Shane C. Burgess  
Vice President for Veterinary Sciences & Cooperative Extension  
Dean, College of Agriculture & Life Sciences  
Director, Arizona Experiment Station
## FY08-FY14 differences

<table>
<thead>
<tr>
<th>Category</th>
<th>Change</th>
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</thead>
<tbody>
<tr>
<td>Base Budget</td>
<td>-10%</td>
</tr>
<tr>
<td>Number of Undergraduate Students</td>
<td>39%</td>
</tr>
<tr>
<td>Number of Graduate Students</td>
<td>-26%</td>
</tr>
<tr>
<td>Total Students</td>
<td>30%</td>
</tr>
<tr>
<td>State perm Dollar/Student</td>
<td>-31%</td>
</tr>
<tr>
<td>Number of Staff</td>
<td>-2%</td>
</tr>
<tr>
<td>Number of Other Appointed Professionals</td>
<td>26%</td>
</tr>
<tr>
<td>Number of T/C-track Faculty</td>
<td>-17%</td>
</tr>
<tr>
<td>Total employees</td>
<td>0%</td>
</tr>
<tr>
<td>Soft money employee %</td>
<td>23%</td>
</tr>
<tr>
<td>Total Instruction FTE</td>
<td>-1%</td>
</tr>
<tr>
<td>Undergraduate Students per Instruction FTE</td>
<td>39%</td>
</tr>
<tr>
<td>Total Research FTE</td>
<td>-22%</td>
</tr>
<tr>
<td>Total Research Expenditures</td>
<td>-12%</td>
</tr>
<tr>
<td>Total Extension FTE</td>
<td>-6%</td>
</tr>
<tr>
<td>Undergraduate Students per Total FTE</td>
<td>61%</td>
</tr>
</tbody>
</table>
## Financial Position as of 1/26/15: Base

<table>
<thead>
<tr>
<th>T&amp;R</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total new salary</td>
<td>$1,647,642</td>
<td>$1,423,426</td>
<td>$1,488,430</td>
<td>$1,798,566</td>
</tr>
<tr>
<td>Already committed new salary</td>
<td>$824,216</td>
<td>$534,997</td>
<td>$289,864</td>
<td>$223,846</td>
</tr>
<tr>
<td>New Salary for new lines</td>
<td>$823,426</td>
<td>$888,430</td>
<td>$1,198,566</td>
<td>$1,574,720</td>
</tr>
<tr>
<td>Budget cut</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>RCM Reserve</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>

Reserve: 3-5%, $1.8M; $14M in unit accounts

## CES

<table>
<thead>
<tr>
<th>CES</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total new salary</td>
<td>$715,983</td>
<td>$389,632</td>
<td>$444,443</td>
<td>$565,968</td>
</tr>
<tr>
<td>Already committed new salary</td>
<td>$526,351</td>
<td>$145,189</td>
<td>$78,475</td>
<td>$80,829</td>
</tr>
<tr>
<td>New Salary for new lines</td>
<td>$189,632</td>
<td>$244,443</td>
<td>$365,968</td>
<td>$485,138</td>
</tr>
</tbody>
</table>
Financial Position as of 1/26/15:
FY16 Budgeted Subvention and Strategic Investment

<table>
<thead>
<tr>
<th></th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
</tr>
</thead>
<tbody>
<tr>
<td>T&amp;Rs</td>
<td>$1,537,878</td>
<td>$1,310,678</td>
<td>$1,372,608</td>
<td>$1,679,579</td>
</tr>
<tr>
<td>CES</td>
<td>$1,146,863</td>
<td>$819,517</td>
<td>$873,303</td>
<td>$993,773</td>
</tr>
</tbody>
</table>
Governor Ducey’s proposed funding cut

7.6% proposed cut to state taxpayers’ proportion
Budget cuts force universities to go a new way

• review of unnecessary regulations

• …enable our universities to become more agile and entrepreneurial, decreasing the cost

• …pursue changes this legislative session...

• …at a turning point for higher education in Arizona.

• …sustainable models for funding that recognize the universities' contribution to the state's economy

• …chance to be the new design for higher education.

Eileen Klein: What Arizona's universities really need is fewer regulations and a new financing model.
Our Focus

1. Best possible education for students so they can determine their own fates.

2. Best possible environment for faculty scholarship, creative activity and program delivery.

Exceptional staff and appointed professionals are the backbone of our enterprise; they allow faculty to do their jobs. Without these people we will have a system failure.
Activity-based accounting

**University Level:** *Responsibility/Revenue Based Management*—financial, NOT decision making, tool.

**College Level:** money goes to the academic front lines where it is most needed, i.e., money goes where the action is—financial, NOT decision making, tool.

**University:** Responsibility CUs (Colleges) and Service CUs (President’s Office; Academic Affairs & Provost; University Information & Technology Services; Human Resources; University Libraries; Business Affairs; Research Office; Arizona Health Sciences Center; Global Initiatives; Distributed Education (Academic Initiatives, UA Online); Student Support Group; Student Affairs; Honors College; Graduate College (Including GIDPs); Facilities; UA Presents; AZ Public Media; Museums)

**CALS T&R budget:** Revenue Units (Schools & Departments: delivering on disciplinary missions) and Service/Cost Units (CAS; RES; CES; Finance & Admin; ESUs).

N.B. Revenue units have their own cost centers.
Guiding Principles

- Strategic Plan
- Incentives
- Minimize Negative Outcomes
- Balance RCUs & UA
- Transparency
- Matching Revenues to Associated Costs
- Simplicity

- Predictability
- Adaptability
- Central Funds Investment
- Data
- Risk
- Communication
- Leadership
- Governance
The Fundamentals of RCM

• Simply a tool to be used by institutional and academic leaders

• Does not add dollars into the system or create new costs

• Flows funds to the Colleges. *Funds allocated to the departments are at discretion of the dean and should not follow this model directly.*
Unit Instructional Investment vs Instructional RCM Return

\[(75\% \text{ SCH}_{\text{UG}} + 25\% \text{ Maj}_{\text{UG}}) + (25\% \text{ SCH}_{\text{G}} + 75\% \text{ Maj}_{\text{G}} - \text{Tuition Waived}) + (\text{GIDP SCH Revenue})\]
Graduate students in RCM

- We control the amount of aid given out.
- The amount of aid given to grad majors greatly affects RCM return.
- Units can put in a lot of effort into grad majors only to see little or no RCM return if they decide to give it away in grad aid.

AFFECTS US AT THE RCU, AND THE REVENUE UNIT, LEVEL
Unit Research Investment vs Research RCM Return (IDC)

Missing: waived IDC; start-up investment; strategic investments; subventions; Exp. Station Unit investment; “voluntary” cost share.

In FY14 CALS units almost $1.8M on “voluntary” cost share. In future this will need to be approved by unit heads and ADR.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Proportion of CALS Research RCM Return</th>
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<tbody>
<tr>
<td>NS</td>
<td>2.7</td>
</tr>
<tr>
<td>SFCS</td>
<td>2.1</td>
</tr>
<tr>
<td>AED</td>
<td>1.1</td>
</tr>
<tr>
<td>ENT</td>
<td>1.0</td>
</tr>
<tr>
<td>SABS</td>
<td>1.0</td>
</tr>
<tr>
<td>SWES</td>
<td>1.0</td>
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<tr>
<td>SPS</td>
<td>0.9</td>
</tr>
<tr>
<td>SNRE</td>
<td>0.9</td>
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<tr>
<td>ABE</td>
<td>0.4</td>
</tr>
<tr>
<td>AREC</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Proportion of CALS Research Investment vs Proportion of CALS Research RCM Return
Unit Research Investment vs Research Return MTDC

Missing: waived IDC; start-up investment; strategic investments; subventions; Exp. Station Unit investment; “voluntary” cost share.
Inputs (salary only) vs Outputs for FY14

- Salary Base (>$25.5M)
- ICR
- RCM Tuition Revenue

- $20M to $10M
- $0
- $10M to $20M
- $30M
CALS 2010-2011 undergrad RCM outcome

6 negative = $(456,989)
5 positive = $595,266

NET to CALS $138,276
Cost savings in all service components will be a continual goal.
Savings will be invested into the critical mission delivery.
Previously the incentive was to minimize work (sch) for the same fixed budget; now we are incentivized to get our foot off the brake.
Decision making
Produce employable graduates, who can do jobs that do not yet exist and create new jobs.

Be the most effective, efficient, responsive, flexible, and financially sustainable college on campus.

Be a leading economic development engine.

Be the most sought-after place to be a part of.

CALS21
Our goal is NOT to do well under RCM—especially by trying to game the system. Doing well under RCM should be the natural outcome of delivering excellently on our mission.

We don’t provide commodities and we must create demand through excellence. RCM provides FUEL to get to our destination; it is not the destination itself.
Decision authority, responsibility and accountability is delegated to those closest to the information. Resources must also be moved closest to the information.
• More ideas from more leaders (i.e., YOU): innovation, creativity, entrepreneurial thinking, risk.

• Root out waste.

• Focus on effectiveness, efficiency, responsiveness, flexibility, and financial sustainability—outstanding management and excellent systems.

• Focus on outcomes not processes.

• Focus not on avoiding errors but achieving excellence.
Powerhouses must have the support to iteratively grow and cannot be over-leveraged.

Smaller units must have the support to take risks and break from the pack.
<table>
<thead>
<tr>
<th>MISSION AREAS</th>
<th>ABE</th>
<th>AREC</th>
<th>AED</th>
<th>SABS</th>
<th>ENT</th>
<th>NS</th>
<th>SFCS</th>
<th>SNRE</th>
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<td>Fin &amp; Admin</td>
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<tr>
<th>EXPERIMENT STATION UNITS</th>
<th>ABE</th>
<th>AREC</th>
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<th>SABS</th>
<th>ENT</th>
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<th>SFCS</th>
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</tbody>
</table>
FY16 Mission Area Funds

Career and Academic Services: $1.3M

1. **54% Time:** primarily to cover (with unit support and match) graduate students, courses and people to give a unit time to make other arrangements, i.e., to bridge academic activities and buy time for adjustments.

2. **13% Academic Initiatives:** start up or matching funds for grants to get initiatives off the ground that cut across more than one unit or program; anticipate that programs started here will eventually replenish funds back to pool.

3. **9% Yuma:** needs to become more self-supporting; working on how this can be accomplished and still return funds to the units. This program also has potential to return funds to the bridge pool.

4. **14% Career Center:** bridge funds to enable center to raise funds from corporate development to support the center; has potential to replenish the pool as well.

5. **10% Graduate Student Support.**

Office of the Associate Dean for Research: $550K

1. **20% Competitive Grants**

2. **20% New Initiatives**

3. **60% Startup Funds**
1. Critical.
2. Exceptional.
3. Strategic subvention and strategic investment.
4. Strategic rescission in FY16.
Produce employable graduates, who can do jobs that do not yet exist and create new jobs.

Be the most effective, efficient, responsive, flexible, and financially sustainable college on campus.

Be the most sought-after place to be a part of.

Be a leading economic development engine.

CALS21
CALS Communications & Cyber Technologies (CCT)

CALS State of the College
Jan, 28 2015

Matt Rahr, CCT Director
CCT Current Services

• Information Technology
  – Critical IT Hardware, server uptime, operating system patches
  – Network Upgrades, both on campus and across Arizona
  – IT Security issues, outreach, awareness
  – Help desk, account management, email support

• Design
  – Desktop Publication
  – Marketing Material
  – Web Design Mockups
  – Logos

• Development
  – Web and Mobile Application Development
  – Database Design
  – GIS/Location-aware applications

• Multimedia
  – Distance education via video conferencing
  – Classroom technology, lecture capture, interactive strategies
  – Video Production, outreach videos, CALS documentaries

http://cct.cals.arizona.edu
Past 6 Months

• Migrated Users onto UA-Connect Email powered by Microsoft Exchange
• Visited multiple CE Offices and AES Centers to review/upgrade network and telephony services
• Upgraded Distance learning classroom in Forbes 124
• Produced two video productions featuring CALS Research on PBS and other outlets
• Released two web starter templates for CALS non-academic units
• Re-aligned CCT to become part of the Arizona Experiment Station
• Re-evaluated our mission, focus, and vision and drafted a new Strategic Plan.
CCT Services - *Road Ahead*

- **Offload “Commodity” Services**
  - Utilize backbone email services offered by UITS
    - Backend only! Maintain @cals email accounts
  - Cloud storage solutions
    - Amazon Glacial & S3, OpenStack, Google Storage
  - Other cloud offerings
    - VOIP/Telephony, Video, Broadband
  - Cost Savings, both in $ and human resources

- **Improve Critical IT Services**
  - Web and Database Services
  - Minimize unplanned outages
  - Increase Virtual Server hosting and offerings
  - Build out secondary disaster recovery site
  - Provide on-demand CPU and storage needs in real-time
CCT – Increasing Capacity

• **Web and Mobile Development**
  – Administration/Leadership needs aggregated data
    • Metrics in Matriculation, Effectiveness in Outreach, Research
    • Data provided in the form of Data Dashboards
  – CALS’ Research needs to exceed Federal data mandates
    • Open Access
    • Retention
    • Data Management Plans
  – Larger, Complex data-driven projects
    • Big Data components increasing across multiple CALS’ disciplines
    • Mobile, Real-Time, native apps using mobile devices as sensors

• **Multimedia Services**
  – Video “hybridization” with web, mobile applications for a new medium
  – More than “integration”. Heighten the interactive experience. (e.g. “Clipstack”.)
Transition in Level of Service

- **CCT Personnel**
  - Long-standing employment in CALS
  - More than just run-of-the-mill technicians
  - Understand the CALS mission
  - Emotional connection to the College
  - Active domain knowledge in CALS disciplines
    - Provide curriculum in CALS courses
    - Research backgrounds in geospatial technologies, range science, etc.
    - Hire student workers from within CALS
CCT – Providing Next-level Service

• CCT Personnel are IT Specialists
  – CCT is capable to use cyber technology in *innovative* ways that *expand* research investigation, not just assist.
  – Handing off commodity IT provides opportunities to engage research and educational *solutions*.
Road Map Next 6 Months

• Provide web starter templates for CALS academic units
  – ACBS to pilot this process
• Migrate/upgrade mission critical infrastructure to UITS data center
  – better uptime
  – faster network connection
  – newer hardware
  – physically closer to iPlant and UITS HPC/HTC resources
• Release interior space modeling tool for Unit Heads
• Release ClipStack version 1.0
Communications & Cyber Technologies (CCT)

- CCT is more than a “fee-for-service” shop

- **Mission:** To support faculty and staff in their use of cyber technology as they pursue research, instruction, and outreach objectives, and in their effort to meet the UA “Never Settle” goals

- We’re building tools that:
  - Reduce redundancy across the College
  - Help make informed strategic decisions
  - Save money and gain efficiency in day-to-day operations

- Increased capacity in Web and Mobile Development drives us to be more competitive in RFP process

- “Information Technology can relieve the pressure of these times and is in fact critical to surviving them.” – **CCT Strategic Plan** [http://cct.cals.arizona.edu]