Rough Cost Estimate

Assuming a min. 150’ span and max. 200’ span toll gantry over I-275, located between E Busch Blvd. and E Fowler Ave.

LEVEL 1 (Trichord) $870,000 - $1.1 million

LEVEL 2 (Trichord with custom treatment) $950,000 - $1.3 million

LEVEL 3 (Accessible Gantry) $1.7 million - $2.3 million

LEVEL 4 (Accessible Gantry with Custom Treatment) $2.0 million – $2.7 million

LEVEL 5 (Full Custom Gantry, Large Scale) $5.0 million - ???

*These estimates were based on 2013 cost estimates for a Trichord and Accessible Gantry. Costs were adjusted for inflation (3%/year).
The most basic type of toll equipment structure is the tri-chord gantry which is basically an overhead sign structure. This type of gantry requires that overhead equipment maintenance be performed with a bucket truck or platform lift. This will require a partial or full lane closure, depending on the roadway section. Given the potential impact of Maintenance of Traffic requirements during overhead equipment maintenance, this type of toll equipment structure is typically used on lower volume ramps. Also, this type of “bare bones” gantry offers minimal aesthetics.

*ELECTRONIC TOLLING POINT DESIGN, 2013 Design Training Expo*
LEVEL 2 – Custom Trichord
Simple Structure, Some architectural treatment thru color and shape

TAMPA

MIAMI - MDX
LEVEL 3 – Accessible Gantry
Structure allows for maintenance access from above, some architectural treatment thru color, shape, and cladding

The second type of toll equipment structure utilized is the accessible gantry. This type of gantry is so named because the toll equipment is accessible by the maintenance technicians from on the gantry structure. This means that equipment can be maintained from above the roadway during live traffic. The toll equipment support arms are able to be rotated back onto the gantry walkway for serving. Access to the overhead gantry structure, which is traversable, is with a scissor-lift truck which allows access to a raised platform and stairway. This type of gantry provides a greater opportunity for some enhanced aesthetic treatments.

-ELECTRONIC TOLLING POINT DESIGN, 2013 Design Training Expo
LEVEL 4 – Custom Accessible Gantry
Structures become more custom and complex,
More use of color and type of materials, specialty lighting

SOUTH AFRICA
LEVEL 5 – Custom
Large Custom Structures, Custom Architectural Treatment

DELEWARE

CONCEPT

DELEWARE

MIAMI - MDX
LEVEL 5 – Custom

TAMPA

Estimated Construction Cost $7.4 million – $9.0 million
LEVEL 5 – Custom

ENGLAND
ADDITIONAL EXAMPLES...

NEW ZEALAND

DELWARE

SOUTH AFRICA