



**Tennessee eStrategy Report:
Broadband as a Driver of Economic
and Social Development in Tennessee**

*Strategies, Options, and
Recommendations*

June 2016

Prepared for



Table of Contents

EXECUTIVE SUMMARY	3
INTRODUCTION	5
SECTION A: A Framework for Broadband Strategies in Tennessee.....	7
SECTION B: Improving Connectivity.....	9
1. Create an Open Regulatory Environment.....	11
2. Explore Tax Incentives and Reforming Taxation to Promote Broadband Deployment	14
3. Implement Broadband Friendly Policies and Ordinances	15
4. Facilitate Community, Middle Mile and Statewide Broadband Initiatives.....	18
5. Make Key Investments in Broadband	20
Access Other Funding and Grants	26
SECTION C: Improving Utilization and Broadband Impacts	31
1. Internet Utilization by Businesses.....	32
2. Community Anchor Internet Utilization	37
3. Household Internet Utilization	40
SECTION D – Building Capacity to Facilitate Internet Connectivity and Utilization.....	43
1. Establish a State Broadband Office and Regional Technology Teams.....	43
2. Enact a Multi-year Action Plan.....	44
SECTION E – Concluding Comments.....	45
Appendix 1 - List of Figures	46
Appendix 2 - Broadband Technologies	47
Appendix 3 - Grant Programs.....	49
Appendix 4 - Role of State Broadband Office in State Broadband Rankings.....	51
Appendix 5 - Glossary.....	52
Appendix 6 - List of Counties by Economic Status	53

EXECUTIVE SUMMARY

This eStrategy Report provides a foundation for developing policies and strategies that will help the State of Tennessee address identified broadband availability and usage gaps and make strategic investments to emerge as a leader in an Internet enabled economy and society. This report includes a **Strategic Framework for Broadband Investments in Tennessee** that establishes the two overarching goals of increasing the access and meaningful use of broadband to drive local economic development and civic advancement:

- A. Ensure equitable access to broadband Internet for community anchor institutions, businesses and households throughout the State.**
- B. Leverage the benefits from broadband infrastructure for communities, businesses and residents by facilitating increased adoption and improved utilization of Internet capabilities.**

The Strategic Framework provides objectives to position the State of Tennessee as an Internet infrastructure leader both nationally and globally. For Internet connectivity, the Strategic Framework is based on a standard for Internet infrastructure that will respond to future utilization and demand.

While connectivity is necessary, it is not by itself a sufficient condition for an Internet enabled economy. Availability of reliable and fast Internet must be accompanied by the ability of individuals, businesses and institutions to maximize the use of impactful online processes and applications that the Internet makes available. The Strategic Framework establishes as a specific objective to increase the utilization of the Internet in a manner that maximizes jobs, incomes, competitiveness, and community well-being.

To achieve the goals and objectives established in the Strategic Framework, this report identifies strategic options available to Tennessee. These strategic options build on the best practices and experiences in other jurisdictions.

Finally, this report provides recommendations on how the State can build the capacity to take decisive and coordinated approach to improving Internet connectivity and utilization within the State by establishing a broadband office and a multi-year action plan.

The objectives, recommendations, and options for implementation of this report are summarized in the table below.

Strategic Objectives and Recommendations

Objective 1: Work toward equitable access for all communities through Internet infrastructure that is reliable and scalable¹.

Recommendation: Within three to five years, ensure all communities have fiber to their core and community anchor institutions, as well as last mile Internet service that meets the 25/3 standard.

Options for achieving this recommendation:

- Create an Open Regulatory Environment
- Explore Tax Incentives to Promote Broadband Deployment
- Implement Broadband Friendly Policies and Ordinances
- Facilitate Community, Middle Mile and Statewide Broadband Initiatives
- Make Investments in Broadband
- Access Other Funding and Grants

Objective 2: Leverage existing and new broadband infrastructure by promoting broader and more intensive utilization of the Internet by residents, businesses and community anchor institutions.

Recommendation: Develop specific initiatives that target key constituencies that are either not using or are under-utilizing the Internet.

- **Businesses:** Target low performing industry sectors, small to medium size businesses, and businesses in non-metro areas. Develop online and local based support to promote the most impactful Internet applications.
- **Community anchor institutions:** Focus on increasing utilization among local governments and health care providers. Support efforts of libraries and economic development agencies in driving Internet utilization.
- **Households:** Design utilization programming for older, low income, and low educational attainment groups.

Objective 3: Enhance institutional capacity and leadership to promote and facilitate the State's broadband initiative.

Recommendation: Establish a State Broadband Office and Local Technology Teams with defined functions and measurable objectives.

Objective 4: Dedicate multiyear resources to making Tennessee a national broadband leader.

Recommendation: Develop and adopt a three to five year action plan supported by appropriate legislation, regulation and financial resources.

¹ **Scalability** is the capability of a network to handle a growing amount of work, or its potential to be enlarged in order to accommodate that growth.