Welcome to the 20th Annual Conference on Local Computer Networks. As I am preparing this statement, I am reflecting on how the fields of computing and networks, and the concept of local, have changed since the inception of this conference. Twenty years ago saw the early days of Ethernet, TCP/IP, and X.25. Microprocessors, while hardly new, were still novelties to most of us and certainly not a household term. Advertisements for floppy disks and computers were not yet appearing in our local newspapers and Doonesbury wasn’t yet making fun of computer operating systems. And the processing power available on the desktop and the bandwidth available in local networks was significant compared to the capabilities of public network service offerings.

Parkinson’s Law, the rule that suggests that the need to utilize a resource grows with the availability of the resource, has been in full swing since the mid-1970s. Consider: When Ethernet products first became available, the expression bandwidth to burn was quite popular. By the early-1990s, 10 Mbps remains adequate only for simple client applications and we are seeing the growth of 100-Mbps Ethernet. My first personal computer class machine (note how I still say machine!) was an Apple II+ with 64 KB of RAM and a processor speed rated in hundreds of kHz. Today’s typical desktop system has in excess of 8 MB of RAM and 100+ MHz processors are common. My laser printer – purchased at around the time of the 17th LCN – needs at least 2 MB of RAM to print a graphics page. My first VAX-11/750 (circa 1983) supported multiple users with 2 MB of RAM. Early PCs did not have a serial port; by the late 1980s, PCs came standard with two RS 232 ports. Today, an ISDN BRI and/or Ethernet port are standard on some PCs and workstations. Some predict that FDDI ports will be standard on some workstations by 1996.

So, how does this affect the local computer network? The demands that our systems place on the LAN are steadily increasing. Whereas the long-haul network was once the bottleneck in network design, new technologies today are blurring the distinction between local, campus, metropolitan, and wide area networks. What used to distinguish the LAN from the WAN were speeds, protocols, and technologies that were adjusted to the size constraints of the networks; today, many LAN and WAN schemes are based on the same technology.

Each year, the LCN presents papers from academia and industry focusing on real implementations and experience with protocols and technologies related to the local network. Increasingly, our discussions touch on topics affecting broader networks. This year will be no exception. Security, network management, ATM, multimedia, high-speed networks, network design, and protocol performance all are critical issues for – but not unique to – the local computer network.

On a matter of logistics, we have introduced two enhancements to our conference schedule this year. First, panel sessions are arranged so as not to conflict with paper sessions, thus allowing attendees the opportunity to attend these, our most popular – and noisy – sessions! Second, the traditional paper sessions are being augmented with a Focused Interest Session on Tuesday evening. This will offer authors working in specialized fields a forum for their work and an opportunity to meet with others who share like interests.

The different session formats are merely ways to bring people together for the real goal of this conference – the workshop atmosphere. The conference schedule is intended to encourage interaction between attendees and speakers, and I hope that it is personally and professionally rewarding for you all. Thank you all for joining us at the Local Computer Networks conference.

Gary C. Kessler
General Chair