I-35 EXPANSION IN CENTRAL TEXAS

Bobby Littlefield, P.E.
District Engineer
TxDOT Waco District
TxDOT is committed to finishing the widening of Main Street Texas (I-35) to a minimum of six lanes, with continuous frontage roads, from San Antonio to Hillsboro.
I-35 Expansion Project – Current Status

Highlights

✓ Last 96 miles – Central Texas

✓ 14 segments/17 projects

✓ Costs: ~$2.0 B
  • Construction = $1.9B
  • Right-of-way = $450M+
  • Utility relocation = $110M

✓ Complete late 2018

✓ Traffic Volumes
  • 55,000 – 115,000 veh/day
  • Trucks: 25 – 35%
Miles

I-35 Miles Under Construction

Peak Construction: 2013–2014 66 miles

<table>
<thead>
<tr>
<th>Year</th>
<th>Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>66</td>
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<tr>
<td>2014</td>
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<td>2015</td>
<td>58</td>
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<td>2016</td>
<td>26</td>
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<tr>
<td>2017</td>
<td>14</td>
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<tr>
<td>2018</td>
<td>8</td>
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</tbody>
</table>
Measures in Place to Reduce Construction Impacts

- I-35 lane closures limited to evenings
  - Sun 10pm – 7am
  - Mon – Fri, 7pm – 7am

- Lane closure blackout dates

- Advance notifications
  (e.g., Electronic Message Signs)

- 6-day work week

- Incentives for completing construction ahead of schedule
I-35 Expansion Project – Current Status

Primary Changes

- 3 lanes in each direction on I-35
- Added I-35 crossings
- Added and relocated ramps
- 1-way continuous frontage roads
- U-turns at selected crossings

- Safety rest areas
- Intelligent Transportation System
- Truck lane restrictions
- Aesthetics
- “Green” initiatives
I-35 Expansion Project – Hill & McLennan Counties

**Section 5A**
North Loop 340 to FM 1858……13.52 miles
Construction Ends .................. Early 2015
Construction Bid .................. $166.8 M
Contractor ......................... Williams Bros

**Section 5B**
FM 1858 to FM 1304.............. 7.13 miles
Construction Ends ................ Spring 2015
Construction Bid .................. $100.9 M
Contractor ......................... Webber, LLC

**Section 4A**
MLK Blvd to Bus 77......... (Frontage Roads Only)
Bid Date: .......................... July 2014
Construction Bid .................. $23.8 M
Contractor ......................... James Construction Group

**Section 4 - Unfunded**
S. Loop 340 to N. Loop 340 ...... 7.9 miles
Construction Funds Needed: .... $330.0 M

**Section 3C**
FM 2063 to South LP 340........3.41 miles
Completed ......................... March 2012
Final Cost ........................ $88.4 M

**Section 3C-2**
North Troy City Limit to Woodlawn Dr... 9.59 miles
Construction Ends .................. Summer 2016
Construction Bid .................. $120.7 M
Contractor ......................... James Construction Group

**Section BRB**
At Brazos River
MLK Blvd to University Parks Dr.......... 1 mile
Construction Ends .................. Fall 2014
Construction Bid .................. $43 M
Contractor ......................... Lane Construction

**LP 340/SH 6**
Interchange Reconstruction
Completed ......................... 2009
Final Cost ........................ $49.4 M

**Section 3B**
Woodlawn to FM 2063.............. 9.79 miles
Construction Ends .................. Summer 2016
Construction Bid .................. $120.7 M
Contractor ......................... Lane Construction

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Section 5B

FM 1858 to FM 1304 ............... 7.13 miles
Construction Ends ............... Spring 2015
Construction Bid ............... $100.9 M
Contractor ....................... Webber, LLC
**SECTION ENHANCEMENTS**

- Expansion from 2 to 3 lanes in each direction
- Converted to one-way frontage roads to improve safety
- Upgraded on-/off-ramps
- Addition of a southbound entrance
- U-turns added
- New traffic signal
- Two new electronic message signs
Section 5A

North Loop 340 to FM 185 ........ 13.52 miles
Construction Ends .................. Fall 2015
Construction Bid ................. $166.8 M
Contractor ......................... Williams Bros.
5A West to Waco

SECTION ENHANCEMENTS

- Expansion from 2 to 3 lanes in each direction
- Converted to one-way frontage roads to improve safety
- Upgraded on/off-ramps
- New on/off-ramps
- U-turns added
- Six new electronic message signs
- TxDOT is converting this from an underpass to an overpass

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**Section BRB**
At Brazos River
MLK Blvd to University Parks Dr
Construction Ends .................. Fall 2014
Construction Bid .................. $40 M
Contractor ...................... Lane Construction

**Section 4 - Unfunded**
S. Loop 340 to N. Loop 340..... 7.9 miles
Construction Funds Needed: $330.0 M

**Section 4 A**
From MLK Blvd to Bus 77
(Frontage Roads Only)
Bid Date: ............................. July 2013
Construction Cost .................. $27.0 M
Contractor ....... James Construction Group
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Brazos River Bridges

SECTION ENHANCEMENTS

- New continuous one-way frontage roads over river
- New frontage road bridges over Brazos River
- Reconfigured on and off ramps
- Remove turnarounds
- Pedestrian access to river
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4 – Waco/Brazos River Bridges

Brazos River Bridges
Lighting: Brazos River Bridges
3C – Hewitt/Robinson to Waco

Section 3C
FM 2063 to S. LP 340......... 3.41 miles
Completed.................... March 2012
Final Cost..................... $88.4 M

LP 340 / SH 6
Interchange Reconstruction
Completed .................... 2009
Final Cost ..................... $49.4 M

Section 3B
Old Bruceville Rd. to FM 2063..9.79 miles
Construction Ends .......... Summer 2016
Construction Bid .............. $120.7 M
Contractor ................. Lane Construction
3C – Hewitt/Robinson to Waco

Fly-Overs
I-35 at LP 340 / SH 6
3C – Hewitt/Robinson to Waco

Completed Construction

Flyover: I-35 from FM 2113/Spring Valley to NB I-35

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I-35 Expansion Project – Bell County

Section 3A-1
From North Loop 363 To North Troy City Limits
6.35 miles
Construction Ends: Spring 2017
Construction Cost: $125.3 M
Contractor: James Construction Group

Section 3A-2
From North Troy City Limits To Woodrow Rd
5.89 miles
Construction Ends: Spring 2017
Construction Cost: $121.4 M
Contractor: James Construction Group

Section 2B
From South Loop 363 to North Loop 363
5.85 miles
Construction Ends: Spring 2018
Construction Cost: $124.3 M
Contractor: James Construction Group

Section 1C
From South FM 2484 to US 190 in Belton
6.0 miles
Construction Ends: Spring 2018
Construction Cost: $107.7 M
Contractor: James Construction Group

Section 1A
From Williamson Co. Line to South FM 2205
5.2 miles
Completed 2010
Final Cost: $85.8 M

Section 1B
From South FM 2288 to North FM 2484
3.9 miles
Construction Ends: Fall 2015
Construction Cost: $72.4 M
Contractor: James Construction Group

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Section 3A-2

N. Troy City Limit to Old Bruceville Rd. 9.59 miles
Construction Ends ......................... Early 2017
Construction Bid ......................... $192.2 M
Contractor ............... James Construction Group

3A-2 – Troy to Bruceville-Eddy
3A-2 Troy to Bruceville-Eddy

SECTION ENHANCEMENTS

- Expansion from 2 to 3 lanes in each direction
- Converted to one-way frontage roads to improve safety
- Upgraded on-/off-ramps
- New crossover
- U-turns added
- Four new electronic message signs
- Addition of a southbound entrance
Section 3A-1
From North Loop 363 to North Troy City Limit
6.63 Miles
Construction Ends: Spring 2017
Construction Bid: $123.6 M
Contractor: James Construction Group
Construction Progress

- Retaining wall
- Underpass Columns
Progress

New Access Rd. Bridges

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3A-1 – Temple to Troy

SECTION ENHANCEMENTS

- **Expansion from 2 to 3 lanes in each direction**
- **Converted to one-way frontage roads to improve safety**
- **Upgraded on-/off-ramps**
- **New direct connector**
- **New crossovers**
- **U-turns added**
- **New traffic signals**
- **Two new electronic message signs**
- **TxDOT is converting Main St./FM935 from an underpass to an overpass**

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Bobby Littlefield, P.E.

I-35: North Loop 363 to Midway Dr

- Project Length: 8.58 Miles
- Construction Letting: Sept 2012
- Construction Bid: $241.3 M
- Anticipated Construction End: Spring 2018
- Contractor: James Construction Group

2B -- Temple
SECTION ENHANCEMENTS

- Expansion from 2 to 3 or 4 lanes in each direction
- Upgraded on-/off-ramps
- U-turns added
- Traffic Signal
- Existing on-/off-ramp
- New electronic message signs
Broke Ground May 9, 2013
New Northbound Mainlanes at Loop 121

New Belton Flyover: Northbound I-35 to West US 190
1C -- Salado to Belton

SECTION ENHANCEMENTS
- Expansion from 2 to 3 lanes in each direction
- Converted to one-way frontage roads to improve safety
- Upgraded on-/off-ramps
- New direct connector ramp
- U-turns added
- New traffic signals
- Six new electronic message signs

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SECTION ENHANCEMENTS

- Expansion from 2 to 3 lanes in each direction
- Converting to one-way frontage roads to improve safety
- Upgraded on-/off-ramps
- New off-ramp
- Removal of existing overpass
- Addition of a new overpass
- U-turns added
- Two new electronic message signs
New Bridges over Salado Creek

New Direct Connect – Northbound I-35 to S. Main St.
# Overall Material Quantities

<table>
<thead>
<tr>
<th>Projects:</th>
<th>Total SY of Concrete Pavement</th>
<th>Total Tons of New Asphalt Pavement</th>
<th>Linear Feet of Concrete Traffic Barrier</th>
<th># Bridges</th>
<th># Bridge Class Culverts</th>
<th># Lane Miles</th>
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<td>1B Salado</td>
<td>404,802.00</td>
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<td>3B Lorena/Brazos River Bridges</td>
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<td>5A Elm Mott</td>
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<td>5B West to Abbott</td>
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<td>141,653.00</td>
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<td><strong>121</strong></td>
<td><strong>50</strong></td>
<td><strong>409</strong></td>
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</table>
**Green Initiatives**

**Air Quality**
- Night-time lane closures ↓ delays and ↓ emissions
- Warm-mix asphalt technologies to ↓ fuel use and ↑ air quality

**Storm Water Pollution Prevention**
- Environmental Mgmt. System (e.g. Const. Stage Gate Inspections)
- Wetland preservation

**Habitat Protection**
- Salado Salamander
- Cliff and Barn swallows’ nests under bridges
- Man-made bat houses (Salado Creek, Lampasas River)
“Green” Initiatives

✓ Recycling
  • Roadway base material, concrete
  • Reclaimed asphalt pavement (RAP)
  • Recycled asphalt shingles (RAS)
  • Rubber for crash and guardrail systems
  • Metal for signs, bridge girders, sign posts

✓ Sustainable Practices
  • Compost to reestablish vegetation ↓ fertilizer
  • Solar panels to power irrigation systems + warning beacons
  • Xeriscape landscaping focused on native plants ↓ irrigation
The Communications Challenge

- More than 30 million travelers per year pass through this corridor.
- ~2/3 travel through the corridor.
- 1,000 businesses are located on these 96 miles.
Communications

Outreach

✓ No surprises!
✓ Business & community meetings
✓ www.My35.org
✓ I-35 newsletter
✓ Lane closure notifications
✓ Dedicated project staff
  • Public Information Officer
  • TTI Mobility Coordinators
  • TxDOT construction staff

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Communications

✓ Advance lane closure notifications
  • Roadside message boards days in advance
  • Coordination between Districts

✓ Real-time travel conditions

✓ Incident alerts
  (As TxDOT is notified)

Sign in Austin District Closure 80 miles away in Waco!
I-35 Work Zone Innovations

Smart Work Zone

2 miles 3 miles

STOPPED TRAFFIC 2 MILES

Speed Sensors

64 mph 52 mph 31 mph 25 mph

I-35 Work Zone Innovations
I-35 Work Zone Innovations

Coming:
Construction Traffic Delay Forecasts

Lane Closure

Anticipated Delay
$\text{Anticipated Delay}_{t+70} = 25 \text{ minutes}$

Current Travel Time
$\text{Current Travel Time}_t = 70 \text{ minutes}$

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Murals

Abbott

West
Murals

Bruceville-Eddy

Troy

Salado

Bobby Littlefield, P.E.
Safety Rest Areas, Hill County and Bell County

Hill County

Bell County

Bobby Littlefield, P.E.
Safety Rest Areas, Hill County and Bell County

- Children’s play area
- Walking trails
- Climate-controlled restrooms
- Enhanced security
- Storm shelters
- Grass paving
Thank You