

## Comparison of stormwater pipe installation costs for closed Vs. open competition

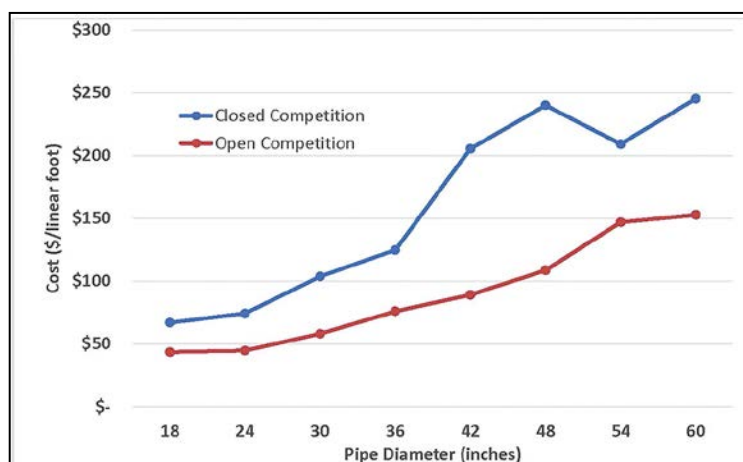
A study sponsored by the American Chemistry Council (ACC) and conducted by BCC Research indicates municipalities utilizing open competition practices for non-pressure stormwater pipe materials enjoy lower pipe costs on average than municipalities with closed material bidding practices.

The study was based on five Texas municipalities. Hidalgo County and Victoria allow open competition for the selection of drainage pipe, while Arlington, Austin and Frisco specify and bid only one storm drainage material. It was concluded the open-competition communities, on average, enjoy lower pipe cost and can reach savings up to 57% when compared to communities using closed competition.

Please see the chart and tables below for more information on the cost savings of open competition.



Simulated 1-Mile Install of 24" (600 mm) Pipe		
Closed Competition	Open Competition	Savings
\$391,746	\$235,621	\$156,125



Average Pipe Capital Costs by Pipe Diameter, for Closed Competition (Frisco, Arlington, and Austin) and Open Competition (Victoria and Hidalgo County) Municipalities.

Pipe Diameter in. (mm)	Closed Competition	Open Competition	% Savings from Open Competition
18" (450)	\$67.75	\$43.44	36%
24" (600)	\$74.19	\$44.63	40%
30" (750)	\$103.66	\$58.01	44%
36" (900)	\$124.76	\$75.93	39%
42" (1050)	\$205.41	\$89.04	57%
48" (1200)	\$239.99	\$108.60	55%
54" (1350)	\$209.11	\$146.95	30%
60" (1500)	\$245.35	\$152.80	38%

Average Cost (\$/foot) for Closed and Open Competition, and Percent Savings Identified for Open Over Closed Competition, On Average.

Source: BCC Research