

Appendix 13

TCM Timely Implementation

**Appendix 13:
Transportation Control Measures**

A Transportation Control Measure (TCM) commitment is a transportation investment or activity in the State Implementation Plan (SIP) designed to reduce on-road vehicle emissions. Failure to demonstrate timely implementation of TCMs contained in the SIP can result in disapproval of our air quality conformity determination. All emissions are calculated using Texas mobile source emissions reductions strategies (MoSERS) and emissions factors from MOBILE6.

All TCMs from the applicable SIPs have been implemented. TCM emission credits are not applied to this conformity. Please refer to the individual project listing for more information on these TCMs.

"2000 SIP"	NAME: POST-1999 RATE-OF-PROGRESS AND ATTAINMENT DEMONSTRATION SIP ID NUM: 2000-0826-SIP EPA APPROVAL DATE: 11/14/2001 FEDERAL REGISTER CITATION: 66 FR 57195
"2005 MCR"	NAME: REVISIONS TO THE STATE IMPLEMENTATION PLAN (SIP) FOR THE CONTROL OF OZONE POLLUTION ID NUM: 2004-042-SIP-NR EPA APPROVAL DATE: 9/6/2006 FEDERAL REGISTER CITATION: 71 FR 52670
"2006 Substitution"	NAME: TRANSPORTATION CONTROL MEASURE SUBSTITUTION FOR HOUSTON-GALVESTON-BRAZORIA 2006 TCEQ REFERENCE: http://www.tceq.texas.gov/airquality/mobilesource/tcm_hgb.html

Appendix 13: Transportation Control Measures

Originally reported in	Project Type	Project ID	Sponsor Agency	Street	From Location	To Location	Project Description	Operational Year/ Completed By	SIP Operational Deadline	VOC tpd	Nox tpd	Total Cost
2000 SIP	Bike/Ped	2273	City of Missouri City	TR 1-11	Various		Construct hike & bike trail	2007	2007	0.0002	0.0003	\$2,376,000
2000 SIP	Bike/Ped	2281	City of Missouri City	TR 12-21	Various		Construct hike & bike trail	2007	2007	0.0002	0.0003	\$2,397,600
2000 SIP	Bike/Ped	2795	City of Houston	Halls Bayou bike trail	Little york at pinewood park	Mesa Rd @ Lake Forest Park	Hike and bike trails along Halls Bayou	2007	2007	0.0010	0.0015	\$7,697,400
2000 SIP	Bike/Ped	2927	City of Alvin	Alvin Mustang Trail	N Alvin C/L	S Alvin C/L	Construct Alvin Mustang Trail System of Brazoria County	2003	2007	0.0014	0.0020	\$1,798,000
2000 SIP	Bike/Ped	2929	City of Houston	West white oak bayou trail ext	pinemont	tidwell	west white oak bayou trail extension	2007	2007	0.0004	0.0006	\$2,252,880
2000 SIP	Bike/Ped	2930	City of Houston	Columbia tap rail to trail	Dixie	Polk	Construct Columbia Tap Rail to trail bikeway	2007	2007	0.0002	0.0003	\$2,293,000
2000 SIP	Bike/Ped	2931	City of Houston	Sims Bayou Trail	Rosenhaven St at Scottcrest Park	IH 45	Construct Sims Bayou Trail	2006	2007	0.0005	0.0007	\$1,296,000
2000 SIP	Bike/Ped	2934	Harris County Precinct 2	North Channel hike & bike trail	Woodforest blvd (south)	Wallisville Rd (north)	Construct hike & bike trail	2007	2007	0.0001	0.0002	\$984,269
2000 SIP	Bike/Ped	3061	City of Houston	N Houston on-street bkwy ntwrk - ph 1			Construct on-street bikeway network (N of LP 610) (TCM Commitment)	2001	2007	0.0255	0.0361	\$1,746,000
2000 SIP	Bike/Ped	3062	City of Houston	SE Houston on-st bike network	Between Griggs & Edgbrook	Between S Wayside & Allen Genoa	Bike SE Houston on-street bikeway network (inside LP 610) (TCM commitment)	2006	2007	0.0021	0.0003	\$2,235,000
2000 SIP	Bike/Ped	3063	City of Houston	W Houston on-st bikeway - PH 1			Bike W Houston on-street bikeway - PH 1 (TCM Commitment)	2001	2007	0.0017	0.0024	\$1,220,000
2000 SIP	Bike/Ped	3064	City of Houston	Buffalo Bayou Trail	Shepherd Dr	Sabine	Bike trail on Buffalo Bayou parallel to Memorial Dr & Allend Pkwy	2007	2007	0.0001	0.0002	\$2,820,050
2000 SIP	Bike/Ped	3065	City of Houston	Herman Brown Park Trail	w/I Herman Brown Park	Dunvegan way at Mercury Dr & westshire at IH10	Bike & Hike trail thru Herman Brown Park Ph 1 (TCM commitment)	2001	2007	0.0002	0.0002	\$611,000
2000 SIP	Bike/Ped	3066	City of Houston	VA	Houston heritage corr-RR trestle	Johnny Goyen Pk along white oak bayou	hike and bike tril (houston heritage corridor bayou trails west, segment 1)	2007	2007	0.0003	0.0005	\$3,421,436
2000 SIP	Bike/Ped	3069	City of Baytown	Baytown Hike & Bike Trail	Arizona St	Market St	Construct Hike & Bike Trail (phase 2)	2006	2007	0.0001	0.0002	\$1,526,890
2000 SIP	Bike/Ped	3071	City of Houston	TMC/Greenway plaza/Galleria on-street bike			Med Ctr/Greenway plaza/ Galleria access on-street bikeway network- east seg ph 1 (TCM SIP Commitment)	2001	2007	0.0017	0.0024	\$1,277,400
2000 SIP	Bike/Ped	3072	City of Houston	VA	Dixie bridge near Herman Park	Mason Park at Tipps St	on-street bikeway improvements	2007	2007	0.0013	0.0018	\$4,889,000
2000 SIP	Bike/Ped	3074	City of Houston	W White Oak Bayou Trail	11th St	S of Pinemont	Construct W White Oak Bayou Trail (TCM SIP Commitment)	2001	2007	0.0003	0.0004	\$2,602,000

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2000 SIP	Bike/Ped	3075	City of Houston	Harrisburg/Sunset rails to trails	Chenevert	75th Street and Buffalo	Harrisburg/sunset rails to trails - phase 1 (TCM SIP Commitment)	2000	2007	0.0003	0.0004	\$2,075,000
2000 SIP	Bike/Ped	4069	The District	Woodlands Town Center	Lake Robbins	Grogans Mill	Construct pedestrian bridges @ Lake Robbins & woodstead	2005	2007	0.0006	0.0011	\$2,350,000
2000 SIP	Bike/Ped	5050	City of Houston	White Oak/Katy Trail	14th st	Main	bike trail/Lane on Roads & RR ROW	2006	2007	0.0004	0.0005	\$2,136,000
2000 SIP	Bike/Ped	5051	City of Pearland	FM 518	Westminister	Riverside Dr	Construct sidewalk/bike path	2007	2007	0.0002	0.0004	\$321,727
2000 SIP	Bike/Ped	5052	City of Conroe	FM 2854 & LP 336			Add striping for on-street bike lane	2007	2007	0.0002	0.0004	\$366,231
2000 SIP	Bike/Ped	5053	City of Baytown	VA	Goose creek park - Goose creek trail	Garth	Construct pedestian path along Goose creek	2007	2007	0.0001	0.0002	\$1,070,581
2000 SIP	Bike/Ped	5056	City of League City	SH 96	IH 45	FM 1266	Construct hike/bike trail along SH 96	2007	2007	0.0003	0.0004	\$757,500
2000 SIP	Bike/Ped	5057	City of League City	FM 518	Perkins	Illinois	Construct pedestrian sidewalk along FM 518	2007	2007	0.0002	0.0003	\$425,000
2000 SIP	Bike/Ped	5058	City of Rosenberg	SH 36	US 90A	Seabourne Creek Park	Construct 5' sidewalk to provide a connection between US 90A and Seabourne Creek Park	2007	2007	0.0005	0.0008	\$651,726
2000 SIP	Bike/Ped	6085	City of Houston	VA	VA	VA	West Houston on-street bikeway network phase 2	2007	2007	0.0001	0.0002	\$800,000
2000 SIP	Bike/Ped	7003	City of Houston	TMC/Greenway plaza/Galleria on-street bike			TMC/Greenway plaza/ Galleria access on-street bikeway network- east seg ph 1 (TCM SIP Commitment)	2000	2007	0.0019	0.0026	\$440,000
2000 SIP	Bike/Ped	7004	City of Houston	TMC/Greenway plaza/Galleria on-street bike			TMC/Greenway plaza/ Galleria access on-street bikeway network- east seg ph 1 (TCM SIP Commitment)	2000	2007	0.0018	0.0026	\$1,734,700
2000 SIP	Bike/Ped	7005	City of Houston	TMC/Greenway plaza/Galleria on-street bike			Access on-street bikeway network - phase 2	2003	2007	0.0007	0.0010	\$1,198,300
2000 SIP	Bike/Ped	7006	City of Houston	Harrisburg/Sunset rails to trails			Harrisburg/sunset rails to trails - phase 2	2003	2007	0.0006	0.0009	\$952,000
2000 SIP	Bike/Ped	7007	City of Houston	N Houston on-street bkwy ntwrk - ph 2			Construct on-street bikeway network (phase 2)	2004	2007	0.0003	0.0004	\$313,000
2000 SIP	Bike/Ped	9351	City of Houston	Keegans Bayou Trail	Gessner	City Limits near Synott	Construct hike & bike trail	2006	2007	0.0002	0.0004	\$5,027,858
2000 SIP	Bike/Ped	9841	City of Houston	Herman Brown Park Trail	W/I Herman Brown Park	E of FM 526 & S to IH 10	Bike & hike trail through Herman Brown Park Phase 2	2007	2007	0.0002	0.0002	\$768,497
2000 SIP	Bike/Ped	9902	City of Houston	West Brays Bayou bike trail west segment A	550' N of bissonet	1500' W of IH 610 (west loop)	construct bike trail	2007	2007	0.0006	0.0008	\$4,875,822
2000 SIP	Bike/Ped	9954	City of Baytown	Goose Creek Trail (Phase 2)	S of Market St	W of Texas Ave	Construct hike/bike trail	2006	2007	0.0003	0.0005	\$1,156,250
2000 SIP	Bike/Ped	9987	City of Houston	CBD Access on-street bikeways	North Segment		CBD access on-street bikeway network (TCM SIP Commitment)	2001	2007	0.0016	0.0023	\$2,076,965
2000 SIP	Bike/Ped	9988	City of Houston	CBD Access on-street bikeways	South segment - PH 1		CBD access on-street bikeway network (TCM SIP Commitment)	2000	2007	0.0028	0.0039	\$1,282,474

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2000 SIP	Bike/Ped	9989	City of Houston	CBD Access on-street bikeways	South segment - PH 2		CBD access on-street bikeway network (Phase 2)	2002	2007	0.0002	0.0003	\$156,600
2000 SIP	INTMDL	2445	Port of Houston Authority	Barbours Cut Queue lanes	Along George Altwater Rd	Barbours Cut Blvd	Construct queuing lanes along George Altwater Road/Traffic crossover to barbours cut blvd	2003	2007	0.0019	0.0042	\$3,903,000
2000 SIP	INTMDL	9534	Port of Houston Authority	Deer Park Junction Terminal	At Strang Yard		Construct Port of Houston Lead Track segment 3 at Strang Yard	2002	2007	0.0024	0.0033	\$14,882,830
2000 SIP	ITS	1012	TXDOT	IH 45 S	61 St ST	S of SH 6	Install CTMS	2002	2007	0.0024	0.0053	\$3,856,000
2000 SIP	ITS	1013	TXDOT	IH 45 N	N of Crighton	LP 336 N	Install CTMS	2007	2007	0.0018	0.0040	\$2,610,000
2000 SIP	ITS	1014	TXDOT	IH 45 N	Rankin Rd	Cypresswood	Install CTMS (TCM SIP Commitment)	2002	2007	0.0042	0.0092	\$3,596,000
2000 SIP	ITS	1015	TXDOT	IH 45 N	Harris C/L	Tamina Rd	Install CTMS (TCM SIP Commitment)	2004	2007	0.0020	0.0044	\$2,318,660
2000 SIP	ITS	1016	TXDOT	IH 45 S	S of SH 6	Harris C/L	Install CTMS	2002	2007	0.0072	0.0158	\$10,345,000
2000 SIP	ITS	1019	TXDOT	SH 249	Westlock	BW 8	Install CTMS	2007	2007	0.0036	0.0079	\$5,833,000
2000 SIP	ITS	1026	TXDOT	SP 330	IH 10	LP 201 (SH 146)	Install CTMS	2007	2007	0.0024	0.0053	\$2,283,000
2000 SIP	ITS	1027	TXDOT	US 59 SW	W Bellfort	Fort Bend C/L	Install CTMS	2007	2007	0.0037	0.0082	\$423,152
2000 SIP	ITS	1028	TXDOT	US 59 N	.28 MI N of Saunders	IH 610	Install CTMS	2002	2007	0.0019	0.0042	\$1,082,654
2000 SIP	ITS	1029	TXDOT	US 59 N	BF 1960A	Montgomery C/L	Install CTMS	2007	2007	0.0011	0.0023	\$1,783,000
2000 SIP	ITS	1030	TXDOT	US 59 SW	Bell St	S Shepherd	Install CTMS	2007	2007	0.0015	0.0033	\$2,162,000
2000 SIP	ITS	1031	TXDOT	US 59 SW	Harris C/L	SH 6	Install CTMS	2006	2007	0.0014	0.0031	\$1,426,204
2000 SIP	ITS	1032	TXDOT	US 59 N	Greens Bayou	.28 MI N of Saunders	Install CTMS	2002	2007	0.0027	0.0059	\$3,027,731
2000 SIP	ITS	1095	TXDOT	BW 8	SH 249	IH 45	Install signal coordination system	2002	2007	0.0207	0.0160	\$1,900,000
2000 SIP	ITS	1103	TXDOT	SH 146	Mccabe Rd	Tyler St	Install CRMS - incl surveillance sys, communicatn sys, satellite computer FAC & monitoring contrl	2003	2007	0.0009	0.0020	\$1,204,650
2000 SIP	ITS	1119	TXDOT	SH 6	US 59	Brooks St	Synchronization & interconnection	2001	2007	0.0001	0.0001	\$50,000
2000 SIP	ITS	1120	City of Sugar Land	SH 6	Lexington Blvd	Austin Pkwy	Synchronization and interconnection	2001	2007	0.0004	0.0003	\$150,000
2000 SIP	ITS	1121	City of Sugar Land	Lexington Blvd, Austin pkwy, Sweetwater blvd			Synchronization and interconnection of traffic signals	2006	2007	0.0066	0.0146	\$600,000
2000 SIP	ITS	1124	City of Sugar Land	Dulles Ave	SH 6	US 90A	Synchronization & innerconnection	2001	2007	0.0023	0.0018	\$285,000
2000 SIP	ITS	3010	TXDOT	SH 225	SH 134	Strang Rd	Install computerized transportation management system	2002	2007	0.0015	0.0034	\$2,270,000
2000 SIP	ITS	9527	TXDOT	IH 10 E	San Jacinto St	Meadow St	Install computerized traffic management system	2003	2007	0.0013	0.0030	\$600,000
2000 SIP	ITS	9532	TXDOT	US 59 N	.136 MI S of BF 1960A	Greens Bayou	Install CTMS	2002	2007	0.0040	0.0088	\$2,172,654
2000 SIP	ITS	9533	TXDOT	US 59 N	IH 610	.019MI N of Bell St	Install CTMS	2005	2007	0.0019	0.0043	\$2,470,000
2000 SIP	ITS	9536	TXDOT	IH 45 N	Tamina	.966 KM N of Creighton	Install CTMS	2007	2007	0.0028	0.0060	\$3,956,000

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2000 SIP	P&R	3039	Fort Bed County	SH 36	US 59		Phase 1: FY98 Conduct PE for fairgrounds Park & Ride	2005	2007	0.0037	0.0052	\$62,500
2000 SIP	P&R	4090	Gulf Coast Center	VA	Various		Park & Ride services to Houston: Operating Costs for Yr 1	2006	2007	0.0032	0.0045	\$400,000
2000 SIP	P&R	4091	Gulf Coast Center	VA	Various		Park and ride services - PH 2	2007	2007	0.0032	0.0045	\$420,000
2000 SIP	P&R	5097	The District	VA	various		FY99- provide operation of 6 add'l buses to serve research forest P&R expansion	2001	2007	0.0011	0.0015	\$600,000
2000 SIP	P&R	9756	Fort Bed County	SH 36	SH 36 - Fairgrounds P&R	US 59	Phase 2: Construct Fairgrounds P&R (250 spaces)	2007	2007	0.0037	0.0052	\$1,695,930
2000 SIP	RCTSS	1007	TXDOT	IH 10 W	Studemont	San Jacinto	Install CTMS	2003	2007	0.0010	0.0023	\$1,255,000
2000 SIP	RCTSS	1008	TXDOT	IH 10 E	Meadow St	SP 330	Install CTMS	2000	2007	0.0024	0.0052	\$6,177,062
2000 SIP	RCTSS	1011	TXDOT	IH 45 S	W of 59th St	61st St	Install Arterial Traffic mgmt system @ Galveston Causeway	2004	2007	0.0003	0.0007	\$65,000
2000 SIP	RCTSS	1020	TXDOT	SH 35	14th St	SH 36	Install Arterial Traffic mgmt system	2006	2007	0.0009	0.0019	\$178,000
2000 SIP	RCTSS	1023	TXDOT	SH 6	FM 2004	FM 519	Install ATMS	2000	2007	0.0009	0.0020	\$183,000
2000 SIP	RCTSS	1034	TXDOT	US 90	FM 359 W	FM 359E	Install Arterial Traffic Management system	2003	2007	0.0004	0.0008	\$289,879
2000 SIP	RCTSS	1071	TXDOT	US 59 SW	W of S Kirkwood	Ramps at SP 41/ Sugar Crk Blvd	upgrade fixed time to actuated signals	2001	2007	0.0017	0.0037	\$40,000
2000 SIP	RCTSS	1072	TXDOT	US 59 SW	Ramps at SP 41/Sugar creek blvd	SH 6	upgrade fixed time to actuated signals	2001	2007	0.0001	0.0002	\$150,000
2000 SIP	RCTSS	1117	City of Sugar Land	Williams trace blvd	US 59	SH 6	Signalization, synchronization & interconnection	2001	2007	0.0031	0.0067	\$265,000
2000 SIP	RCTSS	1118	City of Sugar Land	Williams trace blvd	SH 6	Austin Pkwy	Signalization, synchronization & interconnection	2001	2007	0.0025	0.0056	\$215,000
2000 SIP	RCTSS	1825	TXDOT	IH 45 N	Cypresswood	Montgomery C/L	Install CTMS	2004	2007	0.0016	0.0034	\$2,409,000
2000 SIP	RCTSS	3089	Montgomery Co	Lake Woodlands	NE Mill Entrance	Kuykendahl rd	ATMS: signal synchronization	2007	2007	0.0051	0.0112	\$2,125,000
2000 SIP	RCTSS	3090	Mongomery County	Research Forest	IH 45	Kuykendahl	Signal Synchronization	2000	2007	0.0049	0.0108	\$593,521
2000 SIP	RCTSS	3091	Montgomery Co	Sawdust/Grogans Mill	IH 45	Research forest blvd	ATMS: signal synchronization	2007	2007	0.0037	0.0081	\$1,015,000
2000 SIP	RCTSS	3092	Montgomery County	Woodlands Pkwy	IH 45	Cochrans Crossing	Signal Synchronization	2000	2007	0.0003	0.0006	\$572,527
2000 SIP	RCTSS	9846	TXDOT	FM 529	Huffmeister Rd	Barker-Cypress Rd	install ATMS	2001	2007	0.0044	0.0097	\$393,513
2000 SIP	TDM	3049	H-GAC	VA	various		Telecommuting 3 year pilot program (FY1998-2000)	2000	2007	0.0039	0.0055	\$358,845
2000 SIP	TDM	9417	H-GAC	VA	various		Regional vanpool program (FY2000)	2002	2007	0.0316	0.0445	\$1,387,500
2000 SIP	TDM	9790	H-GAC	VA	various		Regional commute alternatives program - implementation (FY1998)	2001	2007	0.0316	0.0445	\$1,250,000

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2000 SIP	TDM	9927	H-GAC	VA	various		Regional commute alternatives program - implementation (FY2000)	2002	2007	0.0316	0.0445	\$3,439,040
2000 SIP	TDM	9945	H-GAC	VA	various		Regional commute alternatives program - implementation (FY2001)	2002	2007	0.0316	0.0445	\$5,049,090
2000 SIP	TDM	9975	H-GAC	VA	various		Regional commute alternatives program - implementation (FY2002)	2002	2007	0.0316	0.0445	\$4,177,188
2000 SIP	TDM	9978	The District	Woodlands Town Center	IH 45	Grogans Mill	Purchase 4 small alt-fueled vehicles	2005	2007	0.0006	0.0011	\$1,250,000
2000 SIP	TDM	9980	METRO	VA	CBD	Dome project	High Capacity Transitway project	2004	2007	0.0159	0.0223	\$300,000,000
2000 SIP	TSM	206	TXDOT	US 290	1488 M E of mason rd	1394 M E of mason rd	Construct grade separation	2003	2007	0.0012	0.0017	\$8,500,000
2000 SIP	TSM	470	TXDOT	IH 45 S	at El Dorado		Widen Bridge *	2003	2007	0.0057	0.0079	\$2,000,000
2000 SIP	TSM	1144	TXDOT	BU 90-U	IH 610 E	BW 8 E	Continuous left turn lanes	2007	2007	0.0074	0.0144	\$2,500,000
2000 SIP	TSM	1151	TXDOT - Beaumont Dist	LP 573	Boulevard St	Boothe St	Construct Continuous left turn lane by removing median	2004	2007	0.0012	0.0023	\$500,000
2000 SIP	TSM	1152	TXDOT - Beaumont Dist	US 90	East St	Tennessee St	Construct continuous left turn lane	2004	2007	0.0012	0.0024	\$375,000
2000 SIP	TSM	2971	City of Pasadena	BW 8	SH 225		intersection redesigns	2006	2007	0.0007	0.0010	\$1,090,000
2000 SIP	TSM	2986	City of Houston	Westheimer	Wilcrest		Intersection Improvements	2003	2007	0.0001	0.0002	\$150,000
2000 SIP	TSM	2993	TXDOT	BW 8	Richmond Ave & Westheimer		Add RT turn lanes	2002	2007	0.0012	0.0022	\$500,000
2000 SIP	TSM	3006	TXDOT	IH 45 N	at FM 1097		Improve intersection & widen bridge	2000	2007	0.0015	0.0029	\$2,000,000
2000 SIP	TSM	3007	TXDOT	IH 610	At N Shepherd, N Durham and Ella Blvd		Construct U-turns	2000	2007	0.0006	0.0009	\$680,000
2000 SIP	TSM	3012	TXDOT	SH 288	CR 44		Grade separation	2003	2007	0.0027	0.0038	\$5,000,000
2000 SIP	TSM	3013	TXDOT	SH 288	FM 2004		Construct Grade separation of mainlanes on Sh 288 over FM 2004	2003	2007	0.0070	0.0113	\$7,953,500
2000 SIP	TSM	5082	TXDOT	SH 288	CR 220		Construct grade separation	2004	2007	0.0019	0.0027	\$5,000,000
2000 SIP	TSM	6070	Port of Houston Authority	Fairmont Pkwy	UPRR		construct grade separation	2007	2007	0.0001	0.0002	\$10,084,727
2000 SIP	TSM	6099	TXDOT	US 290	Badtke Rd	.52 Mi E of Roberts Rd	Interim diamond interchange w/ rural frontage roads	2004	2007	0.0019	0.0038	\$8,939,933
2000 SIP	TSM	7000	TXDOT	US 290	.52 MI E of Roberts Rd	.72 MI E of Becker Rd	Interim diamond interchange w/ rural frontage roads	2004	2007	0.0015	0.0029	\$11,814,766
2000 SIP	TSM	7001	TXDOT	US 290	.37 MI E of Becker Rd	.75 MI E of Bauer Road	Interim diamond interchange w/ rural frontage roads west of Bauer	2005	2007	0.0020	0.0038	\$11,935,232
2000 SIP	TSM	7033	TXDOT	SH 99	.24 MI S of Highlands Knolls Dr	Harris C/L	Construct grade separation	2006	2007	0.0004	0.0005	\$6,473,310

*Project ID 470: Provide a second 2-lane bridge dedicated to EB traffic, reducing congestion delay and eliminating an operational bottleneck

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2000 SIP	TSM	7034	TXDOT	SH 99	Fort bend C/L	.15 Mi S of IH 10	Construct grade separation	2006	2007	0.0004	0.0005	\$11,329,098
2000 SIP	TSM	7270	TXDOT	SH 36	at Fritzella	Needville M.S. & H.S.	Widen Subgrade ACP overlay and pavement markings (precious cargo program)	2002	2007	0.0006	0.0009	\$127,000
2000 SIP	TSM	7292	TXDOT	FM 1464	FM 1093	.320 MI S of West Oaks (W Oak Village)	Widen subgrade ACP overlay pavement markings and traffic signal (left turn channel)	2002	2007	0.0033	0.0046	\$443,700
2000 SIP	TSM	7295	TXDOT	FM 1488	At new magnolia high school		Widen pavement for left and right turn channelization and flashing beacons	2001	2007	0.0009	0.0017	\$485,000
2000 SIP	TSM	7315	TXDOT	SH 75	League line rd etc		Add left turn lane and traffic signal	2001	2007	0.0011	0.0024	\$220,000
2000 SIP	TSM	11367	TXDOT	SH 35	SH 288	Walker street	Continuous left turn lane, shoulder and overlay	2004	2007	0.0015	0.0032	\$230,000
2005 MCR	Bike/Ped	2936	TXDOT	Texas City Trls - PH 2	College of the mainland	Bay St Park (E TX City)	Construct hike & bike trails	2000	2007	0.0006	0.0008	\$1,600,933
2005 MCR	Bike/Ped	5059	City of Seabrook	Todville Rd	Pine gully park	Miramar Park	Construct 15' hike/bike trail parallel to Todville	2002	2007	0.0001	0.0002	\$218,160
2005 MCR	Bike/Ped	7025	TXDOT	Aldine Mail Route	.5 Mi W of John F Kennedy Blvd	US 59	Install Sidewalks	2006	2007	0.0002	0.0002	\$852,568
2005 MCR	Bike/Ped	7298	TXDOT	FM 2004	Neville St	Schiro St	Place sidewalks	2004	2007	0.0007	0.0014	\$117,000
2005 MCR	Bike/Ped	7644	Harris County	Lyons School Rd	Stuebner Airline	Blue & Gold Rd	Pedestrian walkway	2004	2007	0.0002	0.0003	\$207,900
2005 MCR	Bike/Ped	10946	TXDOT	Hempstead Rd	N of N Post Oak	S of N Post Oak	Construct two pedestrian shelters foundations with pedestrian rails	2004	2007	0.0003	0.0007	\$80,000
2005 MCR	P&R	3041	TXDOT	University Blvd	Sugarland		Construct park & ride	2002	2007	0.0033	0.0048	\$1,252,360
2005 MCR	P&R	4068	The District	Research forest P&R lot	Research forest P&R lot		Construct research forest park & ride expansion	2004	2007	0.0037	0.0052	\$1,150,000
2005 MCR	P&R	5096	The District	Research forest P&R	Various		Provide operation of 6 buses to serve research forest P&R expansion FY 1998	2000	2007	0.0011	0.0015	\$600,000
2005 MCR	P&R	10224	The District	Woodlands pkwy (near)	at Kuykendahl, John Cooper Dr & Branch Crossing		Construction of park & ride facility	2006	2007	0.0088	0.0125	\$6,393,000
2005 MCR	P&R	10225	The District	Woodlands pkwy	Park & Ride		The Woodlands Parkway Park & Ride (Phase II) 400-space lot	2007	2007	0.0059	0.0083	\$1,500,000
2005 MCR	TSM	270	TXDOT	US 59 SW	.681 KM W of S Kirkwood Dr	Ramps @ SP 41/ Sugarcreek Blvd	Widen to 8 lanes with HOV & FRTG Rds at ultimate location	2004	2007	0.0010	0.0015	\$32,756,000
2005 MCR	TSM	2049	TXDOT	At BN&SF and UP RR in Rosenberg			Railroad grade separation and approaches	2003	2007	0.0002	0.0003	\$2,200,000
2005 MCR	TSM	6090	TXDOT	BS 288B	At UP RR in Clute		Construct RR grade separation and approaches	2004	2007	0.0003	0.0005	\$10,000,000
2005 MCR	TSM	7283	TXDOT	FM 359	At Lamar Consolidated ISD Campus		Add right and left turn lane	2002	2007	0.0011	0.0022	\$355,825

Appendix 13: Transportation Control Measures

Originally reported in	Project Type	Project ID	Sponsor Agency	Street	From Location	To Location	Project Description	Operational Year/ Completed By	SIP Operational Deadline	VOC tpd	Nox tpd	Total Cost
2005 MCR	TSM	9720	TXDOT	US 59 SW	Ramps at SP 41/sugarcreek blvd	.682 KM E of Williams Trace Blvd	Widen to 8 main lanes with HOV & FRTG Rds at ultimate location & TMS **	2002	2007	0.0012	0.0035	\$29,136,000
2005 MCR	TSM	9840	TXDOT	US 90	At Krenek Rd		Grade Separation	2003	2007	0.0024	0.0053	\$2,973,800
2005 MCR	TSM	10574	TXDOT	FM 1093	IH 610	SH 6	Wesheimer Corridor Improvements - phase 1 ***	2006	2007	0.0244	0.0505	\$3,125,000
2006 Substitution	Bike/Ped	41	TXDOT	FM 518	FM 1266	SH 146	Widen to 4-lane divided curb & gutter includes 10-ft wide bikeway	2009	2007	0.0005	0.0004	\$6,186,249
2006 Substitution	Bike/Ped	42	TXDOT	FM 518	FM 2094	FM 1266	Widen to 4-lane divided curb & gutter includes 10-ft wide bikeway	2009	2007	0.0003	0.0003	\$11,732,012
2006 Substitution	Bike/Ped	73	TXDOT	FM 529	Huffmeister Rd	US 290	Widen to 6 lane divided W/ continuous left turn lane & traffic management system includes 3.33 MI long 5-FT wide bile lanes in each direction	2001	2007	0.0004	0.0003	\$10,332,000
2006 Substitution	Bike/Ped	937	TXDOT	FM 529	Barker Cypress Rd	1.44 MI W of Barker Cypress Rd	Widen to 4 lanes with continuous left turn lane and replace bridge includes 1.21 MI long 5-FT wide bike lanes in each direction	2005	2007	0.0006	0.0005	\$6,190,000
2006 Substitution	Bike/Ped	986	City of Pearland	Pearland Pkwy	BW 8	FM 518 in Pearland	Construct new 4-lane extension including 2.3 MI pedestrian sidewalk	2004	2007	0.0002	0.0002	\$17,970,000
2006 Substitution	ITS	1094	TXDOT	BW 8	US 90A	E of SH 249	Install computerized traffic management system	2008	2007	0.0001	0.0002	\$85,000
2006 Substitution	ITS	1098	TXDOT	BW 8	W of IH 45	US 90A	Install computerized traffic management system	2008	2007	0.0002	0.0002	\$0
2006 Substitution	Bike/Ped	1721	City of Pearland	SH 35	John Lizer	Industrial	Sidewalk/bike path	2001	2007	0.0001	0.0001	\$0
2006 Substitution	Bike/Ped	1722	City of Pearland	FM 518	SH 35	Westminster	Sidewalk/bike path	2005	2007	0.0001	0.0002	\$178,541
2006 Substitution	Bike/Ped	1723	City of Pearland	FM 518	CR 91	SH 288	Sidewalk/bike path	2005	2007	0.0001	0.0001	\$137,500
2006 Substitution	Bike/Ped	1724	City of Pearland	Magnolia	Pearland Parkway	Veterans	Sidewalk/bike path	2003	2007	0.0005	0.0004	\$708,960
2006 Substitution	Bike/Ped	1725	City of Pearland	Barry Rose	FM 518	Pearland Pkwy	Sidewalk/bike path	2005	2007	0.0002	0.0004	\$658,175
2006 Substitution	Bike/Ped	3033	City of Lake Jackson	Oyster Creek Trail	N. Dixie Dr	SH 332	Construct hike & bike trail	2007	2007	0.0002	0.0002	\$9,372,110
2006 Substitution	Bike/Ped	7062	City of Angleton	Pedestrian Walkway	in Angleton		Construct pedestrian walkway in Angleton	2006	2007	0.0004	0.0003	\$14,993,428
2006 Substitution	TSM	7251	TXDOT	P 149	At FM 1488		Left turn channelization and traffic signal	2003	2007	0.0003	0.0002	\$10,060,000
2006 Substitution	TSM	7252	TXDOT	LP 494	At Community Dr		Left turn channelization and traffic signal	2003	2007	0.0005	0.0008	\$917,339
2006 Substitution	TSM	7253	TXDOT	LP 494	At Green Farris Rd		Left turn channelization and traffic signal	2003	2007	0.0057	0.0061	\$0
2006 Substitution	TSM	7284	TXDOT	FM 518	SH 35	Pearland Ave	Continuous left turn lane, shoulder overlay	2003	2007	0.0115	0.0116	\$0

** Project ID 9720: Widen to 8 main lanes with HOV & FRTG Roads at ultimate location & TMS. Also includes intersection improvements.

*** Project ID 10574: Westheimer Corridor Improvements-phase 1: including median closures, median channelizations, left turn bay extension & signal improvement

Appendix 13: Transportation Control Measures

Originally reported in	Project Type	Project ID	Sponsor Agency	Street	From Location	To Location	Project Description	Operational Year/ Completed By	SIP Operational Deadline	VOC tpd	Nox tpd	Total Cost
2006 Substitution	TSM	7320	TXDOT	SH 105	At Longview St		Add left turn lane	2001	2007	0.0005	0.0004	\$0
2006 Substitution	TSM	7370	TXDOT	SH 36	FM 360 & Colony/ Needville-Fairchilds Rd		Left turn channelization and traffic signal	2003	2007	0.0004	0.0003	\$0
2006 Substitution	TSM	7394	TXDOT	SH 35	At BS 35C N & S, FM 2917, CR 192, SP 28 & CR 46		Install left turn lanes	2004	2007	0.0103	0.0227	\$10,935,000
2006 Substitution	Bike/Ped	7599	City of Pearland	Cullen	FM 518	FITE @ CR 98	Construct 4-lane includes sidewalk/bike path (Ends @ northfork)	2005	2007	0.0072	0.0158	\$8,280,000
2006 Substitution	TSM	7788	City of League City	FM 518 Bypass	FM 518-FM 2094 / FM 270		Intersection improvements @ 3 intersections	2006	2007	0.0034	0.0075	\$3,750,000
2006 Substitution	Bike/Ped	9845	TXDOT	FM 529	Huffmeister Rd	Barker-Cypress Rd	Widen to 6 lane divided curb & gutter & TMS includes 5-FT wide on street bike route	2001	2007	0.0011	0.0025	\$700,000
2006 Substitution	Bike/Ped	9904	City of Sugarland	University Blvd	Commonwealth blvd	US59 in Sugarland	Construct 4 lane divided roadway on new location includes 12-FT wide bikeway 1.55 MI in length	2003	2007	0.0100	0.0118	\$0
2006 Substitution	Bike/Ped	10364	City of Houston	Holly Hall & Ardmore			Medical Center Galleria Phase 3 Bike Trail	2006	2007	0.0186	0.0157	\$0
2006 Substitution	TSM	10391	TXDOT	SH 35	At NASA Rd 1		Lengthen left turn lane	2003	2007	0.0005	0.0010	\$288,300
2006 Substitution	ITS	10535	HCTRA	BW 8	E of SH 249	E of Hardy Toll Road	Install computerized traffic management system	2008	2007	0.0007	0.0012	\$210,000
2006 Substitution	ITS	10536	HCTRA	BW 8	W of IH 45	Genoa-Red Bluff	Install computerized traffic management system	2008	2007	0.0006	0.0011	\$240,000
2006 Substitution	TSM	10714	TXDOT	FM 518	At Clearview Ave		Left turn channelization and traffic signal	2004	2007	0.0004	0.0007	\$680,000
2006 Substitution	TSM	10720	TXDOT	FM 2100	At Wold Rd		Left turn channelization and traffic signal	2004	2007	0.0004	0.0008	\$120,000
2006 Substitution	Bike/Ped	13200	Harris County	Baker Reservoir Trail	Barker Clodine Rd	Nobile Rd	George Bush Park/ Barker Reservoir Hike/Bike Trail	2013	2007	0.0011	0.0024	\$602,800
2006 Substitution	Bike/Ped	13201	Harris County	Terry Hershey Park	SH 6	BW 8	Terry Hershey Park Hike/bike trail	2005	2007	0.0020	0.0044	\$1,520,000
2006 Substitution	Bike/Ped	13460	City of Houston	TC Jester	11th Street	Washington Ave	Bike route	2003	2007	0.0018	0.0035	\$2,600,000
2006 Substitution	Bike/Ped	13461	City of Houston	Dixie Drive	Tierwester	Almeda	Bike route	2003	2007	0.0004	0.0008	\$80,300
2006 Substitution	P&R	13462	Metro	West Bellfort P&R			Expansion of Park & Ride 608 spaces	2003	2007	0.0009	0.0033	\$109,000
2006 Substitution	P&R	13463	Metro	Westchase P&R			Expansion of Park & Rideby 1468 spaces	2004	2007	0.0007	0.0014	\$255,100
								TOTAL		0.5450	0.8609	