I come from a long line of engineers. My grandfather, Warren A. Bechtel, began by grading railroad beds in Oklahoma Territory in 1898 and started our company in the early years of the 20th century. His son, my father Steve Bechtel, was raised around heavy construction jobs—and so was I. The first 2 years of my life were spent living in an "outfit car" with my mother and dad at a railroad construction camp as our company built railroads in the western United States.

In addition to railroads, our company has been involved in highway construction and building bridges and tunnels. In the mid-1950s my father served on President Eisenhower's Advisory Committee on a National Highway Program at the request of General Lucius Clay, the committee's chairman and Dad's good friend. "If we were going to build highways, I wanted people who knew something about it," General Clay once told an interviewer. "Steve Bechtel had more experience in the construction field than anyone in America. He wasn't involved in road building, but had a comprehensive knowledge of the construction industry." I know my dad got a great deal of satisfaction out of helping develop the concept and general plans for what became the interstate highway system—one of the great infrastructure feats of the century.

At Purdue University I majored in civil engineering, an integral part and perhaps the dominant engineering discipline in most transportation systems. In the early 1960s, shortly after I became president of Bechtel, our company partnered with Parsons Brinckerhoff and Tudor to do the feasibility study for, and then served as project managers on, the Bay Area Rapid Transit System. We also had a major role in building the Washington Rapid Transit. These projects were the pioneers of modern-day rapid transit. During my years as president of Bechtel, we were involved in a major 229-kilometer highway program in Turkey, and we are currently helping build the 200-kilometer Croatian Motorway. We are also involved in the Big Dig in Boston, where our people, in partnership with Parsons Brinckerhoff, are nearing completion of the largest road project ever in the United States.

I have been privileged in my career to have gained personal experience in a wide range of transportation projects, including highways, railroads, airports, marine terminals, and pipelines—all of which offered fascinating engineering challenges and very rewarding activities. Although each project is unique, every one demands a high level of integration. First, you must determine the need, the scope of the project, and what it will cost. The potential impact on the environment and the local community also must be considered. The engineering team then uses all the information to create the design. Equipment and materials are procured, and a skilled workforce is brought in to finish the job on time and within budget. It's a straightforward process, but on a big project it takes extraordinary organizational ability to do it well.

For those of us who are fortunate to have been trained and to serve as engineers, there is great satisfaction in working on historic and important infrastructure projects. They improve the quality of life, in both safety and convenience, and facilitate improved commerce and economic growth around the world. From a personal view, the engineers involved get the great feeling of accomplishment in participating and helping to bring these benefits to the people of the world.