

Prior to 2012, the funding model for network infrastructure at Carolina was widely perceived as problematic.

Revenues were generated largely from a bundled voice/data charge to departments that resulted in a \$48.00 per month charge for a standard telephone, which was very high in comparison to peer institutions. The key shortcomings of that funding model were:

- It drove departments to remove telephones and convert to cell phones, resulting in loss of revenue for network infrastructure without a reduction in network usage by the department.
- It lacked contributions from important user groups including students and affiliated entities such as UNC Press.
- It provided no funding for capital refresh or network upgrades or expansion.

A Communication Technologies Coordinating Committee (Comm Tech) was charged with studying this issue and recommending a new funding model for network infrastructure.

Communication Technologies Coordinating Committee members at the time were:

- Carolyn Elfland, Associate Vice Chancellor for Campus Services, Finance and Administration, Chair
- Mike Barker, Assistant Vice Chancellor for Infrastructure and Operations and Chief Technology Officer, Information Technology Services
- Andy Johns, Associate Vice Chancellor for Research, Research and Economic Development
- Tammy McHale, Senior Associate Dean for Finance and Planning, College of Arts and Sciences
- Christopher Payne, Associate Vice Chancellor for Student Affairs, Student Affairs
- Howard Reisner, Professor of Pathology and Laboratory Medicine, School of Medicine
- Dennis Schmidt, Director, Office of Information Systems, School of Medicine
- Brian Smith, Director of Treasury and Risk Management Services, Finance and Administration

Student members added for this study were:

- Dakota Williams, Student Body Treasurer, 2010-11
- Mary Cooper, Student Body President 2011-12
- Neal Viridia, Graduate and Professional Student Federation Treasurer, 2010-11
- Alex Mills, Graduate and Professional Student Federation Treasurer, 2011-12

The new model developed by the committee was designed (and since July 2012, has been shown effective) to guarantee adequate funding for the data network (the data network being the dominant of the “core services” as discussed below). Indeed, phone use and those related charges are considered optional in the new model.

ITS identified specific core services (which included life cycle refresh for network elements) within Communication Technologies and the committee recommended funding those services by a blend of sources:

1. Faculty/staff departmental funding – total assessment against payroll at .54%
2. Student funding– total assessment against cost to educate at .54%
 - “Personal” use: by student technology fees
 - “Academic” use: by central university sources
3. Residential housing – by direct, year-to-year, memorandum of understanding detailing actual expense projections plus overhead percentage

4. Affiliated entities (e.g., UNC Healthcare, General Administration, UNC Press) – by direct, year-to-year, memorandum of understanding detailing actual expense projections plus overhead percentage
5. Reallocation within ITS of building operating reserve – these funds were commingled in the general ITS budget and are to be reallocated; these were line-items appropriated for this use.

With regard to the payroll assessment for departmental funding, it has been implemented exactly as the transit fees (UNC's share of the Town of Chapel Hill bus system – fares are free for riders) are implemented — as a percentage assessment against payroll funding sources, per pay period.

The faculty/staff share was due as .54% of the cost to sustain the employee population (measured by the total salary base across the university). The percentage rate was determined by a line-by-line evaluation of the total expenditures by ITS Communication Technologies over a representative fiscal year.

The student share was determined by applying exactly the same .54% rate against the cost to sustain the student population (measured by the total cost to educate the student body). The cost to educate the total student population is the surrogate for salary in the case of students. For the fiscal year ending Jun 30, 2010, the cost to educate a student is \$22,563 (as calculated according to the National Association of College and University Business Officers standards for presentation in the university's Comprehensive Annual Financial Report). With 26,603 FTE, this comes to $(22,563 * 26,603)$: \$600M. Thus, .54% of \$600M is approximately \$3.2M – but was represented in the Communication Technologies Coordinating Committee recommendation at \$3.1M.

It seemed inappropriate to expect the state of North Carolina or tuition dollars to fund whatever “personal” use of the campus network there may be by students. Similarly, it seemed inappropriate to charge a fee to students for that portion of network utilization that is directly related to student academic requirements/pursuits. So, the salient question was what percentage of time on the campus network is used for personal purposes as opposed to academic purposes. The Communication Technologies Coordinating Committee, which includes student representatives, judged that it was between a third and a half of student usage. To put the matter another way – the question is how much time on the network is sending emails of a non-academic nature, browsing websites for personal things (e.g., postings and browsings of social networking sites), twitter, etc. Evaluation by student focus groups yielded a range of estimates, from 24% at the low end to 38% at the high end, with an average of 31% across all groups. As such 31% of student use was deemed to be “personal”. For the first year then, the “personal” portion came to approximately \$992K (which was added to the student technology fee), and the “academic-use” portion was approximately \$2.208M (which came from central university sources).

Given that ITS was extremely inclusive in the planning of this model – including faculty, staff, multiple student groups; financial people; technology people; etc. – there was little to no resistance in the implementation of this model. ITS representatives met individually with every school and department on campus to discuss the change. Compared to the previous “\$48 per phone line” charges, some departments did better, some did worse under the new model; all departments agreed, however, in the importance of having a sustainable funding model for the network.

This model should be successful on any campus where (a) a broad governance/advisory structure exists and people actually talk to each other (b) the networking group has a strong campuswide reputation for

communicating with people and reliable service (c) the central leadership of the university recognizes the need to change the status quo.