



LINCOLN PUBLIC SCHOOLS

BUCKNER M. CREEL
ADMINISTRATOR FOR BUSINESS AND FINANCE

March 17, 2010

To: School Committee
Michael Brandmeyer, Superintendent
From: Buck Creel

Subject: Request for Award – District Phone System

Background. For a number of years, the Administration has been dissatisfied with the performance of the Comdial DXP phone system installed in the early 1990's. The Comdial is an analog system based on 25-year-old technology requiring outside vendor support for simple add, moves & changes, with little of the functionality obtained with current technology. The Town Offices have been dissatisfied with their Comdial phone system for all the same reasons, and because their phone instruments are failing at a rapid rate.

Observing their equipment failures, and anticipating that we will soon face the same problems, we began working with the Town two years ago to develop a replacement architecture. The talks with the Town were informative but did not develop a timely common solution. We did agree that the Schools would seek our own solution, but develop one which has the flexibility to expand to the other Town departments if successful.

In considering possible project approaches, we realized that the state of our existing data and phone wiring is critical to success, as we are not ready to undergo a complete rewiring of both campuses at this time. Therefore, we sought a firm experienced in system analysis and integration, with a set of solutions robust enough to handle our various wiring networks. We sought a solution which would replace both the central processor equipment and software, and provide new instruments at each location with a current functionality that is responsive to the technology demands of the 21st Century. , We set an internal estimate of \$150,000 as the likely cost of our replacement system.

Initial procurement process. A number of firms have competed for and won the right to offer phone system and data integration services under state contract ITT29. After reviewing materials from several offerers received during the recent eRate annual recompetition process, we identified two firms, CBE Technologies from Andover and Carousel Industries from Boston whose approach to phone system projects seemed a good match to our needs. Both firms were invited for a meeting to discuss our requirements and possible solution strategies. CBE Technologies presented a hybrid digital/voice-over-internet protocol (VoIP) solution based on technology and equipment developed by Cisco Industries. Carousel Industries presented a hybrid digital/VoIP solution based on technology and equipment developed by the AT&T spinoff company Avaya. Both firms proposed locating certain central services (voicemail, directory service, subscriber management, etc) on the Lincoln Campus, with a survivable satellite node with the same functionality on the Hanscom Campus.

We considered both firms capable of meeting our needs, and so invited them to perform a more intense site review and to present a preliminary proposal. CBE Technology presented a solution based completely upon their Cisco equipment at a cost of \$272,783.18; their system would have required the replacement of HP Procurve routers installed during our network expansion project several years ago. The Avaya IP Office solution presented by Carousel Industries is compatible with our existing HP Procurve routers and had a preliminary cost of \$128,248.17. We eliminated CBE Technologies from further consideration based on both cost and technical considerations.

Reference checks and final discussions. Carousel presented 13 pages of customer locations in Massachusetts as possible references; I selected five for contact:

- Town of Littleton
- Mashpee High School
- Wheelock College
- Massachusetts State Police
- Town of Lexington new DPW project

Several of these projects were systems larger than ours, designed for future expansion, but the Mashpee HS project was an identical match for the IP Office solution we are considering. Four of the five firms were unequivocal in their recommendations, citing good planning skills, attention to detail in the implementation phase, responsiveness to changes and problem resolution and excellent long-term maintenance support as Carousel strengths. The individual reference comments were very strong in support of Carousel.

Lexington had some difficulties with some portions of the installation of their larger system, (perhaps caused by the first project manager who no longer works for Carousel), but felt that the current technical team was responsive and is resolving the issues. They will consider Carousel favorably for the next phase of the Lexington phone system.

Following the reference checks, Joe Dearden and I reviewed the scope of the proposal with Carousel to ensure that it represents our functionality requirements. Carousel took our comments and prepared a final proposal, a copy of which is attached. Their price is \$124,821.17 for the district solution. Maintenance is free for the first two years, and will cost \$454 per month for the next year. The final proposal added some features and gave us a greater discount for a net reduction in price.

Funding and recommendation. Funding for this phone system upgrade is proposed as follows: The total of \$124,821.17 would be split 55/45, with \$68,651.64 allocated to Lincoln and \$56,169.53 to Hanscom.

The entire Hanscom share will be funded from the Hanscom Technology Reserve Fund. Lincoln's share will be funded from four sources: the FY10 School Technology warrant, \$10,112.81; expected eRate reimbursements, \$18,000; budget balances in the MIS operating accounts, \$35,037.75; and the School Rentals Revolving Fund, \$5,500.

The Administration is going through a final scrub of the instrument list to ensure that all requirements are covered. It is possible the project will grow by one expansion module and some small number of phone instruments. This potential add plus a small contingency could increase the total project amount to \$130,000.

I recommend that the School Committee authorize the Administration to enter into a contract with Carousel Industries to install the Avaya IP Office phone system as described in their proposal dated March 17, 2010 on both campuses for an amount not to exceed \$130,000.