

HARRIS COUNTY

PUBLIC INFRASTRUCTURE DEPARTMENT

1001 Preston, 5th Floor
Houston, Texas 77002
(713) 755-4400

MEMORANDUM

DATE: June 18, 2012

TO: Bill Jackson
County Budget Officer

CC: Art Storey Dave Bechtol John Blount
Rich Elwood Jackie Freeman Peter Key
Mike Talbott Tina Williams

FROM: Charles Dean *CD*
HCPID Planning Manager

SUBJECT: Planning Activities for Capital Improvement Plan – June 2012

The Public Infrastructure Department (PID) consists of the Harris County Toll Road Authority (HCTRA), the Harris County Flood Control District (HCFCD), Architecture & Engineering (A&E), Right-of-Way (ROW), Construction Programs (CPD), and an Executive Division. Earlier this year, Commissioners Court approved Facilities & Property Management to operate as a separate department responsible for general maintenance and repair of facilities, cleaning, and leases. All facilities planning and engineering activities remain the responsibility of A&E and all construction activities remain with CPD. The reports for those entities are presented in the following pages and summarized below.

Important points to be considered during the Capital Projects Review:

- PID requests court approval to establish budget, and report upon a Pay-As-You-Go account that will be used in lieu of commercial paper for certain non-capital PID projects.
- PID requests court action pertinent to the Administration Building. PID recommends spending \$4 million to comply with two safety issues which should prolong occupancy another 5 to 10 years (details on Pages 30 & 31).
- PID requests court approval to purchase a warehouse to be used for relocating occupants and storage from floors 2-13 in the 1301 Franklin Street Jail (details on Page 32).
- PID requests court approval and immediate funding of 8 additional projects, totaling \$9.1 million, mandated by governmental, environmental, regulatory, and safety issues, as well as addressing critical infrastructure needs (details on Pages 30 - 32).
- PID additionally requests court approval of 16 additional priority projects, totaling \$18.7 million, funding for these projects will be coordinated with Budget Management on an as needed basis (details on Pages 32 - 34).

The Flood Control District. The following are recommendations to be considered for the Flood Control District during the Capital Projects Review:

- The District currently has \$193.5 million cash on hand, plus a \$200 million line of credit.
- The District has presented information on the overall funding needs of its flood damage reduction efforts and a recommendation for continued funding at \$200 million annually. However, the District's approach to projects is scalable and allows them to recognize current constraints and prioritize projects to match available resources.
- Budget Management is working with District/PID to develop a tax rate based funding model to determine the rate to be allocated to the District. It is our understanding this model will be presented to court as part of the budget process, and until that process is complete, the District will delay all projects previously scheduled to be funded using their \$200 million line of credit.
- The District will review all previously committed projects that as of yet have not been started, and will use their cash reserve to fund any that cannot be delayed until after Budget Management completes their review.

Behind the District's tab are (1) Director's Memorandum and Supplemental Memorandum and (2) funding summary of the District's capital program. The District's complete report is forwarded under separate cover.

Funding Considerations. The District currently has \$193.5 million available for project funding, plus a \$200 million line of credit. The District has developed a plan and identified the need for funding at \$200 million per year. Priority is usually given to federal participation projects which can bring in at least 50% federal financial participation when federal funds are available. However, budget tightening at the federal level is affecting appropriations and reimbursements on the District's federal partnership projects resulting in increased pressure to supplement funding on current and future projects with additional local resources. PID will work with Budget Management to allow projects to move forward that cannot be delayed while the tax rate based funding model is being developed.

- a. **Flood Damage Reduction.** During the past 12 years, the District has spent nearly \$1.03 billion in flood damage reduction projects. Federal direct spending and reimbursements to the District during this period total \$570.9 million - federal direct spending is \$289 million and reimbursements from the U.S. Army Corps of Engineers and FEMA is \$103.7 million and \$178.2 million, respectively. It is estimated that \$2 billion in damages has been avoided in implementing these projects and the 100-year floodplain has been removed from almost 30,000 structures. In addition, more than 2,000 flood-prone structures that were subject to repetitive losses have been permanently removed from flooding through the Buy-Out Program.
- b. **District Projects and Parks.** Many park and recreation facilities exist on either District or park land. The greenways along the bayous on District property provide some of the best opportunities for parklands, recreation areas, and trails, and are available for community use the majority of the year when not used to store and convey stormwater runoff. Several organizations and environmental groups support the completed joint multi-use projects that demonstrate that flood damage reduction and quality-of-life mutually support each other.
- c. **Future Projects, Goals & Strategies.** The current condition in Harris County suggests that there is a 10 to 20 percent chance that flooding will occur somewhere in the county during any given year (a 5- to 10-year level of protection). Reducing that annual risk to a 4 percent (25-year level of protection) is estimated to cost at least \$12 billion. The cost to achieve a 1 percent (100-year) level of protection is estimated to be at least twice that much. The recommended approach to making significant headway in reducing the risk of flooding is to invest \$200 million annually to acquire property, design and build channels and stormwater detention sites.

The Architecture & Engineering Division. The A&E division is responsible for planning and designing projects for roads, parks, and county buildings. The Director's Memorandum references challenges to the division's ongoing efforts to streamline its project process and improve quality of work. Behind the Roads tab are (1) Director's Memorandum and (2) METRO General Mobility Program summary.

- a. **Roads.** Funding for current road and bridge capital projects primarily consists of the \$190 million in road bonds approved by voters in November 2007, the current METRO general mobility funding program, and the annual allocation transfers from the Toll Road Authority.

The Director's Memorandum indicates in FY 2012-13, \$224.1 million in precinct road capital projects are projected for bidding. Joint participation funding from other agencies (Texas Department of Transportation (TxDOT), METRO, other cities) is expected to be \$99.9 million. The remaining balance of \$124.2 million of county funds will be required for these projects. It is important to continue to adequately fund the road program because projected future growth in the county will create demand for additional roadway capacity.

- b. **METRO General Mobility Program.** METRO's most current funding projections dated October 2011 are included in the attached list of mobility projects. The current METRO General Mobility funding agreement approved by Commissioners Court on September 29, 2009 will expire on September 30, 2014. The METRO Board has begun public discussion on when to schedule a voter referendum to extend, modify, or terminate the General Mobility Program that funds a portion of the precincts' road program.
- c. **Infrastructure Improvements.** An increasing number of county subdivision street and stormwater drainage systems are nearing the end of their design life. Additionally, the City of Houston has changed their annexation policy, and are no longer annexing subdivisions, thus increasing the funding needs required for the County to maintain these systems. PID is developing a model to quantify the financial impact for pavement and stormwater drainage systems that need maintenance and/or reconstruction. A task force, headed by PID and including representatives from court staff, Budget Management, and the County Attorney will review the data once completed, and recommend an appropriate course of action to take to ensure adequate funding is available to maintain and/or reconstruct these systems if the County retains responsibility.
- d. **Buildings.** Behind the Buildings tab is a report describing building projects completed since the June 2011 Capital Projects Review, projects in progress, and detailed description of 63 building projects totaling \$319.8 million. PID has identified and recommends Court approval of 11 projects totaling \$22.1 million, mandated by governmental and environmental requirements. In view of the economic climate, PID has evaluated this list of compiled projects and recommends Court approval of an additional 16 high priority projects, totaling \$18.7 million. These 27 projects, as listed in the Buildings CIP Executive Summary, were selected on the basis of satisfying time sensitive environmental, regulatory and safety issues, as well as addressing critical infrastructure needs. Failure to fund these projects could result in possible fines, building closures, increased damage to our facilities, and continued cost escalations. If approved, PID will coordinate with Budget Management to obtain necessary funding at the appropriate time, as well as continue to review the other listed projects and forward them for Court review as additional funding becomes available.

Toll Road Authority. In 2007, Harris County was granted authority from the State Legislature (Senate Bill 792) to proceed with development of certain tolled highway projects that were deemed critical to our region's continued prosperity. Harris County has now completed one SB 792 project (Sam Houston Tollway Northeast), has completed a Memorandum of Understanding with TxDOT for the development of two more (US 290/Hempstead and SH 288), has negotiated with Union Pacific Railroad and Houston Belt and Terminal Railroad for the purchase of right-of-way with which to construct a fourth project (Hardy Downtown Connector), and has partnered with TxDOT to develop portions of a fifth project, the region's Grand Parkway (SH 99). The development of these projects is a significant step in coping with the demand that has been placed upon the region's transportation infrastructure from population growth in the greater Houston area. HCTRA's recommended development schedule for the next decade allows for the construction of critical projects while responsibly maintaining, improving, and expanding Harris County's current toll road system.

As of March 1, 2012, outstanding debt principal of the Harris County Toll Road Enterprise exceeded \$2.6 billion dollars. While a significant number (HCTRA's ratio of debt to annual revenue is roughly 5 to 1), the agency's financial condition remains strong, allowing Harris County flexibility to deliver future projects. To maintain this flexibility and financial strength, Harris County staff and financial advisors have formulated a funding plan for capital project development that first uses existing system funds and current revenue before utilizing debt financing (proceeds from the sale of revenue bonds). This plan delivers almost two billion dollars of large-scale capital projects over the coming decade (see chart below) without significantly increasing HCTRA's manageable debt to revenue ratio. Behind the Toll Road Authority's tab are (1) HCTRA CIP Program Summary and (2) HCTRA Capital Improvement Projects Map for FY 2013 – 2020.

\$ in Millions

Projects	2013	2014	2015	2016	2017	2018	2019	2020	Estimated Cost
Toll Collection System	\$60								\$60
Hardy Toll Road Downtown Connector (Phase I)	\$190								\$190
Hardy Toll Road Downtown Connector (Phase II)								\$160	\$160
US 290 Managed Lanes	\$50	\$50	\$100	\$100	\$100				\$400
SH 249 (Phase I)	\$40	\$130							\$170
SH 249 (Phase II)	\$10				\$15	\$140			\$165
SH 249 Direct Connector (Southbound to Westbound)		\$25							\$25
SH 288 Toll Lanes									\$0
Sam Houston Tollway Widening (Southeast)	\$10	\$10	\$180						\$200
Sam Houston Tollway Widening (East)	\$1	\$15	\$15		\$200				\$231
Sam Houston Tollway Widening (Ship Channel Bridge)	\$1		\$10	\$10		\$75	\$75		\$171
Hardy Toll Road Widening (FM 1960 to Grand Parkway)			\$10		\$50				\$60
Hardy Toll Road Interchange @ Beltway 8	\$1				\$10	\$10	\$50		\$71
TOTAL	\$363	\$230	\$315	\$110	\$375	\$225	\$125	\$160	\$1,903

Capital Project Descriptions

Hardy Toll Road Downtown Connector (Phase I) - This project consists of purchasing all remaining right-of-way necessary to construct the Hardy Downtown Connector, including right-of-way necessary for the US 59 and Elysian Viaduct connectors. This project also includes the construction of upgraded railroad trackage, bridges at Quitman and Collingsworth, and an underpass at Lorraine Street.

Hardy Toll Road Downtown Connector (Phase II) – This project consists of the construction of the Hardy Downtown Connector from the Hardy Toll Road's current terminus at IH 610 to a reconstructed Elysian Viaduct. Connections will also be constructed between the Hardy Downtown Connector and US 59.

US 290 Managed Lanes - Harris County will provide \$400 million towards TxDOT's reconstruction of US 290 from IH 610 to the Grand Parkway. This project will consist of building a two to three lane reversible managed lane facility to accommodate mass transit, High Occupancy Vehicle (HOV) and toll traffic, as well as adding one general purpose lane in each direction.

SH 249 (Phase I) – This project consists of building six toll lanes (three in each direction) from the current SH 249 terminus just north of Spring-Cypress Road to the Tomball Bypass. The current frontage roads will remain in place and will not be tolled.

SH 249 (Phase II) – This project will extend the SH 249 toll lanes north of the Tomball Bypass to the Harris County line at Spring Creek and points beyond. This project will require partnership with Montgomery County to achieve successful development.

SH 249 @ Sam Houston Tollway (Direct Connector) – This project will construct the direct connector between southbound SH 249 and westbound Sam Houston Tollway.

SH 288 Toll Lanes – This project consists of toll lanes in the median of SH 288 and will be developed by TxDOT following Harris County's waiver of primacy. In addition to the proposed toll lanes, TxDOT will also construct improvements to FM 521 (Almeda), FM 865 (Cullen), and a direct connection between Macgregor Drive and SH 288.

Sam Houston Tollway Widening (Southeast) – This project will continue the widening of the Sam Houston Tollway from its current two lanes in each direction to four lanes in each direction between SH 288 to IH 45, will include the construction of an inside safety shoulder, and will reconstruct tolled entrance and exit ramps.

Sam Houston Tollway Widening (East) – This project will continue the current widening of the Sam Houston Tollway from its existing two lanes in each direction to three to four lanes in each direction between IH 45 and SH 225, will include the construction of an inside safety shoulder, direct connectors at SH 225, and will reconstruct tolled entrance and exit ramps.

Sam Houston Tollway Widening (Ship Channel Bridge) - This project will consist of the construction of a second span across the Houston Ship Channel and should allow for three to four lanes of tollway with full safety shoulders in each direction from SH 225 to IH 10. This project will require extensive collaboration between public agencies to achieve successful development.

Hardy Toll Road Widening (FM 1960 to Grand Parkway) - This project will add a third lane in each direction from FM 1960 to the proposed intersection with the Grand Parkway, just south of the Hardy Toll Road's current terminus at IH 45.

Hardy Toll Road @ Sam Houston Parkway (Interchange) – This project will consist of the construction of direct connectors between the Hardy Toll Road and the Sam Houston Parkway.

This recommended development plan is predicated on four principles:

(1) Harris County continues to authorize funding of operations and maintenance of the Toll Road Authority at responsible levels. This allows HCTRA to maintain the existing toll road system - an aging, urban highway system - in superior condition, and to keep pace with the information technology and customer service demands of the ever-growing EZ TAG program.

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

(3) Not every regional mobility problem is solved with a toll road. Development of toll roads requires extensive use of public funds, and Harris County is best served by having HCTRA develop enterprising projects that have an expectation of financial viability.

(4) HCTRA continues to follow the Harris County Toll Rate Setting Policy, with changes in toll rates corresponding with changes in inflation. For this current fiscal year, toll rates will increase (September 8, 2012) by \$0.10 for EZ TAG users and by \$0.25 for cash users at mainline toll plazas. The toll rate on the Katy Managed Lanes will increase by \$1.00 for a full trip during peak congestion periods.

Harris County is fortunate to be able to fund transportation infrastructure from a local, user-funded system that is not dependent upon federal, state, or local tax dollars to support the HCTRA enterprise. We recommend that Harris County continue to protect the Toll Road Authority from excessive debt, allowing HCTRA to both maintain its financial strength and flexibility, and responsibly fund regional infrastructure for the foreseeable future.

Right of Way for State Highways. Interlocal agreements with TxDOT require the county to fund 10% of all costs associated with right-of-way acquisitions along state highways. TxDOT will be constructing additional capacity projects along several corridors within the county and right-of-way acquisition costs are expected to be substantial. PID will work with Budget Management to identify and establish a reliable source for funding these agreements with TxDOT on projects not associated to HCTRA's toll road network.

Attachments

**Harris County Public Infrastructure
2012 CIP Review
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