

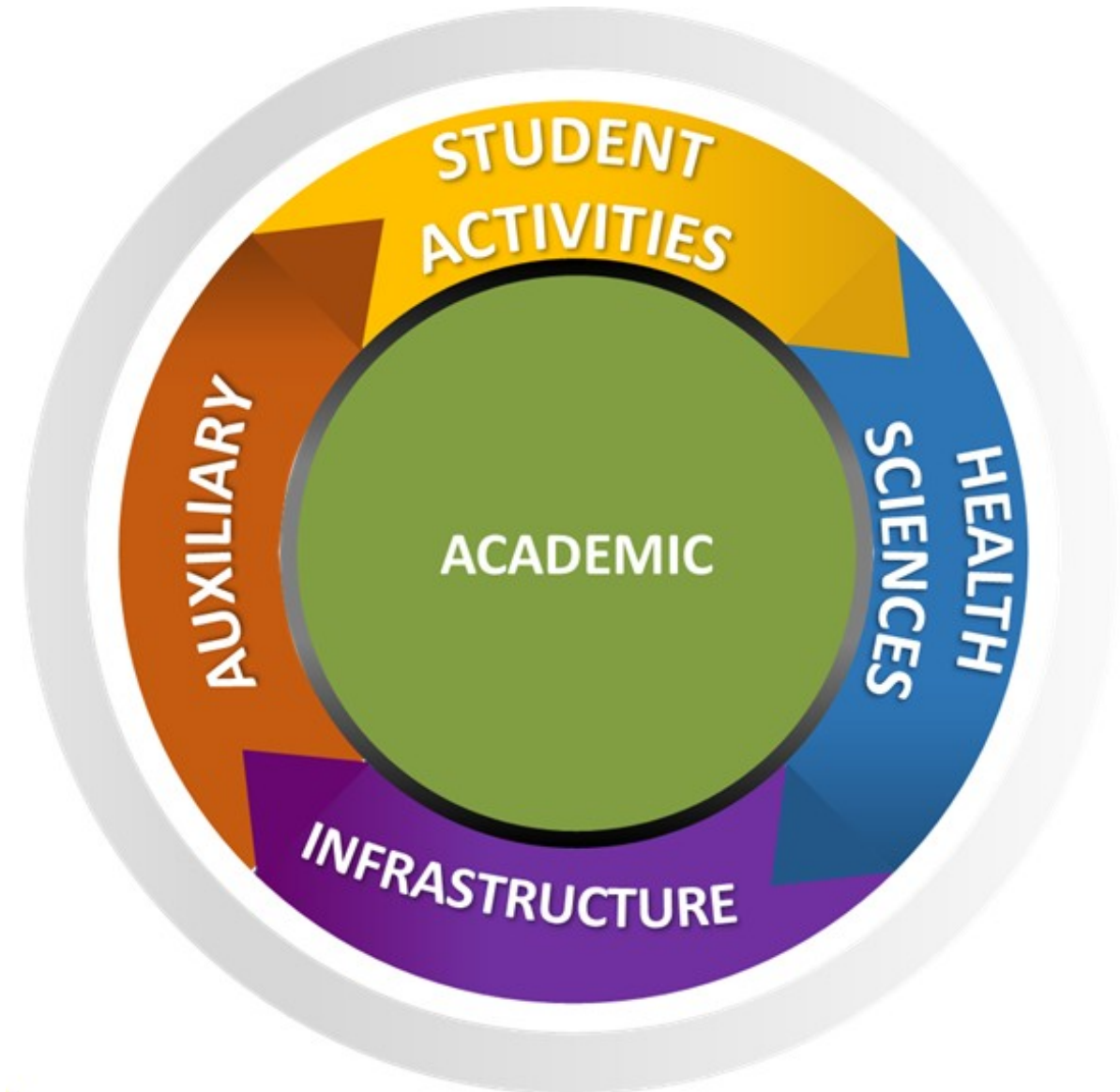
August 29, 2019

ANNUAL CAPITAL PLANNING LIST

Appended is the draft **Annual Capital Planning List** that will be reviewed at the work session on Thursday September 5. The list reflects projects with an estimated cost/budget \$1M or greater or that has a material change to the landscape or footprint change. The information is organized by major areas of focus: Academic, Student Activities, Health Sciences, Infrastructure and IT, and Auxiliary. Within those categories the projects are grouped as follows: In Construction/Substantially Complete or In Planning, Future Capital Project Priorities, and In Discussion/Future.

A review of this list is also in anticipation of our upcoming submission to the State of Michigan for the university's 5-Year Capital Plan and Capital Outlay project funding request. While we have not yet received instructions from the State, the 5-Year Capital Plan and Capital Outlay request is typically due by November 1 and requires BOT action, which occurs at the October BOT public meeting.

The State requires the university to include projects that we are proceeding with or anticipate undertaking over the next five years (reference Future Capital Project Priorities), regardless of funding source. 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 time-frame.



Project Name - ACADEMIC

In Construction or Substantially Complete and In Planning includes projects \$1M or greater. Items in red are pending BOT authorization September 2019.

Estimated Cost FY20

DRAFT

In Construction or Substantially Complete

- Administration Building – Ground Floor – Convert former Data Center to Office Space \$1.35M
- Biological Safety Level-3 Research Laboratory (Ph. 1 of 2) \$3.5M
- Eli Broad College of Business - Addition No. 2 - Pavilion \$62.0M
- Food Science – Fruit and Vegetable Laboratory Renovation \$3.5M
- ICECUBE Laboratory Renovations at Biomedical Physical Sciences \$1.0M
- Interdisciplinary Science and Technology Building (Strategic Academic Development Initiative) \$100.0M
- Music Building – Addition – Program Expansion and Needs \$41.5M**
- STEM Teaching and Learning Facility and Former Shaw Lane Power Plant Renovation (Strategic Academic Development Initiative) \$110.1M**
- Veterinary Medical Center – Alterations to Second floor Locker Rooms \$1.6M
- Wonders Hall – Teaching, Learning, Student Support Renovation \$18.0M

Auxiliary	Capital Outlay / State	Capital Renewal	General Fund*	Gifts	Grants	Utilities	P ³ / Industry
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			X				
			X				
				X			
	X		X				
			X				
			X				
		X	X	X			
	X		X			X	
			X				
X			X				

In Planning

- Administration Building – Renovations to the Third Floor (selected area) \$3.1M - \$3.7M
- Business College Complex - Eppley Center - Student Support, Capital Renewal, and Building Envelope (revised planning request) \$18.0M - \$21.0M
- Kellogg Biological Station – Bird Sanctuary Renovation \$2.5 – 3.5M
- Swine Teaching and Research Addition (Footprint change) \$0.5 – 0.8M

			X				
		X		X			
				X			
	X		X				

** Board Approved Scope and/or Budget change during this time period

*General Fund includes central and/or unit contribution(s)

Project Name - ACADEMIC

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Estimated Cost FY20

DRAFT

Auxiliary	Capital Outlay/State	Capital Renewal	General Fund*	Gifts	Grants	Utilities	P ³ /Industry
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Future Capital Project Priorities

- Bioeconomy – Plant Science Facilities (\$140.9M - \$150.9M)
 - **Greenhouses** – Renovation of Existing and Addition – Research Expansion and Learning. (Recommended SFY21 Capital Outlay request)
 - Plant Biology Building – Comprehensive Renovation
- Biomedical Frontier
 - Biomedical Animal Resources – Provision for Large Animal (\$15.7M - 21.9M)
 - Housing and Surgery
 - Imaging
 - Clinical Center A-Wing – Renovate for Research Expansion
 - Clinical Center B-Wing – Renovate for Research Expansion & Learning
 - Research Laboratory Renovation – Various (STEM and ISTB Related Backfill)
- BSL-3 - Research Expansion
 - BSL-3 Multi-Species Flexible Housing/Procedure Space (Ph. 2)
- Detroit Initiative - MSU Places of Learning
- Engineering - New Construction/Addition/Renovation
- Learning Spaces
 - Learning Space Improvements – Annual Investment for Updates and Improvements (5-Year need, \$12.0 annually)
 - Library Improvements – Learning and Collections Support
- Music Building – Renovation of Existing for Improved Program Support
- Old Botany – Comprehensive Renovation

\$20.9M

\$120.0M - \$130.0M

\$11.3M - \$16.5M

\$4.4M - \$5.4M

\$65.0M - \$75.0M

\$15.0M - \$20.0M

\$15.0M - \$18.0M

\$9.5M - \$10.5M

TBD

TBD

\$60.0M

\$5M - \$8M

\$9.4 - 33.3M

\$9.6M - \$10.6M

		X	X				
			X				
			X				
		X	X				
			X				
			X	X			X
	X	X	X	X		X	
			X				
			X	X			
		X	X				
			X	X			

*General Fund includes central and/or unit contribution(s)

Project Name - ACADEMIC

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Estimated Cost FY20

DRAFT

Auxiliary	Capital Outlay/State	Capital Renewal	General Fund*	Gifts	Grants	Utilities	P ³ /Industry
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In Discussion/Future

Instruction and Curriculum Focused

- McDonel Hall Former Cafeteria – Renovate Portion of Dining Area and Accessibility
- Bio-Engineering Facility (IQ) - Build-out of 3rd and 4th Floor - Bio Design
- College of Engineering - Student Activities Building

TBD
TBD
\$3.5M - \$4.5M

			X				
			X	X			
				X			

Research Focused

- Food Science - Repurpose Closed Cold Rooms
- Life Science Building - Research Labs
- Natural Sciences Building Comprehensive Renovation

\$1.0M - \$1.6M
\$1.6M - \$2.0M
\$115.0M - \$120.0M

			X				
			X				
			X				

Land Management – Biological Stations and Outreach

- Dairy Facility - New
- Judging Pavilion – Roof Over Outdoor Arena

\$25.0M
TBD

			X	X			X
			X				

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Project Name - ACADEMIC

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Estimated Cost FY20

DRAFT

Auxiliary	Capital Outlay/State	Capital Renewal	General Fund*	Gifts	Grants	Utilities	P ³ /Industry
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In Discussion/Future - cont'd

Current or Potential Release Space/Site – Renovations Prior to Occupancy

- Anthony Hall 3rd Floor Unfinished Attic – Additional Student Study Space

\$0.8M - \$1.2M

			X				
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Acquisition of Private Property - Placeholder

- Consolidation
- Growth

*General Fund includes central and/or unit contribution(s)

Project Name - STUDENT ACTIVITIES

In Construction or Substantially Complete and In Planning includes projects \$1M or greater. Items in red are pending BOT authorization September 2019.

Estimated Cost FY20

DRAFT

Auxiliary	Capital Outlay/State	Capital Renewal	General Fund*	Gifts	Grants	Utilities	P ³ /Industry
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In Construction or Substantially Complete

- None

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In Planning

- IM West Outdoor Pool Replacement (on-hold planning completed)
- IM West Outdoor Pool Enclosure
- Outdoor Seasonal Ice Rink
- Sexual Assault Nurse Examiner (SANE) - Renovation at Student Services Building

\$8.5M
\$7.0M - \$9.0M
\$2.3M - \$3.0M
\$1.0M - \$1.5M

X		X	X	X			
X				X			
			X	X			
			X				

Future Capital Project Priorities

- Healthy Campus – Recreation, Fitness, Sport
 - IM Circle – Convert former Pool to Multi-Purpose Space
 - IM Fields – Service Road Synthetic Turf
- Student Services Building – Renovate for Student Support

\$10.0M - \$11.0M
\$9.5M - \$10.5M
\$8.8M - \$35.5M

			X				
			X				
			X				

In Discussion/Future

- Center for Gender in Global Context (GenCen) - Expansion
- Health Promotion Program and Food Bank - Relocation
- Multicultural Center
- Swimming Pools – Indoor
 - IM Circle
 - Jenison

TBD
TBD
TBD

TBD
TBD

			X				
			X				
			X				
			X				
			X				

*General Fund includes central and/or unit contribution(s)

Project Name - HEALTH SCIENCES

In Construction or Substantially Complete and In Planning includes projects \$1M or greater. Items in red are pending BOT authorization September 2019.

Estimated Cost FY20

DRAFT

In Construction or Substantially Complete

- None

In Planning

- None

Board Lease Authorization

- Grand Rapids Innovation Park - Long-Term Lease of Space in the Medical Innovation Building, Construction and Sublease of Radiopharmacy - College of Human Medicine

Future Capital Project Priorities

- MSU Health Care - Medical Services Building

In Discussion/Future

- College of Nursing Skills/Simulation Learning Space
- Medical Education Facility - Human Medicine and Osteopathic Medicine
- Human Performance and Wellness (joint with Intercollegiate Athletics)

Auxiliary	Capital Outlay/State	Capital Renewal	General Fund*	Gifts	Grants	Utilities	P ³ /Industry
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TBD

			X				
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TBD

X							
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\$8.0M - \$50.0M

TBD

TBD

				X			
			X	X			
X			X	X			X

*General Fund includes central and/or unit contribution(s)

Project Name - INFRASTRUCTURE

In Construction or Substantially Complete and In Planning includes projects \$1M or greater. Items in red are pending BOT authorization September 2019.

Estimated Cost FY20

DRAFT

Auxiliary	Capital Outlay/State	Capital Renewal	General Fund*	Gifts	Grants	Utilities	P ³ /Industry
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In Construction or Substantially Complete

• Utilities – Power Plant Modernization							
○ Reverse Osmosis System	\$1.0M					X	
• 2016-2017 Major Maintenance Projects							
○ Student Services Building – Replace Windows and Air Handling Units	\$7.3M		X				
• T.B. Simon Power Plant – Reconfigure House Service and Install Spare Breakers						X	
• Utilities – Power Plant Modernization							
○ Reciprocating Internal Combustion Engines (RICE)	\$47.0M					X	
• Water Distribution – Campus Water System Improvements	\$23.0M					X	

In Planning

• 2017-2018 Major Maintenance Projects							
○ Veterinary Medical Center – Replace HVAC1 & 2	\$1.6M - \$2.0M		X				
• Biochemistry – Replace Power Service – Capital Renewal	\$1.3M - \$1.4M		X				
• Library - West Wing HVAC Zone Level Upgrade	\$1.5M - \$2.0M		X				
• T.B. Simon Power Plant – Site Modifications							
○ Security fence/cameras	TBD					X	
• Utilities – Power Plant Modernization							
○ Medium Pressure Steam Boiler	TBD					X	
○ Replace U4 Cyclone Refractory	\$1.0M - \$1.5M					X	

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Project Name - INFRASTRUCTURE

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Estimated Cost FY20

DRAFT

Auxiliary	Capital Outlay/State	Capital Renewal	General Fund*	Gifts	Grants	Utilities	P ³ /Industry
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Future Capital Project Priorities

- Barrier-Free Accessibility Projects
 - Single Occupant/ADA Restrooms - High Priority Buildings
- Capital Renewal (annual request)
- 600 Crescent Road - Modifications to 1st and 2nd floors for IT Services space consolidation
- Farm Lane Infrastructure and Mobility Upgrades including Bridge Replacement
- Life Science Building (A & B) HVAC replacement and related (phased approach)
- Service Road and Service/Bogue Intersection Reconstruction
- 20MW Solar Array Installation (material change to the landscape and long-term lease)
- Transportation Services and Mobility Research Center
- Utilities (5-year) – Power Plant Modernization
 - Battery Energy Storage System
 - Combustion Turbine Rotor and Engine - Replace Unit 6
 - Electrical Centrifugal Chillers – 8,400 tons
 - Shared Natural Gas Pipeline

TBD
 \$35.0M
 TBD
 \$35.0M - \$40.0M
 TBD
 \$6.0M - \$7.0M
 NA
 \$20.0M - \$22.0M

 TBD
 TBD
 TBD
 TBD

		X	X				
		X				X	
			X				
		X					
		X					
						X	X
X			X	X			
						X	
						X	
						X	

In Discussion/Future

HVAC Replacements & Related Work (alpha order/next 10 years)

- Center for Integrated Plant Systems
- Engineering Building
- IM Sports West
- International Center Academic
- Library
- Plant Biology
- Veterinary Medical Center

\$16.7M
 \$36.6M
 \$17.4M
 \$7.0M
 \$23.0M
 \$36.6M
 \$52.3M

		X					
		X					
		X					
		X					
		X					
		X					
		X					

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Project Name - INFRASTRUCTURE

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Estimated
 Cost FY20

DRAFT

In Discussion/Future - cont'd

Capital Renewal

- Capital Renewal - Annual

TBD

Auxiliary	Capital Outlay/State	Capital Renewal	General Fund*	Gifts	Grants	Utilities	P ³ /Industry
		X					

Energy Conservation Measures

- 2021 - 2022 - Annual

TBD

		X				X	
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Utilities

- Utility Extension and Replacement - Annual

						X	
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Project Name - AUXILIARY

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Estimated Cost FY20

DRAFT

Auxiliary	Capital Outlay/State	Capital Renewal	General Fund*	Gifts	Grants	Utilities	P ³ /Industry
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In Construction or Substantially Complete

- Cowles House – Accessibility and Interior Renovations
- Duffy Daugherty – SAAC – Alterations to Skandalaris Football Offices and the Demmer Family Hall of History
- Hubbard Hall – Exterior Masonry Project Phase 4 of 4
- Munn Ice Arena – Expansion

\$6.0M

\$6.7M

\$2.7M

\$18.8M

		X	X	X			
				X			
X							
				X			

In Planning

- Hidden Lake Gardens – Observation Tower and Canopy Walk
- Owen Graduate Hall – Visiting Scholars Wing

\$2.2M

\$1.5M - \$2.0M

				X			
X							

Future Capital Project Priorities

- MSU Chapel - Columbarium and Accessibility

TBD

X				X			
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Project Name - AUXILIARY

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Estimated Cost FY20

DRAFT

Auxiliary	Capital Outlay/State	Capital Renewal	General Fund*	Gifts	Grants	Utilities	P ³ /Industry
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In Discussion/Future

Parking

- Lot 11 (Administration/Library)
- Lot 38 (Erickson)
- Lot 46 (Integrative Plant Science)
- Lot 62 (North side of Spartan Stadium)
- Parking Ramp #2 (Bessey/Computer Center) Replacement

\$1.3M
\$1.5M
\$1.2M
\$1.4M
TBD

X							
X							
X							
X							
X							

Auxiliary Enterprises/Residential & Hospitality Services

- RHS Major Building Renovations
 - Campbell Hall – Renovation
 - Forest Akers Clubhouse East
 - Spartan Village (old) - Demolition
 - Williams Hall – Renovation
 - Yakeley Gilchrist Hall – Renovation
- RHS Selected Building Renovations
 - Holmes Hall - Life Safety
 - Holmes Dining – Renovation
 - Kellogg Center - Roof (phased)
 - McDonel Hall - Life Safety
- Elevators - Capital Renewal
 - Case Hall - Elevators
 - McDonel Hall - Passenger Elevators

\$17.3M
TBD
\$10.5M
\$12.6M
\$18.8M

\$6.3M
\$6.3M
\$1.4M
\$4.6M

\$1.2M
\$1.3M

X							
X							
X							
X							
X							
X			X				
X							
X							
X							
X							
X							

*General Fund includes central and/or unit contribution(s)

Project Name - AUXILIARY

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Estimated Cost FY20

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Auxiliary	Capital Outlay/State	Capital Renewal	General Fund*	Gifts	Grants	Utilities	P ³ /Industry
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In Discussion/Future - cont'd

Auxiliary Enterprises/Residential & Hospitality Services - cont'd

• Retail Food Service

- Biomedical Discovery Neighborhood - Food Service
- Veterinary Medical Center Complex - Food Service

TBD

X							
X							

TBD

Potential Academic Project Coordination Opportunity and/or Impact in RHS

• McDonel Hall Former Cafeteria – Renovate Portion of Dining Area and Accessibility

TBD

X							
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• Potential Redevelopment

- International Center - Spartan Experience Center
- Spartan Village Property - Redevelopment

TBD

X							
X							X

TBD

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Estimated Cost FY20

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Auxiliary	Capital Outlay/State	Capital Renewal	General Fund*	Gifts	Grants	Utilities	P ³ /Industry
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In Discussion/Future - cont'd

Intercollegiate Athletics

- Golf Course - Short Game Practice Area
- Spartan Stadium Improvements
 - Accessibility Upgrades
 - Aisle Upgrades
 - East Concourse Improvements
 - East Concourse Improvements #2
 - West Concourse Improvements
- Student Athlete Housing/Training Table
- Healthy Campus Initiative
 - Multi-purpose Arena – University and Athletic Programming (includes wrestling training)
 - IM Fields – Cherry Lane Natural Turf
 - IM West – Ph.2
 - Jenison Field House – Ph.1

\$0.85M
 \$3.6M
 \$4.6M
 \$1.4M
 \$15.1M
 \$1.4M
 TBD
 TBD
 TBD
 TBD
 TBD
 TBD

X							
X							
X							
X							
X							
X							
X							
X							
X							
X							
X							

Healthy Campus Initiative - Potential Projects – Monitor for Coordination Opportunity

- Indoor Track Facility
- Outdoor Track Relocation
- Jenison - Fieldhouse Arena Conversion (Ph.2)
- Football Practice Field - Grass Field/Tennis Court Relocation

X							
X							
X							
X							

*General Fund includes central and/or unit contribution(s)