

**SYBASE, INC.**  
**CUSTOMER BRIEF TEMPLATE**

**Customer:** Maricopa County Department of Transportation

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**Date:** 9/30/93

**Application:** Road and inventory management

**Environment:** H/W: servers: Data General clients: IBM 386 & 486s  
Operating System: UNIX  
Networking System: Novell 3.11 LAN  
Sybase products: SQL Server, Open Server, Open Client

**Overview**

Managing and maintaining 4,000 miles of roads is a daunting challenge even with the most sophisticated open-computer network. But if you're relying on a proprietary computer system to make critical decisions, that challenge is infinitely more difficult. That's why the Maricopa County Department of Transportation (DOT) in Arizona is implementing a computer network based on Sybase SQL technology.

The Maricopa County DOT employs 525 people, who are responsible for designing, constructing, and maintaining the 4,000 miles of public roadways in Maricopa County. Maricopa has a population of 2.5 million people, and includes Phoenix, Scottsdale, and Mesa. The DOT is one of six divisions in the Maricopa County Environmental Management and Transportation Agency, which also includes Planning & Development, Environmental Management, Emergency Management, Solid Waste, and the Flood Control District. The DOT's mission is to provide safe, economical, and environmentally-sound roadways to people in Maricopa County.

**Application**

Ken Medlin is the director of the Information Technology Center within the DOT. The Information Technology Center is responsible for the purchase and design of computer applications and custom software for all the departments in the Environmental Management and Transportation Agency. Medlin also spearheads the Information Technology Center's role in producing cartography for the DOT. Until recently, the Information Technology Center relied on a proprietary Data General system for all its computer operations. Users of the system encountered major problems that reached beyond the walls of the DOT. The biggest problem was the Data General system wasn't based on open architecture, and didn't have the connectivity devices to network to other department's systems. This meant there was no way people working in different departments could access one another's data. Consequently, there was a great duplication of data between departments, wasting a great deal of time and money. The DOT wanted a system where one copy of data could be maintained, and all departments within the county government could access it.

In order to achieve that goal, the DOT invested in an open-computer system based on Sybase SQL technology. The department uses Sybase SQL Server, Open Server, Open Client and Open Client for PC, along with Powersoft's PowerBuilder, running on a network of 386 and 486 clients and a Data General Server. The system was installed in July and won't be fully operational for another year. Once fully implemented, the DOT will use its Sybase system to produce information systems that monitor and inventory everything the department does, from road maintenance and road-sign programs to historical data. It will also ensure that all roads within Maricopa County are managed properly. Every department within Maricopa County will have access to every other department's data. The biggest challenges Medlin and the Information Technology Center face are re-engineering the previous legacy database and converting the graphical components to Sybase. In addition, DOT programmers must learn to readjust their thinking away from Cobol and into client/server. When the Sybase system is fully operational, the DOT expects to save almost 70 percent in hardware costs, and almost 60 percent in maintenance costs. Because the Sybase system is easier to use and will make all county government data consistent, it is expected to drastically reduce the amount of user training.

### **Why Sybase Chosen**

When it came down to choosing a relational database as the core of the DOT's client/server computer system, Sybase was the clear choice. Sybase's connectivity features enable the SQL Server to be connected to other heterogeneous databases, such as Oracle and Informix, within the county government. When comparing prices with other relational databases, the DOT found Sybase a much better buy. Not only was Sybase less expensive, it also gives more bang for the buck than the competition, which is particularly important to any government agency trying to trim the fat from its operating budget.