Bridge Type Selection			
Criteria	**Beam**	**Truss**	**Arch**
Complexity (15%)	3	2	1
Aesthetics (5%)	1	3	3
Lightness (20%)	1	2	3
Stiffness (25%)	1	3	3
Fabrication (20%)	3	1	2
Construction (15%)	3	1	2
Total	2.0	2.0	2.4

As shown in the decision matrix above, the arch bridge was eventually chosen as the base for the final design. The scoring for each category ranged from 1 to 3, with 1 being actively detrimental to the design process (either through additional time expended, serious shortcomings, or simply risk of failure associated with implementing it), and 3 being extremely beneficial with limited compromises. Complexity denotes the expected difficulty of developing a bridge that meets the requirements. Bridge types were rated by their potential visual appearance under the aesthetics category. Since weight is a major component of this competition, expected bridge weights for functional designs were also evaluated. Stiffness was a measure of how well the bridge type was likely to handle loadings, particularly at midspan. Fabrication was an assessment of the team's skills in carrying out necessary manufacturing tasks, with 1 being extremely complex operations and 5 being basic tasks. Finally, construction was how long these bridges generally take to build during competition, with 1 being longest, 5 taking the shortest amount of time. Generally, structural performance was considered to be most important, and so construction time, stiffness, weight, and overall complexity were given relatively high ratings. Factors related to the actual fabrication of the bridge were second most important, followed by general appearance (or aesthetics) of the bridge.