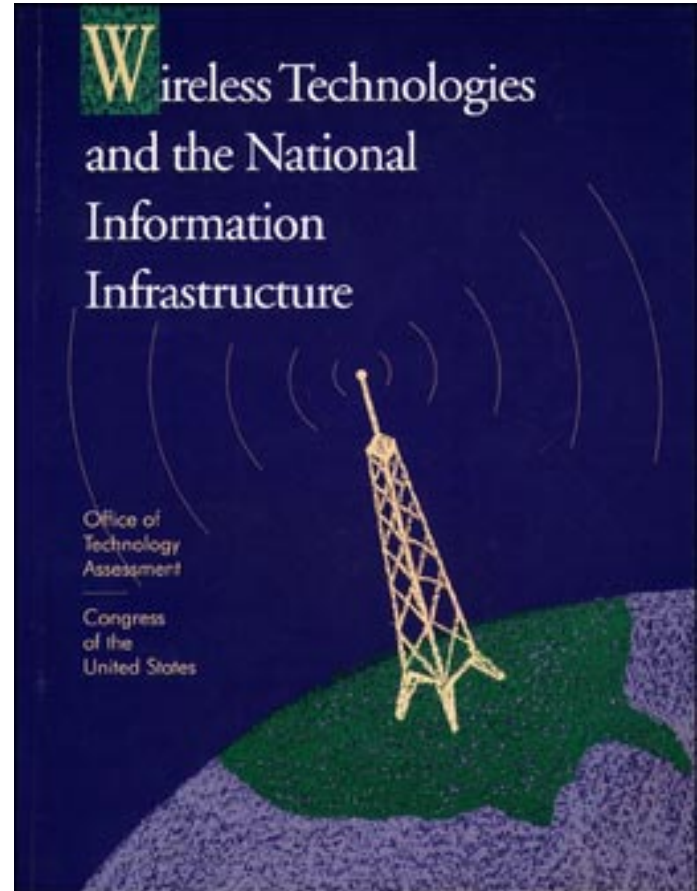


*Wireless Technologies and the National
Information Infrastructure*

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Foreword

The United States is in the midst of a fundamental restructuring of its communications and information technology infrastructure. Congress, the executive branch, and the states all are attempting to determine how to combine the country's many different networks—telephone, computer, cable television, cellular telephone, satellite, and broadcasting—into a broader National Information Infrastructure (NII). The private sector is spending billions of dollars developing systems to bring a wide variety of improved services to businesses and consumers. Wireless technologies, including radio and television broadcasting, satellites, cellular and other mobile telephones, and a variety of data communication systems, make up one of the most vibrant elements of this new telecommunications order, and will offer the American people new and more flexible ways to communicate with each other, access information resources, and receive entertainment. However, realizing the benefits of wireless technologies while avoiding potential obstacles and adverse consequences will require a long-term commitment to overseeing the changes now being set in motion. Government and private sector representatives must cooperate to ensure that wireless and NII goals and policies work together.

This report examines the role wireless technologies will play in the emerging NII and identifies the challenges that policymakers, regulators, and wireless service providers will face as they begin to more closely integrate wireless systems with existing wireline networks. The report provides Congress with a broad overview of the wireless technologies being developed and discusses the technical, economic, and public policy issues associated with deploying them. Potential policy options are presented to help ensure a smooth transition to an integrated wireline/wireless NII. The report also discusses some of the technical and social implications of the widespread use of wireless technologies—paying particular attention to the profound changes that wireless systems may cause in patterns of mobility.

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