

**MINUTES  
of the  
THIRD MEETING  
of the  
SCIENCE, TECHNOLOGY AND TELECOMMUNICATIONS COMMITTEE**

**August 24-26, 2021  
New Mexico State University  
Las Cruces**

The third meeting of the Science, Technology and Telecommunications Committee was called to order by Representative Debra M. Sariñana, chair, on August 24, 2021 at 10:15 a.m. at New Mexico State University (NMSU) in Las Cruces.

**Present**

Rep. Debra M. Sariñana, Chair  
Rep. Joy Garratt  
Sen. Shannon D. Pinto  
Sen. Harold Pope  
Rep. Larry R. Scott  
Sen. William P. Soules

**Absent**

Sen. Michael Padilla, Vice Chair  
Sen. William F. Burt  
Rep. Jason C. Harper  
Sen. Mark Moores  
Rep. Linda Serrato

**Advisory Members**

Rep. Eliseo Lee Alcon (8/25, 8/26)  
Sen. Craig W. Brandt  
Rep. Kelly K. Fajardo (8/25)  
Rep. Randall T. Pettigrew  
Rep. Jane E. Powdrell-Culbert  
Sen. Bill Tallman (8/24)

Rep. Christine Chandler  
Rep. Gail Chasey  
Sen. Leo Jaramillo  
Sen. Bill B. O'Neill  
Sen. Nancy Rodriguez  
Rep. Andrea Romero

**Guest Legislator**

Rep. Willie D. Madrid (8/26)

(Attendance dates are noted for members not present for the entire meeting.)

**Staff**

Mark Edwards, Bill Drafter, Legislative Council Service (LCS)  
Ralph Vincent, Systems Consultant, LCS  
Erin Bond, Research Assistant, LCS

**Guests**

The guest list is in the meeting file.

**Handouts**

Handouts and other written testimony are in the meeting file and posted on the legislature's website.

## **References to Webcast**

The time reference noted next to each agenda item in this document is cross-referenced to the webcast of the committee meeting, which can be found at [www.nmlegis.gov](http://www.nmlegis.gov), under the "Webcast" tab. The presentations made and committee discussions for agenda items can be found on the recorded webcast for this meeting.

## **Tuesday, August 24**

### **Welcome and Introductions (10:15 a.m.)**

Representative Sariñana welcomed the committee, and members of the committee, staff and audience introduced themselves.

### **Welcome to NMSU (10:19 a.m.)**

Dr. Dan Arvizu, chancellor, NMSU, welcomed the committee and provided an update on the programs and activities at NMSU. He highlighted efforts of the branch colleges and the agricultural experiment stations, along with the world-class water quality research, the value-added agriculture research and the work in aerospace, national security and energy research.

### **Foundational Elements for a Thriving Research and Technology Development Economic Sector (11:32 a.m.)**

Dr. Luis Cifuentes, vice president of research, NMSU; Dr. Van Romero, vice president of research, New Mexico Institute of Mining and Technology (NM Tech); Dr. Ellen Fisher, vice president for research, University of New Mexico (UNM); and Dr. Mary Monson, senior manager, Technology Partnerships and Business Development, Sandia National Laboratories, discussed the foundational elements involved in creating an economic sector around the research and technology developments from the universities and national laboratories. The presentation documents can be found here:

<https://www.nmlegis.gov/Committee/Handouts?CommitteeCode=STTC&Date=8/24/2021&ItemNumber=2>.

### **Electric Grid Stability in a Multi-Source Energy Market (1:15 p.m.)**

Dr. Arvizu; Dr. Olga Lavrova, associate professor, Klipsch School of Electrical and Computer Engineering, NMSU; Dr. Charlie Hanley, senior manager, Grid Modernization and Resilient Infrastructures, Sandia National Laboratories; and Dr. Abraham Ellis, program director, Nuclear Fuel Cycle and Grid Modernization, Sandia National Laboratories, discussed the issues surrounding stability in the electric grid. The presentation documents can be found here:

<https://www.nmlegis.gov/Committee/Handouts?CommitteeCode=STTC&Date=8/24/2021&ItemNumber=3>.

### **Approval of Minutes**

The committee approved the minutes of the June 10, 2021 and July 22-23, 2021 meetings.

### **Statewide Electronic Education Technology Network: Implementing Senate Bill 144 (2021) (3:45 p.m.)**

Jonathan Chamblin, director, Public School Facilities Authority (PSFA), and Ovidiu Viorica, program manager, Broadband and Technology, PSFA, provided a status update to the committee on implementing the education technology network as mandated by Senate Bill 144 from the 2021 legislative session. The presentation can be found here:

<https://www.nmlegis.gov/handouts/STTC%20082421%20Item%204%20PSFA%20Statewide%20Education%20Network%20SB144.pdf>.

A motion was made and seconded for the committee to send a letter to the Federal Communications Commission with a copy to New Mexico's congressional delegation asking for changes to the E-Rate program to cover costs of network cybersecurity. There were no objections to the motion.

### **Public Education Department Efforts to Address Student Connectivity (4:28 p.m.)**

John Chadwick, E-Rate coordinator, Public Education Department; Mike Archibeque, president, MA Strategies; and Ferdi Serim, connectivity consultant, Claro Consulting, provided a status update to the committee on the efforts of the Public Education Department to address issues involved in ensuring that all students have access to broadband connectivity for school activities. The presentation can be found here:

<https://www.nmlegis.gov/handouts/STTC%20082421%20Item%205%20--%20PED%20--%20Broadband%20and%20Student%20Connectivity.pdf>.

### **Recess**

The meeting recessed at 5:01 p.m.

### **Wednesday, August 25**

### **EXECUTIVE SESSION: Cybersecurity Issues (Legislators Only) (9:08 a.m.)**

After meeting in executive session, the committee adjourned and reconvened the regular committee meeting.

### **Keeping Information Technology Projects on Track: Structured Communication for Policymakers (10:32 a.m.)**

Brink Trammell, strategic technology integration consultant, discussed methods to keep large projects on track through organization and communication. The presentation can be found here:

<https://www.nmlegis.gov/handouts/STTC%20082421%20Item%206%20--%20Keeping%20IT%20Projects%20on%20Track%20with%20Structured%20Storytelling.pdf>.

**Cybersecurity for State Leaders: Unpacking Recent Cybersecurity Threats and What to Do About Them (11:07 a.m.)**

Forrest Senti, vice president for programs and operations, National Cybersecurity Center, discussed the cybersecurity guidebook for state leaders that the National Cybersecurity Center uses to equip and empower state legislatures on best practices for cybersecurity activities and offered guidance on tactics state leaders can take to defend against cyberattacks. The presentation documents can be found here:

<https://www.nmlegis.gov/Committee/Handouts?CommitteeCode=STTC&Date=8/24/2021&ItemNumber=7>.

**Cyber Challenges in State and Local Government (11:41 a.m.)**

Chris Cruz, chief information officer, State and Local Government and Education (SLED), Tanium; Tim Howell, SLED regional vice president, Western United States, Tanium; and Bradley Crowe, regional SLED account manager, Tanium, discussed cybersecurity challenges in state and local government and best practices to combat cybersecurity attacks. The presentation can be found here:

<https://www.nmlegis.gov/handouts/STTC%20082421%20Item%208%20--%20Tanium%20--Cyber%20Challenges%20in%20State%20and%20Local%20Government.pdf>.

**NMSU Science, Technology, Engineering and Mathematics (STEM) Outreach (1:30 p.m.)**

Dr. Wanda Bulger-Tamez, program director, STEM Outreach Center, NMSU; Erika Acosta, program outreach specialist, STEM Outreach Center, NMSU; Allie Conway, career pathways program outreach specialist, STEM Outreach Center, NMSU; and John Levon Church, program coordinator, STEM Outreach Tech Lab, NMSU, discussed the importance of STEM-connected communities that include STEM programs both during school time and after school with community partnerships and professionals that are teaching and doing research in STEM fields. The presentation can be found here:

<https://www.nmlegis.gov/handouts/STTC%20082421%20Item%209%20NMSU%20--%20STEM%20Outreach.pdf>.

**Artificial Intelligence and Applications in Arid Lands Agriculture (2:34 p.m.)**

Dr. Enrico Pontelli, dean, College of Arts and Sciences, NMSU; Dr. Hatim Geli, assistant professor, Animal and Range Sciences, College of Agricultural, Consumer and Environmental Sciences, NMSU; and Dr. Lara Prihodko, interim associate director, Agricultural Experiment Station, NMSU, discussed the use of artificial intelligence to process large amounts of data in the agricultural industry. The presentation can be found here:

[https://www.nmlegis.gov/handouts/STTC%20082421%20Item%2010%20GELI\\_PONTELLI\\_PRIHODKO.pdf](https://www.nmlegis.gov/handouts/STTC%20082421%20Item%2010%20GELI_PONTELLI_PRIHODKO.pdf).

**Recess**

The meeting recessed at 3:28 p.m. for committee members to attend demonstrations at the NMSU Aggie Innovation Space.

**Inventors and Investors Gone Wild: Aggie Innovation Space and Arrowhead Center (4:00 p.m.)**

Dr. Gabe Garcia, assistant dean of student success, Experiential Learning, Department of Mechanical and Aerospace Engineering, College of Engineering, NMSU; Dr. Kathryn Hansen, director, Arrowhead Center, NMSU; Dr. Carlos Murguia, economic development officer, Arrowhead Center, NMSU; Kelsey Hayes, student lead, Aggie Innovation Space, NMSU; Emilie Rasmussen, student entrepreneur, NMSU; and Beto Pallares, Shark Tank investor, NMSU, discussed the innovation center and led the committee through a tour of the facility.

**Thursday, August 26****Reconvene**

Representative Sariñana reconvened the meeting at 9:11 a.m.

**Identifying the Building Blocks for Statewide STEM Curricula and a Student Recruitment Program for STEM Education and Careers (9:11 a.m.)**

Dr. Arvizu and Dr. Patricia Sullivan, associate dean, Outreach and Recruiting, College of Engineering, NMSU, discussed their efforts to forge partnerships among K-12 schools, higher education institutions and employers to develop STEM programs around the state. The presentation can be found here:

<https://www.nmlegis.gov/handouts/STTC%20082421%20Item%2012%20--%20Identifying%20Building%20Blocks%20for%20STEM%20-%20Student%20Recruitment%20-%20Arvizu.pdf>

**Positioning New Mexico as a Go-To Space State for Research and Research/Industry Collaboration (10:40 a.m.)**

Dr. Steven Stochaj, professor and interim department head, Klipsch School of Electrical and Computer Engineering, NMSU; Dr. Mike Hargather, Ph.D., associate professor, Mechanical Engineering, NM Tech; and Dr. Christos Christodoulou, dean, School of Engineering, UNM, discussed how they would propose to leverage state resources, including Spaceport America, Air Force Research Laboratory, Sandia National Laboratories, Los Alamos National Laboratory, New Space New Mexico's Unite & Ignite Space program and the state's research universities, to position New Mexico as a center for space research and activities. The presentation can be found here:

<https://www.nmlegis.gov/handouts/STTC%20082421%20Item%2013%20Making%20New%20Mexico%20a%20Space%20State.pdf>

**Meeting the United States Department of Energy Wind Turbine Recycling Challenge  
(11:37 a.m.)**

Dr. Sullivan and Dr. Hansen discussed the challenges presented with the development of a program for recycling rendered wind turbine blades and the role that New Mexico could play in developing this industry. The presentation can be found here:

<https://www.nmlegis.gov/handouts/STTC%20082421%20Item%2014%20--%20NMSU%20Wind%20Turbine%20Blade%20Reuse%20NMSTTC.pdf>

**Adjournment**

There being no further business before the committee, the meeting adjourned at 12:19 p.m.