

# Information Services & Technology

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## Campus Communication Network Financial Model Overview

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# Communications Network Model Project

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## Executive Sponsors:

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## The Campus Network – A Common Good

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Network communications are a critical campus resource that must be consistently maintained to meet UC Berkeley's mission of research, teaching and public service needs. The environment includes:

- Interbuilding Communications Conduit System (ICCS)
- Wired Data Network (Switches and Routers)
- Wireless Infrastructure (Private and Public)
- Telephony Network (Dialtone)
- Network Security (Detect and Prevent)
- Emergency Systems (radios, blue phones, e911, WarnMe)



# The Challenges of Our Current Situation: The Node Bank

- Nine year old model is funded by mix of recharge, IST resources, node credits, and Chancellor's reserves
- Resulted in a disproportionate benefit for departments that had many nodes at model inception FY 1999-00
- The blend of service types in the current model complicates cost recovery from multiple fund sources.
- No provision for changing technology landscape (wireless)
- Emergency communications costs have increased, while income from pay phones has declined to zero
- Highly complex accounting method contributed to inaccurate calculations for network costs, and depreciation expenses contributed to structural deficit



## The Campus Network – An Example of Common Good Funding

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Like many common good services, the network lacks a stable funding model that is not reliant on dwindling Chancellor reserves:

- ICCS (Capital: Partially VCAC funded)
- Wired Data Network (~\$2M Chancellor reserves)
- Wireless Infrastructure (~\$1-3M unfunded)
- Telephony Network (~\$5.6M recharge)
- Network Security (~\$1.3 unfunded)
- Emergency Systems (~\$660k unfunded )



## Our Approach to Developing a Model

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- Applied activity based budgeting to align costs with services
- Aggressively reduced operational run rate
- Formed an Advisory Committee of technologists, MSOs and Academic Senate representatives
- Evaluated communication models from peer institutions
- Evaluated applicable populations
- Vetted model with Campus Recharge Committee
- Reviewed proposal with Controller's Office
- Reviewed proposal with 15 Deans



# Design Rules

The following principles were developed by the Advisory Committee in June 2008 to determine the optimal Communications Network Recharge Model for the campus:

- Includes the full IST costs of delivering voice, data, security and emergency communication services to the campus.
- Is in compliance with campus recharge policy.
- Is simple and scalable.
- Provides a transparent, consistent, and timely distribution of service costs.
- Facilitates a consistent/estimated billing expense for customers for planning purposes.
- Is technically and financially sustainable for at least a 7-year life cycle.
- Supports evolving technologies.
- Moves the campus toward a goal of ubiquitous network access.
- Allows departments the flexibility to control their “spend” by reducing or increasing some services.
- Accounts for a small number of compelling departmental service variations.
- Should not encourage behavior that is detrimental or counter productive to the overall goals of the campus.
- Can be implemented in FY 2009/10.



## Model Decisions to Date

- All costs for maintaining the network infrastructure and network security are included in a communications full recharge model
- Communications model includes completion of the “risers”, expansion of AirBears, completion of ICCS
- All users of the network are included in the allocation of costs
- Allocation is based on FTE and service level (FSE)
- Financial support from students will be needed to implement the model
- Voice costs will be recovered on a pay-for-service basis
- Emergency Communications will be moved to the functional owners and costs will be covered by central campus funding



## Cost Breakdown Sample Scenario

Population	Method	FSE	Source	Estimate	Current
Undergrad	15% FSE	3,650	Possible	\$1,641K	None
Graduate	15% FSE	1,509	Possible	\$678K	None
Undergrad Workers	FSE based on HRMS	1,529	department	\$728K	None
GSI	FSE based on HRMS	903	department	\$430K	None
GSR	FSE based on HRMS	767	grant	\$365K	None
Staff	FSE based on HRMS	7,377	dept/grant	\$3,512K	Central
Faculty & Academics	FSE based on HRMS	3,269	dept/grant	\$1,557K	Central
Residents	FSE based on individual billing agreement (less 15%)	2915	RSSP	\$741K	RSSP
Affiliates	Annual averaged FSE per billing agreement	919	sponsor dept	\$453K	Recharge



## Next Steps

- Ratify scope /service levels (5/09)
- Develop communication plan ((5/09)
- Brief campus committees (5/09)
- Develop interim plan June-Jan (6/09)
- Complete impact analysis (6/09)
- Develop and kickoff implementation plan (6/09)
- Move emergency communications funding to functional owners (7/09)
- Implement Communications Network model (1/10)