Committee Name: Budget and Finance  
Date: October 27, 2023

Agenda Item: State of Michigan Fiscal Year (SFY) 2025 Capital Outlay Project Request and Five-Year Capital Plan

Resolution:
BE IT RESOLVED, that the Board of Trustees of Michigan State University hereby adopts the 2025 Capital Outlay Project Request, and Five-Year Capital Outlay Plan included as Attachment A hereto.

Recommendation:
The Trustee Committee on Budget and Finance recommends that the Board of Trustees adopt Michigan State University’s SFY2025 Capital Outlay Request for State of Michigan cost participation for the project titled “Engineering and Digital Innovation Center”, and the Five-Year Capital Plan. Action on the request authorizes the Administration to respond to the State of Michigan Budget Office reporting requirements and submit a Capital Outlay request for state cost participation. The report and request are due to the State Budget Office no later than October 27, 2023.

Prior Action by BOT:

- October 28, 2022: The Board authorized the Engineering and Digital Innovation Center as the capital outlay request to be submitted to the state for cost participation for SFY2024.
- September 2023 Board work session: the administration recommended to the Board resubmission of the Engineering and Digital Innovation Center to the state for cost participation for SFY2025. This recommendation would be brought forward to the Board for action at the October 27, 2023 Board meeting.

Responsible Officers: Barbara J. Kranz, Assistant Provost, Institutional Space Planning and Management
Summary: It is recommended that the Board of Trustees adopt the Engineering and Digital Innovation Center as MSU’s SFY2025 Capital Outlay Request for the State of Michigan cost participation project, and the Five-Year Capital Plan for submission to the State of Michigan Budget office by October 27, 2023.

Background Information:

Five-Year Capital Outlay Plan

The State of Michigan Capital Outlay process requires that public universities and community colleges submit a Five-Year Capital Outlay Plan that is intended to provide state policymakers with the most current information available on institutional priorities and needs. Institutions may request state funding of a capital outlay project. The requested project must be a logical extension of information contained in the Five-Year Capital Plan and address a specific academic or research need of the institution. The plan must be approved annually by the institution’s governing body and is to include state-supported and institutional-funded projects.

To optimize flexibility the university provides a more significant potential list of priority projects, hence the list appears greater than the number of projects that would move forward in the five-year timeframe. The MSU capital outlay project request and capital priorities support programs with strong national reputations, expanding research bases, and high enrollment demand that will sustain the university and its contributions to Michigan. Funding of these requests will advance economic development in the state, now and in the long term.

Capital Outlay Project Request

The SFY2025 Capital Outlay request is for construction of a new Engineering and Digital Innovation Center (EDIC). The new center will support the emergence of a strong and transformative ecosystem focused on the convergence of digital and physical technologies. It will bring together a range of teaching, learning, and research activities across multiple colleges and disciplines to create an energized, innovative, and entrepreneurial community focused on digital futures. The academic partnership across six colleges (Engineering, Natural Science, Arts and Letters, Business, Communications Arts and Sciences, and Social Science) is intentional and will lead to interdisciplinarity in learning and research.

The center will:

a) Provide new capacity.
b) Align modern building infrastructure and space functionality.

c) Support the consolidation of top-ranked researchers and students.

As a result, the center will enable new synergies and enhanced potential for discovery and increase the potential to attract significant federal funding in high-demand research areas. This center will be a physical and symbolic gateway to the digital future at MSU – a home for new ideas and transformational learning and research.

The new center will:

a. Support an increase in enrollment of new undergraduate students in computational sciences and digital literacy disciplines, and in graduate-related programs.

b. Equip MSU graduates with the skills in computational sciences and digital literacy necessary for postgraduate success.

c. Become MSU’s center for excellence in advanced manufacturing, materials science, ultrafast science, and quantum computing including heterogeneous micro-electronic technologies.

This investment will provide the foundation to respond to industry needs and student demand, support economic development in Michigan, leverage the opportunities provided by FRIB for heavy-ion radiation testing of integrated chip-based systems, and provide research infrastructure for growth in materials research and emerging initiatives such as semiconductor research.

Source of Funds:

The request to the state of Michigan for cost participation in the EDIC through this capital outlay request is for $120 million of the estimated project cost of $250 million.

Note: The State of Michigan recently appropriated $30 million via the higher education bill in July 2023. This request is for an additional $120 million for state of Michigan cost participation through the capital outlay process, for a total state contribution of $150 million.

Resource Impact:

Not applicable
### Section I: MSU Capital Outlay SFY25 5-Year Planning

<table>
<thead>
<tr>
<th>Capital Outlay Priority – Renovation and Addition</th>
<th>FY24 Est. (mil.)</th>
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<tbody>
<tr>
<td>Engineering and Digital Innovation Center - New Const. - Rsch Support and Expansion</td>
<td>$250.0M</td>
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#### MSU 5-Year Capital Planning (Alphabetical Order)

### Renovations and Additions

- **195 Crescent Road** - Limited modifications to 1st and 2nd floors for IT Services space consolidation: $1.4M - $1.5M
- **Akers Hall** - Convert Existing 24 Student Apartments to Student Rooms: $3.4M - $3.6M
- **Athletic IT Control Room upgrade**: $2.8M - $2.9M
- **Auditorium Building** - Renovation of the main auditorium to support teaching, learning, outreach: $31.2M - $55.0M
- **Barrier-Free Accessibility Projects** - Single Occupant/ADA Restrooms - High Priority Buildings: $2.5M - $3.5M
- **Berkey Hall** - First Floor renovations: TBD
- **Biomedical Discovery**
  - Biomedical Animal Resources - Provision for Large Animal Housing and Surgery: $14.7M - $22.1M
  - Clinical Center A-Wing – Renove for Research Expansion: $84.9M - $98.8M
  - Clinical Center B-Wing – Renovate for Research Expansion & Learning: $19.7M - $26.4M
- **Breslin Athletic Training room renovation**: $2.8M - $2.9M
- **BSL-3** - Research Expansion Multi-Species Flexible Housing/Procedure Space (Ph. 2 of 2): $12.6M - $13.9M
- **Case Hall** - 4 Passenger Elevators: TBD
- **Chemistry HVAC Renewal**: $41.6M - $44.0M
- **Child Development Laboratory** - Lansing: TBD
- **Core Aquatic Species Research Facility** - Renovation and/or Addition Rsch. Support and Exp.: $29.7M - $36.0M
- **Duffy Daughterty** - Additional Renovations to Support Student Athlete Wellness: $40.0M - $43.0M
- **Engineering** - Renovations - Research and Learning - New Construction Related Backfill: $11.9M - $15.1M
- **Engineering Technology Degree Program** - TBD
- **Grand Rapids Research Center (GRRC) 5th Floor Lab Fit-out**: $9.0M - $9.4M
- **Holmes Hall** - New - Life Safety System: $8.3M - $8.6M
- **Jenison Field House LED/Infrastructure replacement**: $1.3M - $1.4M
- **Jenison Weight Room/Athletic Training Room Renovation**: $20.0M - $21.5M
- **Kellogg Center** - Life safety system replacement: $1.1M - $1.2M
- **Kellogg Center** - 4 Elevator Replacements: $1.0M - $1.1M
- **Kresge Art Center** - Comprehensive Renovations - Teaching and Learning, Research: $52.0M - $56.0M
- **Learning Space Improvements** - Annual Investment for Upgrades and Improvements ($6M annually): $6.0M
- **McDonel Hall** - New - Life Safety: $6.2M - $6.5M
- **McDonel Hall** - 4 Passenger Elevators: $2.5M - $2.6M
- **MSU Union back of house renovation (1st floor kitchen)** - TBD
- **Munn Ice Arena audio system replacement**: $1.0M - $1.1M
- **Munn Ice Arena LED replacement**: $1.0M - $1.1M
- **Old Botany** – Comprehensive Renovation: $12.9M - $13.8M
- **Old College Field LED and Audio Additions**: $6.2M - $6.5M
- **Olympic Sport/Multi-Purpose Arena**: $60.0M - $62.4M
- **One-Stop for Student Services**: $2.0M - $3.0M
- **Outdoor Track Relocation**: $5.2M - $5.3M
- **Parking Lot 38 (Erickson)**: $2.0M - $2.1M
- **Parking Lot 46 (Integrated Plant Sciences)**: $1.6M - $1.7M
- **Plant and Environmental Sciences** - Renovate Existing Plant Biology Building Research, Teaching and Learning: $90.5M - $119.6M
- **Spartan Stadium art addition**: $1.0M - $1.1M
- **Spartan Stadium deferred maintenance**: $2.0M - $2.1M
- **Spartan Stadium LED Replacement**: $11.0M - $11.6M
- **Spartan Village (old) - Decommissioning**: $1.0M - $1.1M
- **Student Services Building** - Renovate for Student Support - First Floor Career Services Area: $2.4M - $3.7M
## Section I: MSU Capital Outlay SFY25 5-Year Planning

**New Construction - New Building**

- Chemical Waste Facility - New Construction: $39.1M - $39.5M
- Intercollegiate Athletics - Multipurpose Arena - New Construction: $75.0M - $85.0M

**Major Systems Maintenance & Utilities (Alphabetical Order)**

- Barrier-Free Accessibility Projects - Single Occupant/ADA Restrooms - High Priority Buildings: $2.6M - $3.6M
- Capital Renewal (annual request): $35.0M
- Chemistry HVAC Renewal: $41.6M - $44.0M
- Install Second Condensate Line from Power Plant to Vault 206: $3.5M - $3.7M
- Life Science Building (A&B) HVAC replacement and related (phased approach): $83.3M - $88.1M
- Reconstruct Shaw Lane (Harrison to Chestnut/coordinated with Student Rec Health & Wellness): $5.1M - $5.3M
- Regional Chilled Water Plant - Convert to Electric Chillers: TBD
- Utilities (5-year) – Power Plant Modernization
  - Combustion Turbine/Heat Recovery Steam Generator/Steam Turbine (Part 1/2 - demolition): $26.0M - $27.5M
  - Combustion Turbine/Heat Recovery Steam Generator/Steam Turbine (Part 2/2 - design/construction): $46.8M - $49.5M
  - East Cooling Tower Replacement: $9.4M - $9.9M
  - Farm Lane Ductbank Extension (Red Cedar to Wilson/Farm Lane): $3.2M - $3.3M
  - Package Boiler: $26.0M - $27.5M
  - #2 Steam Turbine Generator Stator Rewind: $2.5M - $2.6M
  - Power Plant Substations Renewal: $5.5M - $6.1M
  - Replace Power Plant Motor Control Centers: $3.0M - $3.3M
  - RICE Engine: $20.8M - $22.0M
  - Unit 4 Boiler Fluidized Bed Conversion: $10.4M - $11.0M
- West Regional Chilled Water Solution: TBD

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**Tennis Courts - New/Relocation to outside of Tennis Building**: $5.0M - $5.3M

**Wilson Hall - New - Life Safety System**: $5.5M - $5.8M

**Yakeley Gilchrist Hall - Renovation**: $37.4M - $39.6M

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