas 14 1% AEP (100-year) floodplain.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$179,323 | \$1,534,735 | \$3,069,470 | \$3,069,470 | \$1,526,325 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Z-01: Countywide Floodplain Preservation and Right of Way Acquisition

Investment Area: Z - Countywide

Total Estimated Cost: \$50,000,000

Bond Project: Yes

Expenditures to Date: \$41,140,458

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Countywide Floodplain Preservation and Right of Way Acquisition.

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.

Property acquisitions can benefit public safety by utilizing the land for floodplain preservation, or using the land for future projects to construct levees, channels or detention for flood mitigation and controls. Property acquisitions allow land to be used for floodplain preservation, or for future projects to construct levees, channels and/or detention for flood mitigation and controls. This enhancement can be measured by facilities constructed on the property or acreage removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$50,000,000 | \$389,441 | \$346,422 | \$312,471 | \$7,811,208 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Z-02: Partnership Projects with Municipalities, Authorities, and Other Districts in Harris County

Investment Area: Z - Countywide

Total Estimated Cost: \$175,000,000

Bond Project: Yes

Expenditures to Date: \$7,669,360

Approval Status: Implementation

Non-County Funding – Secured: \$0

Projected Completion: FY 2021

Funding Need: \$0

Project Description:

Partnership Projects with Municipalities, Authorities, and Other Districts in Harris County.

Justification:

Jointly funded projects to address flooding with multi-jurisdictional projects. Specific project benefits will be determined as projects are initiated.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$175,000,000 | \$33,830,253 | \$35,660,346 | \$30,445,449 | \$23,845,660 | \$22,835,996 | \$20,712,936 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|----------------|
| O&M | \$2,000 |
| Labor | \$300 |
| Other | \$0 |
| Total | \$2,300 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Z-03: Countywide Ongoing Planning

Investment Area: Z - Countywide

Total Estimated Cost:

\$11,900,000

Bond Project: Yes

Expenditures to Date:

\$407,330

Approval Status: Planning

Non-County Funding – Secured:

\$2,400,000

Projected Completion: TBD

Funding Need:

\$0

Project Description:

Countywide Ongoing Planning.

Justification:

Ongoing efforts to identify future projects and work efforts to reduce flooding in Harris County watersheds.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$11,900,000 | \$3,379,245 | \$363,424 | \$2,585,695 | \$2,585,695 | \$2,578,611 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Z-04: Partnership Projects with the Harris County Engineering Department

Investment Area: Z - Countywide

Total Estimated Cost: \$100,000,000

Bond Project: Yes

Expenditures to Date: \$1,830,065

Approval Status: Implementation

Non-County Funding – Secured: \$0

Projected Completion: FY 2021

Funding Need: \$0

Project Description:

Partnership Projects with the Harris County Engineering Department.

Justification:

Jointly funded projects that could reduce the risk of flooding in conjunction with Harris County Engineering Department projects.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$100,000,000 | \$3,729,067 | \$21,062,630 | \$18,464,919 | \$18,287,757 | \$18,287,729 | \$18,337,833 |

| Estimated Annual Operating Budget Impact: | |
|--|-----------------|
| O&M | \$18,000 |
| Labor | \$2,700 |
| Other | \$0 |
| Total | \$20,700 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Z-05: Advanced Emerging Technologies for Flood Damage Reduction

Investment Area: Z - Countywide

Total Estimated Cost: \$25,000,000

Bond Project: Yes

Expenditures to Date: \$1,223,731

Approval Status: Planning

Non-County Funding – Secured: \$0

Projected Completion: FY 2019

Funding Need: \$0

Project Description:

Advanced Emerging Technologies for Flood Damage Reduction.

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.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$25,000,000 | \$414,097 | \$0 | \$7,794,509 | \$7,794,509 | \$7,773,154 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Z-06: Bond Administration

Investment Area: Z - Countywide

Total Estimated Cost: \$10,000,000

Bond Project: Yes

Expenditures to Date: \$151,400

Approval Status: Preliminary Investment

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

This project is to administer the bond program with legal and financial professional services.

Justification:

These legal and financial professional services are critical to effective management of the bond program. These controls will ensure that project spending is appropriate and documented correctly.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$1,314,347 | \$1,314,347 | \$1,314,347 | \$1,314,347 | \$1,314,347 | \$3,276,865 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Z-08: Preliminary Engineering for Large Diameter Tunnels for Stormwater Conveyance

Investment Area: Z - Countywide

Total Estimated Cost: \$22,820,000

Bond Project: Yes

Expenditures to Date: \$1,034,672

Approval Status: Planning

Non-County Funding – Secured: \$2,820,000

Projected Completion: TBD

Funding Need: \$0

Project Description:

Preliminary Engineering for Large Diameter Tunnels for Stormwater Conveyance.

Justification:

Preliminary engineering for implementation of large diameter tunnels to reduce the risk of flooding across Harris County.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$22,820,000 | \$1,865,328 | \$4,986,832 | \$9,973,663 | \$4,959,506 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Z-09: Upgrades and Expansion of the Harris County Flood Warning System

Investment Area: Z - Countywide

Total Estimated Cost: \$5,000,000

Bond Project: Yes

Expenditures to Date: \$362,336

Approval Status: Preliminary Investment

Non-County Funding – Secured: \$1,310,019

Projected Completion: TBD

Funding Need: \$2,439,981

Project Description:

Upgrades and Expansion of the Harris County Flood Warning System.

Justification:

Improving existing flood monitoring systems to provide near-real time information on flooding in Harris County for emergency managers, public officials, first responders, and the public.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$5,000,000 | \$1,969,976 | \$0 | \$1,335,674 | \$1,332,014 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Z-10: Maapnext - Harris County Floodplain Mapping Updates

Investment Area: Z - Countywide

Total Estimated Cost:

\$28,300,000

Bond Project: Yes

Expenditures to Date:

\$13,625,207

Approval Status: Planning

Non-County Funding – Secured:

\$12,800,000

Projected Completion: TBD

Funding Need:

\$3,000,000

Project Description:

Maapnext - Harris County Floodplain Mapping Updates.

Justification:

Providing more accurate information on the risks of flooding in Harris County including a web-based flood education tool.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$28,300,000 | \$7,429,242 | \$7,245,551 | \$0 | \$0 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Z100-00-00-H058: Flood Mitigation Assistance (FMA) Buyout Grant 2016 (application year)

Investment Area: Z - Countywide

Total Estimated Cost: \$14,827,538

Bond Project: No

Expenditures to Date: \$3,192,275

Approval Status: Design

Non-County Funding – Secured: \$13,275,227

Projected Completion: TBD

Funding Need: \$1,120,311

Project Description:

Flood Mitigation Assistance (FMA) Buyout Grant 2016 (application year).

Justification:

Acquisition and demolition of flood-prone homes under FEMA's Flood Mitigation Assistance 2016 grant program

Property acquisitions can benefit public safety by utilizing the land for floodplain preservation, or using the land for future projects to construct levees, channels or detention for flood mitigation and controls. Property acquisitions allow land to be used for floodplain preservation, or for future projects to construct levees, channels and/or detention for flood mitigation and controls. This enhancement can be measured by facilities constructed on the property or acreage removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$14,827,538 | \$3,871,331 | \$3,881,966 | \$3,881,966 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Z100-00-00-P013: LOMR Delegation Program

Investment Area: Z - Countywide

Total Estimated Cost:

\$2,534,490

Bond Project: No

Expenditures to Date:

\$1,843,208

Approval Status: Design

Non-County Funding – Secured:

\$0

Projected Completion: TBD

Funding Need:

\$1,421,095

Project Description:

LOMR Delegation Program.

Justification:

HCFCF submitted a proposal to participate in FEMA's Letter of Map Revision Delegation Program. June 2009, the District provided additional information upon FEMA's request regarding this proposal. After receiving a letter Oct. 2009 the District was notified that they had been selected to participate in the LOMR Delegation Program.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$2,534,490 | \$72,091 | \$72,091 | \$72,091 | \$72,091 | \$72,091 | \$330,827 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Z100-00-00-Y102: Harris County Flood Forecasting System

Investment Area: Z - Countywide

Total Estimated Cost:

\$1,820,000

Bond Project: No

Expenditures to Date:

\$725,024

Approval Status: Design

Non-County Funding – Secured:

\$0

Projected Completion: TBD

Funding Need:

\$820,000

Project Description:

Harris County Flood Forecasting System.

Justification:

Engineering effort to assist HCFCD in developing a flood forecasting system to project water surface elevations and timing along channels as flood events occur in real-time.

Countywide forecast system and updated technical memo describing system setup, calibration process, testing, system performance, and step-by-step instructions on system operation.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$1,820,000 | \$1,094,976 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Z100-00-00-Y105: Regional Public Education Services Program

Investment Area: Z - Countywide

Total Estimated Cost: \$170,000

Bond Project: No

Expenditures to Date: \$5,703

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$70,000

Project Description:

Regional Public Education Services Program.

Justification:

The District will provide an annual report to 13 Phase II Cities to demonstrate permit compliance with Texas Commission on Environmental Quality for their public education program.

Planning projects produce study results to determine the feasibility of further projects to acquire property for floodplain preservation, establish sensitive habitats, or construct levees, channels or detention for flood mitigation and controls to benefit public safety. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$170,000 | \$164,297 | \$0 | \$0 | \$0 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Z-11: Countywide Communications Relating to 2018 Bond and CIP Projects

Investment Area: Z - Countywide

Total Estimated Cost: \$10,000,000

Bond Project: Yes

Expenditures to Date: \$1,694,540

Approval Status: Design

Non-County Funding – Secured: \$0

Projected Completion: TBD

Funding Need: \$0

Project Description:

Countywide Communications Relating to 2018 Bond and CIP Projects.

Justification:

Providing transparency with countywide and watershed level communications by engaging with the public about 2018 Bond projects.

Communications with the public through collaborative engagement sessions provides needed feedback from the citizens and also provides the citizens with information of the District goals and current projects. Planning projects supply the District and Harris County with information needed to develop solutions to fulfill the mission of reducing flooding risks. This enhancement can be measured by the number of projects initiated from the study performed that reduce flooding risks for structures, land, and roads.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$10,000,000 | \$0 | \$4,293,307 | \$4,012,153 | \$0 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Z-Buyout: Federal Grant-Funded Volunteer Home Buyouts

Investment Area: Z - Countywide

Total Estimated Cost:

\$531,425,000

Bond Project: Yes

Expenditures to Date:

\$100,427,761

Approval Status: Design

Non-County Funding – Secured:

\$387,300,000

Projected Completion: TBD

Funding Need:

\$0

Project Description:

Federal Grant-Funded Volunteer Home Buyouts. Grants awarded under the Flood Control District include the FMA 2017 and HMGP DR-4332 grants through FEMA. Other partnerships considered as secured non-county funding are grants secured by the City of Houston and HCCSD.

Justification:

Purchase of approximately 2300 structures.

Property acquisitions can benefit public safety by utilizing the land for floodplain preservation, or using the land for future projects to construct levees, channels or detention for flood mitigation and controls. Property acquisitions allow land to be used for floodplain preservation, or for future projects to construct levees, channels and/or detention for flood mitigation and controls. This enhancement can be measured by facilities constructed on the property or acreage removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$531,425,000 | \$23,190,823 | \$89,613,630 | \$87,098,734 | \$81,121,278 | \$59,760,349 | \$90,212,425 |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Z-StormRep: Countywide Storm Repairs in Harris County

Investment Area: Z - Countywide

Total Estimated Cost:

\$91,491,009

Bond Project: Yes

Expenditures to Date:

\$80,273,703

Approval Status: Implementation

Non-County Funding – Secured:

\$65,921,009

Projected Completion: FY 2021

Funding Need:

\$5,500,000

Project Description:

Countywide Storm Repairs in Harris County.

Justification:

Support for approximately 1,500 repair projects of erosion and infrastructure in Harris County.

Maintenance projects return flood control facilities to their near intended state for optimal conveyance for the safety of the public. Maintenance projects return flood control facilities to their near intended state for optimal conveyance to allow for key county facilities and roads to be accessible. Maintenance projects return the facility to near intended state for optimal conveyance to reduce flooding risks. This enhancement can be measured by the amount of structures, land, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$91,491,009 | \$11,217,306 | \$0 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Z-Subdiv: Harris County Engineering Department Countywide Subdivision Drainage Improvement Projects

Investment Area: Z - Countywide

Total Estimated Cost: \$521,455,946

Bond Project: Yes

Expenditures to Date: \$17,444,673

Approval Status: Implementation

Non-County Funding – Secured: \$142,684,698

Projected Completion: TBD

Funding Need: \$263,537,498

Project Description:

Harris County Engineering Department Countywide Subdivision Drainage Improvement Projects.

Justification:

Design and construction of these projects could reduce the risk of flooding for over 45,300 homes during a 1% rain or flood event.

Flood control facility construction benefits public safety by mitigating life-threatening flooding events. This project creates/improves flood control facilities to best control stormwater, allowing key county facilities, essential businesses, and roads to remain accessible. This project's benefit can be measured by counting structures, acreage, and roads removed from the Atlas 14 1% AEP (100-year) floodplain.

Alternatives and Engagement:

Alternatives analyses are performed on District projects to determine the best alternative to fulfill the mission of providing flood damage reduction projects that work, with appropriate regard for community and natural values.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------------|------------------|----------------------------|----------------------|
| Harris County Commissioners Court | Executive | Briefings and Reports | Ongoing |
| Precincts | Working Partner | Briefings and Reports | Ongoing |
| HCED | Working Partner | Briefings and Reports | Ongoing |
| Harris County Municipalities | Customers | Public Engagement Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$521,455,946 | \$79,666,883 | \$88,699,133 | \$95,105,943 | \$86,644,767 | \$86,735,396 | \$67,159,151 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | \$0 |
| Labor | \$0 |
| Other | \$0 |
| Total | \$0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Toll Road Projects

| Project Name | Subcategory | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|--------------------------|-----------------|-------------------------|-----------------------|-----------------------|-------------------------|----------------------|
| HCTRA Facility Improvements | Facility | Implementation | \$ 56,360,000 | \$ - | \$ 560,000 | \$ 55,800,000 | \$ - |
| Lynchburg Ferry | Facility | Implementation | 26,000,000 | 100,000 | 1,110,000 | 11,920,000 | 12,870,000 |
| Toll Plaza Conversion(s) and Improvements | Facility | Implementation | 172,000,000 | - | 7,000,000 | 165,000,000 | - |
| Toll System Upgrades, Maintenance, and Capital Support | Facility | Implementation | 110,000,000 | - | 20,000,000 | 90,000,000 | - |
| Washburn Tunnel | Facility | Implementation | 23,000,000 | 610,000 | 2,420,000 | 18,690,000 | 1,280,000 |
| Facility Subtotal | | | 387,360,000 | 710,000 | 24,790,000 | 341,410,000 | 14,150,000 |
| Hardy Downtown Connector (Phase I) | Hardy Downtown Connector | Implementation | 207,000,000 | 159,870,000 | 13,130,000 | 20,900,000 | 13,100,000 |
| Hardy Downtown Connector (Phase II) | Hardy Downtown Connector | Detailed Design | 213,000,000 | 16,610,000 | 2,300,000 | 176,540,000 | 17,550,000 |
| Hardy Downtown Connector Improvements Subtotal | | | 420,000,000 | 176,480,000 | 15,430,000 | 197,440,000 | 30,650,000 |
| Hardy Toll Road Partial Interchange at Beltway 8 | Interchange | Implementation | 110,000,000 | 1,200,000 | 10,000,000 | 90,000,000 | 8,800,000 |
| SH225 Partial Interchange at the Sam Houston Tollway | Interchange | Implementation | 142,850,000 | 1,490,000 | 2,000,000 | 139,360,000 | - |
| Tomball Tollway Partial Interchange at the Grand Parkway | Interchange | Implementation | 110,500,000 | 31,920,000 | 30,410,000 | 48,170,000 | - |
| Interchange Subtotal | | | 363,350,000 | 34,610,000 | 42,410,000 | 277,530,000 | 8,800,000 |
| Sam Houston Tollway Widening (East) | Road Improvements | Implementation | 278,000,000 | 224,800,000 | 53,200,000 | - | - |
| System-wide Roadway Improvements | Road Improvements | Implementation | 152,000,000 | 20,000,000 | 22,000,000 | 88,000,000 | 22,000,000 |
| Road Improvements Subtotal | | | 430,000,000 | 244,800,000 | 75,200,000 | 88,000,000 | 22,000,000 |
| Sam Houston Tollway (Ship Channel Bridge) | Ship Channel Bridge | Implementation | 1,058,200,000 | 469,670,000 | 149,720,000 | 438,810,000 | - |
| Ship Channel Bridge Subtotal | | | 1,058,200,000 | 469,670,000 | 149,720,000 | 438,810,000 | - |
| Toll Road Total | | | \$ 2,658,910,000 | \$ 926,270,000 | \$ 307,550,000 | \$ 1,343,190,000 | \$ 75,600,000 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: HCTRA Facility Improvements

Investment Area: Toll Road - Facility Improvements

Approval Status: Implementation (Year 1 Only)

Managing Entity: Toll Road Authority

Requesting Entity: Toll Road Authority

Total Estimated Cost: \$ 56,360,000

Expenditures to Date: \$ 0

Strategic Objective(s): ENG-SO1, SO2, SO5
MACE-SO1, SO2
FIN-SO1

Project Description:

This is an ongoing lifecycle management project to renovate and upgrade the Toll Road Authority's various EZ TAG stores, call center, administrative campus, and incident management building continue. Court is only being asked to approve Year One funding. Budget Management will work with the department and present an updated workscope during the next CIP.

Justification:

In general, upgrades are needed to improve customer experience while ensuring facilities are fully functional and safe for staff. This falls in line with strategic objectives noted above. HCTRA strives to maintain its physical infrastructure in superior condition. Maintenance of HCTRA assets is handled promptly after identification (through annual inspection or daily maintenance observation), to maximize the life of the system. Facility maintenance was reviewed as part of the 2019 Comprehensive Annual System Report prepared by AECOM. For the 2019 Report, inspections occurred from April to October 2019. The visual inspection included all HCTRA toll roads, bridges, pump stations, and facilities. PGAL performed the facility, and pump station inspections, while CONSOR performed the inspections for the bridges. AECOM inspected the wrong way traffic elements for exit ramps. HDR performed the visual roadway inspections for this report. All sections were inspected including sections under maintenance/ widening construction. Transtec Group performed the pavement evaluation report of 2019 as a sub consultant to HDR.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 56,360,000 | \$ 560,000 | \$ 13,800,000 | \$ 19,000,000 | \$ 23,000,000 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------------|
| O&M | \$ 387,000 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 387,000 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Lynchburg Ferry

Investment Area: Toll Road - Facility Improvements

Approval Status: Implementation

Managing Entity: Toll Road Authority

Requesting Entity: Toll Road Authority

Total Estimated Cost: \$ 26,000,000

Expenditures to Date: \$ 100,000

Strategic Objective(s): ENG-SO1, SO2, SO5
MACE-SO1, SO2
FIN-SO1

Project Description:

In 1888, Harris County became the steward of the Lynchburg Ferry. On June 25, 2019, Commissioners Court transferred responsibility of the Lynchburg Ferry to HCTRA, without the imposition of tolls, effective March 1, 2020. Capital improvement expenditures planned for this facility include the replacement of the two ferryboats currently in use, dating back to 1964, and the addition of a third boat to maintain full capacity during maintenance and reduced service outages. Plans also include the implementation of a comprehensive program to preserve, maintain, repair and improve the existing Lynchburg Ferry facility, which includes landings, approaches, berthing areas, Intelligent Transportation System components, an administrative office, and support structures.

Justification:

The Lynchburg Ferry is one of only five vehicular crossings of the 50-mile Houston Ship Channel. Without modernization and upgrades, this transportation linkage will not be able to be safely maintained. This project will address the mobility needs of the community by creating greater access to transportation options. This falls in line with the strategic objectives noted above. This is a Capital Project intended to provide the residents of Harris County and other stakeholders a unique transportation asset consistent with the Toll Road Authority's goal to improve mobility throughout the region and provide the community greater access to transportation options. This is a Capital Project that will allow for modernization and upgrades to an alternate means of transportation for Harris County residents and visitors.

Alternatives and Engagement:

No alternatives have been identified for this project.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|---------------------------------------|---|------------------------------|----------------------|
| Port of Houston Authority | Planning, Development, User of System/Project | Collaboration/ Communication | Ongoing |
| The Houston Pilots | | | |
| United States Army Corps of Engineers | | | |
| United States Coast Guard | | | |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 26,000,000 | \$ 1,110,000 | \$ 3,450,000 | \$ 3,180,000 | \$ 2,800,000 | \$ 2,490,000 | \$ 12,870,000 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|---------------------|
| O&M | \$ 3,750,000 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 3,750,000 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Toll Plaza Conversion(s) and Improvements

Investment Area: Toll Road – Facility Improvements

Approval Status: Planning

Managing Entity: Toll Road Authority

Requesting Entity: Toll Road Authority

Total Estimated Cost: \$ 172,000,000

Expenditures to Date: \$ 0

Strategic Objective(s): ENG-SO1, SO2, SO5
MACE-SO1, SO2
FIN-SO1
IT-SO1, SO2

Project Description:

On March 17, 2020, Harris County Commissioners Court authorized HCTRA to take appropriate measures in efforts to reduce exposure for customers and employees to the COVID-19 virus while maintaining continuity of services to the public. Subsequently, on July 28, 2020, Commissioners Court approved a recommendation to accelerate planning and development for a permanent transition to an all-electronic “cashless” roadway environment, which provides numerous safety benefits to drivers – an approach adopted by toll roads and turnpike systems across the nation. However, a plan for such a transition must be executed safely and without disenfranchising cash-based users of the system; it must entail a robust public engagement plan and the development of accessible payment alternatives. The total project estimate reflects the necessary expenditures for engineering design, demolition, roadway construction, and tolling infrastructure required to fully transition the Sam Houston Tollway to an optimal all-electronic configuration.

Justification:

Upgrades and improvements are done in response to the community's needs. This falls in line with the strategic objectives noted above. There are numerous benefits of an all-electronic “cashless” roadway environment, including improved roadway safety, as well as personal safety for drivers and employees; increased vehicular throughput and reduced traffic congestion; and increased operational efficiency. Planned upgrades and improvements will create a tolling infrastructure that will improve overall roadway safety.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 172,000,000 | \$ 7,000,000 | \$ 82,500,000 | \$ 82,500,000 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Toll System Upgrades, Maintenance, and Capital Support

Investment Area: Toll Road – Facility Improvements

Approval Status: Implementation (Year 1 Only)

Total Estimated Cost: \$ 110,000,000

Managing Entity: Toll Road Authority

Expenditures to Date: \$ 0

Requesting Entity: Toll Road Authority

Strategic Objective(s): ENG-SO1, SO2, SO5
MACE-SO1, SO2
FIN-SO1
IT-SO1, SO2

Project Description:

As HCTRA's services and customer base grows, so must its toll collection 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. HCTRA has implemented and expanded upon its use of an electronic toll collection interoperability service, in partnership with regional tolling agencies and toll agencies outside the State of Texas, to become interoperable in 2020 and beyond. Furthermore, the transition to an all-electronic roadway will require the development of accessible payment alternatives and requisite system changes. Court is only being asked to approve Year One funding. Budget Management will work with the department and present an updated workscope during the next CIP.

Justification:

Maintenance and upgrades are required in order to continue to support effective tolling, back-office, customer service, and data security systems. Some of these projects may be delayed, but it is not recommended to delay any projects related to the security of customer data. This falls in line with the strategic objectives noted above. Maintenance and upgrades to the toll system allow HCTRA to function securely and appropriately. Planned upgrades and improvements allow HCTRA to function securely and appropriately.

Alternatives and Engagement:

No alternatives have been identified for this project.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|--------------------------|------------------|---|----------------------|
| Drivers of Harris County | User of roadways | Communication with customers via numerous channels including our call center and online | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 110,000,000 | \$ 20,000,000 | \$ 35,000,000 | \$ 20,000,000 | \$ 20,000,000 | \$ 15,000,000 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Washburn Tunnel

Investment Area: Toll Road – Facility Improvements

Approval Status: Implementation

Managing Entity: Toll Road Authority

Requesting Entity: Toll Road Authority

Total Estimated Cost: \$ 23,000,000

Expenditures to Date: \$ 610,000

Strategic Objective(s): ENG-SO1, SO2, SO5
MACE-SO1, SO2
FIN-SO1

Project Description:

The Washburn Tunnel, one of only five vehicular crossings of the 50-mile Houston Ship Channel (HSC), is in need of modernization and upgrades. On June 25, 2019, Harris County Commissioners Court authorized the transfer of responsibility for current and future Operations, Maintenance, and Capital Improvements of the Washburn Tunnel to HCTRA, without the imposition of tolls, effective March 1, 2020. Capital improvement expenditures planned for this facility include a comprehensive program to preserve, maintain, repair, and improve the existing Washburn Tunnel, which includes the tunnel's approaches, Intelligent Transportation System components, and facilities. Expected projects include modernization of the electrical and ventilation systems, and geotechnical evaluation of the tunnel bedding and cover material.

Justification:

Built in 1950, the Washburn Tunnel is one of the largest toll-free tunnels in the Southern United States. This project will address the mobility needs of the community by creating greater access to transportation options. This falls in line with the strategic objectives noted above. This project provides the residents of Harris County and other stakeholders a unique transportation asset, consistent with the Toll Road Authority's goal to improve mobility throughout the region and provide the community greater access to transportation options.

Alternatives and Engagement:

No alternatives have been identified for this project.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|---------------------------------------|--|------------------------------|----------------------|
| Port of Houston Authority | Planning, Development, User of System/ Project | Collaboration/ Communication | Ongoing |
| The Houston Pilots | Planning, Development, User of System/ Project | Collaboration/ Communication | Ongoing |
| United States Army Corps of Engineers | Planning, Development, User of System/ Project | Collaboration/ Communication | Ongoing |
| United States Coast Guard | Planning, Development, User of System/ Project | Collaboration/ Communication | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 23,000,000 | \$ 2,420,000 | \$ 7,660,000 | \$ 9,310,000 | \$ 1,000,000 | \$ 720,000 | \$ 1,280,000 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|---------------------|
| O&M | \$ 3,750,000 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 3,750,000 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Hardy Downtown Connector (Phase I)

Investment Area: Toll Road - Hardy Downtown Connector

Approval Status: Implementation

Total Estimated Cost: \$ 207,000,000

Managing Entity: Toll Road Authority

Expenditures to Date: \$ 159,870,000

Requesting Entity: Toll Road Authority

Strategic Objective(s): ENG-SO1, SO5
FIN-SO1

Project Description:

Phase I of the Hardy Downtown Connector project is underway and establishes the corridor for a future Phase II project. Phase I activities include the construction of three grade separation projects to connect adjacent neighborhoods, long divided by railroad tracks, with improved east-west access:

Justification:

Phase I of the Hardy Downtown Connector benefits the community with safer railroad crossings for vehicles and pedestrians, as well as improved east-west connectivity for the adjacent neighborhoods. This project provides the residents of Harris County with improved mobility throughout the region, as well as greater access to the County's roadways, while working to foster transparency and public engagement to collaborate on future projects. This project will create increased transportation accessibility for the public.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 207,000,000 | \$ 13,130,000 | \$ 8,520,000 | \$ 12,380,000 | \$ 0 | \$ 0 | \$ 13,100,000 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------------|
| O&M | \$ 100,000 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 100,000 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Hardy Downtown Connector (Phase II)

Investment Area: Toll Road - Hardy Downtown Connector

Approval Status: Detailed Design

Total Estimated Cost: \$ 213,000,000

Managing Entity: Toll Road Authority

Expenditures to Date: \$ 16,610,000

Requesting Entity: Toll Road Authority

Strategic Objective(s): ENG-SO1, SO5
FIN-SO1

Project Description:

Phase II of the Hardy Connector involves the development and construction of the toll road's main lanes from the current southern terminus of the Hardy Toll Road to the newly rebuilt Elysian Viaduct. However, on May 19, 2020, HCTRA received authorization from Commissioners Court to suspend development of Phase II to allow for reevaluation of any proposed project within the corridor. The suspension of Phase II of the Hardy Downtown Connector project will allow for the community's collaboration in developing this mobility link directly into downtown, as well as improve pedestrian connectivity, green spaces, and storm water mitigation.

Justification:

This project will address the mobility needs of the community by creating greater access to transportation options, which is in line with the strategic objectives noted above. This project is intended to provide the residents of Harris County with improved mobility throughout the region.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 213,000,000 | \$ 2,300,000 | \$ 34,540,000 | \$ 92,000,000 | \$ 50,000,000 | \$ 0 | \$ 17,550,000 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Hardy Toll Road Partial Interchange at Beltway 8

Investment Area: Toll Road – Interchange Improvements

Approval Status: Implementation

Total Estimated Cost: \$ 110,000,000

Managing Entity: Toll Road Authority

Expenditures to Date: \$ 1,200,000

Requesting Entity: Toll Road Authority

Strategic Objective(s): ENG-SO1, SO5
FIN-SO1

Project Description:

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.

Justification:

This interchange project benefits the community with an enhanced connection between the Hardy Toll Road and Beltway 8. This will help the flow of traffic between the downtown area, northern commuters, and airport travelers. This project will address the mobility needs of the community by creating greater access to transportation options. This falls in line with the strategic objectives noted above. This project will provide the residents of Harris County with improved mobility throughout the region, as well as greater access to the County's roadways. It will also create increased transportation accessibility for the public.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 110,000,000 | \$ 10,000,000 | \$ 90,000,000 | \$ 0 | \$ 0 | \$ 0 | \$ 8,800,000 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------------|
| O&M | \$ 835,000 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 835,000 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: SH225 Partial Interchange at the Sam Houston Tollway

Investment Area: Toll Road - Interchange Improvements

Approval Status: Implementation

Total Estimated Cost: \$ 142,850,000

Managing Entity: Toll Road Authority

Expenditures to Date: \$ 1,490,000

Requesting Entity: Toll Road Authority

Strategic Objective(s): ENG-SO1, SO5
FIN-SO1

Project Description:

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.

Justification:

Direct connectors linking the Sam Houston Tollway to SH 225 will enable drivers to transit between the two roads without having to stop at traffic lights, improving mobility in the area. Motorists needing to transition between the two roadways currently experience significant congestion due to signalized intersections during peak periods. This project will address the mobility needs of the community by creating greater access to transportation options. This falls in line with the strategic objectives noted above. This is a Capital Project intended to provide the residents of Harris County with mobility throughout the region, as well as greater access to the County's roadways, while working to foster transparency and public engagement to collaborate on future projects. This Capital Project will create increased transportation accessibility for the public, and superior maintenance and improvements to the current toll road system, as well as continued funding for non-toll infrastructure projects in Harris County.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 142,850,000 | \$ 2,000,000 | \$ 12,000,000 | \$ 127,360,000 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|---------------------|
| O&M | \$ 2,750,000 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 2,750,000 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Tomball Tollway Partial Interchange at the Grand Parkway

Investment Area: Toll Road – Interchange Improvements

Approval Status: Implementation

Total Estimated Cost: \$ 110,500,000

Managing Entity: Toll Road Authority

Expenditures to Date: \$ 31,920,000

Requesting Entity: Toll Road Authority

Strategic Objective(s): ENG-SO1 - SO5
FIN-SO1

Project Description:

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

Justification:

Direct connectors linking the Tomball Tollway to SH 99 (Grand Parkway) will enable drivers to transit between the two roads without having to stop at traffic lights, improving mobility in the area. Motorists needing to transition between the two roadways currently experience significant congestion due to signalized intersections during peak periods. This project will build the connectors to travel from northbound Tomball Tollway to east- and westbound Grand Parkway as well as east- and westbound Grand Parkway to southbound Tomball Tollway. This project will address the mobility needs of the community by creating greater access to transportation options. This falls in line with the strategic objectives noted above. This is a Capital Project intended to provide the residents of Harris County with improved mobility throughout the region, as well as greater access to the County's roadways. This Capital Project will create increased transportation accessibility for the public.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 110,500,000 | \$ 30,410,000 | \$ 48,170,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|---------------------|
| O&M | \$ 1,775,000 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 1,775,000 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Sam Houston Tollway Widening (East)

Investment Area: Toll Road - Roadway Improvements

Approval Status: Implementation

Total Estimated Cost: \$ 278,000,000

Managing Entity: Toll Road Authority

Expenditures to Date: \$ 224,800,000

Requesting Entity: Toll Road Authority

Strategic Objective(s): ENG-SO1, SO5
FIN-SO1

Project Description:

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 main lanes in each direction, for a total of eight main lanes between IH 45 and SH 225.

Justification:

The widening of the Sam Houston Tollway from IH 45 South to SH 225 will consist of widening the current tollway from two lanes to four lanes in each direction, widening of the inside safety shoulder, and reconstruction of tolled entrance and exit ramps. Construction began in September 2017 and in FY 2022, this project is projected to be substantially complete. This project will address the mobility needs of the community by creating greater access to transportation options. This falls in line with the strategic objectives noted above. This is a Capital Project intended to provide the residents of Harris County with improved mobility throughout the region, as well as greater access to the County's roadways. This Capital Project will create increased transportation accessibility for the public, and superior maintenance and improvements to the current toll road system.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 278,000,000 | \$ 53,200,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|----------------------|
| O&M | \$ 11,765,000 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 11,765,000 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: System-wide Roadway Improvements

Investment Area: Toll Road – Facility Improvements

Approval Status: Implementation

Managing Entity: Toll Road Authority

Requesting Entity: Toll Road Authority

Total Estimated Cost: \$ 152,000,000

Expenditures to Date: \$ 20,000,000

Strategic Objective(s): ENG-SO1, SO2, SO5
MACE-SO1, SO2
FIN-SO1

Project Description:

This project is for ongoing, routine upgrades to the HCTRA system, inclusive of system inspections, heavy maintenance, on-call construction, utility coordination, infrastructure replacement, materials testing, and drainage improvements. Court is only being asked to approve Year One funding. Budget Management will work with the department and present an updated workscope during the next CIP.

Justification:

These are necessary capital maintenance items that will address the mobility needs of the community by maintaining safe and reliable roadways. Ongoing upgrades are needed to maximize the life of HCTRA's roadways while addressing and improving mobility and roadway safety. This falls in line with strategic objectives noted above. Maintaining and improving traffic safety measures are a core function of the Harris County Toll Road Authority. HCTRA's ongoing system-wide improvements have contributed to the region's continued growth and economic health. To ensure the agency continues to deliver results, a combination of fiscal prudence and long-term strategic planning is necessary. Well-maintained roadways and prompt response to driver-reported issues contribute to the safety and value offered to the users of Harris County's toll roads.

System-wide maintenance is reviewed as part of the 2019 Comprehensive Annual System Report prepared by AECOM. For the 2019 Report, inspections occurred from April to October 2019. The visual inspection included all HCTRA toll roads, bridges, pump stations, and facilities. PGAL performed the facility, and pump station inspections, while CONSOR performed the inspections for the bridges. AECOM inspected the wrong way traffic elements for exit ramps. HDR performed the visual roadway inspections for this report. All sections were inspected including sections under maintenance/ widening construction. Transtec Group performed the pavement evaluation report of 2019 as a sub consultant to HDR.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 152,000,000 | \$ 22,000,000 | \$ 22,000,000 | \$ 22,000,000 | \$ 22,000,000 | \$ 22,000,000 | \$ 22,000,000 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Sam Houston Tollway (Ship Channel Bridge)

Investment Area: Toll Road - Ship Channel Bridge

Approval Status: Implementation

Total Estimated Cost: \$ 1,058,200,000

Managing Entity: Toll Road Authority

Expenditures to Date: \$ 469,670,000

Requesting Entity: Toll Road Authority

Strategic Objective(s): ENG-SO1, SO5
FIN-SO1

Project Description:

The Ship Channel Bridge Replacement Program is substantially underway and once complete, will accommodate four 12-ft. travel lanes in each direction, with 10-ft. inside and outside safety shoulders, from SH-225 to IH-10, and all bridge support columns will reside outside of the Houston Ship Channel's waterway. During the construction phase of the project, at least two travel lanes in each direction across the Ship Channel will be maintained. On October 13, 2020, Commissioners Court authorized an agreement with COWI North America, Inc. to become the new Engineer of Record (EOR) for this critical project. With this significant step forward, HCTRA anticipates returning the Ship Channel Bridge program to full-construction in 2021, and working with the new EOR to provide Harris County options regarding the overall project budget and construction schedule.

Justification:

Two primary reasons for the development of the Ship Channel Bridge Replacement Program were: (1) HCTRA's current Ship Channel Bridge (Designed in the 1970's and built by the State of Texas in the early 1980's) does not meet current minimum traffic safety guidelines of the American Association of State Highway and Transportation Officials with regards to lane widths, safety shoulders, grades, and sight distances; and (2) the main piers of the current Ship Channel Bridge present a significant obstacle for the proposed expansion plans of the United States Army Corps of Engineers to widen and deepen the Houston Ship Channel. This project will address the mobility needs of the community by creating greater access to transportation options. This falls in line with the strategic objectives noted above. This is a Capital Project intended to provide the residents of Harris County with improved mobility throughout the region, as well as greater access to the County's roadways, while working to foster transparency and public engagement to collaborate on future projects. This Capital Project will create increased transportation accessibility for the public, and superior maintenance and improvements to the current toll road system, as well as continued funding for non-toll infrastructure projects in Harris County.

Alternatives and Engagement:

No alternatives have been identified for this project.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|---------------------------------------|---|------------------------------|----------------------|
| Port of Houston Authority | Planning, Development, User of System/Project | Collaboration/ Communication | Ongoing |
| The Houston Pilots | | | |
| United States Army Corps of Engineers | | | |
| United States Coast Guard | | | |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 1,058,200,000 | \$ 149,720,000 | \$ 227,460,000 | \$ 173,580,000 | \$ 37,770,000 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|---------------------|
| O&M | \$ 4,699,000 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 4,699,000 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Governance & Customer Service - Building Projects

| Project Name | Subcategory | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|---------------|------------------------|------------------------|----------------------|----------------------|----------------------|-------------------|
| 1301 Franklin Building Demolition | County-Facing | Detailed Design | \$ 1,100,000 | \$ 457,913 | \$ 487,383 | \$ 154,705 | TBD |
| 701 Lockwood Parking Lot Expansion | County-Facing | Planning | 3,000,000 | - | 3,000,000 | - | - |
| Building Consolidation | County-Facing | Detailed Design | 600,000 | 300,000 | 300,000 | - | TBD |
| Demolition of Lomas Nettleton/Coffee Pot Building and Build Parking Lots | County-Facing | Detailed Design | 2,532,692 | 2,532,692 | TBD | TBD | TBD |
| District Clerk Accounting/Billing Office Renovation | County-Facing | Planning | 56,000 | - | 56,000 | - | - |
| Greens Road Radio Shop Customer Service Area Renovation | County-Facing | Planning | 200,000 | - | 200,000 | - | - |
| Mosquito & Vector Control Dixie Camp Improvements | County-Facing | Preliminary Investment | 544,799 | 44,799 | 500,000 | - | - |
| Records Center Renovation and Annex 18 MEP Projects | County-Facing | Preliminary Investment | 2,062,073 | 62,073 | 2,000,000 | - | - |
| South Central Plant Renovations | County-Facing | Implementation | 53,291,453 | 191,453 | 1,100,000 | 52,000,000 | - |
| VMC S 66th Building Renovation | County-Facing | Planning | 4,000,000 | 79,445 | 4,000,000 | - | - |
| County-Facing Subtotal | | | 67,387,017 | 3,668,375 | 11,643,383 | 52,154,705 | - |
| Commissioner's Court Relocation | Public-Facing | Detailed Design | 4,010,161 | 10,161 | 4,000,000 | - | - |
| NRG Center Interior Refresh | Public-Facing | Preliminary Investment | 7,835,543 | 1,335,543 | 6,500,000 | - | - |
| Renovation of Existing NeuroPsychiatric Center (NPC) | Public-Facing | Planning | 4,400,000 | - | TBD | TBD | TBD |
| Riverside Hospital Project | Public-Facing | Detailed Design | 55,000,000 | - | TBD | TBD | TBD |
| Public-Facing Subtotal | | | 71,245,704 | 1,345,704 | 10,500,000 | - | - |
| County Clerk/Office of Election Facility Needs Assessment | Study | Detailed Design | 300,000 | - | 300,000 | - | - |
| Masterplans and Studies | Study | Detailed Design | 1,740,000 | 306,581 | 347,349 | TBD | TBD |
| Study Subtotal | | | 2,040,000 | 306,581 | 647,349 | - | - |
| Buildings Total | | | \$ 140,672,722 | \$ 5,320,660 | \$ 22,790,732 | \$ 52,154,705 | - |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: 1301 Franklin Building Demolition

Investment Area: Governance & Customer Service – Buildings, County-Facing

Approval Status: Detailed Design

Total Estimated Cost: \$ 1,100,000

Managing Entity: County Engineer

Expenditures to Date: \$ 457,913

Requesting Entity: County Engineer

Strategic Objective(s): SO14, SO16

Project Description:

1301 Franklin, also known as the "Old Jail", is located in downtown Houston. The facility was previously used as a detention center before newer detention facilities were built at 1200 Baker. Due to Hurricane Harvey, various users have been temporarily relocated to this facility until such time that permanent facilities become available. A demolition design package is currently underway and efforts are being made to relocate the current facility. A small portion of the facility is able to be used for office space, and due to Hurricane Harvey, various users have been temporarily relocated to this facility until such time that permanent facilities become available. On February 25, 2020, Court awarded a contract for architectural and engineering services to develop demolition documents for the facility; a demolition design package is currently underway and efforts are being made to relocate the current facility users. A timeline for the actual demolition work is to be determined.

Justification:

The demolition of the building will allow for the County to utilize the vacant land for future facilities as indicated in the Downtown County Master Plan. 1301 Franklin can no longer be used for detention purposes because it does not meet detention code requirements, rendering a majority of the facility unuseable as these detention area are not suitable to be repurposed for office space. Due to this, there have been multiple items presented at previous Court sessions regarding the demolition of the facility and the Downtown County Master Plan contemplates utilizing the vacant land for future facilities. The 1301 Franklin facility would be demolished instead of renovated because the cost estimates to repair and renovate the building for a new use are estimated to be more expensive than demolishing the building and constructing something new. The current building systems are inefficient, outdated, and costly to maintain. Annual utilities cost around \$ 556,000, with another \$ 72,000 in labor and materials for annual maintenance, for a total annual cost of \$ 628,000.

Alternatives and Engagement:

The primary stakeholder for this project are the current 1301 Franklin tenants. These tenants are at 1301 Franklin because they were displaced from the Criminal Justice Center due to facility damage from Hurricane Harvey. The engagement of these tenants will be focused on relocating them to a new facility.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 1,100,000 | \$ 642,088 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|--------------------|
| O&M | -\$ 628,000 |
| Labor | TBD |
| Other | TBD |
| Total | -\$ 628,000 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: 701 Lockwood Parking Lot Expansion

Investment Area: Governance & Customer Service – Buildings, County-Facing

Approval Status: Planning

Total Estimated Cost: \$ 3,000,000

Managing Entity: County Engineer

Expenditures to Date: \$ 0

Requesting Entity: County Engineer

Strategic Objective(s): N/A

Project Description:

This project is for the design and construction of a parking lot facility at 701 Lockwood, under the Lockwood overpass. It includes an access road off of Lockwood Drive to access the facility. The project includes parking, access road, sidewalks, drainage and a potential traffic signal. This project is in partnership with the City of Houston and the Buffalo Bayou Partnership.

Justification:

Parking accessibility is limited in and around the facility. The additional parking expansion is necessary for existing and future use.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not yet been planned for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 3,000,000 | \$ 3,000,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Building Consolidation

Investment Area: Governance & Customer Services - Buildings, County-Facing

Approval Status: Detailed Design

Total Estimated Cost: TBD

Managing Entity: County Engineer (OCE)

Expenditures to Date: \$ 300,000

Requesting Entity: Budget Management (BMD)

Strategic Objective(s): N/A

Project Description:

For several years, OCE, the Flood Control District (FCD), and the Community Services Department (CSD) have discussed consolidating into a single location. This consolidation into a new facility would improve coordination among the departments, accommodate projected employment growth, eliminate the need for leased office space, and eliminate the need for costly maintenance for buildings at or beyond their useful life. This consolidation was originally envisioned as a new building constructed at the Pinemont location. BMD has partnered with the departments to look at purchase and lease options as an alternative to new construction.

Congruent with past Court direction, this project assumes the consolidation takes place in an office building in the central business district that was identified for potential purchase (Purchase Option 1), one block from the Main St. transit line and less than a mile from the Admin Building (1001 Preston). Negotiations to purchase the building are underway and Court is requested to execute a Purchase and Sale Agreement and set aside a 1.5% earnest money deposit of \$300,000 - \$450,000. The earnest money deposit is refundable and allows the County to refine the financial model to determine if Purchase Option 1 is the best alternative. Following this, capital cost projections will be updated and presented to Court on April 13, 2020.

Justification:

Currently, maintaining the eleven different locations is inefficient. Most of the current locations are old and nearing the end of their useful life, requiring significant maintenance for continued occupation. The consolidation will allow for a more collaborative work environment within and between departments, creating increased employee engagement and better operational efficiencies.

| | Pinemont | Purchase Option 1 | Purchase Option 2 | Lease |
|------------------|----------------|-----------------------|------------------------|-----------------|
| GSF | 274,000 | 440,983 | 458,001 | 275,000 |
| FTEs | 1,370 | 2,205 | 2,290 | 1,375 |
| Purch./Construct | \$73.2m | \$20-30m | \$20-30m | \$234.9m* |
| Improvements | N/A | \$14.9m | \$40.5m | N/A |
| FF&E | \$8.2m | \$4.4m | \$8.0m | N/A |
| IT | \$2.0m | \$3.3m | \$3.4m | N/A |
| Move | \$0.8m | \$0.8m | \$0.8m | \$0.8m |
| Total | \$84.2m | \$43m-\$54m | \$73m-\$83m | \$235.7m |
| Cost/GSF | \$307.3 | \$98.4-\$121.1 | \$158.7-\$180.6 | \$860.0 |

*Annual Lease Cost over 20 years

Alternatives and Engagement:

The first options for consolidation was to build a new building at Pinemont for an estimated cost of over \$84M, or to renovate the eight current locations for an estimated capital cost of over \$142M. The current three options being explored have an estimated capital cost ranging from \$52M - \$74M, lower than the new build option. The estimated costs were compiled after preliminary tours were taken of the three options. The estimated costs were compiled after preliminary tours were taken of the three options. The initial tours and preliminary financial analysis lead the team to conclude that the purchase options were more viable than the lease option. The lease option does not require an initial capital investment as the landlord offers a tenant improvement allowance to cover the initial buildout; however the estimated operating and parking cost were far higher than any of the other options and the leased GSF does not allow for future growth or expansion. Focusing on the purchase options prompted a request to do more in depth inspections on one of the purchase options. The Commissioner's Court approved \$300,000 for this purpose on January 5, 2021. Inspections will begin once the Letter of Intent has been executed. Further discovery and analysis of the alternatives has led the team to recommend Purchase Option 1 as the best option for this project.

Anticipated Project Expenditures and Timeline:

A reliable schedule of expenditures is not possible at this time because the actual building purchase cost and associated improvements are rough estimates that will need to be further refined. If the purchase move ahead, the project could be completed in FY 2023. Operating impacts for this new building have not been contemplated, but are not anticipated to exceed the operating costs of the buildings to be vacated as part of the consolidation.

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Demolition of Lomas Nettleton/Coffee Pot Building and Build Parking Lots

Investment Area: Governance & Customer Service – Buildings, County-Facing

Approval Status: Detailed Design

Total Estimated Cost: \$ 2,532,692

Managing Entity: County Engineer

Expenditures to Date: \$ 2,532,692

Requesting Entity: County Engineer

Strategic Objective(s): SO14

Project Description:

The county buildings known as the Lomas Nettleton and Coffee Pot buildings are located in downtown. It is recommended these buildings be razed as indicated in the Downtown County Master Plan. This would clear the city block bordered by Franklin, San Jacinto, Commerce, and Fannin. The cleared block would be used as a surface parking lot until a future use is determined. The project will not proceed until the occupants of the Coffee Pot building are relocated.

Justification:

The demolition of the buildings will make available vacant land for future county facilities. The current building systems are inefficient, outdated, and costly to maintain.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 2,532,692 | TBD | TBD | TBD | TBD | TBD | TBD |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: District Clerk Accounting/Billing Office Renovation

Investment Area: Governance & Customer Service – Buildings, County-Facing

Approval Status: Planning

Total Estimated Cost: \$56,000

Managing Entity: County Engineer

Expenditures to Date: \$ 0

Requesting Entity: Election Administrator's Office

Strategic Objective(s): SO 9, 12-14, 17-19

Project Description:

This project is to modify three District Clerk spaces, as noted below:

- 1.) Criminal Justice Center (1201 Franklin), Third Floor: \$32,000. Create offices to accommodate Criminal Courts Management staff and renovate room to conduct required Criminal Court staff training. This specific office space is not covered under the FEMA project currently underway. This work would begin after the on-going FEMA project is complete, around Summer 2021.
- 2.) Civil Intake Training Room (Civil Courthouse 201 Caroline, Floor 1): \$6,000. Combine two separate smaller rooms (115 and 116) into one large training room. This renovation would be completed before February 2022.
- 3.) Accounting/Billing Office (Civil Courthouse, 201 Caroline, Suite 170): \$18,000. Modify customer service counters, add counter in breakroom, and add a drop box. This renovation would be completed before February 2022.

Justification:

- 1.) The improvements will allow management to be onsite in the same building. Doing so will allow quicker resolution to internal and external customer issues as well as allow better efficiency. If not approved/implemented, the Criminal Court Management and Criminal Training Staff would continue working in different buildings.
- 2.) This project is needed due to inadequate space for training employees in the Civil Support sections, which include Civil Intake, Family Intake and Civil and Family Post-Trial. There is no space to train clerks other than at their desks. The training room would allow for group trainings which are more efficient, as well as more effective as it provides for interactive discussions where employees can learn from one another. The new training room would also be utilized for departmental meetings. Break room areas are currently being utilized, which do not accommodate the needed 25-30 people at a given time. If this proposal is not approved or implemented there will continue to be a deficit in a dedicated space for training and meetings to be held for the approximately 70 employees in Civil Support Section.
- 3.) The customer service counters modifications are needed because customer data is more compromised on existing counter. Additionally, shifting away from the existing high rolling chairs and chest level workstations is anticipated to reduce employee risk of injury. The added counter in the breakroom will allow more employees to utilize the breakroom at a time. The drop box would provide an additional option for customers (particularly during the prevailing pandemic) to make non-contact check deposits and to drop off essential paperwork without necessarily coming into the office. The District Clerk has had several requests from customers for a drop box.

Alternatives and Engagement:

No alternatives have been identified for this project.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|---------------------------------|-----------------------------|---------------------------------|----------------------|
| Criminal Court Management Staff | Benefiting from the project | Meeting held to get their input | Ongoing |
| District Court Staff | | | |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$56,000 | \$56,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | \$ 0 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Greens Road Radio Shop Customer Service Area Renovation

Investment Area: Governance & Customer Service – Buildings, County-Facing

Approval Status: Planning

Total Estimated Cost: \$ 200,000

Managing Entity: County Engineer

Expenditures to Date: \$ 0

Requesting Entity: Universal Services

Strategic Objective(s): N/A

Project Description:

Requesting Entity did not provide.

Justification:

Requesting Entity did not provide.

Alternatives and Engagement:

No alternatives have yet to be identified for this project.

Stakeholder engagement has not yet been planned for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 200,000 | \$ 200,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Mosquito & Vector Control Dixie Camp Improvements

Investment Area: Governance & Customer Service - Buildings, County-Facing

Approval Status: Preliminary Investment Review

Total Estimated Cost: \$544,799

Managing Entity: County Engineer

Expenditures to Date: \$ 44,799

Requesting Entity: Public Health

Strategic Objective(s): SO17

Project Description:

The Mosquito & Vector Control Division of Public Health Services (PHS) operates a camp at 6104 Dixie Drive. The primary structures at the camp include a chemical storage facility and rented modular building (trailer) for office space. This project would complete the following improvements by December 2021: 1.) Replace rented modular building with new owned modular building; 2.) Relocate existing modular building to Dixie Drive camp and join with new modular building to create large space; 3.) Larger modular space would be configured to create more office space for staff and an assembly/training area; 4.) New security system and fence around perimeter; 5.) Ramp and decking around modular office unit for ADA compliance; 6.) New ramp for chemical storage facility; and 8.) Leveling of grounds to prevent flooding.

Justification:

The current building is in disrepair and is not ADA compliant. Additionally, the current building has insufficient office space and insufficient space to support staff on training purposes or assignment. This project would double building space by joining a new trailer with a replacement trailer. A deck and ramp to the modular building entrance would be created to ensure ADA accessibility. The new chemical storage ramp would allow a forklift to be safely used to more efficiently move supplies around the facility. The site has a drainage problem causing standing water during rainy season, which interrupts the network and phone lines, and interferes with employees' ability to perform their tasks properly. The standing water also causes the trailer to settle unevenly, creating gaps and cracks for rodents and other pests to enter through. This project would level the grounds around the facility to ensure proper stormwater flow and prevent flooding. Finally, the fence securing the site is unsightly and in disrepair. A replacement fence would be erected around the facility and an electronic surveillance system would be installed to provide better facility security. Security at the camp is important because dangerous and regulated materials are stored on site. This project is anticipated to result in a recurring cost savings of \$ 20,808 by replacing a rented modular building with an owned modular building (estimate based on 12 months current rental rate of \$ 1,734). The expected return on investment is less than ten years, while manufactured buildings have a life expectancy of 30-50 years.

Alternatives and Engagement:

An alternative to this project would be to rent a new modular building to replace the aging rented modular building. However, the long-term, recurring rental cost is more expensive than purchasing the building. Relocating the camp was deemed unfeasible because no alternative location has been identified in the nearby area that would allow PHS staff to continue effectively serving the region. Delaying this project would prevent the County from benefiting from the operating cost savings by eliminating the rental cost of the current modular building. It would also allow for more damage to the camp as deferred maintenance issues go unresolved, possibly resulting in injury from facility failure. The primary stakeholder for this project are the PHS staff working out of the Dixie Drive camp. PHS requested this project and have been involved in developing the scope of the project to ensure it addresses their needs.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 500,000 | \$ 500,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|--------------------|
| O&M | -\$ 208,808 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | -\$ 208,808 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Records Center Renovation and Annex 18 MEP Projects

Investment Area: Governance & Customer Service – Buildings, County-Facing

Approval Status: Preliminary Investment Review

Total Estimated Cost: \$ 2,062,073

Managing Entity: County Engineer

Expenditures to Date: \$ 62,073

Requesting Entity: Universal Services

Strategic Objective(s): N/A

Project Description:

This project is to renovate Records Center offices and restrooms to support staff increases needed for the Enterprise Scanning Project. OCE is finalizing construction documents and the consultant is obtaining required permits. Estimated cost of construction and furniture for this portion of project is \$ 500,000.

This project also does the following mechanical/electrical/plumbing (MEP) work at the Annex 18 data center:

- Replace defective chilled water lateral lines and add isolation valves as necessary to the HVAC chilled water system. A prerequisite of this project is the successful completion of the CIP Data center Expansion CRAC unit replacement project. The cost for this portion of the project is estimated at \$ 500,000.
- Restroom renovation on floors two through four to update fixtures, counters, partitions, flooring and finishes. Annex 18 has had significant renovations over the past five years and the restrooms are the only spaces that need to be updated from the original building. The estimated cost for this project is \$ 500,000.
- Electrical work to remove non-functioning electrical infrastructure and to install a power tap to connect the facility to a generator for emergency power. The electrical work is estimated to cost \$ 500,000.

Justification:

This Records Center renovation part of this project is critical to the success of the Enterprise Scanning project, which will convert physical records to electronic storage. A successful Enterprise Scanning project will enable quicker access of records while reducing physical storage space needs and the risk of document loss.

The Annex 18 Data center renovation work will make the facility more resilient to power outages by have the infrastructure to connect to a generator. The work to remove non-functioning transformers, breaker panels and wire from services closets, stairwells and subfloors will conserve power usage. The bathroom renovation will use efficient fixtures and lighting to save water and electricity.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 2,062,073 | \$ 2,000,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: South Central Plant Renovations

Investment Area: Governance & Customer Service – Buildings, County-Facing

Approval Status: Implementation

Total Estimated Cost: \$ 53,291,453

Managing Entity: County Engineer

Expenditures to Date: \$ 191,453

Requesting Entity: County Engineer

Strategic Objective(s): SO14, SO16

Project Description:

This project is to upgrade the South-Central Plant that provides heating and cooling utility services to a number of facilities in the Downtown Complex. The South-Central Plant is located at 1303 Preston Street. The 16,415 square foot plant houses the mechanical, hydronic, electrical, and ancillary equipment necessary to produce thermal utilities (chilled water and steam) to many of the Downtown County facilities.

Justification:

Operations at the South-Central Plant have been affected by the increased number of mechanical failures seen on a yearly basis. These failures are a result of equipment meeting or exceeded its useful life. A major renovation is required to continue service and prevent an inevitable plant failure. Failure to implement the project will only result in potential facility failure, causing downtown offices to close. Failure to implement the project will only result in more expensive deferred maintenance and potential facility failure, causing downtown offices to close. An upgraded south central plant will increase the value of the facility and decrease the overall maintenance required.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 53,291,453 | \$ 1,100,000 | \$ 20,000,000 | \$ 20,000,000 | \$ 7,000,000 | \$ 5,000,000 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: VMC S 66th Building Renovation

Investment Area: Governance & Customer Service – Buildings, County-Facing

Approval Status: Planning

Total Estimated Cost: \$ 4,000,000

Managing Entity: County Engineer

Expenditures to Date: \$ 49,500

Requesting Entity: Universal Services

Strategic Objective(s): N/A

Project Description:

Requesting Entity did not provide.

Justification:

Requesting Entity did not provide.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 4,000,000 | \$ 4,000,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Commissioner's Court Relocation

Investment Area: Governance & Customer Service - Building, Public-Facing

Approval Status: Detailed Design

Total Estimated Cost: \$ 4,010,161

Managing Entity: County Engineer

Expenditures to Date: \$ 10,161

Requesting Entity: County Engineer

Strategic Objective(s): N/A

Project Description:

On July 9, 2019, Court approved a plan to relocate Commissioners Court Courtroom to the 1st floor of the Administration Building at 1001 Preston. This would require part of the Tax Office to be relocated from the 1st floor to the 7th floor, which in turn would require Engineering staff currently on the 7th floor to relocate to the Delta Building (10555 NW Freeway) and the Palace Hotel (1417 Congress Street). The new Commissioners Court Courtroom buildout will require the replacement of some heating, ventilation, and air conditioning systems, as well as new furnishings and equipment for the new space.

Justification:

Relocating the Commissioners Court Courtroom would make Commissioners Court meetings more accessible to citizens by creating a larger and more comfortable space, allowing more people will be able to attend Court meetings in person.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 4,010,161 | \$ 4,000,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: NRG Center Interior Refresh

Investment Area: Governance & Customer Service – Buildings, Public-Facing

Approval Status: Preliminary Investment Review

Total Estimated Cost: \$ 7,835,543

Managing Entity: Sports & Convention Corp.

Expenditures to Date: \$ 1,335,543

Requesting Entity: Sports & Convention Corp.

Strategic Objective(s): N/A

Project Description:

A refresh of the interior of NRG Center finishes including paint, carpet, wall covering, 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. The Sports & Convention Corporation have invested \$ 1.3 million into the project and requests \$ 6.0 million from the County to complete the project.

Justification:

Part of the NRG Center Refresh includes a full repair of the main lobby Terrazzo floor. Throughout the building's life, the floor substrate has demonstrated crumbling at the control joints creating tripping hazards that have progressively gotten worse over the years. Small repairs and patches are continually done; however, the rate at which the floor is deteriorating has accelerated. 1,534 hi bay 800 watt sodium halide lights were replaced with energy efficient 240 watt LED luminaries. The luminaries utilize wireless technology to customize event lighting in lieu of physical manipulation with technicians on scissor lifts. We'd like to transition all lighting in NRG Center to energy efficient LED lighting.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 7,835,543 | \$ 6,500,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | \$ 0 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Renovation of Existing NeuroPsychiatric Center (NPC)

Investment Area: Governance & Customer Service – Buildings, Public-Facing

Approval Status: Planning

Total Estimated Cost: \$4,400,000

Managing Department: TBD

Expenditures to Date: \$0

Requesting Department: Harris Center

Strategic Objective(s): SO1.1, SO2.3,
SO5.2, SO6.1

Project Description:

This project is to renovate the existing NPC facilities in the Texas Medical Center to allow for improved patient care and double the adult psychiatric emergency bed capacity from 30 to 60. The Harris Center would begin design, planning and renovations in mid-2021.

Justification:

This project would expand capacity, allowing the Harris Center to expand care for residents of Harris County. Expansion of capacity allows the agency to continue to improve access to care by expanding the number of individuals the center can serve. This in turn diverts individuals needing emergency psychiatric from utilizing inpatient hospital services, which is more costly to the community. The project would also create an updated clinical environment, increasing overall patient satisfaction. It's important to note that Harris County is the sponsoring entity of the Harris Center for Mental Health & IDD and County dollars are a required local match to draw down state funds to benefit the local community.

Alternatives and Engagement:

No alternatives have been identified for this project.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-------------------------|----------------------------|--|----------------------|
| Law Enforcement | Brings patients to program | Monthly stakeholder meetings | No |
| Harris County Residents | Utilize the services | Media, participation in community collaborations | No |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$4,400,000 | TBD | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Riverside Hospital Project

Investment Area: Governance & Customer Service – Buildings, Public Facing

Approval Status: Detailed Design

Total Estimated Cost: \$55,000,000

Managing Department: County Engineer

Expenditures to Date: \$5,350,000

Requesting Department: Public Health

Strategic Objective(s): SO4, SO6, SO7, SO10, SO26

Project Description:

On September 15, 2020 Commissioners Court authorized the move of Harris County Public Health (HCPH) Main Office Operations from its current location at 2223 West Loop South, to the historic Riverside Hospital site at 3204 Ennis St. Key considerations for this move include efficiency, cost effectiveness, accessibility, and location. The retrofitted facility is anticipated to provide HCPH with over 80,000 square feet of space for its expanded operations.

Justification:

This relocation effort will allow for HCPH to be better situated within the community, within 3 miles of the Hospital District, and with good access to transit. The move to the Riverside site is anticipated to realize a significant cost savings. The cost savings will come from a reduction in the use of lease space and a reduction in facilities maintenance costs due to new construction. The large footprint at the Riverside site allows for HCPH's operations to consolidate from many locations to a single space, while still having room to grow. The increased square footage also provides the opportunity to create a space for direct client healthcare services to be administered. In addition to improving collaboration and coordination by consolidating many of HCPH's functions into one site, there are opportunities for HCPH to partner with Harris Health and Harris Center at the Riverside site to provide primary and specialty care services to underserved/ underinsured communities in Harris County.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$55,000,000 | TBD | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: County Clerk – Office of Election Administrator Facility Needs Assessment

Investment Area: Governance & Customer Service - Buildings, Study

Approval Status: Detailed Design

Total Estimated Cost: \$ 300,000

Managing Entity: County Engineer

Expenditures to Date: \$ 0

Requesting Entity: County Engineer

Strategic Objective(s): N/A

Project Description:

On December 15, 2020, Court directed the Office of the County Engineer to assess the facility needs of the newly formed Elections Administrator Office, as well as the County Clerk, and approved up to \$ 300,000 in funding for the study on the subsequent Court. This assessment will review the transition of staff from the County Clerk to the Elections Administrator Office, where the Elections Administrator Office should be located, and the current and future growth of both departments.

Justification:

This study is needed to better understand the needs, future growth, and requirements of the newly formed Elections Administrator Office and what impact that has on the County Clerk's Office.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 300,000 | \$ 300,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Masterplan and Studies

Investment Area: Governance & Customer Service - Buildings, Study

Approval Status: Detailed Design

Total Estimated Cost: \$ 1,740,000

Managing Entity: County Engineer

Expenditures to Date: \$ 306,581

Requesting Entity: County Engineer

Strategic Objective(s): PCS SO3

Project Description:

This project was set up to fund requests by Court to hire third party consultants to answer a specific questions and/or issues posed by Court. Currently \$ 300,000 is encumbered to program and design a remodel of the Harris County Pollution Control Services (PCS) Department facility at 101 South Richey Street, Pasadena, TX, which was approved by Court on October 13, 2020. The remaining \$ 1.4m remains unallocated and available for future use.

This preliminary investment of \$ 300,000 is anticipated to lead to a large project for the PCS facility. Several upgrades to the PCS laboratory are necessary to ensure personnel safety. These include a dedicated backup generator, retrofit of plumbing for safety showers, installation of a dedicated sump, and electrical panel changes to remove a water hazard. The space expansion is to allow the increase in staff to have space and placement in the office to allow office completion of job duties. This will modify the space vacated by Public Health, as well as PCS's existing space, to accommodate projected department growth.

Justification:

Several fire code violations were noted during a walk through of the PCS facility with the Fire Marshal, which need to be fixed to protect staff safety. The backup generator will allow the laboratory to continue to function during and after a severe weather event or other emergency that results in power loss. This is often a time when our samples are most crucial. Without the backup generator, we would have to pay an outside lab to run all samples collected during an emergency. The increased capability of our in-house lab will reduce the out-sourcing of analytical test thus increasing PCS enhanced value.

Alternatives and Engagement:

No alternatives have been identified for this project.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|---------------------------|---|--|----------------------|
| PCS Staff | Customers of data provided | Samples submitted to support investigations and compliance verification. | Ongoing |
| Citizens of Harris County | Customers - investigative results including sample analysis | Samples results provide information on potential exposure and concentration. | Ongoing |
| Harris County Leadership | Customers of data provided | Sample results provide information on potential exposure and concentration. | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 1,740,000 | \$ 300,000 | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Governance & Customer Service - Facility Maintenance Projects

| Project Name | Subcategory | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|----------------|-----------------|------------------------|----------------------|----------------------|-----------------------|-------------------|
| Annex Facilities Security Upgrades Countywide | Improvements | Implementation | \$ 5,650,477 | \$ 124,846 | \$ 1,000,000 | \$ 4,525,631 | \$ - |
| Countywide Facility LED lighting projects | Improvements | Implementation | 17,696,661 | 485,336 | 4,630,000 | 12,581,325 | - |
| Improvements Subtotal | | | 23,347,138 | 610,182 | 5,630,000 | 17,106,956 | - |
| County Parking Lots | Repair/Replace | Implementation | 20,767,299 | 782,274 | 3,050,025 | 16,935,000 | - |
| Countywide Stormwater Maintenance | Repair/Replace | Implementation | 5,535,981 | 10,350 | 1,000,000 | 4,525,631 | - |
| Downtown Complex System Repairs | Repair/Replace | Detailed Design | 350,000 | 25,831 | 36,784 | TBD | TBD |
| Elevator Repair and Renovations Countywide | Repair/Replace | Implementation | 21,120,626 | 1,495,626 | 1,350,000 | 18,275,000 | - |
| Fire, Life Safety, and Electrical System Repair and Renovations Countywide | Repair/Replace | Implementation | 40,381,749 | 2,257,599 | 7,894,150 | 30,230,000 | - |
| Heating, Ventilation Air Conditioning (HVAC) Repair and Replacement Countywide | Repair/Replace | Implementation | 29,342,633 | 2,261,763 | 6,472,685 | 20,608,185 | - |
| Miscellaneous Repairs, Painting, Flooring and Other Projects | Repair/Replace | Implementation | 22,084,808 | 5,411,808 | 3,430,000 | 13,243,000 | - |
| Plumbing Systems Repair and Replacement Countywide | Repair/Replace | Implementation | 10,308,955 | 230,735 | 2,428,570 | 7,649,650 | - |
| Roofing Systems Repair and Replacement Countywide | Repair/Replace | Implementation | 17,046,500 | 5,049,285 | 1,940,000 | 10,057,215 | - |
| Repair/Replace Subtotal | | | 166,938,551 | 17,525,271 | 27,602,214 | 121,523,681 | - |
| Countywide Facilities ADA Study and Analysis | Study | Planning | 250,000 | - | 250,000 | - | - |
| Countywide Parks ADA Study and Analysis | Study | Planning | 350,000 | - | 350,000 | - | - |
| Underground Fuel Tank Study and Replacement Projects | Study | Detailed Design | 5,018,808 | 18,808 | 5,000,000 | - | - |
| Study Subtotal | | | 5,618,808 | 18,808 | 5,600,000 | - | - |
| Facility Maintenance Total | | | \$ 195,904,496 | \$ 18,154,260 | \$ 38,832,214 | \$ 138,630,637 | - |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Annex Facilities Security Upgrades Countywide

Investment Area: Governance & Customer Service - Facility Maintenance, Improvements

Approval Status: Implementation (Year 1 only)

Total Estimated Cost: \$ 5,650,477

Managing Entity: County Engineer

Expenditures to Date: \$124,846

Requesting Entity: County Engineer

Strategic Objective(s): SO14, SO16

Project Description:

This is an ongoing lifecycle management project to implement security upgrades at Annex facilities throughout the County. These upgrades might include installation of cameras, card readers, or alarm systems. In some circumstances, this project may also install panic buttons and bullet-resistant barriers. These 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 being maintained by FPM.

Court is only being asked to approve Year One funding. Budget Management will work with the department and present an updated workscope during the next CIP.

Justification:

Security is critical to both the safety and peace of mind for County employees and visitors to County facilities. Security systems must be regularly maintained and upgraded to meet the ever-changing advancements in technology. These enhancements may also be necessary to meet code requirements. The main component of facility security systems are cameras and card readers. These tools document who enters and leaves the facility. This has practical administrative uses, but is also useful in an emergency to quickly identify who may or may not be in the building. These enhanced security system components can represent a cost savings by reducing the number of on-site personnel needed to secure a facility. Visible security cameras are a proven deterrent to costly vandalism and theft.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been completed for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 5,650,477 | \$ 1,000,000 | \$ 1,050,000 | \$ 1,102,500 | \$ 1,157,625 | \$ 1,215,506 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Countywide Facility LED lighting projects

Investment Area: Governance & Customer Service - Facility Maintenance, Improvements

Approval Status: Implementation (Year 1 only)

Total Estimated Cost: \$ 17,696,661

Managing Entity: County Engineer

Expenditures to Date: \$ 485,336

Requesting Entity: County Engineer

Strategic Objective(s): SO14, SO16

Project Description:

This project is to identify and convert lighting to LED for all County facilities. Court is only being asked to approve Year One funding, as detailed below. Budget Management will work with the department and present an updated workscope during the next CIP.

| Project Focus | Location | Estimated Cost |
|---|---------------------------------------|----------------|
| Parking Garage | Annex 46 - 1019 Congress | \$ 775,000 |
| Exterior Lighting | Annex 51 - 301 Fannin | \$ 36,000 |
| Exterior Security Lighting | Annex 73 - 201 Caroline | \$ 33,000 |
| Pedestrian Tunnel Common Area | Various Facilities | \$ 195,000 |
| Damaged Landscape Lighting Removal | Annex 73 - 201 Caroline | \$ 13,000 |
| Sub-Level Parking Garage | Annex 53 - 1001 Preston | \$ 60,000 |
| Street Level Garage | Annex 44 - 1310 Prairie St. | \$ 15,000 |
| Energy Efficiency Lighting Grade in all Office and Common Areas | Annex 53 - 1001 Preston | \$ 1,080,000 |
| | FPM Operations (Old VMC) - 426 Austin | \$ 80,000 |
| | Annex 18 - 406 Caroline | \$ 425,000 |
| | Annex 50 - 1200 Congress | \$ 1,100,000 |
| | Annex 73 - 201 Caroline | \$ 550,000 |
| | Annex 60 - 9111 Eastex Freeway | \$ 60,000 |
| Exterior Security Lighting | Annex 65 - 1201 Franklin | \$ 23,000 |
| Lighting in Parking lot | Annex 59 - 10585 Westoffice | \$ 10,000 |
| Dome Lighting at Civil Courthouse | Annex 73 - 201 Caroline | \$ 175,000 |

Justification:

Modernization of existing facilities to provide energy efficient lighting to reduce costs and enhance building sustainability. LED lighting consumes less energy and require less maintenance, resulting in increased efficiency and lower operating costs.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 17,696,661 | \$ 4,630,000 | \$ 4,542,450 | \$ 2,550,000 | \$ 2,677,500 | \$ 2,811,375 | \$ 0 |

Estimated Annual Operating Budget Impact:

| | |
|--------------|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: County Parking Lots

Investment Area: Governance & Customer Service – Facility Maintenance, Repair/ Replace

Approval Status: Implementation (Year 1 only)

Total Estimated Cost: \$ 20,767,299

Managing Entity: County Engineer

Expenditures to Date: \$ 782,274

Requesting Entity: County Engineer

Strategic Objective(s): SO14, SO16

Project Description:

This is an ongoing lifecycle management project to identify, repair, and construct new parking facilities. Court is only being asked to approve Year One funding, as detailed below. Budget Management will work with the department and present an updated workscope during the next CIP.

| Project Focus | Location | Estimated Cost |
|---|--|----------------|
| Mill & Overlay of parking lot | Annex 49 - 9418 Jensen | \$ 280,000 |
| | Annex 8 - 701 West Baker Road | \$ 450,000 |
| Clean, Sweep & Re-stripe, Base Repair / Overlay | Stratford Branch Library - 509 Startford | \$ 120,000 |
| Replace concrete | Annex 26 - 14350 Wallisville | \$ 280,000 |
| Mill, Repair Base, Resurface, Seal, and Stripe | Annex 39 - 333 Lockwood | \$ 85,000 |
| Base Repair and Overlay | Annex M – 2525 Murworth | \$ 1,295,025 |
| | HCSO Auto Theft Division - 310 Fisher Road | \$ 260,000 |
| | Pearl Fincher Museum - 6815 Cypresswood Dr | \$ 200,000 |
| Restripe | Barbara Bush Branch Library - 6815 Cypresswood Dr. | \$ 80,000 |

Justification:

The County has a backlog of deferred maintenance issues related to parking lots that must be addressed. Ongoing parking lot maintenance is required to maintain safe and functioning parking lots that serve County facilities. Failure to continue maintaining the County's existing parking facilities will result in more expensive deferred maintenance, as well as closure of parking areas and risk of damage to personal vehicles. Well-maintained parking lots are required to maintain high quality facilities, as well as ensure the safety of employees and the public at County facilities. Parking lots provide emergency vehicle access to County facilities and make these facilities more accessible to the handicapped. A well maintained parking facility increases the overall value of the facility.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been completed for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 20,767,299 | \$ 3,050,025 | \$ 2,235,000 | \$ 1,175,000 | \$ 11,375,000 | \$ 2,150,000 | \$ 0 |

Estimated Annual Operating Budget Impact:

| | |
|--------------|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Countywide Stormwater Maintenance

Investment Area: Governance & Customer Service - Facility Maintenance, Repair/ Replace

Approval Status: Implementation (Year 1 only)

Total Estimated Cost: \$ 5,535,981

Managing Entity: County Engineer

Expenditures to Date: \$ 10,350

Requesting Entity: County Engineer

Strategic Objective(s): N/A

Project Description:

This is an ongoing lifecycle management project to inspect and maintain stormwater management facilities to ensure these essential facilities function as designed to mitigate flooding. Funding is being requested to centralize the inventory, repair, replacement, and maintenance of all county owned stormwater quality facilities. This includes culverts and outfall facilities that directs stormwater from roadways to established floodway channels and basins. Court is only being asked to approve Year One funding. Budget Management will work with the department and present an updated workscope during the next CIP.

Justification:

The County's stormwater management facilities have a backlog of deferred maintenance issues that must be addressed. Failure to continue maintaining the County's existing stormwater management facilities will result in more expensive deferred maintenance, non-code compliance, the risk of critical infrastructure failures, and most importantly, risks to life/ safety. Maintaining stormwater management facilities is essential to protecting properties from flooding and has a positive impact on local water quality. The inspections that are part of this project are critical to ensuring that stormwater facilities continue to comply with local, state, and federal requirements.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 5,535,981 | \$ 1,000,000 | \$ 1,050,000 | \$ 1,102,500 | \$ 1,157,625 | \$ 1,215,506 | \$ 0 |

Estimated Annual Operating Budget Impact:

| | |
|--------------|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Downtown Complex System Repairs

Investment Area: Governance & Customer Service – Facility Maintenance, Repair/Replace

Approval Status: Detailed Design

Total Estimated Cost: \$ 350,000

Managing Entity: County Engineer

Expenditures to Date: \$ 25,831

Requesting Entity: County Engineer

Strategic Objective(s): N/A

Project Description:

This project is to repair the system of tunnels that connect various Harris County downtown buildings (not connected to the popular Downtown Tunnels in the central business district that hold commercial storefronts), which were damaged from Hurricane Harvey. On January 28, 2020, Court approved \$ 350,000 in commercial paper to fund an overall damage assessment and to ascertain what repairs would be needed. It is anticipated that these repairs could be eligible for reimbursements from FEMA. The overall assessment of the damage to the tunnels has been completed and the Office of the County Engineer is evaluating next steps.

Justification:

The Harris County tunnel complex provides a critical connection between the various buildings serving the justice system and allows people to be screened once instead of having to be screened as they move from building to building. This cuts down on traffic at security checkpoints and allows people to move faster and more efficiently.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 350,000 | \$ 25,831 | \$ 36,764 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Elevator Repair and Renovations Countywide

Investment Area: Governance & Customer Service - Facility Maintenance, Repair/ Replace

Approval Status: Implementation (Year 1 Only)

Total Estimated Cost: \$ 21,120,626

Managing Entity: County Engineer

Expenditures to Date: \$ 1,495,626

Requesting Entity: County Engineer

Strategic Objective(s): SO14, SO16

Project Description:

This is an ongoing lifecycle management project to identify and address all required repairs and/or modernization of elevators in County facilities that are currently maintained by FPM. This project would address elevator equipment in multiple County facilities that are outdated and where replacement parts are not readily available (and in some cases parts are no longer available). Court is only being asked to approve Year One funding, as detailed below. Budget Management will work with the department and present an updated workscope during the next CIP.

| Project Focus | Location | Estimated Cost |
|--|-------------------------------|----------------|
| Modernize 1 traction freight elevator and 1 hydraulic passenger elevator | Annex 18 - 406 Caroline | \$ 600,000 |
| Modernize 3 hydraulic elevators - FEMA | Annex 27 - 600 N. San Jacinto | \$ 750,000 |

Justification:

The County has a backlog of elevator deferred maintenance issues that must be addressed. Failure to continue maintaining the County's existing facilities may result in more expensive deferred maintenance, as well as closure of certain areas, non-code compliance, and most importantly, risks to life/ safety. Elevators are linked to building fire alarm systems to ensure they operate properly during an event. Another elevator safety issue is people getting trapped in an elevator when they break down. Ongoing elevator entrapments or failures are a potential life safety issue. Elevators need to be modernized to avoid outages and entrapments. Modernized elevators increase building flow of employees and visitors throughout the facility, which is critical for efficient building operations. When elevators are out of service, it disrupts the buildings ability to maintain operations.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 21,120,626 | \$ 1,350,000 | \$ 4,275,000 | \$ 6,950,000 | \$ 4,000,000 | \$ 3,050,000 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Fire, Life Safety, and Electrical System Repair and Renovations Countywide

Investment Area: Governance & Customer Service - Facility Maintenance, Repair/ Replace

Approval Status: Implementation (Year 1 Only)

Total Estimated Cost: \$ 40,381,749

Managing Entity: County Engineer

Expenditures to Date: \$ 2,257,599

Requesting Entity: County Engineer

Strategic Objective(s): SO14, SO16

Project Description:

This is an ongoing lifecycle management project to identify and address all required repairs and/or replacements needed for Fire, Life Safety, and Electrical Systems in County facilities that are currently maintained by FPM. Replacements are done when components are outdated/ failing and when parts are not readily available (and in some cases parts are no longer available). Examples of work this project covers includes repair/replacement of smoke detectors, fire suppression systems, emergency power supply units, and sprinkler pumps/piping. Court is only being asked to approve Year One funding, as detailed below. Budget Management will work with the department and present an updated workscope during the next CIP.

| Location | Project Focus | Estimated Cost |
|--------------------------------------|---|----------------|
| 2318-2324 Atascocita (Complex wide) | Water Suppression System Tanks and Supply | \$ 1,000,000 |
| Academy Building - 2316 Atascocita | Replace Bosch fire alarm system | \$ 100,000 |
| Annex 52 - 1115 Congress | Install wet pipe fire suppression system, fire alarm | \$ 1,314,150 |
| Annex 53 - 1001 Preston | Placing Entrance and Exit Gates on Fire System | \$ 30,000 |
| Annex 60 - 9111 Eastex Freeway | Remove fire pump (not needed) | \$ 10,000 |
| Annex 65 - 1201 Franklin | Fire/Smoke Stairwell Pressurization System | \$ 100,000 |
| Annex 73 - 201 Caroline | Fire/Smoke Stairwell Pressurization System | \$ 100,000 |
| Annex 83 - 2221-2223 W Loop South | Replace Bosch fire alarm system, replace water line vault and equipment, treat sprinkler pipes, install fire pump | \$ 365,000 |
| Delta Building - 10555 Northwest Fwy | Fire Suppression System and Controls | \$ 1,800,000 |
| Finnigan Park CC - 4900 Providence | Replace Bosch fire alarm system | \$ 45,000 |
| Vehicle Maint. Bldg. - 2505 Texas | Repair wet sprinkler system | \$ 30,000 |

Justification:

The County has a backlog of fire system deferred maintenance issues that must be addressed. Failure to continue maintaining the County's existing facilities could result in more expensive deferred maintenance, as well as closure of certain areas, non-code compliance, and risks to life/ safety. Fire, Life Safety, and Electrical repairs/renovations are critical and or required to support the building infrastructure and to allow occupancy. Without these systems, buildings might have to be shut down, which would be a major disruption to continuity of government.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 40,381,749 | \$ 7,894,150 | \$ 10,935,000 | \$ 5,045,000 | \$ 4,650,000 | \$ 9,600,000 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Heating, Ventilation Air Conditioning (HVAC) Repair and Replacement Countywide

Investment Area: Governance & Customer Service - Facility Maintenance, Repair/ Replace

Approval Status: Implementation (Year 1 Only)

Total Estimated Cost: \$ 29,342,633

Managing Entity: County Engineer

Expenditures to Date: \$ 2,261,763

Requesting Entity: County Engineer

Strategic Objective(s): SO14, SO16

Project Description:

This is an ongoing lifecycle management project to identify and address all required repairs and/or replacements of HVAC systems in County facilities that are currently maintained by FPM. Court is only being asked to approve Year One funding, as detailed below. Budget Management will work with the department and present an updated workscope during the next CIP.

| Location | Project Focus | Estimated Cost |
|---|---|----------------|
| Annex 1 - 1413 Westheimer | Replace Gas Furnace & Evaporator Coil | \$ 30,000 |
| Annex 10 - 16603 Buccaneer | Replace 2nd floor AHU and upgrade building controls | \$ 110,000 |
| Annex 14 - 5737 Cullen Blvd. | Replace 6 AHU and Boiler | \$ 635,000 |
| Annex 17 - 6831 Cypresswood Dr. | Replace Rooftop 5 ton server room package unit | \$ 30,000 |
| Annex 26 - 14350 Wallisville | Replace all AHU's (7) and FCU (7) | \$ 185,000 |
| Annex 40 - 601 Lockwood | Replace all AHU's (13), and all Chill Water Line Insulation | \$ 1,450,000 |
| Annex 6 - 8111 Lawn | (5) Split Systems & Boiler | \$ 110,000 |
| Annex 60 - 9111 Eastex Freeway | Replace 7 AHU and 2 chillers | \$ 900,000 |
| Annex 8 - 701 West Baker Rd. | Replace Boiler (1) and Hot Water Pump (1) | \$ 160,000 |
| | Replace the Pneumatic System with Electronic Actuators | \$ 90,000 |
| Annex 83 - 2223 West Loop S. | Upgrade HVAC automation system controls | \$ 850,000 |
| | Cooling Tower Fan & Drive System Replacement. | \$ 30,684 |
| Annex 9 - 1001 Sgt. Macario Garcia Dr. | Replacement of Boiler (1) | \$ 100,000 |
| Parking Garage - 1401 Congress | Replacement of 14 Split Systems and 2 FCUs | \$ 445,000 |
| Crosby Branch Library - 135 Hare Rd. | Replace AHU (2) | \$ 80,000 |
| Fire Station - 2326 Atascocita Rd. | Replace all 5 R-22 Units, Lebert unit, AHU (1) | \$ 140,000 |
| FPM Ops (Old VMC) - 426 Austin | Replace Boiler (1), AHU's (3) and Bard Units (3) | \$ 380,000 |
| Health Clinic - 1730 Humble Place Dr. | Replace (2) Outside Air Units and Ductwork | \$ 80,000 |
| High Meadows Library - 4500 Aldine Mail Rt. | Replace 40 Ton condenser, AHU 7.5 ton Split unit | \$ 100,000 |
| Katherine Tyra Library - 16719 Clay Rd. | HVAC replacement | \$ 400,000 |
| Palace Hotel - 1415 Congress St | Replace of End of Life Cycle HVAC R22 Units. | \$ 75,000 |
| SAT/YMAC - 2310 1/2 Atascocita Rd. | Install/ replace A/C in Dorm B3, Food Prep, & Intake areas | \$ 77,000 |
| Stratford Branch Library - 509 Startford | Replace AHU (1) | \$ 15,000 |

(AHU = Air Handler Unit, FCU = Fan Coil Unit)

Justification:

The County has a backlog of HVAC deferred maintenance issues that must be addressed. Failure to continue maintaining the County's existing facilities will result in more expensive deferred maintenance, as well as closure of certain areas, non-code compliance, and most importantly, risks to life/ safety. HVAC systems must operate at a high level of functionality to ensure comfortable temperature, and air quality, which is critical to building occupancy and functionality. Well maintained HVAC systems are also important because they linked to the fire alarm system via smoke alarms within the duct

system, dampers that open and close, and building exhaust during a fire or smoke event.

Alternatives and Engagement:

No alternatives have been identified for this project. Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

This is an ongoing project. Operating impacts have not been estimated for this project at this time.

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 29,342,633 | \$ 6,472,685 | \$ 4,275,000 | \$ 5,060,905 | \$ 5,397,280 | \$ 5,875,000 | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Miscellaneous Repairs, Painting, Flooring and Other Projects

Investment Area: Governance & Customer Service - Facility Maintenance, Repair/ Replace

Approval Status: Implementation (Year 1 Only)

Total Estimated Cost: \$ 22,084,808

Managing Entity: County Engineer

Expenditures to Date: \$ 5,411,808

Requesting Entity: County Engineer

Strategic Objective(s): SO14, SO16

Project Description:

This is an ongoing lifecycle management project to identify and address all required repairs and/ or replacements in County facilities that are currently maintained by FPM. This includes painting, carpeting, fixing ceiling fixtures, and door replacement projects. Court is only being asked to approve Year One funding, as detailed below. Budget Management will work with the department and present an updated workscope during the next CIP.

| Location | Project Focus | Estimated Cost |
|---|---|----------------|
| Annex 14 - 5737 Cullen Blvd. | Interior Painting | \$ 20,000 |
| Annex 24 - 3330 Old Spanish Trail | Interior Office Hallways & Stairwells Need Painting & Carpet Replaced | \$ 250,000 |
| Annex 47 - 2727 El Camino | Interior Replacement of Carpet | \$ 200,000 |
| Annex M - 2525 Murworth | Interior Renovation Carpet | \$ 490,000 |
| | Interior Renovation. - Painting | \$ 450,000 |
| | Interior Replacement of Carpet and Painting | \$ 480,000 |
| Credit Union Parking Garage - 1401 Congress | Parking Mgmt. - Interior Paint Project | \$ 440,000 |
| | Exterior Remediate Water infiltration in basement | \$ 300,000 |
| Youth Service Center - 6300 Chimney Rock | Exterior siding/flushing | \$ 150,000 |
| Youth Village - 210 J.W. Mills | Overlay and base repair | \$ 480,000 |
| Various locations | Region 1,2,3, & 4 - JP Annex carpet & painting | \$ 800,000 |

Justification:

This project a critical element to the County Engineer's goal to maintain high quality facilities. In particular, the are necessary to provide a welcoming experience for both employees and visitors. County facilities range in age and occupancy and will continue to require constant upkeep. Missing or damaged ceiling tiles are required to be replaced to meet fire code. A well maintained facility increases the overall value of the facility.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 22,084,808 | \$ 3,430,000 | \$ 4,007,000 | \$ 1,556,000 | \$ 2,680,000 | \$ 5,000,000 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Plumbing Systems Repair and Replacement Countywide

Investment Area: Governance & Customer Service - Facility Maintenance, Repair/ Replace

Approval Status: Implementation (Year 1 Only)

Total Estimated Cost: \$ 10,308,955

Managing Entity: County Engineer

Expenditures to Date: \$ 230,735

Requesting Entity: County Engineer

Strategic Objective(s): SO14, SO16

Project Description:

This is an ongoing lifecycle management project to identify and address all required repairs and/or replacements of plumbing systems in County facilities that are currently maintained by FPM. This includes repair/replacement of sewer systems, domestic water supply, pumps, and replacing sinks and toilets with more efficient fixtures. Court is only being asked to approve Year One funding, as detailed below. Budget Management will work with the department and present an updated workscope during the next CIP.

| Location | Project Focus | Estimated Cost |
|------------------------------------|---|----------------|
| Annex 17 - 6831 Cypresswood Dr | 100' of 2" domestic water line | \$ 25,000 |
| Annex 2 - 1302 Preston | Replace 5 sections 1,600,000 BTU Utica Boiler & FLUE Pipes | \$ 650,000 |
| | Replacement of All Domestic Water Pipes | \$ 650,000 |
| Annex 21 - 49 San Jacinto | Upgrade Detention Area 4 in Drain Line to 6 in | \$ 75,000 |
| Annex 24 - 3330 Old Spanish Trail | Need to replace underground plumbing in Bldg. A & B | \$ 250,000 |
| Annex 44 - 1310 Prairie St. | Relocation of Domestic Water Controls Valves, Make Up Station | \$ 75,000 |
| Annex 52 - 1115 Congress | Upgrade of sewer lift station and controls | \$ 400,000 |
| Annex 53 - 1001 Preston | Reserve 2 replacement chill water pumps and motors | \$ 75,000 |
| | Reserve 2 hot water pumps, motors and upgrade controls | \$ 50,000 |
| | Upgrade the BAC Control on the Sanitary Sewer System | \$ 32,000 |
| | Upgrade the BAC Control on the Storm Water System | \$ 32,000 |
| Annex 73 - 201 Caroline | Relocation of Domestic Water Controls Valves, Make Up Station | \$ 60,000 |
| Parking Garage - 1401 Congress | Increase pumping capacity of Pump Station 954-01 | \$ 37,000 |
| SAT/YMAC - 2310 1/2 Atascocita Rd. | Plumbing - Full Equipment Replacement | \$ 17,570 |

Justification:

The County has a backlog of plumbing deferred maintenance issues that must be addressed. Failure to continue maintaining the County's existing facilities will result in more expensive deferred maintenance, as well as closure of certain areas, non-code compliance, and most importantly, risks to life/ safety. Plumbing systems are critical and or required to support the building infrastructure and to allow occupancy. Fire sprinkler systems must have water to operate. Without water a building will not meet code. Running water and flushing toilets are required to maintain the functionality of a facility; without this critical infrastructure a facility will be shut down. Savings would be a challenge to calculate because failures are unpredictable.

Alternatives and Engagement:

No alternatives have been identified for this project. Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 10,308,955 | \$ 2,428,570 | \$ 2,149,650 | \$ 2,500,000 | \$ 1,500,000 | \$ 1,500,000 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Roofing Systems Repair and Replacement Countywide

Investment Area: Governance & Customer Service - Facility Maintenance, Repair/ Replace

Approval Status: Implementation (Year 1 Only)

Total Estimated Cost: \$ 17,046,500

Managing Entity: County Engineer

Expenditures to Date: \$ 5,049,285

Requesting Entity: County Engineer

Strategic Objective(s): SO14, SO16

Project Description:

This is an ongoing lifecycle management project to identify and construct all required repairs and/or replacements for County facilities that are currently maintained by FPM. Court is only being asked to approve Year One funding, as detailed below. Budget Management will work with the department and present an updated workscope during the next CIP.

| Location | Project Focus | Estimated Cost |
|--|------------------------------------|----------------|
| Annex 73 - 201 Caroline | New Roof: Civil Courthouse | \$ 480,000 |
| Annex 47 - 2727 El Camino | New Roof: Precinct 1 Building | \$ 400,000 |
| | New Roof: Aquatics Center | \$ 430,000 |
| Annex 35 - 1721 Peck Rd | New Roof: Spring Branch Tax Office | \$ 280,000 |
| HCSO Detention Facility - 1200 Baker St. | Reseal the windows | \$ 350,000 |

Justification:

The County has a backlog of deferred roof maintenance issues that must be addressed. Failure to continue maintaining the County's existing facilities will result in more expensive deferred maintenance, as well as closure of certain areas, non-code compliance, and most importantly, risks to life/ safety. The repairs that are part of this project are intended to mitigate more costly future repairs and facility damage, as well as to prevent a total roof failure that could potentially shut a facility down. This project also include roof retrofits which can improve a building's energy efficiency.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 17,046,500 | \$ 1,940,000 | \$ 1,908,000 | \$ 2,585,000 | \$ 2,714,250 | \$ 2,849,965 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Countywide Facilities ADA Study and Analysis

Investment Area: Governance & Customer Service - Facility Maintenance, Study

Approval Status: Planning

Total Estimated Cost: \$ 250,000

Managing Entity: County Engineer

Expenditures to Date: \$ 0

Requesting Entity: County Engineer

Strategic Objective(s): SO14

Project Description:

An ADA Study and Analysis will identify and inventory deficiencies as they relate to ADA accessibility and compliance throughout numerous Harris County maintained facilities.

Justification:

A study and analysis is necessary to identify and inventory deficiencies as they relate to compliance of ADA accessibility for the purposes of requesting future capital spending needs.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not yet been planned for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 250,000 | \$ 250,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Countywide Parks ADA Study and Analysis

Investment Area: Governance & Customer Service - Facility Maintenance, Study

Approval Status: Planning

Total Estimated Cost: \$ 350,000

Managing Entity: County Engineer

Expenditures to Date: \$ 0

Requesting Entity: County Engineer

Strategic Objective(s): SO14

Project Description:

A Parks Facilities ADA Study and Analysis will identify and inventory deficiencies as they relate to ADA accessibility and compliance throughout numerous Harris County maintained parks.

Justification:

A study and analysis is necessary to identify and inventory deficiencies as they relate to compliance of Park Facilities ADA accessibility for the purposes of requesting future capital spending needs.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not yet been planned for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 350,000 | \$ 350,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Underground Fuel Tank Study and Replacement Projects

Investment Area: Governance & Customer Service - Facility Maintenance, Study

Approval Status: Detailed Design

Total Estimated Cost: \$ 5,018,808

Managing Entity: County Engineer

Expenditures to Date: \$ 18,808

Requesting Entity: Universal Services

Strategic Objective(s): N/A

Project Description:

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

Justification:

Requesting Entity did not provide.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 5,018,808 | \$ 5,000,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Governance & Customer Service - IT & Equipment Projects

| Project Name | Subcategory | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|-------------|------------------------|------------------------|----------------------|----------------------|----------------------|-------------------|
| Fleet Services Equipment | Equipment | Implementation | \$ 2,640,720 | \$ 174,281 | \$ 1,840,484 | \$ 625,955 | \$ - |
| PCS Equipment Replacement and Additions | Equipment | Implementation | 3,197,467 | 242,871 | 1,387,839 | 1,566,757 | TBD |
| Voting Machines | Equipment | Implementation | 32,962,645 | - | 32,962,645 | - | - |
| Equipment Subtotal | | | 38,800,832 | 417,152 | 36,190,968 | 2,192,712 | - |
| Enterprise Scanning Service | Hardware | Detailed Design | 3,940,231 | 324,876 | 1,316,419 | 2,298,936 | - |
| Networking - Repair Replace | Hardware | Implementation | 15,462,312 | 1,099,477 | 1,903,035 | 12,459,800 | - |
| Security Infrastructure Installation and Upgrades | Hardware | Implementation | 15,296,482 | 5,296,311 | 2,080,450 | 7,919,721 | - |
| Telephone System Repair Replace | Hardware | Implementation | 7,363,097 | 698,298 | 1,505,799 | 5,159,000 | - |
| Hardware Subtotal | | | 42,062,122 | 7,418,962 | 6,805,703 | 27,837,457 | - |
| Application Repair and Replace | Software | Implementation | 18,904,440 | 366,776 | 2,855,198 | 15,682,466 | - |
| Cybersecurity | Software | Implementation | 7,458,872 | 321,811 | 985,611 | 6,151,450 | - |
| Enterprise Document Management | Software | Planning | 17,596,995 | - | 2,019,130 | 15,577,865 | - |
| Enterprise Tririga | Software | Planning | 848,828 | - | 710,428 | 138,400 | - |
| ERP Enhanced Automation and Reporting | Software | Implementation | 2,475,450 | 36,300 | 2,439,150 | - | - |
| ERP Stabilization | Software | Implementation | 3,061,992 | - | 1,984,744 | 1,077,248 | - |
| Infrastructure Enhancements - Replacements | Software | Implementation | 14,366,834 | 2,152,874 | 5,936,480 | 6,277,480 | - |
| IT Service Management | Software | Planning | 1,614,700 | - | 1,200,100 | 414,600 | - |
| Protective Services - Business Applications Repair and Replace | Software | Preliminary Investment | 2,148,637 | - | 1,096,157 | 1,052,480 | - |
| Software Subtotal | | | 68,476,748 | 2,877,761 | 19,226,998 | 46,371,989 | - |
| IT & Equipment Total | | | \$ 149,339,702 | \$ 10,713,875 | \$ 62,223,669 | \$ 76,402,158 | - |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Fleet Services Equipment

Investment Area: Governance & Customer Service - IT & Equipment, Equipment

Approval Status: Implementation (Year 1 Only)

Total Estimated Cost: \$ 2,640,720

Managing Entity: Universal Services

Expenditures to Date: \$ 174,281

Requesting Entity: Universal Services

Strategic Objective(s): SO4

Project Description:

This project represents a multi-year plan for the repair/ replacement of equipment, enhancement of software applications, and services provided by Fleet Services. This project also provides for the move of the 2505 Texas Avenue Fleet Services location to 440 66th Street. Additional equipment and build-out are necessary to make the new location on 66th Street habitable and usable. Court is only being asked to approve Year One funding, as detailed below. Budget Management will work with the department and present an updated workscope during the next CIP.

- Support and maintenance of Fleet Services fuel stations.
- Support and maintenance of Commissioner Pct. 2 fuel stations. Fuel stations managed by Commissioner Precinct. 2 are closed-loop stations meaning they can only be used by Precinct 2. They have requested Universal Services to assume management of these stations and convert them for multi-purpose use by all County vehicles and equipment.
- Modifying fuel stations to multi-purpose stations for use by all county vehicles and equipment.
- Upgrading the Fleetwave application to provide improved functionality and reporting. The Fleetwave application used to monitor our fleet's maintenance and fuel consumption needs to be upgraded to the current version to provide improved functionality allowing Harris County to realize their return on investment (ROI).

Justification:

Due to restraints with the current location, Fleet Services is limited in by parking and staffing constraints. The new 66th Street location addresses these restraints and provides the following benefits:

- Improved maintenance of county vehicles utilizing updated or replaced equipment.
- Back-up generator and emergency facilities to continue operations in the event of a severe weather event.
- New equipment improves Fleet Services' ability to manage operations, increasing productivity and efficiency.
- Upgraded software for monitoring and reporting capabilities.
- Additional multi-use fuel stations to serve all county vehicles and equipment.

Alternatives and Engagement:

No alternatives have been identified for this project.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|--|---|------------------------------------|----------------------|
| All departments with County vehicles that utilize Fleet Services for fuel, maintenance and repairs will be affected. | The departments will benefit by having a more modern facility to bring their vehicles to. | Via email and phone conversations. | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 2,640,720 | \$ 1,840,484 | \$ 438,955 | \$ 187,000 | \$ 0 | \$ 0 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Pollution Control Services (PCS) Equipment Replacement and Additions

Investment Area: Governance & Customer Service - IT & Equipment, Equipment

Approval Status: Implementation (Year 1 Only)

Total Estimated Cost: \$ 3,197,467

Managing Entity: Pollution Control

Expenditures to Date: \$ 242,871

Requesting Entity: Pollution Control

Strategic Objective(s): SO3, SO13

Project Description:

This project to ensure that PCS staff have up-to-date field monitoring equipment, expand testing capacity in the laboratory, and build in redundancy to ensure continuity of service. To make the lab more resilient, a dedicated uninterruptible power supply (UPS) for each instrument (existing and newly purchased) will be installed. Finally, the project procures specialized analytical equipment that will be able to perform new required tests. It is possible that adding this analytical capability may require construction of a dedicated clean lab area; those costs are not projected at this time. Court is only being asked to approve Year One funding, as noted above. Budget Management will work with the department and present an updated workscope during the next CIP.

Justification:

The updated equipment will expand the types of tests that can be done, make processing of samples more efficient, and automate some labor-intensive manual tasks. Adding redundancy will allow for more samples to be run and avoid the need to outsource testing in the event of a large event or an equipment failure, and removes a failure point by reducing third party reliance on an outside analytical lab. Added redundancy also ensures that equipment failure or obsolete technology do not impact PCS's ability to provide emergency response, address citizen complaints, and conduct proactive investigations. PCS's ability to test and sample is required to enforce compliance under the Texas Administrative/ Water Code. The increased capability of the PCS lab will reduce the out-sourcing of analytical tests, reducing operating costs and test turnaround times.

Alternatives and Engagement:

Outsource Testing - In this scenario, PCS outsources more and more of its lab services as critical equipment fails and the lab becomes unable to do tests themselves. Outsourcing lab tests is expensive and it takes longer to get back test results. Outsourcing testing is inefficient and may cause a critical delay during an emergency.

Do Not Replace Equipment - In this scenario, PCS does not replace its equipment. Aging equipment breaks down and is not replaced, causing PCS to be unable perform tests. This option is untenable as it would cause PCS to be unable to carry out its core functions. It may also result in an unsafe working condition for PCS staff.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|---------------------------|---|---|----------------------|
| PCS Staff | Customers of data provided | Samples support investigations and compliance verification | Ongoing |
| Citizens of Harris County | Customers - investigative results including sample analysis | Samples results provide information on potential exposure and concentration | Ongoing |
| Harris County Leadership | Customers of data provided | Sample results provide information on potential exposure and concentration | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 3,197,467 | \$ 1,387,839 | \$ 840,402 | \$ 347,570 | \$ 378,785 | TBD | TBD |

| Estimated Annual Operating Budget Impact: | |
|---|------------------|
| O&M | \$ 14,200 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 14,200 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Voting Machines

Investment Area: Governance & Customer Service – IT & Equipment, Equipment

Approval Status: Implementation

Total Estimated Cost: \$32,962,645

Managing Entity: Election Administrator's Office

Expenditures to Date: \$ 0

Requesting Entity: Election Administrator's Office

Strategic Objective(s): N/A

Project Description:

On January 26, 2020, Court authorized the purchase of new voting machines, as described below. A third will be received and integrated into use prior to the May 2021 elections. The remaining machines will be received and integrated into use prior to the November 2021 elections.

- 12,000 ballot marking devices and accessories (case, stand, privacy screen).
- 2,000 accessible ballot marking devices and accessories (booth, case, headphones).
- 1,000 secure ballot boxes and transport bags.
- Initial programming of machines
- Miscellaneous cables, printers, scanners, keys, etc.

Justification:

This project replaces the 20 year-old voting system with new voting machines with greatly improved technology. The technology would be federally and State certified to ensure secure elections; this is especially important given the nation-wide concerns of election security during the November 2020 election. The new voting machines should also improve voting operation efficiencies and provide for a better voter experience.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$32,962,645 | \$32,962,645 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|---------------------|
| O&M | \$ 1,417,460 |
| Labor | \$ 0 |
| Other | \$ 166,329 |
| Total | \$ 1,583,788 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Enterprise Scanning Service

Investment Area: Governance & Customer Service - IT & Equipment, Hardware

Approval Status: Detailed Design

Total Estimated Cost: \$ 3,940,231

Managing Entity: Universal Services

Expenditures to Date: \$ 324,876

Requesting Entity: Universal Services

Strategic Objective(s): N/A

Project Description:

Develop an enterprise scanning solution at Harris County Records Center (HCRC) that will transform all records with retention periods greater than 10 years from a paper format to electronic.

Justification:

The electronic storage of records will enable quicker access of records while reducing the risk of document loss through water, fire, and paper degradation. Converting physical records to electronic reduces the physical space needed to store records and will reduce the manpower required to operate the records center. Additionally as the service extends to departments that are storing their more active records onsite, it will reduce their manpower costs and their risk of loss of records due to fire and water damage such as we have seen in recent floods. Electronic storage of county records will enable departments to access their records from any county laptop, allowing access from any location where they can access the county network. The ability to access the records electronically will reduce the time it takes to retrieve records and make operations more efficient.

Alternatives and Engagement:

A large percentage of records to be scanned are Law Enforcement records containing CJIS data. These records are required to remain in a Harris County facility, which eliminates the ability to use outside 3rd party vendor locations.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 3,940,231 | \$ 1,316,419 | \$ 985,166 | \$ 849,649 | \$ 464,121 | \$ 0 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Networking - Repair Replace

Investment Area: Governance & Customer Service - IT & Equipment, Hardware

Approval Status: Implementation (Year 1 Only)

Total Estimated Cost: \$ 15,462,312

Managing Entity: Universal Services

Expenditures to Date: \$ 1,099,477

Requesting Entity: Universal Services

Strategic Objective(s): N/A

Project Description:

This is an ongoing lifecycle management project. 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. Court is only being asked to approve Year One funding. Budget Management will work with the department and present an updated workscope during the next CIP.

Justification:

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 the County's 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 to replace all end-of-life equipment over the next few years and then get on a regular refresh cycle moving forward. This lifecycle refresh approach is anticipated to 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 non-County agencies sharing data with the County.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 15,462,312 | \$ 1,903,035 | \$ 4,631,000 | \$ 3,298,800 | \$ 2,265,000 | \$ 2,265,000 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Security Infrastructure Installation and Upgrades

Investment Area: Governance & Customer Service - IT & Equipment, Hardware

Approval Status: Implementation (Year 1 Only)

Total Estimated Cost: \$ 15,296,482

Managing Entity: Universal Services

Expenditures to Date: \$ 5,296,311

Requesting Entity: Universal Services

Strategic Objective(s): SO3, SO5

Project Description:

This project refreshes security technology physical infrastructure. The current systems have exceeded their shelf life and are no longer supported. These systems will be retrofitted with the latest available technology to enhance the security needs of Harris County. The updated system will help to provide real-time feeds and alerts from multiple data sources in order to stay ahead of threats with intuitive workflows and data integrations to facilitate comprehensive intelligence collection and analysis—delivering an automated, smart and actionable insights to make informed decisions. Court is only being asked to approve Year One funding, as described in the table. Budget Management will work with the department and present an updated workscope during the next CIP.

Justification:

The replacement of these end-of-life security systems and hardware devices will help first responders in the event of emergency situation. These devices are used as critical solutions for Harris County departments that provide services to the employees and citizens of Harris County. The County's access system has to be in code compliance with the Fire marshal Office. In the event of an emergency facility egress doors will release to allow individuals to leave the premises. The system also supports duress buttons in the event of an emergency. Updating this technology will reduce time spent by the Harris County agencies and provide efficiencies in their work. These system upgrades will reduce failure rate which will help reduce operational repair costs. Each failure can cost \$ 95 per hour to repair; reducing the work orders generated by the failure of these devices will reduce overall repair costs. The project will provide the following value enhancements:

- This equipment is used to help prevent facility theft from Harris County tax payer dollars.
- ensure Harris County departments and end users do not end up with unsupported technology.
- ensure that Harris County citizens are not put in danger when using Harris County Facilities.

| Location | Cost |
|------------------------------------|------------|
| Crosby Park | \$ 35,000 |
| Decker Drive (WIC CENTER) | \$ 40,000 |
| Dennis Johnston park | \$ 45,000 |
| Doss Community Center | \$ 40,000 |
| Doss Park | \$ 30,000 |
| Doss Park Maintenance Shop | \$ 30,000 |
| Dow Park 2 | \$ 40,000 |
| Duessen Park Community Center | \$ 60,000 |
| East Harris County Activity Center | \$ 45,000 |
| El Franco Lee Community Center | \$ 45,000 |
| Emerald Plaza WIC Center | \$ 40,000 |
| Evelyn Meador Branch Library | \$ 50,000 |
| Fairbanks Branch Library | \$ 40,000 |
| Fallbrook Wic | \$ 45,000 |
| Felix Baldree | \$ 40,000 |
| Finnagan Park | \$ 45,000 |
| Finnigan Park - Y.E.T. Center | \$ 35,000 |
| Fleet Services | \$ 40,000 |
| Fonteno Education Center | \$ 35,000 |
| Foster Street Warehouse | \$ 30,000 |
| Frankie Carter Randolph Park | \$ 15,000 |
| Switches | \$ 200,000 |
| Cables | \$ 200,000 |
| Labor | \$ 254,000 |
| Contingency | \$ 91,450 |

Alternatives and Engagement:

No alternatives have been identified for this project. Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 15,321,032 | \$2,080,450 | \$ 1,702,450 | \$ 1,703,500 | \$ 1,609,000 | \$ 2,904,771 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------------|
| O&M | \$ 40,000 |
| Labor | \$ 104,000 |
| Other | \$ 7,200 |
| Total | \$ 151,200 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Telephone System Repair Replace

Investment Area: Governance & Customer Service - IT & Equipment, Hardware

Approval Status: Implementation (Year 1 Only)

Total Estimated Cost: \$ 7,363,097

Managing Entity: Universal Services

Expenditures to Date: \$ 698,298

Requesting Entity: Universal Services

Strategic Objective(s): SO1, SO3

Project Description:

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. Harris County has approximately 17,000 telephone sets installed for various departments and courts. Approximately 14,000 of these telephone sets have been upgraded to Voice over Internet Protocol (VoIP), which is the more stable and secure. The remaining 3,000 telephone sets 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. Court is only being asked to approve Year One funding. Budget Management will work with the department and present an updated workscope during the next CIP.

In a non-COVID environment, the Voice Team can change out approximately 1,500 handsets in a year at a cost of \$ 900.00 per handset which includes a refresh of the network cabling and patch cords, SIP telephone instrument, station licenses, E911 capability, and installation labor. Both the Avaya and Cisco enterprise voice platforms supporting the current 14,000 telephone sets will need to be upgraded to stay current with manufacturer recommended maintenance and support at a cost of \$ 50,000. Also, the Acme packet Session Border Controllers (SBCs) that support the County's SIP service for inbound and outbound calling will need to be expanded as additional telephones are added to the network at a cost of \$ 20,000. As the locations continue to be upgraded, E911 capabilities will need to be expanded, at a cost of \$ 10,000.

Justification:

This project updates telecom infrastructure, which will lower cost of telecom services overall (with SIP trunk service cost shifts from departments to US). This is anticipated to reduce time and working hours needed to perform moves and changes through remote centralized programming. Modernizing the telephone system enhances disaster recovery capabilities and enables Harris County with a more mobile communication environment.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 7,363,097 | \$ 1,505,799 | \$ 1,738,000 | \$ 1,122,000 | \$ 1,177,000 | \$ 1,122,000 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------------|
| O&M | \$ 73,000 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 73,000 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Application Repair and Replace

Investment Area: Governance & Customer Service - IT & Equipment, Software

Approval Status: Implementation (Year 1 only)

Total Estimated Cost: \$ 18,904,440

Managing Entity: Universal Services

Expenditures to Date: \$ 366,776

Requesting Entity: Universal Services

Strategic Objective(s): N/A

Project Description:

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 the underlying technology gets replaced. Based on a defined ranking methodology, Universal Services ranks and classifies applications that need attention and/ or replacement. This is an ongoing lifecycle management project to address the updates, replacement, or redevelopment of these end-of-life applications/software packages.

Court is only being asked to approve Year One funding. Budget Management will work with the department and present an updated workscope during the next CIP.

Justification:

The repair/replacement of these applications is critical to ensuring continuity of County services. These reduce overhead costs required to support current and legacy applications. Upgraded applications also ensure Harris County departments and end-users do not have to work with unsupported technology, which are vulnerable to cyber attacks.

Alternatives and Engagement:

No alternatives have been identified for this project.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|--|--|--|----------------------|
| Constable Precincts 1-8, Sheriff's Office, Fire Marshal's Office, HC Toll Road Authority, Office of Emergency Management | Mission critical support of public safety officers | HC Law Enforcement Technology Committee | Ongoing |
| Criminal Courts, District Attorney, District Clerk, County Attorney, PreTrial, District Courts, Public Defender | More effective support of justice activities | HC Justice Technology Committee | Ongoing |
| HC Commissioner Precincts 1-4 and County Judge | Better support of Commissioner precincts | Direct Customer Engagement through Customer Success Managers | Ongoing |
| Flood Control, Pollution Control, Public Health, Engineering | Support of critical County infrastructure | Direct Customer Engagement through Customer Success Managers | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 18,904,440 | \$ 2,855,198 | \$ 3,801,096 | \$ 5,236,080 | \$ 3,947,680 | \$ 2,697,610 | \$ 0 |

Estimated Annual Operating Budget Impact:

| | |
|--------------|--------------------|
| O&M | \$ 653,900 |
| Labor | \$ 944,320 |
| Other | \$ 159,822 |
| Total | \$1,758,042 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Cybersecurity

Investment Area: Governance & Customer Service - IT & Equipment, Software

Approval Status: Implementation (Year 1 only)

Total Estimated Cost: \$ 7,458,872

Managing Entity: Universal Services

Expenditures to Date: \$ 321,811

Requesting Entity: Universal Services

Strategic Objective(s): SO1- SO5

Project Description:

This project is for an ongoing cybersecurity program based on a best-practices. This project includes the design and implementation of new protective controls, expansion of existing security services, and the ongoing analysis and optimization of existing cybersecurity controls. Specific cybersecurity services prioritized for this phase of the program include advanced authentication, identity & access management, threat intelligence, threat monitoring/response, incident management, risk assessment and governance solutions. Program components include Security Information & Event Management (SIEM), security operation center (SOC) (24-7 Monitoring) services, and threat intelligence services; all of which provide the technology and services necessary to enable early detection of advanced cyber threats against the county's network and IT services. The objectives of this project is to enhance Harris County's overall cybersecurity and develop a formal cybersecurity program, complete with people, policy, process, and technology. The program's objectives are designed to 1.) mitigate known risks; 2.) address ongoing threats; and 3.) ensure a defense-in-depth strategy that will continuously improve the County's ability to proactively identify and address risks across the county's enterprise network and technology resources. Court is only being asked to approve Year One funding, as detailed in the table above. Budget Management will work with the department and present an updated workscope during the next CIP.

| Project Element | Estimated Cost |
|--|----------------|
| SentinelOne - Advanced Threat Protection – New License Implementation | \$ 93,000 |
| SentinelOne - Vigilance Monitoring and Response Service - New License Implementation | \$ 23,500 |
| Rapid7 InsightVM - Vulnerability Scanner - New License Implementation | \$ 43,300 |
| Cloud-based Secure Web Gateway | \$ 200,000 |
| Multi Factor Authentication Smart Cards and Readers | \$ 200,000 |
| Labor | \$ 336,210 |
| Contingency | \$ 89,601 |

Justification:

This project enables rapid incident detection, analysis, and response processes that will minimize potential disruption to county services from a cyber attack. The requested software, services and staff will help address requirements identified as needing to be addressed for PCI, DSS, and CJIS compliance. This project will also demonstrate cybersecurity competency required to qualify for some grant programs, bond ratings, insurance and business contracts. The SIEM & SOC managed services, threat intelligence services, and network access controls help mitigate risk and ensure a proactive cybersecurity posture that will enable business needs.

Alternatives and Engagement:

No alternatives have been identified for this project. The Elections Administrator and STARS Executive Steering Committee are the primary benefiting stakeholders. They continue to be engaged through regular meetings.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 7,458,872 | \$ 985,611 | \$ 2,209,460 | \$ 3,226,990 | \$ 475,000 | \$ 240,000 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------------|
| O&M | \$ 369,800 |
| Labor | \$ 395,200 |
| Other | \$ 36,980 |
| Total | \$ 801,980 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Enterprise Document Management

Investment Area: Governance & Customer Service – IT, Software

Approval Status: Planning

Total Estimated Cost: \$17,596,995

Managing Department: Universal Services

Expenditures to Date: \$0

Requesting Department: Universal Services

Strategic Objective(s): SO3, SO4

Project Description:

This project is to develop and implement a strategy to provide an enterprise document management system for Harris County. This initiative would consist of multiple phases that apply 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, information archiving, search and usage analytics, scanning and optical character recognition, electronic signature, and record-auditing capabilities. These services would be made available to specific Harris County departments using a phased approach to implementation with ongoing support by Universal Services. A more detailed analysis will be required to accurately determine the final cost of implementing an Enterprise Document Management system.

Justification:

The County is currently in need of an enterprise document management strategy. Each Harris County department maintains its own document/content management strategy. This has resulted in multiple environments across the County doing the same processes, causing expensive and inefficient duplication of services. As document and content management needs to 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 between departments and information analytics not currently available. Other benefits to implementing this project include:

- More effective management for security, compliance, archiving, scalability and analytics.
- County-wide approach to digital signatures and auditing 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.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$19,913,045 | \$2,019,130 | \$3,351,160 | \$3,040,290 | \$2,495,790 | \$6,690,625 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|--------------------|
| O&M | \$1,923,900 |
| Labor | \$1,497,600 |
| Other | \$342,150 |
| Total | \$3,763,650 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Enterprise Tririga

Investment Area: Governance & Customer Service – IT, Software

Approval Status: Planning

Total Estimated Cost: \$848,828

Managing Department: Universal Services

Expenditures to Date: \$0

Requesting Department: Universal Services

Strategic Objective(s): SO3, SO4

Project Description:

This project would establish Tririga as an enterprise tool for full lifecycle management of facility and workspace projects, tasks, and work requests. Tririga provides a full suite of capabilities, including, workspace operations, facility assessments, and capital projects. Universal Services currently hosts and supports the Tririga infrastructure for FPM, which uses only the workspace operations management capabilities. The same infrastructure can be made available to other departments responsible for maintaining buildings, real estate assets, and different physical workspaces.

Justification:

The existing Harris County Tririga infrastructure is configured only for FPM's needs for workspace operations management including, facility service requests and improvement projects. FPM and Commissioner Precinct 2 expressed interest in expanding the current Tririga infrastructure to include the Capital Projects and Facility Assessments capabilities. While additional departments can be included within the existing infrastructure, configuration changes are required to provide separation of data between departments and to build processes and data specific to these departments. Use existing Tririga application and data infrastructure as a centralized and standardized framework for departments that need to manage property maintenance work requests, activities, and projects using a best-of-class product.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$902,841 | \$710,428 | \$138,400 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------------|
| O&M | \$56,417 |
| Labor | \$114,400 |
| Other | \$240 |
| Total | \$171,057 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: ERP Enhanced Automation and Reporting

Investment Area: Governance & Customer Service - IT & Equipment, Software

Approval Status: Implementation

Total Estimated Cost: \$ 2,475,450

Managing Entity: Universal Services

Expenditures to Date: \$ 36,300

Requesting Entity: Universal Services

Strategic Objective(s): N/A

Project Description:

This project is to enhance the usage of PeopleSoft across Harris County. There are three key focus areas for this project: 1) Automation and Efficiency; 2) Enhanced Reporting and Analytics; and 3) IFAS retirement. Automation and Efficiency will focus on automating the manual interfaces for the business. Enhanced Reporting and Analytics will build out the reports in PeopleSoft to ensure departments have easy access to the data they need. Lastly, this project will address how to retire IFAS.

Justification:

This project would improve efficiency by reducing manual data entry for several departments, freeing up resources to focus on more value-added work. The project would also improve efficiency by making it easier to access data and securing historical data, so it is available for future audits. Finally, this project is anticipated to result in a recurring cost savings of \$ 615,000 resulting in no longer needing to maintain IFAS software.

Alternatives and Engagement:

| Alternative | Alternative Description | Why Alternative Not Selected |
|----------------|--|--|
| Delay | Do the automation project at a later date. | This option will delay the benefits being achieved for Harris County and cause the continuance of labor intensive, manual work-arounds. Production support will stay high and impact US ability to cross-train resource. |
| Do not pursue. | Do not implement automation and reporting functions. | Failure to enhance the automation and reporting capabilities of the new ERP would reduce the effectiveness of the new system and slow down the phase-out of the old IFAS system. |
| Other | Solve the problem through another means. | No other feasible technology alternatives have been identified. |

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|------------------------------------|-----------------------|-----------------------------|----------------------|
| STARS Executive Steering committee | Oversight of project. | Committee meetings, emails. | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 2,475,450 | \$ 2,439,150 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: ERP Stabilization

Investment Area: Governance & Customer Service - IT & Equipment, Software

Approval Status: Implementation

Total Estimated Cost: \$ 3,061,992

Managing Entity: Universal Services

Expenditures to Date: \$ 0

Requesting Entity: Universal Services

Strategic Objective(s): N/A

Project Description:

This project is focused on stabilization of the PeopleSoft ERP application support team (referred to as STARS) and stabilization of the PeopleSoft Production environment. For the support team, the project addresses skills required for the team to be able to support the application once the external resources are gone. This includes additional training and knowledge transition from external resources. For the stabilization of the PeopleSoft Production environment, this includes two required upgrades to the application and it includes the expansion of the license agreement to meet Harris county growth.

Justification:

The STARS support team needs deeper knowledge of Peoplesoft and how it was configured for Harris County in order to provide adequate support to the large user base. The high volume of Production support since 'Go-Live' and required projects currently in progress have occupied the team and no knowledge transition has occurred in several key areas of the system. Without this effort, Harris County is at risk should it encounter system issues. The upgrades to the Production environment are also critical to the stability of the environment. Staff is limited in its ability to keep up with the latest updates in the technical stack, which can create cyber security concerns. Benefits include:

- Improve customer service by enabling the team to respond faster to support issues.
- Correct known bugs in PS.
- Allow for growth of users base.
- Reduce risk by ensuring the team has the appropriate skills to handle any system issues.

Alternatives and Engagement:

| Alternative | Alternative Description | Why Alternative Not Selected |
|--------------------------------------|--|---|
| Continue funding external resources. | Relying on consultants for PeopleSoft support. | This would not address the issue of Harris County resources being able to support the system in the future. This would increase the risk for Harris County. |
| Do not pursue. | Status quo; situation is not improved. | Doing nothing would severely impact the responsiveness to Production issues and raise the risk of meeting financial deadlines. |

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|------------------------------------|-----------------------|-----------------------------|----------------------|
| STARS Executive Steering committee | Oversight of project. | Committee meetings, emails. | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 3,061,992 | \$ 1,984,744 | \$ 1,077,248 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------------|
| O&M | \$ 100,609 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 100,609 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Infrastructure Enhancements - Replacements

Investment Area: Governance & Customer Service – IT & Equipment, Software

Approval Status: Implementation (Year 1 Only)

Total Estimated Cost: \$ 14,366,834

Managing Entity: Universal Services

Expenditures to Date: \$ 2,152,874

Requesting Entity: Universal Services

Strategic Objective(s): N/A

Project Description:

This project is for the ongoing refresh, replacement, and expansion of the County's compute, storage, and backup IT infrastructure that supports all of our enterprise-class services. Court is only being asked to approve Year One funding, as detailed below. Budget Management will work with the department and present an updated workscope during the next CIP.

- 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.

Justification:

The growing need for long term storage of electronic and scanned documents, email etc. is creating an increasing need for storage in the County's Storage Area Network (SAN). This, in turn, causes increased need for backup storage in the County's Backup to Disk (B2D) environment. Harris County has 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.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 14,366,834 | \$ 5,936,480 | \$ 3,083,300 | \$ 2,007,500 | \$ 1,186,680 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------------|
| O&M | \$ 613,786 |
| Labor | \$ 0 |
| Other | \$ 61,378 |
| Total | \$ 675,164 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: IT Service Management

Investment Area: Governance & Customer Service – IT, Software

Approval Status: Planning

Total Estimated Cost: \$1,614,700

Managing Department: Universal Services

Expenditures to Date: \$0

Requesting Department: Universal Services

Strategic Objective(s): SO3, SO4

Project Description:

Harris County Universal Services needs to enhance its ITIL (Information Technology Infrastructure Library) / ITSM (Information Technology Service Management) tools to better align its IT services with the needs of the County agencies. Various components of the ITIL / ITSM catalog include: Incident Management, Change Management, Project Management, Configuration Management Database (CMDB), Application Portfolio Management (APM), Application Programmatic Interfaces (API) Centralization, and Enterprise Automation (batch, workflow, and process automation & scheduling).

Justification:

Currently, Harris County Universal Services uses Service Manager for Incident and Change Management, Planview for Application Portfolio Management, and PPM Pro for Project Management. The remaining functions (CMDB, API, and Enterprise Automation) are currently handled via manual procedures and informal tools. The gap in tools and integration creates challenges in keeping software, infrastructure, Cybersecurity, and support activities on the same page resulting in support delays, longer turnaround times for certain types of changes, and a lack of consolidated information about Universal Service's products, services, and deliverables. This CIP seeks to procure new ITIL / ITSM solutions to both replace existing systems and fill gaps providing better integration, a more complete/comprehensive view of the portfolio, and linkage between support and delivery.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$1,614,700 | \$1,200,100 | \$414,600 | \$0 | \$0 | \$0 | \$0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------------|
| O&M | \$726,000 |
| Labor | \$249,600 |
| Other | \$ 0 |
| Total | \$975,600 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Protective Services - Business Applications Repair and Replace

Investment Area: Governance & Customer Service - IT & Equipment, Software

Approval Status: Preliminary Investment Review

Total Estimated Cost: \$ 2,148,637

Managing Entity: Universal Services

Expenditures to Date: \$ 0

Requesting Entity: Universal Services

Strategic Objective(s): N/A

Project Description:

Much like physical infrastructure, Protective Services applications and software packages have a defined shelf life. Current technology and development methodologies change over time to improve capabilities and efficiencies. Protective Services need to replace the following application: Guardianship Financial System (Access front end), Rep Payee Financial System (Access front end), Human Resources (Access front end), Triad Call Log (Access application), plus potential replacement to Court Letter Application (Access front end, .net version in UAT but may not meet business needs).

Justification:

Address the updates, replacement, or redevelopment of these end-of-life applications/software packages. Vendors stop supporting specific version of Access and the underlying technology needs to be replaced. Replacing Protective Services's outdated applications will provide extensibility of limited and data integration with other Harris County systems including the Harris County financial system. Protective Services Application Repair and Replace will:

- Retire the risk presented by current application that relies on outdated technology
- Improve the efficiency of Department employees while reducing errors and omissions
- Improve Department reporting processes

Alternatives and Engagement:

No alternatives have been identified for this project.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|------------------------|--|----------------------|----------------------|
| HC Protective Services | More effective support of Harris County processes and activities | Meetings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 2,148,637 | \$ 1,096,157 | \$ 1,052,480 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Public Safety & Justice - Building Projects

| Project Name | Subcategory | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|---------------|------------------------|------------------------|----------------------|-----------------------|-----------------------|-------------------|
| Adult Detention Facilities Upgrades and Repairs | County-Facing | Detailed Design | \$ 185,541,609 | \$ 4,762,709 | \$ 47,534,800 | \$ 133,244,100 | \$ - |
| HCFMO - Training Facility Atascocita | County-Facing | Planning | TBD | - | TBD | TBD | TBD |
| IFS Long-term Masterplan | County-Facing | Detailed Design | 1,000,000 | 90,680 | TBD | TBD | TBD |
| Juvenile Probation Department Facilities Repair & Renovation | County-Facing | Implementation | 14,065,889 | 1,332,796 | 2,522,136 | 10,210,958 | TBD |
| Navigation Project Programming Phase (HCSO) | County-Facing | Detailed Design | 8,600,000 | 184,612 | - | - | - |
| Property Crime DNA Services | County-Facing | Planning | 735,500 | - | TBD | TBD | TBD |
| Radio System Core Facility | County-Facing | Implementation | 5,036,715 | 36,715 | 5,000,000 | - | - |
| County-Facing Subtotal | | | 214,979,714 | 6,407,512 | 55,056,936 | 143,455,058 | - |
| Additional Office Locations Supporting Supervision & Wraparound Services | Public-Facing | Planning | TBD | - | TBD | TBD | TBD |
| Court Support Facility and Parking Garage | Public-Facing | Planning | 300,000 | - | 300,000 | - | - |
| Criminal Justice Center (CJC) Restoration | Public-Facing | Implementation | 84,763,599 | 29,509,427 | 35,254,171 | 20,000,000 | - |
| CSCD Atascocita Phase II | Public-Facing | Implementation | 58,635,638 | 8,635,638 | 30,000,000 | 20,000,000 | - |
| JP 3-1 Courthouse Addition | Public-Facing | Planning | 700,000 | - | TBD | TBD | TBD |
| JP 7-1 Court Renovation | Public-Facing | Preliminary Investment | 150,000 | - | 150,000 | - | - |
| Peden Building Renovation | Public-Facing | Detailed Design | 9,124,376 | 24,376 | 9,100,000 | - | - |
| Public Defenders Office Expansion | Public-Facing | Planning | 5,000,000 | - | TBD | TBD | TBD |
| Public-Facing Subtotal | | | 158,673,613 | 38,169,441 | 74,804,171 | 40,000,000 | - |
| Buildings Total | | | \$ 373,653,326 | \$ 44,576,953 | \$ 129,861,107 | \$ 183,455,058 | - |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Adult Detention Facilities Upgrades and Repairs

Investment Area: Public Safety & Justice – Buildings, County-Facing

Approval Status: Detailed Design

Total Estimated Cost: \$ 185,541,609

Managing Entity: County Engineer

Expenditures to Date: \$ 4,762,709

Requesting Entity: Sheriff's Office

Strategic Objective(s): SO14, SO16

Project Description:

The various projects will address critical upgrades and repairs to keep the County's Adult Detention Facility operational. The Office of the County Engineer has been working with members of Harris County Sheriff's Office and an outside engineering firm to develop a five year repair and renovation program for both the 580,400 square foot jail located at 701 San Jacinto, and the 790,921 square foot jail located at 1200 Baker Street. These facilities opened in 1990 and 2002 respectively and have had minimal infrastructure repairs since opening. Upgrades will be made to the HVAC systems, replacement of roofs, modernization of elevators and sprinklers, as well as the replacement of both the domestic water and sanitary sewer systems. Additionally, all electronic security systems will be upgraded and the kitchens will be renovated. Project timing must allow for phasing across multiple years due to active occupancy throughout the facilities.

Year One funding is focused on replacing a generator, replacement of the sanitary sewer piping, and replacing detention doors throughout the 701 San Jacinto facility.

Justification:

The Adult Detention Facility has a backlog of deferred maintenance issues that must be addressed. Failure to continue maintaining the County's existing facilities will result in more expensive deferred maintenance, as well as closure of certain areas, non-code compliance, and most importantly, risks to life/ safety. These repairs and upgrades are also necessary to ensure normal facility operations and to remain compliant with Texas Commission on Jail Standards. The upgraded systems are anticipated to increase the value of the facility and decrease the overall maintenance required. Future reporting will provide analytics on utility consumption as well as other operational costs and opportunities for savings.

Alternatives and Engagement:

The Office of the County Engineer and the Sheriff's Office are working together to study the possibility of building a modern detention facility rather than making significant upgrades to the existing detention facility. However, even if it is decided to build a new detention facility, it will take several years to be designed and built and critical maintenance issues must be addressed before then.

Stakeholder engagement has not been completed for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 185,541,609 | \$ 47,534,800 | \$ 32,886,600 | \$ 39,794,000 | \$ 39,407,700 | \$ 21,155,800 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: HCFMO - Training Facility Atascocita

Investment Area: Public Safety & Justice – Buildings, County-Facing

Approval Status: Planning

Total Estimated Cost: TBD

Managing Entity: County Engineer

Expenditures to Date: \$ 0

Requesting Entity: Fire Marshall

Strategic Objective(s): SO8, SO16, SO19

Project Description:

This project would construct a 42' x 70' manufactured classroom building at the Harris County Sheriff/ Fire Marshal Training Academy located at 2318 Atascocita Road Humble, TX 77396. The project would also restore an on-site retention pond to its designed capacity. The Fire Marshall's Office (HCFMO) is currently working with the Office of the County Engineer to determine the project scope.

Justification:

Critical to the ability to provide training is having available space and technologies to support a variety of hands-on, virtual, and online learning. Availability of space at the Training Academy has diminished as the need for training has increased for both HCFMO and the Sheriff's Office, therefore by having additional training space we can better serve not only public safety but also the residents and business owners of Harris County and the region. Enhancement is measured by the increase of training classes conducted by all Agencies located at the Sheriff/Fire Marshal Training Facility. By showing classes that would have had to be cancelled or not scheduled due to the unavailability of space.

Alternatives and Engagement:

| Alternative | Alternative Description | Alternative Cost | Why Alternative Not Selected |
|----------------|--|------------------|--|
| Lease building | In order to gain additional training space a lease building could provide additional training space. | ~\$ 60,000/year | Leased building would not have access to the variety of onsite training props or hands-on learning simulators. |

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|------------------------|--|---|----------------------|
| HC Sheriff's Office | Participants in training and use of facility | Meeting | Complete |
| Regional Public Safety | Participants in training and use of facility | Website/Meetings/Electronic Communication | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| TBD | TBD | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: IFS Long-term Masterplan

Investment Area: Public Safety & Justice - Buildings, County-Facing

Approval Status: Detailed Design

Total Estimated Cost: \$ 1,000,000

Managing Entity: County Engineer

Expenditures to Date: \$ 90,680

Requesting Entity: Institutue of Forensic Sciences

Strategic Objective(s): N/A

Project Description:

This project is to develop a masterplan for the Institutue of Forensic Sciences (IFS) located at 1861 Old Spanish Trail. The Masterplan is to program out the future needs of the IFS facility, such as building out a DNA lab.

Justification:

The IFS Masterplan stemmed from the need to relocate the Forensic Genetics Lab (Nabisco DNA lab) to the IFS Building due to increasing least costs. While considering how to impleement this, IFS began looking at the creation of a Property DNA department to work in conjunction with the DNA lab. This caused a need to look at future growth and restacking of the existing departments at IFS building. The relocation and programming were rolled into one project, which is the IFS Masterplan. Once the Masterplan is completed, Court would need to decide to approve the plan. Afterwards, IFS would work with Engineering to develop a Preliminary Investment Memo for funding design of the actual build-out stipulated in the Masterplan.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 1,000,000 | TBD | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Juvenile Probation Department Facilities Repair and Renovation

Investment Area: Public Safety & Justice – Buildings, County-Facing

Approval Status: Implementation (Year 1 Only)

Total Estimated Cost: \$ 14,065,889

Managing Entity: County Engineer

Expenditures to Date: \$ 1,332,796

Requesting Entity: County Engineer

Strategic Objective(s): SO14, SO16

Project Description:

This is an ongoing lifecycle management project to identify and address repairs and/or replacements needed for known damages and deficiencies that currently exist in the Juvenile Probation Department facilities across the County. Court is only being asked to approve Year One funding, as detailed below. Budget Management will work with the department and present an updated workscope during the next CIP.

| Location | Project Focus | Estimated Cost |
|---|--|----------------|
| Annex 50 - 1200 Congress | Replacement of Sub-Slab Sanitary Sewer Lines | \$ 1,000,000 |
| | Sub-Level Garage Insulation Replacement | \$ 82,136 |
| Burnett-Bayland Rehabilitation – 6500 Chimney Rock | Kitchen Equipment | \$ 180,000 |
| | (3) Washing Machines | \$ 90,000 |
| | Repair floors in the dry food storage area | \$ 65,000 |
| | Freezer & Cooler | \$ 150,000 |
| Leadership Academy – 9120 Katy-Hockley Rd. | Water tank coating (holding tank) | \$ 100,000 |
| | Washing Machines | \$ 25,000 |
| Youth Service Center – 6300 Chimney Rock | Replace (3) Boilers <includes valves, etc.> | \$ 200,000 |
| | Exterior siding/flushing | \$ 150,000 |
| Youth Village - 210 J.W. Mills | Overlay and base repair | \$ 480,000 |

Justification:

This project is part of an ongoing effort to maintain a safe and code compliant juvenile facility. A backlog of deferred maintenance is being worked through, with priority given to repairs or replacement projects to address Fire/Life Safety issues. Failure to continue maintaining the County's existing Juvenile Probation facilities will result in more expensive deferred maintenance, as well as closure of certain areas, non-code compliance, and most importantly, risks to life/ safety. Additionally, if these maintenance issues are left unresolved, they could impact court hearings or juvenile housing.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 14,065,889 | \$ 2,522,136 | \$ 2,544,395 | \$ 2,539,140 | \$ 2,565,423 | \$ 2,562,000 | TBD |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Navigation Project Programming Phase (HCSO)

Investment Area: Public Safety & Justice – Buildings, County-Facing

Approval Status: Detailed Design

Total Estimated Cost: \$ 8,600,000

Managing Entity: County Engineer

Expenditures to Date: \$ 184,612

Requesting Entity: Sheriff's Office

Strategic Objective(s): N/A

Project Description:

This project was originally to plan, program, and design of an approximate 5 acre tract at 5900 Navigation Boulevard. This site has been contemplated to be utilized to relocate Harris County Sheriff's Office operations currently located at 601 Lockwood. This project is under review to examine uses that best serve the community.

Justification:

Requesting Entity did not provide.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 8,600,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Property Crime DNA Services

Investment Area: Public Safety & Justice – Buildings, County-Facing

Approval Status: Planning

Total Estimated Cost: \$735,500

Managing Department: TBD

Expenditures to Date: \$0

Requesting Department: Institute of Forensic Sciences

Strategic Objective(s): SO15

Project Description:

As a part of its building master plan, and with cooperation from the Engineering Department, the Institute of Forensic Sciences (IFS) is requesting to build out existing shell space to accommodate a new DNA property crime laboratory within the next five years. In addition to building out the space, IFS would need to purchase new equipment, including computers and printers, freezers and refrigerators, software licenses, barcode scanners and printers, a thermomixer, vent hoods, QIASymphony and cabinet, AB 7500, ABI Veriti, ABI 3500, large copier, pipettes, and various centrifuges.

Justification:

This project supports the IFS stated goal of providing the justice system with objective, science-based forensic lab analysis. The project also supports strategic objective (SO) 15 (i.e., provide investigative leads for 50% of property crime DNA cases entered into CODIS) since this equipment will be used to directly support property crime DNA analysis in-house. The Institute is additionally considering a new strategic objective to complete property crime DNA cases within 90 days, which would benefit from this project.

IFS is currently outsourcing DNA property crime testing. Completing this project would allow IFS to process property crime DNA cases in-house instead of outsourcing, saving time and increasing efficiency from shorter test turnaround times. Analyzing property crime DNA evidence in-house is more desirable than outsourcing because completed outsourced cases must still be returned to IFS and undergo a technical review in-house in order to verify the CODIS eligibility and entry of any DNA profiles obtained. This in-house review is a statutory requirement described in the Texas Code of Criminal Procedure, Article 38.35 (Forensic Analysis of Evidence; Admissibility). In Texas, forensic evidence must be analyzed by an accredited crime laboratory (such as the Institute) in order to be admissible in court. Chapter 64 of the Texas Code of Criminal Procedure specifically addresses motions for forensic DNA testing.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$735,500 | TBD | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Radio System Core Facility

Investment Area: Public Safety & Justice – Buildings, County-Facing

Approval Status: Implementation

Total Estimated Cost: \$5,036,715

Managing Entity: County Engineer

Expenditures to Date: \$ 36,715

Requesting Entity: Universal Services

Strategic Objective(s): N/A

Project Description:

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

Justification:

Requesting Entity did not provide.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$5,036,715 | \$ 5,000,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Additional Office Locations Supporting Supervision & Wraparound Services

Investment Area: Public Safety & Justice – Buildings, Public-Facing

Approval Status: Planning

Total Estimated Cost: TBD

Managing Department: TBD

Expenditures to Date: \$0

Requesting Department: Community Supervision & Corrections Department

Strategic Objective(s): SO3

Project Description:

The Community Supervision & Correction Department (CSCD) is requesting CIP funding from the County to add additional office locations that would support access to supervision and wraparound services for justice-involved individuals needing services. These services need to be available in strategic locations around the County to provide equal access to justice-involved clients. On February 26, 2019 Commissioners Court approved for the Real Property section of the Office of the County Engineer to assist CSCD with identifying additional office space/county buildings. Real Property identified some locations previously, and CSCD would like to continue this effort with Real Property.

Justification:

Harris County has experienced significant population growth over the last 20 years; however, CSCD locations have not expanded for decades, and the need for services has outgrown its existing locations. This makes it difficult for CSCD clients to succeed in its programs. The CSCD client population has grown in the North and Southeast parts of Harris County. Currently over 18,000 justice-involved individuals on community supervision (probation) do not live on bus lines and must travel over 20 miles to receive supervision, treatment, mental health, and social services. Texas Government Code Chapter 76, Section 76.008 states that the county served by a department shall provide physical facilities, equipment, and utilities for a department. Therefore CSCD is following this requirement and making a formal CIP request to the County. In an effort to increase access to supervision and wraparound services for clients, additional office locations strategically placed within the County need to be identified. This will expand CSCD's wraparound services for clients who live in areas of the County that are far from current supervision offices, critical social services, and bus lines. This CIP project will provide justice-involved individuals with increased access to supervision, treatment, mental health, and social services. This will expand the agency's wraparound services for clients who live in areas of the County that are far from current supervision offices, critical social services, and bus lines.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| TBD | TBD | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Court Support Facility and Parking Garage

Investment Area: Public Safety & Justice – Buildings, Public-Facing

Approval Status: Planning

Total Estimated Cost: \$ 300,000

Managing Entity: County Engineer

Expenditures to Date: \$ 0

Requesting Entity: Justice Administration Department

Strategic Objective(s): SO13

Project Description:

Due to increased operations and the need for more space across multiple departments, departments are investigating a new court support facility be constructed at 1301 Franklin, next to the Criminal Justice Center (CJC) at 1201 Franklin and Civil Courthouse at 201 Caroline. Proximity to these facilities is desired for efficiency and the County already owns the property at 1301 Franklin. This project began planning in January 2021.

Justification:

The Justice Administration Department strategic objective #13 revolves around improving the efficiency of justice departments. A building adjacent to the CJC capable of housing necessary principles involved in the administration of criminal justice will improve communications and the efficiency of court operations. Completion of this project provides cost savings by allowing the District Attorney's Office to relocate back to the building instead of leasing costly downtown space as well as operational savings for numerous departments of more easily and readily accessible resources.

Alternatives and Engagement:

| Alternative | Why Alternative Not Selected |
|-------------------------|--|
| Lease space | Already leasing space for the District Attorney's Office near the other end of downtown; cost prohibitive and inefficient. Still need additional space for growth in the Public Defender's Office and District Clerk's Office. |
| Renovate existing space | Not enough space to renovate in existing buildings in the downtown arena to meet the growth needs. |

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|--|--------------------------|----------------------|----------------------|
| Criminal Courts, District Attorney, District Clerk, County Attorney, PreTrial, District Courts, Public Defender | Participating/Benefiting | TBD | No |
| Justice Administration, Department, Engineering, Facilities and Property Management, Fire Marshal's Office, Universal Services | Participating | TBD | No |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 300,000 | \$ 300,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

Estimated Annual Operating Budget Impact:

| | |
|--------------|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Criminal Justice Center (CJC) Restoration

Investment Area: Public Safety & Justice – Buildings, Public-Facing

Approval Status: Implementation

Total Estimated Cost: \$84,763,599

Managing Entity: County Engineer

Expenditures to Date: \$29,509,427

Requesting Entity: Justice Administration Department

Strategic Objective(s): SO13

Project Description:

This project makes repairs to the CJC, located at 1201 Franklin, resulting from flooding during Hurricane Harvey. It also makes enhancements to the user experience through five additional elevator banks, lobby expansion and security upgrades; replacement of aging and/or outdated finishes; and replacement of furniture and equipment.

Justification:

The Justice Administration Department strategic objective #13 revolves around improving the efficiency of justice departments. A centrally located, secured building capable of housing the criminal courts and principles involved in the administration of the courts will improve communications, improve the efficiency of court operations and reduce the likelihood of an interruption in service. Repairs to the building will include improvements to anti-flooding measures such that in another water event court operations will not be impacted. Completion of this project will allow departments that had to move to new office space to return to the CJC and increase the standard off office space for impacted departments.

Alternatives and Engagement:

No alternatives have been identified for this project.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|---|--------------------------|----------------------|----------------------|
| Criminal Courts, District Attorney, District Clerk, County Attorney, PreTrial, District Courts, Public Defender, Constable Precinct 1, Community Supervision & Corrections, Defense Bar | Participating/Benefiting | CJC Tenant Committee | No |
| Justice Administration Department, Engineering, Facilities and Property Management, Fire Marshal's Office, Universal Services | Participating | CJC Tenant Committee | No |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$84,763,599 | \$35,254,171 | \$ 20,000,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: CSCD Atascocita Phase II

Investment Area: Public Safety & Justice – Buildings, Public-Facing

Approval Status: Implementation

Total Estimated Cost: \$ 58,635,638

Managing Entity: County Engineer

Expenditures to Date: \$ 8,635,638

Requesting Entity: Community Supervision & Corrections Department

Strategic Objective(s): N/A

Project Description:

The County is partnering with the Harris County Community Supervision & Corrections Department (CSCD) to repurpose existing administration, classroom, and staff buildings in the center of the Atascocita complex. The project includes configuring the existing buildings into a reception center and administration building for current staff. The project also includes construction of classroom space and a new Dual Diagnosis Residential Program facility, which will provide additional bed capacity and support areas. Finally, the project addresses a backlog of critical deferred maintenance issues.

Justification:

The Atascocita complex has a backlog of deferred maintenance issues that must be addressed. Failure to correct these maintenance issues could result in the closure of certain areas, non-code compliance, and most importantly, risks to life/safety. On May 1, 2018, the CSCD and the County entered into an Interlocal Agreement, in response to the Peden Building's destruction by Hurricane Harvey, wherein the County agreed to contract for and construct a new 1,000 bed Facility for the CSCD's use for housing clients in residential programs, in exchange for the CSCD agreeing to deed Little Baker to the County upon CSCD's moving into the new Facility. This new facility would eliminate unnecessary wait-time in jail for residential treatment beds. Adequate and acceptable physical bed and program operation capacity is even more critical to safely provide services during the pandemic. The judges trying criminal cases in Harris County rely heavily on CSCD's inpatient residential treatment programs as an alternative to a sentence to incarceration in prison. If replacement beds are not available in the near future, the CSCD risks losing millions in State diversion funding that currently provide an option for judges to divert 2,600 to 3,000 defendants each year from incarceration in jail and prison. The Harris Center risks losing funding for critical continuity of care services for program participants in need of mental health services when they complete inpatient treatment. The County risks an increase in the pretrial detainee population as judges lose a viable sentencing alternative for high risk defendants and stands to lose the ability to move jail occupants, especially those in need of mental health services, from jails to a CSCD inpatient treatment facility.

Alternatives and Engagement:

There is no alternative to this project as the County has entered into an agreement with the CSCD to build the facility.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-------------|---------------------|----------------------|----------------------|
| CSCD | Project Beneficiary | Project Briefings | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 58,635,638 | \$ 30,000,000 | \$ 20,000,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: JP 3-1 Courthouse Addition

Investment Area: Public Safety & Justice – Buildings, Public-Facing

Approval Status: Planning

Total Estimated Cost: \$700,000

Managing Department: TBD

Expenditures to Date: \$0

Requesting Department: JP Court 3-1

Strategic Objective(s): SO1, SO2

Project Description:

This project would build an addition to Annex 26, located at 14350 Wallsville Road, Houston, TX. This addition would be used to build a small conference room and storage space that could be used for mediation associated with Justice of the Peace for Precinct 3, Place 1 (JP 3-1).

Justification:

This project is needed because the JP 3-1 Court uses mediation to resolve civil cases and has no dedicated mediation room. The court had been using a shared conference room in Annex 26, but this space is now a County Clerk's Office. JP 3-1 mediators are now having to meet in the breakroom and sometimes in the hallway. The request for the conference room was reviewed by the Space Planning Committee, but no underutilized space was identified at Annex 26 to fulfill the request. New space must be added to Annex 26 to fulfill the JP 3-1's need of a conference room for mediation.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$700,000 | TBD | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: JP 7-1 Court Renovation

Investment Area: Public Safety and Justice - Building, Public-Facing

Approval Status: Preliminary Investment Review

Total Estimated Cost: \$ 150,000

Managing Entity: County Engineer

Expenditures to Date: \$ 0

Requesting Entity: Justice of the Peace 7-1

Strategic Objective(s): N/A

Project Description:

Harris County Justice of the Peace for Precinct 7, Place 1 (JP 7-1) has requested that her courtroom at 5737 Cullen Boulevard be renovated. The project is estimated to be completed within the year and includes the following components:

- Improve ADA access, including designated wheel-chair areas so that aisle is not blocked.
- Install ballistic glass for Judge's protection.
- Replace existing light fixtures with LED lighting and add additional light fixtures for improved visibility.
- Replace worn furnishings (benches and tables)
- Replace worn doors, ceiling tiles, wall paneling, and carpet.
- Reconfigure space for more comfort and efficiency (move jury box, clerk desk, balif seating, witness stand, and Judge's dias).

Justification:

The courtroom has not been remodeled since it was constructed in 1975 and improvements are needed to bring the JP 1-7 courtroom into ADA compliance. The renovation would also bring the courtroom up to similar standards as other JP courtrooms and will make staff and customers more comfortable. This project would allow the JP 7-1 Court to continue to provide a secure, healthy, and welcoming environment for citizens and staff as the judge conducts day to day business in the courtroom.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 150,000 | \$ 150,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Peden Building Renovation

Investment Area: Public Safety and Justice - Buildings, Public-Facing

Approval Status: Detailed Design

Total Estimated Cost: \$ 9,124,376

Managing Entity: County Engineer

Expenditures to Date: \$ 24,376

Requesting Entity: County Engineer

Strategic Objective(s): N/A

Project Description:

This project is to repair and renovate the Peden Building, located at 600 Baker Street, which was damaged during Hurricane Harvey. It is anticipated that \$2.5m of the repairs will be eligible for reimbursement from insurance or FEMA. The major project elements include \$ 1,100,000 for elevator restoration, \$ 6,500,000 for construction costs, and \$ 1,500,000 for furnishings and equipment. Construction work is estimated to be completed in February 2022. Once completed, the Pretrial Services will move into the building, vacating the 'Coffepot' building at 102 San Jacinto.

Justification:

In the past year, Court has approved a significant increase in FTEs for Pretrial Services and Pretrial Services does not currently have the space for all the positions. The current space that Pretrial Services has at the Coffepot building is insufficient for their needs and a new space is needed, which will be addressed by the Peden building renovation. By completing the Peden building renovation, the Coffepot building will be able to be vacated and its planned demolition can begin (see Demolition of Lomas Nettleton/Coffee Pot Building project).

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 9,124,376 | \$ 9,100,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

Estimated Annual Operating Budget Impact:

| | |
|--------------|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Public Defenders Office Expansion

Investment Area: Public Safety & Justice – Buildings, Public-Facing

Approval Status: Planning

Total Estimated Cost: \$5,000,000

Managing Department: TBD

Expenditures to Date: \$0

Requesting Department: Public Defender

Strategic Objective(s): N/A

Project Description:

This project is to identify additional space for the Public Defender's Office to accommodate a staff increase. The Public Defender's Office currently occupies 12th and 13th floors of the Criminal Justice Center, totalling 49,595 sq. ft. Part of this project will involve working with the Justice Administration department to identify when positions will actually be filled and how much space will actually be needed. Additionally, this space request will be examined with the space needs of other departments supporting the Justice system. A new Court Support building is being designed to house these entities in the long-term and a short-term solution may be needed to accommodate the space needs. A placeholder budget of \$5,000,000 is being used based on the assumption that commercial office space cost is \$50 per square foot, with 100,000 SF of office space needed.

Justification:

The Public Defender's Office staff is expected to double in size, but does not have the space for this staff increase.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$5,000,000 | TBD | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Public Safety & Justice - IT & Equipment Projects

| Project Name | Subcategory | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|---|-------------|------------------------|------------------------|----------------------|----------------------|----------------------|-------------------|
| HCFMO HazMat Equipment | Equipment | Implementation | \$ 1,613,181 | \$ 56,566 | \$ 1,556,615 | \$ - | \$ - |
| IFS Equipment Replacement | Equipment | Implementation | 4,555,315 | 359,590 | 1,006,796 | 3,188,929 | - |
| Radio Replacement Program | Equipment | Implementation | 41,691,893 | 81,406 | 8,195,900 | 33,414,587 | - |
| Equipment Subtotal | | | 47,860,389 | 497,562 | 10,759,311 | 36,603,516 | - |
| Badge Card Access System | Hardware | Planning | 700,000 | - | TBD | TBD | TBD |
| Civil Courthouse AV Systems Upgrade | Hardware | Preliminary Investment | 5,300,000 | - | TBD | TBD | TBD |
| Detention Control System Upgrade | Hardware | Implementation | 8,053,252 | 2,168,369 | 5,884,883 | - | - |
| eCitation with Digital Signatures | Hardware | Preliminary Investment | 11,119,980 | - | 10,780,980 | 339,000 | - |
| VoIP Phone Upgrade | Hardware | Planning | 200,000 | - | TBD | TBD | TBD |
| Hardware Subtotal | | | 25,373,232 | 2,168,369 | 16,665,863 | 339,000 | - |
| AFIS Replacement | Software | Detailed Design | 4,120,284 | 58,949 | 3,442,076 | 619,259 | - |
| Cite and Release | Software | Detailed Design | 1,821,985 | 452,582 | 1,369,403 | - | - |
| HCSO Workforce Management Tool | Software | Planning | 3,044,000 | - | 2,579,000 | 465,000 | - |
| Pretrial Case Management System | Software | Detailed Design | 709,960 | - | 709,960 | - | - |
| Software Subtotal | | | 9,696,229 | 511,531 | 8,100,439 | 1,084,259 | - |
| IT & Equipment Total | | | \$ 82,929,850 | \$ 3,177,462 | \$ 35,525,613 | \$ 38,026,775 | - |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: HCFMO HazMat Equipment

Investment Area: Public Safety & Justice - IT & Equipment, Equipment

Approval Status: Implementation

Total Estimated Cost: \$ 1,613,181

Managing Entity: Fire Marshall

Expenditures to Date: \$ 56,566

Requesting Entity: Fire Marshall

Strategic Objective(s): SO4, SO20, SO23

Project Description:

This project secures hazardous material response equipment to meet the Fire Marshall's Office (HCFMO) portion of the 49 recommendations issued as part of the PENTA Corporation GAP Analysis, commissioned by the Harris County Judge's Office in 2019 concerning Harris County's Multi-Agency Coordination during large scale responses. This includes vehicles, computers, and personal protective equipment.

Justification:

This project provides equipment for HazMat planning and response coverage throughout Harris County, with a target of responding to 100% of calls for service for hazardous materials emergencies within four minutes. This equipment will also help HCFMO to conduct 25 hazmat pre-plans per month. The project will provide enhancements to the Harris County Hazardous Materials Response Team, who conducts HazMat planning and responds to and mitigates hazardous materials/Weapons of Mass Destruction (WMD) to protect the public and environment. The enhancement is measured by decreasing the overall response time to hazardous materials/WMD incidents throughout Harris County by providing response assets on both the east and west side of the County. The influx of additional equipment will allow for additional capacity to existing capabilities on large-scale incidents. Additional justification is outlined in the 2019 PENTA Gap Analysis to enhance the capability of the HCFMO Hazardous Materials Response Team's ability to respond to and mitigate emergencies throughout Harris County.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 1,613,181 | \$ 1,556,615 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: IFS Equipment Replacement

Investment Area: Public Safety & Justice - IT & Equipment, Equipment

Approval Status: Implementation (Year 1 Only)

Total Estimated Cost: \$ 4,555,315

Managing Entity: Institute of Forensic Sciences

Expenditures to Date: \$ 359,590

Requesting Entity: Institute of Forensic Sciences

Strategic Objective(s): SO1-SO21

Project Description:

This project outlines a 5-year replacement schedule for Institute of Forensic Science (IFS) equipment. Per Court's request during the last budget cycle, IFS inventoried and reviewed all capital equipment, its useful life, and current age to determine a replacement schedule. This replacement schedule includes lab equipment, field equipment, computers, and vehicles. Court is only being asked to approve Year One funding. Budget Management will work with the department and present an updated workscope during the next CIP.

Justification:

The equipment request is for continuity of business services so that current strategic objectives will continue to be met. Executive Management has determined what resources are needed each year to provide and maintain the infrastructure necessary for the operation of processes, and to continue the level of service expected by our stakeholders. Performing accurate and timely investigations on cause and manner of deaths (Goal 1) and providing the justice system with objective, science-based, forensic laboratory analysis (Goal 2) are both necessary services provided by the county. The CIP project supports these goals and the associated strategic objectives. Chapter 49 of the the Texas Code of Criminal Procedure, as described in the 4a budget forms, is a legal mandate that dictates our services.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 4,555,315 | \$ 1,006,796 | \$ 845,908 | \$ 764,802 | \$ 826,412 | \$ 751,807 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------------|
| O&M | \$ 280,000 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 280,000 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Radio Replacement Program

Investment Area: Public Safety & Justice - IT & Equipment, Equipment

Approval Status: Implementation (Year 1 Only)

Total Estimated Cost: \$ 41,691,893

Managing Entity: Universal Services

Expenditures to Date: \$ 81,406

Requesting Entity: Universal Services

Strategic Objective(s): SO5

Project Description:

This is an ongoing lifecycle management project to replace old and outdated radio equipment used by Harris County agencies. The existing fleet of radios range in age from new to over twelve years old, with various models. 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. Court is only being asked to approve Year One funding, as noted in the table. Budget Management will work with the department and present an updated workscope during the next CIP.

Justification:

The County is working through a backlog of outdated radio equipment that is increasingly becoming unreliable and more expensive to maintain. This project is critical because radios are a primary communications lifeline for first responders. This mix of differently aged radios with non-standardized features and models increases the cost of programming and maintenance support, as well as making training more complex. 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 newer radios purchased through this project will be easier to maintain as it will be within its intended asset life. Some of the benefits of the new radios include:

- Users will be able to take advantage of up to date technology on the network.
- Communications will be more reliable.
- Radios will be able to perform within the design parameters.

| Work | Quantity | Cost |
|---|----------|--------------|
| Portable Radio - HCSO | 390 | \$ 1,482,000 |
| Mobile Radio - HCSO | 390 | \$ 1,638,000 |
| Mobile Radio - Constable 1 | 43 | \$ 180,600 |
| Mobile Radio - Constable 2 | 27 | \$ 113,400 |
| Mobile Radio - Constable 3 | 58 | \$ 243,600 |
| Mobile Radio - Constable 4 | 98 | \$ 411,600 |
| Mobile Radio - Constable 5 | 143 | \$ 600,600 |
| Mobile Radio - Constable 6 | 28 | \$ 117,600 |
| Mobile Radio - Constable 7 | 34 | \$ 142,800 |
| Mobile Radio - Constable 8 | 3 | \$ 12,600 |
| Mobile Radio - Toll road LE | 85 | \$ 357,000 |
| All Harris County Non-LE | 450 | \$ 1,800,000 |
| Replacement Accessories Mics/ Holsters/ Antennas | 700 | \$ 140,000 |
| Additional Programming Equipment / Tools / Network Gear | 1 | \$ 100,000 |
| Radio Management Software (12.99/year annual fee) LE | 2,200 | \$ 28,600 |
| Radio Management Software (12.99/year annual fee) NLE | 1,440 | \$ 18,720 |
| Labor | 1 | \$ 68,000 |
| Contingency | 1 | \$ 733,980 |

Alternatives and Engagement:

No alternatives have been identified for this project. Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 41,691,893 | \$8,195,900 | \$8,317,898 | \$8,341,558 | \$8,365,218 | \$8,389,913 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|---------------------|
| O&M | \$ (55,252) |
| Labor | \$ (77,814) |
| Other | \$ 0 |
| Total | \$ (133,066) |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Badge Card Access System

Investment Area: Public Safety & Justice – IT, Hardware

Approval Status: Planning

Total Estimated Cost: \$700,000

Managing Department: TBD

Expenditures to Date: \$0

Requesting Department: Community Supervision & Corrections Department

Strategic Objective(s): SO3

Project Description:

This project would install 230 badge card access systems across Community Supervision & Correction Department's (CSCD) five existing locations. These locations are 49 San Jacinto (Administration), 9111 Eastex Freeway (North Region), 3330 Old Spanish Trail (South Region), 1000 Lee Drive (East Region) and 10585 Westoffice Drive (West Region). Project timeline could start March 2021.

Justification:

CSCD's five existing locations do not have card access systems and utilize traditional keys for door access. Staff are required to travel to other regions to provide services, and the keys at one location will not work at other locations. Having a consistent badge card access system allows staff to enter secure areas easily and controls the security of these areas. This project would significantly reduce the number of key requests sent to the Harris County Lock Shop. It would reduce the cost of making new keys, changing or fixing existing door locks, and reduce Harris County Lock Shop staff labor that handles all of these requests. Badge card access is critical to controlling security access of County buildings and monitoring/granting access to secured areas of our buildings. For CSCD staff to provide supervision and wraparound services to its justice-involved clients, having a badge access system will provide a more efficient method to access all of our 5 existing CSCD locations. This CIP project provides a value enhancement to the department by allowing the agency to send staff to support core operations at its other locations without needing to request and wait for additional traditional keys to be made. Enhancement is measured in reducing the number of keys issued and re-keying of existing locks. With a badge card access system, the Department would have the ability to easily add/remove access for its staff at all 5 locations.

Alternatives and Engagement:

CSCD could continue to use tradition keys. The inefficiencies described above would not be resolved and cost savings would not be realized.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$700,000 | TBD | TBD | TBD | TBD | TBD | TBD |

Estimated Annual Operating Budget Impact:

| | |
|--------------|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Civil Courthouse AV Systems Upgrade

Investment Area: Public Safety & Justice – IT, Hardware

Approval Status: Preliminary Investment

Total Estimated Cost: \$5,300,000

Managing Department: TBD

Expenditures to Date: \$0

Requesting Department: District Courts
Administration

Strategic Objective(s): SO8

Project Description:

This is a technology replacement and upgrade project for evidence presentation systems in the Civil Courthouse. This project would impact 24 civil courts, five family courts, and one ceremonial courtroom, for a total of 30 District Court courtrooms. The project would begin in the second quarter of calendar year 2021.

Justification:

Legal practitioners and jurors in the courts have come to rely on the availability of these evidence presentation systems to efficiently and effectively conduct of trials and hearings. Increasingly, the high definition content and laptops brought into the courts are incompatible with the current display systems. Implementing this project would result in lower long-term equipment support costs; currently, repair costs are rising, and analog video components are increasingly difficult to procure. The current systems are based on out-dated analog video technology and will not support newer laptops and other devices designed to present only digital video (HDMI or Display port).

Alternatives and Engagement:

No alternatives have been identified for this project.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-----------------------------|-------------------------|----------------------|----------------------|
| Universal Services | Review Technical Design | Documents Exchange | Ongoing |
| Private Bar Representatives | Review Functionality | Documents Exchange | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$5,300,000 | TBD | TBD | TBD | TBD | TBD | TBD |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Detention Control System Upgrade

Investment Area: Public Safety & Justice - IT & Equipment, Hardware

Approval Status: Implementation

Total Estimated Cost: \$ 8,053,252

Managing Entity: Universal Services

Expenditures to Date: \$ 2,168,369

Requesting Entity: Sheriff's Office

Strategic Objective(s): N/A

Project Description:

This 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.

Justification:

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.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 8,053,252 | \$ 5,884,883 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: eCitation with Digital Signatures

Investment Area: Public Safety & Justice - IT & Equipment, Hardware

Approval Status: Preliminary Investment Review

Total Estimated Cost: \$ 11,119,980

Managing Entity: Universal Services

Expenditures to Date: \$ 0

Requesting Entity: Universal Services

Strategic Objective(s): N/A

Project Description:

The purpose of this project is to identify, document, design, develop and manage the technology and business needs required to implement digital signatures with the e-Citation process in Harris County. Electronic signatures will allow law enforcement (LE) to apply digital signatures to the e-citation rather than printing the citation and applying a "wet signature" or physically marking the citation.

Justification:

This project improves and automates LE processing of citations. eCitations reduce time spent by the Justice Courts processing paper copies of the citations and provide the ability to upload data efficiently into Harris County Records Management System (RMS) and Justice Courts case management system. This efficiency provides opportunities for lost fine & fee collections for Harris County due to quick synchronization and submission of data wirelessly. eCitation can reduce time spent by LE in the field writing and processing paper citations, allowing LE to return more quickly to duty. eCitation will also reduce time spent by the Justice Courts processing paper copies of the citations. Additionally, eCitation will provide ability to issue citations without a connection to the Harris County network, which allows LE on foot patrol & bicycle patrol the ability to issue electronic citations.

Alternatives and Engagement:

No alternatives have been identified for this project.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|---|--|---|----------------------|
| Constable Precincts 1-8, Sheriff's Office, Fire Marshal's Office | Mission Critical support of Public Safety officers | HC Law Enforcement Technology Committee | Ongoing |
| Criminal Courts, District Attorney, District Clerk, County Attorney, PreTrial, District Courts, Public Defender | More effective support of Justice processes and activities | HC Justice Technology Committee | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 11,119,980 | \$ 10,780,980 | \$ 339,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------------|
| O&M | \$ 335,000 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 335,000 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: VoIP Phone Upgrade

Investment Area: Public Safety & Justice – IT & Equipment, Hardware

Approval Status: Planning

Total Estimated Cost: \$200,000

Managing Department: TBD

Expenditures to Date: \$0

Requesting Department: Community Supervision & Corrections Department

Strategic Objective(s): SO3

Project Description:

This project is to replace existing Mitel phone infrastructure at the following Community Supervision & Corrections Department (CSCD) locations: 9111 Eastex Freeway (North Region), 10585 Westoffice Drive (West Region), and 3330 Old Spanish Trail (South Region). The existing phone infrastructure would be retrofitted to Voice over Internet Protocol (VoIP). The project is anticipated to start in March 2021 and end by December 2021.

Justification:

The existing CSCD Mitel phone infrastructure is at end-of-life and no longer supported; voicemail infrastructure does not work at two of the three locations. This project is needed to improve efficiency of operations and ease of support for the CSCD phone infrastructure. The upgraded phone infrastructure supports CSCD's strategic objective of providing supervision and wraparound services to its justice-involved clients. Phones are one of the primary methods of communication between the public and the department. The enhancements from this project can be measured through the reduction of on-site telephone support.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$200,000 | TBD | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: AFIS Replacement

Investment Area: Public Safety & Justice - IT & Equipment, Software

Approval Status: Detailed Design

Total Estimated Cost: \$ 4,120,284

Managing Entity: Universal Services

Expenditures to Date: \$ 58,949

Requesting Entity: Universal Services

Strategic Objective(s): N/A

Project Description:

The Automated Fingerprint Identification System (AFIS) is a 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 project would update backend (server) components of the HC Sheriff's Department AFIS System with the latest software technology. This will provide better capabilities and improved effectiveness. This project was significantly delayed due to COVID and the previously published timeline has been updated. Current project components include:

- Implement a Cloud Based Solution for AFIS/Biometric Services
- Update the Backend servers with up to date software including AFIS Software as well as Operating System software
- Modify specific workflows for greater efficiency
- Add new workflows to accommodate new uses
- Update Existing Interfaces
- Update as needed for CJIS Security Policy
- Move existing equipment from Windows 7 to Windows 10

Justification:

While the system is currently functioning, there are concerns about near-term viability to keep the system running efficiently. The overhead required to support the current system is becoming more and more costly as the hardware and other components are end of support with the manufacturers. Completing the project will ensure continuity of the identification system and save money in the long-term.

Alternatives and Engagement:

No alternatives have been identified for this project.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|---|--|---|----------------------|
| Constable Precints 1-8, Sheriff's Office, Fire Marshal's Office | Mission Critical support of Public Safety officers | HC Law Enforcement Technology Committee | Ongoing |
| Criminal Courts, District Attorney, District Clerk, County Attorney, PreTrial, District Courts, Public Defender | More effective support of Justice processes and activities | HC Justice Technology Committee | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 4,120,284 | \$ 3,442,076 | \$ 619,259 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------------|
| O&M | \$ 456,000 |
| Labor | \$ 0 |
| Other | \$ 45,600 |
| Total | \$ 501,600 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Cite and Release

Investment Area: Public Safety & Justice - IT & Equipment, Software

Approval Status: Detailed Design

Total Estimated Cost: \$ 1,821,985

Managing Entity: Universal Services

Expenditures to Date: \$ 452,582

Requesting Entity: Universal Services

Strategic Objective(s): N/A

Project Description:

The purpose is to 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 in Harris County are arrested and taken to the Inmate Processing Center. State law now allows law enforcement to issue class B misdemeanor citations for a set of seven offenses rather than incarcerating the accused individuals. A Cite and Release program enable law enforcement to issue these citations instead of incarcerating the accused individuals.

Justification:

Implementing Cite and Release in Harris County will impact approximately 4,800 persons arrested yearly on this set of offenses. This provides efficiencies and saves law enforcement time by allowing them to issue misdemeanor citations rather than incarcerating the accused individuals. This project will provide data efficiently into Harris County Records Management System (RMS) and Justice Courts case management system. According to Sheriff Gonzalez, "this administrative policy should help reduce our pre-trial county jail population and provide local costs savings to taxpayers. Citations can divert lower risk individuals from detention, reserving limited space and resources for more dangerous individuals." Cite and Release will:

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

Alternatives and Engagement:

No alternatives have been identified for this project.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|---|--|---|----------------------|
| Constable Precincts 1-8, Sheriff's Office | Mission Critical support of Public Safety officers | HC Law Enforcement Technology Committee | Ongoing |
| Criminal Courts, District Attorney, District Clerk, County Attorney, PreTrial, District Courts, Public Defender | More effective support of Justice processes and activities | HC Justice Technology Committee | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 1,821,985 | \$ 1,369,403 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: HCSO Workforce Management Tool

Investment Area: Public Safety & Justice - IT & Equipment, Software

Approval Status: Planning

Total Estimated Cost: \$ 3,044,000

Managing Entity: Universal Services

Expenditures to Date: \$ 0

Requesting Entity: Sheriff's Office

Strategic Objective(s): N/A

Project Description:

The Sheriff's Office is comprised of ~ 5,000 employees. On any given day, a single shift could have up to 500 staff members working across the various facilities. As to be expected with a staff of this size for a 24/7 operation, shift changes are complex to manage, and coverage of duty stations is critical. Due to the complexity of managing these facilities, the staff, and the shifts, including determining when employees have arrived early, tardy or are absent is a monumental task. Greater visibility and simplicity of shift management and reporting are critical and presently labor-intensive. This project would identify and procure a solution that would enable Sergeants to efficiently manage time recording, shifts, facilities, requests, changes, and reporting while adhering to local and state laws so that costs reduction occurs, and employee morale is improved. The project team will include a project manager, business analyst, and technical resources. The project may expand as the following departments have expressed an interest into a timeclock solution that interfaces with PeopleSoft: Commissioner Precincts 1, 2 and 4, Constables 1,5 and 8, District Attorney, and Juvenile Probation.

Justification:

Benefits will be achieved in the optimization of jail staff scheduling, overtime reduction through staff optimization, and reduction of potentially fraudulent entries. The interface with PeopleSoft will reduce data entry errors and replace the paper-based system with a workflow process.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$3,044,000 | \$ 2,579,000 | \$465,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------------|
| O&M | \$ 900,000 |
| Labor | \$ 0 |
| Other | \$ 0 |
| Total | \$ 900,000 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Pretrial Case Management System

Investment Area: Public Safety & Justice, IT & Equipment, Software

Approval Status: Design

Total Estimated Cost: \$709,960

Managing Entity: Universal Services

Expenditures to Date: \$ 0

Requesting Entity: Pretrial

Strategic Objective(s): N/A

Project Description:

The project consists of obtaining licensing and subsequent implementation of 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 and supervise 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.

Justification:

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 (JIMS/JWEB). The update to technology will reduce time spent by the Harris County agencies and provide efficiencies in their work. Replacing PreTrial's outdated application will also provide extensibility of limited and data integration with other Harris County systems, including the Harris County financial system. PreTrial Case Management System will:

- 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

Alternatives and Engagement:

No alternatives have been identified for this project.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|-------------|--|--|----------------------|
| HC PreTrial | More effective support of Justice processes and activities | Meetings and HC Law Enforcement Technology Committee | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$709,960 | \$709,960 | \$0 | \$0 | \$0 | \$0 | \$0 |

| Estimated Annual Operating Budget Impact: | |
|---|------------------|
| O&M | \$263,600 |
| Labor | \$64,000 |
| Other | \$26,360 |
| Total | \$353,960 |

Harris County, Texas
Fiscal Year 2021-22 Proposed CIP
March 9, 2021

Economic Opportunity and Housing Projects

| Project Name | Category | Subcategory | Approval Status | Total Project Estimate | Expenditures to Date | FY 2021-22 | FY 2022-26 | Beyond FY 2025-26 |
|--|----------|----------------------|------------------------|------------------------|----------------------|---------------------|------------|-------------------|
| Downtown Civic Art Program | Art | Art | Planning | \$ 250,000 | \$ - | \$ 250,000 | \$ - | TBD |
| El Franco Lee Public Service Plaza | Art | Art | Detailed Design | 2,700,000 | - | 2,700,000 | - | - |
| Atascocita Branch Library | Library | Expansion/Renovation | Preliminary Investment | 1,000,000 | 12,997 | TBD | TBD | TBD |
| Baldwin Boettcher Branch Library | Library | Expansion/Renovation | Detailed Design | 3,023,869 | 23,869 | 3,000,000 | - | - |
| Fairbanks Branch Library | Library | Expansion/Renovation | Planning | 1,000,000 | - | TBD | TBD | TBD |
| Freeman Branch Library | Library | Expansion/Renovation | Preliminary Investment | 200,000 | 575 | TBD | TBD | TBD |
| Kingwood Branch Library | Library | Expansion/Renovation | Planning | 750,000 | - | TBD | TBD | TBD |
| Maude Marks Library Branch | Library | Expansion/Renovation | Planning | 1,500,000 | - | TBD | TBD | TBD |
| New Highlands Area Library | Library | Expansion/Renovation | Planning | TBD | - | TBD | TBD | TBD |
| North Channel Branch Library | Library | Expansion/Renovation | Planning | 1,000,000 | - | TBD | TBD | TBD |
| Northwest Branch Library - Modular Wall System | Library | Expansion/Renovation | Planning | 100,000 | - | TBD | TBD | TBD |
| Spring Branch-Memorial Library | Library | Expansion/Renovation | Planning | 500,000 | - | TBD | TBD | TBD |
| New Furniture for Harris County Public Library | Library | Furniture | Planning | 400,000 | - | TBD | TBD | TBD |
| Economic Opportunity Subtotal | | | | 12,423,869 | 37,440 | 5,950,000 | - | - |
| Affordable Housing Program | Housing | Housing | Planning | 500,000 | - | 500,000 | - | TBD |
| Community Services - Affordable Housing | Housing | Housing | Planning | 5,000,000 | - | TBD | TBD | TBD |
| Housing Subtotal | | | | 5,500,000 | - | 500,000 | - | - |
| Economic Opportunity & Housing Total | | | | \$ 17,923,869 | \$ 37,440 | \$ 6,450,000 | - | - |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Downtown Civic Art Program

Investment Area: Economic Opportunity - Art

Approval Status: Planning

Total Estimated Cost: \$ 250,000

Managing Entity: County Engineer

Expenditures to Date: \$ 0

Requesting Entity: County Engineer

Strategic Objective(s): N/A

Project Description:

Funding is being requested, in part, to study and potentially place civic art in and around County public spaces. This includes facilities, parks, and open spaces. Civic art can range from murals, monuments, and certain types of landscaping features.

Justification:

This project would provide the public with a more open and inviting local government experience.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not yet been planned for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 250,000 | \$ 250,000 | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: El Franco Lee Public Service Plaza

Investment Area: Economic Opportunity - Art

Approval Status: Detailed Design

Total Estimated Cost: \$ 2,700,000

Managing Entity: County Engineer

Expenditures to Date: \$ 0

Requesting Entity: County Engineer

Strategic Objective(s): SO16

Project Description:

Installation of the El Franco Lee Public Service Plaza at the north end of the Jury Assembly Facility. The plaza space will include a "service wall" to recognize Harris County officials for their service and to distinguish former Commissioner El Franco Lee with a permanent bronze bust or relief sculpture.

Justification:

It will serve as a remembrance project, additional public space, and enhance the overall county downtown presence. Installation of a new park and features will increase the overall value of the facility.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 2,700,000 | \$ 2,700,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Atascocita Branch Library - Expansion

Investment Area: Economic Opportunity – Libraries, Expansion/ Renovation

Approval Status: Preliminary Investment Review

Total Estimated Cost: \$1,000,000

Managing Entity: County Engineer

Expenditures to Date: \$ 12,997

Requesting Entity: Library

Strategic Objective(s): SO1, SO3, SO35

Project Description:

The Office of the County Engineer is working with the Library to renovate the Atascocita Library Branch. The renovation contemplates a 2,500 square feet (SF) addition for meetings using an open floor concept. This meeting/ community room requires a storage space (approximately 100 SF) and accessible restrooms. The parking lot would be expanded to create more parking spaces along Pinehurst Trail Drive.

Justification:

The new meeting space may be utilized for community meetings, as a “storytelling” space, or for other program needs. The meeting space may also be used as a temporary or early voting location with an approximate capacity for 72 voting machines.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not yet been completed for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$1,000,000 | TBD | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Baldwin Boettcher Library Renovation

Investment Area: Library

Approval Status: Detailed Design

Total Estimated Cost: \$ 3,023,869

Managing Entity: County Engineer

Expenditures to Date: \$ 23,869

Requesting Entity: County Engineer

Strategic Objective(s): N/A

Project Description:

This project is to repair damage from Hurricane Harvey to the Baldwin Boettcher Branch Library at 22306 Aldine Westfield Road. It is anticipated that up to \$1.1m of these repairs will be reimbursable by insurance or FEMA. Repairs are anticipated to be complete in May 2022.

Justification:

These repairs are needed to reopen the Baldwin Boettcher Branch Library, which provides important services to the surrounding community.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 3,023,869 | \$ 3,000,000 | \$ 0 | \$ 0 | \$ 0 | \$ 0 | \$ 0 |

| Estimated Annual Operating Budget Impact: | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Fairbanks Branch Library - Renovations and Expansion

Investment Area: Economic Opportunity – Libraries, Expansion/ Renovation

Approval Status: Planning

Total Estimated Cost: \$1,000,000

Managing Department: TBD

Expenditures to Date: \$0

Requesting Department: Library

Strategic Objective(s): SO1, SO2, SO3

Project Description:

This project would renovate and expand the Fairbanks Branch Library (Library) at 7122 Gessner Rd, Houston, TX. The building was built in 1971, and then later expanded to 7,247 square feet in 1990. Project elements include an expanded staffroom and storage space, larger meeting room, a computer lab, a larger children's area, retrofits to be more compliant with Americans with Disabilities Act (ADA) building code requirements, staff restroom, and security system. It is anticipated that the ADA compliance issues will be addressed in the near-term through an existing FPM CIP project, while the expansion request undergoes further evaluation.

| Fairbanks Branch | 2015 | 2016 | 2017 | 2018 | 2019 |
|-----------------------------|-------|-------|-------|--------|-------|
| Number of Programs Offered | 588 | 633 | 710 | 830 | 772 |
| Number of Program Attendees | 5,350 | 7,386 | 7,324 | 10,774 | 9,188 |

Justification:

Additional space is needed to accommodate growth in staff and customers served from an increase in offered programs. Demand for programs has significantly grown over the past five years due to the need in the area for Early Literacy, ESL, Job Search Assistance, Tax Aide, and Technology/STEM and other educational programs. The Fairbanks Branch serves the communities from the 77040, 77064, and 77080 zip code areas, which have high teen pregnancy rates, high school dropout, and poverty rates. The Fairbanks Branch service area has been declared as one of the most at-risk and vulnerable in the Houston area, according to Harris County Public Health. The above chart shows that more and more people are utilizing the Library's programs. A larger meeting room will allow for larger programs, ultimately serving more people. The meeting room can no longer be used for some of the popular programs due to Fire Marshall capacity restrictions. full-time staffing has been increased at the Library to accommodate the increase in customers. Some of the Library's most popular programs are computer classes, which classes fill up within a few hours of advertising, especially for our children's coding and STEM programming. A dedicated computer lab would allow more participants. Early literacy programs are also very popular, with half of the Library's community being Spanish or Vietnamese-speaking. A larger Children's Area is needed to effectively provide early literacy programs. On the non-program side, new space is needed for a staff workroom and storage space. The staff workroom is cramped, and there is no room to store needed supplies or equipment for programming. A new storage space is needed, as the Library has no custodial or storage closets, forcing the cleaning crew to use and store supplies in a small Electrical Closet, a practice which the Fire Marshall has deemed unsafe.

Alternatives and Engagement:

No alternatives have been identified for this project. Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$1,000,000 | TBD | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Freeman Branch Library - Expansion

Investment Area: Economic Opportunity – Libraries, Expansion/ Renovation

Approval Status: Preliminary Investment Review

Total Estimated Cost: \$ 200,000

Managing Entity: County Engineer

Expenditures to Date: \$ 575

Requesting Entity: Library

Strategic Objective(s): SO1, SO3, SO35

Project Description:

The Office of the County Engineer is working with the Library to renovate the Freeman Library Branch. The project contemplates converting the current Innovation Lab area into a classroom/flexible learning space. This room would be a classroom setting with tables and chairs equipped with data connections for learning activities to accommodate 12-15 people.

Justification:

As the current Innovation Lab space is currently configured, the Library is unable to hold classes and accommodate the large demand for the equipment at the same time. The expanded workshop area would be able to accommodate more community members and will house a wider variety of maker equipment. The new space would also be more visible to the community, with the aim of engaging more of the public. The Library is designing policies to make the new space more inclusive to all community members and removing barriers to its use.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not yet been completed for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$200,000 | TBD | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Kingwood Branch Library - Building Addition

Investment Area: Economic Opportunity – Libraries, Expansion/ Renovation

Approval Status: Planning

Total Estimated Cost: \$750,000

Managing Department: TBD

Expenditures to Date: \$0

Requesting Department: Library

Strategic Objective(s): SO1, SO2, SO3

Project Description:

This project would expand the square footage of the Kingwood Branch Library (Library) located at 400 Bens View Lane, Kingwood, TX. This space expansion would primarily be used to accommodate voting and used for other programming needs during non-election periods. The current space is 900 square feet. Three options to provide this needed space include:

- Option 1: Add an exterior enclosed walkway.
- Option 2: Add a medium modular building.
- Option 3: Add a large modular building (Community Recreational Center).

Justification:

This project expands the polling capacity at the Kingwood Branch Library, by adding a Community Recreational Center (CRC) from a previously vetted design to the property. This project alleviates overcrowding by creating space for the library to continue daily services for the public and accommodate voting at the same time.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$750,000 | TBD | TBD | TBD | TBD | TBD | TBD |

Estimated Annual Operating Budget Impact:

| | |
|--------------|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Maude Marks Library Branch - Expansion/Renovation

Investment Area: Economic Opportunity – Libraries, Expansion/ Renovation

Approval Status: Planning

Total Estimated Cost: \$1,500,000

Managing Department: TBD

Expenditures to Date: \$0

Requesting Department: Library

Strategic Objective(s): SO1, SO2, SO3

Project Description:

This project requests a building renovation and expansion of the Maud Marks Branch Library (Library) at 1815 Westgreen Blvd, Katy, TX. New spaces to be created include: a computer lab; at least two study rooms; a bookdrop and sorting area; expanded public restrooms to create more stalls; new family bathroom; and a teen area with teen-appropriate furniture. Renovation projects include: modernizing the HVAC system; replacing old and damaged fixtures, including kitchen cabinets, appliances, and bathroom tiles; replace lobby doors with modern sliding doors; and replacing rusty and bulky shelving in meeting room and staff workroom with more functional storage options. Some elements of this project could be completed through existing FPM CIP projects.

Justification:

The Library has seen a 57% increase in registered users in the last 10 years and cannot meet the needs of the growing community. As of February 2020, the Library was 5th highest in circulation with 495,793 physical items circulated. To better manage the high volume of materials, a bookdrop and sorting area is needed to make it easier for customers to return materials and to provide staff a dedicated area for sorting and processing. In 2019, the Library had 142,750 visitors, with 21,087 program attendees. Library programs are limited in the number of people they can serve due to space constraints. The computer lab built by this project would replace the previous lab, which was converted to a maker lab due to demand. Since this conversion, the Library has been unable to offer computer classes due to a lack of space to provide instruction. The study rooms built by this project would address an unmet need. The Library has a high demand for study rooms and customers seeking study rooms often have to be directed to other branches. The Library is across the street from a middle school and sees high traffic and noise during the daytime with toddler storytime and after the middle school across the street lets out. Study rooms would provide a needed quiet area and would also benefit the popular ESL groups meeting in the library. A dedicated teen space is needed as the Library typically serves 20-30 teens daily after school; currently the Library only has a small seating space for 3-5 teens.

The renovation elements of the project will improve the customer experience and better serve the Library's community needs. The HVAC system is old and does not maintain a balanced temperature in the building, with some rooms very hot and others very cold, resulting in regular requests to adjust the temperature. The kitchen cabinets and appliances are dated, rusty, and degrading in quality; new cabinets and staff lockers are needed. The bathroom expansion/remodel is needed to address the growing customer base. The current lobby doors are bulky and hard to use; lobby sliding doors would add customer convenience and will also make the facility more compliant with the Americans with Disabilities Act (ADA).

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$1,500,000 | TBD | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: New Highlands Area Library

Investment Area: Economic Opportunity – Libraries, Expansion/ Renovation

Approval Status: Planning

Total Estimated Cost: TBD

Managing Department: TBD

Expenditures to Date: \$0

Requesting Department: Library

Strategic Objective(s): SO1, SO2, SO3

Project Description:

This project contemplates obtaining a new building for the Stratford Branch Library, currently located at 509 Stratford Street, to provide a larger and more functional library facility. The current location is a 2,700-square-foot building located in an older Highlands neighborhood with limited visibility and access, 0.6 miles from FM 2100 and Wallisville Road. A suggested location would be at 1010 E. Wallisville Road, in front of the Highlands Sport Complex. This location will provide equitable access to community resources by being situated in a more visible area with greater traffic flow, as well as being on the Harris County transit route.

| Stratford Library | 2015 | 2016 | 2017 | 2018 | 2019 |
|---------------------------|-------|-------|-------|-------|-------|
| Total Number of Programs | 250 | 277 | 408 | 440 | 333 |
| Total Number of Attendees | 5,065 | 5,685 | 7,806 | 8,201 | 8,142 |

Justification:

The Library has been a resource for information and literacy in the Highlands area since 1927. Proposals have been made to move the Library to a more accessible location since 2009. This larger replacement to the Library is needed to support the growing populations of the Highlands, McNair, Barret Station, Baytown, and Lynchburg areas. The area that the library serves consists of approximately 40 square miles. Staff routinely work with the J.D. Walker Community Center in McNair and the Riley Community Center in Barret Station, including partnering with the Head Start and the Precinct2gether Summer programs. The library also performs outreach to seven Goose Creek CISD schools and two Crosby ISD schools, all of which are Title 1 with a combined average 71% of families being economically disadvantaged. The new facility would provide space for the Library to expand its offerings to better serve the community. Some of these improvements include an increase in information and technologies available to the public, with Wi-Fi, computers, printing, and maker space access. The Library would offer a diverse collection of materials geared towards literacy, education, and job training in English and Spanish. The 9 public schools served by the library have an average 57% Hispanic population, suggesting that a strong multilingual collection is needed. An early learning space will provide the opportunity to promote literacy and math skills to help close the achievement gap for children prior to entering school. In addition, there will be space for educational programs and private rooms for public service providers to schedule consultations for those needing assistance with health care, social services, or educational assistance. The new library building and location will operate as a centralized information & resource center for an otherwise underprivileged area. This transformation will change Stratford Library from a limited small-town facility to a larger east Harris County library center which will benefit the entire area for the foreseeable future.

Alternatives and Engagement:

No alternatives have been identified for this project. Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| TBD | TBD | TBD | TBD | TBD | TBD | TBD |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: North Channel Branch Library - Expansion/Renovation

Investment Area: Economic Opportunity – Libraries, Expansion/ Renovation

Approval Status: Planning

Total Estimated Cost: \$1,000,000

Managing Department: TBD

Expenditures to Date: \$0

Requesting Department: Library

Strategic Objective(s): SO1, SO2, SO3

Project Description:

This project is to expand and renovate the North Channel Branch Library (Library), located at 15741 Wallisville Road. Project elements may include: expanding an existing meeting room, building a new study room and storage space, additional furnishings, constructing an access road at the back of the building and additional parking space, installing new windows and LED lighting, and retrofits to make the facility more compliant with the Americans with Disabilities Act (ADA). This project has not been fully scoped out, but it is anticipated that the LED lighting and ADA retrofits can be accomplished through existing FPM projects.

Justification:

The daily average for Library visitors is 430. This means that someone is entering and exiting the building over 90,000 times annually, many needing ADA accommodations. Updating the Library to better meet ADA standards would help seniors, people with disabilities, and the many parents with strollers to better access the Library's services and events. A key improving these Library events is more space. A building expansion for the Library would benefit a population of 200,000 living within a 5-mile radius of the library. The current meeting room has a capacity of 44 people, which limits the number of participants in programs and events. The meeting room is in high demand; during the 2019-2020 fiscal year, roughly 20,000 people used the meeting room through more than 635 library programs and community events. Another stumbling block for hosting events is a lack of storage space for tables and chairs. The other key space need is an additional study room. On many days, there is a wait to use the one study room. An additional study room would create more opportunities for library users needing a quiet space to take online classes, exams. After the space expansions are made, the Library needs some general lighting improvements. The Library has an antiquated lighting system that requires constant maintenance, limits visibility, and creates an unpleasant environment. Lighting is especially necessary in a library where people are using the building to conduct research, study, and read. Lighting could be improved by installing new windows to provide more natural light. Lighting could also be improved by replacing the old lighting system with newer and brighter LED light that would be more energy efficient. People will be unable to utilize the Library's expanded and renovated space unless improvements are made to the parking lot. The additional parking space contemplated in this project would allow more people to utilize the library and the access road would alleviate congestion problems during high traffic events, such as elections. This project is anticipated to improve customer satisfaction and increase the usage of the library, which can be measured by surveys.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$1,000,000 | TBD | TBD | TBD | TBD | TBD | TBD |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Northwest Branch Library - Modular Wall System

Investment Area: Economic Opportunity – Libraries, Expansion/ Renovation

Approval Status: Planning

Total Estimated Cost: \$100,000

Managing Department: TBD

Expenditures to Date: \$0

Requesting Department: Library

Strategic Objective(s): SO1, SO2, SO3

Project Description:

Install a modular wall system at the Northwest Branch Library (Library) located at 11355 Regency Green Drive, Cypress, TX. There is current space available for the implementation of a modular wall and door system that could encapsulate a section of the Library and not displace any of the collection or directly affect customers' ability to use the computer equipment. The requested modular wall system would be used to create flexible computer lab/ program space.

Justification:

Due to a change in programming direction to meet the needs of the public, a greater emphasis is being placed on technology programming, like coding, robotics, and other STEM-style programming. The Library provides some technology programming, but is limited in the number of STEM programs offered due to space constraints. The Library is one of the few medium-sized locations in the Harris County Public Library system without its own dedicated computer lab space; this would be addressed by using the requested modular wall system to create a flexible computer lab/ program space. When not in use for a program, the lab could be used as overflow computer use for customers who need to access a computer during downtimes. The modular wall system would allow for the temporary creation of areas to facilitate quiet thinking, private meetings, and focused work without distracting open settings.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$100,000 | TBD | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Spring Branch-Memorial Library - Building Extension

Investment Area: Economic Opportunity – Library, Expansion/ Renovation

Approval Status: Planning

Total Estimated Cost: \$500,000

Managing Department: TBD

Expenditures to Date: \$0

Requesting Department: Library

Strategic Objective(s): SO1, SO2, SO3

Project Description:

This project would extend the Spring Branch-Memorial Library (Library) building, located at 930 Corbindale Rd, Houston, TX, by enclosing a approximately 900 square feet patio area. This enclosed area would be used to create a larger space for children, including additional program space. This extension would also enable the creation of a dedicated teen space to better serve that demographic. New furniture and shelving would need to be purchased for this space.

Justification:

Utilization of the Library has grown significantly over the years and services are now limited due to space constraints. To illustrate this growth, in 1977, the library hosted an average 5 story times a month with the occasional special program. Comparitvely, the library hosted 50 programs with 952 people in attendance in February 2020. The addition that would be constructed by this project would allow the Library to have additional programming space and to create a dedicated area for teens. The Library averaged (pre-Covid) at least 10 programs designated for teens a month and has a high circulation rate of young adult books. Due to the amount of furnishing/seating needed in the children's area, the Library struggles to remain compliant with Americans with Disabilities Act (ADA) building code requirements. With the additional space in the children's area, the current furniture would be able to be arranged to allow better compliance. The new children's area, while still fairly small, would also allow the Library to have an area which approaches literacy with a more whole-child experience with sensory activities such as puzzles, early literacy toys, and a creative play area. The additional space, would enable an increase in family engagement in the main library space, with programming in the children's area and having a space for parents to better engage with their children.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$500,000 | TBD | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: New Furniture for Harris County Public Library

Investment Area: Economic Opportunity – Libraries, Furniture

Approval Status: Planning

Total Estimated Cost: \$400,000

Managing Department: TBD

Expenditures to Date: \$0

Requesting Department: Library

Strategic Objective(s): SO1, SO2, SO3, SO35

Project Description:

The Harris County Public Library (HCPL) has identified various furnishing needs at the following locations. These needs range from replacing old and broken office chairs/desks, replacing aging tables/chairs in public spaces, new shelving, and sound proofing. HCPL will be invited to examine furniture kept in storage by FPM before funding for this project is considered.

| Location | Office | Public Space | Other |
|-------------------------|--------|--------------|-------|
| Administrative Building | x | | |
| Atascocita Library | x | | |
| Crosby Library | x | x | |
| Freeman Library | x | x | x |
| Galena Park Library | | x | x |
| Katherine Tyra Library | | x | |
| North Channel Library | | x | |
| Northwest Library | x | | x |
| Octavia Fields Library | | x | |
| Parker Williams Library | | x | |
| Spring Branch Library | | x | |

Justification:

Furniture is considered the centerpiece of any establishment and it plays an important role in the ambiance of the workplace. Library furniture helps determine how patrons interact with a library. If people visiting the library feel like their needs are being met, they are much more likely to return. Furniture does not last forever. It is vital for HCPL to replace furniture when the current furnishings are no longer up to part. This project will improve customer's satisfaction, which can be measured with surveys.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not been contemplated for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$400,000 | TBD | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Affordable Housing Program

Investment Area: Housing

Approval Status: Planning

Managing Entity: County Engineer

Requesting Entity: County Engineer

Total Estimated Cost: \$ 500,000

Expenditures to Date: \$ 0

Strategic Objective(s): N/A

Project Description:

Funding is requested to initiate a pilot project to develop multiple affordable housing residential prototypes. Commissioners Court directed the Office of the County Engineer (OCE) to assist and support ongoing affordable housing initiatives. This request is specifically geared at working with the appropriate stakeholders to develop housing prototypes. The goal is to have ready the most efficient and truly affordable housing units as funding becomes available.

Justification:

It is necessary to develop the appropriate prototypes in order to yield the most efficient and truly affordable residential units for existing and future county affordable housing programs.

Alternatives and Engagement:

No alternatives have been identified for this project.

Stakeholder engagement has not yet been planned for this project.

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$ 500,000 | \$ 500,000 | TBD | TBD | TBD | TBD | TBD |

| <u>Estimated Annual Operating Budget Impact:</u> | |
|---|-------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | \$ 0 |

Harris County FY 2021-2022 Capital Improvement Program

Project Name: Community Services - Investment in Affordable Housing

Investment Area: Housing

Approval Status: Planning

Managing Department: TBD

Requesting Department: Community Services

Total Estimated Cost: \$5,000,000

Expenditures to Date: \$5,000,000

Strategic Objective(s): SO1, SO2, SO6-SO10

Project Description:

Currently the Kinder Institute at Rice University is conducting an Affordable Housing Planning Study and a Market Demand Absorption Study. These studies will form the basis of a County '10 Year Affordable Housing Plan'. Community Services (CSD) is requesting initial funding to be prepared to implement the Affordable Housing Plan. Potential activities would include, but not be limited to: acquiring land for housing development or building housing infrastructure (e.g., roads and sewers) to make housing developments more affordable. County funding would be leveraged with funding and other support from key partners such as TIRZ 24 and the Harris County Housing Finance Corporation. Other potential partners and funding sources include private development partners, other governmental entities, housing authorities, redevelopment authorities, and federal Housing & Urban Development entitlement & disaster recovery programs.

Justification:

This project works towards increasing the scale and scope of safe, quality and affordable housing. Creating affordable stock is a key mission of CSD. The project would also work towards the overall vision of ensuring County residents have access to quality, safe and affordable housing.

Alternatives and Engagement:

No alternatives have been identified for this project.

| Stakeholder | Stakeholder Role | Method of Engagement | Engagement Complete? |
|----------------------------------|------------------|---|----------------------|
| Commissioners Court | Advisory | Meetings | Ongoing |
| County Engineer | Advisory | Meetings | Ongoing |
| General Public | Advisory | Public Meetings | Not Started |
| Rice University Kinder Institute | Advisory | Planning Study, Meetings, data analysis | Ongoing |

Anticipated Project Expenditures and Timeline:

| Total Project Estimate | 3/01/2021 – 2/28/2022 | 3/01/2022 – 2/28/2023 | 3/01/2023 – 2/28/2024 | 3/01/2024 – 2/28/2025 | 3/01/2025 – 2/28/2026 | Beyond 2/28/2026 |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------|
| \$5,000,000 | TBD | TBD | TBD | TBD | TBD | TBD |

| Estimated Annual Operating Budget Impact: | |
|---|------------|
| O&M | TBD |
| Labor | TBD |
| Other | TBD |
| Total | TBD |