Tab Name: Final List Approved By Cabinet

Report Date: August 28, 2019

Minnesota State University, Mankato

FY2020 Institutional Equipment Prioritization Work Group Recommendations

FY2020 Institutional Equipment Spending Budget Target \$ 1,000,000

Less: Prioritization Work Group Recommendation Running Total \$ (999,719)

Difference or Remaining Unspent Balance \$ 281

Item	<mark>s Approv</mark>	<mark>red for Funding By</mark>	the President's Cabinet								
Item #	Divisional Priority	Departmental Unit	Equipment / Furnishing Description	Rationale	Match	Quantity	Unit Price	Total Request	Divisional Running Total	Recommended for FY19 Inst Equip Funding (Type in Yes or No for automatic calc in next column)	Recommended for FY19 Inst Equip Funding Running Total
Α	В	D	E	F	G	Н	I	J	К	L	M
								-	-	Yes	0
1	1	AH&N // Speech, Hearing and Rehabilitation Services	VALT Video system for Center for Communication Sciences & Disorders	In order to be effective clinical educators, we require access to both a live and recorded stream of speech-language pathology and audiology assessment and therapy sessions that will be occurring in Center for Communication Sciences & Disorders. Currently, video sessions are able to be viewed live from designated computers within the building but recording has proved to be ineffective in the current system leaving no opportunities for students to review sessions or supervisors to refer back to a video to give more comprehensive feedback. The current video system was put in to our Center as a temporary solution when we moved to the new Clinical Sciences Building due to lack of funding and is inadequately serving our students. We are requesting a necessary upgrade to a more comprehensive system. We are requesting the VALT system. It is a web-based video system where both educators and students can log in to view, record and annotate clinical sessions. With access to video recordings, students will be able to increase their clinical skills in order to become more competent and be even more prepared for real world settings. Clinical educators can view sessions from any location, annotate these sessions and provide feedback directly on the session recording. With our state of the art clinical space, we need state of the art technology to support continued success and growth of our clinical program.		1	62,740.00	\$ 62,740	\$ 62,740	Yes	\$ 62,740
2	2	A&H // Music		The Maverick Machine has grown to nearly 160 members in 2018-2019. All of the instruments used by the marching and pep bands have been obtained used from local high schools. The Maverick Machine is one of the most high-profile student groups on our campus, performing at dozens of events each year. It is also a student success community, with high retention and completion rates among its members. New instruments last for decades, require far less maintenance over time, and frankly will help attract more students to the Maverick Machine. In addition to instruments, the proposal includes purchasing a 24-foot storage trailer with custom wrap. During the current dean's tenure, the college has made no prior institutional equipment requests.	A&H \$20,000		79,701.00	\$ 59,701	\$ 122,441	Yes	\$ 122,441
3	3	College of Business Main Office Morris Hall 150	table and stools. (1) Copy room work area which holds Scantron machine. Tall file cabinets, long work counter, wall and floor cabinets for storage,	Morris Hall 150 is the main office for the College of Business which hold all of its departments. It consists of a reception and waiting area and is the college's primary workspace and storage area. The main office accommodates 3 Administrative Assistants, several student employees and encompasses office space for 7 full-time faculty and staff. Furnishing upgrades are requested to improve the functionality and appearance of the office. The wall of windows facing the hallway, on the first floor of Morris Hall, makes MH150 highly visible for the campus. As the main location for the COB department chair offices, the main office is the first impression. Goal is to provide a better learning and working environment (all existing furnishings in the department are at least 15-20 years old and most were second-hand to begin, all are now very well worn to wearing out)	CoB \$5,500	3 Admin desk, 2 Dept Chair offices, 1 student work area , 1 copy room work area	35,500.00	\$ 30,000	\$ 152,441	Yes	\$ 152,441
4	4	Education // Aviation	Student Study Opt. 1 / Flight Training / Work Area / Handling Fee	Upgrades to the student usage area of the airport / Chairs, tables, sofas, wall panels		1	83,106.00	\$ 83,106	\$ 235,547	Yes	\$ 235,547

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5	5	Institutional Diversity // Multicultural Center	Stove	The current stove is not working properly and is in need of replacement. It is used regularly by students and student groups from Diversity and the International Center.		1	7,714.00	\$ 7,714	\$ 243,261	Yes	\$ 243,261
6	6	Library Services	Furniture Upgrades: Flexible seating furniture for public seating areas	Memorial Library users expect a variety of furniture available for different purposes. Some very old (outdated/worn-out) furniture is no longer functional. It needs to be discarded and replaced. The Library will leverage this request and fund half (15,000).	15,000.00		30,000.00	\$ 15,000	\$ 258,261	Yes	\$ 258,261
7	7	SET // Chem and Geol	Spectropolarimeter	The base model Jasco J-1500 Spectropolarimeter uses circular dichroism spectroscopy to measure: (1) protein folding, (2) protein secondary structure (alpha-helix, beta-sheet), (3) changes in structure due to mutagenesis, (4) conformational stability of proteins and (5) changes in conformation due to protein: protein interactions. These applications can also be applied to nucleic acids. In addition, the circular dichroism capabilities, the instrument would also be equipped with a Peltier temperature control unit, automated titration system, total fluorescence detector, fluorescence polarization/anisotropy detector and a stopped-flow apparatus (for rapid-mixing kinetics experiments). This instrument would be used in CHEM 360: Principles of Biochemistry, CHEM 455: Biochemical Techniques I, CHEM 466: Biochemical Techniques II and CHEM 450: Physical Chemistry Lab. This instrument will also be used in various areas of biochemistry and biophysics undergraduate research. *External funding will be pursued for this piece of equipment. The tentative plan is seek funding through the NSF Major Research Instrumentation Program (MRI). Possible participation by other MNSU CSET departments (e.g. Biological Sciences, Physics) is being considered to strengthen the chances for external funding.		1	133,000.00	\$ 133,000	\$ 391,261	Yes	\$ 391,261
8	9	AH&N // Human Performance	Monark LC7TT bicycle ergometer	Our current model is 20 years-old and uses software that is no longer supported by the manufacturer. We will trade in the old model and receive a \$5000 discount on the new equipment (see quote). The LC7TT allows for multiple types of physiology tests and for the data to be exported for analysis. There is no ongoing software licensing cost. This equipment could be used by athletic and non-athletic groups, for undergraduate and graduate teaching (HP 414, 439, 456, 466, 601, 602, 605), and research purposes. This equipment supports the recent R&R funded project of renovated Human Performance Lab space in Highland Center 1312.		1	13,274.00	\$ 13,274	\$ 29,918	Yes	\$ 404,535
9	10	AH&N // Human Performance	Cosmed K5 portable metabolic analyzer	Currently, our data collection system is stationary and use is limited to the laboratory. This portable unit (fits into a small suitcase and is easily storable) can be utilized in real-world settings by athletic and non-athletic groups, for undergraduate and graduate teaching (HP 414, 439, 456, 466, 601, 602, 605), and research purposes. There is no ongoing software licensing cost. This equipment supports the recent R&R funded project of renovated Human Performance Lab space in Highland Center 1312.		1	42,674.00	\$ 42,674	\$ 72,592	Yes	\$ 447,209
10	11	College of Business Dean's Office: MH 120, MH 215 Telepresence Conference Room MH 151 Student Center	Standing desks, upper cabinets, and pull out drawers, 1 extra storage cabinet, 1 table and 4 chairs for dean's office (Dean, Administrative Assistant, and Receptionist-Student Worker areas) guest lobby (1 small couch and chair); Conference Room Table/15 chairs, 2 mini blinds for Advising Offices	Morris Hall 120 is College of Business Dean's office. It consists of two offices, a student reception area, administrative assistant desk, a nook for two student interns (marketing team) and break room/copy room. This office holds many confidential meetings with donors, faculty, staff and students. The furniture has not been replaced in 15-20 years and is well worn. The space is also very small and compacted so we would like some new cabinets to hold marketing promotional items. The goal is to rearrange the office to provide a better work area to better serve donors, faculty, staff and students. MH 215 is a telepresence room which is heavily used among the College of Business for student engagement and partnership meetings. Due to the confidentiality of the room, it is utilized by all of university community and Academic Affairs. The table top is well worn and has been repaired multiple times. The 15 chairs are also looking very worn and are not very comfortable any more. This furniture is at least 15-20 years old. By updating this furniture, it will be serve the College of Business and the other university communities. The two offices in the Student Center MH 151 have large windows in them. The current blinds are 15-20 years old and are not in good working order.	CoB \$5,000	3 standing desks, cabinets, & pull out drawers, 1 small table & 4 chairs, 1 conference room table w/15 chairs	31,200.00	\$ 26,200	\$ 98,792	Yes	\$ 473,409

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11	12	Library Services	Furniture for Group Study Rooms	The Group Study Rooms in Memorial Library get high usage by students and overtime furniture needs to be updated because it is outdated/worn. The Library will leverage this request and fund half (15.000)	15,000.00		30,000.00	\$ 15,000	\$ 113,792	Yes	\$ 488,409
12	13	SET // Biology	is used for growing microbial cultures such as	A variety of microbial cultures grown at different temperatures and shaking speeds will be needed for teaching in BIOL 270 (General Microbiology), BIOL 472 (Microbial Ecology and Bioremediation), and BIOL 478 (Food Microbiology and Sanitation). A unique feature of this refrigerated incubator is that it can provide growth temperatures lower than room temperature, allowing investigation of contaminants that can be an issue in refrigerated food items, or cold water species. Currently the department has no such incubator. In addition, Dr. Zhu's research requires growing bacteria at 15-20 degrees C. One example is Flavobacterium psychrophilum, which causes diseases in cold water fish. Furthermore, Dr. Secott and Dr. Land also need this type of incubator in their research.		1	18,000.00	\$ 18,000	\$ 131,792	Yes	\$ 506,409
13	14	SBS // Social Work	Media equipment to convert TR 372 classroom to allow for recording of simulated groups. Record/conference equipment, program audio, speech audio, media control system, and equipment rack.	While the 208 sf. Skills Lab works for labs where students simulate interviews, assessments, and practice with individuals, couples, and families, the room is too small to adequately accommodate a simulated clinical group. This limits the ability to adequately prepare students with the group facilitation skills for the size of groups they will likely encounter in a practice setting. We know that it is not possible to access more physical space for a larger skills lab, so instead we propose that modify TN372 to accommodate remote recording equipment. This would affect classes in both the BSSW and MSW Programs. It would also give us the flexibility to schedule courses that use the skills lab at the same time.	ITS \$5,000	1 set	22,120.00	\$ 17,120	\$ 148,912	Yes	\$ 523,529
14	16	SET // Biology	Hydro lab Multimeter: The Hydro lab HL4 Multiparameter Sonde allows for real-time collection of water quality parameters in freshwater, brackish, and saltwater environments. The multiparameter nature of the meter allows for up to nine different sensors to be mounted into one unit, reducing the time and equipment needed to collect a full suite of environmental testing in water. Sensors include temperature, pH, depth, dissolved oxygen, chlorophyll a, phycocyanin (blue-green algae), rhodamine dye, turbidity, and oxygen reduction.	Minnesota has a multitude of lakes and streams, and water quality is major concern of the state. This meter will be used by students in Biol 215 (General Ecology), BIOL 402 (Stream Ecology), BIOL 404 (Wetlands), and BIOL 432 (Lake Ecology), to learn to analyze and evaluate the health of rivers, lakes, and streams. Because of its ability to measure several parameters simultaneously, the Hydro lab Multimeter will reduce the number of other pieces of equipment that have historically been needed for this type of water sampling. For example in General Ecology, a depth meter, pH meter, temperature/dissolved oxygen meter, and light meter were all needed in order to sample the same parameters that one Hydro lab Multimeter could do. Furthermore, having a multimeter will reduce the amount of time and money needed for equipment calibration and maintenance. The Hydro lab Multimeter will also be used to support graduate student research projects.		1	10,160.00	\$ 10,160	\$ 31,304	Yes	\$ 533,689
15	17	SBS // Government	35 classroom chairs and 2 storage cabinets in MH112	Currently the chairs in this classroom are mismatched and are not on wheels. It is difficult for students to move the chairs around to collaborate and to also see any type of lecture that is occurring. This would give students chairs in good repair that are able to be mobile. he purchase of two storage units would help organize the room and provide the resources students need.	SBS \$2,000	35 chairs / 2 storage cabinets	12,370.00	\$ 10,370	\$ 41,674	Yes	\$ 544,059
16	18	Library Services	Furniture for ML 1st floor	Library Services is updating space on the 1st floor of Memorial Library to provide more study rooms and group study spaces for students. This project will improve access to high demand spaces within Memorial Library. Library Services is funding the construction phase of the project.	LIB \$50,000		100,000.00	\$ 50,000	\$ 91,674	Yes	\$ 594,059
17	19	CoB // Morris Hall 2nd Floor Common Areas: add additional (seating/study area for students) Two vacant areas and fill the cubby space by Honors	4 chairs & 4 ottomans for students	Morris Hall has two large areas with full windows. It would be a perfect quiet study area for students. Currently a very old desk/chair is sitting in those two spaces. There is also a cubby across from Honors that could use comfortable seating for students to study. Currently, it has a couple of old benches in there. It is not being utilized to its potential due to the uncomfortable seating.	CoB \$500	4 sets	4,500.00	\$ 4,000	\$ 95,674	Yes	\$ 598,059
18	1	Security	Replacement cameras	Replace cameras that are broken or are end of life.		12	\$ 1,000.00	\$ 12,000	\$ 12,000	Yes	\$ 610,059
19	2	Security	Card access and new location cameras	Continue progress on the after-hours security plan. Additional building card access and new location cameras		5	\$ 7,000.00	\$ 35,000	\$ 47,000	Yes	\$ 645,059
20	3	Security	Automatic External Defibrillators (AED)s	MUST be replaced with new devices in FY 2020. This is life saving equipment.		14	\$ 1,600.00	\$ 22,400	\$ 69,400	Yes	\$ 667,459

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21	1	Facilities Services Area - Receiving and Delivery Services (214015)	Dock Plate mechanism	Space gap now exists when large trucks are being unloaded at the Wiecking Center loading dock. Hand manipulated heavy steel plates are now used to bridge the gap. Proposed \$10,000 automatic dock plate replaces manually worked plates now used to connect the back of 18 wheel box trucks to the concrete receiving loading dock. Adjusts to height of truck to ensure a match with loading dock height - no slippage of manually placed transition plates. Viewed as a safety enhancement to better avoid accidents from slippage when large trucks are being unloaded.	None	1	\$ 10,000.00	\$ 10,000	\$ 10,000	Yes	\$ 677,459
22	2	Physical Plant	4 Replacement Maintenance Service Vehicles	Request funding to replace Maintenance Fleet Vehicles. The fleet is a hodgepodge of aging mechanically deficient vehicles, many have rust holes filled with spray foam to keep tools from spilling onto the street. Several vehicles were aged out of the passenger fleet and are not supportive of the maintenance activity. The intent is to purchase new maintenance vehicles from the State Contract. We have experienced used vehicles with hidden issues whose repair cost along with the purchase price equal the price of new from State Contract.	\$30,000 from 214014 Maintenance Vehicle Operations Cost Center + \$3,000 Estimated Auction Receipts	4	\$ 22,000.00	\$ 55,000	\$ 65,000	Yes	\$ 732,459
23	3	Intercollegiate Athletics	Blakeslee Stadium Football Scoreboard	Replace aging and outdated football scoreboard at Blakselee Stadium. Current scoreboard loses power, blows fuses and burns through lightbulbs on a regular basis. It is generally unreliable and is on the verge of shutting down permanently at any given time. Replacement parts and bulbs are quickly becoming unavailable. Scoreboard would include a sound system that would replace neglected and outdated public address sound system components at Blakeslee Stadium. Current sound system has been pieced together and repaired as needed over the years and has reached the end of it life cycle in its current state.	0.00	1	\$ 55,000.00	\$ 55,000	\$ 120,000	Yes	\$ 787,459
24	4	Physical Plant & Building Services	Electric Battery-Powered Manually Propelled one man lift	Battery-Powered Manually Propelled one man lift. One 25' and one 40' work height. This lift will replace a similar lift removed from service due to catastrophic failure of the mast. This lift is used in tight spaces for cleaning and mechanical tasks. High ceiling lights in building atriums require lifts to service lights, identify ceiling leaks, etc., - Clinical Sciences Building, Dining Center, CSU Hearth Lounge, depend on lift access.	None	2	\$ 9,000.00	\$ 18,000	\$ 138,000	Yes	\$ 805,459
25	5	Intercollegiate Athletics	Highland Pool timing pads/sound equipment/starting blocks/etc.	Much of the current pool equipment and technology is well past its expected lifespan and needs to be replaced. Due to the humidity and the corrosive environment of the pool area, electronics tend to degrade more rapidly. The need for new equipment is urgent due to the high volume of year round users including West High School, the local swim clubs, and the MSU team. In addition to the competitive teams, other users will benefit from equipment replacement as well including campus recreation, human performance classes, community users, and more.	0.00	1	\$ 22,700.00	\$ 22,700	\$ 160,700	Yes	\$ 828,159
26	6	Building Services (214005)	Rider scrubber	Replacement of a 2005 rider floor scrubber reaching end of its lifespan.	possible up \$1,000 trade in allowance	1	\$ 17,800.00	\$ 16,800	\$ 177,500	Yes	\$ 844,959
27	1	IT Solutions	ITS Furniture for Phase 3 of remodel	IT is replacing furniture for staff that is 19 years old to create workspaces that are more collaborative. IT budget pays for software, equipment, staff and support, but has little for furnishings for their own staff.`	\$25,000 (General Fund Alloc)		\$ 150,000.00	\$ 105,000	\$ 105,000	Yes	\$ 949,959
28	4	IT Solutions	Informal Learning Space Updates	Over the last 15 years we have created many workspaces for students around campus. Some of these spaces need the furniture updated and new/more power for the students to access for their devices.	\$25,000 (General Fund Alloc)		\$ 100,000.00	\$ 18,000	\$ 368,000	Yes	\$ 967,959
29	1	University Event Support	16 foot drop deck trailer	Centrally located trailer for storage of tables and chairs. Eliminates practice of storing tables and chairs in front of fire exists and valuable campus space. Used to move around inventory to address needs of large events without having to use Bobcat. Ground level loading	\$5,000 from University Scheduling	1	\$ 22,000.00	\$ 17,000	\$ 17,000	Yes	\$ 984,959
30	2	University Event Support	200 folding chairs	Replacement inventory of folding chairs used for events		200	\$ 46.00	\$ 9,200	\$ 26,200	Yes	\$ 994,159

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31	3	University Event Support	5 chair carts	Carts to store and move chairs		5	\$ 450.00	\$ 2,250	\$ 28,450	Yes	\$ 996,409
32	4	University Event Support	20 tables	Tables to support numerous events		20	\$ 130.00	\$ 2,600	\$ 31,050	Yes	\$ 999,009
33	5	University Event Support	2 table carts	Chairs to store and move tables		2	\$ 355.00	\$ 710	\$ 31,760	Yes	\$ 999,719
·				Items Recommended for Funding By Institutional Eq	uipment Prior	ritization Committe	e Subtotal	\$ 999,719	\$ 1,392,073		\$ 999,719

Ite	ms Not Re	ecommended for Fu	ınding at this time								
Ite	n# Divisional Priority	Departmental Unit	Equipment / Furnishing Description	Rationale	Match	Quantity	Unit Price	Total Request	Divisional Running Total	Recommended for FY18 Inst Equip Funding (Type in Yes or No for automatic calc in next column)	Recommended for FY18 Inst Equip Funding Running Total
3	\$ 8	UEE // Edina`	Furniture for FR 512 Telepresence room	FR 512 is 1 of 3 telepresence rooms in Edina (map attached). It is essential that this room function at an optimal level in order to meet current and future programming requirements. When MNSU moved from the 3rd floor to the 5th floor in Edina, almost 100% of the 3rd floor furniture was brought to the 5th floor in order to be used in this new space and keep additional costs to a minimum. The current furniture in FR 512 has shown to not allow for a conducive and functional, student-centered learning environment. Updated furniture for this space is essential to meet the needs of students and faculty. IT Solutions and faculty have been consulted on this proposal to ensure compatibility with current and future needs.		1	16,644.00	\$ 16,644	\$ 16,644	No	\$ 391,261

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35	15	CoB // Center for Innovation & Entrepreneurship - Technology and furniture for further student engagement and external community.	Podcast Studio items, Microphones, headphones, microphone stands, audio mixer, pop Filter and Shock Mounts, Digital Voice Recorder, Studio Table, Monitor 60" for meeting room (208), stackable small tables matching the other furniture in CIE; Check in system for the front desk.	A fairly simple podcasting studio would provide students, staff and the community with a space they could use to create high quality audio recordings. Podcasts are a popular means of marketing and educating (highly used by college students while working out, driving, etc) and represent something new that the CIE can offer to the community and students. https://martech.zone/podcasting-popularity-statistics/; High quality microphones to capture sound; High quality headphones to detect unwanted sounds in the recording. For holding microphones, makes for easier interviewing used to mix voices, music and sound effects for professional recording used to minimize extraneous sounds for high-quality recording. For mobile recording (outdoors, on campus, etc). To connect the microphone stands to and hold the equipment - sturdy table with storage drawers. New meeting room - viewing capabilities for visitors to share information from their laptops or mobile devices. Additional surfaces have been requested by students and community members to hold writing materials, laptops. Stackable small tables could resolve this and allow the room to be converted to the more open, event layout that's needed at other times. Many people coming to the CIE don't check in because they find the process slow. A system where students could scan their MavCards and the public could scan a drivers license or a card we issue to them would make checking in as quick as a swipe of the card and would increase the accuracy of our information about space usage. Having two scanners would provide redundancy during slow times and efficient, fast check-in during very busy times.	CoB \$500	2 Microphones, 2 headphones, 2 microphone stands, 1 audio mixer, 1 pop Filter and Shock Mounts, 1 Digital Voice Recorder, 1 Studio Table, 1 Monitor 60" for meeting room (208), 6 stackable small tables matching the other furniture in CIE; 1 Check in system for the front desk.	5,000.00	\$ 4,500	\$ 21,144	No	\$ 523,529
36	20	SET // Chem and Geol	Shimadzu GCMS - Student package	This request is to replace the current GCMS which is functional but no longer supported by the manufacturer. The last repair required installation of used parts to get the instrument operational. It is now over 10 years old and in need of replacement. The instrument is used in Chem 423 and research. The instrument is a student grade instrument and lacks some of the research capabilities of our current instrument (e.g. CI, DIP) but has basic GCMS capabilities.		1	58,824.00	\$ 58,824	\$ 79,968	No	\$ 598,059
37	21	SBS // Economics	Office furnishings to coordinate with the College of Business office renovation.	College of Business plans to renovate their office where the Economics Department is housed. Economics furnishings need to be replaced to coordinate with the other departments in the same space.		1 set	5,000.00	\$ 5,000	\$ 84,968	No	\$ 598,059
38	22	SET // Chemistry/Geology for Civil Engineering Support	Water/Soil Analysis Equipment: DR3900 Laboratory Spectrophotometer for water analysis (\$5,031x2) Sartorius Analytical Balance (\$3,140x2) Hach HQ40D BOD meter(\$2,450x2) Oakton portable pH meters(\$148x6)	Adding new course Geol 219 for all Civil Engineering majors. Course is 1 credit lecture, 4 hours lab. Equipment is needed for this new lab and the new Civil Engineering curriculum cannot be instituted without this equipment. Chemistry & Geology is willing to match to make that happen.	SET \$11,065	1	22,130.00	\$ 11,065	\$ 96,033	No	\$ 598,059
39	23	SET // Biology	Total Organic Carbon and Nitrogen Analyzer (TOCN). This unit uses chromatography to determine organic nitrogen and carbon in soil samples.	Nitrogen is the most limiting factor for plant growth and agricultural yield. The TOCN will allow us to analyze samples for soil fertility and productivity, plant-tissue protein content, and soil organic nitrogen for microbial uptake. This information will be paramount in determine potential plant growth, soil fertility, and the need for fertilizer application. Currently we are sending samples off campus and our latest estimate for running this samples is \$29.50 per sample, plus quite a large amount for shipping and processing. With the new Agronomy major, we expect a significant increase in sample numbers.		1	55,000.00	\$ 55,000	\$ 151,033	No	\$ 598,059

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40	24	SBS // AGES, Anthropology, Geography	Laser Diffraction System	To greatly enhance teaching and learning at the undergraduate and graduate levels, to greatly enhance collaborative research conducted by faculty and students, and to make MSU highly competitive in seeking external research funding, acquisition of a Laser Diffraction System is critical. Major funding agencies (e.g., NSF, EPA, USDA) and refereed publications require laser diffraction analysis for the characterization of soil and sediment. It provides high-resolution data on the shape and size of sediment particles in soil, water and wind, which in-turn creates understanding of soil erosion on the prairie and in rivers, of landslides on bluffs, of land use changes from Paleoindian to modern, of preservation of archaeological material, and more. The method is now state-of-the-science, so is crucially important to ensure our students are competitively trained for the workforce or for further graduate study. It will be utilized in several classes offered in Anthropology, Earth Science, and Geography and in our Certificates in Geoarcheology, and Geomorphology. It will of course be utilized for research in the AGES Laboratory, Earth Science Programs, and in the Departments of Anthropology and Geography. It will be available to other departments and programs on campus, and for collaborative and fee-based work to outside entities. No other institution that we are aware of in the State has this equipment	or renovating the propo	1	66,535.00	\$ 66,535	\$ 217,568	No	\$ 598,059
41	25	SET // Physics/Astronomy	LEAI-62 Lambda Scientific Electron Diffraction Apparatus	This equipment would be used in our Modern Physics sequence and enhances the suite of laboratory experiments available to our students. Including 1. Acquiring the de Broglie wavelength of a moving electron. 2. Measuring the lattice constant of crystalline metals. 3. Calculating Planck's constant. There are other applications as well, as this is a device with a broad range of applications		1	9,950.00	\$ 9,950	\$ 227,518	No	\$ 598,059
42	26	SET // Physics/Astronomy	LEAI-50A Diode-Pumped Solid State Laser Demonstrator	This equipment would be used in our Advanced Laboratory Course and our Optics course. This equipment enhances the suite of experiments available to our students and would provide education in a host of modern techniques and research level experimental physics.		1	20,070.00	\$ 20,070	\$ 247,588	No	\$ 598,059
43	27	SET (various departments) (10)	Electronic door access for labs in ME/CivE, ECET, Biology and CIS	This request continues our installation of electronic door access on labs and high student worker use areas to greater support safety, security and accountability.		8	4,000.00	\$ 32,000	\$ 279,588	No	\$ 598,059
44	28	SET // Chem and Geol	Lachat QuickChem 8500 Upgrade	Flow injection analyses (FIA) are a means of accurately and rapidly assessing the chemical composition of multiple materials including soil, water, and biological matter. Consequently, FIA instruments are commonly held as the centerpiece of research, regulatory, and commercial laboratories that serve the needs of a wide variety of users, ranging from basic researchers to soybean producers. The preeminent FIA instrument, renowned for its accuracy, reliability, and ease of use, is the Lachat Quickchem 8500. The USDA research facility in St. Paul, for example, has three units. The city of Mankato operates one of these instruments every day. Minnesota Valley Testing Laboratories in New Ulm uses their Quickchem to support regional agricultural and environmental work by processing tens of thousands of soil and water samples every year. To fully prepare MSU Mankato students for work in all fields that deal with soil and water, and to fulfil our obligation to serve our region, one dominated by agriculture, MSUM needs a working Quickchem 8500. Our existing instrument currently resides in the Department of Chemistry and Geology, is now approaching its twentieth anniversary within the college, and does not work: It requires major upgrades that the current owner of the Lachat brand stopped providing several years ago. Specifically, our instrument requires upgrades to both its software and processor that will allow it to be operated on any modern Windows-based computer. To make our unit more fully supportive of soil testing associated soil testing, additional modules and associated pre-treatment supplies are also needed. Although the cost of returning our Quickchem 8500 to service is substantial (i.e., \$24,000), this expenditure that will likely allow the instrument to remain valuable.		1	25,500.00	\$ 25,500	\$ 305,088	No	\$ 598,059
45	4	Security	Computers, special orderhigh end	Much needed components of the department disaster recovery plan for the 24/7/365 mission critical, enterprise level, security dispatch center.		4	\$ 7,500.00	\$ 30,000	\$ 30,000	No	\$ 667,459

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Α	В	D	E	F	G	Н	I	J	K	L	М
46	5	Campus Recreation	Replace Senoh volleyball/tennis poles	Replace 8 Senoh volleyball/tennis poles in Myers Field House with refurbished/like new ones as the original ones are over 17 years old and need to be updated as they are rusty and need to be stripped, repainted and have some new parts installed. Sports Imports does not refurbish our old poles, rather they send us refurbished poles they have in stock, and charge us a fraction of the new cost. We are replacing the volleyball and tennis floor sleeves when we install the new field house flooring this summer, so the time is right to update these poles. The equipment is used for Campus Recreation programs, Human Performance classes, Athletic camps, youth tournaments and more.		1 lot	\$ 6,250.00	\$ 6,250	\$ 36,250	No	\$ 667,459
47	6	Campus Recreation	Complete 9-hole Disc Golf Course and Fitness Trail	We secured \$10,000 in Institutional Equipment funding in FY15 to build a 9 hole disc golf course in summer 2015, but over \$5,000 of that funding was taken back during budget cuts. We were not able to complete the tee pads and signage. In addition, we have a need for signage at the fitness trail to indicate a 5K route, distance of the three loops, a marked start/finish line, and a map to be located at the start of the fitness trail.		1 lot	\$ 5,600.00	\$ 5,600	\$ 41,850	No	\$ 667,459
48	7	Campus Recreation	Replace climbing wall mats in Myers Field House.	The climbing wall mats are over 6 years old and are breaking down and need to be replaced for safety reasons. The climbing wall is used for Campus Recreation programs, academic classes, team building and leadership development activities for both campus and off-campus groups.		1 lot	varies	\$ 22,925	\$ 64,775	No	\$ 667,459
49	8\	Campus Recreation	Kayaks, paddles, lifejackets, storage unit and a trailer	Purchase of 12 kayaks, paddles, lifejackets, storage for paddles and jackets, and a trailer for our Maverick Adventures/Adventure Education Program so we can rent them along with use them for trip and travel programming.		1 lot	varies	\$ 11,450	\$ 76,225	No	\$ 667,459
50	9	Security	Golf Cart	Multi-purpose cart for patrolling campus and for special events.		1	\$ 10,000.00	\$ 10,000	\$ 86,225	No	\$ 667,459
51	7	Intercollegiate Athletics	Event management 2-way radios/crowd control stanchions and barriers	Event management radios to replace existing, aging units. Radios are imperative for communication between staff members during events to ensure public safety and keep events operating at NCAA and conference mandated procedural protocols and standards. Stanchions and barriers are public safety and security tools utilized at all athletic events.	0.00	1	\$ 6,500.00	\$ 6,500	\$ 6,500	No	\$ 844,959
52	8	Physical Plant - Grounds	John Deere 8808 A Field Mower	This athletic turf mower will replace an existing ten year old mower. This machine will greatly increase our mowing efficiency. Our current athletic mower is 6 ft wide and this new mower is 8 ft. wide. This replacement mower will reduce labor, fuel costs, and general maintenance work.	Trade-in \$6,500; Recommend funding 50% from Outdoor Campus Rec Sinking Funds (\$24,250)	1	\$ 55,000.00	\$ 24,250	\$ 30,750	No	\$ 844,959
53	9	Physical Plant	Pull Behind Dump Trailer 14'	This pull behind trailer will be used to remove to off-campus locations, brush, compost, concrete, black top chips. Haul broken machines to businesses instead of delivery cost now incurred. Back up for snow removal.	None	1	\$ 12,000.00	\$ 12,000	\$ 42,750	No	\$ 844,959
54	10	Intercollegiate Athletics	Outdoor track shot put platform/cage system	Install throwing cage at outdoor track complex used for outdoor track/field hammer/discus throwing practice and competitions. Current setup is a huge safety concern as existing layout poses risks of injury to student-athletes, coaches, spectators and users of the adjacent walking path. A new netting/framework/boarder throwing cage system would greatly reduce the potential for injury and make the area much safer for all who utilize the space.	0.00	1	\$ 23,000.00	\$ 23,000	\$ 65,750	No	\$ 844,959
55	11	Physical Plant	Vertidrain Aerator	This aerator will replace our 13 year old machine. This machine improves the soil condition by reducing compaction, allowing improved water absorbency and encouraging healthy turf growth on athletic and campus rec fields. The machine is used daily throughout the season. A new feature is that the machine operates more efficiently; travel speed is doubled increasing employee productivity and reducing fuel use. Trade in of old machine will offset a portion of the replacement cost.	\$3,000 Trade in / Campus Recreation; Recommend funding 50% from Outdoor Campus Rec Sinking Funds (\$21,000)	1	\$ 45,000.00	\$ 21,000	\$ 86,750	No	\$ 844,959
56	12	Intercollegiate Athletics	Laser measuring/scoring device system for track/field practice and competitions	In-house laser measuring system would eliminate the need to contract out for the rental and service of this equipment for all indoor and outdoor track/field meets.	0.00	1	\$ 9,500.00	\$ 9,500	\$ 96,250	No	\$ 844,959

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Α	В	D	E	F	G	Н	I	J	K	L	M
57	13	Physical Plant - Grounds/Parking		Replace the current 1981 model. Uses are snow removal, hauling material, trees, branches, landscape supplies, and moving items for campus needs.	\$5,000 From Parking	1	\$ 45,000.00	\$ 40,000	\$ 136,250	No	\$ 844,959
58	14	Intercollegiate Athletics		Gas/electric utility carts needed to move athletic equipment and personnel around to the different outdoor facilities for practices, games and special events. The need increases with the Sports Bubble coming online as another facility that will need to be serviced.	0.00	2	\$ 7,500.00	\$ 15,000	\$ 151,250	No	\$ 844,959
59	15	Physical Plant/Parking		Replace the current 1980 model. Uses are snow removal, landscape work, dirt work, moving campus items, and unloading trucks for campus needs	Trade-in \$28,500	1	\$ 229,000.00	\$ 200,500	\$ 351,750	No	\$ 844,959
60	16	Intercollegiate Athletics		Replace aging injury rehabilitation machines in Athletic Training rooms. Equipment used for treatment of injured student-athletes and as a injury preventative measure.	0.00	1	\$ 16,750.00	\$ 16,750	\$ 368,500	No	\$ 844,959
61	17	Intercollegiate Athletics	Portable, elevated press box/timing	For use with electronic timing system that is part of outdoor track facility. Elevated booth needed for timing system controls and also serve multiple purposes as press box, concessions area and ticketing trailer. Portability allows for placement at different field positions and facilities as needed.	0.00	1	\$ 25,500.00	\$ 25,500	\$ 394,000	No	\$ 844,959
62	18	Intercollegiate Athletics	Athletic Equipment room - industrial clothes washing machine	To replace an old model. The athletic equipment room runs laundry for all athletic teams and many other departments around campus 12 months a year. The existing washer is well past it's shelf-life and is inefficient and barely operationally sustainable as replacement parts from the manufacturer are becoming unavailable.	0.00	1	\$ 25,000.00	\$ 25,000	\$ 419,000	No	\$ 844,959
63	2	IT Solutions		Replace end-of-life Telepresence equipment in Edina and main campus. Current equipment that students depend on for distant learning is no longer supported by Cisco.	\$100,000 (General Fund Allocation)		\$ 100,000.00	\$ 200,000	\$ 200,000	No	\$ 949,959
64	3	IT Solutions		Responding to student requests we would like to create a more collaborative work area in the Academic Computing Center. This would include areas for students to share work on multiple screens (collaboration spaces), in addition to a space that has the power for students to bring any device and work.	\$50,000 (General Fund Allocation)		\$ 100,000.00	\$ 150,000	\$ 350,000	No	\$ 949,959
65	5	IT Solutions		Replace end-of-life Telepresence equipment in Edina and main campus. Current equipment that students depend on for distant learning is no longer supported by Cisco.	\$100,000 (General Fund Allocation)		\$ 100,000.00	\$ 200,000	, , , , , , , , , , , , , , , , , , ,	No	\$ 967,959
									#REF!	No	

Items Not Recommended for Funding At This Time By Institutional Equipment Prioritization Committee Subtotal \$\, 1,360,313

Item	s that do	not seem to meet	the criteria for funding								
Item #	Divisional Priority	Departmental Unit	Equipment / Furnishing Description	Rationale	Match	Quantity	Unit Price	Total Request	Divisional Running Total	Recommended for FY18 Inst Equip Funding (Type in Yes or No for automatic calc in next column)	Recommended for FY18 Inst Equip Funding Running Total
									\$ 0	No	
									\$ 0	No	

Items Not Recommended for Funding Due to Not Meeting Criteria Subtotal \$ 0

Grand Total All Requests \$ 2,360,032