



# AUGLAIZE COUNTY

## Engineering Department

P.O. Box 59  
1014 S. Blackhoof Street  
Wapakoneta, Ohio 45895

TELEPHONE 419-739-6520  
FAX 419-739-6521  
Email: [doug@augcoeng.com](mailto:doug@augcoeng.com)



*Douglas Reinhart*  
COUNTY ENGINEER

The Honorable Stephanie Kunze, Chair  
Ohio Senate Transportation Committee

March 19, 2021

I am Douglas Reinhart, and just completed my 37<sup>th</sup> year as the Auglaize County Engineer. Prior to becoming County Engineer, I held the position of Assistant County Engineer for nine years prior. I am here in support of Sub. HB 74 and the amendment to increase force account limits for local governments.

I apologize for not being person to testify but four months ago, my wife and I scheduled a small trip out of the Ohio. Special thanks to the General Assembly and Governor for seeing that vaccinations are readily available for my age group to make our trip even safer.

The last time the Ohio General Assembly increased the force account limits was 2003 and for one reason or another, construction inflation began in 2004 at double digit rates. Over the past 18 years, this increase has drastically reduced the size of the road or bridge improvement local governments can complete with their own forces. Listed below are just a few of the main construction materials used for road and bridge improvements and their corresponding inflation factors since 2003. Those numbers are based upon bids awarded by the Auglaize County Commissioners and can be documented if necessary.

<u>ITEM</u>	<u>2003 COST</u>	<u>2020 COST</u>	<u>INFLATIONARY FACTOR</u>
Hotmix Asphalt in Place	\$ 27.40/ton	\$ 87.59/ton	3.2
Hotmix Asphalt at Plant	\$ 25.50/ton	\$ 70.00/ton	2.75
#8 Aggregate @ quarry	\$ 5.15/ton	\$ 11.75/ton	2.28
Redimix concrete (Class S)	\$ 64.95/cu.yd.	\$ 113.00/cu.yd.	1.74
Reinforcing Steel	\$ 386.00/ton	\$ 819.12/ton	2.12
Prestressed concrete beams	\$ 37.98/sq. ft.	\$ 78.64/sq.ft.	2.07

My predecessor began precasting concrete bridge beams in 1967 with county forces to address the need for replacing short span bridges in this county. Since I became County Engineer in 1984, we further streamlined the casting operations and in 1997 began casting 3-sided concrete boxes with up to a 16' wide opening to address the multitude of WPA era bridges in excess of 60 years of age. With the money saved from each structure, we were able to construct another bridge that year or move those dollars towards the cost of matching either Ohio Public Works or federal grants of the much larger structures that were contracted out.

As a result of this aggressive force account work, out of the 348 bridges under this departments jurisdiction, Auglaize County is one of the few counties in Ohio that has no bridges closed or posted for legal load restrictions. School buses, farm to market and fire/rescue equipment can travel freely throughout Auglaize County with no restrictions.

Organizations against increasing force account limits have accused this department of purchasing the bridge equipment at Auglaize County taxpayer's expense so I can have "toys". With that said, I have attached an analysis of all the equipment purchased by this department from 1986 through 2020 for use in our force account bridge improvements.



I also summarized all the bridges replaced, rehabilitated and large diameter concrete culverts installed with this equipment over the same period of time. The attached documents clearly show that it is costing the taxpayers of this county only \$ 3,257 per structure to own the equipment necessary to support our program.

Similarly, this department has aggressively completed road improvements using county forces. As a result, all 349 miles of County maintained roadways have been resurfaced with hotmix several times and 99% of the system have pavement widths of 20' or wider. The vast majority of the increased revenue generated by the fuel tax increasing approved by the 133<sup>rd</sup> General Assembly and the Governor, is being dedicated for roadway resurfacing being contracted out to better increase our pavement conditions.

Even with the aggressive force account program in this county, each year well over a million dollars' worth of projects are bid out to contractors. In 2021, over \$2 million in road and bridge projects (31% of the estimated 2021 budget) will be bid and awarded by the Auglaize County Commissioners and paid for from this departments funds. In 2022, along with an estimated \$1.5 million dollar paving bid, one bridge with a one million dollar price tag will also be let by the Commissioners.

In 2003, force account limits were increased in conjunction with an increase in the motor fuel tax. Those associations now against this proposed increase in the force account limits claimed at that time county highways departments would spend vast sums of money on increasing the number of employees and new equipment and put contractors out of business, which is exactly the opposite of what occurred. This department now has exactly the same number of employees as existed in 2003. If a poll were taken across Ohio, County Engineers will report that their staff is either the same or less than 18 years ago as we are trying to streamline our operations and become even more efficient.

Just a few short years ago. I had a meeting in ODOT's Central Office with associations currently voicing opposition to the proposed force account increase. I was told at that meeting that County Highway Department employees should do no more than plow roads in the winter, pick up trash, and mow roadsides in the summer. Everything else should be contracted. We hire Scouts and 4H groups to annually pick up litter, which provides them income for their projects and over the past 36 years, have hired eight college students to mow roadsides and provide them much needed income as they try to pay their college tuitions. I refuse to accept the premise that this department is justified to exist only because of the four months a year we provide the much needed snow and ice control for Ohio's 29,000 miles of County maintained roadways. We are being paid by the taxpayers to work efficiently for all 12 months. Counties have skilled and dedicated employees and already have much of the equipment needed to complete force account projects.

Counties will still be letting millions of dollars in contract projects for the much larger improvements. The \$225 million in bonds annually purchased by the State and the \$60 million in gas tax revenue distributed by the Ohio Public Works Commission all goes to the contracting community along with the hundreds of millions of dollars let annually by ODOT.

Most importantly, the raising of the force account limits will not cost the taxpayers of Ohio a penny.  
I appreciate the opportunity to testify in favor of the proposed force account limit increases and again, apologize for not being able to attend in person.

Respectfully submitted,



Douglas Reinhart, P.E., P.S.  
Auglaize County Engineer

# Auglaize County Construction Inflation Comparision

## Road & Bridge Construction Materials 2003 vs. 2020

Item	2003	2006	2008	2010	2012	2016	2019	2020	Inflationary Factor
Hotmix / ton in place	\$27.40	\$47.50	\$56.50	\$65.00	\$73.95	\$73.00	\$86.00	\$87.59	3.20
Hotmix / ton at plant	\$25.50	\$36.50	\$45.00	\$58.50	\$60.00	\$60.00	\$70.00	\$70.00	2.75
Stone 8's / ton at quarry	\$5.15	\$5.65	\$6.25	\$8.30	\$9.30	\$10.55	\$11.25	\$11.75	2.28
Redimix / Cu.Yd.	\$64.95	\$80.00	\$84.00	\$87.50	\$89.00	\$101.00	\$111.00	\$113.00	1.74
Rebar / ton	\$386.00	\$674.00	\$998.00	\$652.00	\$827.00	\$680.00	\$797.17	\$819.12	2.12

## Prestress Box Beams in place 2004 vs. 2021

Bridge	Span	Width	Sq. Ft.	Bid Price
WAS-130-07.89	36.25	28	1,015	\$72,385.00
	45.5	28	1,274	
DUC-140-12.81	32	28	896	\$105,000.00
	45.33	28	1,269	
	32	28	896	
WAS-81-11.74	72	28	2,016	\$85,615.00
STM-61-12.65	34.5	28	966	\$120,217.00
	63.25	28	1,771	
<b>Total:</b>			<b>10,103</b>	<b>\$383,717.00</b>

	\$ / sq. ft.	Inflationary Factor
2004	\$37.98	2.07
2021	\$78.64	

Bridge	Span	Width	Sq. Ft.	Bid Price
WAS-101-13.47	54.5	28	1,526	\$120,000.00

*\*\*Cost figures are based on the Engineer's estimate. Project bidding on 4/15/21*



# AUGLAIZE COUNTY BRIDGE EQUIPMENT

<u>Acquired</u>	<u>Year</u>	<u>Description</u>	<u>Amount</u>
1986	1986	John Deere 690C Excavator	\$87,000
1986	1986	Delmag Pile Driver w/leads	\$15,000
1991	1991	Bridge Crew Truck w/body	\$32,800
1993	1976	Link Belt Crane	\$75,000
1993	1993	Bridge Forms	\$ 8,697
1994	1994	Kent Hydraulic Hammer	\$30,000
1996	1996	Kobelco 220 Excavator	\$100,000 (\$25,000 trade in)
1997	1997	Lincoln Welder on A 9	\$ 2,395
1997	1997	Rebar Bender – Rod Chomper	\$ 8,000
1998	1984	Strick Semi Trailer (used 40' flat)	\$ 6,000
1999	1999	David White Optical Plumb	\$ 974
2001	1994	Forklift (8,000#)	\$14,405
2001	2001	Forklift (30,000#)	\$77,975
2001	2001	Bridge Forms	\$ 7,310
2002	2002	Hyd. Coupler attached to Excavator	\$ 5,229
2003	2003	Rebar Tier	\$ 2,590
2004	2004	Gorman Rupp Water Pump 8"	\$11,000
2004	2004	John Deere 270 Excavator*	\$131,159 (\$33,000 trade in)
2004	2004	Transcraft Drop Deck Trailer 48'	\$16,050
2004	2004	Trailking LowBoy Trailer 35 ton	\$31,201
2005	1998	Freightliner Semi Tractor	\$19,500
2006	2006	Miller Welder	\$ 2,989
2007	2007	Running Gear	\$ 1,575
2007	2007	Trimble Laser	\$ 2,155
2009	2009	Hammer Drill	\$ 605
2009	used	Hydraulic plate compactor	\$ 5,000
2009	2009	Rod Chopper	\$10,500
2009	2009	Hydr. Ring saw and chain saw	\$ 8,500
2009	2009	GMC C5500 cab/chassis	\$41,975
2010	2010	Rebar Tier	\$ 2,350
2011	2011	JD 270 Excavator	\$179,886 (\$70,500 trade in)
2011	2011	Rebar Tier	\$ 2,350
2011	2011	Trash Pump	\$ 869
2011	2011	Trimble Lazer	\$ 2,215
2012	2012	Skid Loader	\$42,556
2012	2003	IHC semi tractor	\$24,000
2014	2014	Skid Loader	\$ 11,516 (\$35,000 trade in)
2014	???	Used Delang driver for parts	\$ 5,000
2015	1976	Safety Upgrades on Crane	\$15,125
2015	???	Power Screed from Van Wert Co.	\$10,000
2015	2016	3" Pump	\$ 1,495
2016	2016	Vibrator & 10 ton running gear	\$ 3,720
2017	2017	Hydraulic breaker	\$49,950
2017	2017	Skid Loader with breaker	\$ 25,824 (\$ 41,500 trade in)
2017	2017	Banding machine & rebar tier	\$ 3,483
2018	2018	No purchases	\$ 00
2019	2019	Lowboy trailer with trade in	\$ 53,274
2020	2020	Excavator with trade in	\$197,150
2020	2020	Two rebar tie guns	\$ 4,700

**TOTAL SPENT ON EQUIPMENT FROM 1986-2020 = \$ 1,390,618**

## BRIDGE REPLACEMENT HISTORY (1986 – 2020)

Year	Bridges& 3-side boxes Over 10' span	Bridges Rehab.	Culverts >36" dia.	Notes
2020	5	2	0	
2019	4	2	1	
2018	8	6	1	Once contracted with Fed. Aid*
2017	6	3	0	
2016	8	5	3	
2015	5	5	0	
2014	4	10	0	One contracted with Fed. Aid*
2013	9	1	1	
2012	5	2	2	
2011	1	5	2	
2010	9	3	0	One contracted with Fed. Aid*
2009	5	6	7	
2008	3	5	9	
2007	4	6	7	
2006	4	4	8	
2005	8	2	3	One contracted with Fed. Aid*
2004	11	1	2	One Contracted with Fed. Aid*
2003	13	0	3	One Contracted with Fed. Aid*
2002	13	1	1	One contracted with Issue II dollars*
2001	14	0	7	
2000	13	1	4	
1999	13	1	6	
1998	14	1	5	One contracted Fed. Aid*
1997	11	0	8	
1996	10	0	3	one contracted with Issue II dollars*
1995	13	0	3	
1994	9	0	10	one contracted Fed. Aid (33A)*
1993	8	1	3	
1992	11	0	3	one contracted with Issue II dollars*
1991	11	0	3	
1990	13	0	0	two contracted with Issue II dollars*
1989	9	2	3	
1988	10	2	2	
1987	12	1	0	One contracted with Fed. Aid*
1986	9	0	0	
32-Year TOTALS	287	59	94	

\*13 bridges contracted  
(1/01/2019)

**Over the Past 34 years, Auglaize County Highway Department Crews have replaced 274 bridges, rehabilitated 59 bridges and replaced 94 large diameter culverts for a total of 427 structures.**

**Amount spent by County Engineer from 1986-2020 for equipment dedicated for bridge/culvert replacement and rehabilitation = \$ 1,390,618/ 427 structures = \$ 3,257 /structure**

**Note: During the winter months excavator, skid loader and other equipment are used for permanent maintenance ditch repairs.**