

**Review of Technology in School Renovation Technology Grants
Nebraska Department of Education - P.L. 106-554 CFDA 84.352A
Grants Submitted for the June 17, 2002 Deadline**

Applicant Name: Ralston Public Schools

Applicant Identifier:

Reviewer Comments Page

Overview: Briefly describe the type of technology requested and how it will be used. Is the technology requested necessary to achieve the student learning needs presented?

Ralston Public Schools is applying for \$48,066.77 through the NDE School Renovation Grants—Technology Section in order to purchase servers, switches, and a router to replace the 1991 networking technology of Ralston High School. The school will be upgraded from Cat3 to Cat6 cabling and allow for 100MB data and video transmission.

1. To what degree does the proposal address upgradability of requested technology?

Reviewer 1: The equipment identified is an excellent choice. Even though CAT 6 wiring terminators / jacks are not readily available now, it is clearly the direction of the future. As an Apple-based school, utilizing OS X servers is clearly an excellent choice.

Reviewer 2: By going with network switches and CAT 6 RHS is showing a definite commitment to expandability. The mention of streaming video is a good example of future technology capabilities.

Reviewer 3: The Cat-6 wiring is adequate for 1GB over copper solutions should they need those in the future. Since the model of switches was not designated it is difficult to know if they provide growth such as GB uplinks or advanced stacking options. The server technology is consistent with what they are currently using and will provide much greater throughput.

2. To what degree are the costs defined and reasonable for implementation of this type of technology?

Reviewer 3: The desired equipment and wiring is specified, however, there are no exact models given or quantities designated (the exception is that there will, ostensibly, be one router purchased) making it very difficult to assess whether costs are reasonable.

3. To what degree is the implementation timeline reasonable for this type of technology?

Reviewer 2: Though a specific timeline is not described the general descriptions of work to be done in Phase One and Phase Two give seem to indicate that the technology implementation/installation will follow along appropriately with the overall renovation project.

Reviewer 3: The timeline is defined primarily in relationship to the construction and in that regard it is appropriate. The timeline for the implementation of servers and switches is less clear and, therefore, more difficult to assess.

4. To what degree are appropriate maintenance and on-going technical support requirements provided for and defined?

Reviewer 1: Since the management of this network has been in operation for the past 10+ years, it is safe to assume that the district will continue to provide adequate staff and funds for it continue maintenance and support.

Reviewer 2: It is excellent to see the use of student "Senior Technologist" in the plan.

Reviewer 3: It would seem that ESU3 will provide training and maintenance and in that regard the proposal is completely adequate. This is not directly specified, however, it would seem to be a reasonable extrapolation based on the nature of the relationship between the two organizations.

5. To what degree is the requested technology compatible with local and/or statewide infrastructure and compliant with the NITC Technical Panel's infrastructure or video guidelines and standards?

Reviewer 1: It will be fully compatible with any IP-centric network including video.

Reviewer 2: It is good see Ralston P.S. positioning the high school to take full advantage of the local provider's 100MB provision.

Reviewer 3: It may be that the infrastructure is completely compatible. Since no switch models are specified I cannot know for sure whether issues such as Quality of Service are properly addressed.

If funded, what recommendations would you make or what requirements would you impose on the applicant?

Reviewer 1: Proceed as planned. Based on the age and utilization of the network, the currently installed technology should be upgraded from the current Cat 3 to at least 5e and replace hubs with switches as described.

Reviewer 3: Make sure switches are manageable and provide options for GB Ethernet or trunking. If possible, QoS issues should also be addressed to ensure that multicast video applications can be used.

