

Navigate with a trusted guide



QSI Consulting, Inc.

Professional Consultation for Regulated Network Industries

- **Network Industry Specialists**
- **Litigation/Regulatory Support**
- **Economic & Financial Modeling**
- **Management Consulting**

A Trusted Guide In Today's Rapidly Changing Marketplace

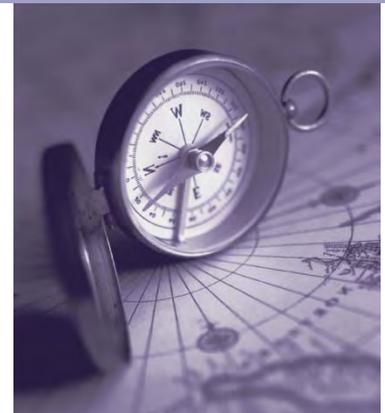


Regulated network industries like communications and energy are complex – technological, regulatory and competitive risks abound. It is for that reason that a trusted, professional team of experienced consultants can significantly improve your organization's ability to react quickly and effectively.

QSI's consultants have more than 150 years of combined, hands-on, industry experience with both corporate and government stakeholders. Likewise, QSI's consultants cover the landscape of professional expertise necessary to succeed; *e.g.*, litigation support, economics, accounting, engineering, damages assessment, etc.

It is no coincidence that a wide array of industry participants entrust QSI consultants to pursue their interests. QSI's client list includes cable companies such as Comcast and Charter, wireless companies such as T-Mobile and Bell Canada Mobility, energy companies like BC Hydro and Toronto Hydro, numerous state utility commissions, consumer advocate groups, and state and federal agencies such as state attorneys general and the U.S. General Services Administration and Federal Executive Agencies.

Please take a few minutes to look through this brochure to better understand how QSI can help you.



Our Services Include

**Economic & Financial
Modeling**

**Litigation, Regulatory &
Legislative Support**

Damages

**Tax Analysis
Cost of Performance**

Tariff Services

**Business Model
Development**

Due Diligence

**Operations Support
System Analysis &
Development**

Regulatory Compliance

**Revenue Assurance &
Billing Reconciliation**

**Witness & Technical
Training**



CORPORATE PROFILE



QSI Consulting, Inc. (QSI) is a privately-held consulting firm specializing in the economics of regulated network industries, including telecommunications and energy. QSI provides a wide-array of solutions to clients, ranging from day-to-day technical, business and regulatory assistance such as tariff and rate analysis and case management, to more complex solutions including expert witness services, tax analysis, damages, and economic cost modeling to better understand the internal cost structure of multi-product, network-based firms.

QSI employs some of the most experienced and trusted experts in the industry. QSI's experts are often called upon to provide expert testimony before regulators, legislators and the courts. QSI's experts have testified in hundreds of proceedings before state public utility commissions across the United States and Puerto Rico, the Federal Communications Commission, the U.S. Patent and Trademark Office and numerous courts. These experts, backed by an experienced research and data analysis team, assist QSI clients in navigating the maze of regulations and compliance issues and finding innovative revenue enhancement and cost efficiency opportunities.

QSI serves a diverse list of clients, including telecommunications companies, energy companies, equipment vendors, federal agencies, state public utility commissions, state attorneys general, consumer advocates and non-profit industry organizations. The fact that QSI provides solutions to the companies operating in the regulated telecommunications and energy spaces as well as to the governmental agencies responsible for regulating those companies is a testament to the quality and objectivity of QSI's practice.

Our History

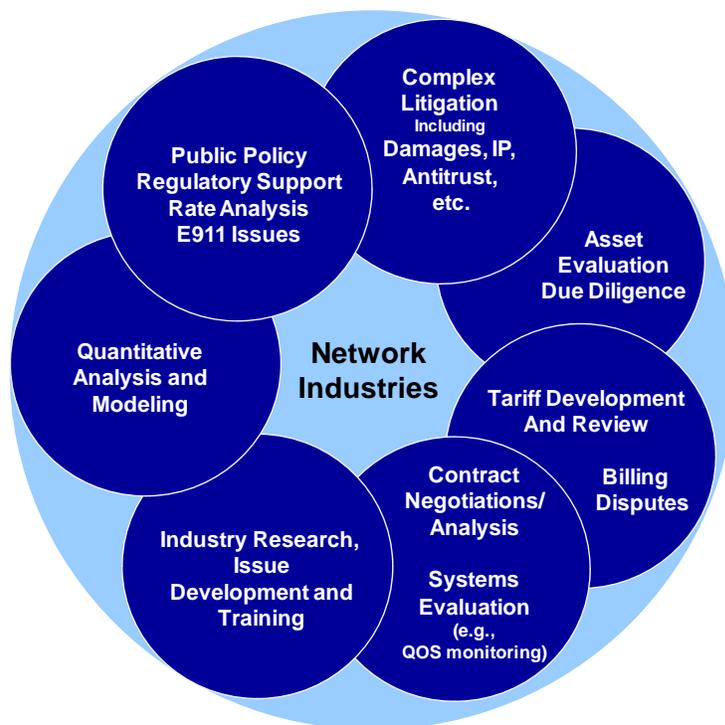
QSI was founded in 1999 by Michael Starkey (President) and August Ankum, Ph.D. (Senior Vice President - Chief Economist). In the early years, QSI's practice focused primarily on establishing rational telecommunications rates and policies following enactment of the federal Telecommunications Act of 1996. Since that time, the telecommunications industry has changed dramatically and QSI has adapted accordingly. QSI now provides services to clients in nearly all aspects of the communications industry covering the spectrum of traditional and emerging communications technologies (wireline, wireless, cable, Internet Protocol - IP, etc.). In recognition of the increasing cross-industry convergence between communications and energy, QSI also assists clients in the energy industry. While the scope of our services and client-base has expanded, QSI remains dedicated to providing industry-leading, high-quality services at reasonable rates.

Our Services

QSI's major practice areas revolve around the economic, operational and regulatory aspect of the communications and energy marketplaces.

QSI has assisted clients in nearly every aspect of operational effectiveness, including the development of the initial business plan, due diligence, technological and network evaluation, service delivery, vendor management and operational support system evaluation and implementation.

QSI consultants are also there when unexpected events arise, *i.e.*, litigation, changes in the regulatory environment or advances in technological innovation. If your organization requires assistance with nearly any aspect of your participation in communications or energy markets, QSI has experience that can help.



Our Clients

QSI provides solutions to all types of market participants ranging from the largest corporate players, their customers, as well as the government agencies that regulate the interaction between those companies and customers. QSI's broad range of clients gives it not only a wide breadth of experience but also a well-rounded, up-to-date perspective on issues important to network industries. Below is a sampling of our clients:



Our Approach

QSI employs a *Project Management* approach to consulting in which QSI's Project Managers (1) analyze the requirements of a given project, (2) develop a "critical path" analysis tasked with organizing and managing several work steps and personnel necessary to complete the project, (3) define deliverables and due dates and (4) staff the project with the industry's most experienced and creative team of professionals. QSI is committed to our clients' satisfaction with the value proposition of our work. Expertise and experience are not enough; a good consultant must ensure that the client receives economic value associated with the consulting dollars they spend.



THE QSI TEAM



www.QSIConsulting.com

QSI's professional consultants provide its clients with hundreds of years of combined expertise in economics, finance, public policy, regulation, marketing, product development, business planning and computer modeling. QSI draws from each of these disciplines and the substantial experience of its consultants when it defines a project-specific team aimed at delivering the most value-laden solutions. In addition, QSI's consultants bring substantial work experience from the utility industry, state regulatory commissions, national carrier associations, academia and a number of other professions. The following list provides a general overview of QSI's consultants and their professional experience. More in-depth information about each consultant and his/her experience may be viewed on our website at www.QSIConsulting.com.

MICHAEL STARKEY President

Mr. Starkey is a founding partner and currently serves as the President of QSI Consulting, Inc. Mr. Starkey's consulting career began in 1996 shortly before the passage of the Telecommunications Act of 1996. Since that time, Mr. Starkey has advised some of the world's largest companies (e.g., AT&T, MCI, Comcast, Time Warner Cable, Level 3 Communications, Siemens Corporation, etc.) on a broad spectrum of issues. Mr. Starkey's experience spans the landscape of competitive telephony, including interconnection agreement negotiations, mediation, arbitration and strategies aimed at maximizing new technology. Mr. Starkey's experience is often called upon in his capacity as an expert witness. Since 1991, Mr. Starkey has provided testimony in more than 100 proceedings before approximately 35 state commissions, the FCC and courts of varying jurisdiction.

Mr. Starkey is a recognized expert in the area of economic costing for telecommunications networks and has constructed, critiqued and/or reviewed telecommunications costing models for the industry's largest companies for the setting of retail and wholesale service rates as well as for cost of performance analyses used in multi-state tax sourcing of income.

Prior to founding QSI, Mr. Starkey founded and served as the Senior Vice President of Telecommunications Services at Competitive Strategies Group, Ltd. (CSG) in Chicago, Illinois. Prior to that, Mr. Starkey served as an executive and analyst for numerous state regulatory commissions, including the Missouri, Illinois and Maryland state commissions.

Mr. Starkey holds a B.S. in Economics from Southwest Missouri State University. He has also attended numerous industry seminars and training courses.

AUGUST ANKUM, Ph.D.
Senior Vice President

Dr. Ankum is a founding partner of QSI, serves as Senior Vice President and is the firm's Chief Economist. Dr. Ankum is a practicing economist and consultant specializing in both domestic and international telecommunications and energy issues. Before co-founding QSI, Dr. Ankum worked directly with a number of the country's largest communications clients in his own practice. Prior to that, Dr. Ankum served as Senior Economist for MCI Telecommunications Corporation's Public Policy Division, and before that as a Manager in the Regulatory and External Affairs Division of Teleport Communications Group, Inc. (later purchased by AT&T). In his capacity with both MCI and TCG, Dr. Ankum provided expert testimony regarding the economics of telecommunications and public policy in contested proceedings across the country. Dr. Ankum specializes in competitive telephony issues pertaining to removing barriers to entry in local telecommunications markets and determine appropriate rates for intercarrier compensation. Dr. Ankum also critiques energy utility cost of service and rate design proposals to assess their impact on residential and small business customers as well as economic development in the states served by the utilities. Dr. Ankum began his career in utility regulation with the Texas Public Utility Commission, where he served as the Commission Staff's Chief Telecommunications Economist.

Dr. Ankum received a Ph.D. in Economics from the University of Texas at Austin, a M.A. in Economics from the University of Texas at Austin, and a B.A. in Economics from Quincy College in Illinois.

WARREN FISCHER, C.P.A.
Chief Financial Officer

Mr. Fischer is a QSI partner and currently serves as its Chief Financial Officer. Mr. Fischer has over 20 years of experience in the telecommunications industry and joined QSI after five years of service within AT&T's Local Service & Access Management and Wireless Services divisions. During his career, Mr. Fischer has focused his attention on external financial statement and internal management reporting analyses, forecasting, historical and forward-looking economic cost methodologies, operational cost analyses, multi-state tax sourcing of income through cost of performance determination, financial and management audits, Telecommunications Act policy and compliance issues, universal service fund administration and policy issues, billing disputes, forensic accounting analyses, and damages assessment.

Mr. Fischer is an experienced and effective expert witness who has provided expert testimony and reports in over 50 proceedings before 27 state utility commissions, state and federal courts, and other administrative agencies. Mr. Fischer is an active Certified Public Accountant who is licensed in the States of Colorado and California. Mr. Fischer's professional experience as a C.P.A. includes two years in public practice with Deloitte and Touche LLP and over 20 years of managing financial analysis, reporting and forecasting processes for various multi-national corporations.

Mr. Fischer has a Bachelor of Science degree in Business Administration from the University of Colorado – Boulder.

JAMES WEBBER
Senior Vice President

James Webber is a QSI partner and serves as Senior Vice President. He has approximately 19 years of experience within the public utility and regulatory fields during which time he has successfully managed projects for a number of the nation's most notable telecommunications carriers including, for example, AT&T, MCI, One Communications, PAETEC and XO. Mr. Webber's consulting engagements typically include governmental affairs, litigation, business analysis and planning, and/or vendor management.

Prior to joining QSI, Mr. Webber served in a number of management positions within the telecommunications industry including, for example, as the Director of External Affairs for ATX/CoreComm and as a District Manager for AT&T's

Law and Government Affairs and Local Services and Access Management organizations. In addition to his experience within the telecommunications industry, he served at the Illinois Department of Energy and Natural Resources, where he was involved with energy use and DSM forecasting, pollution mitigation strategies and other environmental issues.

Mr. Webber has been qualified as an expert and provided testimony over 100 times regarding contract disputes, cost of service, economic damages, interconnection agreements, pricing and public policy issues before state and federal regulatory agencies and courts throughout the United States.

Mr. Webber holds a M.S. in Economics and a B.S. in Business Administration and Economics from Illinois State University.

PATRICK PHIPPS
Consultant

Patrick Phipps is a QSI partner and has been with QSI since 2003, during which time he has provided clients with expert testimony, reliable research, negotiation/arbitration support, policy and rate analysis, merger/acquisition analysis, compliance advice, tariff services, and business case analyses. Prior to joining QSI, Mr. Phipps was employed by the Illinois Commerce Commission, where he began his career as a rate analyst in the Telecommunications Division and later served as Policy Advisor to an Illinois Commerce Commissioner. As an analyst, Mr. Phipps provided expert testimony on wide-ranging communications issues, and as a policy advisor, he provided advice and analysis to commissioners on policy and procedural matters related to the regulation of network industries, including communications, energy and transportation.

Mr. Phipps holds a M.A. in Economics from the University of Illinois and a B.S. in Economics from Illinois College.

OLESYA DENNEY, Ph.D.
Senior Consultant

Dr. Denney serves as a Senior Consultant in QSI's Telecommunications Division and provides its clients with superior quantitative, econometric modeling and research skills. Dr. Denney's telecommunications carrier began at AT&T in its Local Services and Access Management group. Her responsibilities included data analysis, forecasting, cost modeling, access issues and universal service reform issues. Dr. Denney's professional experience includes academic research

in the area of environmental and resource economics, and teaching advances economic courses at Oregon State and Novosibirsk State (Russia) universities.

Dr. Denney holds a Ph. D. and M.S. in Economics from Oregon State University as well as a B.S. in Economics from Novosibirsk State University in Russia.

SCOTT LUNDQUIST
Consultant

Mr. Lundquist, a consultant to QSI, performs strategic and regulatory analysis, project management, and client support services for projects in telecommunications regulation and economics. Prior to joining QSI in June 2007, Mr. Lundquist served as a Vice President and Partner at Economics and Technology, Inc. (ETI). Over the course of his twenty-five year career in the field, Mr. Lundquist has developed a specialized expertise in key areas of modern telecommunications regulation and policy, including service costs and pricing, network interconnection and unbundling, implementation of competition policies, incentive regulation, and next-generation broadband and wireless services.

Mr. Lundquist has served as an expert witness on these issues in over thirty-five proceedings before twenty state public utility commissions. He regularly works with a wide range of clients including competitive services providers, consumer advocates, and regulatory commission staff. He has also advised regulatory agencies and foreign ministries on modern regulatory practices, and has developed and undertaken on-site training programs for regulatory staff.

Mr. Lundquist received his Bachelor of Arts degree in Psychology and Social Relations from Harvard College, Cambridge, Massachusetts.

Kelsey Leftwich
Technology Consultant

Ms. Leftwich joined QSI in March 2015 and serves as its technology consultant. Ms. Leftwich is responsible for assessing client IT system requirements and then establishing project scope, deliverables, and timelines on a variety of engagements. She defines, develops, and implements scalable database schema using E-R diagrams as well as web applications using ColdFusion, T-SQL, and MS SQL Server 2012. Ms. Leftwich researches telecommunications regulatory issues affecting emerging technologies and incorporates her findings as a co-author of company whitepapers.

Ms. Leftwich received her Bachelor of Information Technology degree, *cum laude*, with a Minor in Business Administration from the University of Missouri - Kansas City.



CONTACT INFORMATION

QSI Consulting, Inc.
243 Dardenne Farms Drive
Cottleville, Missouri 63304 - 1002

Michael Starkey, President

636.272.4127 *office*

636.448.4135 *cell*

mstarkey@qsiconsulting.com

August Ankum, Ph.D.

618.364.2505 *office*

gankum@qsiconsulting.com

Olesya Denney, Ph.D.

503.723.5156 *office*

303.601.5164 *cell*

odenney@qsiconsulting.com

Warren Fischer, C.P.A.

303.722.2684 *office*

303.883.9014 *cell*

wfischer@qsiconsulting.com

Scott Lundquist

508.654.2013 *office*

slundquist@qsiconsulting.com

Patrick Phipps

217.726.7334 *office*

217.622.8102 *cell*

pphipps@qsiconsulting.com

James Webber

630.904.7876 *office*

312.952.6694 *cell*

jwebber@qsiconsulting.com

Kelsey Leftwich

816.519.1998 *office*

kleftwich@qsiconsulting.com

visit us at

www.QSIConsulting.com