1. **What kind of distance-learning technology do you currently use?**

The Vermont State Colleges (VSC) currently offers online and hybrid courses utilizing its existing network infrastructure and an open-source learning management system, Moodle. The Moodle platform is available for all courses, not only online and hybrid delivery courses, across the system. As part of routine VSC system IT infrastructure development, faculty and students will soon all have access to Office365, which includes such features as Skype and OneDrive.

This summer, Vermont Tech IT staff began testing and installing new equipment to support distance-learning courses in five of its locations: Bennington, Brattleboro, Randolph, Williston, and Rutland. The setup includes multiple cameras allowing for closeup and wide-angle views, flat-panel touchscreen displays, student-activated microphones, and a portable microphone for faculty. The system is also designed to be used flexibly with multiple kinds of videoconferencing and lecture capture software, including programs like Skype, AdobeConnect, and Vidyo, and it will be used in conjunction with Moodle, the existing VSC learning management system. Such flexibility will allow faculty and students to use the best technology for their particular teaching and learning needs. Six additional locations around the state have been identified—Newport, Springfield, Lyndonville, Middlebury, St. Albans, and White River Junction. Vermont Tech is working with VSC and other educational partners to identify options for sharing classroom spaces in these locations in order to complete its transition by the end of December 2015.

2. **What are/were the start-up costs for such technology and what are the total/projected ongoing operational and maintenance costs?**

The current budget estimate for the one-time transition cost for Vermont Tech's new distance learning setup is $384,704. This compares with about $150,000 annually that Vermont Tech currently pays in user fees to VIT. Even assuming conservative replacement cycles on equipment and part-time IT staff expansion, Vermont Tech's projection is that even if the state continued to fund VIT, the conversion will be advantageous in the long-run, given the significant potential for expanding usage of these classrooms beyond the nursing program without incurring more per-hour cost as under the VIT model.

Last year, CCV and Castleton also piloted several distance-learning courses. These pilot courses were conducted on a limited basis without investment in additional classroom equipment beyond that currently in use (laptops and projectors) at each institution.

3. **What technology do you plan to offer in the future and at what cost?**

The VSC expects to continue to offer online, hybrid, and distance learning courses utilizing current, scalable technologies as they become available. VSC IT services,

including its network, enterprise information system, and learning management system are consolidated at the system level to reduce costs.

4. **What technology, if any, have you offered but discontinued? (Why was it discontinued and how much was invested?)**

In recent years, within the VSC, only Vermont Tech has used the VIT system for course delivery. VSC analysis of VIT's client hours data shared with the VIT Working Group for all of 2014 shows 60% of total VIT usage was for Vermont Tech courses. An additional 22% of total VIT usage was for Department of Labor apprenticeship programs. In contrast to VIT, we expect the new distance-delivery system under development at Vermont Tech will not incur ongoing costs for on-site technicians, it uses more universally compatible technologies, it is installed in classrooms that retain multipurpose functionality, and it will operate within the VSC's existing network capacity.

5. **Who are the current (past, future, as applicable) users of your technology and what are (were or will be, as applicable) the user costs of the technology?**

The VSC system-level technologies are, have been, and will be available to all users affiliated with the VSC. Distance learning equipment, like all institutional resources at each VSC institution, is available to other users by prior arrangement. The Department of Labor will begin using Vermont Tech's new distance learning sites to support electrical and plumbing apprenticeship courses beginning in January 2016. Vermont Tech has established a rate of $30 per hour for the apprenticeship courses, which represents approximately a 40% reduction from the VIT educational rate charged to the Department of Labor.