

## Recovery and Recharge in Higher Education



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Facilities Research

### AGENDA

- Purpose of Research
- Who?
- Results

**DAVID REYNOLDS. P.E., F. SAME**

**Associate Vice President, Facilities  
University of North Texas**



- Joined UNT in 2013
- 35 Years of Installation /  
Campus Operational Management
- 30-year career as a Colonel in the US Air Force including Installation (Campus), Major Command (System), Pentagon and combat assignments
- Vice President, Texas Association of Physical Plant Administrators

Bachelor of Science, Civil Engineering  
Master of Political Science  
Master of Civil Engineering  
Master of National Security &  
Strategic Studies

Georgia Institute of Technology  
Midwestern State University  
Clemson University  
US Naval War College



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3



Carnegie Tier One Research

38,000 Student headcount

7 Million Building GSF System

176 Buildings

900 Acres

Housing for 6,800 students

Established in 1890

336 Facilities Employees/inc Housing

High user density/older facilities

**Glen Haubold**  
**Associate Vice President,**  
**Facilities and Services**  
**New Mexico State University**



- NMSU in 2008
- University of North Texas
- Texas Christian University, Texas Woman's University
- ARCO Oil and Gas, Rockwell International
- Supervisor's Toolkit Trainer
- Board of Directors in RMA, CAPP, and APPA
- President's Award
- Pacesetter Award
- Meritorious Service Award
- Principal at GHaubold Consulting

Bachelor of Business Administration      Texas Christian University



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5

## New Mexico State University



Doctoral High Research

14,000 headcount

Established in 1888

Housing for 3,200 students

1,200 acres

383 Educational Buildings

7 Million Building GSF in System

FM – 325 employees

Cogeneration and thermal storage



All About Discovery!™  
 New Mexico State University  
 nmsu.edu

Facilities and Services



## Purpose of the Research

- Broaden knowledge base of “chargebacks”
- Generate discussion regarding advantages and disadvantages
- Are there issues?
- Identify Recommendations



## Purpose of the Research

Convince our boss !!



## What is Recovery and Recharge?

- Widely used funding mechanism in university facilities management
- Recapture costs in the facilities unit
  - Non-maintenance actions
  - Shops or Planning, Design, Construction?
- Little standardization

## Perceptions

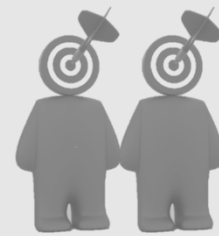
- Necessity to offset budget shortfalls in shops
- Uncertain histories
- Ambiguity in definition & application

## Why Study This?

- Lightning rod with academic units
- Facilities staff accounting challenges
- “Tax burden” generally not understood by leadership

## Target Audience

- Chief Financial Officers
- Budget Officers
- Facilities Team





## The Research Process

- *“The Charge of the Rate Brigade”*  
- Don Guckert, Jeri Ripley King, 2004
- Small group interviews
- Eighty-six survey responses
- Seven interviews
- Final interview



## The Research

### Small Group Email

- Little Historical Record
- Customer Gripes
- Multiple Charges
- Financial Goals / No goals
- Positive / Negative Reactions

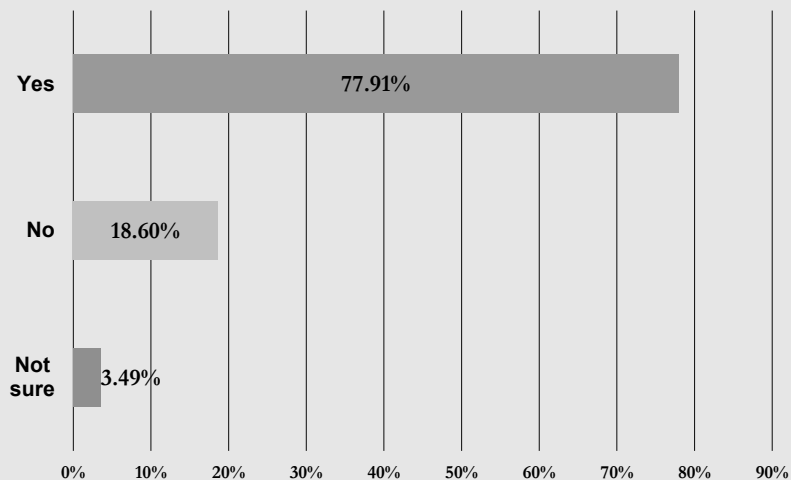


## The Research

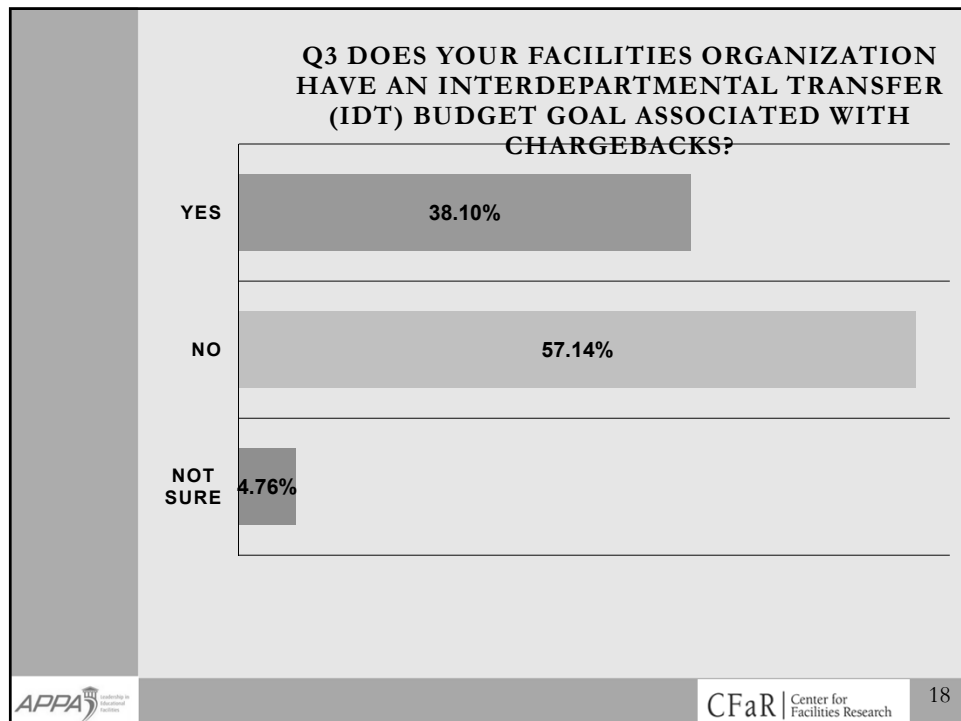
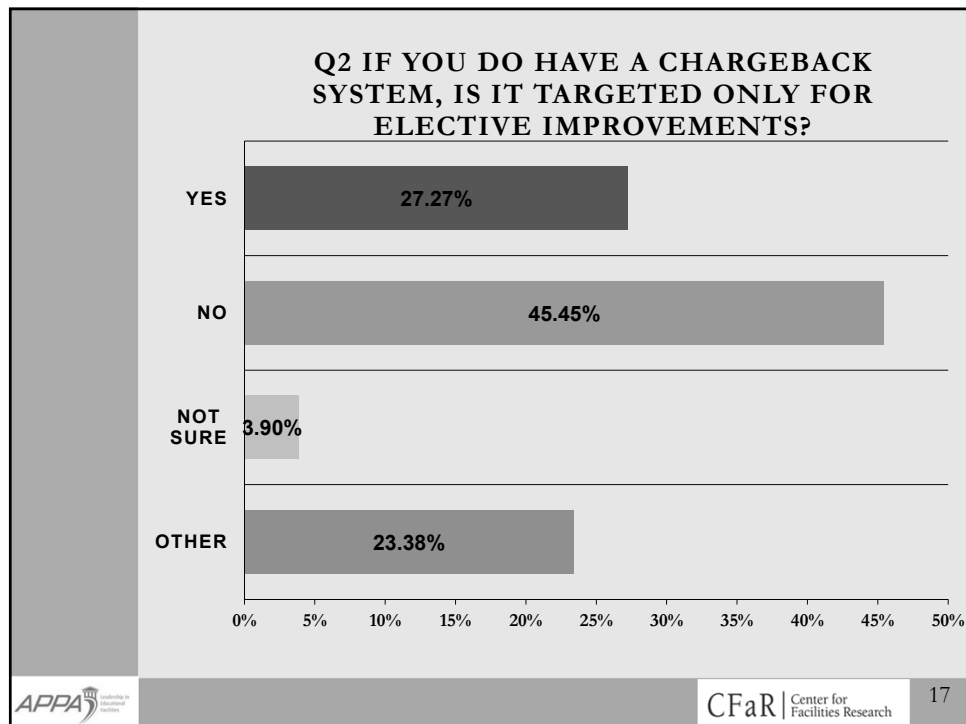
### The Survey

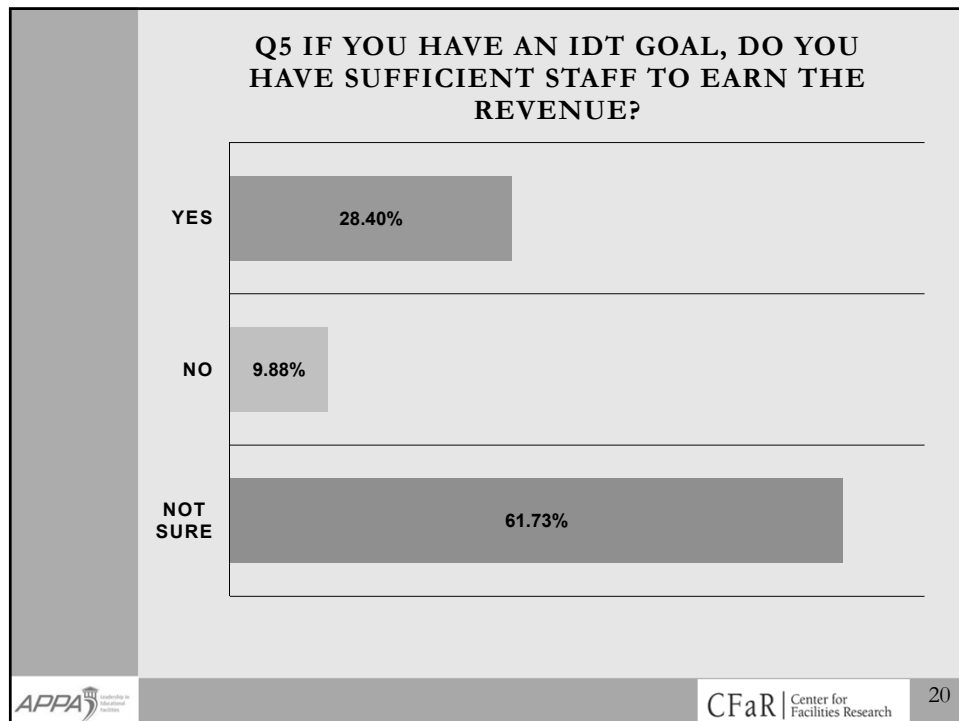
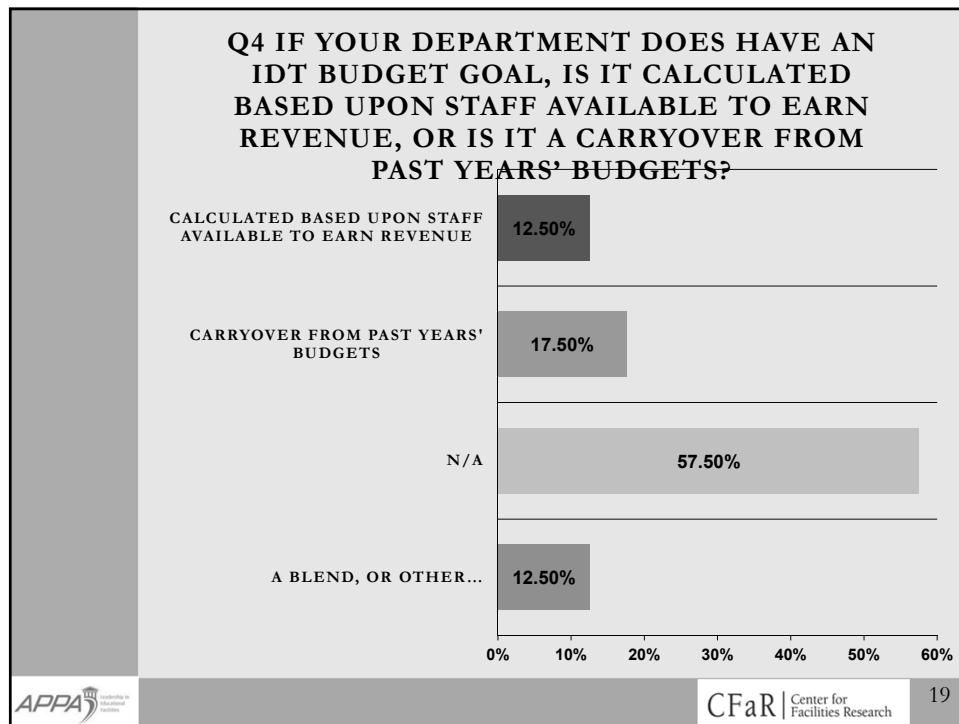
- 78% of respondents had some variety of “chargeback”
- Enhancements
- FPDC fees
- Auxiliary / Athletics
- Parking / Transportation

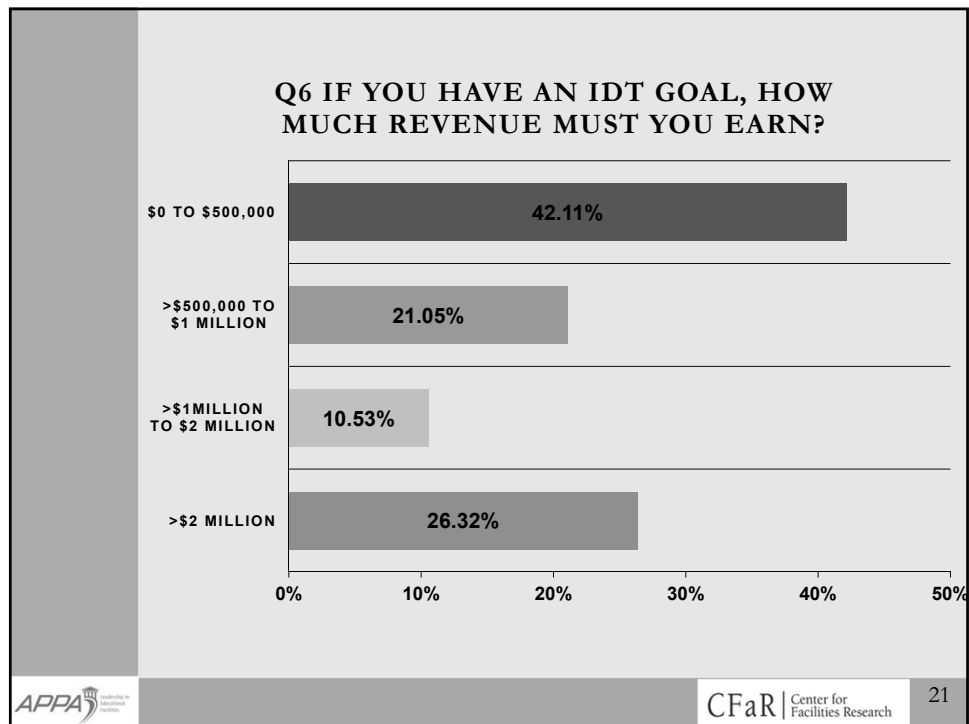

### Q1 DOES YOUR FACILITIES ORGANIZATION HAVE A CHARGEBACK SYSTEM?









## The Research

- Options for enhancement work
  - Fully allocated
  - Review panel / priorities
  - Responsibility Centered
  - Outsourced / funded

APPA Association of Professional Planning and Assessment CFaR Center for Facilities Research 22



## The Research

- Options for enhancement work
  - Materials only
  - Incremental
  - “Icing on the cake”

## New Mexico State University

- Fully allocated hourly rates for non-maintenance
- Fee based for Project Development and Engineering (or FPDC)
- Gross square foot rate for Research Park, Housing, and Athletics

## New Mexico State University

<b>Recovery</b>	<b>\$ 2,696,877</b>
<b>Agreements</b>	<b>\$ 1,997,848</b>
<b>Operating Expense</b>	<b>\$ 2,984,687</b>
<b>Fringe</b>	<b>\$ 2,877,711</b>
<b>Salary</b>	<b>\$ 8,246,340</b>

## NM State Hourly Rates

	<b>FY19 Rate</b>	<b>FY19 OT Rate</b>
FS Vehicle Maintenance	37.48	47.61
FS Structural Maintenance	36.23	46.01
FS Facilities Maintenance	50.61	64.28
FS Custodial	29.96	38.05
FS Electricians	47.95	60.9
FS Grounds	26.03	33.05
FS Mechanical/HVAC	46.64	59.23
FS Access (Locksmith)	43.93	55.8
FS Paint	27.12	34.44
FS Sign Shop	30.96	39.32
FS Solid Waste & Recycling	55.34	70.29

## NM State Project Development and Engineering Rates

- 11 % to \$500,000
- 4.25% above
- Everything is permitted
- A/E nearly always hired

## NM State GSF Rates

Arrowhead Research	Cost Per Sq. Foot Model		
Applicable Sq. Ft.	10,291	< 1	Research Park GSF
Total Shop Exp	5,902,460	< 2	Total Facilities Shop Expenses
Total Admin Exp	1,379,920	< 3	Total Facilities Administrative Expenses
Total Exp	7,282,380	< 4	Total Facilities Expenses
FY15 Inst Support	(757,932.81)	< 5	Less Institutional Support  (NMSU has an institutional support charge and subtracts costs already recovered to avoid "double recovery")
Total Costs	6,524,447	< 6	Total Facilities Costs to be recovered

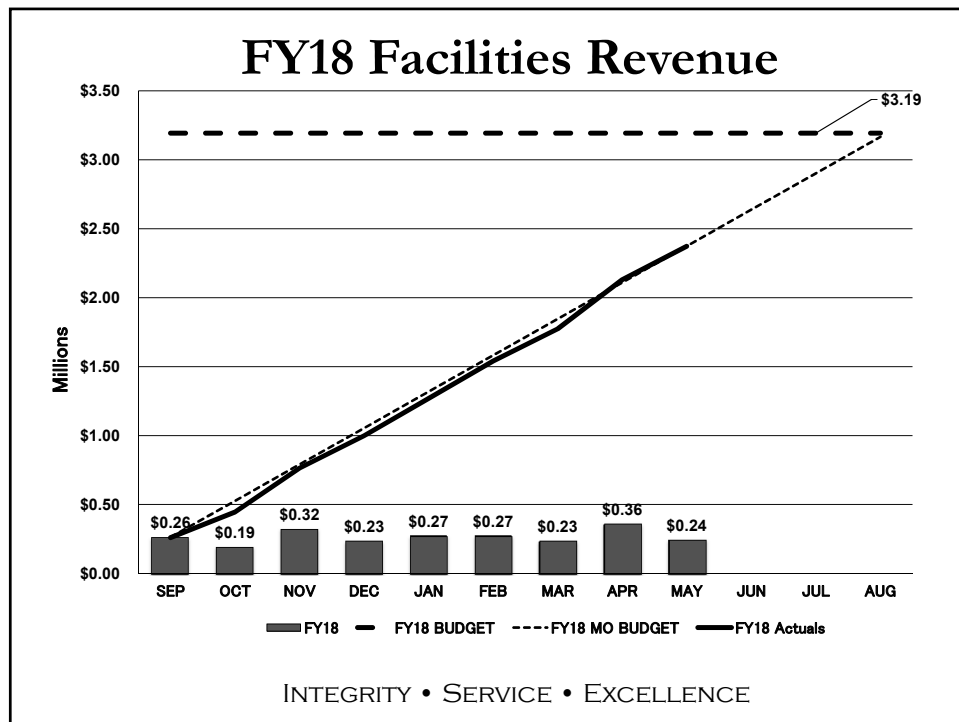
## NM State GSF Rates


Total NMSU Sq. Ft	5,656,126
Total Non-E&G Sq. Ft.	2,199,650
Total E&G Sq. Ft.	3,456,476 < 7 Total Educational and General GSF
Total E&G Cost/Sq. Foot	1.8876 < 8 Dollar Rate per GSF  Divide total (#6) by GSF
Total Applicable Sq. Ft	10,291 < 9 Square footage of this unit (Research Park)
Total	19,425.30 < 10 Total charge



## University of North Texas

- Fully allocated shop rates for enhancement
- Little shop manpower capacity
- Significant budget target






## University of North Texas

- Fee based for FPDC

	Fee (% of total cost for materials & labor less professional services)	Notes
In-house design	12% (which is 4.5% + 7.5% per 1996 BOR)	These are typically projects with construction costs less than \$50K designed in-house; excludes project contingency
No design (ie: furniture, maintenance or equipment only)	4.50% of construction + FFE	Excludes A/E fee and project contingency
With design consultant <\$3M	4.50% of construction + FFE	Excludes A/E fee and project contingency
With design consultant >\$3M	4.5% of first \$3M in construction + FFE, 2% on remaining construction + FFE	Excludes A/E fee and project contingency

- Revising Fee Structure FY19
- 4.5% projects to \$3M
- 2.0% for over \$3M to \$85M
- Excludes A/E fee



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32





## The Research

- Final Interview
- Mike Johnson  
-- *AVC Facilities, University of Arkansas*
- Matt Adams  
-- *President FM2*

## Conclusions

- No standard approaches
- Cost model must be conscious /  
informed decision by university leadership
- APPA would benefit from definition and  
additional research