



Tacoma Narrows Bridge Steel Procurement

Background on the Tacoma Narrows Bridge Project

The Tacoma Narrows Bridge project will result in two parallel suspension bridges between Tacoma and Gig Harbor. Each bridge will carry three lanes of traffic. The new bridge will open in 2007 and upgrades to the existing bridge will finish in 2008.

The Tacoma Narrows Bridge is a toll project and minimizing overall project costs also minimizes toll payer costs. WSDOT is required to finance the project with a goal of providing a \$3 toll for as long as possible. Overall project cost is a critical variable in meeting the \$3 toll requirement.

The design builder, Tacoma Narrows Constructors has full responsibility for the procurement of materials and engineering on the project. Tacoma Narrows Constructors ultimately selected Nippon Steel Kawada Bridge (NSKB) as their Sub Contractor for delivery of the deck sections. NSKB utilized Samsung Heavy Industries as the deck fabricator.

Steel Procurement on the Tacoma Narrows Bridge Project

Of the 46,000 tons of steel required for the Tacoma Narrows Bridge project, approximately 26,000 tons have been procured from foreign sources, and 20,000 tons from US sources. Examples of US steel procurement include the Caisson Cutting Shoe Anchor Rod Frames, Anchorage and Tower Saddle Castings, Rebar, and temporary steel work for the project.

The decision to use foreign steel materials and fabrication on the project was driven by two considerations. First, projects with federal funding are subject to the Federal Highway Administration's "Buy America" requirement. Since the Tacoma Narrows Bridge did not receive federal funding for the design or construction of the project, the "Buy America" requirement did not apply.

The cost of materials was the second part of the decision to use foreign steel. The fabricated bridge deck sections and cable wire are the largest foreign procurement effort on the project. During contract price negotiations, a project cost analysis showed that using foreign steel for these procurement efforts would save the project approximately \$30 million. This savings was a result of lower foreign labor costs, and types of available facilities for orthotropic deck fabrication. The

contract terms and price negotiations were finalized on the basis of this assumption.

Prior to work starting on the project, several meetings were held with Ironworker union representatives and US fabricators to discuss concerns related to foreign steel procurement and the potential loss of industry jobs. While about half of the available steel work had already been committed to foreign sources, Tacoma Narrows Constructors agreed to remain in close contact with the Ironworker organizations as the project developed and to continue to evaluate remaining products and services to provide work to domestic sources.

As part of our oversight efforts on the project, WSDOT's fabrication inspectors regularly visit the foreign fabrication sites to review quality plans, testing results, and work in progress. We are pleased with the quality of the overseas fabrication work and delivery appears on track to meet our schedule milestones. The project remains on time and within budget.

The Federal "Buy America" Requirement

Generally, federal funds may not be obligated for a construction project unless the steel and iron materials are produced in the United States. Federal law does allow One-tenth of one percent of the contract total or \$2,500, which ever is greater, to be provided by a foreign source. These provisions are generally known as the "Buy America Clause."