

Washington University in St. Louis School of Medicine

Operations & Facilities Management

Operations & Facilities Management Department

FY 16 Year End Performance Report

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FY2016

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Operations & Facilities Management Department Overview

About Us

The Washington University School of Medicine Operations & Facilities Management Department provides a range of services for the medical campus in a customer-focused, efficient and sustainable manner. Services include:

- physical planning
- capital projects
- transportation and parking
- campus safety
- custodial services
- operations and maintenance for facilities
- grounds keeping
- utilities
- emergency management services
- mail & receiving
- auxiliary services including bookstore, food service, housing and retail
- property management oversight
- School of Medicine real estate and leasing

Operations & Facilities Management maintains **50 university buildings** and provides service to over 5.5 million gross square feet of space.

Our Mission

The staff of the Operations & Facilities Management Department strives to provide responsible stewardship for the long-term preservation and growth of Washington University School of Medicine's physical assets while working to ensure a safe, welcoming and high-quality environment for students, faculty, staff and visitors in support of the School's missions of clinical care, research and education.

Our Core Values

PRIDE: Professionalism, Respect, Integrity, Dedication & Excellence

We will act with **Professionalism** at all times by being approachable, supportive and accountable. We will take responsibility for the quality and completion of our work, accept personal responsibility for our actions and strive to solve problems.

We will show **Respect** for ourselves and for others by showing compassion and empathy, respecting each experience for what it is (practicing civility at all times), not judging or promoting gossip.

We will act with **Integrity** by being honest, trustworthy and doing the right thing.

We will serve WUSM and the surrounding community with **Dedication** by acting as stewards of the environment, ensuring that all physical assets are turned over to the next generation with an increased value.

Our work will be done with the goal of **Excellence** – we will develop a unified facilities and safety services organization that is customer-service focused and strives to become the benchmark that all other medical schools will want to model.

Our Organizational Structure



Department Service & Program Portfolio

University Efficiency Efforts – OFMD continues to support and deliver on four year efficiency goal targets. We are currently exceeding plan.

	TARGET		ACTUAL		Variance Target to Actual
	Annual	Cumulative	Annual	Cumulative	
Efficiency Targets					
FY15	\$2,558,691	\$2,558,691	\$3,071,474	\$3,071,474	\$512,783
FY16	\$1,170,000	\$3,728,691	\$2,582,822	\$5,654,296	\$1,412,822
FY17	\$500,000	\$4,228,691	\$127,219	\$5,781,515	-\$372,781
FY18	\$300,695	\$4,529,386	\$1,219,279	\$7,000,794	\$918,584
Total 5 Year Cumulative Savings	\$4,529,386	\$15,045,459	\$7,000,794	\$21,508,080	
Reinvestments					
FY15			(285,251)	(285,251)	
FY16			(717,192)	(1,002,443)	
FY17					
FY18			(918,584)	(1,921,027)	
Total 5 Year Reinvestment Cost			(1,921,027)	(3,208,721)	
Total Savings			\$5,079,767	\$18,299,359	

FY 2016 Year End Actuals – Operating Budgets

For FY 2016, we are projecting to come in under plan by 4% and are recommending that a portion of these savings be utilized to fund technology improvements for capital projects and space planning, thus reducing the overall capital investment required from WUSM for these efforts in 2017, as applicable, to the defined program need and contributions. We are projecting coming in under plan due to outsourcing of additional facilities in custodial (salaries) and increased revenue for billable services, as well as continued improvements in purchased services.

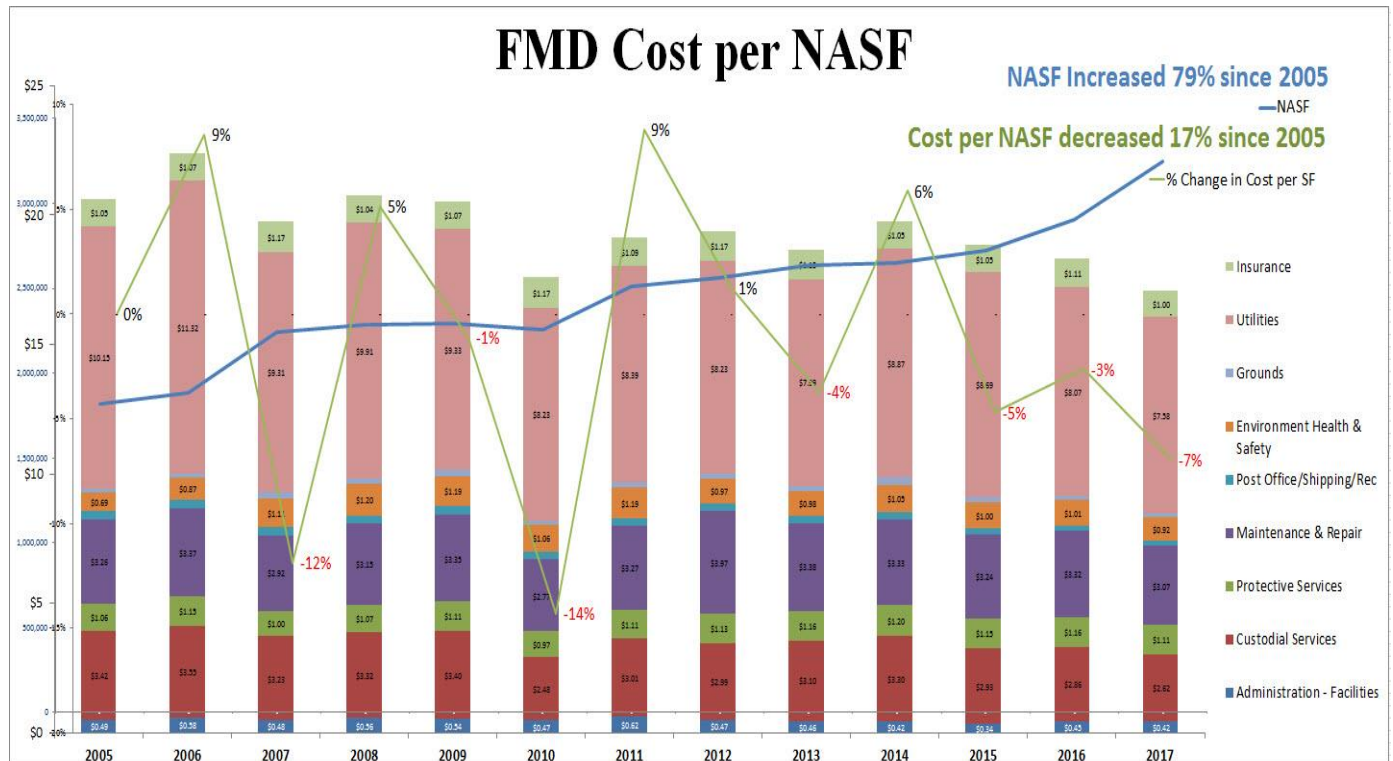
FY 2016 Reinvestments

Archibus Development (OSIS and My Reservation)	\$64,487
PM Web additional enhancements for Phase 1 Implementation	\$87,409
PM Web Phase 2	\$105,000
Employee Development Training	\$72,490
Dupot Safety Training	\$20,000
Consulting fees for Runner Review	\$35,640
Replacement of 3 OFMD Cars beyond their useful life	\$133,855
Equipment and Training for PSO expansion - safety initiative	\$15,000
1 month of salary for PSO expansion (5 new PSO) - Safety Initiative	\$23,603
Custodial power equipment	\$125,577
Olin Basement Renovation	\$118,000
	\$801,060

Efficiency & Budget Notations

1. Seven additional facilities were outsourced for custodial in 2016 adding an additional savings of \$643,404
2. Mail Services Integration has saved \$234K since implementation
3. Chemical Treatment Contract negotiated for University WUSM savings portion is \$91,869
4. Additional Savings on 8 Energy Projects is \$200,000

- 5. Olin Residence Hall Supervisor Reduction saved \$136,442
- 6. Additional Vending Revenue is \$22,500



2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
\$0.49	\$0.58	\$0.48	\$0.56	\$0.54	\$0.47	\$0.62	\$0.47	\$0.46	\$0.42	\$0.34	\$0.45	\$0.42	Administration - Facilities
\$3.42	\$3.55	\$3.23	\$3.32	\$3.40	\$2.48	\$3.01	\$2.99	\$3.10	\$3.30	\$2.93	\$2.86	\$2.62	Custodial Services
\$1.06	\$1.15	\$1.00	\$1.07	\$1.11	\$0.97	\$1.11	\$1.13	\$1.16	\$1.20	\$1.15	\$1.04	\$1.11	Protective Services
\$3.26	\$3.37	\$2.92	\$3.15	\$3.35	\$2.77	\$3.27	\$3.97	\$3.38	\$3.24	\$3.32	\$3.32	\$3.07	Maintenance & Repair
\$0.35	\$0.35	\$0.30	\$0.30	\$0.33	\$0.29	\$0.29	\$0.28	\$0.28	\$0.29	\$0.24	\$0.19	\$0.19	Post Office/Shipping/Rec
\$0.69	\$0.87	\$1.11	\$1.20	\$1.19	\$1.06	\$1.19	\$0.97	\$0.98	\$1.05	\$1.00	\$1.01	\$0.92	Environment Health & Safety
\$0.16	\$0.17	\$0.21	\$0.22	\$0.20	\$0.15	\$0.17	\$0.17	\$0.19	\$0.26	\$0.19	\$0.17	\$0.16	Grounds
\$10.15	\$11.32	\$9.31	\$9.91	\$9.33	\$8.23	\$8.39	\$8.23	\$7.99	\$8.87	\$8.69	\$8.07	\$7.58	Utilities
\$1.05	\$1.07	\$1.17	\$1.04	\$1.07	\$1.17	\$1.09	\$1.17	\$1.13	\$1.05	\$1.05	\$1.11	\$1.00	Insurance
\$20.64	\$22.41	\$19.74	\$20.76	\$20.53	\$17.59	\$19.14	\$19.38	\$18.66	\$19.76	\$18.83	\$18.21	\$17.06	Total

2005-2017 Cost Trend

The above trend presents visually the reductions and cost/SF that have been achieved by the School of Medicine over the last 3 years as a result of our ongoing Quest for Excellence efforts. Since 2005, our space has increased by 79% and our costs have decreased by 17%.

Organizational Development - People & Place

Human resource development is one of our top priorities. We have developed a full staff development and resource plan that works to strategically move our organization to the next level as well as ensure our staff are a

top priority. They are our greatest asset. In 2016, we were recognized for global leadership by the International Facility Management Association (IFMA) and were invited to speak at two national conferences as presenters on organizational best practices as well as profiled in an article on best practices. Below is an outline of our goals and work this year.

<http://fmj.ifma.org/publication/?i=249717&p=56>

People – Staff Development and Resource Planning

Our primary goals are as follows:

1. Performance Management
 - a. Resources (people) Development (training, communications, resources and recognition)
 - b. Cultural
 - c. Diversity and Inclusion
 - d. Contractor (mentor programs, WBE, MBE)
 - e. Succession planning focused on leadership core competencies, which we have defined as the following for all extended leadership team members (Supervisors, Managers, Assistant Directors, Planners, Project Managers, Directors, etc.)
 - f. Finance and Business
 - g. Communications and Technology
 - h. Leadership and Service
 - i. Decision Making, Problem solving and Analytical Skills
 - j. Project Management and Planning
2. Customer Service
 - a. Organizational Skills, including multi-tasking

Training & Professional Development – 2016 Plan & Progress

NIMS Training

Managed and facilitated by Emergency Management staff. Designed to educate staff on incident response and create a safer, better prepared campus. Training was available to the entire department including regional participants, while mandatory for some staff. **300+ individuals trained.**

DuPont Safety Training

Managed and facilitated by Facilities Operations staff. The program was designed to make safety a part of regular operations, increasing supervisors' observation and communication skills regarding safety issues. Forty nine employees completed the training in January 2016. They will train their teams, until all of OFMD has participated in training.

IFMA FMP Certification

Most recently, we conducted FMP training in November 2015. Eleven OFMD employees earned their credential, as well as 9 community partners. In total, 112 people (staff and partners) have achieved FMP certification through WUSM, or are employed by WUSM and already held the credential. We are world record holders in relation to Facilities Leadership Planning and have received three National awards for this work.

Lean Six Sigma Yellow Belt Training

This course was offered through the International Institute for Learning and several other certified vendors. Training was two full days and was a blend of lecture, application and individual and team-based exercises. This course was designed to instill an in-depth understanding of Lean Six Sigma and provided a clear sense of what is required to define high impact improvement projects. Twenty staff members completed this training in February 2016 and were certified in Lean Six Sigma as Yellow Belts.

Learning Outcomes:

- Establish the structure that supports and sustains Lean Six Sigma Quality
- Identify and calculate key Lean Six Sigma Measurements (Sigma, DPMO and Yield)
- Select successful, high-impact projects that match to strategic objectives
- Document, measure and improve key processes using the DMAIC (Define, Measure, Analyze, Improve and Control) Methodology
- Utilize data-based thinking to make key business decisions

New Manager Orientation

This course was offered in partnership to Human Resources. This course was designed to introduce new leaders to WUSM expectations, policies, procedures and philosophy. Part One topics include WUSM culture, managerial expectations, recruitment and selection, and compensation. Part II focuses on time off, performance assessment and employee communications. Part III emphasizes leadership. This training was mandatory for all members of the Extended Leadership Team (ELT).

Civil Treatment for Managers

This class was also a training partnership with Human Resources and provided supervisors, managers and directors with the tools needed to manage fairly and legally. CTM takes complex legal standards and translates them into guidelines for businesslike behavior, demonstrating firsthand how attendees' conduct can either cause or prevent liability and other workplace problems. This was also made mandatory for all ELT members. Currently,

Diversity & Inclusion Training

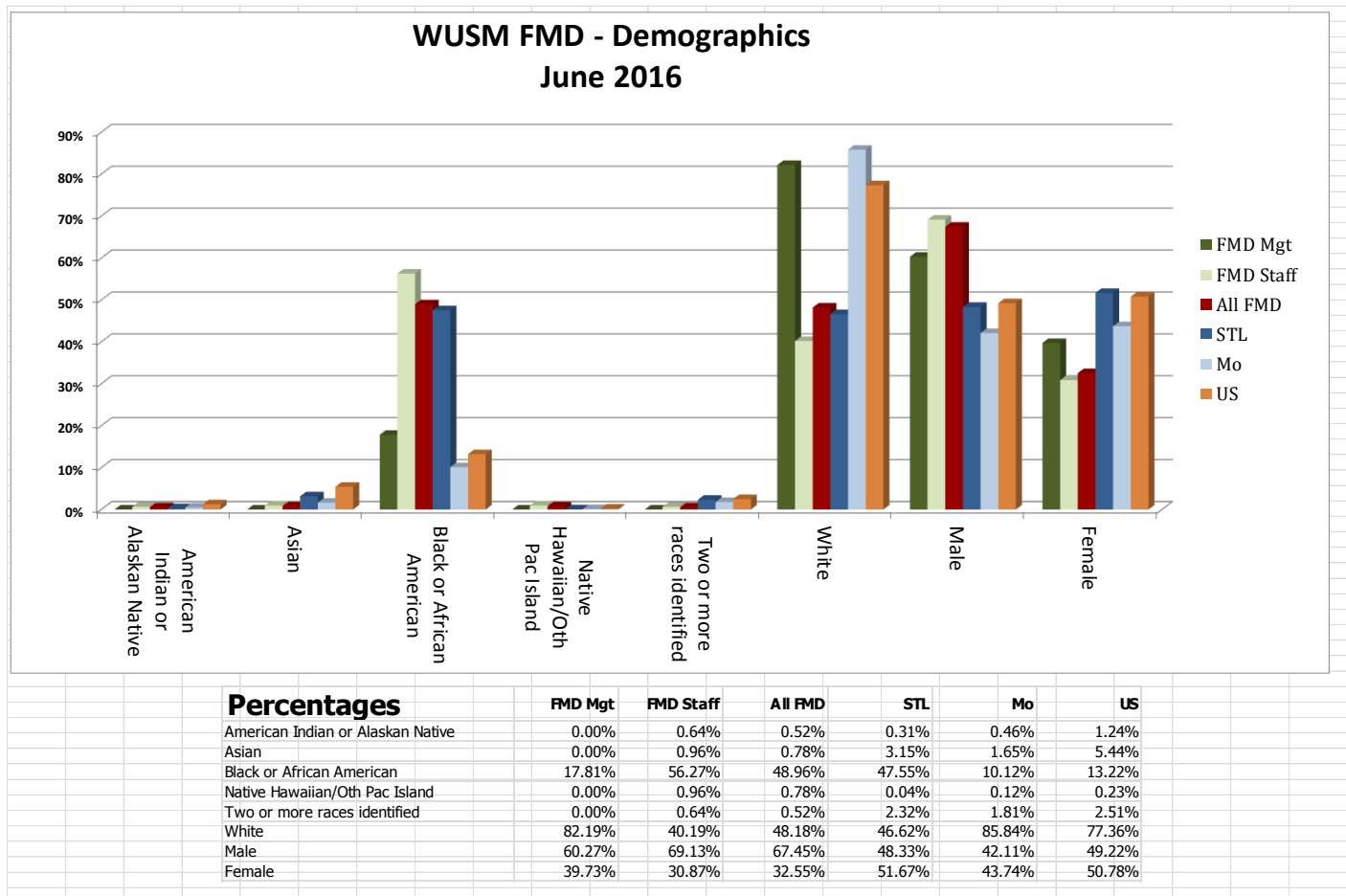
OFMD has held four diversity training sessions for their leadership teams and has also, in collaboration with Human Resources, provided unconscious bias training and education to over 450 staff members. OFMD is also tracking the diversity hiring and striving to add more diversity (gender) to our Engineering teams as well as ethnic diversity in leadership positions.

Human Capital Strategist Training

This course was offered through Human Capital Institute. Training was two full days was a blend of lecture, application and team-based exercises. HCS is the recognized credential for strategic knowledge in the Human Capital field and is an important career achievement for Human Resources, Organizational Development, Recruitment, Corporate Learning and Line executives. Fourteen members of our Senior Leadership Team completed this training in May 2016 and earned their HCS certification.

Empowered Leadership Training

This two-hour course was offered through Goal Line Enterprises for our Extended Leadership Team in June 2016. This session described and dramatically illustrated the difference between Policy and Directive. The ELT now has a clearer understanding of the difference between the two and is able to better individually apply proper guidance to each circumstance and/or encounter with employees. By challenging the One Size Fits All mentality that sometimes accompanies departmental directives each member of ELT is now able to more critically assess the impact on exceptions and outliers.



OFMD Employee Recognition Program

The Operations & Facilities Management Department recognition program acknowledges staff members (individual and team) who have shown meritorious service, dedication and contributions to OFMD and to the School of Medicine beyond the requirements and expectations of the job and who have gone above and beyond their duties by exhibiting the department's PRIDE core values.

The award breakdown is as follows for CY13 – CY16:

Calendar Year	Number of Awardees
2013	12
2014	142
2015	161
2016	121

Award Definitions

Team Award

To recognize a group of people with a full set of complementary skills used to complete a task, job or project.

PRIDE Core Values Award

For consistently demonstrating OFMD's core value(s) of (PRIDE) Professionalism, Respect, Integrity, Dedication and Excellence.

Excellence in Leadership Award

For consistently serving as a role model who inspires others to be innovative and to achieve common goals while building and improving the knowledge and capabilities of the workforce. This award requires perfect attendance within the fiscal year quarter of the nomination.

Community Service Award

To recognize and honor persons who are making significant contributions to their community through their time, actions, talents and dedication.

Collaboration Award

To recognize someone outside of OFMD who has made significant contributions to help OFMD achieve its goals.

Innovation Award

To recognize and honor persons who develop a new idea or practice which improves department processes, services, technologies, etc. resulting in increased productivity, better customer service, etc.

Be the Change Award

To recognize someone whose actions create positive strategic changes, and serves as a model by offering inspiration and support to others.

Kudos Award

For positive feedback, praise received and acknowledgement of customer service.

OFMD Departmental Communications Program Enhancements

Project Delivery Guide

In 2015, the Facilities Management Department developed the **Project Delivery Guide**, which communicates the planning, design, construction and closeout phases for new and renovated facilities on and off campus. This was distributed to Management Council, the Capital Projects and the Physical Planning teams.

4515 Art Project

In 2016, the Facilities Management Department began a project to add artwork to the shell space of 4515 McKinley Research Building. OFMD is working with Dr. Gordon, Dr. Milbrandt and other building occupants to add artwork based on their research and science to the shell space in 4515. The project is expected to be completed in January of 2017.

Outage/Service Interruption Notifications

In 2015/2016, the Operations & Facilities Management Department improved the outage/service interruption notification process by updating all distribution lists, streamlining the process and, working with Emergency

Management, meeting with focus groups for departments to improve emergency outage notifications, especially during non-core business hours. The improvement process continues with additional business manager meetings for consensus on process.

Executive Faculty Website

In 2016, the Operations & Facilities Management Department became the owner of the Executive Faculty Website and is responsible for updating all documents and membership on the site.

A&F Website Development and Management

The new Administration and Finance website launched on August 4, 2015. The purpose of this website was to create an online A&F identity and purpose, align A&F mission between Rick Stanton's support team (requested by Management Council), support information "ask" and transparency goals as well as to provide ease of access/use for campus and outside constituents.

Project Delivery & Physical Planning Programs

Capital Projects Staffing, Structure & Process

We have fully re-staffed our project delivery team and have matched the new staffing team to project needs and work load volumes. All prior staffing issues have been managed through retirement attrition and performance management actions. In collaboration with the vice chancellor of research, a new component was added to the organization in support of critical facilities operations, physical planning and capital projects. The current organization of Capital Projects and Physical Planning (developed in 2015) is now team based, uniquely aligned and operating well above our peers. Below is a current organizational chart of the enhanced structure. WUSM is unique in its team based, point of service delivery model and the process used for actively managing our work through collaborative weekly team meetings with all parties, including WashU IT, EHS, Business Operations, TFC, DCM, WUMC and Facilities Operations Partners. In 2016, we were asked to present on our program strategies and Project Delivery program at two separate national facilities conferences (IFMA, SCUP).

In House Construction Team (IHCT)

The IHCT has been expanded to recapture small renewal and minor renovation work previously outsourced. The anticipated capital savings from creating a productive IHCT is 10% on all projects resourced by this team on projects under \$50,000.

In House Fabrication Team (IHFT)

The IHFT, which primary supports on-campus research, was reorganized in 2016 and rates adjusted to reflect market rates. The shop was downsized and relocated to reduce expense but continue to support mission. The former shop was demolished to provide green space as part of the 4515 McKinley Research Building project. This shop supports research fabrication services and is a valued campus service that has now aligned with the full delivery model.

Project Delivery Tools and References

The Operations & Facilities Management Department has developed and implemented a project delivery process to serve as a roadmap for successful cost, schedule and quality performance on projects. Processes have been documented and supporting tools created to:

- Enable the Operations & Facilities Management Department to provide high quality service to its customers, stakeholders and the University.
- Provide a balanced, systematic approach to planning and delivering construction/renovation projects.
- Incorporate planning/project management best practices.

A comprehensive update was completed in July of 2015 and all staff went through the enhanced training program that included the new process components for EHS, Risk Management, Contracts and Risk Training module added in collaboration with our WUSTL partners in these areas. A link to our current process and forms is provided below. Annual training on updates and enhancements, as well as training related to PMWeb, which is the University's web based project delivery software has continued and is required for all planners, project managers and business support staff (ongoing throughout year).

<http://facilities.med.wustl.edu/planning-construction/project-delivery/project-delivery-tools-and-references/>

Project and Planning Quality Assurance

A project evaluation process was rolled out in 2016 and will be completed by customer, AE and Project Manager all completed projects to ensure GC, AE and PM performance. Below you will find the 3 surveys as well as the supporting evaluation guidelines.

- [Project Assessment Guidelines](#)
- [Customer Survey Form](#)
- [Professional Services Evaluation](#)
- [Construction Contractor Evaluation](#)

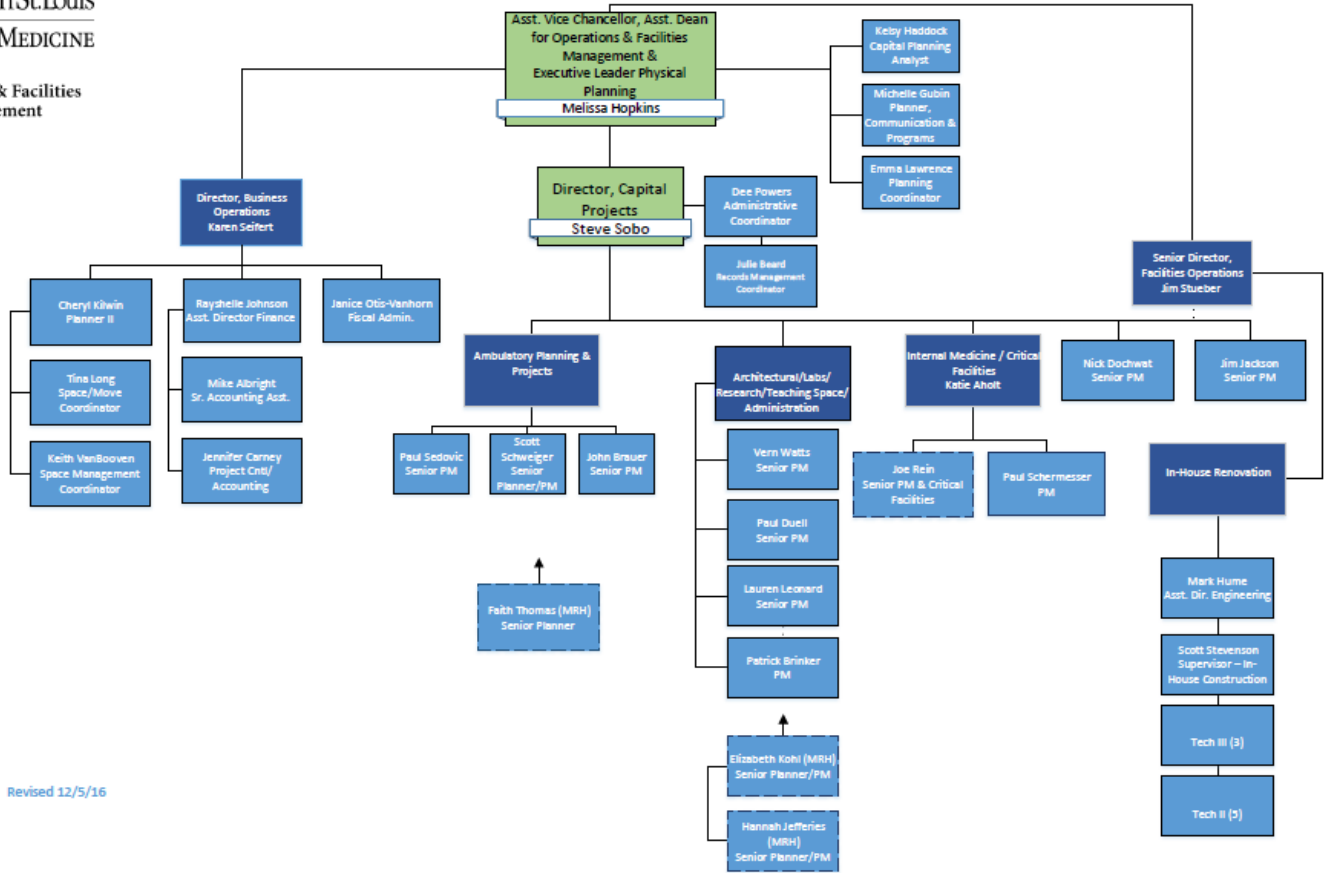
FY 2016 Project Portfolio

In FY 2016, we are projected to complete (based on substantial completion) 116 capital projects with a total estimated cost of \$152M which is \$7M below plan (4%). Major projects completed were South County Phase II, South County Phase 1 Expansion, 4515 McKinley and the New Joint Garage (WUMC).

Major efforts in 2016 included the Mid Campus Center (MCC), Center of Outpatient Health Restacking and design for clinic ambulatory growth, initial CAM Restacking and ambulatory study, and MCC leave behind projects (52+), IT Collocation and 4480 Renovation + Addition, New Student Housing Programming and Design, Medical Education Physical Plan Development, Central West End Station Enhancement Conceptual Design, Tiger Grant Planning, Public Realm Capital Plan Development and Campus Renewal Project Support.

Capital Projects and Physical Planning

Operations & Facilities Management



Revised 12/5/16

FY 2016 Completed Project Listing

PROJECT#	PROJECT NAME	BUDGET	FINAL COST
12021	UTILITY METERING PH 4-8	\$ 1,984,110	\$ 1,818,848
12037	WOHL H. FIRE PUMP	\$ 297,909	\$ 297,718
12132	4515 MCKINLEY - NEW CONSTRUCTION	\$ 81,100,000	\$ 81,511,023
12140	MALLINCKRODT ENERGY STUDY	\$ 49,800	\$ 47,206
12149	4511 FOREST PARK HVAC UPGRADES	\$ 3,578,050	\$ 3,531,068
13003	4444 FOREST PARK PH1 CENTRAL AHU'S & CONTROLS	\$ 3,829,818	\$ 3,621,924
13039	SOUTH COUNTY PHASE 2	\$ 18,000,000	\$ 16,500,000
13088	NWT 14 MED. ONCOLOGY FELLOWS ROOM	\$ 160,761	\$ 138,519
13148	LIBRARY 7FL GLASER GALLERY	\$ 96,074	\$ 96,074
13151	CAM 7FL MED HEMATOLOGY	\$ 1,619,550	\$ 1,080,084
14001	MCDONNELL ELEVATORS	\$ 1,410,000	\$ 1,238,242
14041	CHILLED WATER SYSTEM OPTIMIZATION	\$ 180,949	\$ 180,442
14049	MCDONNELL SPRINKLERS-MORGUE	\$ 309,408	\$ 279,545
14059	4444 F.PK. ENERGY RETROFIT	\$ 863,630	\$ 818,788
14060	BARNARD ENERGY RETRO-FIT	\$ 361,215	\$ 358,781
14084	DUNCAN (EAST STAFF) GARAGE	\$ 23,000,000	\$ 18,700,000
14086	TAB AHU#7 SAFETY PLATFORM	\$ 17,614	\$ 16,084

PROJECT#	PROJECT NAME	BUDGET	FINAL COST
14110	SOUTH COUNTY SITEMAN EXPANSION	\$ 1,972,000	\$ 1,878,991
15001	WOHL CLINIC ELEVATORS	\$ 374,095	\$ 337,397
15002	MED LIBRARY ELEVATORS	\$ 634,175	\$ 548,595
15004	TAB FIRE ALARM SYSTEM REPLACEMENT	\$ 180,000	\$ 153,791
15005	MCM/BIO/EAST IMAGING PRE-ACTION PANELS	\$ 46,900	\$ 36,694
15016	4511 FOREST PARK ROOF REPLACEMENT	\$ 480,187	\$ 478,850
15036	4444 FOREST PARK CHILD PYSCH PH 3	\$ 1,257,606	\$ 1,234,704
15056	MCD 6&10FL MECH RM SPRINKLERS	\$ 17,885	\$ 162,585
15062	MPRB 7FL MED INF.DISEASE BSL3 LAB	\$ 794,395	\$ 736,848
15064	MCD/OLIN VFD'S	\$ 122,000	\$ 112,292
15069	AMEREN ENERGY RETROFIT	\$ 707,000	\$ 678,582
15084	MCDONNELL 1FL MACHINE SHOP RELOCATION	\$ 149,940	\$ 149,940
15085	RENARD 1FL EMERG.MED	\$ 996,804	\$ 996,804
15090	TAB 1FL CIO	\$ 360,683	\$ 293,752
15093	WEST RADIOLOGY DR WAHL	\$ 776,600	\$ 706,870
15095	CSRB-NTA ROOF REPAIRS UNDER COOLING TWRS	\$ 244,000	\$ 242,844
15101	4444 FOREST PARK B,1,2,6 PT EXPANSION	\$ 3,200,000	\$ 3,172,490
15102	MCMILLAN 2FL STRUCTURAL ASSESSMENT	\$ 70,575	\$ 66,857
15104	WEST BLDG 1FL MEDICINE DR.FINCK LAB/OFFICE	\$ 90,453	\$ 86,498
15105	WOHL CL 9FL MEDICINE DR HUMPHREYS LAB/OFFICE	\$ 130,374	\$ 107,900
15111	NWT 9FL PEDIATRICS OFFICES	\$ 109,188	\$ 107,331
15113	EAST MCD 3FL OTO MOOG	\$ 35,557	\$ 35,557
15115	MCDONNELL 3FL DEV BIO DR RENTSCHLER LAB	\$ 153,989	\$ 171,138
15120	BIOTECH RADIOLOGY DR. WAHL	\$ 105,357	\$ 105,357
15121	MATERNITY RADIOLOGY DR. WAHL	\$ 235,694	\$ 214,394
15123	SPECIALTY LAB ASSESSMENT	\$ 322,000	\$ 267,305
15125	CSRB 6FL ANESTHESIOLOGY DR CHEN MICROSCOPE LAB	\$ 50,000	\$ 40,501
15128	4444 FOREST PARK 2FL OT EXPANSION	\$ 252,097	\$ 240,577
15131	BJCIH 9&11FLS WINDOW REPLACEMENTS	\$ 30,000	\$ 27,105
15136	CSRB 5FL ANESTHESIOLOGY DR MORON-CONCEPCION	\$ 350,000	\$ 304,102
15137	NORTH CAMPUS 1FL MEDICINE BILLING OFFICES	\$ 259,042	\$ 286,880
15139	4488 F.PK FPP PEDIATRICS	\$ 51,345	\$ 43,073
15140	MCD/CSRB COLD ROOM UPGRADES	\$ 321,318	\$ 312,479
15141	BJC WEST CTY POB#3 1FL PLASTIC SURGERY CLINIC	\$ 353,000	\$ 353,000
15144	OLIN/MCD PATIO	\$ 20,363	\$ 19,726
15145	WOHL CLINIC ENTRANCE ROOFS	\$ 26,426	\$ 24,138
15148	MATERNITY 8FL BLDG AUTOMATION SYSTEM	\$ 36,000	\$ 32,379
15149	MCDONNELL 7FL WARM RM TO COLD RM	\$ 49,000	\$ 33,605
15151	PAINTING AT EUCLID BRIDGE	\$ 19,808	\$ 17,093
15152	BARNARD STEAM REPAIRS	\$ 60,000	\$ 54,001
15153	WOHL H. STEAM REPAIRS	\$ 80,000	\$ 72,634
15154	MCDONNELL RM 100 ADMISSIONS CARPET REPLACEMENT	\$ 26,230	\$ 26,230
15157	MCD 3FL DEV BIO DR YOO	\$ 40,976	\$ 26,850
15159	SWT 8FL MED END/METAB DR. MILLMAN	\$ 50,440	\$ 37,872
15162	WOHL H 7FL COMMON SPACE	\$ 50,321	\$ 50,321
15164	CSRB-NTA 4FL MEDICINE ABSL3 LAB DR. PHILLIPS	\$ 378,534	\$ 324,057
15165	EAST MCD 3FL ANATOMY DR PADOA-SCHIOPPA	\$ 146,984	\$ 139,868

PROJECT#	PROJECT NAME	BUDGET	FINAL COST
15166	SWT 7FL DR LINK	\$ 75,575	\$ 65,329
15167	CSRB-NTA 4&5 ANESTHESIOLOGY	\$ 213,312	\$ 212,211
15169	EUCLID AVE EMERGENCY STEAM LINE REPAIR	\$ 140,000	\$ 137,831
16000	SRF-EAST/EH&S STEAM LINE	\$ 492,424	\$ 484,542
16001	522 BALLAS RD 3FL MEDICINE DERMATOLOGY SUITE	\$ 472,225	\$ 427,438
16002	IWJ UPPER ROOF REPLACEMENT	\$ 247,629	\$ 224,358
16012	WEST 1FL MED DR DUBBERKE	\$ 122,000	\$ 105,762
16014	EUCLID SIDEWALK REPAIRS	\$ 33,478	\$ 31,828
16015	FIBER OPTIC CABLE REPLCMNT FIRE ALARMS	\$ 111,689	\$ 88,744
16021	BJCIH ROOF WALKWAY EXT	\$ 25,960	\$ 22,912
16025	SOUTH 4FL CELL BIO DARK ROOM DR PISTON	\$ 13,395	\$ 6,750
16026	EAST MCD 6FL RADIOLOGY DR WAHL	\$ 53,965	\$ 48,568
16028	BJCIH FOUNDATION LEAKS	\$ 25,593	\$ 25,593
16029	MCMILLAN 9FL OTO CHAIRMAN'S SUITE	\$ 336,110	\$ 328,802
16033	EPNEC FIRE SUPPRESSION PIPING	\$ 33,226	\$ 33,226
16039	OLIN/MCD 1FL SHELL CAFÉ UPGRADES	\$ 190,109	\$ 190,109
16040	PARKING LOT H CHAGES 4480 CLAYTON	\$ 52,685	\$ 48,124
16041	SIDEWALK REPAIRS PH2	\$ 17,121	\$ 13,409
16044	OLIN CIRCLE TAYOR & MCKINLEY IMPROVEMENTS	\$ 150,000	\$ 143,471
16046	EAST MCD LIMESTONE	\$ 23,470	\$ 21,438
16050	4444 F.PK BSMT PT DR HARRIS	\$ 448,440	\$ 441,477
16051	CSCC 3FL PEDIATRICS UPA CLINIC	\$ 244,778	\$ 244,778
16056	CAM 2FL MED SUITE 200	\$ 89,885	\$ 72,656
16057	OLIN CIRCLE DRIVEWAY	\$ 56,165	\$ 56,165
16058	CSRB 4FL COLD BOX AND FREEZER	\$ 31,161	\$ 28,735
16059	CSRB 8FL COLD BOX AND FREEZER	\$ 34,580	\$ 32,789
16060	IWJ 5FL MED LOCKER ROOMS	\$ 297,988	\$ 286,294
16062	BJCIH 10FL CWIDR HOODS	\$ 69,922	\$ 58,483
16073	CID RESEARCH SNOW GUARD	\$ 66,473	\$ 58,555
16074	CID SCHOOL SNOW GUARD	\$ 49,276	\$ 46,161
16078	EPNEC-MPRB SKYWALK CAULKING	\$ 20,921	\$ 20,598
16080	4480 CLAYTON FIBERGLASS SKYLIGHT	\$ 29,745	\$ 24,928
16086	TAB OTO BUSINESS OFFICE	\$ 544,381	\$ 531,190
16098	RENARD 1FL WINDOWS/HVAC	\$ 57,128	\$ 56,367
16102	EAST BLDG 1FL PSYCHIATRY	\$ 44,189	\$ 43,397
16104	4515 MCKINLEY CGS 4FL LAB RELOCATION	\$ 28,441	\$ 19,515
16105	BJC WEST CTY POB 3 OTO 2FL	\$ 70,317	\$ 63,163
16106	BJC WEST CTY POB 1 1FL OTO	\$ 142,738	\$ 119,276
16117	EAST/EAST IMAG./BIOTECH EXTERIOR LIGHTS	\$ 22,742	\$ 15,635
16088	MPRB 5fl cold room refrigeration equipment replacement	\$ 29,150	\$ 26,500
16089	Taylor Avenue Building replace water heaters	\$ 25,000	\$ 21,852
16067	CSRB installation of new pressure regulating valves in the bldg	\$ 16,412	\$ 15,847
16048	West Bldg 1fl cold room upgrades	\$ 18,040	\$ 10,752
16043	CID Research Bldg repair chiller #2	\$ 17,164	\$ 17,164
16038	South Bldg 4fl Cell Biology lab renovation for Dr. Huettner	\$ 83,641	\$ 64,449
16023	Mallinckrodt Bldg 1fl structural & plumbing repairs	\$ 35,000	\$ 31,104
15076	Progress West - WUCA Pediatric Ambulatory Facility	\$ 425,060	\$ 90,340

PROJECT#	PROJECT NAME	BUDGET	FINAL COST
15086	Olin Residence Hall 5,7,9fl Kitchen Remodels	\$ 89,014	\$ 36,739
15116	McDonnell Sciences 3fl Dev Biology Dr. Kroll lab renovation	\$ 284,724	\$ 278,327
15161	McDonnell Science 3fl Dev. Biology microscope rm for Dr. Rentschler	\$ 11,676	\$ 11,676
16094	4444 FP Replace UPS for Genome Institute	\$ 34,663	\$ 26,208
16146	McMillan 9fl Neurology renovate faculty office & small conference area	\$ 37,393	\$ 34,078
16077	HAP BLDG EXTERIOR	\$ 17,568	\$ 17,249
16156	HAP EXTERIOR WOOD AND FASCIA	\$ 42,097	\$ 39,655
16101	WOHL CLINIC 9FL MEDICINE - RENAL LABS	\$ 115,129	\$ 84,001
16178	MATERNITY 8FL PEDIATRIC NEUROLOGY FACULTY OFFICE	\$ 76,700	\$ 67,352
16144	MCDONNELL 5FL MEDICINE DR TOMMASON'S LAB	\$ 15,061	\$ 7,611
16140	WOHL CLINIC 7FL MEDICINE RENAL CASEWORK	\$ 17,897	\$ 16,105
16091	NWT 14FL MEDICINE MED. ONCOLOGY FACULTY OFFICE	\$ 79,950	\$ 64,119
16189	TAB 1FL WU IT DEPT APPL GROUP	\$ 243,679	\$ 198,262
16130	MCDONNELL 3FL DEV BIO DR KROLL FF&E	\$ 50,000	\$ 44,852
16141	WEST BLDG 3FL PATHOLOGY FACULTY LAB	\$ 72,742	\$ 65,543
16005	CSRB 4&5FL ANESTHESIOLOGY LABS	\$ 733,435	\$ 678,617
	TOTALS	\$160,828,660	\$ 152,614,211

Physical Planning

The Physical Planning team within OFMD was established in FY 2015 and was fully staffed in FY 2016 through OFMD reinvestment efforts and savings through planned program attrition. The team made considerable progress in 2016, including gaining departmental support and was requested to become the staff support for the Executive Faculty Space Committee.

- Melissa Hopkins was awarded the Dr. Richard Brand Award from the Department of Physical Therapy due to her working to document, plan and support their programmatic space needs, which resulted in the fulfillment of a space request that had been outstanding for a number of years.
- Physical Therapy received over 10,000 NASF and was able to expand and complete three phases of projects in less than 10 months ensuring their classroom, research and clinical needs were able to be achieved.
- Rent for Lab Space support provided in development key support processes, tracking of all space needs, transactions and supporting report development

The Operations & Facilities Management Physical Planning team proactively supports and plans for the School of Medicine's physical needs to ensure the ongoing stewardship, care and expansion planning in its mission of patient care, research and education.

Our efforts were and are driven by the WUSM mission and business objectives and are a link to strategic and financial planning processes.

Our planning approach is:

- comprehensive
- data-informed
- transparent
- fluid
- adaptable
- collaborative

<http://facilities.med.wustl.edu/planning-construction/physical-planning/>

Space and Facilities Management

The team provided the following services related to space and facilities management:

- Data Management
- Annual Space Survey
- Charge-back & Financial Reporting
- Integrated Facilities Technology (Space, Work Management, Project & Renewal)
- Vacancy & Space Reporting
- Analysis & Trends
- As built, CAD, O&M & Warranty Information
- Capital Renewal Plans
- Clinical Space Charge Management

Real Estate and Lease Information

The Business Office administers all real estate and leasing activities for the School of Medicine consisting primarily of lease agreements and other financial documents pertaining to the use of medical office and laboratory spaces. As of the close of FY16, the School of Medicine, as Landlord, leases approximately 156,000 sf of space to third parties – with Barnes-Jewish Hospital, as Tenant, comprising the largest share of this area. Conversely, the School of Medicine, as Tenant, leases approximately 600,000 sf of space from third parties – with Barnes-Jewish, as Landlord, accounting for roughly half of this area.

In addition to lease agreements, the Business Office also administers a program launched in FY15 whereby all spaces that WUSM leases from other parties are periodically inspected. The objective of the program is to ensure that all space leased to WUSM is being maintained and cleaned in an acceptable manner, and that all services WUSM personnel should be receiving in these areas are in fact being adequately provided. As of the close of FY16, over 50 site inspection reports have been issued with corrective action plans outlined for custodial and infrastructure deficiencies. All issued reports are followed and tracked until the underlying problem is completely addressed. The Business Office also coordinates the process whereby WUSM-owned office space is returned when the occupants move out to ensure that the space is secure, clean and ready for its next assigned occupant.

Project Accounting

The Business Office provides accounting services to Capital Projects and Physical Planning and works closely with WUSTL Finance as well as WUSM Finance for the financial management of renovation and new

construction projects. We worked successfully to ensure the University policies and procedures are followed and that projects proceeded on time and within budget.

Our services include:

- Set-up, management and close-out of projects in AIS and the Construction Accounting System (CAS).
- Assist Project Managers with project set-up, planning, financing and project approval.
- Purchase orders for construction related services and furniture and equipment purchases.
- Invoice and pay application processing.
- Billing projects for Capital Projects services.
- Report on the status of construction projects (monthly, quarterly and annual).
- Planning and Facilitation of Senior Leadership Capital Planning Meetings WUSM (Quarterly).

Ambulatory Planning

Our planning team has become an important part of campus planning and is in coordination with the Joint Office of Strategic Planning (JOSP). We are leading the ambulatory plan review and program development for the WUMC campus as well as the restacking efforts for Center for Outpatient Health (COH) and the Center for Advanced Medicine (CAM), which are essential elements in supporting the campus ambulatory plan as well as faculty office relocations. Additional planning services and project management include the fit out of Anesthesiology, Surgery and Pediatrics space within St. Louis Children's Hospital (SLCH) and the new Barnes-Jewish Hospital North Tower. We are staffed with three individuals who can do ambulatory planning and clinical projects as well as one full time clinical planner.

The scope of the ambulatory study is as follows:

Phase 1: Validate volumes, capacity and utilization analysis

1. Evaluate and validate the current CAM Clinic capacity study completed by the Joint Office of Strategic Planning & BJH Diagnostic projections & capacity. Consider new operating models that may influence the square footage needs, e.g. multidisciplinary cancer clinics, extended hours of operation and process improvement targets
2. Evaluate existing facility function and clinical volume capacity for both CAM and COH in relationship to the supporting platforms such as diagnostic, parking, valet, accessibility, etc.

Phase 2: Clinical Restacking

1. Determine clinic by clinic restacking process in CAM and what residual entities must come out of CAM.
2. Assess what additional needs could be met on the potential additional three floors (which may be vacated by BJC) of COH or would need to be placed elsewhere. All placement options we have & what diagnostic platforms would need to be duplicated.

Faculty Office Space

Physical planners have been assigned by the department and a five year plan for departmental growth is being established. Faculty office needs are being coordinated with all physical planning efforts and plans are updated by department request, as well as reviewed on an annual schedule to ensure effective management with long

term physical planning. Each planner is assigned departments in their area of expertise and planning teams are aligned by area (clinical, research, education and other).

Planner & Department Assignments

Department	Primary Planner (Primary PM for Projects)	Planning Area (Main)
Faith Thomas, Senior Planner		
Internal Medicine	Faith Thomas (Katie Aholt)	Office & Ambulatory
Emergency Medicine	Faith Thomas (Paul Duell)	Office & Ambulatory
Ophthalmology	Faith Thomas (John Brauer)	Office & Ambulatory
Otolaryngology	Faith Thomas (John Brauer)	Office & Ambulatory
Anesthesiology	Faith Thomas (Various)	Office & Ambulatory
Surgery	Faith Thomas (Various)	Office & Ambulatory
OB- GYN	Faith Thomas (John Brauer)	Office & Ambulatory
Faculty Practice Plan (Multiple Departments)	Faith Thomas (John Brauer)	Office & Ambulatory
PACS	Faith Thomas (Various)	Office & Ambulatory
Elizabeth Kohl, Senior Planner/Project Manager		
Pediatrics	Elizabeth Kohl	Office, Education & Research
Neurology	Elizabeth Kohl	Office, Education & Research
Pathology & Immunology	Elizabeth Kohl	Office, Education & Other
Genetics	Elizabeth Kohl (Lauren Leonard)	Office, Education & Research
Developmental Biology	Elizabeth Kohl	Office, Education & Research
Biochemistry & Molecular	Elizabeth Kohl	Office, Education & Research
Cell Biology	Elizabeth Kohl	Office, Education & Research
Molecular Microbiology	Elizabeth Kohl	Office, Education & Research
Office of Medical School Education, Office of Education and Student Affairs, Medical Library, DBBS, OMSR and Administration Other	Elizabeth Kohl & Kelsy Haddock (Vern Watts)	Office, Education & Research
Katie Aholt, Senior Project Manager/Senior Planner		
DCM	Katie Aholt (Joe Rein)	Critical Facilities
BSL3 Facilities	Katie Aholt (Joe Rein)	Critical Facilities
Hannah Jefferies, Senior Planner/Project Manager		
Psychiatry	Hannah Jefferies (Paul Duell)	Office, Education & Research
Physical Therapy	Hannah Jefferies (Paul Duell)	Office, Education & Research
Occupational Therapy	Hannah Jefferies (Paul Duell)	Office, Education & Research
Orthopedics	Hannah Jefferies	Office, Education & Research
Neurosciences	Hannah Jefferies	Office, Education & Research
Tyson Memorial Grove	Hannah Jefferies (Nick Dochwat)	Other
Dean & Other A&F	Hannah Jefferies (Various)	Other

Department	Primary Planner (Primary PM for Projects)	Planning Area (Main)
Kelsy Haddock, Planner/Planning Analyst		
Department of Informatics	Kelsy Haddock (Vern Watts)	Office, Education & Research
Lab Decommissioning	Kelsy Haddock (N/A)	Research
Biostatistics	Kelsy Haddock & Elizabeth Kohl (Vern Watts)	Office, Education & Research
Neurosurgery	Kelsy Haddock (Various)	Office & Other
TFC	Kelsy Haddock (Paul Duell)	Office & Other
Other/All Other		
CFU Units on WUSM Campus – various	Assigned by Need or Request & Facility	Office & Other
Food Service	Kelsy Haddock (Nick Dochwat)	Other
Housing	John Brauer	Other
Retail	Various	Other
Relocation Planning	Cheryl Kilwin	All Space
Data & Information Management	Cheryl Kilwin & Kelsy Haddock	All Space

Medical Education Planning

In preparation for the new office building being built on campus (Mid Campus Center) and the “leave-behind” space that this will create, the School of Medicine initiated a study to document the Medical Education Program’s current state and create strategic and physical plans for the future. This study reviewed the educational program’s organizational structure, resource needs, current space, space availability, key adjacencies and supporting technology needs. The review included key support areas such as conference spaces, student study space, Bernard Becker Medical Library, the King Center and classroom space. In addition, recommendations were reviewed and compared with educational best practices. Recommendations were made, design is underway and the following components are in the process of being completed over the next 36 months as a result of this study.

Medical Education Physical Plan Components

Student & Occupational Health Renovation & Expansion
– East 1 & 3

Continuing Medical Education Renovation & Expansion
– CSRB Link

Graduate Medical Education Renovation & Expansion –
McDonnell Medical Sciences 1

Informatics to Becker Library 6th Floor (in 3 phases)

Medical Education – DBBS to Becker Library 4 &

Barnard 2/3

Medical Education – Admissions to North Building 1

Medical Education – Diversity to North Building 1

Medical Education - Office of Education to Becker 3

Medical Education - OMSE to Becker 3

Medical Education - Office of Student Financial Planning to Becker 2

Medical Education – Ombudsman to Cancer Research 1

Medical Education - Student Affairs to Becker 2

Medical Education - Student Affairs OMSR to Becker 4

Medical Education - Student Affairs Registrar to Becker 2

Medical Education Support Services Planning – Project Management

As part of this study, meeting, teaching and event spaces, including EPNEC and FLTC, were reviewed and the findings showed low overall utilization for all like space. As a result, WUSM Senior Leadership asked OFMD (MRH) to convene a task committee to review the existing program model(s) and work collaboratively to make recommendations on a modified business and organizational model that will allow for more effective space utilization while still achieving the campus core needs.

Subcommittee & Program Mission:

To create a business support model that will effectively manage all centralized space at the School of Medicine including EPNEC, FLTC and other Dean or A&F managed education, meeting and conference space, working to ensure access, quality program support, sound financial management and physical stewardship. Support priorities in the following order would be:

1. Education/Curriculum/ Teaching
2. Meetings - Central Administration/Campus
3. Events/Conferences/ Departments/External

As of the publishing of this report, a full recommendation has been made and details on the integrated plan, rate structures and organizational changes will be made in the OFMD Mid-Year Report.

Rent for Space Program & Committee Support

Physical Planning provided support to the Vice Chancellor for Research and the AVC of Administration and Finance as well as the Executive Faculty Space Committee in the following processes:

1. Web Lab Space Planning, Returns and Assignments

2. Wet Lab Space Reporting for Rent for Space
3. Management of related WUSM Space System and Data Reporting
4. Staffing and Support for the Executive Faculty Space Committee

Lab Space Return

1. Rent for Lab Space was intended to incentivize departments to return unused lab space. This process is managed by OFMD, in conjunction with EHS, who completes the decommissioning and inspections.
2. In FY16, we facilitated the return of 58,695 NASF of wet lab space to the Space Bank, allowing the Physical Planning group to address space requests in a more timely manner.
3. Since July 2015, 12,204 NASF of wet lab space has been assigned from the Space Bank.
4. In addition, distribution of monthly Space Bank Reports have made available lab space more transparent to the Departments.
5. At the end of FY 2016, the total wet lab space included in the model was 946,658 nasf.

FY 2016 Lab Space Transactions

Summary of Rent for Lab Space Transactions FY15 & FY16

Reported Space Transactions - FY15 - NASF Lab Space				
Who Gave Space	Who Got Space	Building	Dept. to Dept.	Dept./Sp Bk
Neuroscience	BME	East McDonnell - 2	668	
	Space Bank	McDonnell Sciences - 4		2,023
	Space Bank	McDonnell Sciences - 9		1,210
Biochemistry	Space Bank	South Bldg - 1		2,161
Dev Biology	Space Bank	McDonnell Sciences - 7		2,399
Genetics	Neurology	Biotech - 3	1,673	
	Radiology	Biotech - 3	1,412	
Otolaryngology	Neurology	McMillan - 9	55	
	Space Bank	McMillan - 9		2,692
Pathology	IM	West Bldg - 1	2,873	
	PT	West Bldg - 1	2,157	
	Radiology	West Bldg - 1	2,800	
Pediatrics	IM	McDonnell Peds - 7	3,609	
Radiation Oncology	Space Bank	4511 Forest Park - 4		10,579
	Space Bank	CSRB - 4		1,108
Surgery	CHIIPS	BJCIH - 7	1,686	
	IM	Wohl Clinic - 9	2,622	
	Rad Onc	Wohl Clinic - 10	3,493	
The Genome Center	Space Bank	4444 FP - 3		2,189
Dean	CIMED / HPAN	BJCIH - 9		8,919
	Space Bank	BJCIH - 10		2,142
Cell Biology	Space Bank	BJCIH - 7		997
Sum of FY15 Transactions			23,048	36,419
Space Bank Transactions				
FY15 Department returns to Space Bank				27,500
FY15 Assignments from Space Bank/Dean				(8,919)
Starting FY16 Space Bank NASF				18,581
FY 16 Returns to Space Bank				58,695
FY16 Assignments from Space Bank				(12,204)
Ending FY16 Space Bank				65,072
Transactions Affecting Rent Model - FY16				
Starting NASF Included in Rent Model (Original July Data)				888,214
New Space Assigned in 4515 McKinley*				67,321
Shell Space added in 4515 McKinley				21,368
4515 McKinley Space not included in Model (Core space, Comp Sciences space, etc.)				(6,778)
Space Removed from Model (Excluded Dept, Core Adjustments, Building Demo)				(32,202)
Space Added to Model (Core Adjustments, room conversions, etc)				8,735
Lab Space in Rent Model - End of FY16				946,658

Bench Space Analysis Support

Physical Planning provides support to the Vice Chancellor for Research and the AVC of Administration and Finance in the following processes:

1. Economic and People Density calculations using OSIS
2. Extension exploration discussions with Vice Chancellor of Research to develop program methodology to calculate at the PI level NASF, MTDC and headcount
3. Developed programming specifications for IT supporting methodology developed with Vice Chancellor of Research

Other Key Project Efforts – 2016

OFMD also provided leadership and project management or participated on the following efforts:

1. TIGER grant project and planning support (in progress) <http://news.stlpublicradio.org/post/federal-tiger-grant-funds-new-metrolink-station>
2. CWE Phase II Station Enhancement Planning (WUSM led) (in progress)
3. Public Realm 10 year plan development (in progress)
4. Campus Renewal planning and project support and related project management activities (ongoing) <http://www.bjconstruction.org/Home.aspx#.VunceK10zIU>
5. Support of WBE/MBE efforts –primary focus on purchasing and construction (ongoing)
6. New Housing Project Planning Committee – Owner & Co chair and WUSM Lead (in progress) <https://nextstl.com/2015/01/washington-university-aims-convert-shriners-cid-buildings-student-housing/>
7. MCC Project Planning and Project Management Leadership (in progress) <https://facilities.med.wustl.edu/planning-construction/project-delivery/mid-campus-center/>
8. Domino or “leave behind” project planning (In progress)
 - a. As a result of the New Housing, COH and MCC Projects, we are managing multiple domino projects on campus and are actively tracking for completion in the next 12 – 24 months. The relocations include 52 relocations and just over 680,000 SF of space (in progress).

Future Expansion Possibilities

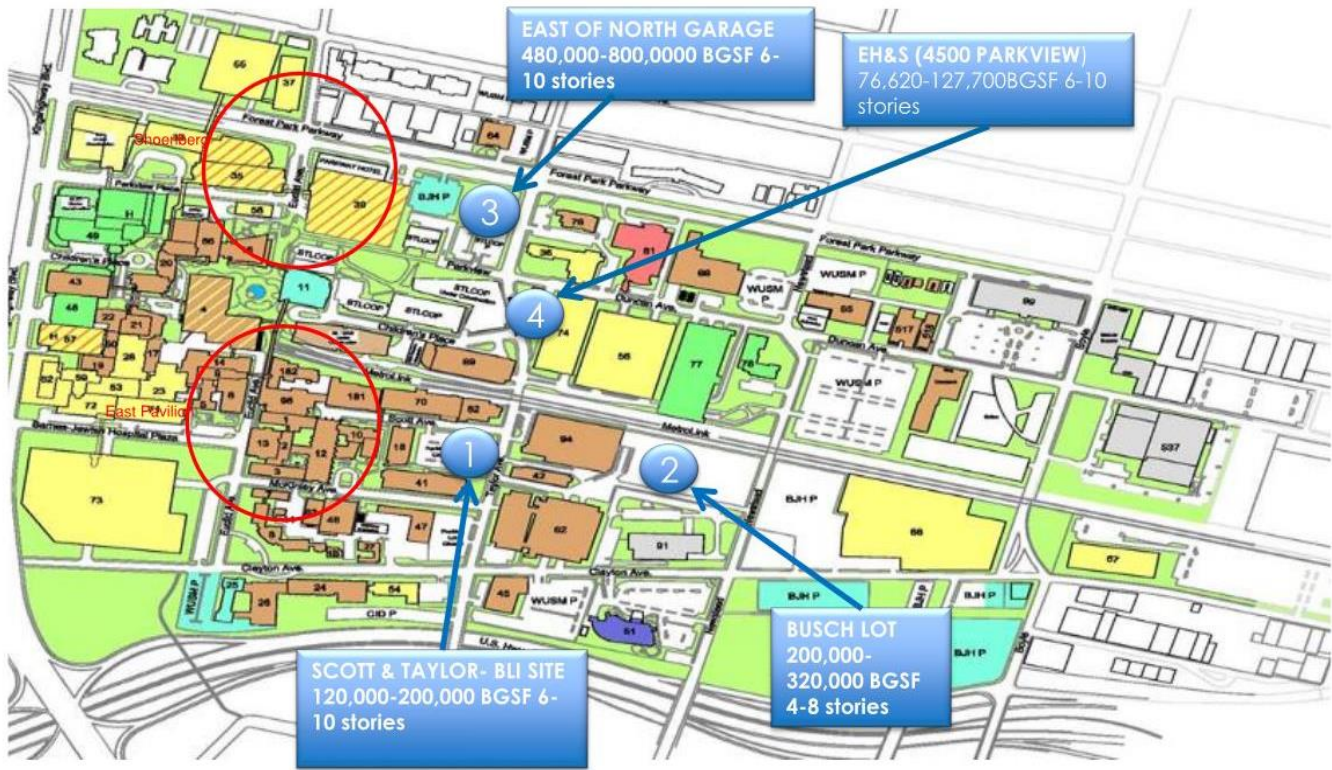
- Vertical Expansion
 - BJCIH North Tower is structured to add another 10 floors at 25,500 BGSF each, for a total of 255,000 BGSF.
 - The SRF-East on McKinley is structured to add one floor at 15,500 BGSF.
 - There is a plan to decommission/deconstruct Olin Residence Hall by 2025 and replace the structure with either a research facility or faculty office space. From 2018-2024, the facility will be utilized for office swing space.
 - 4488 Forest Park could be replaced with a larger facility if deconstructed for future growth

Lateral Site Expansion (Master Plan)

For example, green space north of 4515 McKinley is earmarked for Center for Biological Imaging (CBI).

- Former Clean City Squares parking lot
- 4480 Clayton Avenue – expansion in progress for 4480 renovation and addition – IT integrated services planning (60% of Wash U IT)
- Ambulatory opportunities within the complex

All potential Clinic Sites could support the proposed freestanding building options



Internal Expansion

- Shell Space
 - Mid Campus Center – Floor 10 (as of 12/6/16, assigned to Internal Medicine)
 - 4515 McKinley – Floor 1 (as of 12/6/16, assigned to Genetics)
- Restacking of Center of Outpatient Health (in progress)
- Restacking of Center of Advanced Medicine (being studied as part of current ambulatory plan)
- 4511 Forest Park 4th Floor - 9,400 NASF
- 4444 Forest Park – 30,000 NASF (wet lab & office)
- Maternity – will be restacked to accommodate Surgery decant from Queeny Tower (2020)

DCM Facilities Condition Assessment

The School of Medicine completed a study to assess the facilities conditions for DCM animal quarters and all Biosafety Level 3 (BSL3) and Animal Biosafety Level 3 (ABSL3) labs on the medical school campus. This study is Phase 1 of a 2 part study to optimize operations and space for DCM. The study was completed in October of 2015 and has provided both DCM and Facilities Management with a comprehensive summary of the existing conditions for all supporting building infrastructure, as well as estimates of costs for required upgrades in the short, medium and long terms. This study also developed a new design standard for BSL3 and ABSL3 lab construction, ensuring compliance with all codes and standards for these facilities. Maintenance items are being completed and all other recommendations have been reviewed and will be prioritized for completion in future projects, beginning in FY17.

DCM Space Optimization Study

This work is being completed for the Vice Chancellor of Research. Phase 2 of this study was initiated in January of 2016 to assess the current utilization of Medical School animal space and DCM business organization. This study will provide recommendations for optimization based on peer benchmarking, best practices and programmatic needs. Data for this study, including growth projections for animal census as well as needs for procedure and core spaces, has been collected from Department Heads as well as researchers and will be incorporated into the final report and recommendations in August 2016. These recommendations will be reviewed to determine the need for future capital improvement projects.

Critical Facilities Program Report

A Critical Facilities Program Report was completed by OFMD in June 2016 to provide a comprehensive summary of the activities that are occurring in support of the Biohazard Research Facilities, including the recommendations for the Phase 1 and 2 studies above. The School of Medicine, in collaboration with its campus partners, has been working to establish an integrated care strategy that aligns strategy to stewardship and planning. The Program Report highlights the 10 year plan for services, resources, physical space, capital, operational and renewal plans with a focus on technology and process improvement, communication, training, transparency in process, alignment of financial investments and continual safety and compliance.

The Program Report will be updated annually in conjunction with the VCR. All capital projects, maintenance and renewal projects and re-commissioning will be tracked and reported monthly to the various stakeholders at the Critical Facilities Partnership meeting.

Satellite Clinic Planning and Project Management – various (ongoing) – primary focus South County

1. Children's Specialty Care Center
2. Siteman Cancer Center at South County
3. South County CAM
4. North New Ballas Dermatology
5. BJH West County POB # 3
6. BJH West County POB #1
7. Orthopedics at Chesterfield
8. North County Dialysis Unit & Clinic
9. Pediatrics Off Site Clinic Planning

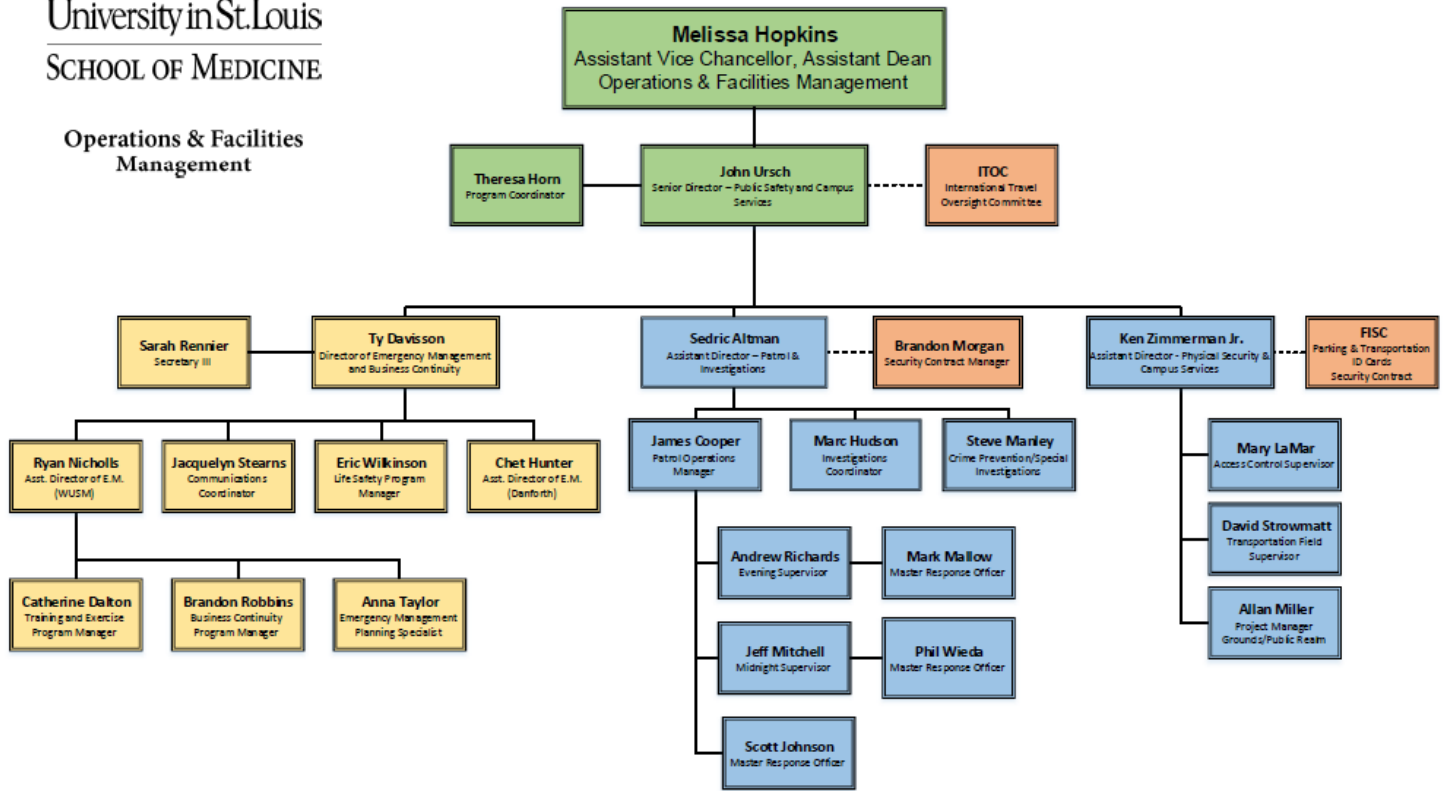
Workplace Safety (Capital Projects)

Capital Projects had zero DART-related incidents in 2016.

Emergency Management, Business Continuity and Public Safety

Emergency Management

OFMD assumed responsibility for the University Emergency Management Program in March of 2016.



Integration of Emergency Management Programs (Danforth/WUSM)

1. Recruited new Assistant Director (Danforth Campus)
2. Integration budget approved
3. ITOC Committee and Planning Support added
 - a. Staff and EM Strategic support integrated to support Dedric Carter and ITOC

Joint Services

1. Emergency Plan Development and Maintenance
2. Emergency Alerts/Notifications
3. Campus Fire Drills/Life Safety Program Management
4. Emergency Operations Center Management
5. Disaster Preparedness Training and Education
6. Business Continuity Planning and Program Coordination

Additional Services:

1. Public Safety and Disaster Response Exercises
2. Emergency Response Liaison Support to Partner Hospitals
3. Campus Hazard Identification/Risk Assessments

International Travel Oversight Committee (ITOC)

As part of Emergency Management Program support, OFMD was asked by the Office of the Provost to support the International Travel Oversight Committee (ITOC). The ITOC is an advisory to the provost and makes policy

recommendations on overseas travel conducted by students, faculty and staff of Washington University. The ITOC is chaired by the assistant provost for international education and includes key administrators from each WUSTL school as well as representatives from the chancellor's office, general counsel, university risk management and faculty. The ITOC convenes at least once a semester to review the university's travel policies and procedures. The ITOC Executive Body consists of the assistant provost for international education, the assistant to the chancellor, the head of risk management and the university's insurance officer. The executive body also meets when necessary to make immediate determinations on whether travel restrictions should be placed on particular countries or regions of countries under circumstances described in the Washington University International Travel Policy. OFMD provided staff support as well as EM Program Strategy, policy and training support and serve as members of the ITOC Executive Committee.

<https://global.wustl.edu/international-policies-resources/international-travel-policy/>

Business Continuity Program Development

1. In collaboration with Central IT, the Business Continuity Management System Project Charter was completed and the pilot program outline developed.
2. A technology vendor was selected.
3. Enhancements to WUSM BC Program continue
 - Executive Functional Exercise – Emergency Planning
 1. A senior level exercise was conducted for the Executive Leadership Team and a detailed scenario was developed. Senior University Administration participated.
 - WUMC Medical Surge Planning
 2. Multiple meetings conducted with key stakeholders of WUMC Institutions.
 3. Operational details under development with draft plan nearly completed.
 - Mitigation Planning
 - Planning committee organized with core committee representing several departments.
 - Planning process outlined from project profile through strategic goals and objectives for up to five years.
 - Will allow the University to be eligible for FEMA funds in the case of a significant regional incident or event.
 - Led effort to RFP and select a Recovery Contract for the University – contracts in place.
 - Educational session to be given on Risk Mitigation @ WUSM MC April 2016.

Public Safety & Security Services

1. OFMD expanded their crime prevention/special investigations services (safety education and outreach).
2. OFMD provided support to WUMC in creating an RFP for community policing review for WUMC.
3. OFMD conducted diversity and “service” environment training for all PS service areas.
4. Planning and design for the MCC Joint Security Center Planning with BJH was completed.

HRMS Work Location Project

Emergency Management is working in coordination with University Human Resources and IT to develop a process whereby faculty and staff can easily verify and, as needed, update their location information within HRMS. The goal of this project will be to require periodic review of work location (building/room) by every employee.

A solution has been reviewed by the working team and will be presented in FY 2016 to senior administration.

Protective Services Escort Service

- 6300 : Total Escorts logged into CAD (1400-0000)
 - 3286 : Off Campus
 - 3014 : On Campus
 - 2593 : CWE
 - 693 : FPSE
 - PT : 6
 - OT : 13
 - Faculty : 132
 - DBBS : 804
 - Medical Students : 934
 - Staff : 964

- Total from 0000-1400 : 3198 , 1845 Off Campus (1495 in CWE , 350 in FPSE) / 1353 On Campus

- Grand Total : 9497
 - Off Campus : 5130
 - On Campus : 4367
 - CWE : 4085
 - FPSE : 1045

Transportation and Parking

1. Partnered with BJC/H on the completion of a new staff garage – garage added 3,000 spaces to campus parking portfolio (WUSM acquired 1,200 spaces of which 800 are WUSM and 400 are leased to St. Louis College of Pharmacy)
2. Participated on Working Committee to develop streets and roads improvement plan in support of Civitas mobility study (Urban Planning).
3. Leveled Parking Rates (external) with BJH and SLCH.
4. Selected and purchased a unified technology platform with BJH and SLCH and implementation of the new Skidata platform is in progress
5. Completed staff procedures and training in common so that customer campus experience is aligned.
6. Aligned external communications for WUMC on all parking, shuttle and transportation activities. STLCOP coordination has improved but still requires active oversight planning.

Parking Portfolio – 2016 Current

<u>PARKING INVENTORY AND AVERAGE DEMAND – Year End</u>	CLAYTON	DUNCAN CENTRAL	METRO	SURFACE LOTS	NOTES
Total Number of spaces	2323	1200	687	1500	
(Less)					
- ADA	36	0	25	78	

- Reserved	72	0	20	39	
- Patient/Visitor	0	0	0	222	
- Leased	0	400	0	0	Future commitment for 300 total spaces for CORTEX
Total available for permit parking	2215	800	642	1161	
Total permits issued (average)	1891	116	701	813	
Daily cash spaces	15	n/a	10	n/a	
Daily exit permits (average)	230	n/a	4	n/a	
Total spaces open (average)	150	684	100	348	88% (360) at Clean City Squares/"L Lot"

Parking Auxiliary Revenue Projections - 2016

As of May 31, 2016	BUDGET	ACTUALS	END OF YEAR FORECAST
Revenue			
TOTAL INCOME	(\$4,650,263)	(\$4,637,810)	(\$4,637,810)
Expense			
PAYROLL	\$320,783	\$314,119	\$346,988
DEBT	\$3,052,902	\$1,915,199	\$1,915,199
O&M	\$1,500,683	\$1,082,602	\$1,146,647
TOTAL	\$4,874,368	\$3,311,920	\$3,408,834
Net Income	\$224,105	(\$1,325,890)	(\$1,228,976)

OFMD Customer Satisfaction

OFMD continues to make daily cultural, process and service improvements in operations. Customer Satisfaction rates in all areas improved and were above average.

In November of 2015, the Operations & Facilities Management Department distributed a customer service survey to the WUSM campus. Below you will find a summary of the survey results. Over a 3 week time period, we received 1,866 responses to our survey. Customers rated, from excellent to poor, our services in five categories: Facilities Operations, Facilities Integrated Service Center, Protective Services, Capital Projects and Physical Planning and Auxiliary Services.

Category	Rating (2014) 1 = Poor 5 = Excellent	Rating (2015) 1 = Poor 5 = Excellent
Facilities Operations	3.67	3.95
Facilities Integrated Service Center	New Integrated Service - No data	3.91
Protective Services	3.96	4.09
Capital Projects and Physical Planning	3.44	3.84
Auxiliary Services	3.42	4.06
Total	3.62	3.99

In all categories, our numbers were better in 2015. Some items listed for improvement opportunities include: Custodial services, HVAC (too hot/too cold), parking, shuttles and street access.

Energy & Sustainability

In FY16, three energy conservation projects recently completed total \$1.85M in investment, resulting in \$556,469 in annual savings with a cumulative payback of 3.3 years. Projects that are currently in process total \$1.3M in investment, resulting in \$439,834 in annual savings with a cumulative payback of 2.9 years. Below is the overall progress for the School of Medicine toward the \$30M commitment. Not identified below are several Capital Renewal projects that reduced energy consumption (completed or are in process).

\$30 Million Dollar Commitment Project List Update as of 2/11/16

	Project	Brief Description	Project Cost	Estimated Annual Cost Savings	Estimated Annual Carbon Reduction (MTCO2e)	Useful Life	Payback (yrs.)
Recently Completed	Biotechnology Center HVAC Retro-Commissioning & Retrofit	Reduce airflows, convert to variable air volume (VAV), replace steam coil w/ hot water coil, convert cold rooms to chilled water	\$2,012,000	\$451,880	3,220	10	4.5
	CID HVAC Retro-Commissioning & Retrofit	Rebalance airflows, revise control logic, eliminate winter chilled water use	\$269,711	\$129,000	852	10	2.1

Project	Brief Description	Project Cost	Estimated Annual Cost Savings	Estimated Annual Carbon Reduction (MTCO _{2e})	Useful Life	Payback (yrs.)
McDonnell Sciences HVAC Retro-Commissioning & Retrofit	Renovate heat recovery system, reduce / rebalance airflows	\$1,400,000	\$233,744	1,846	10	6
Phase 5 Lighting Retrofit - IWJ, Storz, 4511, 4444, Annex, & Barnard 7th Floor	Replace fluorescent T12 lamps & magnetic ballasts with T8 fluorescent lamps & electronic ballasts	\$150,244	\$19,500	221	10	7.7
Barnard HVAC Retro-Commissioning	Rebalance airflows, convert air systems to variable air volume (VAV)	\$315,600	\$62,013	671	10	5.1
4444 Forest Park HVAC Retro-Commissioning & Retrofit	Convert to variable air volume, revise AHU control logic, install heat pump chiller, install VFD on one existing chiller	\$828,700	\$141,456	1,415	10	5.9
Multi Building Retro-commissioning w/Ameren Rebates	Revise AHU control logic and fix leaking control valves etc. (CIS/CIR, EPNEC, FLTC, SFR/SRE, WOC)	\$707,000	\$353,000			2
TOTAL COMPLETED		\$5,683,255	\$1,390,593	8,225		
In Progress	East Building & East Imaging HVAC Retro-Commissioning & Retrofit	\$1,030,400	\$308,799	1,065	10	3.3
	North & South Building HVAC Retro-Commissioning & Retrofit	\$99,443	\$20,375	283	10	4.9
	Phase 2 Campus-Wide Chilled Water Optimization	\$162,700	\$128,000	3,360	5	1.3

	Project	Brief Description	Project Cost	Estimated Annual Cost Savings	Estimated Annual Carbon Reduction (MTCO _{2e})	Useful Life	Payback (yrs.)
	TOTAL IN-PROGRESS		\$1,644,543	\$676,174	7,198		

Planned ECMs - FY 16 through FY 20	Mallinckrodt	Retro-commissioning, rebalance airflows	\$1,134,128	\$148,659	TBD	5	7.6
	4480 Clayton	Retro-commissioning & energy retrofits	\$91,570	\$31,335	TBD	5	2.9
	McMillan	Retro-commissioning, reduce airflows	\$1,591,548	\$232,063	TBD	5	6.9
	Renard	Retro-commissioning & energy retrofits	\$371,997	\$59,377	TBD	5	6.3
	Wohl Hospital	Retro-commissioning & energy retrofits	\$491,235	\$68,526	TBD	5	7.2
	Medical Library	Retro-commissioning & energy retrofits	\$683,448	\$96,669	TBD	5	7.1
	Maternity	Energy retrofits	\$292,715	\$22,545	TBD	10	13
	SW Tower (6th, 7th and 8th floor)	Retro-commissioning & energy retrofits	\$262,823	\$18,526	TBD	5	14.2
	Olin Residence	Retro-commissioning	\$612,200	\$24,016	TBD	5	25.5
	4488 Forest Park	Scheduling modifications	\$94,789	\$21,053	TBD	5	4.5
	Cancer Research	Retro-commissioning & energy retrofits	\$64,500	\$9,831	TBD	5	6.6
	Pediatrics	Retro-commissioning & energy retrofits	\$675,220	\$55,529	TBD	5	12.2
	TOTAL PLANNED ECMs - FY 16 THROUGH FY 20			\$6,366,173	\$788,129		

Energy Rebates

In FY 2016 as part of our energy and infrastructure planning OFMD received over \$517K in rebates out of \$525K in rebates received from the University.

Project Number	Name (Parent Site)	Current Incentive Total	Trade Ally
006187-WASHINGTON UNIVERSIT	WASHINGTON UNIVERSITY - CENTRAL INSTITUTE OF DEAF RESEARCH	\$330.00	Villa Lighting Supply Inc
006186-WASHINGTON UNIVERSIT	WASHINGTON UNIVERSITY - FLTC	\$429.00	Villa Lighting Supply Inc
006682-WASHINGTON UNIVERSIT	WASHINGTON UNIVERSITY - BENARD HOSPITAL	\$17,292.24	8760 Engineering, Inc
	Totals FY14 and FY15	\$18,051.24	
008056-WASHINGTON UNIVERSIT	WASHINGTON UNIVERSITY SCHOOL OF MEDICINE - SCOTT MCKINLEY RESEARCH E	\$34,446.30	KJWW Engineering Consultan
007531-WASHINGTON UNIVERSIT	WASHINGTON UNIVERSITY SCHOOL OF MEDICINE - SCOTT MCKINLEY RESEARCH E	\$114,427.60	KJWW Engineering Consultan
011114-WASHINGTON UNIVERSIT	WASHINGTON UNIVERSITY (CIS)	\$5,559.39	8760 Engineering, Inc
012068-WASHINGTON UNIVIERSI	WASHINGTON UNIVERSITY SCHOOL OF MEDICINE	\$39,627.35	8760 Engineering, Inc
011662-WASHINGTON UNIVERSIT	WASHINGTON UNIVERSITY - BENARD HOSPITAL	\$30,840.27	8760 Engineering, Inc
011119-WASHINGTON UNIVERSIT	WASHINGTON UNIVERSITY - BENARD HOSPITAL	\$57,520.20	8760 Engineering, Inc
011111-WASHINGTON UNIVERSIT	WASHINGTON UNIVERSITY - CENTRAL INSTITUTE OF DEAF RESEARCH	\$35,200.80	8760 Engineering, Inc
011117-WASHINGTON UNIVERSIT	WASHINGTON UNIVERSITY - FLTC	\$71,005.45	8760 Engineering, Inc
011120-WASHINGTON UNIVERSIT	WASHINGTON UNIVERSITY (CIS)	\$36,253.89	8760 Engineering, Inc
011116-WASHINGTON UNIVERSIT	WASHINGTON UNIVERSITY (CIS)	\$38,419.13	8760 Engineering, Inc
011118-WASHINGTON UNIVERSIT	WASHINGTON UNIVERSITY SCHOOL OF MEDICINE - EPNEC	\$54,583.40	8760 Engineering, Inc
	Total FY16	\$517,883.78	
	TOTAL INCENTIVES	\$535,935.02	

Metering & Solar Projects

The final installations were complete with the Utility Metering Project. Significant progress has been made on report writing to support Base Year for the Indirect Cost efforts.

The most recent solar project, the Taylor Avenue Building solar array, was completed in FY16. Below lists the solar arrays currently on the med school campus

- 4488 Forest Park – Start Date of 3/27/15
- 222 S. Newstead Genome Data Center – Start Date 5/08/15
- 4480 Clayton Ave. – Start Date 6/12/15
- 600 S. Taylor (TAB) – Start date 7/14/15

Sustainability Other

OFMD supported Phil Valko, Assistant Vice Chancellor for Sustainability, with the review and completion of the 2015-2020 Sustainability Plan.

Plan Support includes but is not limited to:

1. Served on and supported University Greenhouse gas committee in a process to update University Goals in a workgroup that met for over 4 months and provided multiple staff to support the overall planning effort. OFMD also referred the consultant who completed this work to the University Sustainability Office.
2. Achieved LEED Gold on 4515 McKinley Project (expected award FY 2016).
3. Assisted GRG with completion of their Bikeway Master Plan.
4. Participated in completion of WUMC Mobility Study which studied ways to improve pedestrian and bike experiences on campus as well as reduce car travel and increase utilization of public transportation.
5. Implemented Green Strategies (centralized trash management) in 6 facilities.
6. Added green space near 4515 McKinley.
7. Created dedicated food truck area with power to reduce generator emissions and noise.

In addition, OFMD has made significant progress in engaging the WUSM community in sustainability awareness. Below is a list of initiatives completed or in planning for FY16.

1. Quarterly SAT Meetings
2. Employee Health Fair (February 2016)
3. Campus Sustainability Day (October 2015)
4. Employee Appreciation Picnic – Composting (September 2015)
5. Holiday Light Recycling Drive (November 2015 - January 2016)
6. Shoe Recycling Drive (January – May 2016)
7. Supported Less is More Campaign and related efforts
8. Supported food composting and food vendor sustainability efforts (ongoing)
9. Implemented Kaldi's at Farrell – A vegetarian café
10. Support Farmers' Market on WUSM Campus
11. Implemented Landscape Standards for the campus that now focus on trees and natural habitat plantings, adding bike resources and reducing campus traffic by moving key delivery areas (like Mail) to exterior of campus
12. Won Best Workplace For Commuters Award from the National Center for Transit Research
13. Met 2016 Recycling goals (waste diversion rate was 12.03% in 2014 and is now 21.2% in 2015)

Bigbelly & Smartbelly Waste Stations

In December of 2015, we placed new waste stations on the WUSM campus around 4515 McKinley Research and the new food truck parking area. These waste stations include:

- Bigbelly – a solar compacting trash receptacle that is self-powered by solar energy and software-controlled. Its capacity is five times greater than a similarly sized trash can. As waste collects, an internal infra-red “eye” senses when the bin is filling and triggers a compaction cycle.
- Smartbelly – a recycling container that is self-powered by solar energy and provides real-time fullness status to limit unnecessary collections and head off overflow issues before they become a problem.

Both stations use a software system, which allows the user to set and manage notifications for when the bins are full. The user has the ability to monitor all the stations, check conditions, real-time fullness level, daily collection activity, etc. Additional benefits are eliminating waste overflow, keeping pest out, reducing carbon footprint, increasing recycling and providing waste diversion rates and invaluable operations data.



Facilities Operations

Improved Efficiency Through the Use of Technology

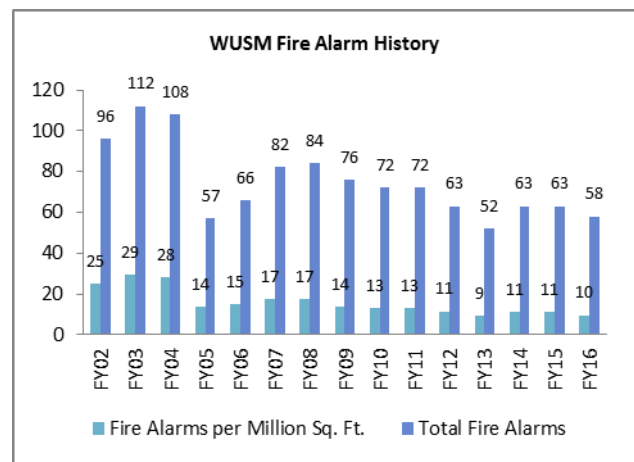
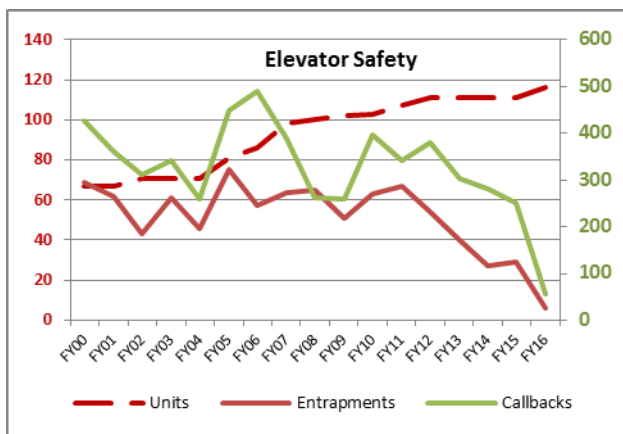
Facilities Operations continues to incorporate technology into work processes to improve quality of service and reduce costs. Below are highlights of technology use and its benefits.

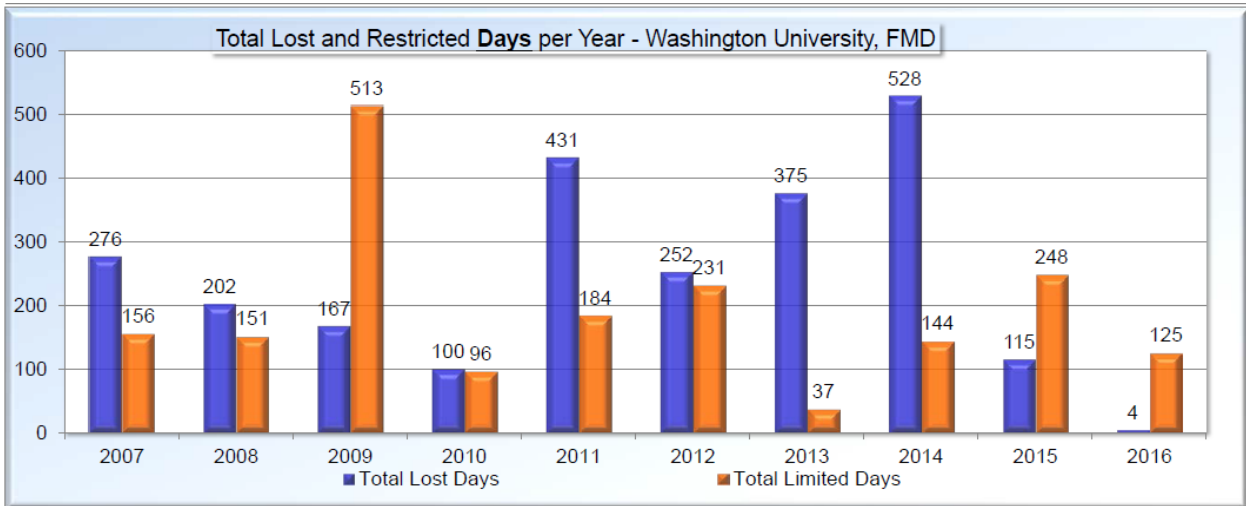
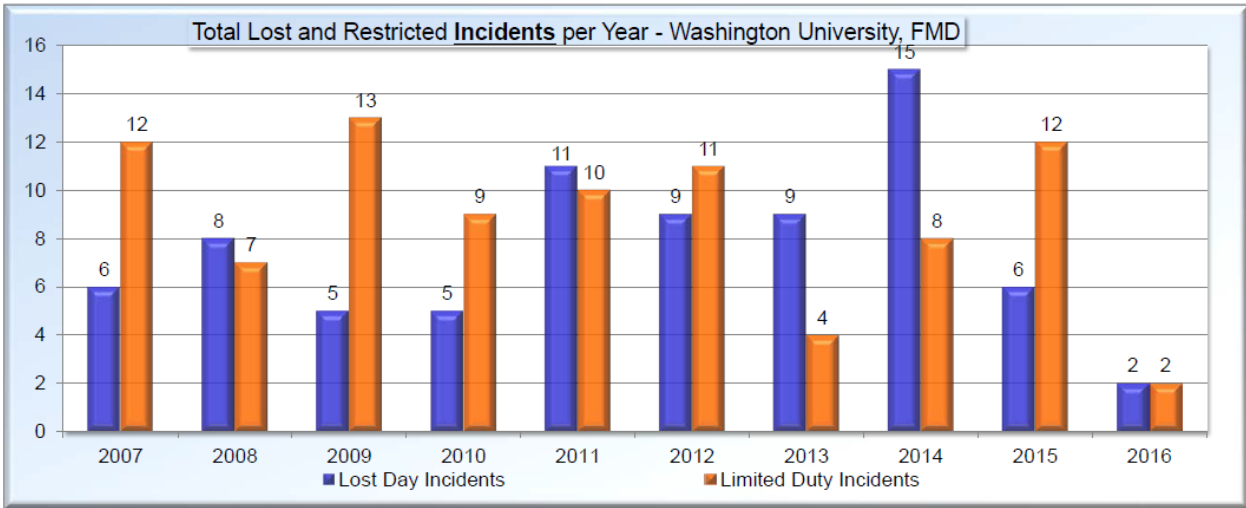
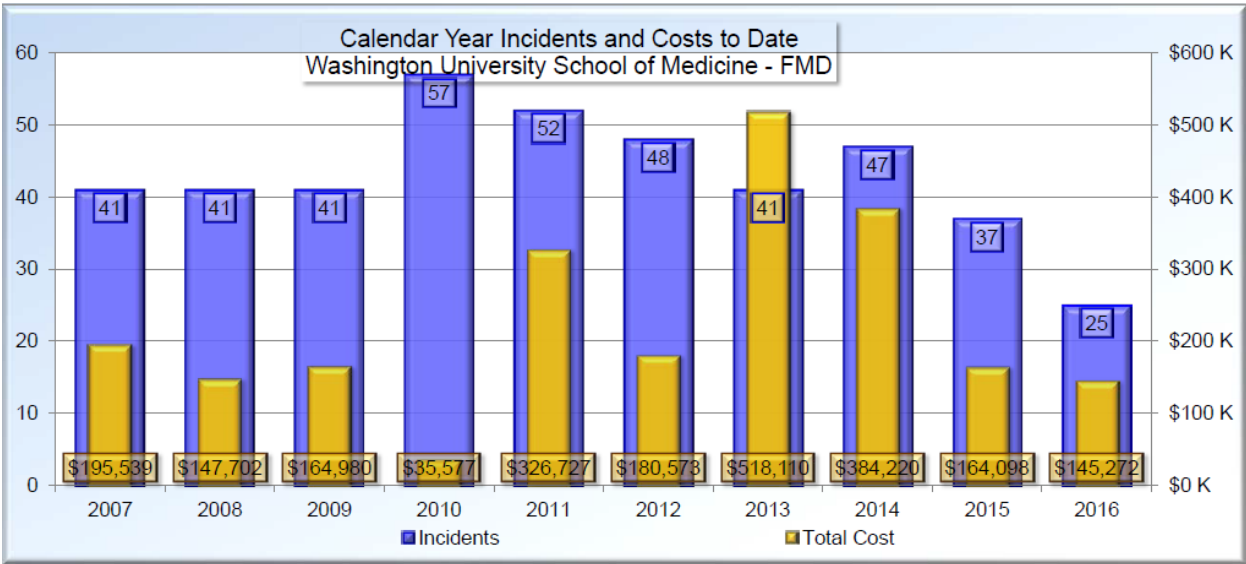
- Flooring types (carpet, tile and “non-cleaned”) have been entered into OSIS for all buildings on the School of Medicine campus. This has improved the quality of cleaning by accurate workload leveling.
- Operations technicians and custodial supervisors were equipped with iPads to give them the ability to see their workload real-time. This has greatly improved the accuracy and response time of their work.

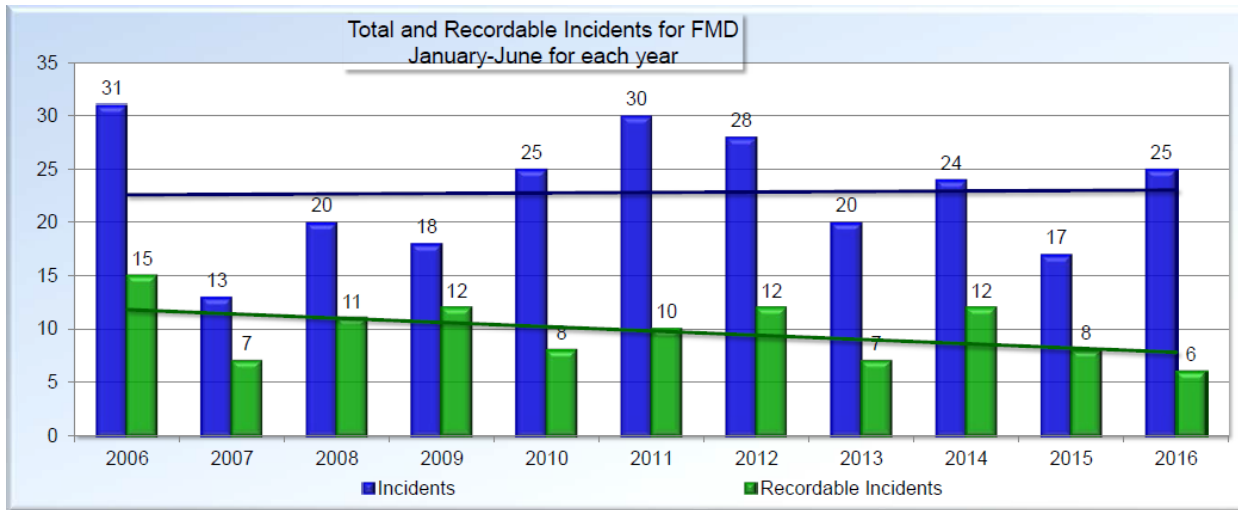
Workplace Safety (Facilities Operations)

Facilities Operations continues to improve the safety of the physical plant for our faculty, staff and students. Below are examples of our efforts.

- Fire alarms and elevator call backs and entrapments continue to improve over previous years despite the campus growth. This trend is attributed to diligent maintenance, operations, and capital renewal.
- The Safety Recommendation Process is a long standing program that provides a voice or our staff and customers to communicate unsafe elements and behaviors. Over its life over \$2M has been spent on safety improvements. To date, in FY16, 11 recommendations were resolved.
- Facilities Operations continues to improve our safety culture through training and employee involvement. In collaboration with EH&S 100% of OSHA required safety training was conducted for the Facilities Operations staff. Both Facilities Engineering and Custodial Services support thriving safety committees. These committees have representatives from each work group that are passionate about safety. As a safety representative, they become subject matter experts as well as advocates for safe facilities and behavior.







Improved Process Efficiency

Below are accomplishments related to efficiency in FY 2016.

- Satellite storerooms were developed for the maintenance technicians. The benefits are reduced travel time for technicians resulting in lower cost per work ticket.
- Flood response rooms were established on campus. The rooms are equipped with all the materials and equipment needed during a flood emergency. This reduces travel time as well, which ultimately minimizes water damage and expense during a flood event.
- Custodial and maintenance offices and shops, equipment rooms and IT closets were rekeyed throughout campus. This initiative improves material, parts, and equipment control, resulting in lowering replacement costs.

Capital Projects Support

The Facilities Operations Department supported the new buildings; 4515 Building, TAB Addition, and the 4522 Building by participating in all phases of the projects. From planning to project closeout and start up, Facilities Operations made a major impact in minimizing project costs, as well as ongoing operating costs. Startup of each of the above buildings was also very successful. Facilities Operations provided a seamless transition to the faculty and staff as they occupied their new space.

Collaboration with our BJH Partners

The Facilities Operations Department has developed, trained and implemented a “Shared Facilities Agreement” with our BJH partners to serve as a roadmap for maintenance, cleaning, and capital renewal of all jointly occupied facilities. Both custodial groups have partnered and outsourced the cleaning of our entries and major walkways for our patients, faculty, and staff.

Improvements in Service Quality

Facilities Engineering, with the help of EH&S, made significant strides in the maintenance and operations of our critical facilities that insures safe and reliable environments for our researchers. Below are some of the accomplishments:

- Developed an annual re-commissioning for all BSL3 laboratories.
- Performed the commissioning and participated in the startup of a new BSL3 and an ABSL3 lab.
- Identified and labeled all critical equipment, including building automation graphics, that support all BSL3 and ABSL3 labs.
- Developed and implemented critical alarm tracking and response guidelines.

Custodial Services made significant progress in improving the quality of their services. The new employee onboarding process was refined with the help of Human Resources, to improve the quality of our staff as well as improve ongoing staffing levels. Training as well as process improvements were implemented to further improve quality of service:

- Cleaning Boot Camp was implemented for all new employees to ensure quality of service.
- Annual floor care training was conducted for the Floor Care Team that ensures a higher quality product.
- An equipment inventory/tracking process was developed to provide proper resourcing of our custodians.

Custodial Services conducts inspections as a quality assurance practice.

Other Savings

The Data Center Maintenance was brought in house. The annual savings is \$100k/year. Also, VBelts were installed on large air handlers threw out campus. Annual maintenance and energy savings is projected to be \$22,262/year.

Shared Service Leadership, Projects & Programs – Other

Served or serving as the project manager, chair or team facilitator on the following efforts for Information Technology:

IT Physical Operations University Governance Subcommittee

Assistant VC, Assistant Dean of OFMD serves as the chair and lead on establishing the strategic level of technology needs for the following University operations. Committee planning and staff support are provided by OFMD Business Administration and in coordination with WashU IT.

Scope of committee charge includes the following areas:

- 1) Master Planning
- 2) Capital Planning

- i) New Construction
 - ii) Capital Renewal
 - iii) Infrastructure
- 3) Real Estate Management – leasing, contracts, easements, etc.
 - 4) Capital Projects Project Management Program
 - 5) Space Management & Space Information Systems Documentation
 - 6) Renovation and Renewal activities

Other General Operations including in committee overview include:

- a) Grounds
- b) Custodial Services
- c) Waste Management
- d) Building Automation
- e) Mail, Receiving and Labor Services
- f) Maintenance and Engineering
- g) Food Service
- h) Security Services
- i) Access Control
- j) Asset Management (fixed, non-fixed)
- k) Utilities
- l) Transportation and Parking

Physical Operations Subcommittee goals are as follows:

- Consolidate and/or integrate systems and services among Danforth campus facilities, School of Medicine facilities, Danforth operations and other WUMC partners, where appropriate
- Improve efficiency by eliminating redundant and manual processes
- Adopt university-wide standards
- Automate wherever possible

Technology Projects Approved 2016

In FY 16, we presented key projects related to our strategic roadmap and received approval and funding for all submissions:

1. Implement OSIS for Danforth
2. Migrate to Archibus/OSIS from AI Spaces
3. Replace Building Profile Systems (BPS) with OSIS
4. Replace Web survey
5. Business Continuity Software
6. PMWeb Phase II
7. Skidata (transportation & parking)

Public Safety Integrated Technology Planning – Alignment of Campus Security Technology

WUSM led the planning for Public Safety Campus Collocation, as well as the Campus Security Technology Alignment Plan. Through these efforts, we worked to create a unified security technology platform for the School of Medicine campus with initial partners being WUSM, BJC, BJH and SLCH. This is critical to aligning operations to a “point of service” collaborative organization over time. This will also align contracts, campus services, dispatch and 911 and will improve services, reduce cost and expand security services through joint collaboration and increased the depth of personnel in key campus areas, allowing for the redeployment of assets by function.

- Access Control and Badging
- CCTV/Surveillance
- Fire Alarms
- Radio Communications
- Bike patrol & campus security patrols
- Dispatch
- Data Distribution Infrastructure
- Support Systems/Equipment

- 1) Access Control integration to Lenel platform is well underway and will be completed by 2018 – allowing \$3.5M in infrastructure renewal and alignment of platform, then actual badging and ID services (future).
- 2) Transportation and Parking Systems is well underway with project to implement BJH technology platform \$750K investment.
- 3) The total investment in integrated technology strategy is estimated at \$9M.

Space Planning Survey Timelines & Technology Solutions

We also worked with the CFU IDR (Space) team to improve the implications of the former schedule for the annual space survey which will enhance operations when implemented this year.

FY 2015

- 4/7 – space data is closed
- 4/7 – 6/15 – WUSM survey
- 6/15 – WUSM deadline
- 6/15 – 7/16 – CFU surveys recharge
- 7/16 – WUSM freeze
- 7/16 – 9/11 – CFU finalizing data
- 9/11 FY2016 – space data is open

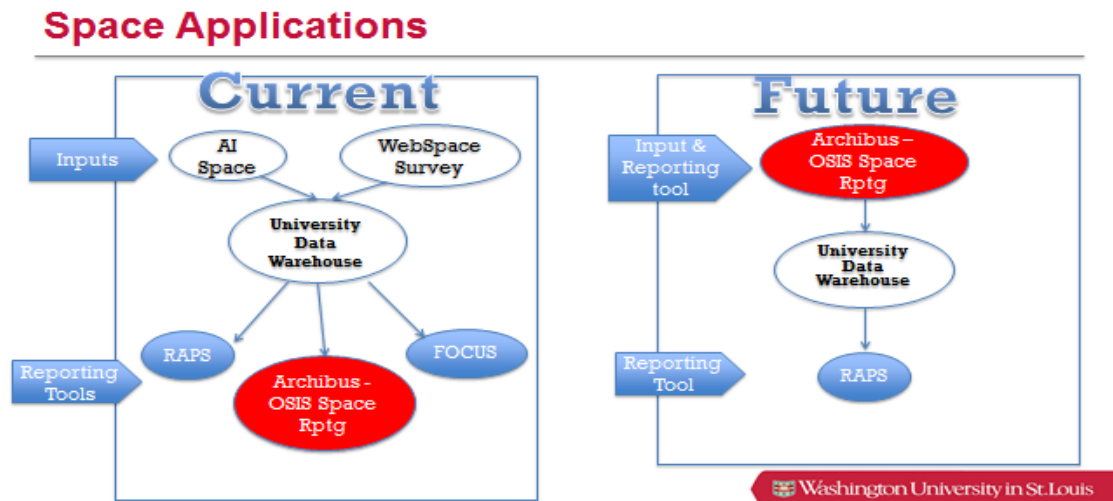
FY 2016

- 6/1 – space data is closed
- 6/1 – 7/15 – WUSM survey

- 7/15 – WUSM deadline
- 7/16 – space data is open

Space Management Systems Planning

We completed a thorough study on the space management needs of the University and received approval to proceed with planning in summer of 2016 for the following work. Our project has begun implementation and will be completed in FY 2018.



- BJH is currently reviewing Archibus with our Planning Team and may consider moving to the University System. If this occurs that would be a significant in our joint planning efforts.

PMWeb Phase I – Project Management and Planning Technology Implementation

AVC/AD of OFMD served as one of two primary project Stakeholders on this project and led recent recovery effort due to issues that resulted during implementation as a result of the IT Project Management change/IT restructuring effort. This work encompassed support of PMWeb implementation both financially and operationally. This technology streamlined the management of capital projects from planning concept, to design and construction to scheduling and execution, helping ensure that projects are completed on time and under budget. It will also support capital planning and renewal through an integrated planning and project delivery platform.

Goal Statement

The goals of this project are:

- To implement PMWeb portfolio management system
- To integrate with the University financial system to eliminate duplicate entry where possible, generate contracts, generate all financial functions currently in CAS, create reconciliation workflows and execute project workflows.
- To authenticate with WUSTL Connect and use WUSTL key as the authentication login.
- Integrate with AIS to invoice charges directly via webservice.

- To create a future governance structure and upgrade agreement.
- To align PMWeb with the WashU IT Enterprise Applications support structure, as defined in the Physical Operations Technology Roadmap.

Phase II of PMWeb:

- To integrate with service ticket and asset information system.
- To integrate with MarketPlace for resource management.
- Ability for external contractors to submit PCOs.

WUSM Auxiliary Contract & Service Management

This year, we improved operations, reduced costs and enhanced revenue on the following contracts – year end projections noted below. Both Food Service and Housing changed to a point of service, customer based model and changed service partners. We will continue to work to expand food service options on campus.

Housing: Olin Residence Hall

- \$122,802 revenue above plan
- \$119,364 below expense plan due to process improvements
- \$78,072 in reduced O&M due to purchasing efficiencies
- Achieved \$276,917 above planned income

FY16 FMD Budget vs Actual comparison

Olin Residence Hall			
	FY16 Original Budget	FY16 Forecast	Variance
Dorm Rent/Income	(\$850,150)	(\$835,886)	(\$14,264)
Consumables			
Custodial Staff	\$221,149	\$112,098	\$109,051
Dorm Mgt	\$67,689	\$61,365	\$6,324
Bldg O&M	\$505,600	\$359,713	\$145,887
Dean Tax	\$23,000	\$23,000	\$0
Net Results	(\$32,712)	(\$279,708)	\$246,996

Food Service Operations

Food service operations were transitioned from Aramark to Bon Appetite over a year ago and the services in the Shell Café have been expanded in hours, seating and service. Two additional locations will be in FY 17 and will include a second Kaldi's operation on MCC Link Level Two and a new Bon Appetit location that will replace Starbucks in McDonnell Pediatrics. Customer satisfaction has increased significantly and financial viability remains strong.

May FY 16 Food Service Executive Summary

1. Shell Café

- a. Revenue was 13.6% over budget for the month and 24.2% over last year for the same month. Revenue is currently 15.9% over budget YTD and 19.2% over last year YTD.

2. Catering

- a. Revenue was 48.7% over budget for the month and 50.7% over last year for the same month. Revenue is currently 9.2% under budget YTD and 24% over last year YTD.

3. Kaldi's

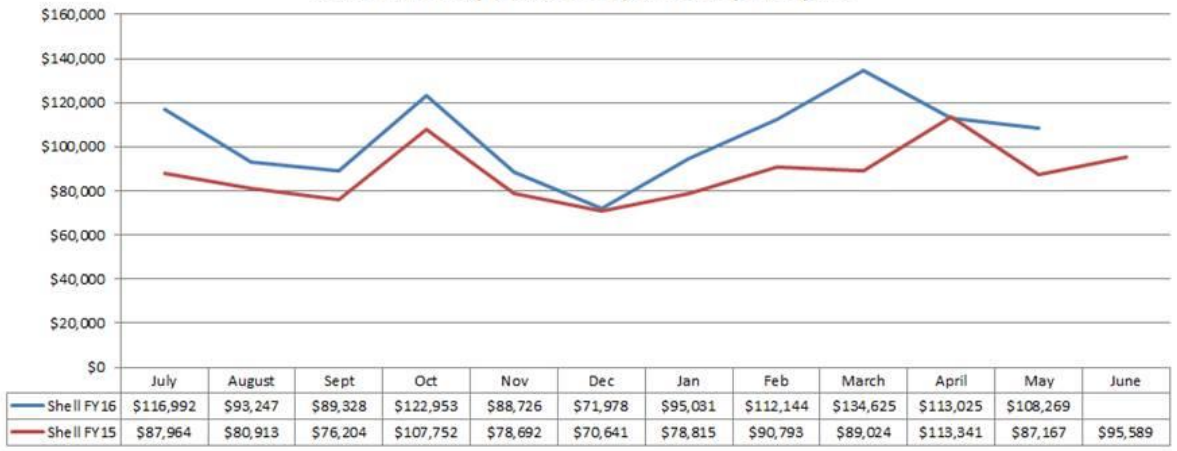
- a. Revenue was 20.5% over budget for the month and 1.3% over last year for the same month. Revenue is currently 28.7% over last year YTD.

Food Service Customer Counts

Kaldi's covers for the month were 13,446 up 2434 covers from last year for the same month. Covers are up 24,916 from last year YTD.

Shell Café covers for the month were 18270, up 1589 covers from last year for the same month. Covers are up 19093 from last year YTD.

Shell Monthly Sales Compared to prior year



Catering Monthly Sales Compared to prior year



FLTC Monthly Sales Compared to prior year



Bookstore

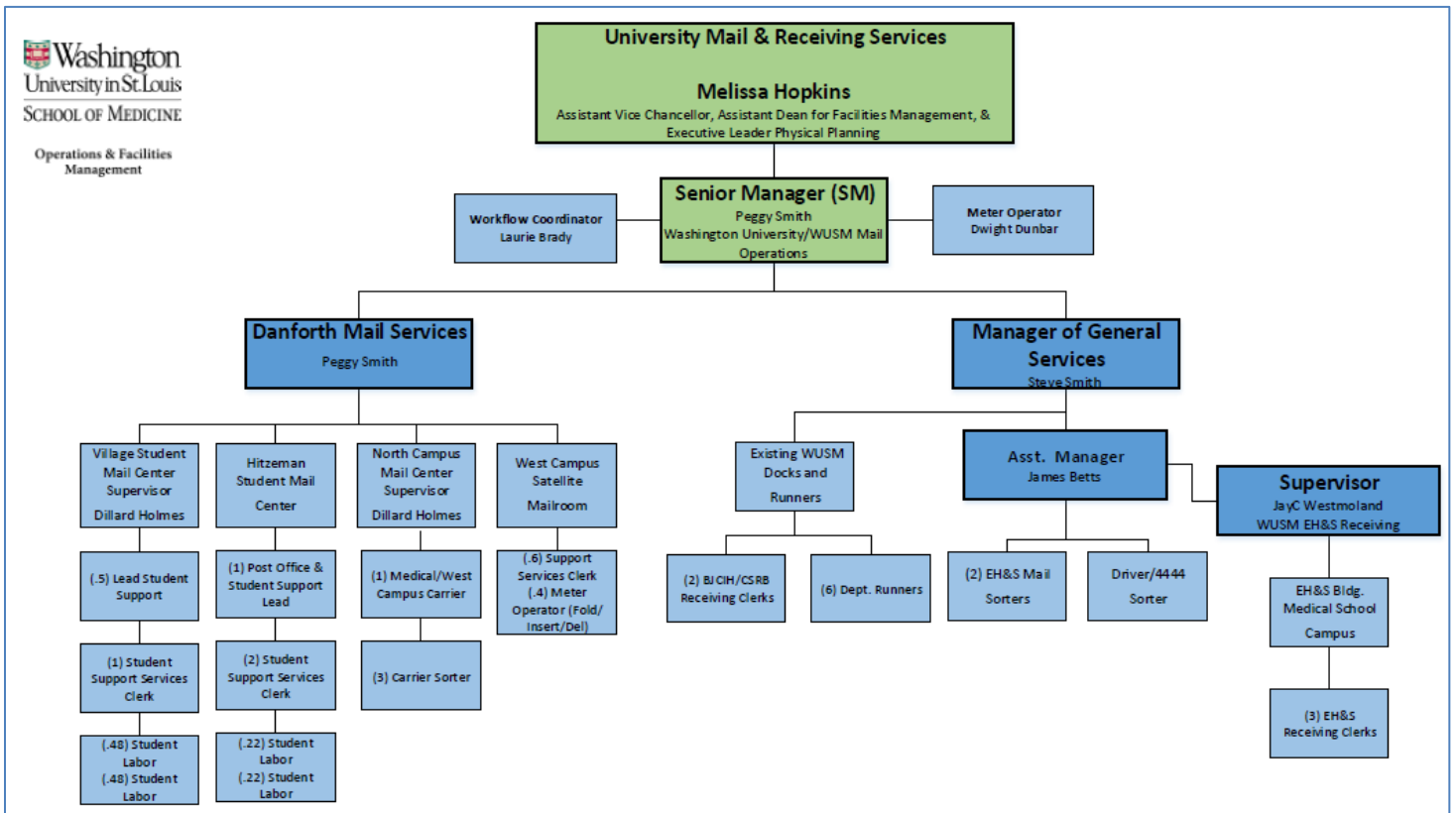
The Barnes and Noble Bookstore & Café will close in McDonnell Pediatrics on 12/8/2016 and reopen as a Follet store in MCC in spring 2017. WUSM will then receive positive net income from reduced and improved store model. The former bookstore space will be renovated for the EPIC medical records physician training for 2 years, after which it will be used for Pediatric faculty office needs on campus.

FedEx Office

In partnership with University Resource Management, we have entered into a preliminary agreement with the FedEx office for two campus locations (CSRB Link and MCC bookstore). These locations will serve all WUMC partners. Employee and business production support will be available in both locations and all revenue from this new auxiliary service will be an additional resource for the Dean at the School of Medicine. Services would include all services traditionally offered in a FedEx office operation.

University & WUMC Mail Services

OFMD assumed the management of the University Mail and Delivery options in FY 2015. \$237K of savings achieved to date. BJC is a partner in space and unified process, but not in structure.



Mail & Receiving Efforts Continued – WUSM Management Council

Provided project management, committee facilitation and staff support for MC Runner Review subcommittee and provided project management support to final recommendations. A partial implementation was supported by WUSM Management Council and will be implemented by FY 2018. Over 5 years, the savings projected will be \$1.1M.

Other Shared Services Leadership Work Completed or in Progress (AVC/AD OFMD)

1. IT Collocation Planning “strategy” support (John Gohsman) – assumed planning leadership at request of Danforth in FY 2015
2. Completed Plan for Tyson “Memorial” Site and Family Visit Relocation – work now funded and schedule being developed for implementation in FY 2017
3. Gender Neutral Restrooms (Student Affairs) – added 70 gender neutral restrooms to campus in support of campus diversity needs
4. Campus Mobility Project Support (WUMC) – Campus Task Group Member
5. Community and Neighborhood Security Project Task Group Member (WUMC)
6. TIGER Grant and Boyle Station Improvement Planning Participation (Community) – Member
7. CWE Phase II Enhancement Project Lead (WUMC) – Campus Lead
8. Public Realm Planning Subcommittee (WUMC) – Campus Co-Chair
9. WUMC Board – added in FY 2016 as member
10. Administrative Domain IT Committee Member – Since 2015
11. Data Warehouse Domain IT Committee Member – New Committee
12. Urban Planning Committee Member – Since 2014
13. Joint security Operations Leadership (Project Manager)
 - a. Led the project to ensure the Joint Operations with BJH/MCC security/EM systems would take place, including funding meetings for capital issues related to BJC
 - b. Systems planning completing DD out to bid soon, ongoing operational discussions, weekly meetings – will align all security and safety technology platforms on campus
14. Chair & Staff WUMC Facilities Officers meetings (Monthly) – all partners for physical planning
15. PM Web – IT Recovery Lead – issues with IT management and PM Web were addressed in summer 2016
16. Support of WUMC, Public Realm, Campus Renewal, TFC Planning & University Community Outreach Programs
17. Assisting with WUMC Runner Review – second chair on planning with purchasing and Management Council Committee
18. Chaired University Ombudsperson search and hired a successful candidate in support of EVC of A&F

OFMD Community Outreach Activities – FY16

School Supply Drive – August 2015

OFMD participated in the school supply drive benefitting Adams Elementary. In addition to collecting supplies and cash, OFMD staff coordinated collection and delivery to the school.

United Way – October – December 2015

OFMD held several 50/50 raffles, a BBQ, and a bake sale to benefit the United Way. The total raised from special events was \$1,297.56. 12.65% of all staff committed to payroll pledges, totaling \$4,826.58.

Holiday Adopt – a – Family – December 2015

OFMD adopted a family of 4, fulfilling all items on their wish list by raising over \$800 from 50/50 raffles and a bake sale. Gift cards totaling \$300 were also donated and given to the family.

Holiday Food Drive – December 2015

Food and personal care items donations were accepted at the Annual Holiday and Recognition event to benefit Operation Food Search. 2 barrels were filled.

PB&Joy Food Drive – April 2016

OFMD held a 50/50 raffle and collected food donations from April 7 – April 19, 2016. OFMD raised \$855 and over 1,900 pounds of food to benefit Operation Food Search.

Other General Campus Improvements & Projects

Lactation Room Program Expansion

- 1) Since the program began in January of 2014, we have expanded from 21 lactation spaces to 37 spaces.
 - a) Over the next 2 years, we will have 12 additional spaces for a total of 49 spaces on the BJH/WUSM campus.
 - b) Of the original 21 spaces, most have been renovated. All WUSM rooms include proper signage, framed photos, comfortable chairs, fridges, microwaves, mirrors, etc.
 - c) Currently, 11 rooms have hospital grade breast pumps.
 - d) All WUSM-managed, multi-user (non-restroom) lactation rooms now have added security with the installation of badge readers.
 - e) Raised awareness of the program by hosting a table at the Health Fair for the first time, adding information to digital screen around campus, and expanding the partnership with HR to include program information at New Employee Orientation.
- 2) Won Gold Award Missouri Breastfeeding Friendly Workplace (see article at <http://www.barnesjewish.org/news/?id=5032&sid=2&nid=3094>).
- 3) Led Efforts for WUMC to put the following programs in place in coordination with Campus Partners
- 4) Established Web Site and Key Resources and Published Best Practice Paper (see hyperlinks below)
- 5) Raised awareness of the program by hosting a table at the Employee Health Fair for the first time, adding information to digital screen around campus, and expanding the partnership with HR to include program information at New Employee Orientation

[Best Practice Document for Lactation Rooms](#)

[Map of Lactation Rooms](#)

[Lactation Room Brochure](#)

[Lactation Room List](#)

[Service Levels – WUSM](#)

[Workplace Lactation Policy – BJH](#)

[Workplace Lactation Policy – WUSM](#)

<http://facilities.med.wustl.edu/lactation-rooms/>

Report Summary

This report is an executive review of priority programs, operations and projects and is not representative of all department efforts. For more information on OFMD and/or ongoing strategic priorities, please visit our [website](#) or contact Melissa Hopkins Assistant Vice Chancellor and Assistant Dean of Operations and Facilities at Hopkinsm@wustl.edu