

# APPENDIX C

## DEFINITION OF TERMS

The following list references, in sequential order, a summary description of ten major inter- and intra-campus infrastructure documents or products that have been completed to date. These materials provide the structural foundation by which the inter- and intra-campus infrastructure was planned and will be implemented. Campus representatives, CSU staff and consultants, by and far, have been the principal authors and reviewers of these various studies and standards.

### **1. Telecommunications Infrastructure Planning Guidelines (TIP)**

An updated version of a document originally issued in 1993 expounding on the essential functional, technical, and program criteria used when planning a campus inter/intra-building telecommunications infrastructure for new or renovated facilities. The revision is designed to meet current technology standards and practices and to provide a framework for insuring technical quality and performance. The document describes in detail installation and construction activities related to pathways, wiring, planning, budgeting, procurement specifications, and acceptance testing.

### **2. Telecommunication Infrastructure Master Plan (TIMP)**

These documents, completed in January of 1996, represent the telecommunications master plans for 20 of the 23 CSU campuses. The TIMPs utilized a planning model that was followed by every campus submitting a report. These documents, produced with assistance of several telecommunications engineering consultants, detailed the intra and inter-building media, pathways and space target environments, and projected costs for both State and non-State buildings.

### **3. Minimum Baseline Taxonomy**

This rather comprehensive report developed by the CTI identifies and recommends the minimum baseline requirements necessary to support the systemic inter/intra-building telecommunications needs of a campus. The purpose of the Minimum Baseline requirements is to ensure a universal foundation level of basic activity that serves students, faculty and staff across a seamless intra-campus and inter-CSU system. The Minimum Baseline defines the role of infrastructure in terms of voice, data, and video components and the general framework for eventual construction.

The taxonomy section of this document was to succinctly describe and define the campus intra-building horizontal cabling/wiring and the information outlet build-out parameters that CSU campuses will apply in meeting infrastructure objectives. The overall goal of the document was to eliminate any confusion or

misinterpretation when applying the TIP Revision and/or Minimum Baseline as reference tools.

#### **4. Preliminary Drawings**

A series of preliminary engineering designs, installation/construction specifications and costs developed by various telecommunication consultants engaged by the campuses for building out their infrastructure based on a \$6.24 per assignable square foot funding standard. The latter unit cost was determined from a utilities project funded at the Fullerton campus.

The preliminary drawing provided the framework for extrapolating the build-out costs for the remaining State owned buildings not included in the original estimate. This documentation, in conjunction with the Minimum Baseline requirements, formed the basis for arriving at the \$244 million build-out estimate.

The twenty completed plan sets were submitted and received approval from the California Public Works Board.

#### **5. Campus Interview Data**

This data was developed during a series of “discovery meetings” in November 1997 with each of the campuses after they had some time to evaluate the CSU-produced documents entitled “Network Infrastructure Build-out” and the preliminary “Scope of Work” for each campus. As a part of the discovery process, each campus was also invited to share with the Physical Infrastructure Sub-task group any changes in their administrative or academic objectives, program priorities, capital outlay programs and feedback on the scope submittal and network design. The outcomes learned during this process provided the foundation for a “Scope of Work” report for every campus. The discovery meetings and scope of work documentation were the catalyst for generating a CSU policy statement on the physical telecommunications infrastructure.

#### **6. Infrastructure Build-out Framework**

This policy paper uses the TIP guidelines and the CSU Minimum Baseline as the primary technological and programmatic drivers on which all CSU funded inter/intra-campus building infrastructures are designed and deployed. Much of the policy outcomes were generated from what was learned during the discovery interview process and subsequent visits to the Pomona and San Diego campuses. The policy outlines five (5) major topics:

- Infrastructure Guidelines and Standards;
- Buildings and Sites Covered by the Infrastructure;
- State Capital Outlay Building Projects;
- Infrastructure Ventures; and,
- Telemetry and Signal.

## **7. Construction Quality Standards**

This document covers in greater detail the installation and construction requirements and performance standards required by a new or renovated inter/intra-campus infrastructure. The standards and measurements used by this document define practices and other criteria currently being employed by the campuses, the CSU and the industry for building out a comprehensive telecommunications infrastructure. These specifications describe and identify standards that will be used as performance indicators to guarantee a quality installation and construction outcome that is wide range but rather tightly defined and tied to industry qualifiers.

## **8. Campus Implementation Schedule**

The rollout plan delineates the criteria used by the Physical Infrastructure task group for selecting the sequential order by which CSU campuses will be constructed. The rationale used to determine the order included:

- Implementation (i.e., cost effectiveness, geography, leveraging/efficiencies, project management, baseline requirements);
- Campus (i.e., campus need, readiness/receptivity, executive input and support, unique campus/programmatic requirements); and,
- Revenue Potential (i.e., history of success, entrepreneurial, high impact, long term)

## **9. Intra-Campus Infrastructure Plan**

This document describes the intra-campus rollout plan and criteria used by the Intra-Campus Infrastructure Sub-task group to ensure that the telecommunications pathways, spaces and media, and terminal resources support anytime, anywhere access to information resources by all students, faculty and staff.

## **10. Inter-Campus Infrastructure Plan**

This document describes the inter-campus rollout plan and criteria used by the Network Infrastructure sub-task group in selecting the sequential order by which 4Cnet campuses will be installed. The rationale used to determine the order of events included:

- Cost Effectiveness (i.e., existing local transport, utilizing existing facilities and equipment, expansion capacity, existing network upgrade and construction phasing);
- Other Educational Partnerships (i.e., community colleges, CENIC, UCAID/Internet II); and,
- Cost Considerations (i.e., existing circuit and internet contracts).