Information and Telecommunication Technology Center

A KTEC Center for Excellence

1997 Technology Overview
and Advisory Board Meeting
September 29-30, 1997

K. Sam Shanmugan, Director
Victor Frost, Executive Director for Research
Gary Minden, Chief Technologist
Tim Johnson, Exec. Director for Ops & Applied Tech

The University of Kansas   9/29/97 - 1

Information and Telecommunication Technology Center

MEETING OBJECTIVES

- Technology Overview
  - Showcase ITTC research
  - Explore areas of mutual research interests

- Advisory Board Meeting
  - Develop strategic plan for ITTC

The University of Kansas 9/29/97 - 2

Information and
Telecommunication
Technology Center

HISTORY OF ITTC

- 1983 - TISL (Telecommunication and Information Sciences Laboratory) Mission: Basic research in Telecommunication and Information Sciences

- 1989 - CECASE (Center for Computer-aided Systems Engr.) Mission: Develop and transfer systems engineering methods and software to Kansas Companies to increase their competitiveness (Application area: telecommunication and Information Systems)

- 1997- TISL+CECASE = ITTC

The University of Kansas   9/29/97 - 3

Information and
Telecommunication
Technology Center

ITTC: Mission and Vision

- Mission:
    - To support graduate education and research at the University of Kansas
    - To leverage University research and resources for the benefit of the State of Kansas and the nation

- Vision:

    To be a world class center excelling in basic research, technology development and transfer of viable Telecommunication and Information Technologies
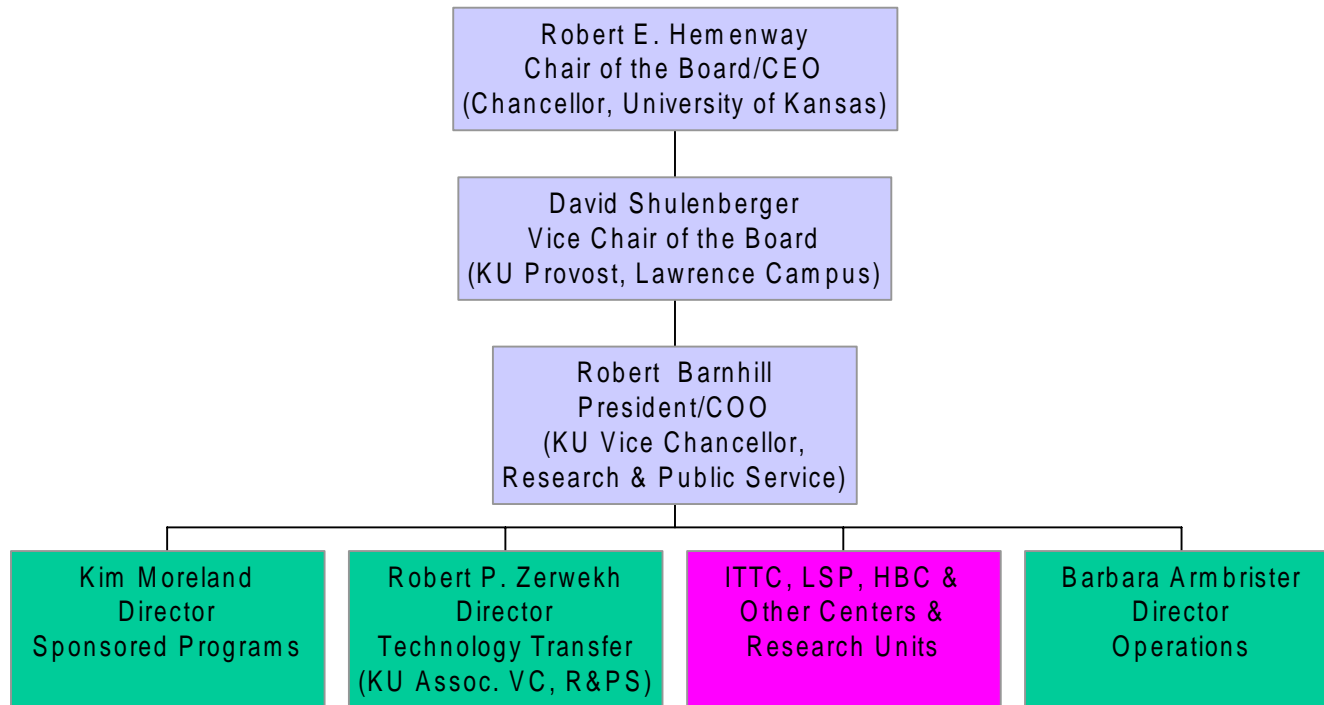
Information and
Telecommunication
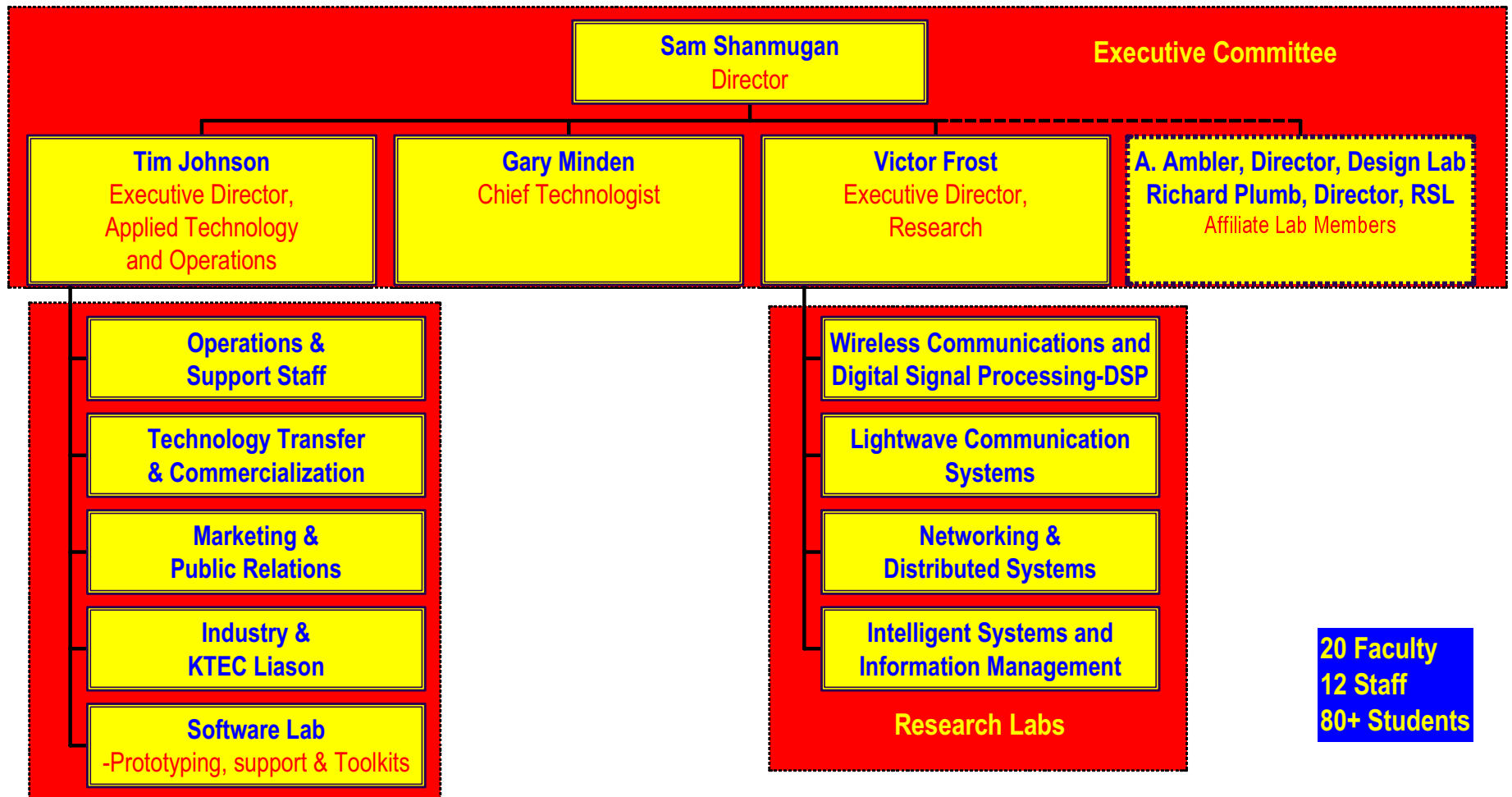Technology Center

ITTC: Focus Areas

- Wireless Communications and DSP
- Optical Communications
- Networking and Distributed Processing
- Intelligent Systems and Info Management
- SW and HW Prototyping (support, toolkits)

Information and
Telecommunication
Technology Center

University Research Organization

**University of Kansas. Lawrence
Center for Research, Inc.**

Robert E. Hemenway
Chair of the Board/CEO
(Chancellor, University of Kansas)

David Shulenberger
Vice Chair of the Board
(KU Provost, Lawrence Campus)

Robert Barnhill
President/COO
(KU Vice Chancellor,
Research & Public Service)

| Kim Moreland Director Sponsored Programs | Robert P. Zerwekh Director Technology Transfer (KU Assoc. VC, R&PS) | ITTC, LSP, HBC & Other Centers & Research Units | Barbara Armbrister Director Operations |

The University of Kansas 9/29/97 - 6

Information and
Telecommunication
Technology Center

ITTC R/D&C Organization

Sam Shanmugan
Director

Executive Committee

Tim Johnson
Executive Director,
Applied Technology
and Operations

Gary Minden
Chief Technologist

Victor Frost
Executive Director,
Research

A. Ambler, Director, Design Lab
Richard Plumb, Director, RSL
Affiliate Lab Members

**Operations &
Support Staff**

**Technology Transfer
& Commercialization**

**Marketing &
Public Relations**

**Industry &
KTEC Liason**

Software Lab
-Prototyping, support & Toolkits

**Wireless Communications and
Digital Signal Processing-DSP**

**Lightwave Communication
Systems**

**Networking &
Distributed Systems**

**Intelligent Systems and
Information Management**

Research Labs

**20 Faculty
12 Staff
80+ Students**

The University of Kansas 9/29/97 - 7

Information and
Telecommunication
Technology Center

R/D&C Core Expenditures

6 year total = $11.76 Million

Information and
Telecommunication
Technology Center
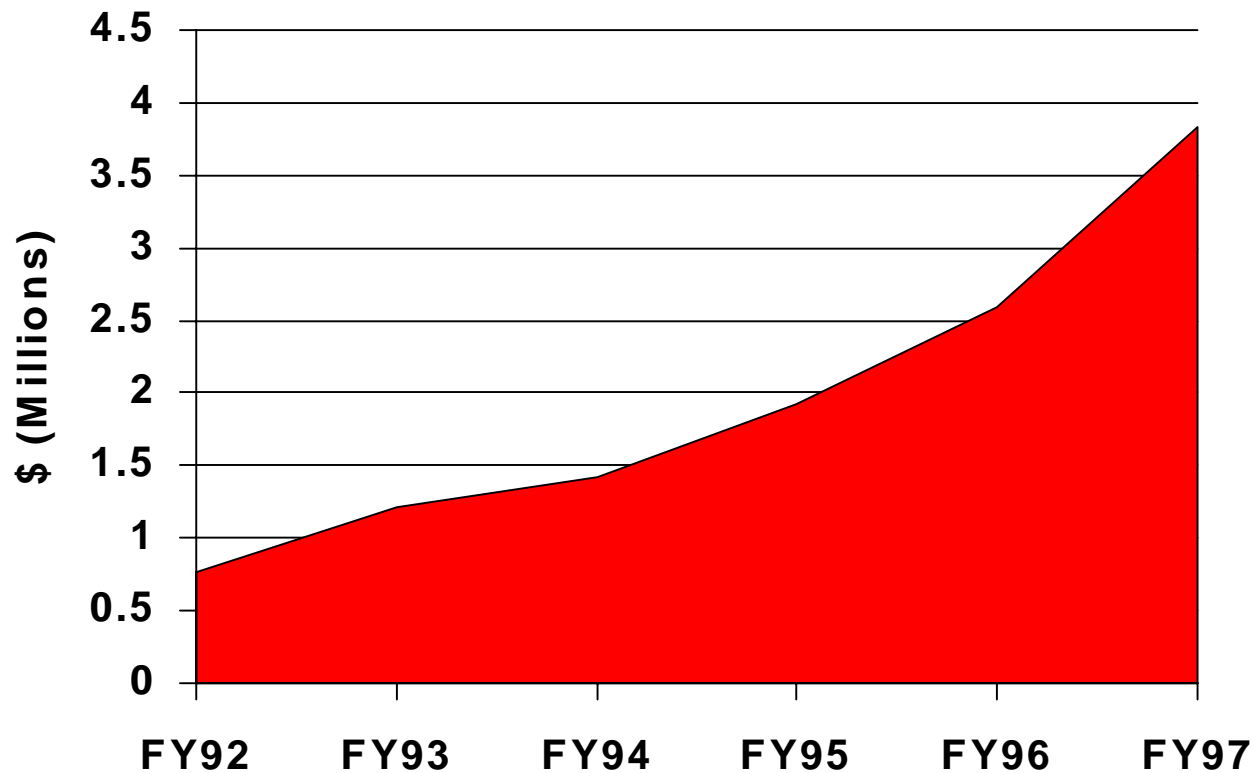
FY 1997 Project Expenditures

Other
2%

Fed. Sub.
21%

State
13%

Federal
26%

Industry
38%

* $4.88 million

The University of Kansas 9/29/97 - 9

Information and
Telecommunication
Technology Center

FY 1997 Project Awards

Federal
54%

State
10%

Industry
36%

* $7.34 million

The University of Kansas 9/29/97 - 10

Information and
Telecommunication
Technology Center
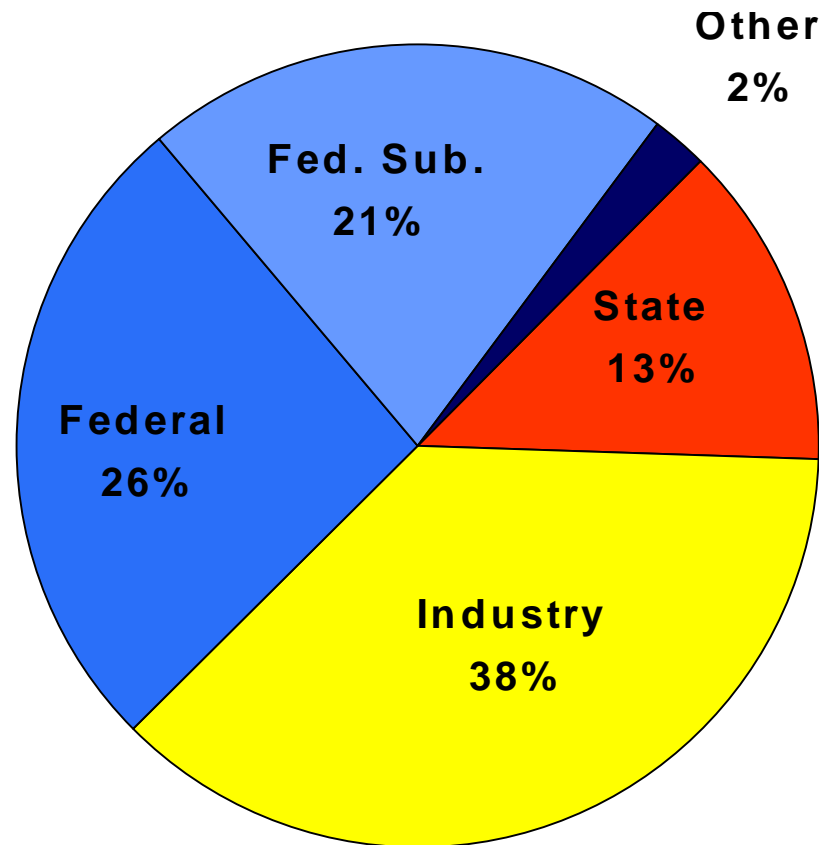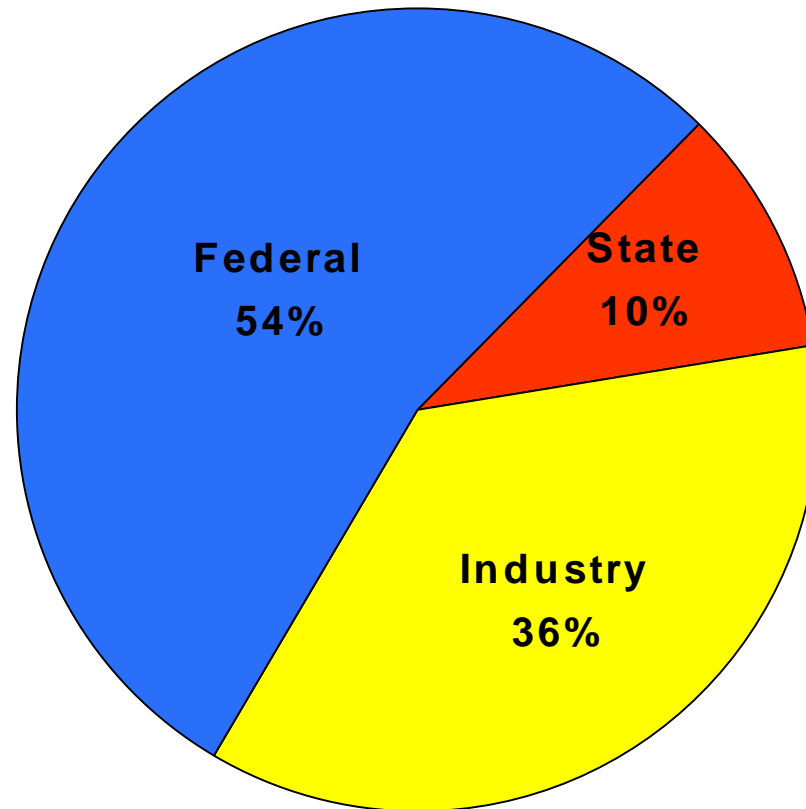
ITTC Overview

- ITTC Research Overview-Victor Frost
- Individual technology area overviews (Various group and project leaders)
- Doing business with the University & ITTC and Technology Transfer (Tim Johnson)
- Tour of the laboratories
- Reception and poster session

Information and
Telecommunication
Technology Center

AGENDA-Technology Overview

- Welcome & Introductions   8:30
- Research Focus & Collaborations   9:00
- Intelligent Systems & Info. Management   9:30
  - Break   10:30
- Wireless Communications & DSP   11:00
  - Lunch   12:00
- Networking & Distributed Systems   1:00
  - Break   2:00
- Lightwave Communications Systems   2:30
- Technology Transfer   3:30
- Tour, Poster Session and Reception   4:00
  - Adjourn   5:00

The University of Kansas   9/29/97 - 12

Information and
Telecommunication
Technology Center