5-Year Capital Outlay Plan Update
And
Capital Outlay Project Request

Board of Governors
Budget and Finance Committee
October 10, 2014
• Integrative Biosciences Center (IBio)
  – Expected completion May 2015
  [Status: Y – Green]

• Macomb Advanced Technology Education Center
  – Completed On Time, Under Budget
  [Status: G – Green]

• Student Center Renovation
  – Food Court may be delayed until January ‘15
  [Status: Y – Green]

• Electrical Reliability Projects
  – On track for 2015 completion
  [Status: G – Green]

• Chatsworth Life Safety System Upgrades
  – Residential Life Enhancements
  – Completed early and under budget
  [Status: G – Green]

• Manoogian 2nd Floor Classroom Renovations
  – Completed with rave reviews
  [Status: G – Green]
**Integrative Biosciences Center (formerly MBRB)**

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Scope of Project</th>
</tr>
</thead>
</table>
| • Provide new construction fronting Woodward that is integrated with the former Dalgleish Cadillac Dealership that will be comprehensively renovated  
• Approved project budget: $93 million  
• Expected completion: May 2015 | • Demolition of former American Beauty and Iron Works building  
• 78,000 sq. ft. of new construction  
• 126,600 sq. ft. of renovation  
• Green space and site amenities at Woodward and Burroughs |

**Justification**

• Permits expansion of research initiatives (55 new PI teams) focused on biomedical engineering, cardiovascular, diabetes/obesity/metabolism, systems biology, bioinformatics and translational science  
• Expected additional research income: $23 million  
• Expands relationship with Henry Ford Health System whose bone and joint center, and motion analysis lab will relocate to the building  
• Continues contribution to MidTown revitalization and economic growth
Macomb Advanced Technology Education Center

**Project Description**
- Construct new Macomb County Extension Center at former Farmer Jack site on 12 Mile in Warren, MI.
- Approved project budget: $12 million
- Completed: August 2014

**Scope of Project**
- Construct new 40,000 sq ft single story building or renovate existing structure
- Ten 20 – 60 student technologically advanced classrooms
- Seven 20 – 40 student computer labs
- One advanced energy lab
- Various student amenities

**Justification**
- Provides dedicated instructional resources to the citizens of Macomb County
- Immediate proximity to MCC
- Enhances student enrollment by approximately 900 students per semester
- Enhances retention and graduation rates
- Increases revenue: by the end of the third year of operation, ATEC will be generating more than $9 million in revenues and a potential net of more than $3 million
### Student Center Building Renovation

#### Project Description
- Renovate basement, first, second and third floor to provide appealing food court options, increased retail venues, and proper facilities for all the student organizations
- Approve project budget: $26.5 million
- Expected completion: August 2015

#### Scope of Project
- Increase building by 12,000 sf, expanding food court, retail and south entry
- Renovate over 95,000 sf, improving finishes and functionality
- Construct new entrances from Gullen Mall
- Improve interior circulation, replace interior finishes, and upgrade mechanical and electrical systems

#### Justification
- Improves campus image for student recruitment and retention
- Provides excellent space for student clubs and organizations
- Improves the quality of University experience with better food court and retail options
- Reduces negative impacts on the Undergraduate Library which many, many students use for play and socialization due to the dysfunctional performance of the Student Center
Electrical Reliability Upgrades

Project Description
• Upgrade electrical infrastructure to improve service reliability by replacement of electrical service entrances and substations, additional back-up power generators and UPS equipment
• Approved project budget: $13.5 million
• Expected completion: December 2015

Scope of Project
• Electrical service entrance and substation upgrades at the Data Center and Athletics
• Additional back-up power generators at Shapero, Pharmacy, Physics, Elliman, BioEngineering, FPM
• Uninterruptable power supplies (UPS) for various portions of the research portfolio to protect sensitive lab equipment

Justification
• Prevents key University operations from being shutdown due to power outages
• Protects key research assets: animals, equipment and careers
• Improves stature with NIH et al through redundant infrastructure supporting grants
• Enhances recruitment of faculty scientists that recognize benefit of supportive services
• Enable continued growth of Data Center capacity
## Chatsworth Life Safety System Improvements

### Project Description

- Upgrade life safety, technology, and mechanical systems
- Approved project budget: $2.3 million
- Expected completion: December 2014

### Scope of Project

- Replace and upgrade fire alarm system for full building coverage
- Install building-wide fire suppression system
- Upgrade mechanical equipment in egress corridors
- Replace and upgrade building technology infrastructure

### Justification

- Provides life safety system coverage that is code compliant to entire apartment building
- Restores information technology infrastructure to current best practice standards
## Project Description

- Completely renovate and renew the 23 general-purpose classrooms on the 2\textsuperscript{nd} floor as part of an on-going multi-phase building improvement initiative that included renovation of the 1\textsuperscript{st} floor in 2008
- Estimated project cost: $6 million
- Estimated duration to complete: 20 months

## Scope of Project

- Maintaining the interior floor plan configuration, the project will comprehensively renovate and replace mechanical and electrical infrastructure, interior finishes including ceilings and lighting, provide new academic technology, and install fire alarm and suppression life safety systems

## Justification

- Continues the renovation of the building various classrooms that started four years ago; when done 2 of the 3 classroom floors will provide fully updated instructional space
- Existing mechanical and electrical infrastructure is original to the building; upgrade will reduce energy consumption and improve occupant comfort
- Restores related classrooms to excellent condition – presently in poor condition
<table>
<thead>
<tr>
<th>Project/Description</th>
<th>Amount in millions</th>
<th>FY15</th>
<th>FY16</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEM Laboratory Classroom Building</td>
<td>30.0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Bio Sci/Food &amp; Nutrition Renovation</td>
<td>5.5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Hilberry Gateway Phase</td>
<td>25.0</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>BioEngineering Building Renovation and Expansion</td>
<td>19.5</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Class lab back-fill to research</td>
<td>8.0</td>
<td>3</td>
<td>8 – a)</td>
</tr>
<tr>
<td>State Hall Classroom Building Renovation</td>
<td>20.0</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Fountain Court Improvements</td>
<td>2.5</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Business School Building</td>
<td>40.0</td>
<td>8</td>
<td>On Hold</td>
</tr>
<tr>
<td>Scott Hall Research Laboratory Renovations</td>
<td>5.0</td>
<td>New</td>
<td>4</td>
</tr>
<tr>
<td>Law School Classroom Building Renovation</td>
<td>10.0</td>
<td>New</td>
<td>12</td>
</tr>
<tr>
<td>School of Social Work Relocation</td>
<td>3.0</td>
<td>New</td>
<td>3</td>
</tr>
<tr>
<td>Student Innovation Center for Engineering</td>
<td>10.0</td>
<td>New</td>
<td>11</td>
</tr>
<tr>
<td>DeRoy Apartments Exterior Improvements</td>
<td>5.0</td>
<td>New</td>
<td>5</td>
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(a = Re-allocate Series 2013 bond proceeds to fund Social Work relo and Scott Hall renovations)
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<tr>
<th>(Amount in millions)</th>
<th>Project Priority</th>
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<td>STEM Laboratory Classroom Building</td>
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<td>(a – Re-allocate Series 2013 bond proceeds to fund Social Work relo and Scott Hall renovations)</td>
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On Hold
### STEM Laboratory Classroom Building

#### Project Description
- Repurpose Science and Engineering Library as new STEM Laboratory Classroom Building
- Consolidate and relocate Math Department
- Estimated project cost: $30 million
  ($20M Capital Outlay, $10M Series 2013 Bond)
- Estimated duration to complete: 18 -24 months

#### Scope of Project
- Renovate eight floors totaling 100,000 gross square feet in SEL providing general-purpose and lab classrooms, and faculty offices for Math

#### Justification
- Many existing lab classrooms at Physics, Engineering, Science Hall and Shapero are obsolete and not suitable for classroom use
- Will help to improve STEM retention / graduation rates by providing environment to effectively deliver undergraduate STEM instruction
- ~55,000 sq. ft. of existing space becomes available for new research and other needs
- Avoids $3 million cost to make first floor Physics classrooms code compliant
# 5447 Woodward Renovation for the School of Social Work - Phase I

## Project Description
- Renovate and upgrade the recently purchased Detroit Institute for children at 5447 Woodward to be the new home of the School of Social Work
- Estimated project cost: $3.0 Million, re-allocate some Series 2013 bond proceeds to fund
- Estimated duration to complete: 12-18 Months

## Scope of Project
- Reconfigure portions of the interior floor plan to create required faculty and School administrative office space.
- Upgrade or replace mechanical, electrical and plumbing systems to support interior changes, and to prepare building infrastructure for eventual classrooms

## Justification
- Establishes the School of Social Work on prominent Woodward frontage
- Social Work has outgrown the Thompson House, enables growth of program by providing additional dedicated space
- Former Detroit Children’s Institute now vacant
- Allows Thompson House to be re-purposed
## Biological Sciences Building Improvements

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<thead>
<tr>
<th>Project Description</th>
<th>Scope of Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Upgrade key lab support spaces throughout the Biological Sciences Building to benefit the Biology Department.</td>
<td>• Renovate the equipment room on the 5th floor providing DI water and functional autoclaves</td>
</tr>
<tr>
<td>• Estimated project cost: $2.5 million <em>(Series 2013 Bonds)</em></td>
<td>• Provide a CORE facility in the basement including hi-tech microscopy available to all researchers</td>
</tr>
<tr>
<td>• Estimated duration to complete: 12 – 15 months beginning FY15</td>
<td>• Convert portion of greenhouse to vivarium</td>
</tr>
<tr>
<td></td>
<td>• Convert former office area to lab support</td>
</tr>
</tbody>
</table>

### Justification

• Several lab support spaces require significant improvement to provide necessary environment for specialized equipment

• Additional vivarium space is required in building to support current research; renovation will reduce need for vivarium at Life Science Building

• Improved conditions will increase research productivity
## Science Hall Lab Renovations for Food and Nutrition Science

### Project Description
- Renovate research, office and teaching space on the second and third floor of Science Hall for Food and Nutrition Science Department, over 13,000 gsf.
- Estimated project cost: $3.0 million *(Series 2013 Bonds)*
- Estimated duration to complete: 18 – 24 months

### Justification
- Replaces functionally obsolete teaching lab equipment which is original to this 64 year old building
- Improves research and office space for this growing program
- Improves lab safety
- Restores necessary heating and cooling performance critical to research and learning productivity
- Previous power outages have caused equipment damage and research sample / data losses

### Scope of Project
- Upgrade lab infrastructure including back-up generator and related electrical distribution.
- Upgrade heating and cooling equipment
- Improve functionality of research and teaching lab layouts
- Renovate interior finishes and casework

![Second Floor](image)

Second Floor

Chemistry Classrooms

Third Floor
## Backfill Laboratory Renovations - Post STEM Laboratory Classroom Building

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<tr>
<td>• Renovate / repurpose existing lab classroom space in Physics, Engineering and Shapero</td>
<td>• Renovations at Physics (10,500 sq ft), Engineering (4,100 sq ft) and Shapero (20,800 sq ft) provide repurposed space for research expansion</td>
</tr>
<tr>
<td>• Estimated project cost: $8.0 million</td>
<td></td>
</tr>
<tr>
<td>• Estimated duration to complete: 12 - 18 months after completion of STEM laboratory classroom project</td>
<td></td>
</tr>
</tbody>
</table>

### Justification

- Provides up to 35,400 sq. ft. of renovated and renewed wet and dry laboratory space to expand and support research initiatives in physics, engineering and biology.
Fountain Court

**Project Description**
- Renovate and renew Fountain Court and adjacent lawn areas on Gullen Mall in center of campus
- Estimated project cost: $2.3 Million
- Estimated duration to complete: 6 months

**Scope of Project**
- Remove existing lawns and pavement between Student Center Building, Undergraduate Library, State Hall and Fitness Center
- Install lawn and new pathways.
- Provide improved lighting and seating opportunities.
- Repair the existing fountain.

**Justification**
- Eliminates damaged and unsightly landscape features in the center of campus
- Creates attractive and fully functional green space with related amenities to support relaxation, casual recreation, and student events
- Provides a cornerstone place where Wayne State University branded memories can be created
<table>
<thead>
<tr>
<th>Project Description</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Renovate and renew research laboratories on the fourth floor, including all related mechanical, electrical, and plumbing systems</td>
<td>• Will reduce throughout the research tower that presently reduce research productivity</td>
</tr>
<tr>
<td>• Estimated project cost: $5.0 – 7.0 Million</td>
<td>• Provides research environment that contributes to attracting and retaining the best scientists</td>
</tr>
<tr>
<td>• Estimated duration to complete: 18 - 24 months</td>
<td>• Enhances competitive position for external funding to support research and discovery</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scope of Project</th>
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</thead>
<tbody>
<tr>
<td>• Rebuild quadrant oriented air handling units, distribution and controls for heating and cooling</td>
</tr>
<tr>
<td>• Upgrade electrical and plumbing systems</td>
</tr>
<tr>
<td>• Replace all compartmentalized lab, lab support and office facilities with new space efficient open lab environments</td>
</tr>
</tbody>
</table>

Justification
• Will reduce throughout the research tower that presently reduce research productivity
• Provides research environment that contributes to attracting and retaining the best scientists
• Enhances competitive position for external funding to support research and discovery
• Provides state of the art facilities for School of Medicine researcher currently housed in Elliman
### Project Description

- Expand Hilberry Theatre complex with new production and practice theater.
- Estimated project cost: $25 million
  ($10M Philanthropy, $15M Series 2016 Bonds)
- Estimated duration to complete: 24 – 30 months

### Scope of Project

- Construct new 44,000 sf performance art center at the corner of Cass and Forest, attached to the existing Hilberry Theatre
- Create new 500 seat Main Thrust Stage
- Provide support spaces including: Scene Shop, Dressing Rooms, Loading Dock, Storage, Green Room, and Offices
- Relocate the adjacent MacKenzie House

### Justification

- Existing building was not designed to be a theatre, and functions poorly as a theatre
- Existing support spaces, including the Scene Shop and Storage are located a block away
- Provides for necessary support space not currently in the Hilberry theatre
- Anchors the neighborhood, attracting students and patrons from campus and the cultural district
- Establishes gateway to the south end of campus
BioEngineering Building Renovation and Expansion

Project Description
- Expansion and renovation of the BioEngineering Building
- Estimated project cost: $19.25 million
  (Series 2016 Bonds)
- Estimated duration to complete: 24 – 30 months

Scope of Project
- Construct two-story addition to the north side of the BioEngineering Building at Warren and Anthony Wayne Drive
- Additional 23,200 gsf in new research lab, lab support and office space for the program
- Renovate over 46,000 gsf of existing space, including finishes and infrastructure

Justification
- Overcrowding experienced throughout the College of Engineering
- Poor conditions in current BioEngineering building require attention
- Growth in the BioEngineering program requires high-tech research space
- Provides an environment to expand departmental initiatives, including interdisciplinary endeavors
- Eliminates significant backlog of deferred maintenance in existing building
## State Hall Classroom Building Renovation

### Project Description

- Complete on-going multi-phase renovations of building – (started 5 years ago)
- Estimated project cost: $20 million
- Estimated duration to complete: 24 – 30 months

### Scope of Project

- Completes building renovation, including: mechanical and electrical infrastructure, elevator core, exterior windows at east and west facades and life safety systems

### Justification

- Finalize the renovations that started five years ago, providing a fully updated general purpose classroom building
- Existing elevator is original to building, and not ADA compliant
- Existing mechanical and electrical infrastructure is original to the building; upgrade allows reduced energy consumption
- Restores general purpose classroom building to excellent condition
<table>
<thead>
<tr>
<th>College of Engineering Student Innovation Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>• New construction on the parking lot adjacent to Engineering Technology, the project will provide space for student competition groups and student collaboration.</td>
</tr>
<tr>
<td>• Estimated project cost: $10.0 million</td>
</tr>
<tr>
<td>• Estimated duration to complete: 18 – 24 months</td>
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<table>
<thead>
<tr>
<th>Law School Classroom Building Renovation</th>
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</thead>
<tbody>
<tr>
<td>• Renovate and renew existing classroom building and select classrooms on second floor of 2001 addition</td>
</tr>
<tr>
<td>• Estimated project cost: $10.0 Million</td>
</tr>
<tr>
<td>• Estimated duration to complete: 12 – 18 months</td>
</tr>
<tr>
<td>• Law School capital campaign priority</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business School Building</th>
</tr>
</thead>
<tbody>
<tr>
<td>• New Construction</td>
</tr>
<tr>
<td>• Estimated project cost: $45.0 million</td>
</tr>
<tr>
<td>• Estimated duration to complete: 30 - 36 months</td>
</tr>
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<table>
<thead>
<tr>
<th>DeRoy Apartments Exterior Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Repair deficiencies in building exterior walls to prevent water infiltration and collateral damage to building interiors</td>
</tr>
<tr>
<td>• Estimated project cost: $5.0 million</td>
</tr>
<tr>
<td>• Estimated duration to complete: 9 – 12 months</td>
</tr>
<tr>
<td>• Funded from auxiliary reserves</td>
</tr>
</tbody>
</table>