

# Construction Production Rates

*March 12, 2024*

*These rates were originally developed in coordination with the following parties.*

*Construction Division*

*Pharr District*

*Beaumont District*

*The Associated General*

*Houston District*

*Contractors of Texas*

*Tyler District*

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 2024 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 schedules 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
<b>100 ITEMS</b>					
1	Preparing ROW	AC	1	3	6
2	Removing Conc Pav	SY	1,510	1,974	4,000
3	Removing Conc	CY	25	105	255
4	Removing Stab Base and Asph	SY	1,425	2,915	4,430
5	Removing Stab Base and Asph	CY	500	930	1,263
6	Excavation (Roadway)(Earth)	CY	500	2,050	3,500
7	Excavation (Roadway)(Rock)	CY	250	1,000	1,440
8	Embankment	CY	508	2,030	4,240
10	Seeding/Sod	SY	1,000	2,500	4,000
<b>200 ITEMS</b>					
11	Flex Base	CY	500	750	1,250
12	Rework Bs Mtl	CY	250	500	750
13	Lime Trt	SY	688	2,495	4,108
14	Cement Treat	SY	1,585	2,529	3,325
15	Asphalt Stab Base (Plant Produced)	TON	305	744	1,309
<b>300 ITEMS</b>					
16	Prime Coat	GAL	1,000	4,500	8,000
17	Seal Coat	SY	14,000	36,000	140,000
18	ACP	TON	505	978	1,690
19	Superpave HMA (mat thickness over 1")	TON	522	1,000	1,713
20	PFC (mat thickness over 1")	TON	250	560	850
21	SMA (mat thickness over 1")	TON	300	1,000	1,750
22	TOM (mat thickness of 1" or less)	TON	200	500	750
24	Asphalt Planing/Milling	SY	2,450	7,430	12,075
25	Conc Pvmt (CRCP) - Hand Pour	SY	192	523	746
26	Conc Pvmt (CRCP) - Slipform	SY	972	2,463	4,170
<b>400 ITEMS</b>					
27	Temp Special Shoring/Cofferdams	SF	130	538	915
28	Soil Nails/Rock Nails	LF	208	415	708
29	Drilled Shafts	LF	33	104	203
30	Piling	LF	100	150	200
31	Sheet Piling	SF	250	350	650
32	Wall, MSE	SF	105	358	810
33	Wall, Fascia	SF	200	263	512
34	Retaining Wall, Reinforced Concrete	SF	120	175	220
36	Corrugated Metal Pipe	LF	50	117	243
37	Reinfoced Concrete Pipe	LF	80	119	212
38	Concrete Box Culvert	LF	31	74	135
39	Junciton Box	EA	0.50	0.70	1.00
40	Headwall	EA	0.20	0.40	0.60
41	Wingwall	EA	0.10	0.20	0.30
42	Jack and Bore Culvert	LF	20	40	70
43	Concrete Footing	EA	0.20	0.27	0.36

LINE NO.	MAJOR WORK ITEMS	UNITS	Production Rates		
			LOW	MED	HIGH
<b>400 ITEMS cont.</b>					
44	Concrete Abutment	EA	0.24	0.25	0.30
45	Concrete Bent (Multi-column)	EA	0.05	0.10	0.18
46	Concrete Bent (Single-column)	EA	0.17	0.20	0.18
47	Concrete Bent (Post-tensioned)	EA	0.07	0.10	0.14
48	Concrete Beam (Simple Span) EA/span	EA	6	8	11
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	0.42
51	Steel Girder (Tub) EA/span	EA	0.24	0.39	0.65
52	Bridge Deck	SF	500	920	2,117
53	Bridge Deck (Extend)	SF	100	200	300
54	Bridge Approach Slab	CY	6	11	18
55	Concrete Overlay	SY	100	300	500
56	Steel Cleaning and Painting	SF	250	500	750
57	Concrete Rail (Slipform)	LF	100	271	601
58	Concrete Rail (Combination/Formwork)	LF	25	60	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	0.19	0.40	0.59
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
<b>500 ITEMS</b>					
64	Port CTB	LF	746	2,000	4,000
65	Perm CTB	LF	200	400	600
66	Conc Curb & Gutter	LF	288	554	1,000
67	Conc Sidewalks	SY	30	132	415
68	Cable Barrier System	LF	200	300	800
<b>600 ITEMS</b>					
70	Overhead Sign Bridge	EA	0.50	1.00	2.00
71	Pavement Marking (Paint)	LF	12,500	50,000	100,000
72	Pavement Marking (Buttons/Markers)	EA	1,000	2,000	3,000
73	Temp Traffic Signal	EA	0.10	0.17	0.30
74	Perm Traffic Signal	EA	0.05	0.10	0.22
75	Bridge Deck Repair Full Depth	SF	30	60	100