

HOUSTON DISTRICT OVERVIEW

Texas Transportation Commission

Woodlands, TX

September 27, 2012



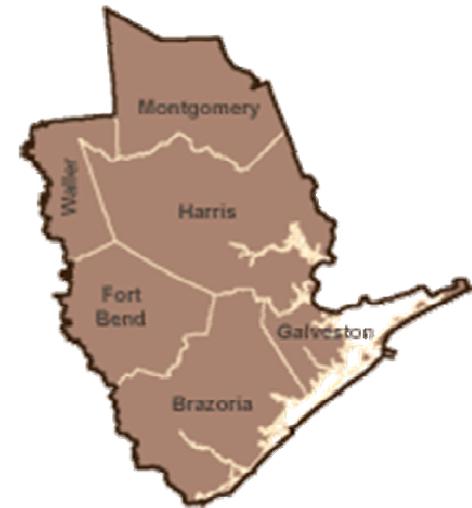
Presented by
Mike Alford, P.E.
Houston District Engineer



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District Demographics and Stats

- Plans, designs, builds, operates and maintains the state transportation system in the following **6** Counties.
- Encompasses **5,856** square miles.
- Serves about **5.7 million** people.
- Approximately **4.6 million** registered vehicles
- Current FTE Count is 974
- 7 Area Offices & 9 Maintenance Sections



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Projects of Statewide Significance

- Three of the “Top 10” Major Projects

- US 290, Grand Parkway, SH 288



- Four of Seven Projects Authorized for CDA Development (SB-1420)



- SH 99/Grand Parkway, US 290, SH 288 & SH 249

- 31 of the 100 Most Congested Roadways

2012	2011 Rank	Road Name	From To	
			From	To
3	13	IH 45	IH 610	SL 8
7	6	US 59	IH 10	SH 288
8	18	US 59	SH 288	IH 610
10	16	IH 45	IH 10	IH 610
12	10	IH 45	IH 10	IH 610
14	15	IH 610	UA 90	IH 10
16	9	IH 610	IH 10	IH 45
18	20	US 290	FM 529	IH 610
21	31	US 59	IH 610	SL 8
23	38	SH 288	US 59	IH 610
24	12	IH 10	SL 8	IH 610 West
25	24	IH 10	IH 610	IH 45



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Regional Priorities

- 1** U.S. 290 Corridor
• Added capacity/Non-toll project

- 2** Proposed Hempstead Tollway
• Toll/Managed-lanes project

- 3** Proposed SH 99/Grand Parkway
(Segments A-12)
• Toll project

- 4** I-45 North Freeway Corridor
• Added capacity/Managed lanes
– Non-toll project

- 5** SH 288 Corridor
• Toll/Managed-lanes project

- 6** U.S. 59/Southwest Freeway
(Harris County)
• Non-toll project

- 7** U.S. 59/Southwest Freeway
(Fort Bend County)
• Added capacity – Non-toll project

- 8** Proposed SH 35 Corridor
(Harris/Brazoria Counties)
• Toll/Managed-lanes project

- 9** Proposed SH 249 Corridor
• Toll/Managed-lanes project

- 10** I-10 West (SH 6 - Brazos River)
• Added Capacity/Managed Lanes



Fiscal Years 2013 and 2014*

- Planned letting volume includes:
 - State Highway Fund, Prop 12, Prop 14, Pass Through Finance, Local Funds and Texas Mobility Funds.
- FY 2013 planned letting volume is \$1.546 Billion
 - Not including SH 99 Segments F-1, F-2 and G.
- FY 2014 planned letting volume is \$456 Million



**Currently planned volumes as of September 2012*

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Proposition 12 Funding

- July 2009, the TX State Legislature authorized TxDOT to go to contract on approx. \$2 billion of [Proposition 12](#) voter-approved bonds for non-tolled highway projects.
- Nov 2009, TTC allocated a total of \$441 million to 2 projects in the Houston District
 - Contracts Awarded May 2011
 - IH 610/US 290 Interchange Reconstruction (a portion)
 - Prop 12 Funding (Design, Constr & ROW) = \$315 M
 - IH 45 South from Kurland to S. of FM 2351
 - Prop 12 Funding (Construction & ROW) = \$127 M



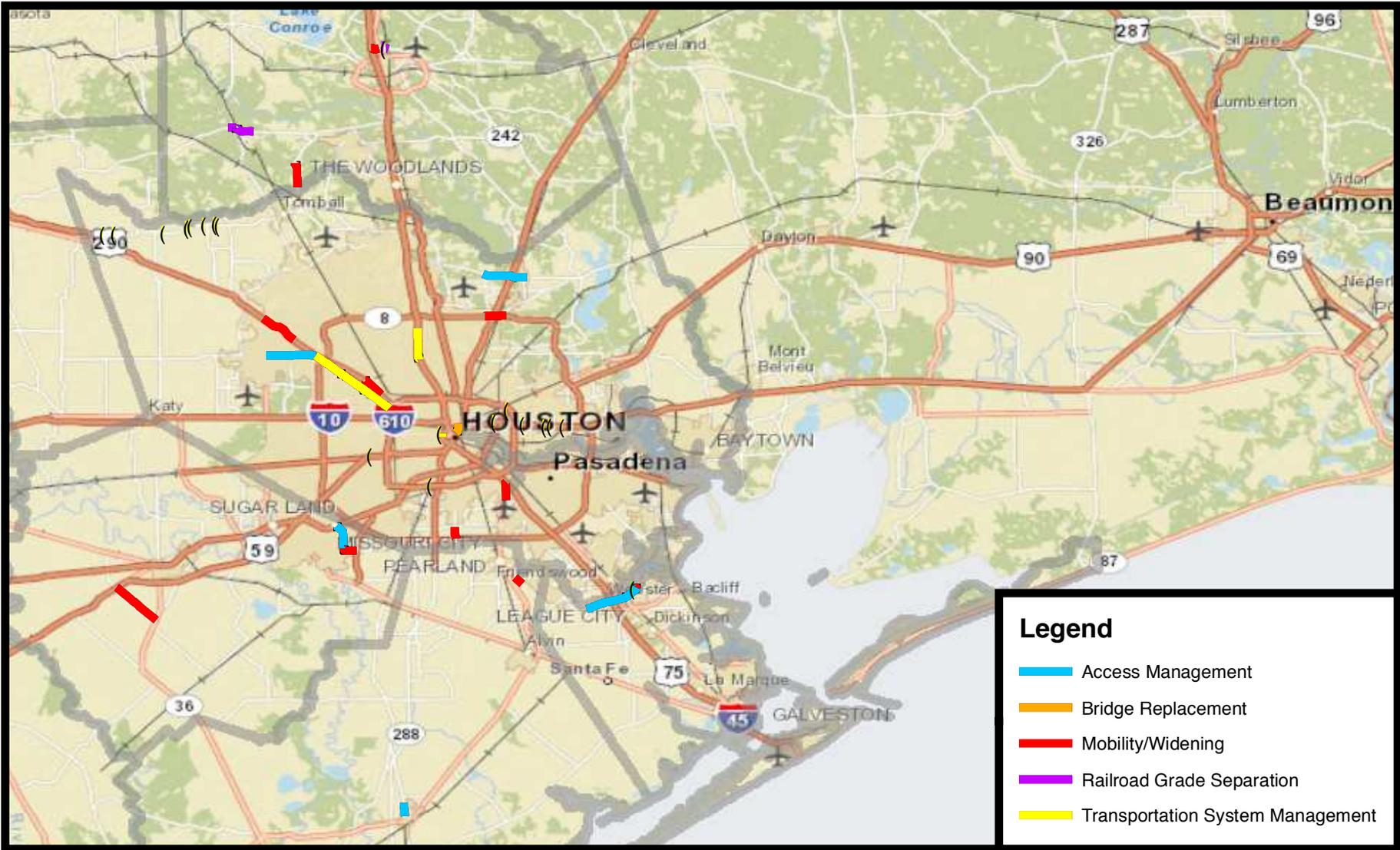
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Proposition 12 V2 (Rider 42)

- Reflects the remaining \$3 Billion in bonds approved by voters in 2007 and funded by the legislature in 2011.
- The TxDOT Houston District and the Houston-Galveston Area Council have approximately \$312 Million in V2 construction funds.
- The TxDOT Houston District also received \$116 Million for ROW/Engineering for projects in the top 50 of the Top 100.
 - In 2010, Houston led the list of the 100 most congested roadways with two of the top segments: **IH 45** (Beltway 8 North - IH 610/North Loop) and **US 59** (IH 610/West Loop - SH 288)



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Legend

- Access Management
- Bridge Replacement
- Mobility/Widening
- Railroad Grade Separation
- Transportation System Management

Proposition 12 V2 -



TxDOT's \$2 Billion Program

- Houston District received \$530 Million.
 - US 290 Corridor - \$411 Million
 - FM 2234/FM 521 - \$68 Million
 - Hempstead - \$4 Million
 - IH 610 at Cambridge St. Connector – \$20 Million
 - SH 288 at Texas Medical Center Connector - \$17 Million
 - SH 146 at SP 330 Connector - \$10 Million



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Working With Others

Houston Major Projects Office

- SH 288
 - Oversight of Procurement Activities
 - SH 288 from US 59 to SH 6, 2-lane reversible managed lanes.
 - Estimated construction cost \$320 Million
 - District Managing Alignment Studies & Environmental Documentation
 - Environmental Assessment (EA) Currently Being Reviewed (FONSI Summer 2013)
 - Texas Medical Center Connector
- SH 99 (Segments F-I)
 - Oversight of the Project Development & Procurement Activities
 - SH 99 Segments F-1, F-2 and G (from US 290 to US 59) (est. construction cost \$989 Million)
 - SH 99 Segments H and I-1 (from US 59 to IH 10) (est. construction cost \$377 Million)
 - District Provides Segment E Construction Management
 - 4 Contracts, \$350 Million
 - Anticipated Completion 2015
 - Environmental Documentation



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SH 99/Grand Parkway Snapshot

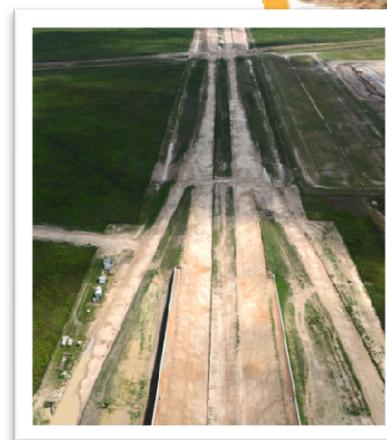
- ◎ Approve Segment B DEIS and host the Public Hearing
- ◎ Approve Segment C FEIS, host a Public Workshop request the issuance of the ROD
- ◎ Segment D - Fort Bend County awards six additional bridge construction contracts
- ◎ Segment E construction began Sept, 2011
- ◎ Award for F-1, F-2 and G pending
- ◎ TxDOT acquires special ROW parcels for F-1, F-2 and G
- ◎ Approve Segment H & I-1 FEIS
- ◎ TxDOT began toll collection on Segment I-2 Nov, 2011
- ◎ Approve Phase II of Segment I-2 FEIS Re-Eval for tolling



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SH 99 Updates

- Segment E Under Construction
 - State Funded
 - Ground Breaking September 13, 2011
 - Schedule to Open 2014
 - All direct connectors to/from IH 10 to SH 99 are either complete or under contract as Sept. 2012
- Segments F-1, F-2 and G
 - Design, build, possibly operate and maintain
 - Projected to Open in 2015
- Segment I-2:
 - Open to traffic: tolls began in 2011
 - O&M for toll portion may be included in future procurements



Working With Others

Houston Transtar

- Multiple Collaborating Agencies

- State of Texas (TxDOT)
- Harris County
- City of Houston
- Metropolitan Transit Authority of Harris County
- Corporate Media Representatives



- Houston TranStar Benefits

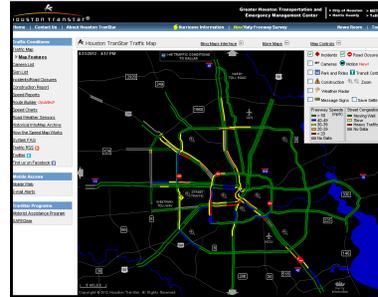
- Houston TranStar has saved motorists nearly \$2.8 billion in lower travel time costs between 1997-2010.
- In 2010, more than \$296 million in savings for congestion, fuel costs and environmental damage. Operating cost in 2010: \$26 million.
- Estimated cost-benefit ratio – 11.4:1.



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More on Houston Transtar

- Infrastructure
 - Camera Surveillance
 - More than 900 cameras
 - Speed Data Collection
 - www.houstontranstar.org
 - Dynamic Message Signs
- Freeway Incident Management
- SAFEClear
- Motorist Assistance Program (M.A.P.)
- Emergency Management
- Regional Plans and Decisions
- Weather Sensors
- Flood Alerts
- Shared Resources for Response and Recovery



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Working With Others...

Local Transportation Partners

- Houston Galveston Area Council
 - Transportation Policy Council (TPC)
 - Regional Transportation Plan (RTP)
- Harris County/ Harris County Toll Road Authority
 - Memorandum of Understanding (MOU)
 - SH 249 Toll Lane Project Development
 - IH 10 Katy Freeway Managed Lanes – A first of its kind
- Montgomery County
 - SH 249 Toll Lane Project Development
 - SH 242 Direct Connector & Woodlands Parkway – Pass Through Financing Projects



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Working With Others...

Local Transportation Partners

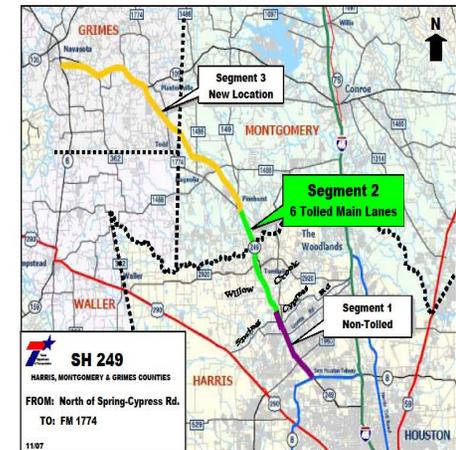
- Fort Bend County/ Fort Bend County Toll Road Authority`
 - SH 99 Overpass Construction
 - FM 1093/ West Park Expansion
- Brazoria County
 - Primacy of SH 288 Managed Lanes (C/L to SH 99)
 - Three SH 36 Pass Through Finance Projects
 - In Brazoria City, West Columbia and Port of Freeport
- Galveston County
 - FM 646 from FM 1764 to S. of FM 517 (Pass Through Finance Project)
- Houston Metropolitan Transit Authority
 - HOT Conversions on IH 45, US 59, & US 290
 - HOV/Managed Lane Operations



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SH 249

- Spring Cypress to FM 1774
 - Harris and Montgomery Counties have Primacy
 - Earlier this year, both counties took action to advance development of the Segment 2 of SH 249
 - Minute Order 111168 (12/13/07) Authorizing Segment 2 as a toll project
 - Project agreement under review
 - Goal to have construction contracts by Summer 2013
 - Total Project Cost = \$357 Million



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Harris County/TxDOT MOU

- **US 290** partnership to fund, operate and maintain; Harris County retains toll revenues
 - Harris County to contribute \$400 M for interim plan implementation
- Harris County waives **Hempstead Tollway** and **SH 288** primacy
- TxDOT to improve **Hempstead, Alameda, Cullen** & provide improved connections to the medical center
- HCTRA operates regional TxDOT toll projects



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US 290 Program

US 290 – IH 610 to FM 2920 (35 miles)

- Traffic counts of over 238,000 vehicles/day
- Grade “F” in current Level of Service
- Stop and go traffic continuing for 3 to 4 hrs+ during peak travel time
 - Traffic projections indicate future 12+hrs
- Approximately 1400 accidents/year, US 290 from IH 610 to FM 2920 with another 200 per year at the IH 610 Interchange (2005-2007)
- Corridor population projected increase to 800,000+ by 2035
- Three of 100 Most Congested Roadway Segments
 - #18: IH 610 from IH 45 N to IH 10 W; #20: US 290 from IH 610 to FM 529; & #38: US 290 from FM 529 to FM 1960
- Hempstead – IH 610 to SH 99 (24 miles)
- ROD approved 2010
- Portion of IH 610 Interchange under construction (\$151.5 Million)



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US 290



Ultimate Plan (IH 610 to FM 2920)

- Freeway capacity reconstruction and widening from IH 610 to FM 2920 to create five to six general-purpose lanes in each direction from IH 610 to just west of SH 6.
 - Auxiliary lanes will also be added, with three to four general purpose lanes west of SH 6 to FM 2920 and two- or three-lane frontage roads in each direction throughout the corridor.
- Hempstead Tollway -Two managed toll lanes each way from IH 610 to SH 99/Grand Parkway.
- Two non-tolled frontage road lanes in each direction to be reconstructed along Hempstead Tollway from IH 610 to Beltway 8.
- Reserved right-of-way for high capacity transit
- Bicycle and pedestrian improvements.



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US 290



Interim Design (IH 610 to SH 99)

- 4-General Purpose lanes each direction (Increase of one lane over existing)
- Reversible managed lanes in the center of US 290
 - IH 610 to SH 6 – 3 managed lanes
 - SH 6 to SH 99 – 2 managed lanes
- IH 610/US 290 Interchange reconstruction
- US 290/Beltway 8 Interchange improvements
- US 290/SH 6/FM 1960 Interchange improvements

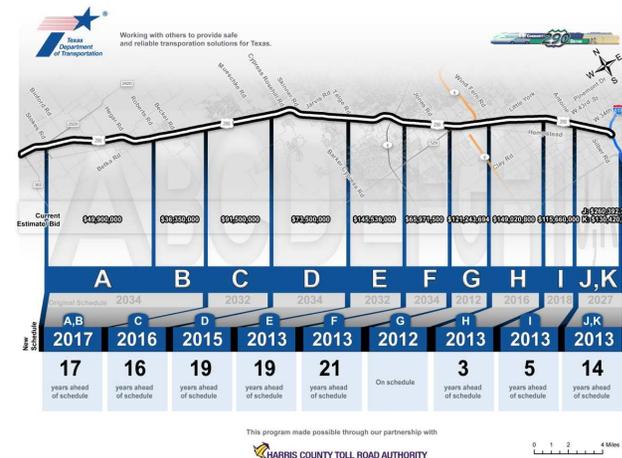
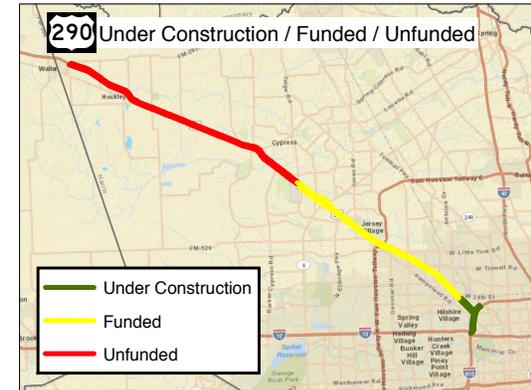


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US 290 Interim Design Funding (Construction and ROW)



- IH 610 Interchange - Project K (May 2011 Letting)
 - Construction - \$151.5 Million Awarded Contract [Prop 12/Federal]
 - ROW/Utilities - \$155 Million [Prop 12]
- IH 610 Interchange – Project J-1 (October 2012 Letting)
 - Construction - \$100 Million Est. [Prop 14/Federal]
 - ROW/Utilities - \$65 Million [Prop 12/14/Federal]
- US 290/Beltway 8 Interchange – Project G (September 2012 Letting)
 - Construction - \$110 Million [Federal]
 - ROW/Utilities - \$78 Million [Prop 12 V2, Rider 42, Harris County 10% local partner]
- Remaining Projects
 - HCTRA funding - \$400 Million
 - TxDOT, Prop 12 and Federal - \$787 Million



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US 290

Next Steps



- Developing final agreements with Harris County Toll Road Authority
- Environmental Reevaluation underway
 - Public Meetings to be scheduled by end of year
- Remaining projects from IH 610 to SH 6 let in 2013
- Open Managed Lanes by 2016
- Projects from SH 6 to SH 99 to let in 2014-2017



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IH 45 North Studies

North Houston Highway Improvement Project (NHHIP)

- Evaluation of IH 45 North from the US 59/SH 288 interchange to Beltway 8 North, the Hardy Toll Road from IH 610 North Loop to Beltway 8 North, as well as portions of IH 10, US 59 and SH 288 near downtown Houston.
- Reconstruct & add capacity to the IH 45/IH 610 North Loop interchange.
- Construct 4 managed lanes from downtown to north of Beltway 8.
 - Public scoping meeting held Nov. 15 & 17, 2011.
 - Project website: www.IH45northandmore.com
 - 2nd Round of Public Meeting schedule for October 9 & 11, 2012



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IH 45 North Studies

Bottleneck Reduction Projects

- Preliminary engineering for transportation management improvements in various locations along IH 45
- Includes restriping shoulders to add auxiliary lanes and two direct connectors at North Shepherd Drive,
- Bottleneck removal and traffic improvement projects between West Road and North Shepherd Drive, and exit ramp relocation at northbound Gulf Bank.

Additional Studies

- Downtown Redesign Planning Study
- Feasibility Study for Implementation of Active Traffic Management Strategies
- Evaluation of Travel Option Strategies
- Support for Aggressive Incident Management
- Mobility Improvements to Significant Parallel Streets.



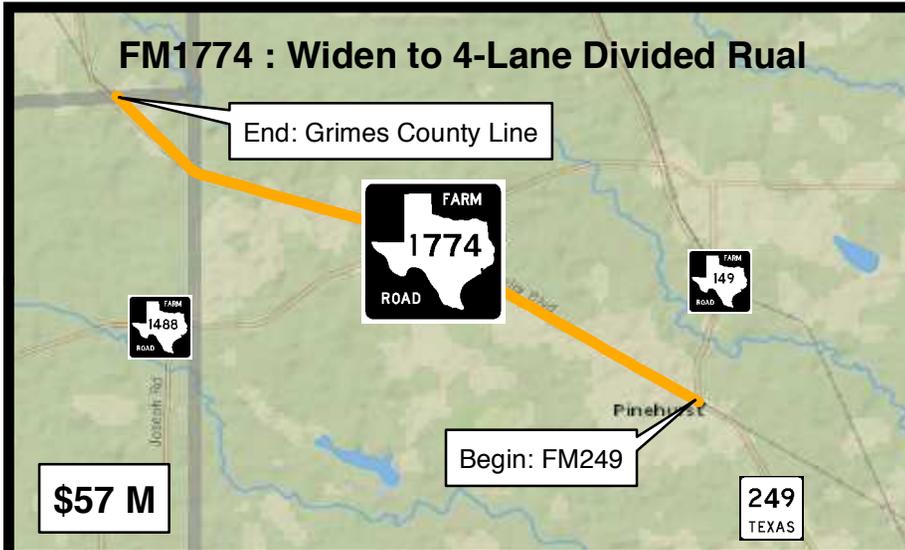
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Upcoming Consultant Contract Procurements

- Hydraulics/Hydrology- late September 2012
- Traffic Signal Timing- October/November 2012
- Schematic/Environmental- January/February 2013
- Construction, Engineering & Inspection (CE&I)- Spring 2013



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Major Unfunded Projects



Key Area & Division Operations



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Brazoria Area Office

Eliza Paul, P.E. – Area Engineer

Mike McGuire – Maintenance Supervisor

- Major cities and towns: *Sugarland, Hempstead, Houston, and Katy*
- Major Active Projects:
 - SH 35 widening from the Harris County Line to FM 518, **\$21.7 Million.**
 - FM 865 widening from Harris County Line to FM 518, **\$13.7 Million.**
- Total Contract Amount: \$167 M
- 23 Active Construction Projects



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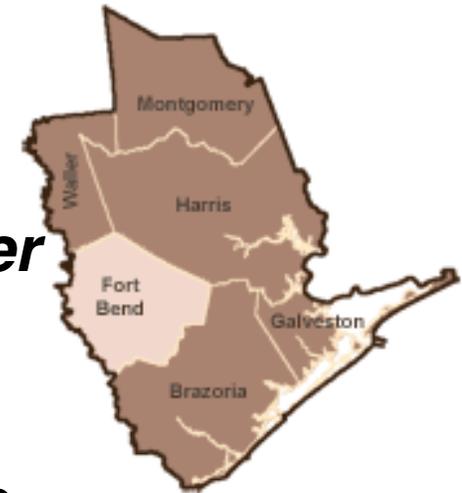
Fort Bend Area Office

Michael Hobbs, P.E. – (Interim) Area Engineer

Royce Macha – Ft. Bend County Mnt Supervisor

Glen Cardiff (Interim) – Waller County Mnt Supervisor

- Major cities and towns: *Pearland, Alvin, Lake Jackson, and Angleton*
- Major Active Projects:
 - SH 99/Grand Parkway Segment E (3 of 4 contracts)
 - FM 359 widening from Farmer Rd. to US 90A, **\$11.8 Million.**
- Total Contract Amount: \$340 M
- 17 Active Construction Projects



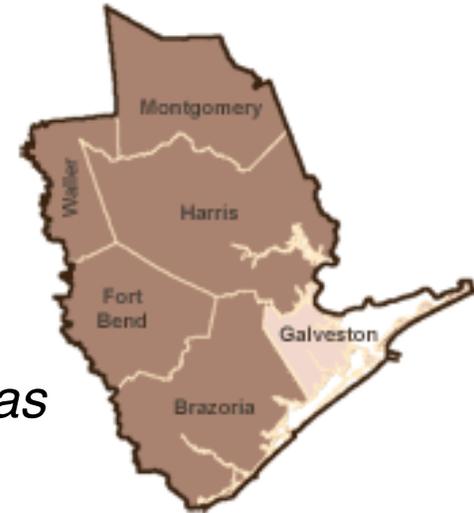
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Galveston Area Office

Bill Babbington, P.E. – Area Engineer

Kerry Kipp – Maintenance Supervisor

- Major cities and towns: *Galveston, League City, Texas City, and Friendswood*
- Major Active Projects:
 - SH 146 construction of southbound grade separation from N. of Loop 197 to S. of Loop 197, **\$7.8 million**.
 - FM 646 widening of from IH 45 to SH 3, **\$9.8 Million**.
- Total Contract Amount: \$59 M
- 16 Active Construction Projects



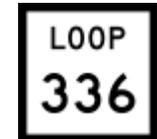
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Montgomery Area Office

Richard Brown, P.E. – Area Engineer

Delbert Aldredge – Maintenance Supervisor

- Major cities and towns: *Woodlands, Conroe, Willis, Splendora, and New Caney*
- Major Active Projects:
 - IH 45 Widening from N. Loop 336 to S. Loop 336 in Conroe, **\$175 Million.**
 - FM 1774 Reconstruction from N. of FM 1488 to S. of W. Lost Creek Blvd, **\$11.3 Million.**
- Total Contract Amount: \$350 M
- 14 Active Construction Projects



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North Harris Area Office

Clifford Halvorsen, P.E. – (Interim) Area Engineer

Alan Moreau–Maintenance Supervisor

- Major cities and towns: *Houston, Crosby, Tomball*
- Major Active Projects:
 - FM 2978 widening from Conroe-Huffsmith to the Harris County line, **\$1.07 Million.**
 - Beltway 8 bridge widening east of Humble Road, **\$8.7 Million.**
- Total Contract Amount: \$140 M
- 24 Active Construction Projects



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West/Central Harris Area Office

Jesse Garcia, P.E. – Area Engineer

Jeffery Thomson – Central Maintenance Supervisor

Robert Faircloth – West Harris County Maintenance Supervisor

- Major cities and towns: *Houston, Katy, Bellaire, and Jersey Village.*
- Major Active Projects:
 - US 290/IH 610 Interchange Reconstruction, **\$151.6 Million.**
 - US 290 TSM Improvements
 - SH 99/Grand Parkway-Segment E (1 of 4 contracts underway)
- Total Contract Amount: \$509 M
- 28 Active Construction Projects



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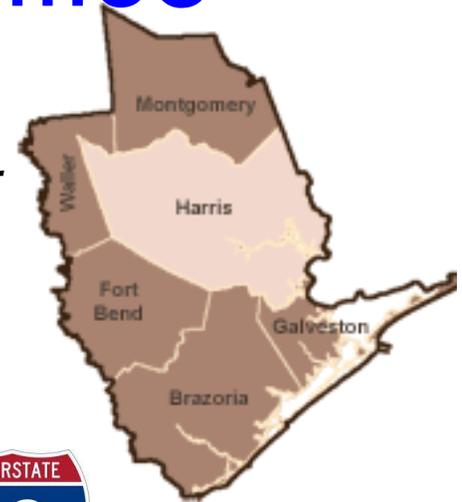
East/ South Harris Area Office

Jeff Volk, P.E. –Area Engineer

Todd Hebert – East Harris Maintenance Supervisor

Johnny Guice – South Harris County Maintenance Supervisor

- Major cities and towns: *Houston, Pasadena, Baytown, and Highlands.*
- *Major Projects:*
 - IH 45 Widening of in South Harris County, **\$77.5 Million.**
 - SH 146 Construction of multiple direct connectors in East Harris County, **\$41.9 Million.**
- Total Contract Amount: \$177M
- 21 Active Construction Projects



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Maintenance Operations



- **FY 13-Strategy 144: \$53M**
- **FY 13-Strategy 105: \$33M**
- **IH 45 District-wide MNT Contract**
 - Outsourced Routine Maintenance, \$26M Contract
 - Strong Performance Metrics
- **Galveston-Port Bolivar Ferry Operations**
 - Takes travelers on SH 87 between Galveston Island and the Bolivar Peninsula.
 - Service 24 hours per day/ 7 day a week
 - 6 Vessel Fleet
 - John W. Johnson – now in operation to help ease the burden on the existing fleet.



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4 Years Later

Hurricane Ike in Review



- Hurricane Ike was the 3rd costliest hurricane in U.S. history.
- Ike made landfall over Galveston as a strong Category 2 hurricane with Category 5 equivalent storm surge, on September 13, 2008.
- Final total cost to TxDOT over \$150 million.
- Costs include evacuation assistance prior to landfall; repairs to roadways, signs, signals and ferry facilities; and debris removal on and off system.



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Hurricane Ike in Review

Debris removal conducted through contracted services and by TxDOT forces.

- Began as soon as TxDOT forces could return to the impact zone.
- The first round consisted of removing tons of debris, including everything from boats, barges and houses to household contents and marsh grass from roadways so that first responders could get through.
- All of the roads in the area were cleared within four days.
- But that still left mounds of debris up to six feet tall along some of the roadsides.
- More than three dozen emergency debris removal contracts were in place three weeks after landfall. Still, the lack of access and authority prevented TxDOT from removing much of the debris along county and city roadways.
- Governor Perry made the call in November to grant TxDOT the authority it needed
- Total costs for On-System debris removal: **\$17.9 Million**
- Total costs for Off-System debris removal: **\$7.1 Million**



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Hurricane Ike in Review

Summary of Repairs

- Damaged equipment and facilities on Galveston Island and the Bolivar Peninsula.
- Ferry landings on both sides of the Galveston-Bolivar channel suffered severe damage, totaling approximately **\$17 million**.
- Additional repairs to the work dock included replacing lost components of the fender and monopile systems and extending the pipes for the monopiles an additional 15 feet to prevent loss of floating donut fenders in future storm events. Total costs more than **\$3.3 million**.
- Ike also damaged street lighting, traffic signals, illumination and flashers, **\$11.4 million**.
- Due beach erosion on the Gulf side of SH 87 a revetment system (an erosion control device) was installed between the road and the Gulf. Work at a total cost of **\$884K**.



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Communication is Key...

- HOU PIO provides needed information to TxDOT system users and stakeholders
 - Highway Construction and Project Development
 - Incident Management
 - Driver Behavior Modification and Safety Campaign Awareness
 - Featured News and Updates based on Statewide and Local Transportation Issues
- District in One of the Top-10 Television Markets in the Country
 - 7 major network television stations, multiple news-radio stations, several daily papers and many smaller daily and weekly publications
 - Transportation and weather are staple news features on a daily basis
 - Local news outlets rely heavily on the daily roadwork reports, incident alerts and Transtar Camera feeds
 - PI Officers proactively work with all the media outlets
 - PI Officers uses a wide range of tools to connect with the media and general public.
- Critical to District-Wide Stakeholder Engagement and Public Involvement



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Houston District



Questions