Facilities Management Department
A Division of Business and Finance
Annual Report 2019
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A Message from the Associate VP for Facilities Management

Insights from 2019

2018-19 was another positive year for Facilities Management and WMU. The trend of many retirements and new employees continue as we wish the best for employees that dedicated a good part of their life to WMU and welcome new team members to the FM family. The campus footprint and building assets also changed with the times. Elmwood Apartments are gone and cranes are seen across campus. The coordination and engagement by all FM employees is making a difference to our campus customers and student success. All FM units continue to focus on metrics and customer service.

Our IT Unit was busy with hardware and software updates. Labor Relations has ramped-up training and negotiated the new MSEA agreement in two joint sessions. Organizational Performance and Effectiveness Unit has improved the project and subcontracting processes and supports team building/management training. The Architecture and Design Division completed the on-line furniture ordering product, guided the new Facility Standards, supported all of the small and capital project designs, and earned design awards at the AUID conference. The Construction Division inserted many private sector management practices and engaged in 378 projects. The Engineering Division completed numerous building MEP, paving, and utility projects. Their GIS area has proven to be extremely helpful to all FM units. The Planning and Capital Projects Division has been extremely busy with capital outlay planning, College of Aviation addition, BTR 2.0 site work, Hilltop Village master plan, Arcadia Flats housing, the new Student/Dining Center, and planning for renovating Dunbar Hall.
The Operations Division has a new Senior Director, Steve Gilsdorf. The Custodial Unit earned Green Seal recertification, completed a reorganization, and added a Recycling Manager. Landscape created a new Master Plan, revised and implemented a Tree Care Plan and Fund, and earned a 4-star Landscape Management Accreditation for the 5th consecutive year with the PGMS. Maintenance Services earned an APPA Award of Excellence, changed the chiller maintenance program, and managed improvements with BIM records and elevator upgrades. The Service Center, in conjunction with Maintenance, lead the change for FM service communication with the County Consolidated Dispatch Center. They were busy with 10,249 calls and processed 22,641 work orders and 17,751 web service requests. The Power Plant continues a very safe environment with 15 years of no employee lost time injuries. Employee Professional Development through the Joint Labor-Management Training Committee continues to be very successful. The new peaking engine project has evolved this past year and will prove to be very cost effective in the coming years.

Every FM Division is at the top of their game and performing at a high level. They continue to change with technology, best management practices, customer service, and data driven metrics. It’s been a fast and rewarding year as we continue on our journey for facility excellence.

Pete Strazdas
Associate Vice President
### Administration Division

**Business Operations**

**FM PROJECTS JULY 2018 - JUNE 2019**

Total Number of Active Projects **378**
Total of Project Budgets **$275,534,860**

Total Billed **$ 41,521,525**

**BUDGETS & EMPLOYEE INFORMATION**

<table>
<thead>
<tr>
<th>Department</th>
<th>Budget FY 2017-18</th>
<th>Benefit Eligible Employees</th>
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<tbody>
<tr>
<td>Planning</td>
<td>$ 787,232</td>
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<tr>
<td>Construction</td>
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<td>Architecture and Design</td>
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<td>Engineering</td>
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<td><strong>Operations</strong></td>
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<tr>
<td>Maintenance</td>
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<td>Custodial</td>
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<tr>
<td>Transportation</td>
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<tr>
<td>Power Plant</td>
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<tr>
<td>Landscape</td>
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<tr>
<td><strong>Total</strong></td>
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<td>Administration</td>
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<tr>
<td>Network Services</td>
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<tr>
<td>Associate VP</td>
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<td>Business Operations &amp; Labor Relations</td>
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<td><strong>Total</strong></td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$ 54,305,778</strong></td>
<td><strong>384.0</strong></td>
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**Information Technology Unit**

**Accomplishments**
- Developed a tool for departments to claim spaces in buildings.
- Installed and deploy new storage array.
- iPad replacement. Replaced the oldest 1/3 of devices with a new generation iPad Mini.
- Deployed Windows 10 to all new computers and laptops.
- Upgraded windows 10 to most of the existing computers/laptop.
- Computer refresh for Maintenance, Landscape, Business Operations.
- Deployed a new desktop imaging environment - SCCM.
- Refreshed all the mechanical room computers with Win 10 repurposed machines utilizing Webstart and legacy application.
- Upgraded iPad operating system and TMA application.
- Stores reporting and moving toward less reliance on paper tracking.
- Refreshed TMA executive dashboards using SQL.
- Web camera for construction of student center.
- Supported stores for year-end inventory.
- Month-End process enhancements.
- Cleaned up SQL injection issue with some webpages.
- Investigated and deployed PowerBI for space claim initiative.
- Created CMS pages for online purchasing of chairs, desks, and storage.
WESTERN MICHIGAN UNIVERSITY
INFORMATION TECHNOLOGY
ORGANIZATIONAL CHART
AUGUST 2019

Director
Erik Dantes

Network Administrator
Senior
Mark Scafaria

Database Specialist
Jonathan Orweller
**Labor Relations Unit**

**Accomplishments**

- Received, heard and answered all step two AFSCME grievances in a particularly busy year with over 40 grievances.
- Attended all step three grievance meetings.
- Participated in the bi-monthly meetings of the Contract Administration Team with the goal of discussing contract administration issues for the AFSCME bargaining unit. Assisted the Labor Relations Director with three trainings for all management staff of AFSCME employees.
- Worked with the Power Plant training committee and kept Department of Human Resources apprised of all activity. This included quarterly meetings with the Vice President, AVP and the Labor Relations Director.
- Continued meeting with division directors to work on common threads and work towards consistency of contract administration and disciplinary actions.
- Continued in leadership role on the executive boards of the Kalamazoo Area Labor.
- Participated in ongoing professional development: Miller Canfield annual employment seminar, Kalamazoo Area Labor Management monthly speaker series, MiAPPA conferences.
- Participated as a member of the management team in negotiating the MSEA collective bargaining agreement; reached a new three-year contract in two joint sessions.
- Participated in interview panel for multiple positions with the goal of complying with university policies, employment laws and diversity standards.
Organizational Performance and Effectiveness

Accomplishments

Project Processes
- Continuing collaboration with all FM Divisions and personnel in assessing current project processes for accuracy, continuity and emulation of industry defined standards and practices.
- Continued documentation of new and amended project processes and related project phases in the Facilities Management Project Manager Handbook.
- General project process education through personal interaction and presentations to various Facilities Management and client groups.

Subcontracting
- Amended the subcontracting notification procedure providing a more comprehensive process including more advanced notice, more detailed task and time-line descriptions.
- Provided subcontracting training for FM personnel.
- Assessed and provided AFSCME notifications for all Facilities Management subcontracted work.
- Provided a monthly forum for subcontracting discussions with AFSCME representatives and other WMU departments as related to new project approvals, ongoing projects, subcontracted work and the notification process.

Project Execution
- Assessed all new project requests and assigned project managers.
- Continuing Project Manager education and process oversight - Ongoing weekly meetings with Project Managers, FM Directors and Technical Specialists to identify and document challenges, successes and improvement strategies in all areas of construction planning and execution.
- Provided semi-monthly meeting opportunities for non-Facilities Management construction assets to address coordination, progress and process questions for past, present and future projects.
Facilitated weekly discussions with Facilities Management Operations Administrators in areas of professional development and intra-organizational coordination.

Advice and training for anomalous project issues so subscription to existing processes and policies is maintained.

**Additional continuing and future initiatives**

- New Project Manager Onboarding
- Project Debriefing Protocol
- Options and Assessment of Project Management Tracking Technology
- APPA / MIAPPA Project Management
- Professional Development for FM management including Color Code and various best management presentations
- Construction Team and Client Surveys
Architecture and Design Division

Accomplishments

Services include, Architecture, Interior Design (ID), Signage services for campus community. Design drawings/specification, codes, life safety, review, furniture procurement (FFE), construction administration, warranty, and signage.

- Capital and Large Projects Design Review: Aviation, Arcadia Flats, Student Union, CHHS Physical Therapy, and Waldo Library.
- FFE: Arcadia Flats $1.3M Furniture bid package in progress; 80% complete.
- Space Allocation: Provide support through analysis for campus space requests and relocation needs. Welborn, Woodlawn Place, Bernhard Center. In progress, 5% complete. Newly added support role August, 2019.
- Capital Outlay Report: 5% complete; newly added support role August, 2019.
- Project list highlights: Adult Wellness on Cork Street, Waldo Library various renovations, Student Recreation Center (SRC) rock climbing wall, Dalton Center dance floor, EUP renovations in Ellsworth, Student Success relocation from Seibert to Ellsworth, Sanford Center and Haworth donor display construction completed, Kohrman classroom 3301 renovation. Numerous renovation and furniture/finishes projects completed including ADA signage: Classrooms, public spaces, toilet rooms and staff spaces in Dalton, Floyd hall, Moore, Schneider, Sindicuse, Sprau, SRC, Trimpe, Rood, Valleys, Waldo, Wood, etc.
- 2019 GF Building Interior Asset Analysis: Classrooms, public spaces and toilet rooms; student audit complete. Academic partnership offering FM internship experience; AnneMarie Pusateri, ID student received course credit this year.
- University Design Guidelines for FM; 70% complete.
- Promote WMU culture through education, professional development and global diversity participation. NCIDQ certification (K. Quada), APA Rep for university’s SRM Revenue Allocation Committee, AUID and Student Advisory Board Reps
- FM Excellence process improvements in collaboration with FM divisions; ongoing
- Productivity exceeded billing expectation for design services, FY 2018/2019.
- Design survey client satisfaction average score:10. Rating scale 1–10 (Low/High)
- Website Improvement: Bronco Furniture Online Initiative; 100% complete.
- 2 National Awards: First Place and Best of Show, Waldo Library Dean’s Suite Renovation, Association of University Interior Designers (J. Lenczycki).
WESTERN MICHIGAN UNIVERSITY
ARCHITECTURE AND DESIGN
ORGANIZATIONAL CHART
AUGUST 2019

Director
Eleonora Philopculos

Project Architect
Doug Lloyd

Interior Designer
Julie Lenczycki

Interior Designer
Vacant

Interior Designer
Karen Quada

Sign Shop Coordinator
Trent Hines
Construction Division

Accomplishments

Projects and Construction continues to bring the private sector professional construction management process to WMU. We complete hundreds of small to midsize projects with efficiency and accountability while giving consult to the capital projects in the area of means/methods, constructability, schedule, and budget.

Selected projects for consideration are:

- Adult Wellness Center: 110 Cork Street
  Renovation/remodel of an existing child daycare facility into a WMU adult wellness center. Project includes: gutting and remodeling of entire interior space (plumbing, mechanical, electrical and architectural) along with new exterior siding and a parking lot addition.

- Trimpe Room 1231
  Walls painted, new carpet installed, and counter top replaced. New chairs and mobile screens were also used to freshen up the room.
• Walwood Heat and Pump Replacement

Completed the replacement of the final 17 Heat Pump units in Walwood Hall. This was the culmination of a 5-year effort to replace all 71 Heat Pumps in Walwood Hall with Geothermal Heat Pumps.

• 1201 Short Rd Repairs

New laundry on 2nd floor, retaining wall at pool, new pool liner, new gas line to pool house, repair residential east facade for moisture barrier

• McCracken Hall Demolition

Razed building to provide space for the new Student Center and 3rd floor Dining Facility.

• Waldo Library Improvements-first floor

First floor renovation of flooring, lighting, ceilings, and HVAC
Engineering Division

Accomplishments

- Paving - Completed paving in parking lots 6, 12, 40, and 51
- Completed PASER condition analysis of the University streets and parking lots
- Parking ramp improvements - Completed at Miller, Ellsworth, and the College of Engineering ramps
- Stormwater improvements - Lots 40, 51, 9, and 54
- Electrical - Replaced sections of cable in the G and H feeders
- Deferred Maintenance - Developed project scopes and estimates for projects for both Accounting and Finance, and Student Affairs
- Initiated troubleshooting efforts on the Chillers at the Valley Dining Center
- Lead structural analysis of exterior walls at Stadium Drive Apartments
- Developed Key Performance Indicators for the Engineering Division
- Completed the Underground phase of the SRC/UA chiller expansion project
- Completed to award of contract the mechanical portion of the SRC/UA chiller expansion project
- Completed to award of contract the mechanical portion of the Read Arena roof top unit replacement project
- Completed Standard Specification updates and guideline revisions for future construction projects
- Completed design for the upgrade to the HVAC for the Waldo Library rare book room
- Held continuing education sessions for the Engineering Divisions as part of staff meetings
- Vault renewal - Clean and repair electrical vaults.
- Campus wide cable replacement. Replace old and damaged cable
- Replace portion of G feeder - Replace old and damaged cable
- Replace portion of L feeder - Replace old and damaged cable
- Switchgear Maintenance - Clean, test and repair electrical switchgear
- SRC PoolPak Replacement: Remove existing AHU1 PoolPak dehumidification unit and installation of replacement Seresco machine feeding the University Natatorium
- Mill Auditorium Chiller Electronics Interference at Soundboard: Chiller carrier frequency being picked up by audio equipment was diagnosed and reduced through factory rep upgrades.
- College of Engineering and Applied Sciences - Lab Hood Controls Upgrades: Upgrade the existing Phoenix HVAC lab Controls systems from, Celeris 1 System to current Celeris 2 Vantage System phase; second to final phase
- Miller Auditorium Repair Hallway Heater: Diagnose design and support maintenance services efforts in the restoration of building hydronic perimeter heating which was disabled and abandoned several years previous.
- Lawson Concessions Add VAV to AHU-5: Demo failed Air handling unit AC-1 and refeed the concession area with a VAV box served by AHU-5
- Haenicke MEP for NMR Spectrometer: Install mechanical, electrical and plumbing to facilitate new departmental NMR. A new departmental compressor was installed in the space and HVAC was tested and adjusted to meet the demands of the new equipment.
- Steam vault SC-094 and SC0-096 Repairs. Replaced steam traps and trap piping in vaults. Temporarily repaired condensate piping in SC-096.
- Installed steam meters in Waldo Library, Read Arena, and SRC.
- Replaced leaking valves in steam pressure reducing station at SRC
- Installed new isolation valve and spool piece for Davis Hall Heat exchanger
- Installed screen on tunnel person hole covers to eliminate leaves and debris from entering the tunnel and damaging sump pumps
- Marked utilities and/or gave positive response for 340 MISS DIG Tickets.
- Clipped and packaged GIS data for multiple campus projects for outside firms: Arcadia Flats, Activity Therapy Demo, McCracken/New Student Center, Power Plant Generator Install, Paving Projects (Lot 51, Lot 41, Oliver Ln)
• Multiple GIS data updates to all utility systems and base layers (excluding TCOM). (refined accuracy & added more attribute info)
• Revised the Land book of WMU Board of Trustees properties
• Recorded and compiled all GPS points of the stakes from the recently surveyed boundary line (Stadium Dr. from W. Michigan to Howard St.)
• Generated the 2019-20 Parking Map
• Generated the 2019-20 Summer Projects map
• Generated explosion buffer, closes Fire Stations, and utility map for Paper Pilot for EHS.
• Generated list of coordinate points for all WMU parking lots to Public Safety/Central Dispatch
• Set metadata standards for all new GIS data.
• Obtained MISS DIG certification
Planning, Space Management and Capital Projects Division

Accomplishments

Updated the Five Year Capital Outlay Plan https://wmich.edu/facilities/planning/5year

Started Construction of the College of Aviation Renovation and Addition Project https://wmich.edu/capitalprojects/aviation

Started Construction of the Business Technology & Research Park 2.0 Design https://wmich.edu/capitalprojects/httpswmicheducapitalprojectsbtr2

Completed the south neighborhood master plan (Hilltop Village)

Completed design and started construction of the south neighborhood housing project (Arcadia Flats) https://wmich.edu/capitalprojects/southhousing

Completed design and started construction of the new student center and dining facility https://wmich.edu/capitalprojects/studentcenter

Initiated the analysis of type of project delivery for the Hilltop Village http://www.fm.wmich.edu/ap/webcam/south/

Initiated the start of the Dunbar Hall Renovation https://wmich.edu/capitalprojects/httpswmicheducapitalprojectsdunbarrenovation

Analysis and completion of a number of feasibility studies
Operations Division
Recycling and Sustainability

Accomplishments

- Developed an all new WMU Recycling Website including on the homepage, general recycling information with links to other informative websites, as well as three individual tabs: Faculty and Staff; Students and Move-In
- Developed new recycling and landfill signage based on research-based data. Replaced old signage with new signage in buildings.
- Re-purposed 25 stainless steel outdoor recycling containers to indoor use. Research data of outdoor recycling containers collected over the past two years showed an average of over 80% contamination rate. Removal of these containers has helped reduce outdoor trash on campus due to lower levels of pilferage and reduces landscape's maintenance time and bag usage for these containers. The re-purposed containers have been placed in Lawson, Read Fieldhouse and SRC.
- WMU switched the outdoor dumpster collection of recycling from GPM (glass, plastic and metal) to a Single Steam collection system. Outdoor cardboard-only dumpsters on campus have been evaluated and some have been eliminated or added to certain buildings based on usage and outdoor contamination rates. A new program has been developed to collect cardboard/paper on the loading docks at a few of our buildings where cardboard/paper collection volume is either low or contamination of the outdoor dumpsters is high.
- Developing, with the assistance of WMU's video department, a new recycling video on what to recycle and what not to recycle at WMU. Targeted audience: students, faculty and staff.
- Developed and currently conducting a Loading Dock Standardization project where building loading docks are evaluated on contents that are (abandoned) left at docks. We are working with the custodial supervisors to best target items that are typically recycled in that particular building. New signage mounted on the walls and corresponding taped-off areas on the floor identify where items should be placed for pick-up. The signage and floor tape is intended to clear enough for the general user. Of the 41 buildings on campus to be evaluated, the recycling department has standardized 13 building loading docks. Weekly data is being collected on the effectiveness of the new standardization to better improve the project.
• The recycling department is using a WMU master student’s year-long research project conducted on the efficacy of the placement of indoor recycling clusters (recycling containers paired with landfill containers) to determine the best location within the building to place the containers, as well as the number of actual clusters needed to be effective. Streamlining, eliminating excess containers and relocating existing clusters improves the overall hallway appearance, user convenience and impacts the custodians time and resources.

• Coordinated with Student Services/Residence Life to aid and enhance student move-in and student move-out at WMU
Special Events and Requests

- Created event request webpage providing a central point of information, such as event request form, key performance indicator (KPI’s) and event satisfaction survey.

- Facilitated and coordinated over 310 event requests for customer needs.

- Attended and coordinated high profile events with operation units, including custodial, recycling, maintenance and landscape. Events included commencement, football games, Medieval Festival, WMU open houses, Bronco Bash, the Medallion Scholarship, and International Festival.

- Implemented a new overtime room staging process for Heritage Hall events to eliminate the impact to standard service levels provided by house staff.

- Coordinated and executed review of campus tour routes to assist admissions with recruitment efforts.

- Developed procedure to ensure proper funding is obtained for all service requests.

- Centralized the internal review of event details and determination of required staffing levels for each event.

- Provided training to the campus community to highlight the importance of partnering with FM to ensure successful events.
Custodial Services Unit

Accomplishments

- Green Seal Recertification
- Completed departmental reorganization
- Projects specialists year round positions formed
- Summer projects completed
- Reduced staffing to accommodate reduced budgets
- Reestablished and reorganized the "WeCare" committee
- Created and coordinated "Flex Crew" comprised of summer dining employees
  - Completed work in Student Affairs
  - Completed work in Athletics
  - Completed work in Maintenance, Custodial, and Landscape
- Awarded two new supplier contracts for trash liners and soap/sanitizer
- Supported FM with funds saved from the year
- Added additional board member to "KALM"

Key performance indicators

- Annual building coordinator survey
- Annual employee survey
- Supervisor quality control:
  - Building condition audits
  - Building coordinator interaction
  - Employee skill checks
  - Closet and equipment audits
Landscape Services Unit

Accomplishments

- Created a WMU landscape master plan intended to be a flexible tool that will guide the physical development of the campus, creating a framework for future growth that also preserves the university's unique heritage and a culture. It will serve to assist the current designers and land managers in the understanding of the campus and its conceptual boundaries.
- Managed native plant propagation program in cooperation with the Biology Departments Finch Greenhouse. This six-month project provided thousands of
native plants to over 12 local schools and environmental organizations; taught students, faculty and staff propagation and greenhouse techniques.

- Revised and implemented a significant plan and procedure for the trees on campus, which exceeds Tree Campus USA requirements. It includes clear and concise management for the future of daily tree care and trees impacted by development.
- Created a campus tree fund.
- 7th consecutive year of certification in the Michigan Turfgrass Environmental Stewardship Program.
- 5th consecutive year of 4-star Landscape Management Accreditation awarded by the Professional Grounds Management Society (PGMS).
- 3rd consecutive year using ArcGIS Collector for data collection using the sidewalks as the asset.
- Revision and publishing of 2019-2020 Snow Book and paperless distribution to our customers/ building coordinators across campus’.
- Completed the renovation of the baseball infield which includes a home plate halo and engineered soil skin.
- Extended fencing at Softball for extra practice area and separation of fans from players. Added a flair of style with a small marquee at the front gate.
- Installed a prototype fence system to economically screen dumpsters.
Maintenance Services Unit

Accomplishments

- Award for Excellence/APPA: Graduate student project
- Outsourcing of chillers and cooling towers resulting in annual cost savings of over $50k
- Stockroom: reducing inventory process improvement
- KPI: Time on Task: Over a one-year period, on average, AFSCME employees were on task 80% of the time.
- Maintenance Services ended the fiscal year with a $20,000 surplus in the General Fund budget, and a $397,000 surplus in the Student Affairs budget.
- Henry and Burnhams: Smoke detectors replaced
- Hadley: Global lounge remodeled
- Henry, Valley 1,2 and 3: All exit signs replaced
- Davis and Zimmerman: Ceiling tiles replaced
- Western Heights East and West: Coat hooks installed
- Burnhams: Showers renovated
- Ellsworth: Replaced almost one hundred fogged windows
- Burnhams: Updated (light remodel) six bathrooms
- Three water main breaks repaired in conjunction with the city of Kalamazoo
- GVA U Building: Domestic hot water line rerouted and replaced
- Waldo Stadium Flood
- Installed Hydration Stations
- Emergency lighting replacement
- Paper Pilot Plant: New hot water heaters
- President’s Residence: Laundry room moved upstairs
- Kanley and Waldo clock towers
- Friedmann Hall, Miller/Gilmore/Shaw complex, Kohrman Hall, Faunce, Haenicke Hall, Lawson and Welborn: Installed new control air compressors
- Re-calibrated air flow monitoring stations throughout G/F portfolio.
- Rebuilt approximately 50% of all circulating pumps in the student affairs portfolio.
- Valley II: Upgraded domestic hot water circulating pumps
- Miller Fountain: Painted and reconstructed the filtration system on the Miller Fountain which has made the water much clearer and cleaner this year
- COEAS: Painted exterior light poles
- Completed exterior painting needs campus wide as needed
- Gilmore Theater: Installed new LED lights on catwalk which are much more efficient and cost savings on energy usage
- Floyd Hall: Replaced damper parts on all air handlers allowing the air handlers to function at a higher efficiency
- Total Do-It-Now work orders: 22,811
- Total PM work orders: 16,904
- Maintenance plumber, Dustin Skaggs, received the WMU Make a Difference Award
- Planned and implemented changes to university procedures related to the transition from WMU police dispatcher to a county wide consolidated emergency dispatch center
- Apartment turnover readiness: 300 work orders for apartment turnover completed
- Residence hall room to room readiness: over 3000 rooms were inspected and repairs made, along with preparations for the Medieval Conference
- Summer Flex Crew – In coordination with Summer Dining individuals, Maintenance, Landscape & Custodial, the Flex Crew accomplished an incredible amount of work throughout Facilities Maintenance
- A total of 30 positions have been filled with 10 of these being new hires joining the Bronco Family
- Built tablet collection apps for condition assessments of exterior lights, flagpoles, waste baskets, generators, fire hydrants
- Occupancy Temperature Sensors for Building Vestibules - Prevent building freezing issues
- Friedmann Hall: Completed building controls upgrade
- Portage Airport: Installed temperature sensors in classroom and office.
- Campus wide: Integrated new steam meters into BAS
- Assa Abloy: Company provides AAADM certified technicians to maintain sliding doors on campus. Assa Abloy also insures its' work in case of personal injury. No reported injuries from sliding doors and no outages over 24 hours.
- Nalco Water: Maintenance contract for reverse osmosis and di-ionized water generation used at Lawson Ice Arena, Haenicke, and Chemistry Building.
- Canney’s Water Conditioning: Maintenance contract for salt delivery and testing of 43 different water softener systems. Monitors test results for area shops to perform 1st response to trouble calls. Canney’s provides technical support as a T&M contractor. Also revised contract to reduce frequency of testing resulting in a 30% reduction in cost.
- State boiler inspections: Updated boiler inspection and licenses for boilers in buildings other than the Robert Beam Powerhouse. There
are 19 boilers in different campus buildings that have to have CSD1 boiler tests to maintain state license. All licenses are current and tested.

- ChemTreat and Airtech: Perform preventative maintenance.
- Implemented new process for FM project closeout which requires Facility Records project review prior to financial closeout to better ensure required closeout documents are being collected and saved in the project folder.
- Standardized and simplified Project Folder Structure Template to remedy previous structure challenges. All 2019 projects start out with the new folder structure which is now created by Facility Records in Active Projects with the project request. 68 new folders created.
- Reviewed and archived 122 projects checking for FM required closeout information – made updates to simple floor plans and other FM databases as required to support project changes
- Archived 60 cancelled projects
- Created a strategy to flag spaces in Bronco Fix with work orders that may relate to active project work or may be covered under warranty.
- 54 TMA warranty or project Pop-Ups created
- Provided extensive review and testing of software to replace free discontinued software in order to maintain and increase access to WMUs BIM portfolio. Purchase of 3-year subscription is underway.
- Supported the update to Division 1 of WMUs Design Standards using Master Spec as a base – still in progress
- Supported the update to our FM design, construction and commissioning contracts - still in progress
- Assisted with the planning and coordination of the MiAPPA 2019 Summer Conference located in Boyne Highlands Resort
- Worked with the Builders Exchange of Michigan for their bi-annual publication of “The Source,” providing an owner’s perspective, highlighting WMU FM’s use of BIM (Building Information Modeling). This is to be published in their Technology and Innovation in Construction publication and distributed to all members.
- Assumed ESO water valve location project - reviewed information with previous team member and new GIS manager to devise plan to finalize – still in progress
- Exterior paint assessment for 25 Flagpoles, Loading Docks for 20 buildings, 95 Waste Baskets, 8 Poster Kiosks, and Entrances for 44 Buildings. Still in progress is the Light Pole collection; currently 1,929/2,473 light poles have been documented
- Created and provided Roof Leak scatter plots of Shop 6’s zone covering 39 buildings using data from work order history as provided by the Service Center
- Completed a Cooler & Freezer audit for 11 buildings with updated location floor plans and pictures. Compiled and organized audit into 4 physical booklets and delivered bound copies to FM Director
- Compiled and updated emergency lighting floor plans for 19 buildings by referencing historical emergency lighting plans of each building. Indicated emergency lights that were not functioning during field test as performed by Shop 3 Electricians
- Vehicle Wrap Project: Generated a map and list of shop vehicles with their parking locations and a schedule of the vehicle graphic wraps for all General Fund Maintenance Shops
- Upgraded Henry Hall fire alarm system with addressable devices, notification appliances, and ADA pull stations
- Modernized traction elevators at Harrison and Eldridge with new gearless machine, hoistway wiring, hall call buttons, controller and governor
- Managed the process for 511 Monroe dispatch to consolidated dispatch for fire alarm monitoring, elevator emergency call buttons, and emergency phones
- Added 12 elevators from old monitoring system to Liftnet monitoring system.
Facilities Management Service Center

Accomplishments

Key Performance Indicators

- Work orders created: 22,641
- Bronco Fix-It requests: 17,751
- Bronco Project requests: 239
- Calls received: 10,249

Service Center Development

- Converted two temporary positions into full time positions
- Began triaging calls for Custodial, Landscape and Transportation divisions
- Integrating Service Center into Construction, Custodial, Engineering and Landscape operations
- Developed social media platforms for FM (Instagram and Twitter)
- Centralized communication regarding utility service interruptions, event requests, and equipment testing through the Service Center
- Developed new processes to track which residential areas have service or emotional support animals in TMA to assist Maintenance trades
- Developed process to track warranties based on spaces in TMA
- Took over responsibility of overtime posting and awarding for Maintenance

Accomplishments

- Coordinated and executed transition from WMU police dispatch to Kalamazoo County police dispatch
- Developed new account with external service to respond to after-hours calls for Facilities Management as a result of police dispatch transition
- Assisted with setting up accounts with monitoring services for alarms as a result of police dispatch transition
- Provided TMA and iPad training to new and existing staff members as necessary
• Coordinated holiday recess building temperature setback with Building Coordinators
• Assisted with hosting MiAPPA summer conference
• Helped lead team building events for Maintenance Services
• Assisted with refining processes for summer residential space turnover
• Coordinated FM Operations participation in Bronco Bash 2018
• Maintained KPIs for Maintenance Services
• Presented at TMA and MiAPPA conferences

Ongoing Initiatives

• Working with Custodial Services to refine service request processes, implementing usage of TMA and providing training to staff
• Supporting Landscape Services in enhancing processes and TMA usage
• Assisting in updating emergency response procedures
• Facilitating improvements to communication processes
WESTERN MICHIGAN UNIVERSITY
FACILITIES MANAGEMENT SERVICE CENTER
ORGANIZATIONAL CHART
AUGUST 2019
Robert Beam Power Plant Unit

Accomplishments

Every year is special and unique at the Robert M. Beam Power Plant and this year was no exception with its own unique events and accomplishments highlighted as follows:

SAFETY: Safety is paramount here at the plant and we’re glad to report another year (15 in a row now and counting) of no employee lost time due to on-the-job injuries. I’ve come to believe this is no “accident” or “luck” but attributable to our employee training program where safety is continually emphasized along with a culture that encourages safety, pride and professionalism in one’s work. This along with excellent mentoring by our senior journey level employees to our junior apprentice employees that emphasizes constant vigilance in their physical work involving welding, rigging, fabrication, electrical, etc., creates the safe environment and results such as this. Also important is the continued support and training we receive from Environmental Health & Safety – a truly valuable resource.

STAFFING TRANSITIONS: Fortunately we have an environment here in the power plant where there is not a lot of employee turnover especially when compared to other departments in our division. However, changes still do occur and this year was no exception which saw the retirement of 30 year employee Randolph Bortolussi. Randy’s position was subsequently filled by Ryan Hill who began his new career here at the power plant in August 2018. The Training Committee is commended for their efforts in upgrading both the employee on-boarding and off-boarding experience.

STAFF TRAINING & DEVELOPMENT: Arguably the major reason for our success is having adequately trained and competent individuals on staff. This is accomplished through the many efforts of the joint Labor-Management Training Committee that oversees all aspects of the program with its overriding goal of helping the employees be as successful as they can be in their training program. William Pedersen and Paul Uldriks became the program’s newest apprentices this past year joining three other employees currently active in the apprenticeship program (Matt Cronkhite, Brad Oswalt...
and Andrew Ferrari). Also, this past year saw both Troy Leinaar and Ron Uldriks achieve their Mechanical Advanced Level 1 certification for 4G structural welding. Ron had previously achieved his Advanced Level 2 certification for 5G & 6G carbon steel welding. The success of the apprentices could not be achieved without the detailed coordination of on the job training and classroom scheduling masterfully done by Kevin Bridges supported by Tara Tresh. Our total apprenticeship program graduates this year remained at 10 (9 active and 1 retired) since it was first registered and approved by the US Department of Labor on April 15, 2002. Mr. Cronkhite is on track to complete his journey level program next year.

PROFESSIONAL DEVELOPMENT: Kevin Bridges continued his participation with the WMU “Make a Difference” evaluation committee as well as serving on Dr. Hill’s Retirement Program Review Committee. Matt Cronkhite participated in the President's "listening program" on staff input. Both Mike Walden and Kevin continue taking on more responsibility for reporting and plant operations especially regarding turbine and boiler operations. A special highlight was Matt Cronkhite being named State of Michigan Ivan Cronkhite NIULPE (National Institute for the Uniform Licensing of Power Engineers) Chapter President for which he will be serving as their representative at the national convention.

PROJECTS: The major project currently underway that the power plant staff will play a significant role in is the installation of the new peaking engine generators slated for startup in fall 2019. Plant staff is excited and enthusiastic to be part of this effort and apply the skills and abilities they have been trained in. Beyond this, Plant staff stepped up and performed the demolition of the mechanical piping in the tunnel to CH&HS as part of the AT Demo Project. Not a project per se, but in what was very positive news, after much study and discussion it was agreed the new South Neighborhood (Hilltop) Student Center and two new housing facilities would be thermally sourced with power plant generated steam.

ENVIRONMENTAL: All required emission reports submitted including MAERS (Michigan Air Emissions Reporting System) and EIA (Energy Information Administration) 860 and 923 largely through the efforts of Mike Walden supported by Kevin Bridges. Permit required testing successfully performed on the engine generator (required annually). We had a successful environmental records review inspection by our local DEQ representative. We are currently in the process of submitting our application to renew our 5 year Renewable Operating Permit (ROP) that expires in April 2020.

BOILER INSPECTIONS: Annual required boiler inspections again were successfully performed, however, in what turned out to be an unexpected challenge was the catastrophic failure of a number of boiler manway door gaskets. Working with Dean Boiler ultimately resulted in the installation of their “Black Max” gasket that so far has been working as designed and expected.
PURCHASED GAS & ELECTRIC ENERGY: This was the second full year of our gas purchasing relationship with Landmark Energy (Becki Grabowski) and the State of Michigan for all of our gas purchasing needs. Due to the positive results here along with favorable market conditions, the gas purchasing contract was extended through June 2025 at $3 per MMBtu giving us a burner tip price of under $4 which greatly helps the overall budget. The news was mixed on the electric side which saw demand rates skyrocket to over $30/kW for the central plant. However, the new “GPTU” (time of day billing) rate at ERC resulted in savings there. We are currently evaluating the Standby Rates that Consumers recently proposed.

EMPLOYEE RELATIONS: A new 3year contractual bargaining unit agreement beginning July 2019 and extending to June 2022 was successfully negotiated between MSEA and WMU in literally under two days. This speaks to the special relationship between these two entities which is based on trust, respect and fairness that is continually employed and worked for on a daily basis that creates results such as this. Also, a particular highlight for Power Plant staff is achieving 100% employee participation in the United Way program which they have done now for 14 years in a row and again speaks to the type of employee here at the plant.

PRODUCTION: It was a good year for plant production in a number of respects but the main highlight was surpassing our 60% goal for generation of “free steam” for the year. This means that of the nearly 600 million pounds of steam generated this year, 60.6% or 362,000 million pounds was generated through heat recovered off the turbine exhaust with no additional gas (i.e., fossil fuel) used. This resulted in 25,000 less tons of CO2 (considered a greenhouse gas) going into the atmosphere. Beyond this, we generated over 72 million kWh’s of electricity in the plant and imported 7.7 million. Overall gas used at the central plant was down slightly due to a combination of a 4.5% increase turbine operating hours coupled with a 21% decrease in the steam output of the less efficient register burner fired boilers even though heating degree days were up 4% to 6518. Peak steam demand remained consistent at just over 170,000 lbs./hour and WMU campus electric use peaked at 14,580 Mw (megawatts) and just over 15 Mw total.

LOOKING AHEAD: The most immediate challenge is the successful completion and startup of the peaking engine generators this fall. We are anxiously looking forward to the options and flexibilities this new equipment will be bring to our operation. The major item on the horizon beyond that will have far reaching effects on the plant operation for years to come is the negotiation of a new long term service arrangement with Siemens for the gas combustion turbine co-generation units expected to be concluded this fall. Beyond this are some carryover items including installation of a boiler blowdown water cascade system at the central plant similar to what was successfully implemented at ERC. With the chiller system at ERC now in its 17th year of operation, several upgrades are being looked at for next year particularly the cooling tower fill. Other upgrades at ERC include completing the conversion of the ERC controls and the emergency generator. Other major efforts will be bidding out the water treatment
contract, air emission testing for our renewable operating permit and testing of all the electrical switchgear which is performed every four years, and increased focus on our energy billing rates and how they compare with other entities.