XML Schemas for Exchange of Transportation Data (TransXML)

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Large volumes of data need to be exchanged in the planning, design, construction, maintenance, and operation of transportation infrastructure. The lack of common data formats to facilitate data exchange across different platforms and applications imposes costs and delays on transportation agencies. A new XML "application schema," TransXML, offers a solution.

XML (eXtensible Markup Language) is a widely used structured data transfer system that facilitates Web-based e-Business and e-Government. XML data structures called "schemas" provide a mechanism to develop and adopt common, self describing formats for data exchange. "XML Schemas for Exchange of Transportation Data (TransXML)," a project (Project 20-64) of the National Cooperative Highway Research Program (NCHRP), is developing XML schemas for exchange of transportation data. These XML schemas will support business processes in local, state, and federal departments of transportation (DOTs). The schemas are also of interest to vendors who develop software products for the transportation industry.

TransXML will facilitate the exchange of transportation data broadly across multiple business areas in a format independent of the software that produced it. The project draws from existing schemas and formats, such as the OpenGIS® Geography Markup Language (GML), LandXML, aecXML, JusticeXML and AASHTOWare. One objective is to develop a framework of tools and organizational arrangements for continuing schema development and for validation, dissemination, and extension of current and future schemas. This will involve "harmonization" efforts with the organizations responsible for those schemas and formats.

The TransXML project began in 2004 and is expected to finish in March, 2006. The project team is actively seeking comments from transportation agencies and software vendors on work to date. For more information or to comment on the schemas as they evolve, see http://www.transxml.org/
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