

Capital Improvement Program Open House

Transportation Proposed Projects FY2014 – FY2018

June 5, 2013

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Transportation Proposed Projects Summary

Transportation projects are funded from General Obligation Bonds, Certificates of Obligation (CO) and Metro funds.

<u>Bond</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Additional Traffic Signals		\$495,000	\$85,000		
TMC Generator	\$200,000				
Bridge Rehabilitation		\$125,000	\$125,000	\$125,000	
ROW Management			\$150,000		
Pavement Maintenance & Mgmt Program (PMMP)	\$397,000	\$282,000	\$167,000		
Hurricane Lane Extension	\$1,010,000				
Vicksburg Extension	\$3,105,000				
Lexington Extension	\$3,300,000				
Turtle Creek / Mission Valley - Hilton Head		\$2,400,000			



Gregory Reconstruction		\$2,125,000			
Trammel-Fresno Improvements	\$500,000				
Sienna Parkway Recapitalization			\$1,065,000		
Sign Shop Expansion					\$124,075
Intelligent Traffic System (ITS) Improvements	\$490,000	\$410,000			
Lake Olympia Parkway Extension			\$440,000	\$351,479	
Glenn Lakes Bridge Over Oyster Creek		\$1,750,000			
S. Cravens - US 90A to Cangelosi Ditch		\$572,022			
Total for Bond	\$9,002,000	\$8,159,022	\$2,032,200	\$476,479	\$124,075



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Transportation projects are funded from General Obligation Bonds, Certificates of Obligation (CO) and Metro funds.

<u>Metro</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
Traffic Studies	\$ 60,000	\$60,000	\$60,000	\$60,000	\$60,000
GIS-Mapping,Plotter,Flyover,Script	\$ 30,000	\$30,000	\$30,000	\$30,000	\$30,000
Signal Upgrade/Sequencing	\$ 100,000	\$100,000	\$100,000	\$100,000	\$110,738
Sidewalk Replacement	\$ 400,000	\$400,000	\$400,000	\$400,000	\$400,000
Lakeview Infrastructure	\$ 1,100,000	\$1,125,000	\$1,125,000	\$0	\$0
Pavement Maintenance & Mgmt Program (PMMP)	\$ 300,000	\$415,000	\$529,800	\$697,000	\$697,000
Sign Shop Expansion	\$0	\$0	\$0	\$0	\$231,000
Transfer to Gen Fund	\$ 800,000	\$800,000	\$800,000	\$800,000	\$800,000
Rebate - Sienna Plantation MD	\$ 200,000	\$200,000	\$200,000	\$200,000	\$200,000
Total for Metro	\$ 2,990,000	\$3,130,000	\$3,244,800	\$2,287,000	\$2,528,738



Transportation Proposed Projects Summary

Transportation projects are funded from General Obligation Bonds, Certificates of Obligation and Metro funds.

<u>CO</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
S. Cravens - US 90A to Cangelosi Ditch	\$627,977	\$6,000,000		
S. Cravens - Cangelosi Ditch to Buffalo Run	\$600,000		\$1,300,000	
Total for CO	\$1,227,977	\$6,000,000	\$1,300,000	\$0

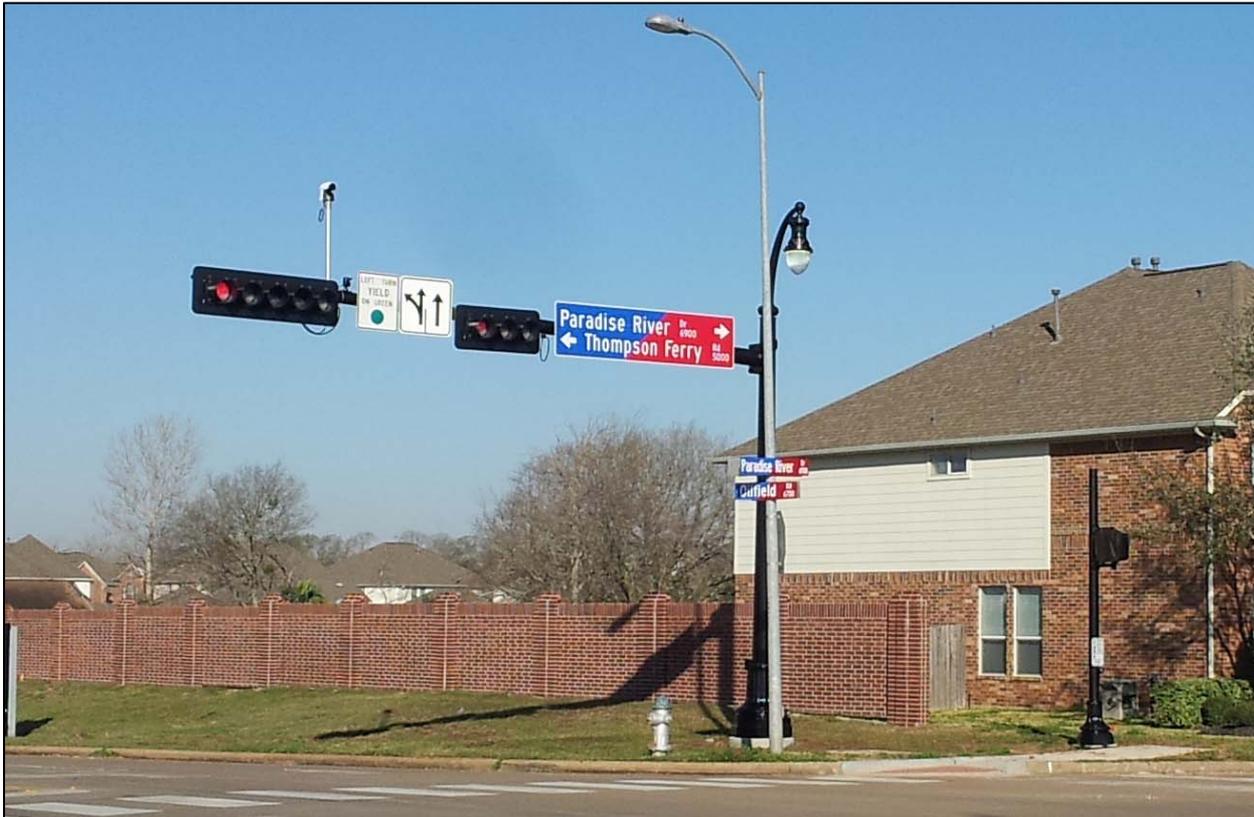


Additional Traffic Signals

<u>Bond</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
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Additional Traffic Signals		\$495,000	\$85,000		
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- Description – Design and construction of traffic signals.
- Justification – Necessary to maintain traffic circulation for future development.
- Status – Funds will be used to construct additional signals on FM1092, FM2234, and SH6 and other roadways as warranted.



Traffic Management Center Generator

<u>Bond</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
TMC Generator	\$200,000				

- Description – Retrofit emergency Generator at Streets Building A to power the Traffic Management Center and kennel portion of the Animal Control Facility.
- Justification – Necessary to maintain traffic management center operation and air conditioning for confined animal during power outages.
- Status – FY 2014 Bond funds will be used to install the emergency generator.



Bridge Rehabilitation

<u>Bond</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
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Bridge Rehabilitation		\$125,000	\$125,000	\$125,000	
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- Description – Design and construct new or repair bridges as needed.
- Justification – Necessary to rehabilitate or replace structures to ensure mobility and provide safe routes for residents as well as public safety vehicles.
- Status – Funds will be used to construct bridge improvements identified in the bridge analysis performed in FY2009.



Right-of-Way Management

<u>Bond</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
ROW Management			\$150,000		

- Description – Purchase of Bucket Truck.
- Justification – Required to manage the street right-of-way and for NPDES Phase II requirements.
- Status – Additional bucket truck is planned to be purchased in FY 2016.



Pavement Maintenance & Management Program

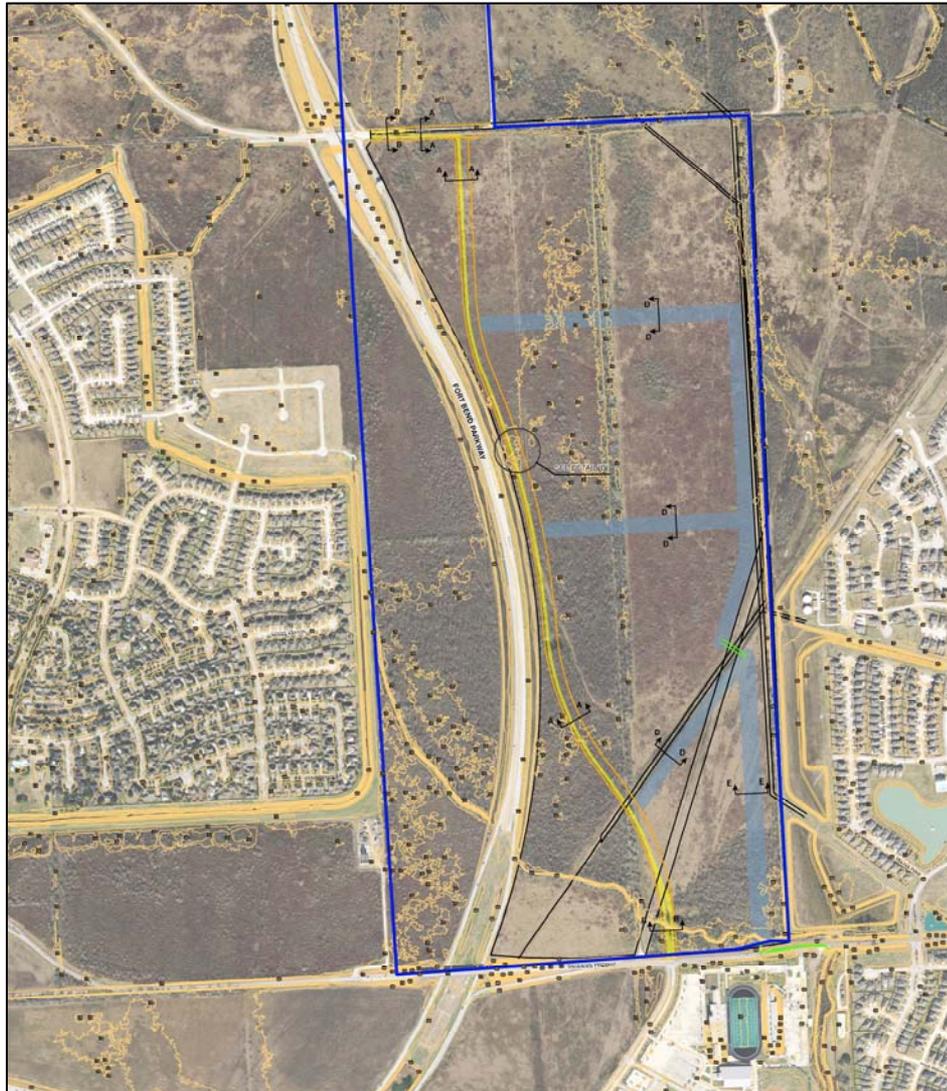
	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
PMMP (Bond)	\$397,000	\$282,000	\$167,000	\$0	\$0
PMMP (Metro)	\$300,000	\$415,000	\$529,800	\$697,000	\$697,000

- **Description** – Maintain existing pavement maintenance and management program (PMMP), including software upgrades, equipment, condition surveys, and street reconstruction and/or overlay.
- **Justification** – Missouri City must maintain City owned streets, which currently consist of approximately 600 lane miles and represent the City's largest asset. Keeping an updated condition survey allows multi-year planning and budgeting for maintenance, rehabilitation and operation of City streets. Reconstruction and overlay expand the lifespan of the streets.
- **Status** – Each year, one-third of city streets are evaluated for updated condition ratings using the Cartegraph system. Ongoing projects include overlaying, removal and replacement, street raising, re-striping, and crack & joint sealing.



Hurricane Lane Extension

<u>Bond</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
Hurricane Lane Extension	\$1,010,000				



- Description – Construct two lanes of four-lane boulevard roadway with shared use path for pedestrians and bicycles, and add fourth leg of traffic signal at Trammel-Fresno. 80% federal funded; CIP estimate above reflects 20% match.
- Justification – Necessary to handle expected traffic demands resulting from new development in the area.
- Status – Project in design phase; construction is expected to begin Summer 2014.

Vicksburg Extension

<u>Bond</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
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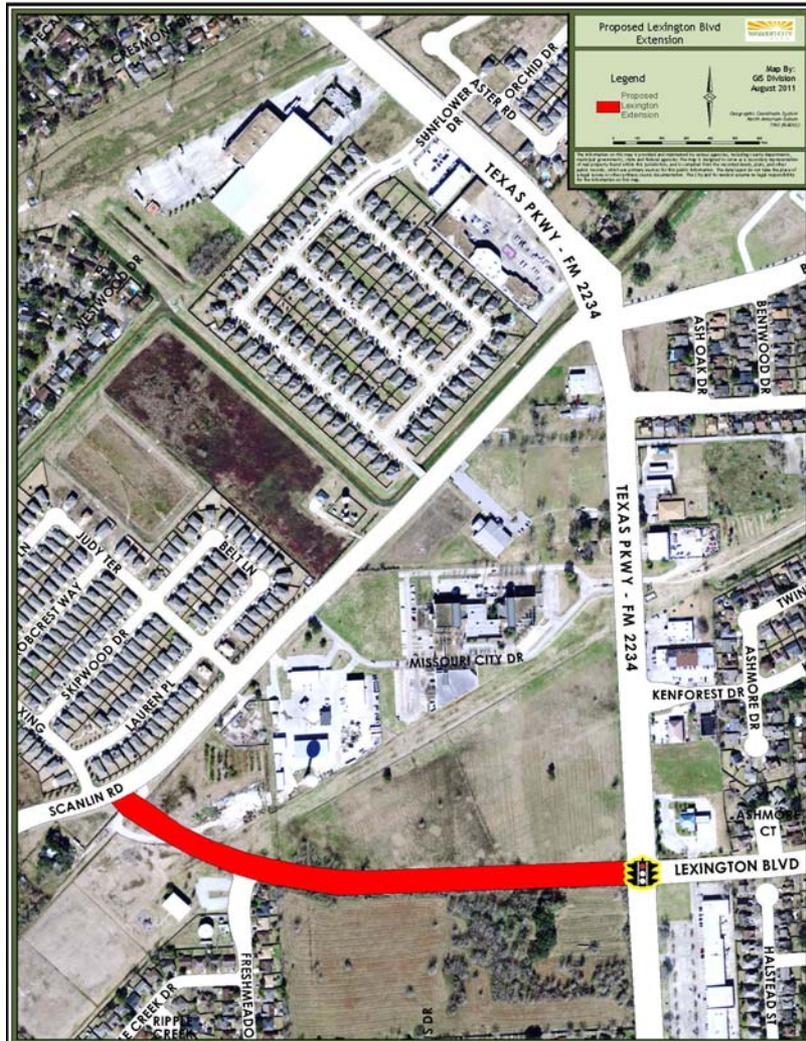
Vicksburg Extension	\$3,105,000				
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- Description – Construct new four-lane boulevard roadway with bicycle lane, sidewalks, and new traffic signal at Lake Olympia Blvd. Funded by Fort Bend County and local MUDs.
- Justification – Necessary to handle expected traffic demands resulting from new development in the area.
- Status – Design was completed in FY2012; construction is planned to start fourth quarter of 2014. Project is primarily funded by Fort Bend County and local Municipal Utility Districts.



Lexington Extension

<u>Bond</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
Lexington Extension	\$3,300,000				



- Description – Construct two lanes of new four-lane boulevard roadway with bicycle lane, sidewalks, and new traffic signal at Texas Parkway. Funded by Fort Bend County.
- Justification – Necessary to handle expected traffic demands resulting from new development in the area.
- Status – Project design initiated in FY2012 by Fort Bend County contribution; construction funding by Fort Bend County to follow in later funding year.

Turtle Creek Reconstruction – Mission Valley to Hilton Head

<u>Bond</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
Turtle Creek – MV/HH		\$2,400,000			

- Description – Reconstruction of 4,500 linear feet of Turtle Creek Drive from Hilton Head to Mission Valley.
- Justification – The roadway has reached its expected service life. Maintenance and rehabilitation are no longer cost effective and complete reconstruction is necessary.
- Status – Design began first quarter of FY2013 and construction is planned for first quarter FY2015.



Gregory Reconstruction - McLain to Fondren

Bond	FY2014	FY2015	FY2016	FY2017	FY2018
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Gregory Blvd.		\$2,125,000			
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- Description – Reconstruction of 8000 linear feet of a four lane facility to a two lane facility with a divided median, sidewalks, bike lanes, LID (Low Impact Development), decorative railings, City monument sign and ADA ramps.
- Justification – The roadway is approaching its expected service life. Maintenance and rehabilitation are not cost effective at this point and complete reconstruction will be necessary.
- Status – Design is underway; HOA meetings will be held to discuss design elements this summer; construction is planned for 2015.



Trammel-Fresno Improvements

<u>Bond</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
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Trammel-Fresno	\$500,000				
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- Description – Widen approximately 1.02 miles of existing two-lane open ditch asphalt roadway to a four-lane concrete curb and gutter, divided roadway with raised medians and storm sewer system from Vicksburg to Fort Bend Toll Road.
- Justification – Necessary to handle expected traffic demands resulting from new development in the area; this segment will complete the overall improvement to Trammel-Fresno Road as Fort Bend County is currently planning to widen Trammel-Fresno Road from the east side of the Fort Bend Toll Road to FM 521.
- Status – Project is at 50% design; TxDOT is scheduled to construct summer FY2014. \$358,960 of FY2014 funds are intended to match federal funding.



Sienna Parkway Recapitalization

<u>Bond</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
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Sienna Parkway Recapitalization			\$1,065,000		
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- Description – Construct various improvements along Sienna Parkway, including: additional turn lanes, acceleration lanes, and other intersection improvements.
- Justification – Improvements are identified in the City's Traffic Management Plan as being necessary to handle increasing turning movements as traffic grows in the area.
- Status – Design and construction will take place in FY2016.



Sign Shop Expansion

	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
Sign Shop Expansion (Bond)					\$124,075
Sign Shop Expansion (Metro)					\$231,000

- Description – Design and construct expansion to Building C, Traffic Control, to better utilize space as a sign shop.
- Justification – Necessary to accomplish planned transportation projects and improve our support facilities.
- Status – FY2018 funds will be utilized for design and construction of an expansion to the sign shop.



Intelligent Transportation System (ITS) Improvements

<u>Bond</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
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ITS Improvements	\$490,000	\$410,000			
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- Description – Various improvements such as: communication reliability upgrade, DMS & CCTV cameras, and advance warning flasher for train crossings, are proposed for future Transportation Improvement Program funding, which requires 20% local match.
- Justification – Upgrading the City's intelligent traffic system will continue to improve mobility and safety for the community.
- Status – FY 2014 funds will be utilized to prepare design documents and FY 2015 funds will be utilized to match TIP funding awarded May 2013.



Lake Olympia Parkway Extension

<u>Bond</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
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Lake Olympia Parkway Extension			\$440,000	\$351,479	
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- Description – Construct remaining two traffic lanes and esplanade section from existing terminus to Fort Bend Toll Road.
- Justification – Improvements are identified in the City's Traffic Management Plan as being necessary to handle increasing traffic as the area is developed.
- Status – Design of the roadway is anticipated to occur in FY2016 with construction following in FY2017.



Glenn Lakes Bridge Over Oyster Creek

<u>Bond</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
Glenn Lakes Bridge		\$1,750,000			

- Description – Design and construct replacement of Glenn Lakes Bridge over Oyster Creek.
- Justification – Necessary to rehabilitate or replace structures to ensure mobility and provide safe routes for residents as well as public safety vehicles.
- Status – Funds will be used to perform engineering design and then construct a new bridge in place of the aged structure.



South Cravens – US90A to Cangelosi Ditch

	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
S. Cravens - Bond		\$572,022			
S. Cravens – CO		\$627,977	\$6,000,000		

- **Description** – Widen existing asphalt open ditch road to minimum three lane concrete road with slotted curb, and construct new four lane bridge over Cangelosi Ditch and widen ditch to ultimate condition to accommodate improvements.
- **Justification** – Upgraded facilities are needed to accommodate pending growth in the area.
- **Status** – Design for this phase and section to Buffalo Run will be designed as one package to take advantage of economies of scale. Construction is planned in FY 2016.



South Cravens – Cangelosi Ditch to Buffalo Run

	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
S. Cravens – CO		\$600,000		\$1,300,000	

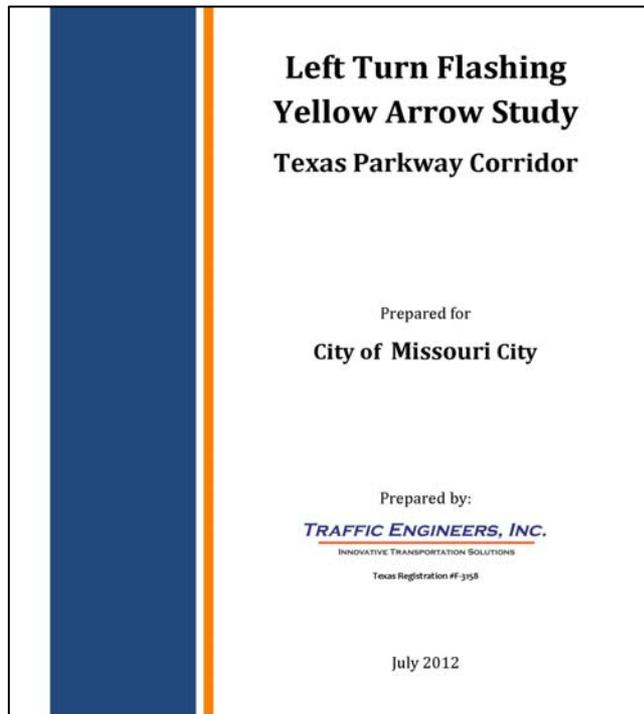
- Description – Widen existing two-lane concrete road to minimum three lanes.
- Justification – Upgraded facilities are needed to accommodate pending growth in the area.
- Status – Design for this phase and previous will be designed as one package to take advantage of economies of scale. Construction is planned in FY 2017.



Traffic Studies

<u>Metro</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
Traffic Studies	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000

- Description – Professional engineering services to identify traffic improvements with small traffic studies, speed studies, signal warrant analysis, and school zone studies.
- Justification – Necessary to predict future transportation facility requirements and maintain or improve existing facilities.
- Status – Ongoing projects for FY2014 include traffic signal retiming and localized studies as needed.

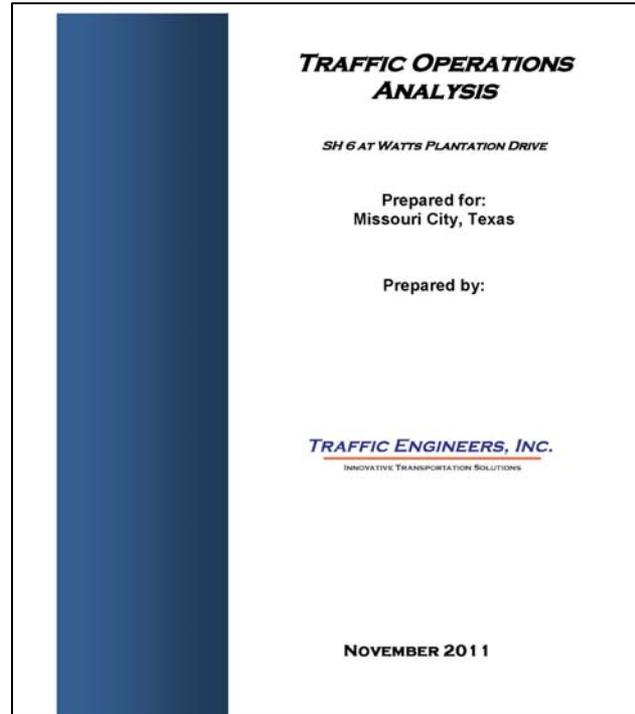


**Left Turn Flashing
Yellow Arrow Study**
Texas Parkway Corridor

Prepared for
City of Missouri City

Prepared by:
TRAFFIC ENGINEERS, INC.
INNOVATIVE TRANSPORTATION SOLUTIONS
Texas Registration #F-3958

July 2012



**TRAFFIC OPERATIONS
ANALYSIS**

SH 6 AT WATTS PLANTATION DRIVE

Prepared for:
Missouri City, Texas

Prepared by:

TRAFFIC ENGINEERS, INC.
INNOVATIVE TRANSPORTATION SOLUTIONS

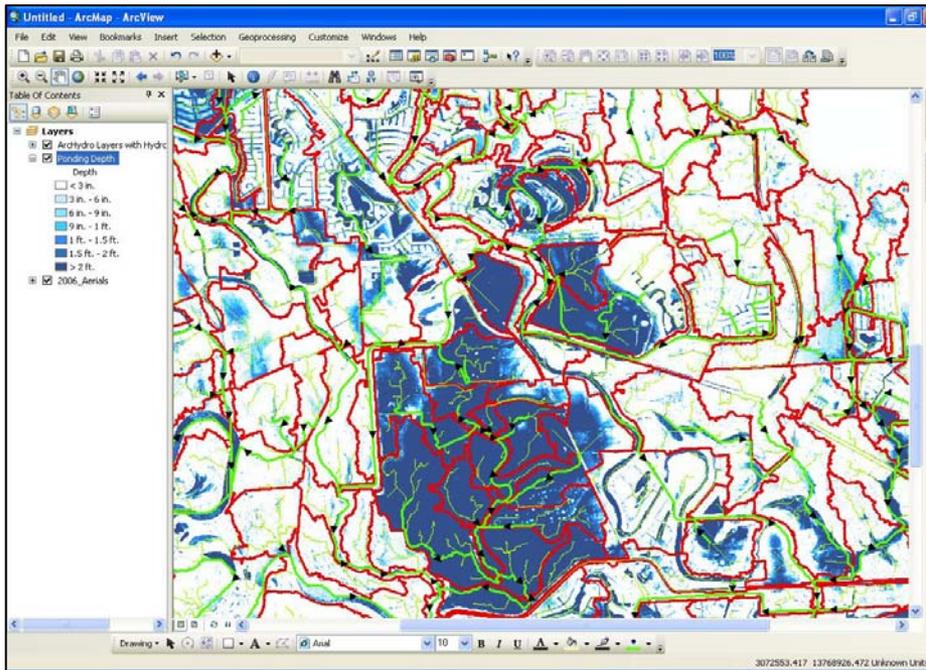
NOVEMBER 2011



GIS-Mapping,Plotter,Flyover,Script

<u>Metro</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
GIS	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000

- Description – Updated GIS software, consulting services, and updated flyover (ortho photos).
- Justification – Necessary to maintain efficient GIS service to support City functions.
- Status – Funds will be utilized to update GIS software as needed.



Signal Upgrades / Sequencing

<u>Metro</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
Signal Upgrade/Seq.	\$100,000	\$100,000	\$100,000	\$100,000	\$110,738

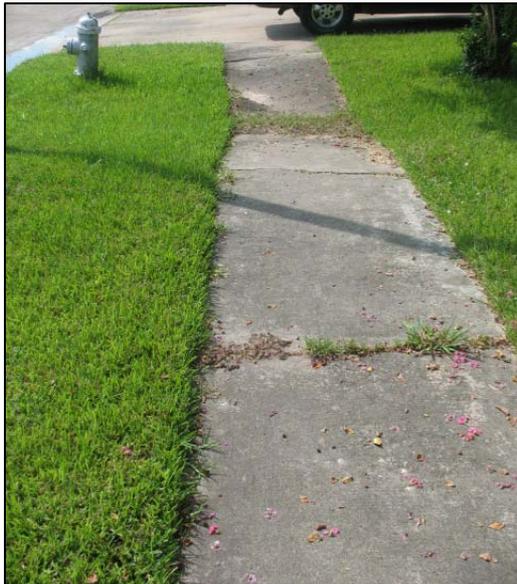
- Description – Ongoing upgrading of equipment on existing signals on major thoroughfares for use with City's Intelligent Transportation System (ITS), which provides city-wide sequencing and control of all signals.
- Justification – Necessary, due to increasing population density, to improve intersection capacity and improve mobility.
- Status – Funds will be used to maintain the city's signal and Intelligent Transportation systems as needed.



Sidewalk Replacement

<u>Metro</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
Sidewalk Replacement	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000

- **Description** – Sidewalk repair program to remove, repair, lift, grind, or install optional material like decomposed granite and rubberized sidewalk sections. Some repairs may include root pruning and/or tree removal. Tree and/or root damage to sidewalks in public right-of-way may require adjacent property owner to mitigate.
- **Justification** – To maintain public infrastructure in the public right-of-way. Alleviate undue hardship of adjacent property owner to maintain sidewalks in public right-of-way.
- **Status** – Repairs throughout the city have begun in FY2008 and will continue throughout FY2018.



Lakeview Business Park Infrastructure

<u>Metro</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>FY2017</u>	<u>FY2018</u>
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Lakeview Infrastructure	\$1,100,000	\$1,125,000	\$1,125,000		
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- Description – This project will construct an internal roadway to serve the Lakeview Business Park.
- Justification – Boost economic development in the City by providing a destination for industrial & distribution type companies. A preferable site ready to locate new business within.
- Status – Reimbursement to developer is expected FY2014 through FY2016 for Phase 2.

