

**APPROVAL OF THE ADDITION OF TXDOT GAP PROJECTS, SHEPHERD
DURHAM CORRIDOR PROJECT AND GARTH ROAD PROJECT TO THE 2021-2024
TIP**

Summary

During the development of the 2021-2024 Transportation Improvement Program (TIP), H-GAC staff received requests to fund new projects. Normally the funding of new projects is considered during the call for projects process. Additionally, new projects may be selected for funding when presented with an opportunity to leverage funds allocated to the region for additional funding from other sources. The list of projects summarized below have been presented for consideration of funding.

- Program \$125.5M total Category 2 funds for the Texas Department of Transportation Houston District 'Gap Projects' in the 2021-2024 TIP. Below are comments from the Houston District regarding each project.
 - SH 146 (Harris County) CSJ 0389-05-129/MPOID 13841 (S. of Spencer Hwy to Fairmont Pkwy - Widen from four to six lanes to remove bottleneck). This project was not selected in a call for projects, but it is a gap piece/bottleneck project. The MPO did select 0389-05-087 (Fairmont Pkwy to Red Bluff). The 0389-05-129 project is adjacent to the project that was selected by the MPO and is currently a sub project to it for letting. Both projects show funding in the UTP using Cat 2.
 - SH 146 (Galveston County) CSJ 0389-07-025/MPOID 467 (FM 519 to SL 197, Reconstruct RR overpass and Widen from two to four lanes, gap filler). This section of SH 146 is the last remaining two-lane section and has become a gap/bottleneck project. The project estimate is \$49.6M. Bridge Division has given a fixed amount of \$15M toward the project.
 - US 90A (Fort Bend County) CSJ 0027-08-180/MPOID 16348 (US 90A at SH 99, Construct Grade Separation and Intersection Improvements). This project will construct a main lane bridge through the SH 99 intersection and provide needed intersection improvements. US 90A to the east was widened to six lanes and there is a project to the west of the intersection that has recently received funding through the last MPO call for projects that will also widen US 90A to six lanes, CSJ 0027-08-147. This bridge, if not funded, will become a gap/bottleneck project.
 - FM 517 (Brazoria County) CSJ 1002-01-006/16320 (Galveston County Line to SH 35, Reconstruct and Widen from two to four lanes). This segment of FM 517 was not selected in the last MPO call for projects, but the piece of FM 517 in Galveston County was selected from IH 45 to Brazoria County Line (CSJs 0978-01-039 and 1002-02-016). If the Brazoria County piece of FM 517 is not funded this will become a gap/bottleneck project.

- SH 242 (Montgomery County) CSJ 3538-01-055/17146 (East of FM 1314 to West of FM 1485, Reconstruct and Widen from two to four lanes). The SH 242 corridor from Needham Drive to US 59/IH 69 was selected in the 2016 MPO Call for Projects under CSJs 3538-01-035 and 3538-01-036. CSJ 3538-01-035 (Needham Drive to FM 1314) was let 5/2019 and when we were months away from letting 3538-01-036 (East of FM 1314 to US 59/IH 69) we were having a permit issue near FM 1314 so it was decided not to delay the whole project and to split the project into two pieces. Limits were changed on CSJ 3538-01-036 to West of FM 1485 to US 59/IH 69 and project was let 8/2019. CSJ 3538-01-055 was created for the remaining limits and HGAC says there is no funding for project in the STIP. If project is not funded in STIP there will be a gap/bottleneck in the middle of the SH 242 corridor. Based on low bids from the previously let projects there is still \$11.2M (includes match) remaining from what was given to the SH 242 corridor in the 2015 Call for projects.

Additional project information can be found online at <http://www.h-gac.com/transportation-improvement-program/documents/2021-2024/Draft-TIP-New-Projects.pdf>

- Add \$20.73M (\$16.58M Federal and \$4.15M Local Match) in Surface Transportation Block Grant (Category 7) funding the City of Baytown's Garth Road extension and widening project to cover new resiliency standards design costs.
 - Due to the recent release of new rainfall data and increase development the City of Baytown has had an increase in cost associated with this project. Through work with the Houston District the City is proposing to break their project into phases. The City is proposing to complete phases A and B with this request. Additional information is available in the letter from the City as attached.
 - As part of the amendment request the City is also proposing to move the federal funding awarded to the project during the 2015 Call for Projects for design and right-of-way (ROW) acquisition to the construction phase of the project. All design and ROW costs will be paid by the City of Baytown.
- Program \$50M (\$40M Federal and \$10M Local Match) in STBG (Category 7) funds to the City of Houston's Shepherd-Durham Corridor Improvement project into FY 2021 of the 2021-2024 TIP.
 - Phase 1 of the Shepherd Durham project received funding in the FY 2019 BUILD Discretionary grant program. In order to complete the project and to avoid higher costs in the future the City is requesting additional funds to complete Phase 2 as well.

Fiscal constraint analysis was done against the proposed projects in the draft 2021-2024 TIP document. The table below shows the available balances should these projects be awarded funding by the TPC. Please note that Category 2 funding is allocated over a 10-year timeframe. The total balance of Cat. 2 funding is \$2.9 Billion as identified in the FY 2020 Unified Transportation Program.

| Category | FY 2021 -2024 Allocation | FY 2021-2024 Total Programming | Balance |
|-----------|-----------------------------|-----------------------------------|----------|
| 2 – Metro | \$2.4 B | (\$2.4B) | \$0.0 |
| 5 – CMAQ | \$643.4M | (\$487.2M) | \$156.2M |
| 7 - STBG | \$845.3M | (\$675.1M) | \$153.1M |
| 9 - TASA | \$58.0M | (\$57.5M) | \$0.5M |

If awarded funding, H-GAC staff is proposing to amend these projects into the new 2021-2024 TIP and submit to the State for inclusion in the Statewide TIP in July 2020.

The Transportation Advisory Committee recommended the approval of the following additional projects to be amended into the 2021-2024 TIP:

- i. TxDOT Gap Projects
- ii. Shepherd/Durham Corridor project
- iii. Garth Road project

Action Requested

Approval of Resolution 2020-2022.



Resolution

NO. 2020-22

APPROVING THE 2021-2024 TRANSPORTATION IMPROVEMENT PROGRAM FOR THE HOUSTON-GALVESTON TRANSPORTATION MANAGEMENT AREA:

WHEREAS, the Fixing America's Surface Transportation Act (FAST Act) was enacted on December 4, 2015 and authorizes the Federal surface transportation programs for highways, safety, and transit; and

WHEREAS, the FAST Act and Code of Federal Regulations establish requirements for the metropolitan transportation planning process, including the development of Transportation Improvement Programs (TIPs); and

WHEREAS, the Transportation Policy Council (TPC) as the Policy Board for the Metropolitan Planning Organization (MPO), has adopted policies and procedures for the selection and prioritization of projects consistent with federal planning requirements; and

WHEREAS, the 2021-2024 Transportation Improvement Program was developed in cooperation with the state and local governments, and local transit providers; and

WHEREAS, opportunity for public comment has been provided per the policies established by the *Public Participation Plan* adopted by the Transportation Policy Council in July 2017; and

WHEREAS, the 2021-2024 Transportation Improvement Program includes statewide project groupings developed in accordance with the Metropolitan Planning regulations and in cooperation with the Texas Department of Transportation; and

WHEREAS, the 2021-2024 Transportation Improvement Program includes a financial summary that demonstrates its compliance with federal regulations regarding financial constraint; and

WHEREAS, the 2045 Regional Transportation Plan, the long-range transportation plan for the Houston-Galveston Transportation Management Area, was adopted in May 2019 by the Transportation Policy Council; and

WHEREAS, the 2021-2024 Transportation Improvement Program was developed from, and is consistent with the 2045 Regional Transportation Plan, as amended, and its air quality conformity determination received Federal Highway Administration concurrence in August 2019.

TPC Agenda Item 06B
Mailout – 06/19/2020

NOW, THEREFORE, BE IT RESOLVED BY THE TRANSPORTATION POLICY COUNCIL FOR THE HOUSTON-GALVESTON TRANSPORTATION MANAGEMENT AREA, THAT THE TXDOT 'GAP PROJECTS' (MPO ID 467/CSJ 0389-07-025, MPO ID 13841/CSJ 0389-05-129, MPO ID 16320/CSJ 1002-01-006, MPO ID 16348/CSJ 0027-08-180 AND MPO ID 17146/CSJ 3538-01-055), THE CITY OF HOUSTON SHEPHERD AND DURHAM MAJOR INVESTMENT PROJECT (MPO ID 18086 AND MPO ID 18417) AND THE CITY OF BAYTOWN GARTH ROAD RECONSTRUCTION AND WIDENING (MPO ID 17096/CSJ 0912-72-359) BE PROGRAMMED IN THE 2021-2024 TRANSPORTATION IMPROVEMENT PROGRAM.

PASSED AND APPROVED this 26th day of June 2020, at a regularly called meeting of the Transportation Policy Council.

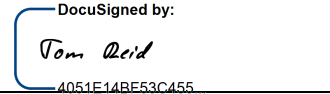
APPROVED:

DocuSigned by:

AEE0EE5C8DEC4CA

Hon. Kenneth Clark, Chairman
Transportation Policy Council

ATTEST:

DocuSigned by:

4051E14BE53C455

Hon. Tom Reid, Secretary
Transportation Policy Council

H-GAC 2021-2024 TIP and 2045 RTP**June 2020 TPC Amendments**

| MPOID/CSJ | Sponsor/County | Project | Proj Type | Proposed Modifications | | | | |
|--|-----------------------------------|--|-----------|------------------------|-------------------------------------|----------|---|---|
| | | | | STIP? | Funding (M) | | Scope | Schedule |
| | | | | | Fed/State | Local | | |
| 467 0389-07-025 | TXDOT HOUSTON DISTRICT (GAL) | SH 146 (FM 519, SL 197) CONSTRUCT SH 146 RR OVERPASS AND WIDEN F... | R | Yes | <input checked="" type="checkbox"/> | + \$34.6 | | <input checked="" type="checkbox"/> FY 2024 to FY 2023 |
| 13841 0389-05-129 | TXDOT HOUSTON DISTRICT (HAR) | SH 146 (N OF FAIRMON..., S OF SPENCER...) WIDEN FROM 4 TO 6 LANES TO REMOVE BOTTLE... | R | Yes | <input checked="" type="checkbox"/> | + \$9.9 | <input checked="" type="checkbox"/> Add to TIP. | <input checked="" type="checkbox"/> FY 2021 |
| 16320 1002-01-006 | TXDOT HOUSTON DISTRICT (BRA) | FM 517 (GALVESTON C/..., SH 35) WIDEN FROM 2 TO 4 LANES WITH CURB AND GU... | R | Yes | <input checked="" type="checkbox"/> | + \$14.5 | <input checked="" type="checkbox"/> Add to TIP. | <input checked="" type="checkbox"/> FY 2024 |
| 16348 0027-08-180 | TXDOT HOUSTON DISTRICT (FOR) | US 90A (AT SH 99,) CONSTRUCT GRADE SEPARATION AND INTERSECT... | O | Yes | <input checked="" type="checkbox"/> | + \$30.1 | <input checked="" type="checkbox"/> Add to TIP. | <input checked="" type="checkbox"/> FY 2022 |
| 17015 0912-72-359 | CITY OF BAYTOWN (HAR) | GARTH RD (IH 10, SH 146) DESIGN CONGESTION AND SAFETY IMPROVEMENT... | R | Yes | <input checked="" type="checkbox"/> | (\$1.3) | (\$0.3) | <input checked="" type="checkbox"/> Cancel. <input checked="" type="checkbox"/> Cancel. |
| 17096 0912-72-359 | CITY OF BAYTOWN (HAR) | GARTH RD (IH 10, S OF ARCHER ...) RECONSTRUCT AND WIDEN FROM 4 TO 6 LANES ... | R | Yes | <input checked="" type="checkbox"/> | + \$17.8 | + \$4.4 | <input checked="" type="checkbox"/> Reduce limits. <input checked="" type="checkbox"/> FY 2022 to FY 2021. |
| 17146 3538-01-055 | TXDOT HOUSTON DISTRICT (MON) | SH 242 (E OF FM 1314, W OF FM 1485) WIDEN FROM 2-LANE TO 4-LANE DIVIDED RURA... | R | Yes | <input checked="" type="checkbox"/> | + \$36.5 | | <input checked="" type="checkbox"/> Add to TIP. <input checked="" type="checkbox"/> FY 2021 |
| 18086 | MEMORIAL HEIGHTS REDEVEL... (HAR) | SHEPHERD-DURHAM ... (IH-610 EB FR, W 15TH ST) Reconstruct roadway and various cross st... | O | Yes | <input checked="" type="checkbox"/> | + \$25.0 | + \$25.0 | <input checked="" type="checkbox"/> Add to TIP. <input checked="" type="checkbox"/> FY 2022 |
| 18417 | CITY OF HOUSTON (HAR) | SHEPHERD-DURHAM ... (W 15TH ST, IH 10 WB FR) Reconstruct roadway and various cross st... | O | Yes | <input checked="" type="checkbox"/> | + \$40.0 | + \$10.0 | <input checked="" type="checkbox"/> Add to TIP. <input checked="" type="checkbox"/> FY 2023 |
| 18656 | CITY OF BAYTOWN (HAR) | GARTH RD (S OF ARCHER ..., N OF CEDAR B...) RECONSTRUCTION AND WIDENING TO 6 LANES W... | R | No | | | | <input checked="" type="checkbox"/> Add to RTP. <input checked="" type="checkbox"/> FY 2024 |
| 18657 | CITY OF BAYTOWN (HAR) | GARTH RD (N OF CEDAR L..., N OF RICELAN...) RECONSTRUCTION AND WIDENING FROM 4 TO 6 ... | R | No | | | | <input checked="" type="checkbox"/> Add to RTP. <input checked="" type="checkbox"/> FY 2025 |
| 18658 | CITY OF BAYTOWN (HAR) | GARTH RD (N OF RICELAN..., S OF BAKER R...) RECONSTRUCTION AND WIDENING FROM 4 TO 6 ... | R | No | | | | <input checked="" type="checkbox"/> Add to RTP. <input checked="" type="checkbox"/> FY 2026 |
| 18659 | CITY OF BAYTOWN (HAR) | GARTH RD (S OF BAKER R..., SH 146) RECONSTRUCTION AND WIDENING FROM 4 TO 6 ... | R | No | | | | <input checked="" type="checkbox"/> Add to RTP. <input checked="" type="checkbox"/> FY 2028 |



CITY OF HOUSTON

Office of the Mayor

HGAC MAILROOM
2020 APR -8 PM 12:13

Sylvester Turner

Mayor

P.O. Box 1562
Houston, Texas 77251-1562

Telephone – Dial 311
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March 24, 2020

Mr. Alan Clark
Director of Transportation Planning
Houston-Galveston Area Council
3555 Timmons Lane, Suite 120
Houston, Texas 77027

Re: Shepherd and Durham Major Investment Project Funding Request

Dear Mr. Clark,

The Shepherd and Durham Major Investment Project (project) is a regionally significant project that addresses every one of our regional transportation priorities: safety, state of good repair, the movement of goods and people, economic competitiveness, and resiliency. The first phase of the project was recently funded through a FY19 BUILD award, an extremely competitive federal discretionary funding program. The City of Houston requests \$40M in H-GAC directed funding to leverage the federal BUILD funds and allow for the completion of the project in its entirety.

For background, in 2018, the project was submitted to the Houston-Galveston Area Council (H-GAC) Call for Projects in the Major Investment category. The submitted project proposed the reconstruction and improvement of the Shepherd and Durham corridor from IH-610 to IH-10. The staff recommendation and Transportation Policy Council (TPC) action yielded only one funding award within that category, for METRO's Inner Katy BRT.

In July 2019, the City of Houston, in partnership with the Memorial Heights Redevelopment Authority (Redevelopment Authority) applied for the project's funding through the FY19 United States Department of Transportation BUILD program. This program is the successor to the TIGER program and is one of the most competitive discretionary funding programs in the nation.

The application, due to BUILD funding limits, requested the maximum award of \$25M to be matched by \$25M in local funding for the northern half of the project, from IH-610 to W. 15th Street, referred to as Phase I. In November 2019, it was announced that the project was selected for funding in the full amount of \$25M. This award is the largest TIGER/BUILD grant the City of Houston has received to date, and the largest award within the State of Texas as a component of the FY19 program.

As a result of this award, the Redevelopment Authority has moved forward with design and environmental activities to prepare the entirety of the corridor for construction (both the funded project limits from IH-610 to W. 15th Street as well as the currently unfunded "southern" project limits from W. 15th St. to IH-10). This was made possible through H-GAC's decision to advance the entire project into the Regional Transportation Plan (RTP) and will create economies of scale associated with the coordination and administrative actions of the design and environmental approval process.

However, at this time, neither the City nor the Redevelopment Authority have the funds available to fund construction phase activities associated with the southern portion of the project, from approximately W. 15th Street to IH-10, known as Phase II. Failure to complete Phase II will leave a gap along the corridor related to safety, accessibility, drainage, and transit access. The transit access element is particularly important as the project will connect to a proposed terminal location for METRO's funded Inner Katy BRT. Furthermore, the entirety of the Shepherd/Durham corridor from IH-610 to US-59 has been reconstructed or is proposed to be reconstructed by various entities, except for the portion between W. 15th and IH-10, or Phase II of this project.

The original request to H-GAC in the 2018 Call for Projects was for \$65M in H-GAC funds to be matched by \$35M in Redevelopment Authority funds. With the \$25M BUILD funding in place, the project can move forward, in its entirety, with only a \$40M investment by H-GAC. This represents a unique opportunity to directly leverage federal discretionary infrastructure investment in the Houston-region, which will deliver a complete project.

H-GAC participation in this project would now result in the following funding framework, which includes an additional \$10M in local funds to match the additional H-GAC funding requested:

| | | |
|---|---------------|-------------|
| City of Houston / Redevelopment Authority | \$35M | 35% |
| USDOT / BUILD | \$25M | 25% |
| H-GAC | \$40M | 40% |
| Total | \$100M | 100% |

The BUILD award validates the regional significance of this project, its benefits, and the bipartisan and broad-based political support it has received. Furthermore, the award and commensurate actions to complete design and environmental work demonstrate the project's readiness. The BUILD funding allocation reduces the total amount of H-GAC and other local resources required to deliver a holistic project, helping to stretch limited regional funds for our regional mobility needs. Finally, the scope of this project helps enhance the benefit of METRO's Inner Katy project and is in alignment with the work that Harris County is doing county-wide related to flood mitigation and transportation connectivity for all users and all modes.

It is for these reasons that the City of Houston requests H-GAC funding support for this regionally significant project.

Sincerely,



Sylvester Turner
Mayor

cc:

Council Member David Robinson, Transportation Policy Council First Vice Chair
Council Member Abbie Kamin, Transportation Policy Council
Council Member Carolyn Evans-Shabazz, Transportation Policy Council
Council Member Sallie Alcorn, Transportation Policy Council

JOHN CORNYN

TEXAS

United States Senate

WASHINGTON, DC 20510-4305

May 15, 2020

Mr. Alan Clark
Director of Transportation Planning
Houston-Galveston Area Council (H-GAC)
P.O. Box 22777
Houston, TX 77227-2777

Dear Mr. Clark:

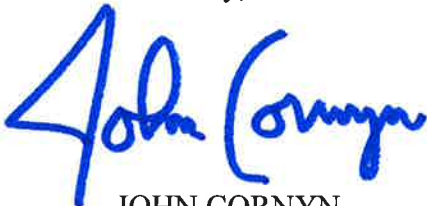
I am writing to express my support for the Memorial Heights Redevelopment Authority's application to the Department of Transportation for the BUILD grant to fund their Shepherd and Durham Major Investment Project – Phase II.

As you and your staff review the proposal, I trust you will give full consideration to the many strengths of this application. As you may know, the remaining project segment, or Phase 2, between approximately W. 15th and White Oak Bayou is presently unfunded. The fulfillment of this Phase will ultimately allow for cohesive multimodal connectivity and safety along the corridor, a fully improved linear drainage system, and provide an important connection to Houston METRO's Inner Katy BRT project. H-GAC funding dedicated to this phase would best leverage USDOT investments towards this corridor and will demonstrate the Houston region's commitment to future large scale USDOT discretionary applications and resultant awards.

I would appreciate your efforts to ensure that I am kept informed of the progress of this application. Please contact Holten Stringer (Holten_Stringer@cornyn.senate.gov), my Grants Coordinator, with any developments regarding this proposal as soon as they are available.

Thank you for your assistance and consideration.

Sincerely,



JOHN CORNYN
United States Senator

DAN CRENSHAW

2ND DISTRICT, TEXAS

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WASHINGTON, DC 20515
202-225-6565

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713-860-1330

Congress of the United States
House of Representatives
Washington, DC 20515-4302

COMMITTEE ON HOMELAND SECURITY

OVERSIGHT, MANAGEMENT,
AND ACCOUNTABILITY
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EMERGENCY PREPAREDNESS, RESPONSE
AND RECOVERY

COMMITTEE ON THE BUDGET

April 16, 2020

Mr. Alan Clark
Director of Transportation Planning
Houston-Galveston Area Council
P.O. Box 22777
Houston, TX 77227-2777

Re: Shepherd and Durham Major Investment Project – Phase II

Dear Mr. Clark,

In 2019, the Memorial Heights Redevelopment Authority, and the City of Houston were successful in their application for BUILD funding to support the reconstruction of Shepherd and Durham Drives between approximately IH-610 and W. 15th Street. The BUILD program, the successor to TIGER, is one of the most competitive United States Department of Transportation (USDOT) discretionary grant programs in the nation. In 2019, 666 applications were submitted requesting \$9.6B in funding. Only 55 projects and \$883M in funds were awarded. The Shepherd and Durham Major Investment project was one of only two projects selected within the State of Texas and received the maximum award amount of \$25M, matched by an additional \$25M of local funds.

The remaining project segment, or Phase 2, between approximately W. 15th and White Oak Bayou is presently unfunded. The fulfillment of this Phase will ultimately allow for cohesive multimodal connectivity and safety along the corridor, a fully improved linear drainage system, and provide an important connection to Houston METRO's Inner Katy BRT project. Unfortunately, local resources are not available to provide for the full \$50M cost of this Phase.

I am writing to express my support for the allocation of H-GAC resources towards Phase 2 of the Shepherd and Durham Major Investment project so that the full benefits of the holistic corridor improvement can be achieved. H-GAC funding dedicated to this Phase would best leverage USDOT investments towards this corridor and will demonstrate the Houston region's commitment to future large scale USDOT discretionary applications and resultant awards.

The BUILD award demonstrates that the USDOT recognizes the reconstruction of Shepherd and Durham are critical components of the transportation infrastructure for the City of Houston, the Houston-Galveston Region, and for the State of Texas; I fully support H-GAC doing the same.

Thank you for your consideration of this letter.

Sincerely,



Dan Crenshaw
Member of Congress



To: James Koch, P.E. - Director of Transportation Planning and Development – Houston TxDOT
 Alan Clark – Director Transportation Planning at HGAC

From: Frank O. Simoneaux, Jr., P.E. - City of Baytown Director of Public Works and Engineering

Date: May 7, 2020

Subject: Garth Road – TIP Funding Revised Project Scope

The City of Baytown (City) applied to the Houston-Galveston Area Council (HGAC) for Transportation Improvement Program (TIP) funding in 2015 for improvements along the Garth Road corridor. Per the original application, the corridor is in a high-growth area where the heavy traffic from local and non-local drivers make this major corridor congested and unsafe. Options for other north/south corridors are limited for temporary and long-term relief of congestion and this is a critical regional project for transportation and drainage improvements.

Original Scope: The original intent of the project was to reduce the congestion and improve safety through widening the corridor and providing subsurface drainage improvements from IH-10 to Baker Road, construct raised medians and sidewalks along the entire corridor from IH-10 to SH 146, and provide dedicated right turn lanes as needed to reduce congestion and improve safety.

Flood Resiliency: Due to the recent extreme flood events, the City is also focused on providing a more flood resilient transportation route for access for the fire department located at the intersection of Garth Road and Cedar Bayou Lynchburg Road and the hospital located at the intersection of Garth Road and Baker Road. Therefore, the City tasked the design team to propose drainage infrastructure that would allow for at least one lane of traffic in both directions of to remain open during the 100-year storm.

Preliminary Engineering Results: The first step of the scope of work was to compile the Preliminary Engineering Report (PER) and have TxDOT review the schematic design of at least three improvement scenarios.

- **Drainage Infrastructure:** Based on the preliminary engineering design, the drainage improvements were found to be much more impactful to the project construction cost than anticipated with the original TIP funding application. Even without the increased flood resiliency discussed above, the need to convert the roadway from a cross section with a roadside ditch to an underground storm sewer system and curb and gutter roadway design was significantly more impactful along the corridor than previously anticipated. When factoring in the required detention to meet Harris County Flood Control District (HCFCD) standards, the drainage infrastructure construction costs were approximately six times greater than previously estimated (\$3.3M pre-project construction cost estimate vs. \$20.7M preliminary engineering construction cost estimate).
- **Roadway Reconstruction:** The required storm sewer improvements will also require a complete reconstruction of Garth Road from IH-10 to just south of Baker Road instead of only the widening of the roadway as previously expected. This revision increases the project paving cost by approximately four times greater than the original requested amount (\$7.8M pre-project construction cost estimate vs. \$33.2M preliminary engineering construction cost estimate).
- **Engineer's Opinion of Probable Construction Cost (EOPCC):** Utilizing the information from the PER, it is estimated that the total project cost will increase from the Total \$21.81M requested in 2015 to \$79.28M in 2020 dollars.



Proposed Project Phasing: With this significant change in project scope and cost due to conditions in the field, the City is requesting an amendment to the scope of work approved in the original TIP application and is requesting additional funding to cover additional projected costs.

The City is proposing to break the project up into six proposed phases outlined in **Table 1** below. Based on the preliminary drainage and traffic engineering, the phasing of design projects will begin at IH-10 and progress to the south to the termination at SH 146.

Garth Road in the areas of Project A and B (between IH-10 and Archer Road) is rapidly developing, and the City requests that the scope of the TIP funded project be amended to include both Projects A and B to expedite this section of the roadway to attempt to complete the improvements in this area by the end of 2023. Based on the current available funding of \$17.50M, Project A alone could almost be fully funded with the current available TIP funds. However, the City would like to request additional funding from the TIP in the amount of \$20.73M (\$16.58 Federal | \$4.15 Local) such that both Projects A and B can be designed at the same time with construction anticipated to begin in 2021 and allowing construction to be complete by the 2023 goal. If Projects A and B are funded, the City will re-compete for additional TIP funding for Projects C through F.

TABLE 1 – PROPOSED PROJECT PHASES

| Proposed Project Phase | Proposed Limits | Project Length (LF) | ROW Required (Acres) | EOPCC* (Million \$) | Proposed Fiscal Year Construction | Total Estimated Inflated Value** (Million \$) |
|------------------------|---|---------------------|----------------------|---------------------|-----------------------------------|---|
| A | IH-10 to Hunt Road | 3,100 | 0.37 | \$18.86 | 2021 | \$19.34 |
| B | Hunt Road to South of Archer Road | 3,465 | 2.31 | \$18.43 | 2021 | \$18.89 |
| C | South of Archer to North of Cedar Bayou Lynchburg Road | 2,770 | 1.87 | \$15.18 | 2024 | \$16.76 |
| D | North of Cedar Bayou Lynchburg Road to North of Riceland Road | 1,710 | 0.22 | \$10.15 | 2025 | \$11.48 |
| E | North of Riceland Road to South of Baker Road | 2,455 | 0.44 | \$11.26 | 2026 | \$13.06 |
| F | South of Baker Road to SH 146 | 6,200 | 0.07 | \$5.40 | 2028 | \$6.58 |

*Engineer's Opinion of Construction Costs (EOPCC's) are in 2020 Dollars with no Engineering Costs

**Inflation is assumed to be 2.5% increase per fiscal year of project start delay after 2020

Engineering and Utility Relocation Costs: The City is also proposing to pay for all engineering and utility relocation costs which would move all federal funds to the construction phase of the projects. The City will still match the 20% of the construction costs as well, meaning the City will be paying much greater than 20% of the project costs.



Additional Considerations: Two other activities that are in process that could impact the construction schedule are Property Acquisition and Environmental Clearance.

- **Property Acquisition:** As of the date of this memo, the required acreage of property to be acquired based on the proposed project phasing is shown in **Table 1** above. The City plans to wait to begin acquiring ROW until after the public hearing as part of the Environmental Clearance process. The City will begin acquiring the ROW with Project A and B and then work to the south. Information to note about property acquisition required for Project A and Project B:
 - **Project A** - 0.25 acres of the 0.37 acres needed for Project A come from the mall development and the City has already begun negotiations with the mall redevelopment team.
 - **Project B** - 2.23 acres of the 2.31 acres needed for Project B are required for the detention pond and a storm sewer easement along the south side of Archer Road to discharge to the proposed detention pond. After the public hearing, the City will begin to coordinate to acquire the necessary ROW.
- **Environmental Clearance:** Based on the preliminary analysis by the environmental engineer on the project, it is anticipated that the entirety of the Garth Road project (Projects A through F) will be filed together and will fall under a Categorical Exclusion (CE). As a key milestone of the environmental clearance process, the City and TxDOT are working towards a June 2020 public hearing. After the public hearing, the remainder of the process should take approximately a year to complete. Therefore, the environmental clearance process is anticipated to be finalized by the fall of 2021 and be complete prior to the bidding of Projects A and B (assuming Projects A and B begin design in the fall of 2020 and bid in the fall of 2021).

Summary of Scope and Funding Revision Request: The City of Baytown requests that the scope of work as previously defined in the 2015 TIP Application be revised to include the construction costs for the reconstruction of Garth Road from IH-10 to just south of Archer Road (defined as Projects A and B in Table 1 above). With this revised scope, the City also requests an increase in TIP funding from \$17.50M to \$38.23M to cover the estimated construction costs associated with both Projects A and B. As mentioned above, the City will pay for all engineering and utility relocation costs in addition to matching the 20% construction costs for Projects A and B.

The City intends to begin engineering design for Projects A and B immediately. The engineering designs for Projects C through F will follow as expeditiously as possible to continue to improve the traffic conditions and improve flood resiliency along the entire corridor as originally intended with the 2015 TIP application. If Projects A and B are funded with this revision, the City will re-compete for additional TIP funding for the construction costs of Projects C through F.