



Next Generation Access Report: 2001-2006

At Home - At Work - Anywhere



United States **50 States - 150 Metro Areas**

*Including Forecasts for:
Fixed and Mobile Access,
Residential Broadband, Voice and Data, Minutes of Use*

Next Generation Access Report: 2001-2006

May 2002

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The Telecompetition forecast methodology used in this report represents a powerful and consistent approach to developing a bounded forecast. Country-level forecasts are based on known or published demographic, firmagraphic, technological, economic and other factors built into the ATIVA Research Tool[®] model.

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Preface

Welcome to the Telecompetition US Next Generation Access Report.

This "Next Generation Access Report" quantifies access demand by end-users for fixed and mobile services, by metro area and state, for home, business locations, and anywhere in between. Thus, it provides a comprehensive view of the total access demand, across industry sectors, for any geographic area in the US.

This report represents a view of the mobile and fixed (wireline) market at a fixed point in time. The overall market numbers presented in this report fairly represent the future potential for the market based on the current and anticipated market dynamics. The analysis done to develop the numbers in this report was in-depth, and considered both primary and secondary sources. Thoughtful consideration was given to the broader context of services and substitutes available outside the industry. At each step, conservative assumptions were made across a range of parameters including willingness to pay, adoption rates, penetration levels and many other considerations.

At the time of publication, the US technology market is undergoing considerable change, and at least a short-term slowing economic environment is evident. We believe the conservative assumptions made as the basis for the forecasts in this report are consistent with this economic environment.

In a dynamic market, the market must be analyzed in light of new changes. Telecompetition, Inc. monitors and analyzes the mobility market on a continual basis. We are pleased to present this annual report and will reflect the latest market conditions and dynamics as we update this report each year. Our patented technology allows us to concentrate on the continually changing dynamics and reflect those changes in the stored memory of the thousands of factors and coefficients used to produce these forecasts. Individual metro- or state-level data may vary based on the additional factors not currently reflected in the forecast for each area. Any insights or specific state, metro-area, or country-level comments or data provided by any reader will be considered and may be reflected in forecasts in future years. Such comments can be sent to info@telecompetition.com. We will respond to all such comments. Parties providing information that is used to refine these forecasts will be acknowledged in writing in future reports unless they wish to remain anonymous.

We appreciate the support you have shown by purchasing an electronic copy of this report. We also appreciate your strict adherence to the terms and conditions of licensing of the electronic version. This adherence allows us to continue to produce high quality market reports.

Telecompetition, Inc.
May 2002

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1. Executive Summary – The Next Generation Network

Over the past 20 years, the US communications industry has transformed itself from a single-provider network dominated by voice technology and services to a multi-industry, cross-technology network dominated by digital technology delivering multimedia services and content. Networks once designed to be uniform and standardized are now required to be open and interoperable with a number of different technologies and protocols. The “first generation” voice network provided universal service to the US, and lasted about 100 years. The conversion of the telephony network to digital switches and fiber backbones and the growing importance of packet technology exemplifies completion of the “second generation” and the transition into the “next generation network.”

In this next generation network, formerly distinct access technologies, with comparable price points, become interchangeable. Mobile phones can displace fixed (wireline) long distance, and digitized voice is transmitted over the Internet via dedicated “data” lines. In this new converged environment, service providers must contend with not only competition within their own technology space, but also with the considerable threat from substitute services in what was previously considered different industries.

This report is intended to provide a cross-industry look at end-user demand for network access. It introduces a new term “access connection” to describe an environment where a mobile “phone” is comparable to a dial-up line in the eyes of the end-user. This “Next Generation Access Report” includes access connection forecasts for fixed and mobile services, by metro area and state, for home, business locations, and anywhere in between. Thus, this report provides a comprehensive view of the total access demand, across industry sectors, for any geographic area in the US.

The analysis in this report includes the following forecasts:

- Total access connections (mobile and fixed) will increase at a compound annual growth rate (CAGR) of 19% driven by increased data and mobile usage.
 - New applications for multimedia drive higher bandwidth requirements. Businesses will continue to increase total bandwidth requirements as well as move traffic to IP networks.
 - By 2006, 60% of total access connections will be for data.
 - Mobile voice access connections will surpass fixed voice by 2005.
- End-users find mobile minutes a cost-effective substitute for long distance, and as a result, mobile minutes of use are growing while fixed usage growth is slowing.
- Internet penetration will grow, but at a slower rate than in the last few years. Internet user penetration in the US is expected to grow from 50% in 2001 to 75% by 2006. This in turn will continue to drive considerable growth in higher-speed access in both fixed and mobile networks.
 - Residential broadband growth, having started rather slowly, is now picking up and is expected to reach almost 50% of households in the next five years.
 - Consumers are dropping second lines and opting for mobile phones or broadband.