

# 1999 Bond Program

The taxpayers of Plano ISD passed a bond election in February, 1999, approving the issuance of \$21.2 million in bonds for the equipment of school buildings in the district, including the acquisition and installation of computers and other related technology and networking equipment.

Three major technology needs were identified for the bond proposal, including 1) upgrading computers (primarily in secondary campuses) to be Year 2000 (Y2K)/Windows '95 compliant, 2) greatly improving the district's Wide Area Network (WAN), and 3) completing the PBX telephone system to bring all schools into the network configuration. The bond election passed as follows.

For	3,542 (68.67%)
Against	1,616 (31.33%)

## Bond Proposals

### Year 2000/Windows '95 Compliance Issues

This portion of the overall bond package includes replacing approximately 2,500 computers (primarily at the secondary school level) to bring them up to Year 2000/Windows '95 compliance. Approximately 15,500 district computers are already Y2K compliant, according to Mr. Hirsch. These funds will also support an upgraded Energy Management system and others such as campus-based automatic phone notification and facility systems.

### Wide Area Network Upgrade

The wide-area network (WAN) upgrade will affect all 64 district schools/facilities (including five planned schools). The upgrade will greatly enhance the district's data network, provide for integrated voice and private video networks, and improve reliability, functionality and quality of network services. The new "fiber optic" network would provide for one improved cabling system to transfer phone, video and computer data for the district's more than 50,000 network users (which includes staff and students).

The PBX Telephone system completion will bring the remaining 19 elementary campuses into the same network phone configuration system as the other district campuses and sites. These digital phone switches will greatly enhance the communication at these schools by providing full network capability and reliability, improved communication accessibility with increased numbers of lines per campus, and will integrate the phone system into the proposed wide area network configuration.

## Q & A

**1. What will the \$21.2 million fund?** The PISD Board of Trustees has called this bond election to replace 2,500 computers (out 18,000 total) which are not Year 2000 (Y2K) or Windows 95 compliant; to expand the Wide Area Network (WAN) by converting to fiber optic and thus enhance the ability of school computers to communicate data and video; and to integrate and complete the voice network capability by expanding the district's telephone system to 19 (of 35) unserved elementary schools. Each of the included items directly affects the classroom and student learning as well as our teachers' ability to communicate with parents and colleagues.

**2. What has the district done to ensure Year 2000 compliance?** The Plano ISD Year 2000 task force began meeting in spring, 1998. A written plan to address Y2K issues was presented to the PISD Board of Trustees. Since that time, we have completed hardware and software inventories, notified manufacturers to request their Year 2000 compliance statements and updated our existing database to show which hardware, software and other embedded systems needs replacement and/or upgrading to be compliant. Installation and testing of necessary replacement systems is scheduled for completion by fall '99.

**3. Why does the district need an expanded wide area network?** Compare the communication needs of PISD to Plano's trying to accommodate existing traffic on a single two lane road instead of multiple six lane highways. This district is one of the largest users of the Internet with more than 400,000 requests per day - an increase from 150,000 a year ago and still growing as we continue to add student computers to the wide area network. The major improvement with a new network will be increased capacity (allowing data, voice and video traffic to occur simultaneously) and quality of service (network outages should become relatively rare and the network can continue to function in the event of problems). To increase capacity on our current network would involve significant increases in ongoing monthly expenditures for high speed phone lines.

**4. What are the most important reasons for building a new network?** First, to ensure that PISD students have access to the most up-to-date information and current software applications. Second, to give students the opportunity to use more multimedia capability in their classrooms and with their projects, whether they use the Internet or collaborative video techniques. Third, to make student and professional use of the available technology more effective and efficient and to bring voice network capability up to an equitable level at all campuses.

**5. How will this bond election affect the delivery of curriculum?** These proposed technology initiatives will make students and staff more efficient just as similar initiatives do for the business world. Secondary students, in particular, will benefit from access to updated software, including compatible versions of software that many have access to at home. This is becoming a more important issue as students are working on projects involving updated software applications such as Office 97 at home and cannot use those files directly at school. More curriculum resources will be available; students and teachers will be able to use collaborative video techniques when appropriate; and network reliability will increase to allow more network "uptime" for student access. Additionally, students will have the opportunity to participate in distance learning classes where students can remain at their home campus, yet participate in courses offered at other sites in PISD or outside our district. Without an upgrade to the wide area network, student access to multimedia components of curriculum resources will be limited.

**6. How are secondary curriculum needs being addressed?** This bond addresses two areas that have direct impact on the curriculum and instruction program of the district. The replacement of 2,350 computers at the secondary level alone will allow all student computers to run Windows 95 and therefore use update software throughout the entire campus. Students will also have access to their files from anywhere throughout the campus and can expect more reliable performance from their computers. The expanded capacity and capability of the network will allow students access to more information via networks and the ability to use video conferencing techniques for collaborative projects.

**7. Why is the video capability enhanced by a fiber optic network important to the students?** Video communication provides a far more powerful, realistic tool for students and teachers interaction than phone conversation or Internet mail. Video communication allows students in remote locations to collaborate and interact with peers. For Plano ISD, "remote" can mean between campuses. We could offer low enrollment courses to students at varying campuses without having to transport them to remote sites; middle school classrooms could partner on projects with their elementary school counterparts; we could collaborate with schools in other districts as well as higher education and business to offer more opportunities to our students. Better and more complete information and interaction will result in better quality educational products.

**8. How will this be an improvement over the current PISD data, communications and video systems?** Our current data network is comprised of high speed telephone lines (T1 frame relay circuits) provided by GTE and Southwestern Bell. We have no guaranteed speed of data transmission and no control of data traffic once it leaves our local area networks. This compromises the quality of service and hampers our ability to troubleshoot problems as they occur. In addition, our current data network has only limited ability to function in the event of problems. We have had problems on occasion where a single circuit going down has completely shut down our network. Maintaining the current network is costly in terms of personnel and lost time at work. This bond election would also allow 19 elementary school sites currently outside the network to become part of our telephone network and will allow us to put a phone in each classroom for added safety, security and enhanced communications. Finally, we do not currently have a two-way video network. We have TCI-provided cable services to only 49 of our 54 campuses with no method of broadcasting video to sites other

than the studio at Plano East Sr. High. This network would allow each site to communicate using video techniques and resources.

**9. What are the implications to the classroom if the bond fails?** Secondary students will not have access to updated software and Internet access in all curriculum areas. As examples: Business Education students will not be able to use updated versions of productivity software such as Office 97, nor have Internet access. Additionally, middle school science and reading computers will not have Internet access nor be able to run updated software necessary for our total curriculum. The competitive edge our students have gained in the elementary classrooms through the use of updated technology software applications will not be fully continued in secondary schools. As we bring all student computers onto the Wide Area Network (WAN) currently, the network capacity is not increasing, so ability to access the Internet is limited (slower, no sound, no video). This limitation negatively affects delivery of our own curriculum to the classrooms. With an improved network, all classroom teachers will benefit from the ability to access curriculum and resources from the Internet as well as our own networks. Teachers find the most up-to-date materials on the Internet because publishers update their materials frequently. All of these classroom opportunities will slow down if we don't upgrade our network and if the network capacity stays the same, particularly as we grow.

**10. How is Plano ISD helping teachers use technology to implement the curriculum?** One of the most critical issues facing PISD is professional development so that all teachers can become more familiar with the available technology. This issue is common to all large organizations using technology, both in business as well as in education. The continuous staff development provided for all of our teachers will mean more uniform usage of our technology resources in all classrooms and content areas.

**11. What will this bond election cost me?** If you own a home valued at approximately \$165,000 (the average home cost in Plano ISD), passage of this bond election will add no more than 1.5 cents to your tax bill, the equivalent of \$22.56 a year at the high point; taxes on a \$250,000 home will increase about \$32.25; and for a \$100,000 home, taxes will increase about \$12.75. Because of restructuring of previous debt to take advantage of lower interest costs, the district has been able to maintain a lower rate of debt service than had been projected in the 1996 bond election.

**12. How will this election be affected by the "Robin Hood" provisions of the state school finance plan?** Debt service dollars are NOT subject to "Robin Hood," so every cent raised here through this bond election will be spent for Plano ISD students.

**13. Over what period of time will the bond be paid off?** We will pay off the bonds for the new computers in five years, and the bonds sold to upgrade the network will be paid off in ten years. This coincides with the life expectancy of the computers and network equipment.

**14. What will be the ramifications if we funded technology through the maintenance and operations budget instead of the bond issue?** We would be forced to use a "piecemeal" approach to updating technology, adding a little at a time over many years. This would make standardization very difficult and would leave the district behind in meeting identified student needs. We would see a retreat from the district's and community's shared vision of ensuring that PISD students are on the leading edge of educational and technological preparation for the future.

**15. Isn't replacement of technology going to be a continuous drain on the district's budget?** Technology helps deliver the PISD curriculum and prepare our students for a technological future. The district buys only that level of technology which is necessary to deliver our curriculum effectively and efficiently. Our technology resources need to be funded to allow replacements and upgrades as necessary, typically five years for computer and local area network equipment and ten years for video equipment and wide area network electronics. Because of the "Robin Hood" law, our operating budget has not been able to support this type of replacement fund.

**16. Why is the district participating in the TIF (Tax Increment Financing District) for the new parking lot for the new mall if there is a need for funding for technology?** While it may appear that the district is giving up funding to participate in the TIF, in fact, under the current "Robin Hood" law, PISD would realize no decreases in tax funds from the TIF. The agreement has been structured to give the TIF only those funds which

would be lost to recapture (Robin Hood). Also, the district's staff and students will actually benefit because the city has committed to build a professional development center for teacher and staff training, a much needed facility which the district is unable to afford at this time. PISD has a long history of working cooperatively with its sister governmental bodies, and it is the belief of the board that the mall will generate sales tax revenue which will be very beneficial to the city thereby benefiting the citizens of Plano.

**17. Didn't the voters approve a technology bond issue in 1996?** Yes, and every promise in that bond election has been kept. Additionally, the computers purchased with those funds are Y2K compliant, and will not be replaced. Student computers, teacher computers and work stations, and administrative applications have been installed and are functioning. The project was completed ahead of schedule and within budget. The 1999 bond election addresses Year 2000 compliance and Windows 95 upgrades and provides an upgrade to the Wide Area Network, a process which must be accomplished because of the increased use and demands on the existing system. It is expected that the Network will meet projected district needs for 10-15 years.