Missouri University of Science & Technology: Fiscal Years 2024 - 2029 Capital Plan included in Finance Plan

	Current Year	Year 1	Year 2	Year 3	Year 4	Year 5
N/A						
N/A						

* Projects listed under 2024 are projects approved or will request approval during FY24.

Missouri University of Science and Technology: Fiscal Years 2024 – 2029 Capital Plan included in Finance Plan Funding

N/A		

FY 2025 – Missouri University of Science and Technology: Strategic Projects Development Plan

The Bioplex is a planned new construction project immediately North and West of the James E. Bertelsmeyer Hall. The project will bring faculty together from a broad range of academic programs who are currently engaged in medical or health

The Physics Building, constructed in 1963, is home to the physics department. The project is a full renovation of the building and will include replacement all current building mechanical, electrical, plumbing systems, exterior envelope repairs, renovation of all interior components, installation of a fire suppression system and associated backup generator, and accessibility improvements. The project will address all deferred maintenance and 10-year facility renewal needs.

The physics department is a key department at S&T in terms of both its teaching and research missions. Every year, close to 2000 students take classes in the Physics Building, and most S&T students take at least one class in this building during their time on campus. In addition, physics faculty carry out high-profile research in astrophysics, atomic physics, and materials physics.

The Physics Building houses a number of cutting-edge lap43 (ui)-2 (l4 (dge)4 0 Tw (-)4 (P)-3.9 (hy

The initial concept for the Innovation Campus Expansion proposes providing additional program space in three separate buildings adjacent to the Missouri Protoplex building. These facilities will provide research, laboratory, meeting, and classroom space.

The Innovation Campus Program Expansion is intended to follow construction of the Missouri Protoplex and accommodate additional program to support pre-production, testing and development, business incubation, cyber-security, materials, manufacturing and methods, semi conductor, and critical minerals research. Research that will occur on the Innovation Campus will focus on advanced manufacturing, additive manufacturing, and the development of tools and techniques to reduce production costs, lead time, improve product quality, and reliability and safety. The work will draw on the expertise of Missouri S&T faculty in aerospace, ceramic, electrical, manufacturing, mechanical, metallurgical, and systems engineering, as well as engineering management, materials science and engineering, economics, and business information and technology. The Innovation Campus will build on and broaden Missouri S&T's strong relationships with over 60 companies in the aerospace, electronics and computing, infrastructure, and the steel manufacturing industries through four consortia through which S&T conducts non-proprietary research for consortia members who benefit from this shared expertise.

These facilities will also accommodate meeting and classroom space for the education and training of high-skilled advanced manufacturing workers, collaboration among manufacturers and entrepreneurs with faculty from colleges and universities across our state, and education focused on innovation, entrepreneurship, and economic development.

This $95,000,000 project will be funded by $40,000,000 in federal funds, $40,000,000 in state funds, and $15,000,000 in gifts.

The proposed facility is intended to be a new stand-alone building for critical mineral and material processing including hydrometallurgy and extraction of Complex Amorphous Materials (CAM) material. The main goals of the proposed facility include building a skilled workforce, advancing hydrometallurgical and separation techniques, as well as advancing manufacturing technologies. The facility will incorporate a 12,000 sf mineral processing 18-foot high bay; a 4,750 sf entry-office-laboratory area; and a 1,950 sf observation and supply storage mezzanine. The mezzanine will be utilized for observation of the mineral processing area as well as general supply storage for day-to-day operations of the facility.

Construction of the new building will be consistent with that of similar mineral processing facilities. The building will have a pre-engineered metal building structure and exterior enclosure, with an insulated metal wall panel façade, and an insulated metal roof system. The interior face of exterior walls will be finished with durable and cleanable painted metal panels. The floor will be slab on grade with integral curbed, sloped, and drained floors for containment of all liquid waste within sump basins for collection and disposal.

Missouri S&T has a long history of mining and minerals education and that we can leverage to become a national leader in critical minerals research. Missouri S&T now has over $21 million (including $15.5 from the State of Missouri) in active critical minerals research projects from government and industry sources. The proposed facility will be a unique facility in the U.S. with pilot-scale mineral processing and extractive metallurgy equipment combined with advanced simulation that currently does not exist in the U.S. By co-locating this facility near the Missouri S&T Experimental Mine, we will create a combined mining campus that would enhance our ability to support research and train the engineers and scientist for the critical minerals sector.

This $25,000,000 project will be funded with 100% federal funds.

.

This project provides leasable research space for strategic partnerships between Missouri S&T's research centers and State, Federal, and/or private entities. The new 40,070 gross square feet (GSF), single story building includes offices; dry, wet, and clean up laboratories; and storage space. The building exterior façade is anticipated to be an insulated metal panel system. The location, north of HWY E, East of Spruce Drive and West of Fraternity Drive, selected sl rh ofsa as2 (e)4 (c)4 (t)-2 (e)4 (d slr)3 h97 sl141 (s)-0.9 &d t.084 3(a)4 (o be6 (20(b)

The University Center West project will construct a 20,000 gross square feet (gsf), two story facility at the southwest corner of Bishop Avenue and University Drive. The Center will provide space for a food service venue, offices for Campus Housing and Dining Services, and a central mail facility to serve the nearby residential complex. The project will include the demolition of 720 Tim Bradley Way Building which has $1.8 M in facilities needs and an FCNI of 0.16.

This facility will provide a dining venue to serve the Residential Commons One & Two, and the University Commons building. These facilities currently do not have a dining facility. Additionally, this facility will locate the campus housing and dining staff that serve these students to a more accessible location near these large housing complexes.

This $11,191,515 project will be funded by campus funds.