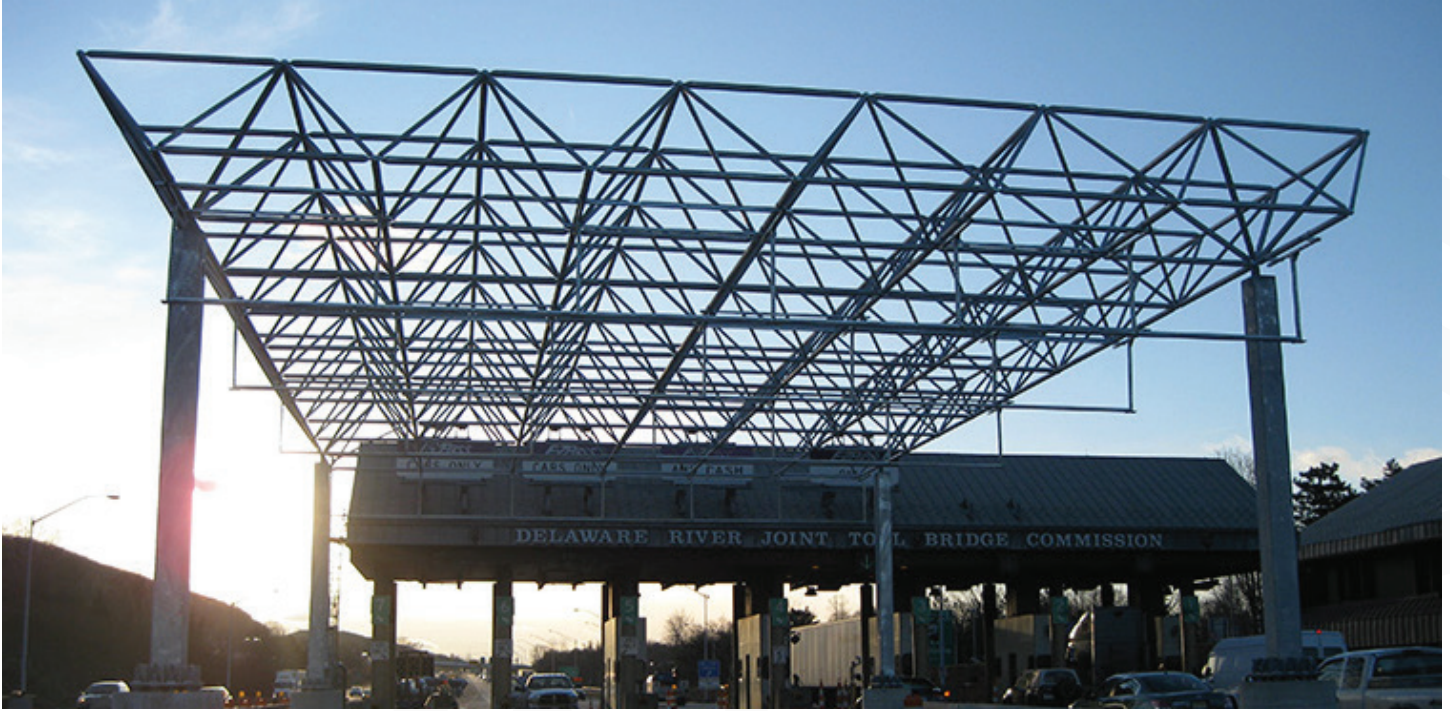


# Open Road Tolling With Space Frame Structures Improves Travel Efficiency On Maine Turnpike

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## Architect

Wyman & Simpson

## Date

Completed in 2013



## Project Highlights

Two space frame structures manufactured and installed by DSI Spaceframes support open road tolling (OTR) equipment at the New Gloucester toll plaza on the Maine Turnpike—the state's first open road tolling lanes. The space frame geometry allows for greater flexibility for the equipment connection locations compared to the limitations found when using monotubes. Space frame structures also are an exceptional choice for the E-ZPass-only lanes because they require minimal support columns. As a result, the roadway remains unobstructed and cars can proceed at full speed through several lanes as tolls are collected from above. E-ZPass transponders mounted to vehicle windshields are scanned by sensors attached to the space frame structures and account holders are billed accordingly. Not only is open road tolling more convenient for motorists, it also reduces vehicle emissions and cuts operating costs for the turnpike authority. The space frame structures provide additional financial benefits: they require little maintenance, are lightweight, sturdy to withstand wind and the elements, modular and scalable, and easy to install. Based on the advantages of the space frame structures, they are used elsewhere on the Main Turnpike Memorial Highway including the West Gardiner, Falmouth and Scarborough open road tolling plazas.



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