

*UMKC Facilities Management and  
Parking Operations  
Faculty Senate Presentation*

October 6, 2015

# *Presentation Outline*

- Capital Projects Update
  - 51 Oak Mixed Use Project
  - OPAC Spencer Theatre Renovation and Lobby Addition
  - Robert W. Plaster Free Enterprise Center
  - Spencer Chemistry Building/School of Biological Sciences Renovations – Phase 1 and Phase 2
  - Downtown Conservatory of Music and Dance
  - SCE Educational and Research Center
- Space Utilization Study
- Maintenance and Repair Funding
- Parking Operations
  - Revenue Mix
  - Permits Sold vs. Spaces Available
  - Updates on Tiered Parking Program
  - Future Parking Initiatives/Structures

# Projects in Construction – 51 Oak Mixed Use Project



Updated Rendering



# Projects in Construction – OPAC Spencer Theatre Renovation and Lobby Addition



# Projects in Design/Planning

- Robert W. Plaster Free Enterprise Center
- Spencer Chemistry Building/ School of Biological Sciences Renovations – Phase 1 and Phase 2
- Downtown Conservatory of Music and Dance
- SCE Educational and Research Center

# Space Utilization Study

# I PAULIEN & ASSOCIATES, Inc.

**+650** Campuses

**49** States

**9** Countries

**36** Years in Higher  
Education Planning

**24** Association of American  
Universities (AAU) Clients

**46** Flagship University Clients

## Select Projects

- University of Colorado Space Needs Analysis
- Temple University Space Needs
- University of Kansas Engineering Building Expansion
- University of Tennessee STEM Master Plan
- University of Wisconsin-Madison College of Engineering Space Study
- University of Missouri Science and Technology Space Needs

# II

# SPACE NEEDS ANALYSIS - PROCESS

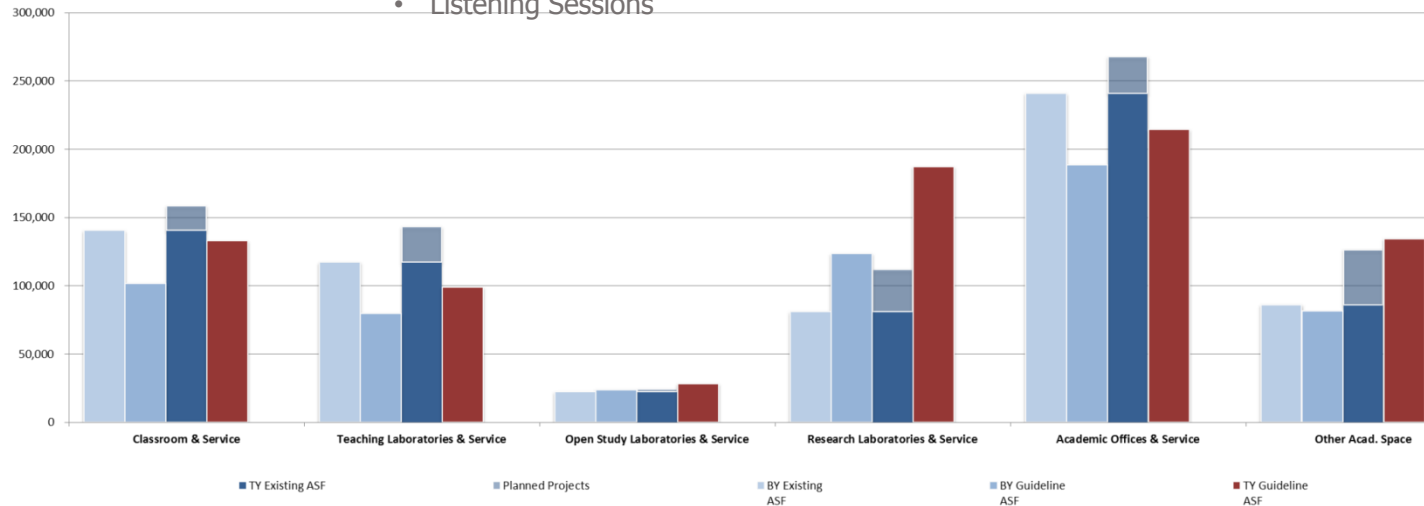


- Refine Project Goals and Objectives
- Collect Data: Inventory, Course, and Staffing files
- Enrollment Projections

- Review Student Enrollment and Growth Assumptions
- Review Research Expenditures and Projected Research Growth
- Review Faculty and Staff Projections
- Listening Sessions

- Sophisticated Data Model
- Blend Data and Empirical Information
- Apply Appropriate Space Guidelines
- Integrate Planned Projections

- Space Needs Analysis at Current and Target Enrollment
- Space Needs Recommendations





## II

# SPACE NEEDS ANALYSIS - TIMELINE

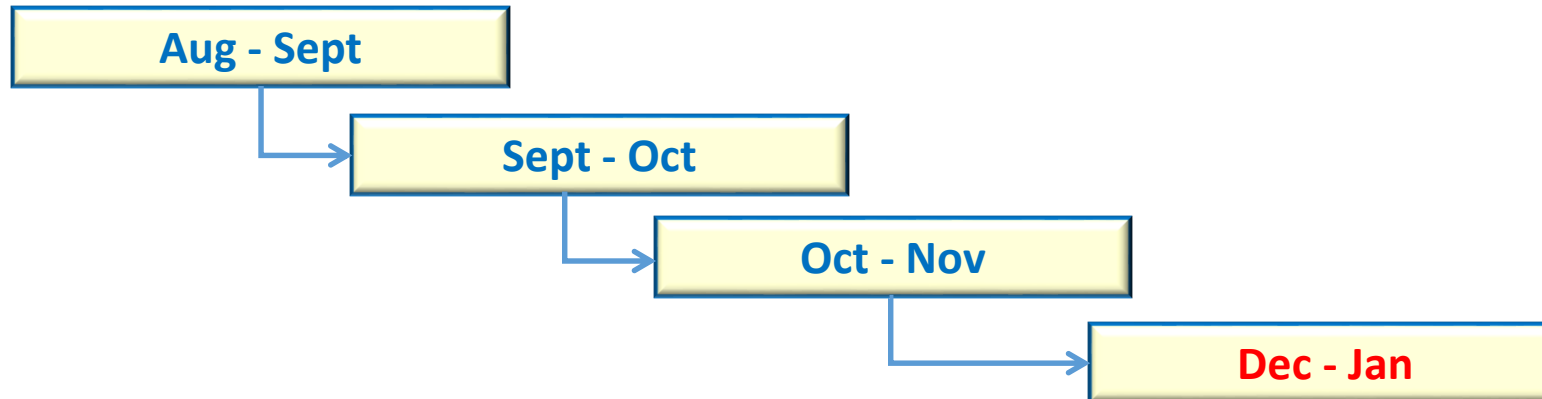


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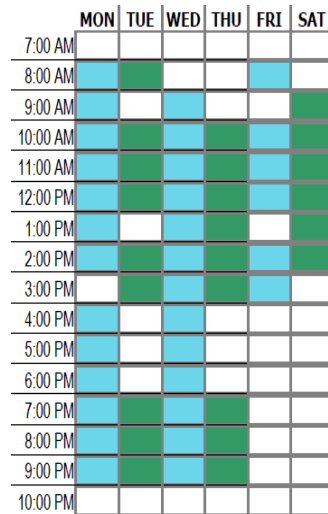


# III CLASSROOM/LABORATORY UTILIZATION METRICS

Analysis is performed on a room-by-room basis and across the inventory using proprietary data analytics with comparison to national benchmarks

## Weekly Room Hours

The average number of hours per week a room is scheduled over a term or semester



***Opportunities for increased utilization***

## Student Station Occupancy

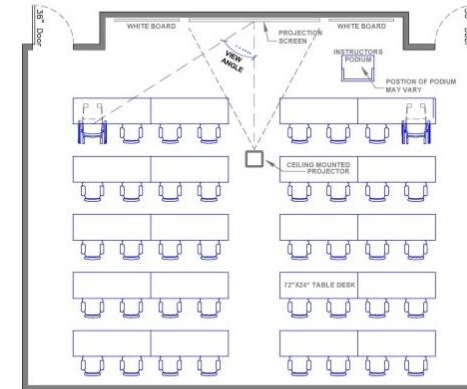
The average percent of seats filled when a room is occupied during scheduled use



***Opportunities for increased capacity***

## ASF per Station

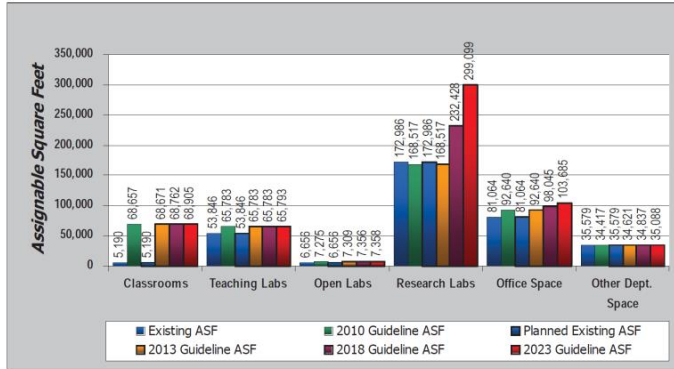
The amount of space per student station. A 960 ASF classroom with 40 stations = 24 ASF/Station



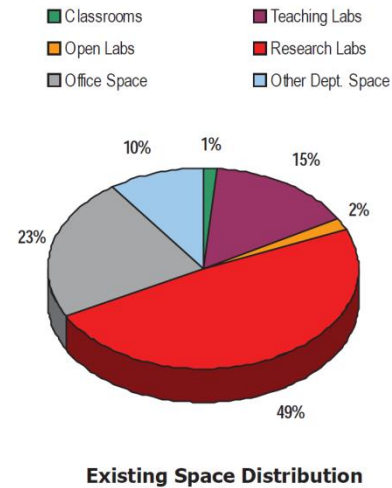
***Opportunities for aligning with new pedagogies***

# IV SPACE NEEDS ANALYSIS

CAS • Sciences



## Facilities Master Plan Space Needs Study – Analysis by Space Type



### Space Needs Analysis

| Space Category                              | 2010           |                |                    | Planned Existing ASF | 2013           |                    | 2018           |                    | 2023           |                    |
|---|----------------|----------------|--------------------|----------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
|   | Existing ASF   | Guideline ASF  | Surplus/ (Deficit) |                      | Guideline ASF  | Surplus/ (Deficit) | Guideline ASF  | Surplus/ (Deficit) | Guideline ASF  | Surplus/ (Deficit) |
| <b>Academic Space</b>                       |                |                |                    |                      |                |                    |                |                    |                |                    |
| Classroom & Service                         | 5,190          | 68,657         | (63,467)           | 5,190                | 68,671         | (63,481)           | 68,762         | (63,572)           | 68,905         | (63,715)           |
| Teaching Laboratories & Service             | 53,846         | 65,783         | (11,937)           | 53,846               | 65,783         | (11,937)           | 65,783         | (11,937)           | 65,793         | (11,947)           |
| Open Laboratories & Service                 | 6,656          | 7,275          | (619)              | 6,656                | 7,309          | (653)              | 7,356          | (700)              | 7,358          | (702)              |
| Research Laboratories & Service             | 172,986        | 168,517        | 4,469              | 172,986              | 168,517        | 4,469              | 232,428        | (59,442)           | 299,099        | (126,113)          |
| Academic Offices & Service                  | 81,064         | 92,640         | (11,576)           | 81,064               | 92,640         | (11,576)           | 98,045         | (16,981)           | 103,685        | (22,621)           |
| Other Academic Space                        | 35,579         | 34,417         | 1,162              | 35,579               | 34,621         | 958                | 34,837         | 742                | 35,088         | 491                |
| <i>Academic Space Subtotal</i>              | <i>355,321</i> | <i>437,289</i> | <i>(81,968)</i>    | <i>355,321</i>       | <i>437,541</i> | <i>(82,220)</i>    | <i>507,211</i> | <i>(151,890)</i>   | <i>579,928</i> | <i>(224,607)</i>   |
| <b>TOTAL</b>                                | <b>355,321</b> | <b>437,289</b> | <b>(81,968)</b>    | <b>355,321</b>       | <b>437,541</b> | <b>(82,220)</b>    | <b>507,211</b> | <b>(151,890)</b>   | <b>579,928</b> | <b>(224,607)</b>   |
| <i>Internal Circulation Counted as NASF</i> | <i>3,313</i>   |                |                    | <i>3,313</i>         |                |                    |                |                    |                |                    |

### Space Needs by Department

| Department                         | 2010           |                |                    | Planned Existing ASF | 2013           |                    | 2018           |                    | 2023           |                    |
|------------------------------------|----------------|----------------|--------------------|----------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|
|                                    | Existing ASF   | Guideline ASF  | Surplus/ (Deficit) |                      | Guideline ASF  | Surplus/ (Deficit) | Guideline ASF  | Surplus/ (Deficit) | Guideline ASF  | Surplus/ (Deficit) |
| Biological Sciences - Biology      | 63,391         | 70,728         | (7,337)            | 63,391               | 70,763         | (7,372)            | 88,328         | (24,937)           | 106,034        | (42,643)           |
| Center for Hearing & Deafness      | 9,350          | 12,552         | (3,202)            | 9,350                | 12,560         | (3,210)            | 13,008         | (3,658)            | 13,480         | (4,130)            |
| Chemistry                          | 123,976        | 147,991        | (24,015)           | 123,976              | 148,057        | (24,081)           | 178,085        | (54,109)           | 211,311        | (87,335)           |
| Communicative Disorders & Sciences | 13,353         | 17,559         | (4,206)            | 13,353               | 17,592         | (4,239)            | 17,844         | (4,491)            | 18,225         | (4,872)            |
| Geology                            | 37,594         | 35,126         | 2,468              | 37,594               | 35,142         | 2,452              | 36,102         | 1,492              | 37,120         | 474                |
| Mathematics                        | 19,213         | 30,489         | (11,276)           | 19,213               | 30,505         | (11,292)           | 30,642         | (11,429)           | 30,681         | (11,468)           |
| Physics                            | 46,264         | 59,169         | (12,905)           | 46,264               | 59,197         | (12,933)           | 72,869         | (26,605)           | 86,574         | (40,310)           |
| Psychology                         | 42,180         | 63,675         | (21,495)           | 42,180               | 63,725         | (21,545)           | 70,333         | (28,153)           | 76,503         | (34,323)           |
| <b>TOTAL</b>                       | <b>355,321</b> | <b>437,289</b> | <b>(81,968)</b>    | <b>355,321</b>       | <b>437,541</b> | <b>(82,220)</b>    | <b>507,211</b> | <b>(151,890)</b>   | <b>579,928</b> | <b>(224,607)</b>   |

### Space by Building

| Building             | Class-rooms  | Teaching Labs | Open Labs    | Research Labs  | Acad Offices  | Internal Circultrn | Other Acad Space | TOTAL ASF      |
|----------------------|--------------|---------------|--------------|----------------|---------------|--------------------|------------------|----------------|
| Astronomy Observer   |              |               |              |                |               |                    | 130              | 130            |
| Biomedical Education |              |               |              |                | 1,703         |                    | 4,066            | 5,769          |
| Cary Hall            |              |               |              | 11,011         | 4,535         | 1,089              | 1,388            | 18,023         |
| Cooke Hall           | 1,704        | 2,438         |              | 18,925         | 10,684        |                    | 1,057            | 34,808         |
| Ctr of Excellence Bi |              |               |              | 607            |               |                    |                  | 607            |
| Diefendorf Hall      |              |               |              | 1,411          | 967           | 620                | 4,746            | 7,744          |
| Dorshheimer Greenhou |              |               |              | 2,004          | 532           |                    | 3,616            | 6,152          |
| Fronczak Hall        | 1,160        | 8,248         | 4,393        | 21,707         | 9,893         | 738                | 523              | 46,662         |
| Hochstetter Hall     |              | 9,717         |              | 24,120         | 6,020         | 342                | 892              | 42,004         |
| Mathematics Bldg     | 2,326        |               | 1,078        |                | 14,028        |                    | 1,781            | 19,213         |
| Nat Sci and Math I   |              | 33,443        | 272          | 69,397         | 21,178        | 146                | 12,880           | 137,316        |
| Park Hall            |              |               |              | 18,931         | 11,392        | 378                | 4,120            | 34,821         |
| Stalfer Food Commis  |              |               |              | 4,873          |               |                    |                  | 4,873          |
| Wende Hall           |              |               |              |                | 132           |                    | 380              | 512            |
| <b>TOTAL</b>         | <b>5,190</b> | <b>53,846</b> | <b>6,656</b> | <b>172,985</b> | <b>81,064</b> | <b>3,313</b>       | <b>35,579</b>    | <b>358,633</b> |

ASF = Assignable Square Feet

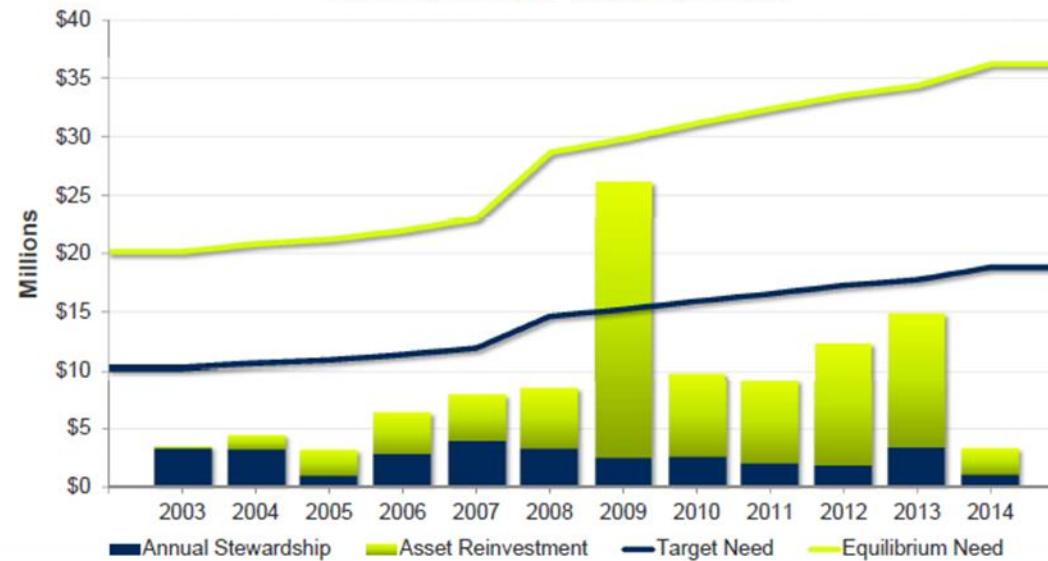
# Maintenance and Repair Funding

## Chasing A Moving Target



Capital spending reaching target levels in 1 of 12 years

Capital Spending vs. Target, Equilibrium

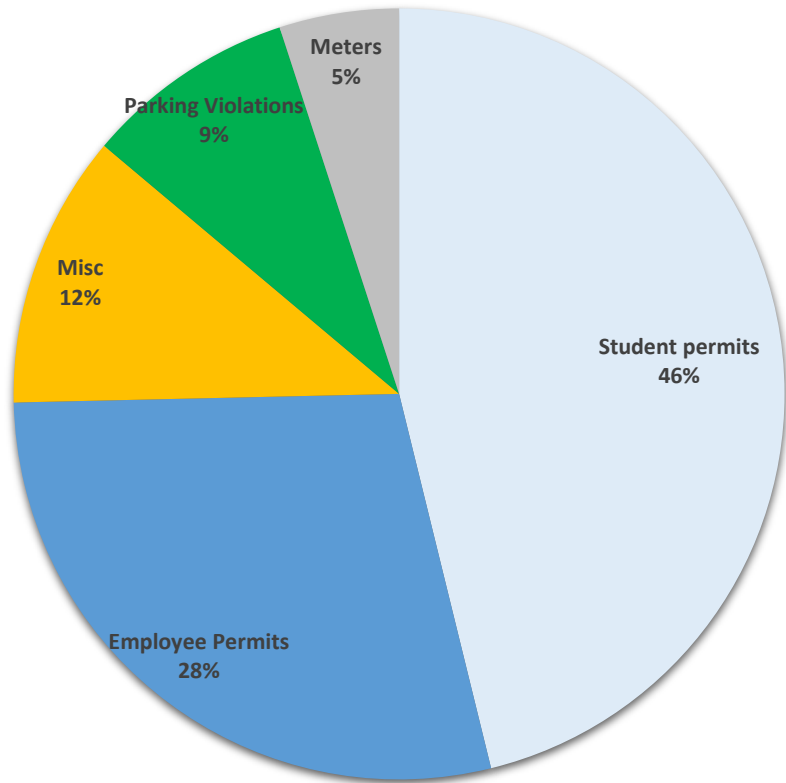


# Parking Operations



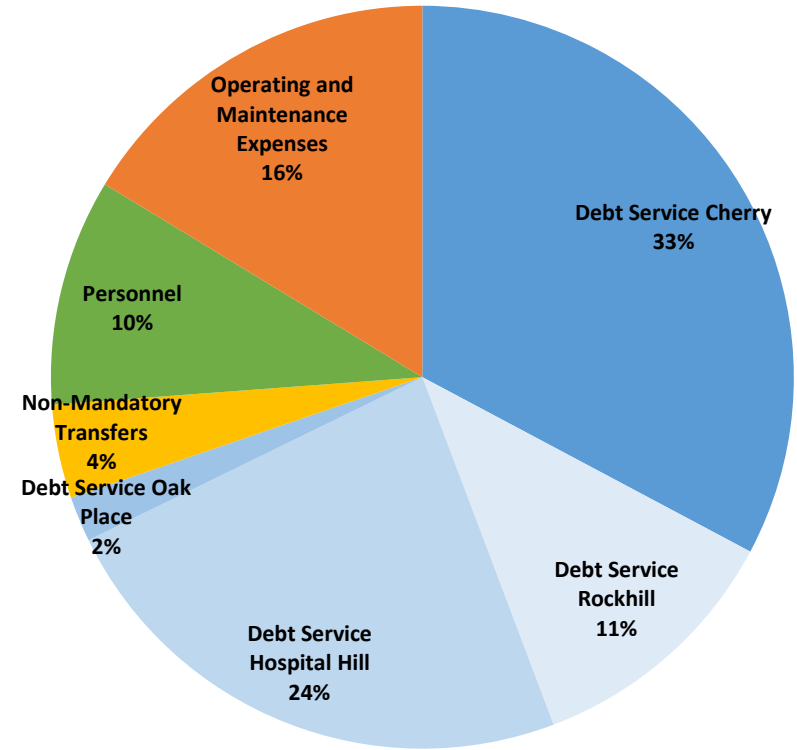
# FY15 Parking Revenue and Expenses

Revenue  
\$4.1M



Student permits Employee Permits Misc Parking Violations Meters

Expenses  
\$3.9M



Debt Service Cherry Debt Service Rockhill  
 Debt Service Hospital Hill Debt Service Oak Place  
 Non-Mandatory Transfers Capital Repairs  
 Personnel Operating and Maintenance Expenses

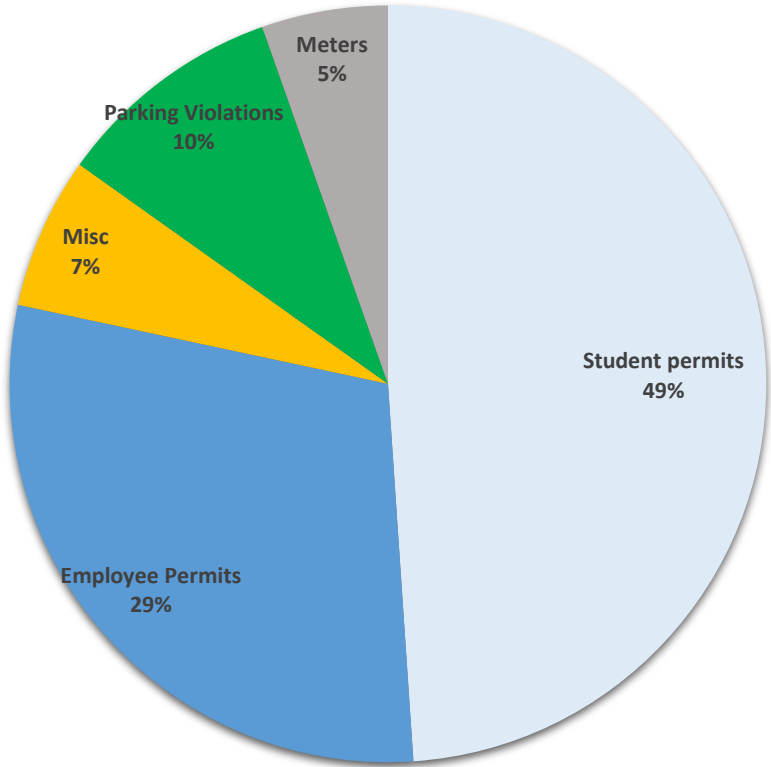
\$2.75M Debt Coverage, 2.3 Debt Coverage Ratio

70% of Expenses are Debt Service

74% of Revenue generated by permit sales

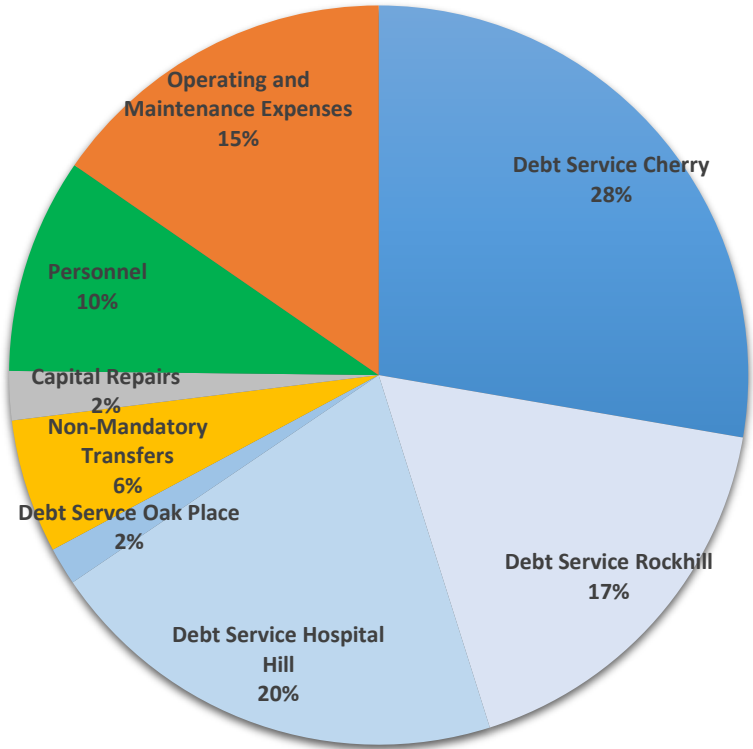
# FY21 Parking Revenue and Expenses

Revenue  
\$4.4



Student permits Employee Permits Misc Parking Violations Meters

Expenses  
\$4.6



Debt Service Cherry Debt Service Rockhill  
Debt Service Hospital Hill Debt Service Oak Place  
Non-Mandatory Transfers Capital Repairs  
Personnel Operating and Maintenance Expenses

\$3.1M Debt Coverage, 2.0 Debt Ratio

70% of Expenses are Debt Service

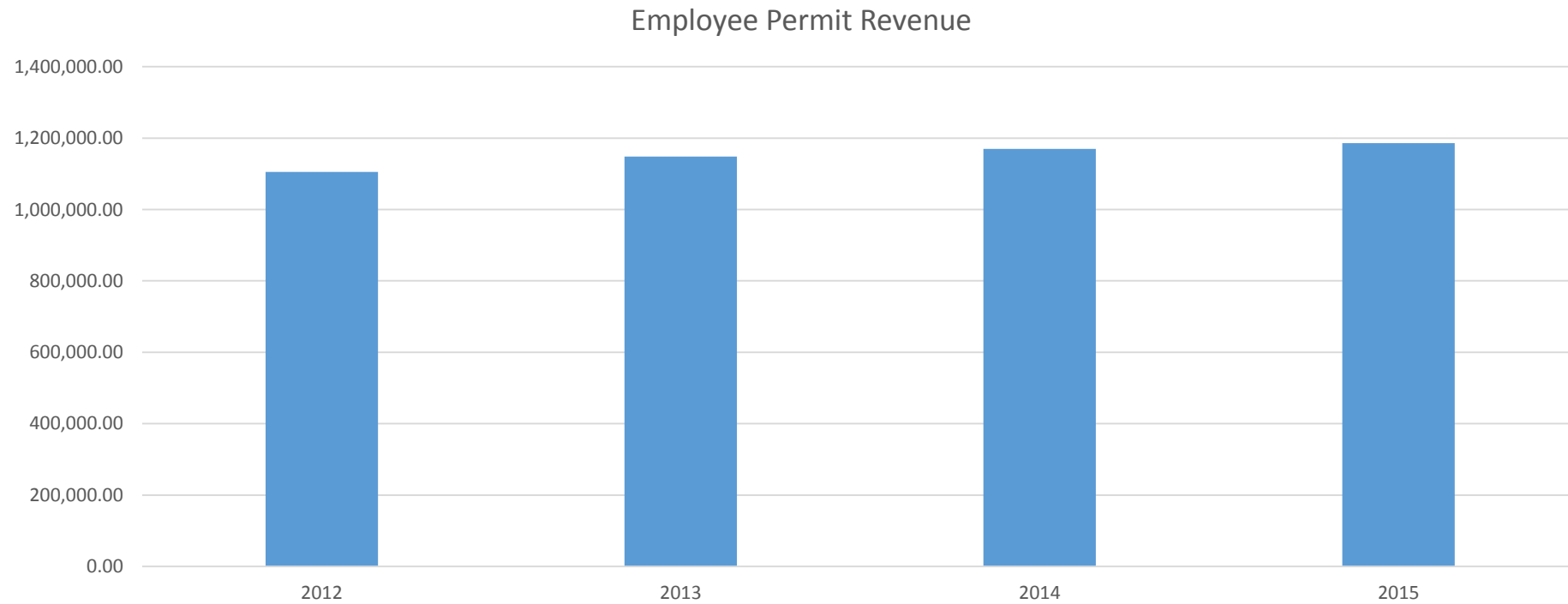
78% of Revenue generated by permit sales

# Parking Space Count

| Space type  | Volker Campus | Health Sciences Campus | Both Campuses |
|---|---------------|------------------------|---------------|
| Student permit  | 3473          | 1229                   | 4702          |
| Faculty permit  | 1044          | 613                    | 1657          |
| Metered   | 308           | 6                      | 314           |
| Disability  | 196           | 59                     | 255           |
| *Reserved for a special purpose   | 165           | 93                     | 258           |
| <b>Total</b>  | <b>5186</b>   | <b>2000</b>            | <b>7186</b>   |
| <b>5 Parking structures and 28 surface lots</b>   |               |                        |               |
| <b>*Special purpose includes official or service vehicle spaces, spaces reserved for motorcycles, timed spaces, dean's spaces, visitor and patient spaces</b>   |               |                        |               |
| <b>Fall and Spring student permit sales between 4600-6500, summer 1400-1800. Currently 6164 permits issued. (1.3 per space: industry benchmark is 1.4-1.5 permits per space for residential campuses and 1.8-2.0 permits per space for commuter campuses)</b> |               |                        |               |
| <b>Currently 1928 employee permits issued. 1560 - 3 year, 137 fall and 231 fall and spring. Typically issue around 2,000 per year. (1.16 permit per space: industry standard benchmark is 1.4-1.5 per space)</b>  |               |                        |               |



# Employee Permit Statistics



Two percent increase in FY12 and FY13. Tiered parking implemented FY14. In FY15 an increase of two percent for the highest tier with a graduated increase for lower tiers.