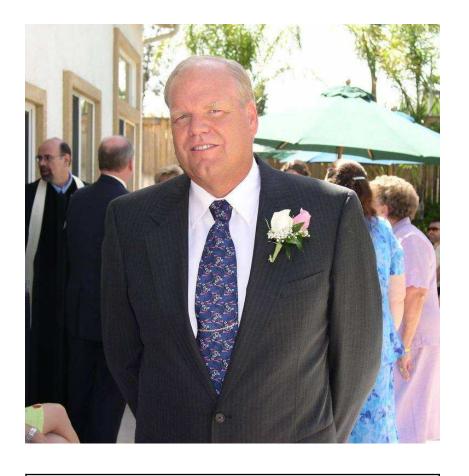
# IN MEMORY OF DAVE REESE CENIC VICE PRESIDENT FOR REGIONAL & INTERNATIONAL INITIATIVES

## IN MEMORY OF DAVE REESE CENIC VICE PRESIDENT FOR REGIONAL & INTERNATIONAL INITIATIVES



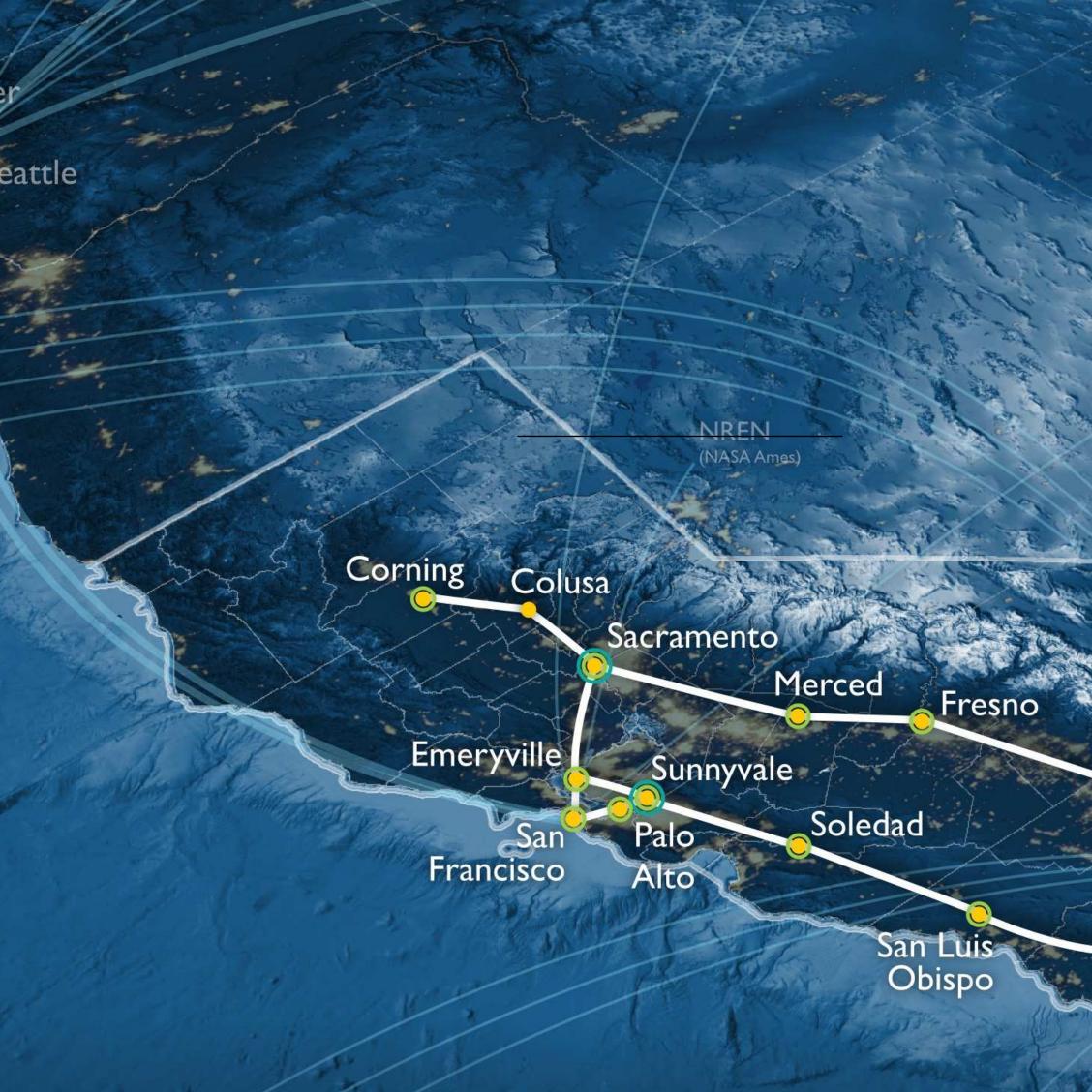






# Tributes from the CENIC & Pacific Wave Networking Communities

Dave Reese's contributions to the research and education community were unmatched. Following Dave's passing, CENIC President and CEO Louis Fox suggested members of the networking community might share memories of Dave that could be bound together in a book for his family. Colleagues answered the call for tributes in droves, sending dozens of emails detailing the profound impact Dave made on them, and on the thousands of people in California, the nation, and the world served by the networks he supported. This collection of stories and photos celebrates and remembers Dave's years of conscientious work and professional dedication.



Dear colleagues,

It is with great sadness that I write to inform you that our great friend and colleague, Dave Reese, passed away yesterday after a valiant fight with a prolonged illness. Dave has been with CENIC since it began in 1996, most recently as Vice President for Regional and International Initiatives. Before CENIC, he led in the creation of the California State University's network in the early days of the Internet. His brilliance and imagination were integral to the creation and development of research and education networks — at home and abroad — for over three decades.

An inimitable presence in any setting, Dave was powerful in presenting his views with remarkable prescience. He was equally and visibly enthusiastic in supporting the insights of his colleagues. He worked with boundless intensity and commitment, and he lived his life outside of work with similar passion, deeply committed to his family and friends. He had a sweet, gentle, and loving side that he shared with those he loved and those he respected. His laugh could fill a room.

I will always remember him unfolding himself out of his beloved Mustang convertible, with the love of his life, Susan, by his side, happy to see his friends and colleagues, radiating with larger-than-life joy, and eager for whatever adventure lay ahead. His was a life well lived.

Our hearts go out to Susan and his family. He will be deeply missed. There will be a memorial in California and, as I have more information, I will share more details with you.

As we go forward with our commitment and passion for the work that we do and the lives we lead, we do so having shared this experience with Dave, who will be remembered for his contributions and who will remain an inspiration in the days ahead.

Louis Fox
President and Chief Executive Officer, CENIC

Bakersfield

ESnet

Palm Desert

Yuma

El Centro

Los Tustin Angeles

Riverside

San Diego

Tijuana

## The CENIC Community Mourns the Passing of Dave Reese,Vice President for Regional and International Initiatives, Esteemed Colleague, and R&E Network Leader

While members of the family, as part of the grieving process, are recalling many wonderful family memories, those of us who were his professional colleagues are pausing to recall and reflect on the highlights of our professional associations and relationships with Dave. So it has been for me, personally, since receiving word of his passing. Here is a bit of my recall of our professional relationship.

During my 28-year tenure (1981–2009) with the California State University (CSU) system, CENIC, and National LambdaRail, there were many professional colleagues who made significant contributions to the networking and information technology developments, advancements, and accomplishments of these organizations. There was only one individual who partnered with me for that entire period, Dave.

I had Dave attached to me at the hip over this entire 28-year period. Even over this past decade, I sought his advice and counsel several times. He was always my number one "go-to guy" when it came to planning the future, implementing plans, or solving networking and/or technological problems.

Our relationship started when I arrived at CSU in 1981. Personal computing with the PC and Apple were just being introduced to the world. Networking throughout universities across the country was just emerging. The CSU campuses were networked via a clunky and unreliable state agency network. So, we decided to go it alone but we did not have any networking expertise. I asked the staff if anyone wanted to volunteer to form our networking team. Two young "nerd software programmers," Chris Taylor and Dave Reese, volunteered.

One of the first things they did in developing CSUNET was select equipment from a startup company, Cisco. Subsequently, Cisco became the lead networking vendor/partner for the entire 28-year period for all three organizations.

At the same time, the CSU Chancellor's Office was selecting an office system for word processing, email, etc. Chris and Dave convinced me we should go with Apple's Mac versus the PC. Consequently, the Mac became the Chancellor's Office standard until I left in 1999.

As part of implementing CSUNET, we permitted a few community colleges and some high schools to become connected. By the mid-1990s, this began to pay dividends as the Community College System (CCC) determined it needed a statewide network. The community colleges already connected to CSUNET convinced the CCC leadership to join CSUNET rather than build their own. Thus, CSUNET became 4CNET. By this time, Chris Taylor moved to the newest CSU campus, CSU Monterey Bay, and Dave got a new working partner, Brian Court.

In 1996, CSU joined forces with UC, USC, Stanford, and Caltech to form CENIC to develop and operate an advanced research and education network, CalREN, as part of a nationwide movement of state/regional networks sponsored by National Science Foundation grants. Spearheaded by CENIC's founding CEO Stuart Lynn, and his technical guy, David Wasley, the counterpart to Dave, the backbone of CalREN was initially developed utilizing leased circuits from Pacific Bell. CSU, under Dave Reese's leadership, managed CalREN.





Auckland, New Zealand 5-9 August 2018

In 1999, I replaced Stuart and Dave replaced Wasley at CENIC. Faced with the challenge of upgrading CalREN, Dave and Brian first suggested we experiment by developing the backbone route between San Diego and Los Angeles with our own fiber. Two weeks later, they came back and recommended we go with fiber throughout the entire CalREN backbone. We did it and the rest is history.

In 2000, at the urging of the Cisco CSU sales team, Cisco's CEO John Chambers and UC's President Richard Atkinson went to Governor Gray Davis and proposed that funding be provided to connect all the K–12 schools to 4CNET/CalREN. One day, I received a call from the Governor's Office asking for a budget amount to accomplish this objective. Within four hours, Dave gave me a dollar amount that became part of the state budget that enabled us to connect all the 58 County Offices of Education to 4CNET/CalREN. That is how the K–12 schools became part of CalREN.

In 2003, several regional networks and universities decided to form National LambdaRail. Dave became the architect of this nationwide research and education fiber-based network.

Over the years, Dave became increasingly involved and a leader in national groups that promote research and education networking. One such group was The Quilt. I found this to be a bit ironic, since every year Dave would take several days off to help his mother at a "real" quilt show. So, quilting was in both his personal and professional lives.

I think it is fair to say Dave Reese's professional contributions over the past 38 years have made a significant impact on the lives of thousands of people across California and the nation.

Dave certainly had a very positive impact on my life.

## Tom West Chief Executive Officer Emeritus, CENIC

You can't talk about CENIC, broadband, and fiber without mentioning Dave Reese. From the beginning, Dave understood the importance of fiber in delivering broadband resources and how critically important broadband would become for educational institutions. In the 10 years he worked with me at CENIC, Dave became recognized as a leader in broadband deployment within the state of California, nationally, and internationally. Generations of future researchers, teachers, and students will benefit from Dave's outstanding contributions to broadband deployment for education.

Jim Dolgonas
Chief Executive Officer Emeritus, CENIC









I am very sad to hear about Dave's passing. I found this picture of Dave with Lars Fischer (Strategy and Policy Officer of the Nordic Gateway for Research and Education [NORDUnet]) on the left, and David Wilde (Chief Technology Officer of Australia's Academic and Research Network [AARnet]) on the right, in Trondheim, Norway, for the TERENA Networking Conference meeting in June 2018. It's nice to remember Dave with a smile on his face.

**John Silvester** 

Professor of Electrical and Computer Engineering, University of Southern California

I am sad about the news of Dave's passing. He has been a mentor of sorts for me over the past 20 years or so. I can't remember when I first met Dave, but I do know he has had an impact on me and Merit over the many years. Dave was such a great representative for your, and our, whole community.

Over the years, I had the great opportunity to collaborate with Dave on a number of projects, ideas, and concepts. I always felt Dave's values were well set in serving not only his local community but the regional and national community. In many ways, I felt he was a mentor for all of us as we followed his leadership in developing and implementing regional research and education networks. I don't know how many times I picked up the phone or sent an email to contact Dave for advice on projects my organization was working on. He was always ready to listen and consider other ideas while focusing on the challenges that were before our organization.

Many years ago, when R&E networks were still weary of obtaining fiber infrastructure, I remember a meeting in which Dave also attended. Many of us were debating whether R&E networks should get into the fiber business. As a newly minted manager, I could not get my head around why we would want to get into the dark fiber business. Then, Dave spoke about how this investment was not just for our research universities but it was for our whole community, since as R&E goes the rest will follow. This lesson has been with me since then in how we develop our overall network strategy. His leadership and guidance will be missed by me and our national community.

## Bob Stovall Vice President of Network Strategy and Architecture, Merit Network

Dave was both a leader in the networking community, and a good friend. His commitment to research and education networks helped lay the groundwork for transformative collaborations like the Asia Pacific Ring that continue to enable international research. I first met Dave when I began to work on the Pacific Wave international peering exchange. Dave was a patient and dedicated mentor, providing invaluable counsel from his years of experience. Dave's strong vision and presence will be missed.

## Jonah Keogh Managing Director, Pacific Northwest GigaPoP

I've worked closely with Dave for about 25 years. Dave was not just a sensational engineering force who never learned the word "quit," but also a truly wonderful, kind, and generous human.

Ron Johnson
Chief Executive Officer, Pacific Northwest GigaPoP







My condolences to the CENIC/Pacific Wave team on the passing of Dave. I was saddened this morning to hear that Dave is no longer with us.

I shared with the Americas' Research Platform audience today about how Dave visited me at California State Fullerton, showed me a map of the Pacific, and convinced me that going back to Guam would be helpful for the international research and education network community. Much of the progress with getting the Guam Open Research and Education Exchange (GOREX) implemented, as well as applying for and receiving Guam's National Science Foundation Campus Cyberinfrastructure Award, can be attributed to Dave's assistance and efforts. I will surely miss Dave's presence as a colleague and a mentor.

#### **Rommel Hidalgo**

Associate Vice President and Innovation Officer, Division of Information Technology, California State University, Fullerton

I have met many interesting people in the R&E community and Dave is one of those people that I will always remember. It took me many years to get to know Dave — or I guess to know him more than a larger-than-life presence in my first few years in the community. It took many meetings, many interactions, phone calls — hard and good ones — and many trips. It was through time that I learned to appreciate Dave and his larger-than-life presence. I learned how much Dave actually cared about our community and our work. His commitment to our "stuff" was passionate and ultimately, we all hurt because it's often hard to find people that so genuinely care about something. He was candid and direct — and I've learned to appreciate that, too. As the years went by, I'd like to think that Dave became more than a good colleague.

There are some trips where I spent a lot of time chatting with Dave and both of us knew the deep power of collaboration and relationships with the international community. I am thankful for what we shared and his honest direct perspectives — and debating with him but all in a good way. I will not be able to go back to a work trip in China without thinking of Dave. These two pictures were from a meeting we both attended at Duke Kushnan University (in Suzhou), breaking bread and enjoying the unique opportunity to experience other cultures in all regards. I wish I had taken more pictures of similar moments throughout the years and in so many meetings around the world.

I will always appreciate his asking about me and my family and I can see him smile (that big smile) whenever I would ask him to go beyond work and talk about Susan and his family, his daughters, his dogs, his surroundings, and his grandchildren. He adored them and he treasured the time with them.

Dave, you will be deeply missed.

**Ana Hunsinger Vice President of Community Engagement, Internet2** 

Dave Reese's favorite word was "yes." This meant all the world to my UC San Diego colleagues and me since our academic careers for decades have been based on building infrastructure on top of the networks that Dave and his CENIC colleagues offered and continuously kept at the state of the art. I'm sure CENIC will always strive with success to offer our community Dave's level of positivity and engineering contributions, but given how hard it is to be funny about networking, there's no one who will ever replace Dave's sense of humor and top his fabulous dinner-time stories.

Tom Defanti Research Scientist, UC San Diego I was saddened to hear the news about Dave. We met at Supercomputing (SC) sometime after 2002, but the night this picture, (which I remembered immediately), was taken was the first time I had really gotten to talk to him. I will always remember how friendly and genuine Dave was. After that night, I would often chat with Dave in the hallway when we'd run into each other at conferences.

The picture was taken somewhere in Tokyo in September 2006. GLIF (Global Lambda Integrated Facility) was being held in conjunction with an Optical Networking Testbeds workshop in Akihabara. From left to right are Tom Lehman, myself, Dave, Jeroen van der Ham, Jerry Sobieski, and Tod McQuillin. The five of us had never met Tod, who lived in Tokyo. He was a former business partner at Telerama, an ISP which I was working at during the late 1990s/early 2000s. I only had his email address, but he was glad to be our tour guide that night. This place used touch screen menus to place your orders, even though the restaurant was ludicrously small (yellow device in foreground — it's 2006 remember). We had a great time together, the food was excellent, and we all talked long into the night as you might imagine. I will miss Dave and my thoughts go out to all of his friends and family.

## Chris Tracy Network Planning Engineer, Energy Sciences Network (ESnet)

I was very sad to hear the news. My thoughts and prayers go out to Dave's family. I first met Dave 10 years ago when I started at CENIC in the accounting department. Early on, I was very impressed to learn that he had created the asset management system (AMS) that tracks the inventory and asset purchases of the company. He knew all of the intricacies of the systems: what should be in there, what shouldn't be, why something wasn't working, and so on. I knew he was a very busy person but he always found the time to answer all of my questions in the AMS system during our financial closing crunch. That was the type of person he was because he deeply cared about CENIC. Every time I open AMS each day, I am reminded of Dave. His legacy lives on here at CENIC.

#### Paul Nguyen Senior Accountant, CENIC

This is very sad news. Dave was a terrific person.

#### Joe J Mambretti

Director of the International Center for Advanced Internet Research, Northwestern University

Dave has been a giant and has contributed immensely to the progress of the APAN community. He established the close relationship between Pacific Wave, CENIC, and APAN.

#### **Francis Lee**

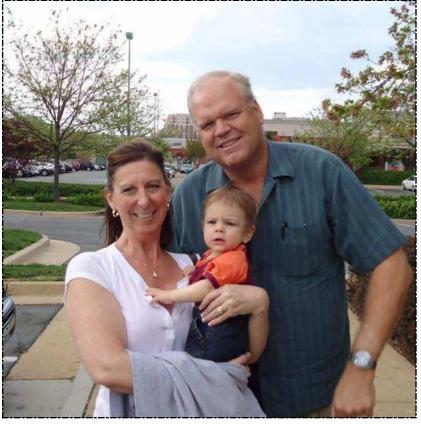
Associate Professor School of Computer Science and Engineering, Nanyang Technological University Singapore

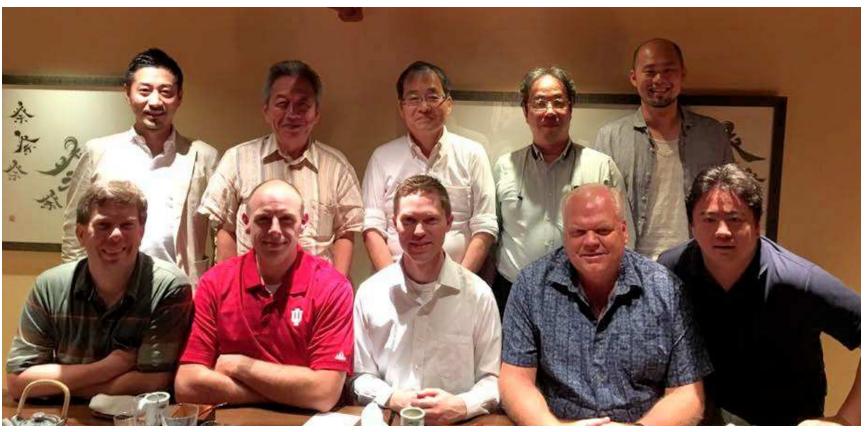












Such a shock and such a loss! My heart goes out to all who will miss him greatly. The world is less without him.

#### Ron Hutchins, Vice President for Information Technology, University of Virginia

Very sad, and hard to believe because Dave was so full of life.

#### Michael Berman, Chief Information Officer, California State University

I was always struck by how generous Dave was with his time and ideas, and in answering my questions, no matter how dumb. One way to honor him is passing on that generosity. Condolences to Susan and his family, and to his CENIC family. We have all suffered a great loss.

#### Tim Lance, Distinguished Service Professor Emeritus, State University of New York at Albany; President and Chairman Emeritus, New York State Education and Research Network (NYSERNet)

Sad indeed. He will be remembered. He is missed.

#### Jim Stewart, Chief Technology Officer, Utah Education Network

We will miss his large presence and laugh.

#### **Trevor Akers, Systems Engineering Manager, CENIC**

This is truly sad news. Sherilyn (Evans) and I were just talking about Dave last week in Dallas. Dave leaves behind such a wealth of knowledge and pride for R&E, for which we will always be grateful. But yet his absence will be felt by all of us for a long time. I know this is a very difficult day at CENIC. Our thoughts and prayers for Susan and the rest of Dave's family.

#### Pankaj Shah, President and Chief Executive Officer, Lonestar Education And Research Network (LEARN)

So sorry for your loss at CENIC. This reminds us that we're all a part of a continuum of effort.

#### Sunne Wright McPeak, President and Chief Executive Officer, California Emerging Technology Fund (CETF)

### Dave at CENIC

Dave led a noteworthy career that positively impacted all higher education institutions in California and the nation. Through his early days building a combined network in California and his tireless efforts to negotiate and secure cost decreases for ISP service, he brought about greater influence and purchasing power not just in California but to all regional networks.

Dave was instrumental in the evolution of CSUnet/4Cnet. He was one of the original creators of the shared backbone network (CSUnet) used by all California State University campuses. Having this one network greatly benefited CSU, focusing its influence and purchasing power through a single entity. In addition, Dave was key in bringing broadband network connections to K-12 schools in California via his involvement in the Digital California Project (DCP). His work for DCP included many long road trips to visit all 58 counties in California and to consult with K-12 sites — trips that were an important factor in the project's success. He also played a major role in bringing the California Community College System onto the network through his leadership in the 4Cnet project, which was the last major component in unifying networking for all public higher education in California.

Over much of his career, Dave was key to continually reducing the cost of ISP service for educational networks for all regional networks in the nation. He was able to leverage the influence and purchasing power of public higher education in California, and combined with his tireless efforts at negotiation with the providers, to substantially lower the high cost for the use of commercial ISP service. He was later able to incorporate the influence of The Quilt to successfully extend these savings to all regionals.

Dave also played a major role in the adoption of educational (and administrative) video conferencing by CSU, community colleges, and public K-12 communities in California via three key enabling components. One component was the design of the 4Cnet backbone using transport technologies (first X.25 and later ATM) that could emulate Time Division Multiplexing (TDM) circuits to support H.320-based video conferencing. The next component was his development of an easy-to-use video conference scheduling system that was tailor-made to support video conferencing on the 4Cnet network. The final enabling component was his creation of an automated provisioning system that could interface with the scheduler and the 4Cnet network to automatically set up and tear down the emulated TDM circuits according to the schedule.

Dave single-handedly increased CENIC's Layer-1 backbone management capabilities via his creation of the CAMEL software. He was able to significantly advance CENIC's capabilities for Layer-1 network monitoring, design, and analysis while simultaneously saving hundreds of thousands of dollars on the costs of the available, but inferior, commercial software alternative. This software went on to generate much interest in the Cisco Layer-1 networking community as well as with Australia's Academic and Research Network (AARnet).

#### **Erick Sizelove, CENIC Principal Engineer**

## Dave's Career Highlights

#### Instrumental in the early evolution of CSUnet/4Cnet.

- Created one shared backbone network (CSUnet) for all CSU campuses.
- Helped to increase influence and purchasing power with volume purchase for CSU campuses.

## Instrumental in bringing broadband network connections to the K-12 schools in California (Digital California Project).

- Went on long road trips and visited all 58 counties in California to consult with many K-12 sites.
- Connected California community colleges to CSU's statewide network (4Cnet project).

## Instrumental in bringing down the cost of paid ISP service through volume purchasing for all regional research & education networks across the United States participating in The Quilt.

• Held frequent and on-going negotiations with multiple commercial providers that resulted in steady decreases in ISP service costs.

## Instrumental in the adoption of educational and administrative video conferencing for all public K-12 and higher education in California.

- Designed the CSUnet and 4Cnet backbones with transport technology that could support H.320 and then H.323 video conferencing.
- Backbone technologies able to emulate fractional to full T-1 TDM circuits between video conferencing sites.
- Started with X.25 backbone transport. and evolved to later become ATM backbone transport.
- Developed a video conference scheduling application that was used by all of California's public K-12 and higher education for several years.
- Sponsored the development of a video conference circuit provisioning system that automated the setup and teardown of all video conferencing emulated T-1 circuits in conjunction with the scheduling application.

## Greatly increased CENIC's capabilities for monitoring and analyzing its Layer-1 optical backbone in California

- Single-handedly developed large/complex optical backbone monitoring software CAMEL.
- Saved CENIC hundreds of thousands of dollars in commercial vendor software costs.
- Provided advanced analytical capabilities that did not exist in the equivalent commercial vendor software.

#### Instrumental in the creation of new networking projects

- Western Regional Network
- Pacific Wave

#### **Managing Director of Pacific Wave**

• Responsible for developing new relationships with NRENs and new links across the Pacific.

I am at a loss for words with this sad news about Dave. It is devastating. Dave's passion, warmth, and intellect radiated in any size room. His commitment to this community that he held so dear and that meant so much to him should inspire us all in our days ahead. A life well lived indeed. He will be sorely missed.

#### Jen Leasure

#### **President and Chief Executive Officer, The Quilt**

So sorry to hear about Dave's passing. The last time I spoke to him was on the Dulles people-mover when we were coming back from a meeting (maybe the CENIC meeting). We spoke about his Mustang and his family. It was a nice moment and I appreciated the joy in his eyes when he spoke about them.

#### **Howard Pfeffer**

#### **President and Chief Executive Officer, Internet2**

Very sad news. Condolences on behalf of the Florida LambdaRail Board of Directors and corporate executive staff.

#### Joseph A. Lazor

#### Chief Executive Officer, Florida LambdaRail

Dave was a titan in the development of R&E networking. He leaves behind a remarkable legacy of interconnected universities around the world. And only Dave could have seriously considered calling the Pacific Wave network node in Los Angeles "LALALan," (which naming recommendation, by the way, preceded the movie of similar title by well over a decade).

My condolences to Dave's family and his colleagues at CENIC. I share in the sadness of your loss and the loss to the R&E networking community.

#### Jan Eveleth

#### Executive Director of Information Technology Infrastructure Services, University of Washington

Dave was a fascinating person. He had so many talents. I knew Dave back from the WestREN days when CSU and Los Nettos shared a DS3 connection to the NSFnet backbone. I had to collect data from Dave to include in the reports to NSF. This was all pre-CENIC days. He was involved with the original CalREN network created by PacBell and registered the domain name. Walt Prue from Los Nettos USC/ISI registered the address space. PacBell agreed to let CENIC take over the CalREN name (and domain) and USC/ISI transferred the address space to CENIC after the creation of the CalREN network. This is the main IPv4 / 16 block that is in use today in the CalREN network.

ISI had the contract to deploy the CalREN network, but once created there was competition on who was to get the contract for Network Operations. I worked with Dave and Mike McLean of CSU on a proposal with CSU and ISI getting the successful bid. As you may imagine, the NOC function transitioned into a more permanent position as 4Cnet was merged with CalREN along with UCnet. Dave was such an integral part of making this transition successful, along with Susan Reese and Brian Court.

I miss Dave, his stories, his insights and his creative solutions to ordinary problems.

#### **Celeste Anderson**

#### **Director of Customer Relations, Pacific Wave**

My condolences to CENIC on the sad news of Dave's passing. I know that Dave was a long-time friend and colleague and it is tough to lose the important people in our lives. You wrote a beautiful tribute to him. He did live a good life. He willingly shared his expertise with the community through committees and task forces and his perspectives made a difference. He contributed a great deal not only to CENIC but also to the Internet2 community. He had lots of great stories about his family, travels, boating, and his love of life.

#### **Linda Roos**

**Senior Director of Service Implementation and Retention, Internet2** 

So sorry to hear this. I always liked Dave and he was a key part of CENIC for decades. Your statement, "His was a life well lived," is one of the best things you can say about a person!

#### **Larry Smarr**

Director of the California Institute for Telecommunications and Information Technology, University of California, San Diego

A profound loss to the entire community and especially to CENIC. Our hearts go out to his family and to your team.

#### **David Marble**

President and Chief Executive Officer, Ocean State Higher Education Economic Development and Administrative Network (OSHEAN)

I'm thinking of Dave's family, you, and your staff today. A very sad day for all, for sure.

#### **Steve Corbató**

**Executive Director, Link Oregon** 

So very, very shocking and sad for our community. A huge loss. Our thoughts and condolences to his family, to CENIC, and to the community at large.

#### **Tripti Sinha**

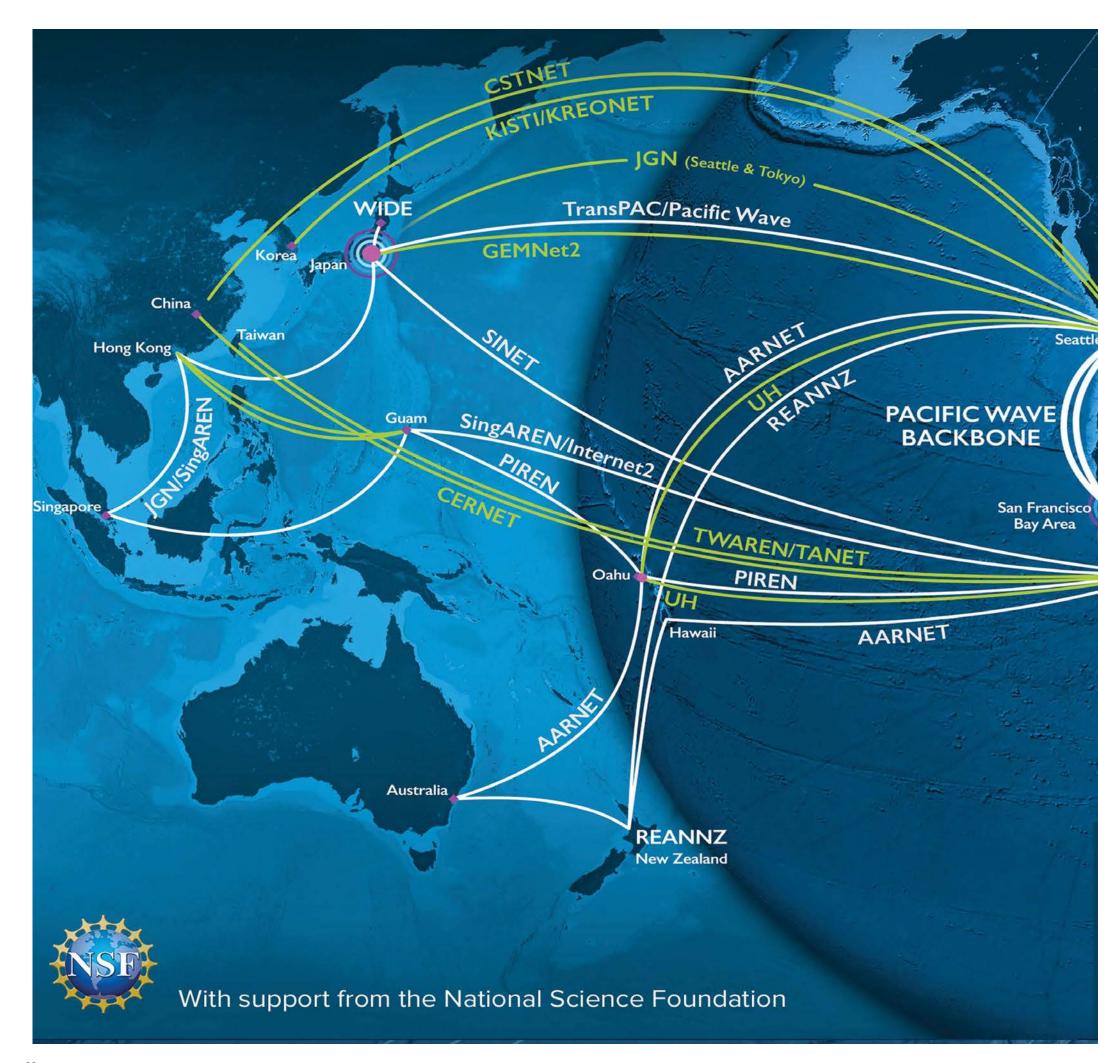
**Executive Director, Mid-Atlantic Crossroads (MAX)** 

Dave was delighted with technology and delighted to share what he knew. He was forever showing me some new app or explaining some technical detail in a way that was clear and thoughtful. Best of all, his enjoyment and enthusiasm for what he was sharing – the first flashlight app for the iPhone or Waze when it was first available – never waned. He wasn't boasting or showing off or making me work to understand something about a router, he was just excited about it, and sharing his excitement just added to his enjoyment.

Whenever I was going to spend time with Dave, I knew I would learn something interesting and enjoy every minute of that experience.

#### **Amy Phillipson**

**Executive Director, Pacific Northwest GigaPoP and CEO ResearchChannel** 





Thanks for sharing the sad news and for gathering thoughts for Dave's family. I have to say when he moved to Virginia, several of us immediately began scheming on trying to hire him. But when we saw the beautiful house he bought overlooking the river, we realized he was out of our league. He was that in more ways than one. Here's my reflection:

Dave was one of the people whom I most loved to see in the room at national meetings. Mostly, those gatherings are pleasant and collaborative but on rare occasions conflict does arise. On two separate occasions, things got uncomfortable enough that I had to escape the room for a bit and both times I found Dave had beaten me to it. Both times, he gave me that big golden smile and told me some story about his boat or buying a house with a garage big enough for his toys and he soon had me laughing and breathing again. He will be truly missed by me and by a whole lot of other people in the research networking community.

## Jeff Crowder Executive Director of Strategic Initiatives, Virginia Tech Director, Net.Work Virginia Next Generation (NWVng)

I had the honor of working with Dave for over 20 years and was fortunate to have him and Susan as my friends. Dave was generous with his time, knowledge, and ideas, and was always willing to work and collaborate with others. I learned so much about fiber, routing, networking, running a quilting show, and raising children from him. His contributions to our community and our lives will last for a long time. My deepest sympathies to his family, friends, and colleagues at CENIC.

## Wendy Huntoon President and Chief Executive Officer, Keystone Initiative for Network Based Education and Research (KINBER)

I am one of the "newer" generation of R&E network leaders. When I began to engage our community nationally (about 10 years ago), Dave and I quickly made a connection. I've always been known to be somewhat blunt and to speak my mind. It's no surprise that Dave and I were fond of each other. I would seek Dave out at every national meeting to get his view on whatever the big issues of the time were — not for agreement or disagreement, but because he \*always\* had a unique point of view that I valued. Dave taught me to not accept something I do not agree with just because nobody else spoke up.

My fondest memory of Dave was the day that I got into a heated exchange with Shel Wagoner, then at Internet2, over the (at the time) new NET+ program. Dave found me not long after the session and told me that he'd been blamed for putting me up to it — in fact, he was at a bit of a loss about what was going on. Well, much as I would have probably gone along had he, Dave didn't put me up to it. I'm not sure we ever convinced folks we had not colluded to stir the pot, but it became the source of a number of laughs for years to come — both between Dave and me personally and a bit more publicly. At least a few times, we both gave disclaimers before voicing an opinion that it had not come from the other.

I admired Dave for his candor because I know his intentions were always to reach the best possible conclusion for our community. He always had time to talk, and the patience to help me understand. Dave has long been on the short list of true R&E leaders I credited for teaching me how to do my job.

Wherever you are, thank you, Dave.

## Cort Buffington Executive Director, Kansas Research and Education Network (KanREN)

Thank you for sharing this. This must come as a complete shock to everyone at CENIC. I met with Dave only a few times. The last time was last year in Trondheim, Norway. I met his wife there for the first time. During all of our interactions, it was apparent he cared deeply about community and wanted to contribute productively on supporting it. Last year, I also learned that being a grandparent was reason enough for him to start telecommuting from Virginia, and that spoke volumes to me. Please extend our deepest condolences from your friends in Canada to his family and friends, and to the team at CENIC.

#### Jim Ghadbane

President and Chief Executive Officer, Canadian Network for the Advancement of Research, Industry, and Education (CANARIE)

I'm so sorry to hear this sad news. I didn't know that Dave was suffering a prolonged illness. I always enjoyed catching up with him and our enjoyable times with mutual friends and colleagues. Please pass on my condolences.

#### George McLaughlin

Former Director of the Australian Academic and Research Network (AARNet) and a founding director of the Asia Pacific Advanced Network (APAN)

Among the various network folks I interact with, there has been a shorthand used when we need to have a clear, congenial, but no-nonsense meeting about things network related and that is to say, "...we need a Dave Reese meeting." This didn't mean Dave was necessarily needed at the meeting, though of course, any network meeting was vastly improved with Dave's presence. Rather, the call for a "Dave Reese meeting" is a call for a discussion without preconceived political, fiscal, or turf notions that so often run things deep off track and into the impenetrable weeds of opinion and assumption. It's not that those aspects aren't important to come to terms with eventually, but Dave's attitude has always been to start with a common sense approach to the problem(s) at hand, do it in a non-confrontational way, not waste time with ill-informed or specious arguments, but seek common ground. Indeed, the "Dave Reese meeting" method is a worthwhile way to conduct any meeting whether it involves networks or newts.

Sadly, what is so often missing in meetings is someone to carry forward the "Dave Reese meeting" approach. And now, Dave himself is no longer here to guide us by example with his steady hand. Whenever I was about to enter a meeting I knew Dave would be participating in, a sense of calm came over me. He set a standard for all of us in the best ways to treat one another.

Yes, he was an outstanding engineer with an astounding depth and breadth of knowledge on all things network related. Yes, he was an amazing manager with a work ethic next to none. But above and beyond all that was his basic decency and humanity, his generosity, and the respect he gave to everyone.

#### **Steve Smith**

Vice Provost and Chief Information Officer, University of Nevada, Reno; Chairman of the Board, Pacific Northwest GigaPoP







Thank you for sharing this sad news with me. Louis, your words truly showcase the man Dave was, and how much he will be missed.

## Kimberly Lewis Legislative Advocate and Government Relations Consultant, CENIC

I just wanted to pass on my condolences to you all. Dave was definitely a character larger than life. He certainly had a way with words and people and loved a robust debate. It has been an honor to sit down with him and discuss various issues at the various Global Network Architecture/Global Lambda Integrated Facility/Asia Pacific Advanced Network meetings or to quietly just have a drink with him and his wife Susan at various conferences. Please pass my condolences on to his wife Susan. Truly a sad day for everyone who knew him.

## Warrick Mitchell Head of Network and Systems Architecture, Australia's Academic & Research Network (AARNet)

I am sorry to hear about this. I really enjoyed speaking with Dave about his travels and his life experiences. And I so looked forward to seeing him again to hear the newest story at the CENIC Board retreats. And, as Louis recounts, his laugh was always hearty and full. Dave answered any technical questions but always had a suggestion for how to learn more. I appreciated his time and energy and wisdom. I will miss him and hope we can remember him in a meaningful way. My heart goes out to his family but also to our CENIC family as well.

## Patty Wong Director of Library Services, Santa Monica Public Library

I remember working with Dave at the turn of the century when his email address was still <a href="mailto:Dave@CSU.edu">Dave@CSU.edu</a> — except that those were the days when Unix-to-Unix Copy Protocol addresses were still in vogue and we had things like <a href="mailto:CSU.net!Dave">CSU.net!Dave</a>.

In the days before CENIC, the idea that the California branches of the "Edu" enterprise could find common ground in their networking needs and work together was not uniformly held. And there was a contingency that held that running such a large network was something to be left to the professionals. As the lead guy for California State University's network, Dave was key to finding a pathway through that and convincing all the stakeholders that we really did have the talent to pull off such a large enterprise. I thank Dave for his leadership and guidance. He will be missed.

#### Jim Warner

Network Engineer in the Division of Information Technology Services, University of California, Santa

Dave Reese used his considerable intellect and talent to make the world a better place. I hope he will continue to inspire the generations that follow.

## Sherilyn Evans Chief Operating Officer, CENIC

Dave was a driving force in international and domestic R&E networking for the more than 20 years that I knew him. I have a number of fond memories of Dave, including a tour he gave me of the exchange facilities in downtown Los Angeles some years ago. Dave had a unique way about him in how he explained things and it was on display that day. He had a powerful approach using a conservation of words without overbearing complexity. He could go as deep as you wanted technically but was a master in adapting to the level of the audience or individual. Whenever I talked with him one-on-one, he had a kind of brightness in how he described even the most mundane elements. Network engineering and infrastructure, let's face it, is pretty dry material — yet Dave often painted it with a slight brush of humor, adding color to an otherwise gray hue. I recall smiling a lot around him; he had that effect.

I remember him making me laugh at an airport lounge in Hong Kong where I came upon a group of us heading home from an event — I don't remember what I laughed about so hard but Dave was the source. Dave also had a way to convey things in a straightforward and reasoned way that stood out at important times. I remember a meeting in Europe where a discussion in a meeting was going in a less-than-positive direction. Without a single word of acrimony or negative tone, Dave laid out the core issues in clear terms and suggested a more productive line of discussion going forward — I believe his timely retorts and refocusing of the group led later to significant changes in some guiding documents on international R&E networking coordination and best practices. This was also one of a number of memories I have of Dave as a consensus-builder in our community. I remember coming upon him at Newark airport in the terminal, prior to boarding the same flight, and he was smiling about something that had happened to him on his way through the airport. This is how I will remember Dave, with a warm and calming smile.

#### **Kevin Thompson**

Program Director, National Science Foundation's Advanced Network Infrastructure Research (ANIR) Division of Computer and Information Science and Engineering (CISE)

I knew Dave for as long as I can remember being part of the research and education networking community. He welcomed me, he was infinitely patient in teaching me, and he became a true and trusted friend. He was brilliant and yet patient in sharing his knowledge with me both professionally and personally (he was my go-to tech support for my phone, cool apps, international hot-spots, home networking, solar panels, etc.). Dave was tireless and creative in his efforts to better our community and networks. He made me a better person, and my world will never be the same without him. I have been privileged to get to know Susan and share time with her, and my heart goes out to her. The "breakfast club" is quiet without Dave's warm and strong presence. I miss him deeply as my colleague and friend.

#### Marla Meehl

Manager of Networking and Telecommunications, University Corporation for Atmospheric Research (UCAR); Section Head, Network Engineering and Telecommunications Section (NETS); Manager, Front Range GigaPoP (FRGP)

I am deeply saddened to learn about the passing of David Reese. Please convey sincere condolences and thoughts from NORDUnet to David Reese's colleagues and family throughout this hard and sad time. David was a good friend and colleague, and he will be truly missed.

#### **Rene Buch**

Chief Executive Officer, NORDUnet (A collaboration between the National Research and Education Networks [NRENs] of the five Nordic countries; Denmark [DelC], Iceland [RHnet], Norway [Uninett], Sweden [SUNET], and Finland [Funet]).









I am so sorry to hear this. Dave was a larger-than-life person. Smart, creative, and unflappable. He will be greatly missed. Dave was one-of-a-kind. His commitment to professionalism, relationships, and family stand out for me as does his ever-present good humor and optimism.

I met Dave nearly 20 years ago during the National LambdaRail times. I was Chief Information Officer at Florida State University then and we joined and leveraged the NLR initiative to define, fund, build, and launch the Florida LambdaRail. That effort was successful despite the fact that two prior attempts to build a CENIC-like Research and Education Network in Florida had failed. I led that effort and ran the company for the first three years. CENIC was the template for that effort. Florida already had its own K–12 network at that time, so we knew that was off the table for us. But, taking a page from the CENIC playbook, we scoped the FLR from the start to include all state-funded universities, private universities, community colleges and local governments.

The NLR was a contentious and brazen initiative. It took on the status quo. While, ultimately, it did not achieve its primary goal, it was successful in spawning several regional networks — including the FLR — which fundamentally altered the higher-ed networking landscape in this country. Dave played a key role in that effort. Despite all the controversy and national networking politics that were so thick you could cut them with a metaphorical knife, he always kept his cool, stayed solution-focused, and remained even-handed in dealing with all the several gigantic egos involved. His knowledge and understanding of how to define and run research and education networks was impressive and served as a guiding light for many RENs around the country. CENIC and many other RENs bear his indelible mark. Millions of Californians are better off for his tireless efforts.

He will be deeply missed by his many colleagues here in California and around the nation.

#### **Larry Conrad**

Associate Vice Chancellor for Information Technology and Chief Information Officer, University of California, Berkeley

My best memories of Dave were the times we flew from the Ontario airport to Oakland for the CENIC Board of Directors' annual retreat. We would then rent a car and drive to Vintner's Inn, talking about life, his school board experiences, life at CENIC, the dogs, our kids and their trials and tribulations, and our vacation homes. I always looked forward to that time as Dave was a good listener and wise counsel. I think it was therapeutic for both of us to vent a bit, laugh a lot at ourselves, and enjoy each other's company. In the last years, Susan joined us and I loved hearing about their adventures, especially in the ragtop convertible they rented to vacation in for a bit before the retreat. Susan, Dave, and I would gravitate towards each other for the meals and enjoy laughing and talking about our experiences.

Dave was a good man, an honest man, and a dear friend. He will be missed. My best to Susan, the kids, and of course the dogs, as I know they will all miss him.

Deborah Ludford
Retired District Director of Information Technology Services, North Orange California Community College District; CENIC
Board of Directors

It's of great sadness to hear about the passing of Dave. He was well-respected, appreciated, and loved by all who got to know him. As a CENIC board member for many years, I could always count on Dave to bring a smile and find the humor in any situation but it was his honesty and transparency we appreciated the most. Take solace knowing that we share your loss, greatly. He was a great man — a mensch.

## Russell M. Kaurloto Vice President and Chief Information Officer, Clemson University

About five years ago, when I started at CENIC, there was a lot that I didn't know that I had to learn by asking copious amounts of questions of anyone that was put in my path. I was very lucky to get to work with Dave right off the bat on Pacific Wave.

Dave patiently explained the complex relationships of R&E networks to me, as well as a simple introduction to the mystery of "what is peering exactly?" that ended with laughs and a simple path forward.

It was Dave who encouraged the staff to get their pictures taken in his "office photo booth" and Dave who understood that it was a very positive thing to be able to see what the person on the other end of a call looked like so you could find them and recognize them at a conference or other event and say "hi." He had a great way of being inclusive, knowing that to deal with complex problems everyone needs to contribute what they have to the problem at hand.

I will sorely miss our Pacific Wave calls with Dave's reassuring words and way of clearing the path to a simple plan to allow us to do the best we could do, without getting too mired in what we could not. The culture of CENIC is less without Dave but he has left us better able to continue to build it.

Lee Ann Weber
Director of Communications, CENIC

Let me express my deepest sympathies to you, and the entire CENIC family, and everyone who knew Dave so well in the community. I'm very sorry for your loss.

I also wanted to share with you in advance a note we have put together as a small tribute to Dave that we plan to post to our website later today along with the same picture from your website. Please let us know if we can help in any way during this trying time.

Glenn Lipscomb
Associate Vice President Marketing and Communications, Internet2

#### Internet2 Mourns the Loss of David Reese

David M. Reese, Vice President for Regional and International Initiatives at CENIC, passed away on Sunday, September 15, 2019.

A long-time contributor, member and leader in the R&E community around the globe, Reese started working with CENIC since it began in 1996. Before his various work and contributions at CENIC, Reese led the creation of the California State University's network in the early days of the Internet. His brilliance and imagination were integral to the creation and development of research and education (R&E) networks for over three decades both nationally and globally.

Reese was a community pioneer and enabler, helping propel many important regional, national and international scale networking projects. From envisioning the possibilities — and actual opportunities of R&E community-owned optical infrastructure — Reese played a key role in enabling large-scale commercial peering and defining international exchange capabilities in the global R&E community. In the US, Reese contributed significantly in the development and advancement of regional and state networks in support of higher education and research.

Reese was also a member of Internet2's Network Technical Advisory Committee (NTAC), where he was instrumental in providing technical advice and expertise to Internet2 staff for the benefit of the entire R&E community.

We are very saddened to have lost a dear colleague and friend. There are countless people who had the distinct pleasure of knowing and working with Dave for many years and he was an exceptional person in every regard. Dave cared so much about our community. He had passion for our work — here in the US and also around the world as a leader for networking in the R&E community. He will be deeply missed.



I am so very sorry and saddened to hear this news about Dave. I only wish I had more interaction with him over the years and had the chance to know him even better. From my relatively limited relationship with him, I know he was a true force in the community and that he will be so sorely missed by all who had the privilege and pleasure to know and work with him.

I am keeping you all close in my heart and sending you much peace as I know it has been an incredibly difficult year. If there is anything either I or KINBER can do for you all there, please do not hesitate to let us know.

## Jennifer Oxenford Director of Community Engagement, Keystone Initiative for Network Based Education and Research (KINBER)

I was very saddened to hear the news about Dave. As you mentioned, Dave was very knowledgeable and convincing in dealing with matters. As a vendor/partner to Dave and CENIC over the last decade plus, I can let you know that I always appreciated the way that Dave approached our negotiations with professionalism and transparency. There is no doubt that Dave wanted to negotiate the best deal for CENIC; however, we also knew that it had to make sense for us as a corporation as well. It was that thoughtfulness and candor that enabled us to do some really great things. I will certainly miss him.

Craig M. Cupach
Director of Sales, CenturyLink

That is very sad news. I only met Dave a couple times, but I know he was a great guy and had a huge impact on the R&E networking community. Thanks for letting me know and my heart goes out to his family and friends.

## Noah H. Pitzer Program Manager of the Washington K-20 Education Network, University of Washington

Right around 2006, I found myself bumping into Dave Reese through contacts in El Centro, California. I was very impressed with all that had been built by CENIC, and Dave exposed me to the idea of "where there is a will there's a way." We quickly engaged and aligned our projects together, and I was able to solve a few problems for him across the border as he continued to push for connectivity further south enabling higher education institutions in Mexico. He was also able to solve, not only a few problems for us, but some rather large hurdles that we had in Southern California. We worked together, traded a few thoughts, and at the end of the day through Dave and CENIC's help we were able to bring connectivity to tens of thousands of students in Mexico. Dave's ideas transcended more than he ever knew.

We will miss Dave.

**Arturo Iglesias Chief Technology Officer and Director, Transtelco** 

I am so sorry to hear about your loss, and respectfully express my condolences. My warmest tribute to the memory of the deceased. Rest in peace.

#### **ByungKyu Kim**

Executive Officer, Trans-Eurasia Information Network (TEIN [R&E network connecting researchers in China, India, Indonesia, Japan, Korea, Malaysia, Nepal, Pakistan, the Philippines, Singapore, Sri Lanka, Thailand, Vietnam, Australia, Bangladesh, and Cambodia])

Greetings from REANNZ. As with the rest of the national research and education network community, we were very saddened to hear about the recent passing of Dave Reese. Dave was a great guy and a great friend of REANNZ (and New Zealand).

As you know, REANNZ hosted Asia Pacific Advanced Network 46 in Auckland in August 2018 and Pacific Wave was a gold sponsor of that event. Dave had been to New Zealand on other occasions and was of course a long standing member of the wider APAN community. After APAN46 finished, he had an RV booked and was taking his wife and in-laws on a slow tour around the north of the North Island (having previously taken a similar trip around the South Island). He was typically enthusiastic about that trip and the various places he had planned to stay. I have attached a photo (see page 7) from APAN46, with Dave, Pacific Northwest GigaPoP Managing Director Jonah Keough (left) and REANNZ Science and Technology Collaboration Manager John Bancroft (right).

Please pass on our condolences to Susan and the wider CENIC team from the New Zealand community. His larger-than-life personality and contribution to R&E across the region will definitely be missed.

#### **Douglas Harré**

Chief Engagement Manager, Research and Education Advanced Network New Zealand (REANNZ)

I remember Dave as someone who was proud of his family. He loved to travel with his family and share stories. Dave also loved a good deal. I remember getting advice from Dave on various technologies from media servers to solar panels.

One of my favorite stories was Dave's identity mix-up that prevented him from presenting at a conference in Canada. I heard him tell this story several times — his indignation with the mix-up as well as the way he was processed made for a great story. We, in The Quilt community, will miss him, his stories, his love of life, and his sage advice.

#### Cas D'Angelo

Vice Chair, The Quilt Board of Directors, Southern Crossroads/Southern LambdaRail

