THE ONGOING BATTLE AGAINST HIGHWAY SLOPE BREAKDOWN

Award-winning research could help prevent hills and soil from sliding onto Texas highways

NORTH TEXAS — It's an epic battle that has spanned decades in Texas—engineers vs. sliding hills or slopes—until now.

"Slop failures" as they are called, happen when pieces of the embankment along a highway break away and collapse and pose a danger to drivers.

Thanks to TxDOT's research that was recently honored for being one of the best research projects in the nation, the agency can now address these soil issues early on, either through prevention or repair, and help keep drivers safe.

The researchers developed a unique system to track slopes, pavement, soil, underground pipelines, retaining walls and other structures. Researchers also created an online management system that helps TxDOT make repairs and keep tabs on slopes prone to falling.

"The work done on this project will be vital to how we approach slope failures in the future," said Darrin Jensen, TxDOT's project manager on the study. "With this information now at our finger tips, those repairs will be far more permanent than they were in the past."

Slope breakdowns are common in Texas—especially North Texas—because of soil conditions and extreme weather patterns. The seasonal swelling and shrinking of expansive soil on a slope, combined with the forces of gravity, causes soil movement down the face of the slope. Each year, TxDOT spends millions of dollars repairing slope failures along highways.

"We found that about half of those (slope failures) are recurring," said Mohsen Shahan-dashti, a professor of civil engineering at the University of Texas at Arlington. "Now, we project significant cost savings, and identify slopes that are likely to fail, so that TxDOT can address issues before a failure occurs."

This new information will help engineers quickly determine the best approach for each specific hill that's starting to crumble onto roadways. Knowing the conditions of the slope and which repair method to use will help produce more effective repairs and reduce recurring slope failures along Texas highways.
## DECEMBER 2019 LET PROJECTS

<table>
<thead>
<tr>
<th>CSJ NUMBER</th>
<th>HWY</th>
<th>LIMITS</th>
<th>TYPE OF WORK</th>
<th>COST EST. (M)</th>
<th>BID (M)</th>
<th>(%</th>
<th>EST. TOTAL COST (M)*</th>
<th>CONTRACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>0092-01-052**</td>
<td>US 175; SH 310</td>
<td>On US 175 from S. of Budd St. to I-45 and on SH 310 from Pennsylvania Ave. to N. of Al Lipscomb Way and from Len- way St. to Good Latimer</td>
<td>Reconstruct freeway to 6-lane divided arterial and reconstruct I-45 and S.M. Wright Interchange</td>
<td>$76.01</td>
<td>$78.61</td>
<td>3.37</td>
<td>$93.41</td>
<td>Johnson Bros. Corp.</td>
</tr>
<tr>
<td>0522-01-023</td>
<td>SH 243</td>
<td>At FM 2515 and FM 2727</td>
<td>Intersection improvements</td>
<td>$1.30</td>
<td>$1.27</td>
<td>-1.81</td>
<td>$1.47</td>
<td>Fitcher Constru. Services</td>
</tr>
</tbody>
</table>

* Estimated Total Project Costs includes est. PE, ROW, E&C, Indirec: Costs and Potential Change Order Costs at the time of bid.
** Project is an A+B bidding project.

** Estimated December 2019 Totals:
- District FY Accumulative Lettings: $156.22
- Dallas District FY Letting Volume Cap: $235.08

## JANUARY 2020 PROJECTED LETTING PROJECTS

<table>
<thead>
<tr>
<th>CSJ NUMBER</th>
<th>HWY</th>
<th>LIMITS</th>
<th>TYPE OF WORK</th>
<th>EST. COST (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0196-03-277</td>
<td>I-35E</td>
<td>Oak Lawn Avenue to Northwes: Highway</td>
<td>Full depth repair, mill and inlay on mainlanes</td>
<td>$16.91</td>
</tr>
</tbody>
</table>

NOTE: Project is an A+B bidding project.

## COMPLETED CONSTRUCTION PROJECTS (FROM DECEMBER 1-31, 2019)

<table>
<thead>
<tr>
<th>CSJ NUMBER</th>
<th>HWY</th>
<th>LIMITS</th>
<th>TYPE OF WORK</th>
<th>EST. COST (M)</th>
<th>COMPLETED DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0047-06-133</td>
<td>US 75</td>
<td>PGBT to Park Blvd</td>
<td>Interchange improvements</td>
<td>$37.47</td>
<td>12/30/2019</td>
</tr>
<tr>
<td>0918-45-757</td>
<td>CS</td>
<td>Second Ave SB at Trib of White Rock Creek</td>
<td>Replace bridge and approaches</td>
<td>$7.88</td>
<td>12/20/2019</td>
</tr>
<tr>
<td>0995-03-093</td>
<td>US 80</td>
<td>Dallas C/L to FM 548</td>
<td>Mill and overlay existing roadway</td>
<td>$11.46</td>
<td>12/16/2019</td>
</tr>
<tr>
<td>0197-11-013</td>
<td>FM 1310</td>
<td>US 175 to FM 148</td>
<td>Restore existing pavement and add shoulders</td>
<td>$4.72</td>
<td>12/05/2019</td>
</tr>
<tr>
<td>0751-03-038</td>
<td>FM 148</td>
<td>HM 1388 to FM 1094 North</td>
<td>Reconstruct existing pavement and add shoulders</td>
<td>$4.09</td>
<td>12/12/2019</td>
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<tr>
<td>1016-06-011</td>
<td>FM 1392</td>
<td>US 80 to SH 205</td>
<td>Reconstruct existing pavement and add shoulders</td>
<td>$5.68</td>
<td>12/05/2019</td>
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<tr>
<td>0574-01-029</td>
<td>SH 309</td>
<td>At Rush Creek</td>
<td>Replace bridge and approaches</td>
<td>$7.60</td>
<td>12/02/2019</td>
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<tr>
<td>0918-90-283*</td>
<td>VA</td>
<td>Various Locations in Dallas District</td>
<td>Installation of traffic signals</td>
<td>$1.47</td>
<td>12/16/2019</td>
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<tr>
<td>0918-47-114*</td>
<td>VA</td>
<td>Various Locations on State Highways in Dallas County</td>
<td>Construct curb ramps in northeast Dallas co. in cities of Dallas and Mesquite</td>
<td>$2.65</td>
<td>12/02/2019</td>
</tr>
</tbody>
</table>

* Unmapped.

SOURCE: Texas Department of Transportation.
DALLAS DISTRICT PROJECTS MAP

Colored and numbered boxes correspond with the charts on page 2 and show projects that have let in December, are projected to let in January, or have recently been completed.

2019 DALLAS DISTRICT ESTIMATE TOTALS

<table>
<thead>
<tr>
<th>District</th>
<th>Vehicle Registration</th>
<th>Population Estimate</th>
<th>Lane Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Collin County</td>
<td>5,085,742</td>
<td>4,905,280</td>
<td>10,753,693</td>
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<tr>
<td>B. Dallas County</td>
<td>2,155,995</td>
<td>2,535,770</td>
<td>3,377,212</td>
</tr>
<tr>
<td>C. Denton County</td>
<td>680,143</td>
<td>874,240</td>
<td>1,633,926</td>
</tr>
<tr>
<td>D. Ellis County</td>
<td>181,871</td>
<td>189,820</td>
<td>1,526,862</td>
</tr>
<tr>
<td>E. Kaufman County</td>
<td>124,760</td>
<td>124,850</td>
<td>1,215,130</td>
</tr>
<tr>
<td>F. Navarro County</td>
<td>52,355</td>
<td>50,250</td>
<td>1,191,856</td>
</tr>
<tr>
<td>G. Rockwall County</td>
<td>91,492</td>
<td>101,020</td>
<td>346,193</td>
</tr>
</tbody>
</table>

SOURCE: TxDOT research
*POPULATION ESTIMATE: NCTCOG

LEGEND
- LET
- PROJECTED
- COMPLETED
- TOLL ROAD

N
10 miles
HOW DO THE CHEMICALS WORK?

Granular De-Icer
A granular de-icer—salt for instance—lowers the freezing point of water from 32 °F to about 15 °F (depending on how much you use). When salt makes contact with ice, melting begins immediately and spreads out from that point, creating a salt/water mix (brine) that continues melting the ice, undercutting the bond between the ice and the road.

Melting Ice Takes Time
The temperature and the amount of ice or snow on the road determine de-icing material amounts and melting rates. As temperatures drop, the amount of de-icer needed to melt a given quantity of ice increases significantly.

WHAT MATERIALS ARE USED ON THE ROADS?

Before an ice/snow event
- Liquid salt-based anti-icers help prevent ice formation

During an ice/snow event
- Various salt-based granular de-icers are used to help melt ice already formed on the road

AFTER SNOW/ICE EVENT
- Stockpiles/supplies are replenished (multi-day storm)
- Roadways are swept/cleaned of excess aggregate
- Winter plan effectiveness is evaluated and adjusted
- Roadway repairs are scheduled (potholes, guardrails, structures, etc.)
- Equipment is serviced and prepared for the next winter storm

SOURCE: Texas Department of Transportation

A VISIONARY LOOK AT THE BUSINESS OF BUILDING ROADWAYS
A factory-themed metaphorical take on the business of how TxDOT builds roadways:

1. FUNDING SOURCES

Motor Fuel Taxes
Vehicle Registration Fees
Prop 1/Prop 7
Federal Reimbursements

2. ADVANCED PLANNING

1. Public Involvement
2. Feasibility Analysis
3. Environmental
4. Engineering
5. Right of Way
6. Utility Adjustment
7. Contractor Procurement

3. MOBILITY AND MAINTENANCE PROJECTS

8. Connectivity
9. Preservation
10. Safety
11. Mobility
12. Roadway Maintenance

SOURCE: Texas Department of Transportation

DEAN HOLLINGSWORTH/TxDOT Information Specialist
**TxDOT: Connecting You with Texas**

As part of its mission, TxDOT works to keep the highways passable during inclement weather.

Historically, North and West Texas experience the heaviest snowfalls or icy road and bridge conditions. Remember to:

- Call 911 if stranded for any reason on a Texas roadway
- Stay tuned to local news for road conditions

For travel information, visit: drivetexas.org

January 2020

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**TxDOT’s New Mission Statement**

TxDOT has established a new mission statement to define the purpose of our agency. "Connecting You with Texas" exemplifies the very core of why TxDOT exists as a department. Everything TxDOT does flows out of this mission: from building roads and bridges, to operating our ferries; to helping communities get funding for their general aviation airports and transit services; to supporting Texas ports; and managing the state’s only railroad.

[txdot.gov • inside TxDOT](http://txdot.gov)

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**SH 170 Public Hearing**

A public hearing for SH 170 from I-35W to SH 114 was held on Dec. 19. The proposed six-mile project would add portions of mainlanes to improve operations in the corridor. The $177 million project is estimated to be awarded to a contractor this fall.

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**Alliance Texas/Haslet Accessibility**

TxDOT has issued a finding of no significant impact for the AllianceTexas/Haslet Accessibility Improvement Project which includes the widening of Avondale-Haslet Road from Haslet to FM 156, the extension of Avondale-Haslet Road to I-35W, and the extension of Intermoda Parkway. The approximately $50 million project is estimated for construction in 2021.

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**Texas Transportation Forum**

The 2020 Texas Transportation Forum will be held in San Antonio Feb. 9-11. Building on this annual event’s reputation as an impactful platform to dive deeper into key transportation topics that help drive our state’s success, the 2020 Forum will focus on “Connecting You with Texas” and how the innovations of today and the geo-political landscape affect what is next for transportation in Texas, the nation and the world.

[txdot.gov/itf](http://txdot.gov/itf)

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**Transportation Summit**

The 11th annual Tarrant Transportation Summit will be held at the Hurst Conference Center Friday, Feb. 14. The summit will focus on how innovation and transportation is shaping the destiny of mobility initiatives throughout North Texas, including the integration of 5G into the transportation network, the AllianceTexas Mobility Innovation Zone, and growth of transit options for Tarrant County.

[netransportationsummit.com](http://netransportationsummit.com)

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**INSIDE: DFW CONGESTION UPDATE**
### Awarded Projects

<table>
<thead>
<tr>
<th>Hwy</th>
<th>Limits</th>
<th>Type of Work</th>
<th>Estimate (millions)</th>
<th>Bid (millions)</th>
<th>Over/Underrun (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 67</td>
<td>SH 220 to US 281, Erath County</td>
<td>Add passing lane</td>
<td>$14.0</td>
<td>$15.7</td>
<td>+11.9</td>
</tr>
<tr>
<td>Various roadways</td>
<td>Districtwide</td>
<td>Seal coat</td>
<td>$13.2</td>
<td>$12.6</td>
<td>-3.9</td>
</tr>
<tr>
<td>SH 121 frontage rd</td>
<td>At Mustang Dr, Grapevine</td>
<td>Traffic signal</td>
<td>$1.1</td>
<td>$1.5</td>
<td>+36.4</td>
</tr>
</tbody>
</table>

### Projected Projects

<table>
<thead>
<tr>
<th>Hwy</th>
<th>Limits</th>
<th>Type of Work</th>
<th>Estimate (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM 3450</td>
<td>FM 167 to SH 171, Hood &amp; Parker Counties</td>
<td>Pavement rehabilitation</td>
<td>$5.7</td>
</tr>
<tr>
<td>FM 917</td>
<td>At FM 2738 &amp; FM 731, Johnson County</td>
<td>Illumination &amp; signing</td>
<td>$0.2</td>
</tr>
<tr>
<td>FM 8</td>
<td>Bluebonnet St to Bates St, Erath County</td>
<td>Resurfacing</td>
<td>$3.6</td>
</tr>
<tr>
<td>Various roadways</td>
<td>Johnson County</td>
<td>Resurfacing</td>
<td>$15.1</td>
</tr>
<tr>
<td>SH 174</td>
<td>Elk Dr to Newton Dr, Burleson</td>
<td>Hike &amp; bike trail</td>
<td>$2.2</td>
</tr>
<tr>
<td>Various roadways</td>
<td>Districtwide</td>
<td>Traffic signal improvements</td>
<td>$6.0</td>
</tr>
<tr>
<td>FM 1658</td>
<td>US 380 to SH 114, Wise County</td>
<td>Resurfacing</td>
<td>$1.1</td>
</tr>
<tr>
<td>FM 157</td>
<td>Green Oaks Blvd to Lamar Blvd, Arlington</td>
<td>Resurfacing</td>
<td>$2.8</td>
</tr>
</tbody>
</table>

### $435 M Proposed Letting

- $41 M Total Let To Date
- FY 2020 Construction*:
  - 56% Average Project Completion
- Total Contracts $3.3 B

*includes CDAs
Construction is progressing on the I-635/SH 121 interchange project which is 54 percent complete and scheduled to finish in 2022.

In January, the project will reach a major milestone when the new northbound SH 121 auxiliary lanes open to traffic. Already open are three new direct connectors, with seven more direct connectors opening this year. The second half of the widened Bass Pro Drive bridge is scheduled to open this spring.

In addition to a new interchange, the $370 million congestion-relief project is constructing new direct connectors at SH 26 and FM 2499. Added auxiliary lanes will improve safety by moving merging vehicles from out of the SH 121 mainlanes.

When the project is complete, drivers will have one added mainlane each direction on SH 121 from Bass Pro Drive to north of FM 2499. I-635 will have two added mainlanes each direction from SH 121 to Royal Lane.

The three-mile project is funded as part of TxDOT’s Texas Clear Lanes initiative to reduce congestion.

[Image of construction site]

[Map of I-635/SH 121 interchange project]

[Image of future I-635 ramp to Southbound SH 121]

[Image of SH 121 at I-635]
WE'RE READY

Winter emergency road preparedness

Hazardous weather can unexpectedly change from freezing ice to snow and fog in some areas of the state. TxDOT works 24/7 to ensure our roads remain passable and safe year-round. Road crews throughout the state are especially prepared to address road safety during severe winter weather conditions.

Particular attention is given to bridges, traffic interchanges and roadways. TxDOT uses snowplows, spreaders and brine equipment to assist with de-icing/anti-icing of the roadways and bridges.

TxDOT stockpiles various types of de-icers and anti-icing agents for winter storms as well as sand or small aggregate. Because each winter storm is unique, TxDOT will use a combination of materials and equipment depending on the severity of the storm.

TREATING THE ROADS
Each area of Texas treats roads based on weather conditions.
The two most common materials used include:

- Brine solution to prevent roads from icing
- Granular de-icing materials to improve traction

USE CAUTION!

TxDOT’s #1 priority is the safety of the traveling public, including using every resource available to keep the roads open and passable during winter storms. Motorists should always exercise caution and, if possible, allow extra time to reach destinations or delay travel until conditions improve.

Simple driving tips to practice in inclement weather:

- Remove snow and ice from your vehicle before you drive
- Maintain your vehicle in accordance with manufacturer's recommendations
- Ensure headlights and taillights are functioning properly
- Accelerate slowly, drive cautiously, and observe traffic signs and alerts
- Approach bridges, shaded spots and turns slowly
**OVERVIEW**

The initial $1 billion DFW Connector project simultaneously designed and built 8.4 miles in Grapevine, Southlake and Irving, and doubled the size of the existing highway system around the north DFW International Airport entrance.

Funding constraints required some original DFW Connector segments to be deferred. However, since 2013, TxDOT has been able to identify funding for FM 2499, new SH 121/360 ramps, the SH 121/360 interchange, and the I-635/SH 121 interchange.

FM 2499 work included rebuilding the mainlanes from SH 121 to Denton Creek. The SH 121/360 ramps project constructed new on-ramps from the southbound SH 121 frontage road (William D. Tate Avenue) to SH 121 and SH 360.

The SH 121/360 interchange was completed in May 2018, and construction began in August 2018 on the I-635/SH 121 interchange.

**PROJECT HISTORY**

- March 2006 – TxDOT Commission authorized request for CDA proposals.
- March 26, 2009 – CDA conditionally awarded to NorthGate Constructors.
- Jan. 2013 – TxDOT identified $90 million in funding for FM 2499.
- Sept. 2014 – TxDOT signs $17 million contract for the SH 121/360 ramp project.
- Feb. 2016 – SH 121/360 interchange project approved for Texas Clear Lanes congestion relief funding.
- March 2017 – I-635/SH 121 interchange approved for Texas Clear Lanes congestion relief funding.
- Aug. 13, 2018 – I-635/SH 121 interchange groundbreaking held.

**FM 2499**

**LENGTH:** 1 mile

**NUMBER OF LANES**
- Two mainlanes in each direction built below the existing grade level, allowing commuters to bypass two intersections.
- Two frontage road lanes in each direction at grade level.

**COST:** $92 MILLION (FUNDED BY TxDOT)
- Cat. 19 (Texas Transportation Commission approval in January 2013)

**CONSTRUCTION DATES:**
- Construction start: August 2013
- Substantial completion: Summer 2016

**I-635/SH 121 INTERCHANGE**

**LENGTH:** 3 miles

**SCOPE:** Widen SH 121 to accommodate new interchange at I-635 and direct connectors for FM 2499 and SH 26

**COST:** $370 MILLION (FUNDED BY TEXAS CLEAR LANES INITIATIVE)

**CONSTRUCTION DATES:**
- Construction start: August 2018
- Est. substantial completion: 2022

**TRAFFIC COUNTS (VEH PER DAY, 2018)**
- SH 121 north of SH 114: 123,000
- SH 121 north of I-635: 128,000
- I-635 east of SH 121: 86,000

**FIRST PHASE DFW CONNECTOR**

**LENGTH:** 8.4 miles

**NON-TOLL LANES (WIDEST POINTS)**
- 6 to 8 WB, 6 EB between William D. Tate Avenue and International Parkway
- 4 to 7 NB and 3 to 6 SB at SH 121 near DFW Airport’s north entrance

**TEXPRESS LANES**
- Four miles, two in each dir. on SH 114

**COST:** $1 B (FUNDED BY TxDOT)
- TxDOT: $696 million; ARRA funds: $261 million; Prop. 14 bonds: $172 million; Prop. 12 bonds: $32 million
- ROW: $127 million (Prop. 14 funds)

**CONSTRUCTION DATES:**
- Construction started: Feb. 2010
- Final acceptance: March 2014

**I-635/SH 121 INTERCHANGE PROGRESS**

- In January, the project will reach a major milestone when the new northbound SH 121 auxiliary lanes open to traffic.
- Three new direct connectors are now open to traffic, with up to seven more direct connectors opening this year, beginning with the I-635 ramp to southbound SH 121 in March.
- The second half of the widened Bass Pro Drive bridge is scheduled to open this spring.
- The project is currently 54 percent complete.
I-30/SH 360 INTERCHANGE

OVERVIEW
Recognizing the ever-growing transportation needs of the Metroplex, the Texas Department of Transportation began construction on the $233 million Interstate 30/SH 360 Interchange Project in Spring 2016. The improvements to the area will increase safety, connectivity and mobility for motorists. The project will transition the original 1950s Dallas-Fort Worth Turnpike cloverleaf design into a modern, fully-directional interchange with connection ramps for all movements between I-30 and SH 360.

The project will include auxiliary lanes added to I-30, one mainlane in each direction added on SH 360 within the project limits, and the Six Flags Drive bridge over I-30 will be rebuilt from two lanes to five lanes (three southbound and two northbound lanes), extending Six Flags Drive north to Avenue H. The construction project limits are I-30 between Ballpark Way and Great Southwest Parkway and SH 360 between Brown Boulevard/Avenue K and Road to Six Flags Street.

PROJECT HISTORY TIMELINE
1957 – The Dallas-Fort Worth Turnpike (later to become I-30) was completed from Fort Worth to Dallas.
1959 – SH 360 (formerly Watson Rd.) was constructed from SH 183 to SH 180, crossing the then Dallas-Fort Worth Turnpike.
2007 – TxDOT completed the original schematic and received environmental clearance for improvements to SH 360 from Brown Blvd./Ave. K to Green Oaks Blvd. (including the I-30/SH 360 interchange).
2010 – Cooper St. to Ballpark Way (2.8 miles) in Arlington: reconstruction of the I-30 mainlanes and construction of I-30 frontage roads, collector-distributor roads, ramps, and cross street bridges at Center St., Collins St. and Baird Farm Rd./AT&T Way.
2010 – Center St. to the Dallas County line: construction of two HOV lanes on I-30 (one lane in each direction).
2015 – TxDOT issued environmental clearance on the re-evaluation for the improvements to I-30.
March 2, 2016 – I-30/SH 360 Interchange Project groundbreaking event.

PROJECT FACTS
LENGTH
- I-30 – Approx. 2 miles
- SH 360 – Approx 1.5 miles

PROGRESS TO DATE
- Opened westbound collector-distributor road under Ballpark Way and new exit ramp to southbound Ballpark Way.

PROGRESS NEXT 12 MONTHS
- Open south-west direct connector (1st of 8 connectors).
- Open east-south direct connector (2nd of 8 connectors).
- Open fully completed SH 360 SB frontage road from Brown Blvd. to Road to Six Flags.
- Complete reconstruction of Ave. F and Ave. G.
- Open new I-30 EB exit to Copeland Rd.
- Complete new SH 360 SB mainline bridges and demolish old bridges over Johnson Creek, Lamar Blvd., I-30 and Six Flags Dr.
- Open new SH 360 SB exit to Ave. J/Lamar Blvd./Six Flags Dr.
- Open Copeland Rd. from Ballpark Way to Six Flags Dr.

COST
- $233 million

FINAL CONFIGURATION
- Fully-directional interchange with connection ramps for all movements between I-30 and SH 360.
- I-30 and SH 360 mainlanes will be rebuilt with additional auxiliary lanes added to I-30 and an additional lane in each direction on SH 360 within the project limits.
- Rebuilding the Six Flags Dr. bridge over I-30 from two lanes to five lanes, extending Six Flags Dr. north to Ave. H.

2018 TRAFFIC COUNTS (project area)
- I-30 – 139,000 vehicles per day
- SH 360 – 162,000 vehicles per day

ANTICIPATED COMPLETION
- 2021

2035 PROJECTED TRAFFIC
- I-30 is 234,000 vehicles per day
- SH 360 is 235,000 vehicles per day
### Roadway and Limits

<table>
<thead>
<tr>
<th>I-30 from Cooper Street to SH 161</th>
<th>Existing Facility</th>
<th>Proposed Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainlanes in Each Direction</td>
<td>3 lanes</td>
<td>3 lanes (plus auxiliary lanes)</td>
</tr>
<tr>
<td>Frontage Road/Collector-Distributor Lanes in Each Direction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- from Cooper St. to Ballpark Way</td>
<td>2 to 3 lanes discontinuous</td>
<td>2 to 3 lanes discontinuous</td>
</tr>
<tr>
<td>- from Ballpark Way to SH 161</td>
<td>2 to 3 lanes discontinuous</td>
<td>2 to 3 lanes discontinuous</td>
</tr>
<tr>
<td>TEXpress Lanes in Each Direction</td>
<td>1 concurrent lane</td>
<td>1 concurrent lane interim / 2 reversible lanes in ultimate</td>
</tr>
<tr>
<td>SH 360 from Brown Boulevard/Avenue K to Road to Six Flags Street</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mainlanes in Each Direction</td>
<td>3 (plus auxiliary lanes)</td>
<td>3 to 4 (plus auxiliary lanes)</td>
</tr>
<tr>
<td>Frontage Road Lanes in Each Direction</td>
<td>2 to 3 lanes</td>
<td>3 lanes</td>
</tr>
</tbody>
</table>

### PROJECT CONTACTS

Texas Department of Transportation
2501 SW Loop 820
Fort Worth, TX 76133
817-370-6830
www.txdot360moving.org

I-30/SH 360 INTERCHANGE

Shawna Russell
TxDOT Northwest Texas
Communications Director
2501 SW Loop 820
Fort Worth, TX 76133
817-370-6737

WINTER • 2020
OVERVIEW
The Interstate 35W improvement project spans 18 miles in Fort Worth and includes a section currently ranked sixth on the state's most congested roadways list. Plans to reduce congestion by doubling capacity include interim projects to reconstruct the existing lanes and add two TExPress Lanes in each direction.

This project is being built in segments. The NTE Mobility Partners Segments 3, LLC (NTEMP3) constructed Segment 3A, from north of I-30 to north of I-820 including the I-35W/I-820 interchange. The Texas Department of Transportation (TxDOT) constructed Segment 3B, from north of I-820 to US 81/287. NTEMP3 is slated to begin construction on Segment 3C in 2020. The 6.7-mile project will extend improvements from US 81/287 to Eagle Parkway.

I-35W currently carries 122,000 vehicles daily near downtown Fort Worth and 161,000 vehicles north of I-820. Approximately 11 percent of these vehicles are trucks.

PROJECT HISTORY
- January 29, 2009 – CDA conditionally awarded to NTEMP.
- July 6, 2011 – NTEMP3 and TxDOT completed a Facility Implementation Plan (FIP) for 3A/3B.
- April 24, 2012 – The U.S. Department of Transportation announced that TxDOT entered the final stage for a $531 million Transportation and Infrastructure Finance and Innovation Act (TIFIA) loan to help construct Segment 3A.
- Sept. 2012 – TxDOT awarded a contract for 3B to Lane Construction.
- March 1, 2013 – A facility agreement between TxDOT and NTEMP3 was signed.
- Feb. 2018 – The Texas Transportation Commission authorized the Private Activity Bond Surface Transportation Corporation to take all actions necessary for the issuance of private activity bonds to construct Segment 3C.

PROJECT PROGRESS

THE 3A PORTION: (I-30 to I-820)
- Project is substantially complete.
- In downtown Fort Worth, new direct connectors to and from the I-35W TExPress Lanes at Belknap Street/Weatherford Street opened in January 2019.

THE 3B PORTION: (I-820 to US 81/287)
- This segment is substantially complete with all lanes in their final location.

THE 3C PORTION:
- Design, survey and utility work are underway.
- Construction is slated to begin in spring 2020.

PROJECT FACTS
LENGTH
- Segment 3A (I-35W from N of I-30 to N of I-820 including the I-35W/I-820 interchange) 6.5 miles
- Segment 3B (I-35W from N of I-820 to US 81/287) 3.6 miles
- Segment 3C (I-35W from US 81/287 to Eagle Parkway) 6.7 miles

TExPRESS LANES
- Segments 3A, 3B, & 3C: Two NB & SB lanes

COST
- Segment 3A: $1.4 billion
- Segment 3B: $256 million
- Segment 3C: $950 million

FUNDING
- Segment 3A: $531 million federal TIFIA loan; $430 million developer equity; $274 million Private Activity Bonds (PABs); $127 million provided by the Metropolitan Planning Organization; $46.5 million interest income
- Segment 3B: $245 million public funding; $8.4 million developer equity; $2.4 million PABs
- Segment 3C: $653.9 million PABs; $96.1 million PABs premium; $24 million interest income; $160.2 million developer equity; $14.4 million public funding for right of way

RIGHT OF WAY
- Segment 3A: Complete
- Segment 3B: Complete
- Segment 3C: In progress

CONSTRUCTION DATES
- Segment 3A: Construction start - May 2014; substantial completion - July 2018
- Segment 3C: Construction start - 2020; substantial completion - Late 2023
### SEG* Roadway and Limits

**3C** FORT WORTH - I-35W from US 81/287 to Eagle Parkway  
- **Existing lanes (Each dir.)**  
  - 2  
- **Frontage lanes (Each dir.)**  
  - 2 - 3

**Interim Configuration**
- **Mainlanes (Each dir.)**  
  - 2  
- **TEXPress Lanes (Each dir.)**  
  - 2  
- **Frontage lanes (Each dir.)**  
  - 2 - 1

### SEG* Roadway and Limits

**3B** I-35W from north of I-820 to US 81/287  
- **Existing lanes (Each dir.)**  
  - 2  
- **Frontage lanes (Each dir.)**  
  - 2

**Interim Configuration**
- **Mainlanes (Each dir.)**  
  - 2  
- **TEXPress Lanes (Each dir.)**  
  - 2  
- **Frontage lanes (Each dir.)**  
  - 2

**Ultimate Config. as Proposed in Regional Mobility 2030 Plan**
- **Mainlanes (Each dir.)**  
  - 4  
- **TEXPress Lanes (Each dir.)**  
  - 2 - 3  
- **Frontage lanes (Each dir.)**  
  - 2 - 3

### SEG* Roadway and Limits

**3A** I-35W from north of I-30 to north of I-820  
- **Existing lanes (Each dir.)**  
  - 2 - 3  
- **Frontage lanes (Each dir.)**  
  - 2

**Interim Configuration**
- **Mainlanes (Each dir.)**  
  - 2 - 3  
- **TEXPress Lanes (Each dir.)**  
  - 2  
- **Frontage lanes (Each dir.)**  
  - 2

**Ultimate Config. as Proposed in Regional Mobility 2030 Plan**
- **Mainlanes (Each dir.)**  
  - 4  
- **TEXPress Lanes (Each dir.)**  
  - 2  
- **Frontage lanes (Each dir.)**  
  - 2 - 3

### SEG* Roadway and Limits

**3A** SH 121 Interchange  
- **Mainlanes (Each dir.)**  
  - 4  
- **TEXPress Lanes (Each dir.)**  
  - 2  
- **Frontage lanes (Each dir.)**  
  - 2 - 3

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**NOTE:** Highlighted areas are not to scale.

* Segments identified by number do not denote priority or sequence. **All segments will include one-way frontage roads at identified locations and connections to all existing and proposed improvements. ***Discontinuous. ****Potential deferment of additional mainlanes. *****Currently not funded. Ultimate capacity remains a priority to the region.
OVERVIEW: The Southern Gateway project will add capacity, replace aging pavement and improve safety along I-35E and US Highway 67 in southern Dallas. As one of the major highways into and out of downtown Dallas, the roadway carries about 218,000 vehicles per day on pavement that was first built in the 1950s. The reconstruction project has been supported since before 2003, when the project was first environmentally cleared but left unfunded. With improvements complete just to the north with the Horseshoe Project, the next step to further improve congestion in downtown is to rebuild this major urban highway.

Goals: Improve safety by rebuilding the highway, which will improve entrance and exit ramps, improve cross street bridges and add full shoulders within the right of way along the I-35E section.

Full reconstruction and widening of I-35E to include five general purpose lanes in each direction and two reversible non-tolled express lanes from Colorado Boulevard to US 67. I-35E will have seven lanes into downtown each morning and seven lanes out of downtown each evening. The US 67 scope will save the existing paving and widen to provide a third general purpose lane in each direction from I-35E to I-20.

The existing concurrent US 67 HOV lane will be reconstructed to be one reversible non-tolled managed express lane in the center median.

PROJECT HISTORY
- FHWA Schematic Approval – Spring 2016
- Public Hearing – July 2016
- FHWA Environmental Clearance – December 2016
- Design-Build Contract Executed with Pegasus Link Constructors (PLC) - June 2017

PROJECT PROGRESS
- Work continues on Marsalis Ave., 12th St, Illinois Ave., Louisiana Ave., and Overton bridges over I-35E.

PROJECT DETAILS
- Length: 11 miles
- Estimated Completion: Summer 2022

PROJECT DESCRIPTION
- I-35E: Full reconstruction and widening to include five general purpose lanes in each direction and two reversible, non-tolled managed express lanes from Colorado Blvd. to US 67 and infrastructure for a deck plaza.
- US 67: Add a third general purpose lane in each direction from I-35E to I-20. The existing concurrent US 67 HOV lane will be rebuilt to become one reversible, non-tolled managed express lane in the center median.

ESTIMATED COSTS

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*Subject to change.

ESTIMATED FUNDING

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* Congestion Relief Funding

SOUTHERN GATEWAY PROJECT

A Texas Clear Lanes project: www.TexasClearLanes.com