7.2.2 **California OneMap – Road Database Solution for California DOT**

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The 15-year-old system whereby Caltrans submits mandatory reports for road classifications to the Federal Highway Administration needed modernization.   Requirements for accurate and current road data, distribution of road information and efficient use of current GIS and database technology led to a public-private solution called California OneMap, a customized version of the TeleAtlas Dynamap 2000 roads data product. California OneMap is an Oracle/ArcSDE supported database of road and other feature data that carries Caltrans-specific road attributes, and is jointly maintained by both organizations to include Caltrans-sourced road classification updates, and TeleAtlas road additions and improvements.

The business needs of Caltrans dictated the direction this project, the most pressing of which was support for in-house production of California Road System maps, Caltrans' reporting mechanism to Federal Highways for road classification. The choice of TeleAtlas road data for map production led to examination of alternatives for long-term maintenance of the road database. Caltrans developed business and system requirements for California OneMap, from which an agreement with TeleAtlas was fashioned. California OneMap includes attributes for Federal Highway Performance Monitoring System (HPMS) segments, and as such represents the first spatial enablement of HPMS data in Oracle/ArcSDE at Caltrans.

California OneMap was inaugurated in July 2005. Database development is scheduled for completion in June 2006. The March 2006 GIS-T conference is well timed to present to the GIS-T community status, findings, and lessons learned from the building of California OneMap.

The presentation will explain the process through which California OneMap was developed, including the business needs, reporting requirements, data quality, data distribution, and maintenance strategies.

Technical issues associated with database development, including data format, synchronization and integration, quality assurance, data transfer, and project tracking logistics will be discussed, as well as the current state of California OneMap as of the date of the conference.