

Construction Production Rates

March 30, 2022

These rates were developed in coordination with the following parties.

Bridge Division

Laredo District

Construction Division

Lubbock District

Maintenance Division

Lufkin District

Abilene District

Paris District

Brownwood District

San Antonio District

Corpus Christi District

Tyler District

Fort Worth District

*The Associated General
Contractors of Texas*

In accordance with the 2016–2017 Sunset Advisory Commission Staff Report Recommendation 3.7, the Texas Department of Transportation (TxDOT) has updated construction production rate information for estimating project timelines. Minor production rate updates for 2022 were conducted via analysis of survey data from the Districts. TxDOT will review and update these rates, as appropriate, by March every two years.

The following assumptions were made in the development of these rates.

- Engineering judgement must be used in the application of these rates.
- Proper critical path method scheduling methods must be used for construction time determination.
- Construction activities must be scheduled according to project phase narrative.
- Single crews will be mobilized for each independent activity.
- Utility construction in plans set is not included in these rates.
- Weather delays are not accounted for in these rates.

The following conditions would likely cause the proposed construction production rates to fall outside the estimated ranges shown, therefore warranting additional effort to determine proper rates:

- Extremely small or extremely large work zones,
- Long distances from materials sources,
- High average daily traffic (ADT) in project area, or
- Extremely low or extremely high quantities of bid items.

| LINE NO. | MAJOR WORK ITEMS | UNITS | Production Rates | | |
|------------------|---|-------|------------------|--------|---------|
| | | | LOW | MED | HIGH |
| 100 ITEMS | | | | | |
| 1 | PREPARING ROW | AC | 1 | 3 | 6 |
| 2 | REMOVING CONC PAV | SY | 1,000 | 2,000 | 3,000 |
| 3 | REMOVING CONC | CY | 25 | 100 | 250 |
| 4 | REMOVING STAB BASE AND ASPH | SY | 1,500 | 3,000 | 4,500 |
| 5 | REMOVING STAB BASE AND ASPH | CY | 500 | 900 | 1,250 |
| 6 | EXCAVATION (ROADWAY)(EARTH) | CY | 500 | 2,000 | 3,500 |
| 7 | EXCAVATION (ROADWAY)(ROCK) | CY | 250 | 1,000 | 1,500 |
| 8 | EMBANKMENT | CY | 500 | 2,000 | 4,000 |
| 10 | SEEDING/SOD | SY | 800 | 2,000 | 3,500 |
| 200 ITEMS | | | | | |
| 11 | FLEX BASE | CY | 350 | 750 | 1,250 |
| 12 | REWORK BS MTL | CY | 250 | 500 | 750 |
| 13 | LIME TRT | SY | 500 | 2,500 | 4,000 |
| 14 | CEMENT TREAT | SY | 1,500 | 2,500 | 3,000 |
| 15 | ASPHALT STAB BASE (PLANT PRODUCED) | TON | 300 | 750 | 1,250 |
| 300 ITEMS | | | | | |
| 16 | PRIME COAT | GAL | 1,000 | 4,500 | 8,000 |
| 17 | SEAL COAT | SY | 14,000 | 36,000 | 140,000 |
| 18 | ACP | TON | 500 | 1,000 | 1,750 |
| 19 | SUPERPAVE HMA (mat thickness over 1") | TON | 500 | 1,000 | 1,750 |
| 20 | PFC (mat thickness over 1") | TON | 250 | 560 | 850 |
| 21 | STONE-MTRX-ASPH (mat thickness over 1") | TON | 500 | 1,000 | 1,750 |
| 22 | TOM MIX & mat thickness of 1" or less | TON | 200 | 500 | 750 |
| 24 | ASPHALT PLANING/MILLING | SY | 2,500 | 7,500 | 12,000 |
| 25 | CONC PVMT (CRCP) - HAND POURS | SY | 180 | 540 | 720 |
| 26 | CONC PVMT (CRCP) - SLIPS | SY | 1,000 | 2,700 | 4,400 |
| 400 ITEMS | | | | | |
| 27 | Temp Special Shoring/Cofferdams | SF | 100 | 500 | 900 |
| 28 | Soil Nails/Rock Nails | LF | 200 | 400 | 700 |
| 29 | Drilled Shafts | LF | 30 | 100 | 200 |
| 30 | Piling | LF | 100 | 150 | 200 |
| 31 | Sheet Piling | SF | 250 | 350 | 650 |
| 32 | Wall, MSE | SF | 100 | 350 | 800 |
| 33 | Wall, Fascia | SF | 200 | 250 | 500 |
| 34 | Retaining Wall, Reinforced Concrete | SF | 100 | 150 | 200 |
| 36 | Corrugated Metal Pipe | LF | 50 | 120 | 250 |
| 37 | Reinfoced Concrete Pipe | LF | 50 | 120 | 200 |
| 38 | Concrete Box Culvert | LF | 30 | 70 | 130 |
| 39 | Junciton Box | EA | 0.5 | 0.7 | 1 |
| 40 | Headwall | EA | 0.2 | 0.4 | 0.6 |
| 41 | Wingwall | EA | 0.10 | 0.2 | 0.3 |
| 42 | Jack and Bore Culvert | LF | 10 | 30 | 60 |
| 43 | Concrete Footing | EA | 0.2 | 0.25 | 0.33 |

| LINE NO. | MAJOR WORK ITEMS | UNITS | Production Rates | | |
|------------------------|--|-------|------------------|--------|---------|
| | | | LOW | MED | HIGH |
| 400 ITEMS cont. | | | | | |
| 44 | Concrete Abutment | EA | 0.20 | 0.20 | 0.30 |
| 45 | Concrete Bent (Multi-column) | EA | 0.05 | 0.10 | 0.15 |
| 46 | Concrete Bent (Single-column) | EA | 0.07 | 0.10 | 0.15 |
| 47 | Concrete Bent (Post-tensioned) | EA | 0.07 | 0.10 | 0.13 |
| 48 | Concrete Beam (Simple Span) EA/span | EA | 6 | 8 | 10 |
| 49 | Concrete Beam (Spliced Girder) EA/span | EA | 0.10 | 0.20 | 0.35 |
| 50 | Steel Girder (Plate) EA/span | EA | 0.15 | 0.25 | 0.40 |
| 51 | Steel Girder (Tub) EA/span | EA | 0.15 | 0.25 | 0.40 |
| 52 | Bridge Deck | SF | 300 | 900 | 2,000 |
| 53 | Bridge Deck (Extend) | SF | 100 | 200 | 300 |
| 54 | Bridge Approach Slab | CY | 5 | 10 | 15 |
| 55 | Concrete Overlay | SY | 100 | 300 | 500 |
| 56 | Steel Cleaning and Painting | SF | 250 | 500 | 750 |
| 57 | Concrete Rail (Slipform) | LF | 100 | 250 | 550 |
| 58 | Concrete Rail (Combination/Formwork) | LF | 25 | 50 | 100 |
| 59 | Rail Retrofit | LF | 10 | 25 | 50 |
| 60 | Remove Structure (0-99 FT) | EA | 0.20 | 0.40 | 0.75 |
| 61 | Remove Structure (100-499 FT) | EA | 0.20 | 0.40 | 0.60 |
| 62 | Remove Structure (500-999 FT) | EA | 0.05 | 0.15 | 0.30 |
| 63 | Remove Structure (1000 FT or greater) | EA | 0.01 | 0.10 | 0.20 |
| 500 ITEMS | | | | | |
| 64 | PORT CTB | LF | 750 | 1,500 | 3,000 |
| 65 | PERM CTB | LF | 200 | 400 | 600 |
| 66 | CONC CURB & GUTTER | LF | 250 | 500 | 1,000 |
| 67 | CONC SIDEWALKS | SY | 25 | 100 | 400 |
| 68 | CABLE BARRIER SYSTEM | LF | 200 | 300 | 800 |
| 600 ITEMS | | | | | |
| 70 | OVERHEAD SIGN BRIDGE | EA | 0.50 | 1.00 | 2.00 |
| 71 | PAVEMENT MARKING (PAINT) | LF | 15,000 | 50,000 | 100,000 |
| 72 | PAVEMENT MARKING (BUTTONS/MARKERS) | EA | 1,000 | 2,000 | 2,500 |
| 73 | TEMP TRAFFIC SIGNAL | EA | 0.10 | 0.15 | 0.20 |
| 74 | PERM TRAFFIC SIGNAL | EA | 0.05 | 0.10 | 0.20 |
| 75 | Bridge Deck Repair Full Depth | SF | 30 | 60 | 100 |