

Larry D. Thompson Curriculum Vitae

Currently

- A registered professional engineer in over 20 states and Chief Executive Officer of Vantage Point Solutions. Vantage Point Solutions has more than 700 clients (nationally and internationally) and more than 400 employees.
- Larry provides strategic planning, consulting, and professional engineering services spanning a wide array of technical and regulatory subjects associated with telecommunications.
- Frequent speaker at state and national conferences and has been an expert witness at many utility commission hearings and legal proceedings related to telecommunications.

Education

- Bachelor of Arts degree in Physics from William Jewell College (1983)
- Bachelor of Science in Electrical Engineering from the University of Kansas (1985)
- Master of Science degree in Electrical and Computer Engineering from the University of Kansas (1986)

Employment History

- 1985-1991: Satellite Systems Engineer TRW, Inc (Redondo Beach, CA)
 - Designed communication payloads for classified and unclassified satellite systems and ground stations. Overall engineering responsibility for the Tracking and Data Relay Satellite System (TDRSS) Flight 7 and 8 as well as the Advanced Communications Technology Satellite (ACTS) systems and several classified satellite systems.
- 1991-1996: Senior Engineer CyberLink Corporation (Boulder, CO)
 - Performed a variety of voice and data communications consulting for numerous private and public clients including school districts, municipalities, and the Federal government. Designed satellite systems and ground stations as well as city and campus data networks.
- 1996-2000: Senior Engineer Martin and Associates, Inc. (Mitchell, SD)
 - Provided engineering and consulting services primarily to Rural Local Exchange Carriers including state and regional networks. Responsible for designing and managing the upgrades to the South Dakota Network SONET network and designing the regulatory framework for the use of this network. Engineered broadband networks and some of the original IP video networks.
- 2000-2002: General Manager of TCE Martin Group, Inc. (Mitchell, SD)
 - I was responsible for a growing department of approximately 100 engineers and consultants and oversaw many large engineering projects including Syringa Networks in Idaho. Engineered some of the early ATM and IP Video networks. Built one of the first sales organizations for this industry.
- 2002-Present: CEO Vantage Point Solutions, Inc. (Mitchell, SD)
 - One of the initial six founders and owners of Vantage Point Solutions. Have grown the company from a staff of 6 people to over 400 people. Vantage Point currently serves over 700 clients in 45 states and international. Active in both the technical and regulatory operations of the company. Currently involved in many state and national industry organizations and committees.



Boards and Industry Committees

- 2003-Present: National Exchange Carrier's Association (NECA) Rate Development Task Group
 - Assist in the development of service rates and new technologies for the rural telecommunications industry.
- 2005-2011 & 2013-2016: School Board, Mitchell Christian School
 - Served for 9 years and as the board president for 7 of those years. Involved with many of the school committees (Development, Finance, and Education)
- 2008-2010: NECA Access Evolution Task Force (2008-2010)
 - Assisted NECA and other industry experts to develop alternatives to access rates for recovery of network expenses.
- 2010-2016: Mitchell Area Development Corporation
 - Served as a board member, treasurer, and vice chairman of the development corporation for two terms.
- 2012-Present: National Telecommunication Cooperatives Association (NTCA) Industry and Regulatory Policy Committee
 - Elected to this committee in 2012 and reelected every year since. This committee sets the policy for the small rural carriers nationally.
- 2013-2017: State of South Dakota Transportation Commission
 - Appointed by Governor Daugaard in 2013 to the South Dakota transportation commission board; part of the time serving as the chairman.
- 2015-Present: Board of Directors, Dakota Wesleyan University
 - Serving on the board of the university and as part of the finance/business committee.
 - 2017-Present: FCC Broadband Deployment Advisory Committee (BDAC)
 - One of 29 people selected by FCC Chairman Pai to serve on the BDAC to help eliminate local, state, and federal barriers to broadband deployment. Reelected in 2019.
- 2018-Present: AsOne Ministries
 - Servicing on the board of directors and currently Chairman of the Board for this ministry that provides education, economic opportunity, and medical assistance to poor, remote villages in Uganda.

Selected Industry Awards

- 2015: National Telecommunications Cooperative Association (NTCA) Associate Member of the Year
- 2016: Harold Hagan Award for Leadership in Economic Development for the Mitchell Community.

Key Regulatory Presentations and Ex Partes

I am a frequent speaker at local, state, and national conferences dealing with a variety of subjects including telecommunications, regulation, and national policy. Some of the key regulatory and policy presentations include the following.

- Presented at various US Senate events, including "Going the Last Mile Closing the Digital Divide in Rural America," for Senator Tom Daschle (1999)
- Presented "Challenges Delivering Broadband in Rural Areas" at Tom Daschle's Technology Summit in Sioux Falls (2001)

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- Presented a whitepaper I had written titled, "Demystifying VoIP Rural America's Connection to the IP Enabled National Telecommunications Network" to a Senate Luncheon (2005)
- A participant on a US Senate Panel regarding rural broadband challenges with Senator Dorgan and Hilda Legg (2014);
- Presented to the South Dakota House and Senate Telecommunications Committees regarding Phantom Traffic (2004)
- Presented at various Federal Communications Events, including, an FCC Section 706 panel with FCC Commissioner F. Furchtgott-Roth (2000); was a panelist on the FCC's "Networks in Transition" workshop dealing with network's transition from TDM to IP (2011);
- Presented at the Nebraska Utility Commission Call Termination Workshop regarding Phantom Traffic issues (2011)
- Was a presenter on a nationally televised (C-SPAN) panel for the Hudson Institute in Washington DC with regard to "Broadband for Rural America: Economic Impacts and Economic Opportunities." (2012)
- South Dakota Telecom Association Public Utilities Commission Forum (2004, 2006, 2008, 2010, 2012, 2014, 2016) Present on a variety of technical and regulatory subjects to the South Dakota PUC Commissioners and their staff.
- Presented at the Intelligent Community Forum in New York and was instrumental in getting Mitchell South Dakota inducted into the top 7 most Intelligent Communities in the World (2014)
- Frequent speaker at many state and national conferences in the telecommunication and electrical utility industries regarding technical, regulatory, and policy issues
- Signaling ExParte (NECA) WC Docket No. 01-92, Developing a Unified Intercarrier Compensation Regime, <u>https://ecfsapi.fcc.gov/file/6519869251.pdf</u>
- Capital Budget Mechanism ExParte Connect America Fund, WC Docket No. 10-90; A National Broadband Plan for Our Future, GN Docket No. 09-51; Establishing Just and Reasonable Rates for Local Exchange Carriers, WC Docket No. 07-135; High-Cost Universal Service Support, WC Docket No. 05-337; Developing a Unified Intercarrier Compensation Regime, CC Docket 01-92; Federal-State Joint Board on Universal Service, CC Docket No. 96-45; Lifeline and Link-Up, WC Docket No. 03-109. <u>https://ecfsapi.fcc.gov/file/60001416120.pdf</u>
- IntraMTA ExParte (NTCA) Connect America Fund, WC Docket No. 10-90; A National Broadband Plan for Our Future, GN Docket No. 09-51; Establishing Just and Reasonable Rates for Local Exchange Carriers, WC Docket No. 07-135; High-Cost Universal Service Support, WC Docket No. 05-337; Developing a Unified Intercarrier Compensation Regime, CC Docket 01-92; Federal-State Joint Board on Universal Service, CC Docket No. 96-45; Lifeline and Link-Up, WC Docket No. 03-109, <u>https://ecfsapi.fcc.gov/file/7021716808.pdf</u>
- Presented to the South Dakota Join Appropriations Broadband Funding Workgroup on Jan 27, 2021 regarding Governor Noem's plan to provide \$100M in funding for broadband.
- Numerous ExPartes filed and assisted on behalf of clients and State and National Organizations regarding technical and regulatory filings

Publications

- *A Technology for the Next Generation* Rural Telecommunications Magazine, December 2003, pg. 23-26.
- Look Who's Talking Now Do Video & Voice Mix? USTA Telecom Executive Magazine, September/October 2004, pg. 30-32.

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- Distance Sensitivity of Rural Telephone Company Transport Networks, South Dakota Telecommunications Association, CC Docket 01-92, July 2005. (<u>https://ecfsapi.fcc.gov/file/6518012568.pdf</u>)
- Demystifying VoIP: Rural American's Connection to the IP-Enabled National Telecommunications Network – Foundation for Rural Service, Rural Telecom Educational Series; December 5, 2005.
- A Fiber Runs Through It Outside Plant Magazine, November 2006, pg. 30-34.
- *Lighting the Way to Increased Bandwidth* OPASTCO Roundtable Magazine, Summer 2009, pg. 32-37.
- Providing World-Class Broadband: The Future of Wireless and Wireline Broadband Technologies – Foundation for Rural Service, Rural Telecom Educational Series, March 4, 2010.
- An Engineering Analysis of the Broadband Assessment Model Using Actual Network Data Nebraska Rural Independent Companies, WC Docket 10-90, July 2010 (<u>https://ecfsapi.fcc.gov/file/7020522078.pdf</u>, Appendix A)
- Wireless Technology Cannot Deliver Broadband Services as Envisioned in the National Broadband Plan, A Technical Analysis by Vantage Point Solutions On Behalf of the Nebraska Rural Independent Companies, May, WC Docket 10-90, May 23, 2011 (https://ecfsapi.fcc.gov/file/7021650684.pdf, Appendix A)
- Analysis of Satellite-Based Communication Services, November 2013. (https://ecfsapi.fcc.gov/file/7520956711.pdf)
- Wireless Broadband is Not a Viable Substitute for Wireline Broadband, WC Docket Nos. 10-90, 14-58 and 14-192, March 2015. (https://ecfsapi.fcc.gov/file/60001039981.pdf)
- Comparing Wired and Wireless Networks Broadband Communities Magazine, May/June 2015, pg. 86-92. (<u>http://bbcmag.epubxp.com/i/530181-may-jun-2015</u>)
- Evaluating 5G Wireless Technology as a Complement or Substitute for Wireline Broadband, February 2017. (<u>https://ecfsapi.fcc.gov/file/1021310720678/02.13.17%20FCC%20Ex%20Parte-NTCA%20Letter%20Submitting%202017%20Technical%20Paper%2C%20WC%2010-90.pdf</u>)
- 5G Is Not the Answer For Rural Broadband Broadband Communities Magazine, March/April 2017, pg. 24-30. (http://bbcmag.epubxp.com/i/812274-mar-apr-2017)
- Latency Considerations for Satellite Broadband, May, 2017 (https://www.ntca.org/images/stories/Documents/Advocacy/FederalFilings/05.18.17%20rural%2 0coalition's%20opposition%20to%20hughes%20pfr%20of%20caf%20ii%20auction%20order,% 20wc%2010-90,%2014-58.pdf)
- NTCA and Vantage Point Solutions Reply to WISPA Ex Parte, September 6, 2017 (<u>https://ecfsapi.fcc.gov/file/10906010564454/09.06.17%20NTCA%20and%20Vantage%20Point</u>%20Solutions%20Reply%20to%20WISPA%20Ex%20Parte%2C%20WC%2010-90.pdf)
- Satellite Broadband Remains Inferior to Wireline Broadband, September 7, 2017 (https://ecfsapi.fcc.gov/file/1090792953817/VPS-Satellite%20Broadband%20Remains%20Inferior%20to%20Wireline%20Broadband%2009-07-17.pdf)
- Deploying a Broadband Network From Start to Finish (and Beyond), January 2018, (https://ecfsapi.fcc.gov/file/1052598259628/USF%20Budget%20NPRM%20Comments%20FIN AL.pdf – Attachment 1)
- 5G Technology: Smart Decisions for Smart Cities, March/April 2018, pg. 38-42. (https://bbcmag.epubxp.com/i/964326-mar-apr-2018/44?m4)



- Broadband Speed Characteristics, June 2018 (<u>https://www.ntca.org/sites/default/files/federal-filing/2018-06/06.18.18PerformanceTestingJune152018%2CDk.No_.10-90.pdf</u>)
- Evaluating the Capabilities of Fixed Wireless Technology to Deliver Gigabit Performance in Rural Markets, February 2021 (<u>https://ecfsapi.fcc.gov/file/10201387611048/Letter%20and%20technical%20whitepaper%20on</u> %20Gigabit%20standards%20020121.pdf)
- Future Proof: Economics of Rural Broadband: Comparing Terrestrial Technologies & Investment Considerations To Meet Increasing Consumer Broadband Demands, Foundation for Rural Service, May 2021 (<u>https://www.ntca.org/sites/default/files/documents/2021-</u>05/Future%20Proof%20--%20Economics%20of%20Rural%20Broadband%20FINAL_0.pdf)

Testimony and Expert Reports

- Direct Testimony South Dakota Public Utilities Commission, TC02-176, In the Matter of the Petition for Arbitration on behalf of WWC License L.L.C. with Certain Independent Local Exchange Companies, <u>http://puc.sd.gov/Dockets/Telecom/2002/TC02-176.aspx</u>
- Expert Report and Testimony South Dakota Public Utilities Commission, CIV04-3014, United States District Court, Southern Division, South Dakota, Verizon Wireless, LLC, Commnet Cellular License Holding LLC, Missouri Valley Cellular, Inc., Sanborn Cellular, Inc., and Eastern South Dakota Cellular, Inc. d/b/a Verizon Wireless v. South Dakota Public Utilities Commission defendants, <u>http://puc.sd.gov/Dockets/Civil/2004/civ04-3014.aspx</u>
- Direct Testimony South Dakota Public Utilities Commission, TC06-036 Through TC06-042, In the Matter of the Petitions of Armour Independent Telephone Company, Bridgewater-Canistota Telephone Company, Golden West Telecommunications Cooperative, Inc., Kadoka Telephone Company, Sioux Valley Telephone Company, Union Telephone Company, and Vivian Telephone Company (Collectively the "Golden West Companies") for Arbitration Pursuant to the Telecommunications Act of 1996 to Resolve Issues Relating to Interconnection Agreements with WWC License L.L.C. ("Western Wireless"), http://puc.sd.gov/Dockets/Telecom/2006/TC06-036.aspx
- Direct and Rebuttal Testimony South Dakota Public Utilities Commission, TC06-175, In the Matter of the Petition of Sprint Communications Company L.P. for Arbitration Pursuant to the Telecommunications Act of 1996 To Resolve Issues Relating to an Interconnection Agreement with Interstate Telecommunications Cooperative, Inc., http://puc.sd.gov/Dockets/Telecom/2006/TC06-175.aspx
- Direct and Rebuttal Testimony South Dakota Public Utilities Commission, TC06-176, In the Matter of the Petition of Sprint Communications Company L.P. for Arbitration Pursuant to the Telecommunications Act of 1996 to Resolve Issues Relating to An Interconnection Agreement with Brookings Municipal Utilities d/b/a Swiftel Communications, http://puc.sd.gov/Dockets/Telecom/2006/TC06-176.aspx
- Direct and Rebuttal Testimony South Dakota Public Utilities Commission, TC06-181, In the Matter of the Petition of Venture Communications Cooperative for Suspension or Modification of Local Dialing Parity and Reciprocal Compensation Obligations, <u>http://puc.sd.gov/Dockets/Telecom/2006/TC06-181.aspx</u>
- Direct and Rebuttal Testimony South Dakota Public Utilities Commission, TC07-111, In the Matter of the Petition of Alliance Communications Cooperative, Inc. for Arbitration Pursuant to the Telecommunications Act of 1996 to Resolve Issues Relating to an Interconnection



Agreement with Alltel Communications, Inc., <u>http://puc.sd.gov/Dockets/Telecom/2007/TC07-111.aspx</u>

- Direct and Rebuttal Testimony South Dakota Public Utilities Commission, TC07-112, In the Matter of the Petition of McCook Cooperative Telephone Company for Arbitration Pursuant to the Telecommunications Act of 1996 to Resolve Issues Relating to an Interconnection Agreement with Alltel Communications, Inc., <u>http://puc.sd.gov/Dockets/Telecom/2007/TC07-112.aspx</u>
- Direct and Rebuttal Testimony South Dakota Public Utilities Commission, TC07-113, In the Matter of the Petition of Beresford Municipal Telephone Company for Arbitration Pursuant to the Telecommunications Act of 1996 to Resolve Issues Relating to an Interconnection Agreement With Alltel Communications, Inc., <u>http://puc.sd.gov/Dockets/Telecom/2007/tc07-113.aspx</u>
- Direct and Rebuttal Testimony South Dakota Public Utilities Commission, TC07-114, In the Matter of the Petition of Kennebec Telephone Company for Arbitration Pursuant to the Telecommunications Act of 1996 to Resolve Issues Relating to an Interconnection Agreement with Alltel Communications, Inc., <u>http://puc.sd.gov/Dockets/Telecom/2007/tc07-114.aspx</u>
- Direct and Rebuttal Testimony South Dakota Public Utilities Commission, TC07-115, In the Matter of the Petition of Santel Communications Cooperative for Arbitration Pursuant to the Telecommunications Act of 1996 to Resolve Issues Relating to an Interconnection Agreement with Alltel Communications, Inc., <u>http://puc.sd.gov/Dockets/Telecom/2007/tc07-115.aspx</u>
- Direct and Rebuttal Testimony South Dakota Public Utilities Commission, TC07-116, In the Matter of the Petition of West River Cooperative Telephone Company for Arbitration Pursuant to the Telecommunications Act Of 1996 to Resolve Issues Relating to an Interconnection Agreement with Alltel Communications, Inc., <u>http://puc.sd.gov/Dockets/Telecom/2007/tc07-116.aspx</u>
- Expert Report U.S. District Court, District of South Dakota, Southern Division, CIV05-4181, WWC License L.L.C and South Dakota Rural Local Exchange Carriers InterMTA
- Rebuttal Testimony South Dakota Public Utilities Commission, TC08-006 Through TC08-027, In the Matter of the Petitions for Suspension or Modification of 47 U.S.C. Section 251(B)(2) of the Communications Act of 1934 as Amended, http://puc.sd.gov/commission/dockets/telecom/2008/tc08-006/080608.pdf
- Direct Testimony South Dakota Public Utilities Commission, TC10-014, In the Matter of the Investigation of Pricing Regulation for Switched Access Services Provided by Competitive Local Exchange Carriers, <u>http://puc.sd.gov/Dockets/Telecom/2010/tc10-014.aspx</u>
- Direct and Rebuttal Testimony South Carolina Public Service Commission, Docket 2015-290-C, Petition of the South Carolina Telephone Coalition for a Determination that Wireless Carriers are Providing Radio-Based Local Exchange Services in South Carolina that Compete with Local Telecommunications Services Provided in the State, https://dms.psc.sc.gov/Web/Dockets/Detail/11560
- Direct and Rebuttal Testimony California Public Utilities Commission, Docket R.11-11-007, Order Instituting Rulemaking into the Review of the California High Cost Fund-A Program, https://apps.cpuc.ca.gov/apex/f?p=401:1:0::NO:RP.
- Direct and Supplemental Testimony California Public Utilities Commission, Docket A.11-12-011, In the Matter of Application of Kerman Telephone Co. (U1012 C) d/b/a Sebastian, to Review Intrastate Rates and Charges and Rate of Return for Telephone Service Furnished within



the State of California and Modify Selected Rates, <u>https://apps.cpuc.ca.gov/apex/f?p=401:1:0::NO:RP</u>::

- Direct Testimony Nebraska Public Service Commission, Dockets FC-1346 and FC1347, Great Plains Communications, Inc. and Great Plains Broadband, Inc., Complainants, v. Sprint Communication Company, L.P. a/k/a Sprint, Respondent; Sprint Communication Company, L.P. a/k/a Sprint, Complainants, v. Great Plains Communications, Inc. and Great Plains Broadband, Inc., Respondent; <u>http://www.psc.nebraska.gov/index.html</u>
- Direct and Rebuttal Testimony Nebraska Public Service Commission, Dockets FC-1348, FC-1351, FC1352, FC-1355, and FC-1356, AT&T Communications of the Midwest, Inc. Complainant, v. Cambridge Telephone Co., Eastern Nebraska Telephone Company, Great Plains Communications, Inc., Hartington Telecommunications Company Inc., Hooper Telephone Company, Northeast Nebraska Telephone Company, and Rock County Telephone Company, Respondents; Eastern Nebraska Telephone Company, Complainant v. AT&T Communication of the Midwest, Inc. a/k/a AT&T, Respondent; Great Plains Communications, Inc., Complainant, v. AT&T Communication of the Midwest, Inc. a/k/a AT&T, Respondent; Northeast Nebraska Telephone Company, Complainant, Northeast Nebraska Telephone Company, Complainant, v. AT&T Communication of the Midwest, Inc. a/k/a AT&T, Respondent; Northeast Nebraska Telephone Company, Complainant, v. AT&T Communication of the Midwest, Inc. a/k/a AT&T, Respondent; Northeast Nebraska Telephone Company, Complainant, v. AT&T Communication of the Midwest, Inc. a/k/a AT&T, Respondent; Northeast Nebraska Telephone Company, Complainant, v. AT&T Communication of the Midwest, Inc. a/k/a AT&T, Respondent; Rock County Telephone Company, Complainant, v. AT&T Communication of the Midwest, Inc. a/k/a AT&T, Respondent; Northeast Nebraska Telephone Company, Complainant, v. AT&T Communication of the Midwest, Inc. a/k/a AT&T, Respondent; Rock County Telephone Company, Complainant, v. AT&T Communication of the Midwest, Inc. a/k/a AT&T, Respondent; http://www.psc.nebraska.gov/index.html
- Expert Report United States District Court for Lancaster County, Nebraska, Case CI 17-2961, Windstream Services, LLC v. Spickelmier and Son, Inc., Fiber Optic Damage Repair Costs, February 22, 2017.
- Expert Report United States District Court for Southern District of Iowa Central Division, Case No. 4:16-cv-00219-CRW-SJB, MCI Communications Services, Inc. v. Plowman & Stanley Trenching, L.C., Fiber Optic Damage Repair Costs, March 15, 2017.