Board of Regents
Committee on Economic Development and Technology Commercialization

December 2, 2021
Virtual (public listen only access at 443-353-0686, Conference ID: 407 208 879)
Committee Members will be sent Zoom information

Public Session Agenda

(1) **Featured Startup: Plugged** – Victor Ehienulo, CEO (Information Item)

(2) **Towson University Economic Development** – Patrick McQuown, Executive Director of Entrepreneurship (Information Item)

(3) **Workforce Development Quickfire Panel** (Information Item)
   a. Eric Ford, Director, Choice Program at UMBC
   b. Nilanjan Banerjee, Faculty at UMBC and PI for CyMOT

(4) **Momentum Fund** – Claire Broido Johnson, Managing Director, USM Maryland Momentum Fund (Information Item)

(5) **USM Office of Economic Development Update** – Lindsay Ryan, USM Venture Development Director (Information Item)
   a. Economic Recovery
   b. Economic Impact Report
   c. USM Strategic Plan
   d. New Early-stage Resource(s) Feasibility Update
TOPIC: Featured Startup: Plugged

COMMITTEE: Economic Development and Technology Commercialization

DATE OF COMMITTEE MEETING: Thursday, December 2, 2021

SUMMARY:

Victor Ehienulo, CEO of Plugged, will present his startup. Victor participated in the most recent cohort of Towson University’s StarTUp Accelerator. A video of Victor’s lightning pitch from the Accelerator demo day will be shown and Victor will be available live on Zoom for Q&A and commentary. Plugged is a SaaS diversity recruiting startup that shares employment opportunities to diverse pools of candidates through a web app, mobile, messaging and interview platform. Plugged University partners with HBCUs to connect their school departments and the career center with large companies to offer internships, full time opportunities and streamline information session scheduling to their students. In essence, they help HBCUs increase student engagement with recruiters by 80% and convert companies to donors, therefore creating a new line of revenue for HBCUs.

FISCAL IMPACT: This item is for information purposes.

CHANCELLOR’S RECOMMENDATION: n/a

SUBMITTED BY: Lindsay Ryan 410-409-2236
lryan@usmd.edu
TOPIC: Towson University Economic Development

COMMITTEE: Economic Development and Technology Commercialization

DATE OF COMMITTEE MEETING: Thursday, December 2, 2021

SUMMARY:

Patrick McQuown, Executive Director for Entrepreneurship at Towson University will provide an update on economic development there. He joined Towson University in January of 2020. Specifically, he will discuss the relatively new StarTUp Accelerator, which just finished its second cohort. He will also provide a virtual tour of the StarTUp at the Armor, a new space in downtown Towson that was recently opened in a redeveloped former Maryland National Guard Armory building. It is a state-of-the-art facility to connect workforce development and entrepreneurship programs with the surrounding community. It is 26,000 square feet, which includes 6,000 square feet of dedicated, free co-working space. The StarTUp Accelerator and Towson’s ATHENAPowerLink Baltimore program, which assists women entrepreneurs, in addition to partners such as the TEDCO and the Baltimore County Small Business Resource Center are housed in the StarTUp Armory.

FISCAL IMPACT: This item is for information purposes.

CHANCELLOR’S RECOMMENDATION: n/a

COMMITTEE RECOMMENDATION: DATE:

BOARD ACTION: DATE:

SUBMITTED BY: Lindsay Ryan 410-409-2236 lryan@usmd.edu
TYPICAL ENTREPRENEURSHIP CENTER

3,000 SQUARE FEET

LOCATED IN A COLLEGE OF BUSINESS

CLOSED TO THE PUBLIC
TOWSON UNIVERSITY STARTUP

26,000 SQUARE FEET 2 STORY BUILDING

LOCATED IN DOWNTOWN TOWSON

6,000 SQUARE FEET FREE CO-WORKING SPACE OPEN TO THE PUBLIC
Towson University launched an incubator for startup businesses and nonprofits Monday aimed at connecting business leaders with each other and with students interested in finding a career.

The venture, called StarTUp, includes a state-of-the-art business engagement center housed in the renovated Towson armory.

In partnership with Greenberg Gibbons real estate development and Baltimore County government, the school held a ribbon-cutting ceremony Monday at the 26,000-square-foot facility at the corner of Washington and Chesapeake avenues.

“We wanted to have a center that was full of innovation … this is a perfect space,” Towson University President Kim Schatzel said.

The structure will also house the university’s entrepreneurship and venture creation programs such as the StarTUp Accelerator, an intensive, eight-week, cohort-based fellowship where startup businesses can work in a collaborative space to present competitions and events for students and professionals.

McQuown said the facility is open access Monday through Friday from 10 a.m. to 7 p.m., without any reservation, memberships or fees.

The space is also a part of Towson Row, a $350 million development in downtown Towson that will include a Whole Foods Market, additional stores, restaurants, offices, apartments and a 220-room hotel.

“The transformation of the old armory building is yet another sign of downtown Towson’s revitalization. This is a blended facility that will serve students, entrepreneurs and customers who simply come off the street,” County Council member David Marks said in a statement.

Schatzel and McQuown were joined at the ceremony by Baltimore County Executive Johnny Olszewski Jr. and Brian Gibbons, chair and CEO of Greenberg Gibbons.

“I think this is a great day for Baltimore County. I think this is a great example of what happens and what’s possible when we all come together. You take a great anchor institution, take the Baltimore County government and you take the private sector and look at what we’ve done. I think the best is yet to come. The stories that are going to be written here are going to be incredible,” Olszewski said.

To learn more about this entrepreneurial hub, go to towson.edu/startup.
TOWSON STARTUP ACCELERATOR

★ 6 to 7 ventures - residency based cohort model
★ $10,000. Equity-free stipend
★ Anyone can apply
  ★ Lawyer, TU Professor, Hopkins ER Medicine Director, TU Students, Stanley Engineer
★ Plans for two cohorts per year with one being exclusively TU
TOPIC: Workforce Development Quickfire Panel

COMMITTEE: Economic Development and Technology Commercialization

DATE OF COMMITTEE MEETING: Thursday, December 2, 2021

SUMMARY:

Two “quickfire” oral presentations/briefs will show different types of workforce development programs at one university, the University of Maryland Baltimore County (UMBC).

Eric Ford will present the Choice Program (https://choice.umbc.edu/), for which he is the Director. The Program is part of the Shriver Center. Through the job readiness program, they “allow youth to carve a unique pathway to employment success in a supportive environment, with access to resources and opportunities they may otherwise not be afforded”. This is accomplished with curriculum and on-the-job training at social enterprises and, more recently, a Technology Academy program in partnership with BGE.

Nilanjan Banerjee, Faculty at UMBC, will present the CyMOT program (https://cymot.org/index.php?redirect=0), for which he is the PI. The program “addresses the need for improved cybersecurity in operational manufacturing technology by teaching the skills and abilities necessary to succeed to the adult learner”.

FISCAL IMPACT: This item is for information purposes.

CHANCELLOR’S RECOMMENDATION: n/a

COMMITTEE RECOMMENDATION: DATE:

BOARD ACTION: DATE:

SUBMITTED BY: Lindsay Ryan 410-409-2236
lryan@usmd.edu
TOPIC: Momentum Fund Update

COMMITTEE: Economic Development and Technology Commercialization

DATE OF COMMITTEE MEETING: Thursday, December 2, 2021

SUMMARY:

Claire Broido Johnson, Managing Director of the Momentum Fund, will provide an update. The portfolio has grown, as have the estimated valuations of the existing portfolio. The Fund has provided many benefits before it has provided a financial return. However, a return is not likely to happen for a few years, and funding currently allotted for first investments in startups is on track to be depleted by summer of 2022. The short-term responsible management of the remaining funds and this coming gap will need to be addressed, in addition to thinking longer-term about the role that the Momentum Fund should play in the ecosystem.

FISCAL IMPACT: This item is for information purposes.

CHANCELLOR’S RECOMMENDATION: n/a

COMMITTEE RECOMMENDATION: DATE:

BOARD ACTION: DATE:

SUBMITTED BY: Lindsay Ryan 410-409-2236
lryan@usmd.edu
Main Goals for MMF

1. **Returns**
   - Generate long-term financial returns which will be reinvested in future start-ups (evergreen fund)

2. **Expand the Entrepreneurial Ecosystem across the State of Maryland**
   - Catalyze additional investments from private investors
   - Invest in fixture companies (companies that start here, grow here, stay here)
   - Create jobs – and retain those jobs
   - Grow talent
   - See more and share via BBJ article: https://bizj.us/1qav0h

3. **USM-Specific Indicators:**
   - Stimulate/improve visibility of USM IP; advance USM status as a research institution and center of excellence
   - Support, recruit and retain innovative students and faculty
Accomplishments

• $9.3 MM invested and committed
  • $7 MM from MMF
  • $2.3 MM from affiliated universities that can co-invest alongside MMF

• 35 investments and commitments
  • 26 companies; 9 follow-ons

• 165 jobs created

• $6.7 of outside investment for every $1 MMF invested into our portfolio companies

• $266K average investment (MMF+ University co-investments); $191K from MMF

• 41 companies reviewed by Advisory Board (since July 2019)

• 300 unique expert panelists have provided due diligence on 43 companies (since July 2019)
## Investments

<table>
<thead>
<tr>
<th>Late 2017-2018</th>
<th>2019</th>
<th>First Half</th>
<th>Second Half</th>
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<tbody>
<tr>
<td><strong>MF Fire</strong></td>
<td><strong>Retrium</strong></td>
<td><strong>InferCabulary</strong></td>
<td><strong>NextStep Robotics</strong></td>
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<td>$1.2MM Round</td>
<td>$1.6MM Round</td>
<td>$783K Round</td>
<td>Add-on; $500K Round</td>
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<tr>
<td><strong>NextStep Robotics</strong></td>
<td><strong>Veralox</strong></td>
<td><strong>ARMR</strong></td>
<td><strong>MiRecule</strong></td>
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<td><strong>PaverGuide</strong></td>
<td><strong>Gemstone</strong></td>
<td><strong>DataKwp</strong></td>
<td><strong>N5 Sensors</strong></td>
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<td>$675K Round</td>
<td>$1.3MM Round</td>
<td>$650K Round</td>
<td>$1MM Round</td>
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<td><strong>NAWEC</strong></td>
<td><strong>Neoprogen</strong></td>
<td><strong>Pathotrak</strong></td>
<td><strong>InferCabulary</strong></td>
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<td><strong>MF Fire</strong></td>
<td><strong>Minnowtech</strong></td>
<td><strong>KaloCyte</strong></td>
<td><strong>Voxy Engen</strong></td>
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<tr>
<td>Add-on $400K Round</td>
<td>$600K Round</td>
<td>$1MM Round</td>
<td>$6.75MM Round</td>
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<tr>
<td><strong>Zest Tea</strong></td>
<td><strong>Zest Tea</strong></td>
<td><strong>VisiSonics</strong></td>
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<tr>
<td>$1.035MM Round</td>
<td>Add-on $650K round</td>
<td>$3.5MM Round</td>
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## Investments

### 2021

<table>
<thead>
<tr>
<th>First Half</th>
<th>Second Half</th>
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<tbody>
<tr>
<td><strong>Veralox</strong>&lt;br&gt;Jan 2021, $250K&lt;br&gt;Add-on; $5MM Round</td>
<td><strong>Aqualith</strong>&lt;br&gt;Sep. 2021, $100K&lt;br&gt;$1.5MM Round</td>
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<tr>
<td><strong>Dynamhex</strong>&lt;br&gt;Feb. 2021, $250K&lt;br&gt;$800K Round</td>
<td><strong>To Be Named</strong>&lt;br&gt;Oct. 2021, $250K&lt;br&gt;$4MM Round</td>
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<tr>
<td><strong>Qualytics</strong>&lt;br&gt;Apr. 2020, $250K&lt;br&gt;$2.1MM Round</td>
<td><strong>ARMR – in process</strong>&lt;br&gt;Nov. 2021, $250K&lt;br&gt;$750K Round</td>
</tr>
<tr>
<td><strong>Target Docs</strong>&lt;br&gt;Apr. 2020, $250K&lt;br&gt;$850K Round</td>
<td><strong>To Be Named – in process</strong>&lt;br&gt;Nov. 2021, $250K&lt;br&gt;$2MM Round</td>
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<tr>
<td><strong>KaloCyte</strong>&lt;br&gt;Apr 2020, $300K&lt;br&gt;Add-on, $500K Round</td>
<td><strong>Liatris</strong>&lt;br&gt;June 2021, $250K&lt;br&gt;$800K Round</td>
</tr>
<tr>
<td><strong>Veralox</strong>&lt;br&gt;June 2021, $500K&lt;br&gt;Add-on, $16MM Round</td>
<td><strong>To Be Named – in process</strong>&lt;br&gt;Nov. 2021, $250K&lt;br&gt;$2MM Round</td>
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### Initial Investment Set
*Aside (just MMF): $7MM; $5.7 MM invested*

### Follow On Investment Set
*Aside (just MMF): $3 MM; $1.2K invested*
Portfolio Companies

**UMCP IP and Alum**
- **Advanced wood burning stove**

**UMB IP, Towson Alum**
- Exoskeleton robot to reverse foot drop for stroke victims.

**UMCP Alum**
- **Advanced pulse jet engine**

**UMBC and UMCP Alums**
- Exoskeleton robot to reverse foot drop for stroke victims.

**UMCP Alum**
- **High caffeine tea, energy drink product**

**UMB IP and Alum**
- **Advanced semipermeable pavement system**

**UMCP Alum**
- **Agile software development management product**

**UMBC and UMCP Alums**
- **Tissue regeneration via stem cells**

**UMB IP and Alum**
- **Anticoagulant drug, therapeutics for rare blood disorders**

**UMCP Alum**
- **Cell-based therapy for cardiovascular disease**

**UMB Alum**
- **Sonar to measure shrimp biomass**

**UM BioPark Tenant**
- **Next-gen tourniquet**

**Towson Alum, TU Incubator startup**
- **Ed-tech vocabulary app**

**UMCP Alum**
- **Software platform to manage energy across buildings**

**UMCP Alum and Faculty**
- **Food safety testing technology**

**UMBC and UMCP Alums**
- **Semiconductor sensor technology**

**UMCP Alum and Faculty**
- **Spatial and personalized audio solutions**

**UMCP Alum and Faculty**
- **Language upskilling platform**

**UMCP Alum**
- **RNA Therapeutics**

**UMCP Employee**
- **Fireproof, lightweight insulation**

**UMCP/UMB Alum**
- **TBD**

**UM BioPark Tenant**
- **Next-gen tourniquet**

**UMBC BwTech**
- **Data integrity**

**UMCP Alum**
- **Data platform for construction industry**

**UMCP Employee**
- **Fireproof, lightweight insulation**

**UMCP Professor**
- **More efficient lithium ion batteries**

**UBalt Professor**
- **climate change modeling and action platform**

**UMB/UMBC Faculty, UM BioPark Affiliate**
- **Dried artificial red blood cell**

**UMCP/UMB Alum**
- **TBD**
Responsibly Managing Remaining Funds

- **Initially allocated for first checks and $3 MM for follow-on investments**
  So we have funding to invest in companies that continue to do well

<table>
<thead>
<tr>
<th></th>
<th>Initial</th>
<th>Follow On</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allocated for Initial and Follow On Investments</td>
<td>$ 7 MM</td>
<td>$ 3 MM</td>
<td>$ 10 MM</td>
</tr>
<tr>
<td>USMO (Investment+Committed) does NOT include separate university investments</td>
<td>$ 5.7 MM</td>
<td>$ 1.2 MM</td>
<td>$ 6.9 MM</td>
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<tr>
<td>Remaining Left to Invest by USM</td>
<td>$ 1.3 MM</td>
<td>$ 1.8 MM</td>
<td>$ 3 MM</td>
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</table>

- MMF has been set up as an “evergreen fund” to “generate long-term financial returns which will be reinvested in future start-ups”. The average time between start of fund and first exit is 6 years, and between initial investment and exit is 5-7 years. For MMF, late 2022 to 2024. To date, estimates of the valuations of our portfolio companies have increased by $37M.

- Keeping our pace, the portion currently dedicated to first checks will be invested by summer 2022.
- At least 25 companies we would like to engage with in the queue.

If no additional funding, MMF can:
- Stop investing or invest in fewer new companies when we invest the last $1.3M
- Deplete reserves for follow-on in hopes of stretching the Fund, which means we can’t invest further into companies “winning” in our portfolio
What Role Should MMF Play Going Forward?

Should USM decide to continue MMF at its current strength (or more), additional funding required short term. With eye towards long term, we would need to determine:

• If anything needs to change (structurestagecriteria)
• The right dollar investment per company
• Length and cadence of commitment
• Funding source
• Reevaluating what success looks like; not necessarily an exit
• Right Sizing
  • We have invested about $2 MM per year
  • Data gathering: market size is quite large per year (companies we could invest in)
  • TEDCO will have $5 MM per year for its Builder Fund starting next year (had $1 MM per year before); UMCP and UMB will also increase investment, as approved previously
Appendix
Additional Value

- **Established valuable relationships with investors and across ecosystem** including: Abell Foundation, Squadra, Early Light Ventures, Alexandria Venture Partners, Sanofi, TCP, Lord Baltimore Fund, Conscious Venture Labs

- We have developed a network of advisory board members, mentors, entrepreneurs willing to support companies borne out of USM

- We are creating a ‘name’ for Maryland as a reputable entity creating valuable start-ups

- MMF is the only USM fund investing in USM startups other than UM Ventures at UMB, for now

- **$57 MM invested by outside entities** like Sanofi, ReThink Education, JDRF T1D, Lord Baltimore Fund, Alexandria Venture Investments, Chesapeake Bay Seed Capital Fund, Dingman Angels, alongside MMF + University investments

- **150 unique investors** (in total) have invested alongside MMF in our investment rounds
Overview of Maryland Momentum Fund

- **$10MM University System of Maryland investment fund**
  - Funding source is System fund balance
  - Invested in 23 companies in last 24 months
  - $1.6MM left for initial investments (about 8 more companies)
  - Goal of generating at least $15MM in co-investment from non-USM entities; already at ~$57MM

- **Investing in the most promising USM-affiliated technologies and people**
  - Help promising early-stage companies bridge early-stage funding gaps
  - Support companies so they get to a point where they can raise additional funding with VCs or be acquired

- **Eligibility criteria**
  - Located in Maryland; Must have a co-investor(s) that will invest at least as much as MMF
  - Affiliated with one of the 12 USM institutions across the State of Maryland (any one of the below):
    - University-owned intellectual property
    - Founded by University faculty, staff, student, or alum
    - Located in a University-affiliated research park or incubator
Investment by Industry – shown two ways

Portfolio Investment by Industry

- Deep Tech: 12%
- Technology: 11%
- Med Tech: 10%
- Consumer Product: 6%
- Data: 17%
- Therapeutic: 31%
- Aquaculture: 2%
- Education Tech: 10%

Portfolio Investment by Industry

- Engineering and DeepTech: 2,250,000
- Consumer Products: 2,092,500
- Life Sciences: 500,000
- Data and Software: 3,445,000
### Portfolio Investment by School Affiliation / Connection

<table>
<thead>
<tr>
<th>School Affiliation / Connection</th>
<th>Investment Amount</th>
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<tr>
<td>UMB</td>
<td>1,345,000</td>
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<tr>
<td>UMCP</td>
<td>3,842,500</td>
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<tr>
<td>UMB/UMBC</td>
<td>600,000</td>
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<tr>
<td>UMCES</td>
<td>150,000</td>
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<tr>
<td>Towson</td>
<td>350,000</td>
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<tr>
<td>UB</td>
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<tr>
<td>UMGC/UMB/Towson</td>
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<td>UMBC</td>
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<td>UMCP/UMBC</td>
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TOPIC: Office of Economic Development Update

COMMITTEE: Economic Development and Technology Commercialization

DATE OF COMMITTEE MEETING: Thursday, December 2, 2021

SUMMARY:

Lindsay Ryan, Venture Development Director, will provide a briefing on economic recovery and provide time for any feedback on the USM Strategic Plan as it relates to Workforce & Economic Development and Research. She will also provide an update on progress so far with the charge by the Committee to study the feasibility of additional multi-institution USM support for early-stage entrepreneurs.

FISCAL IMPACT: This item is for information purposes.

CHANCELLOR'S RECOMMENDATION: n/a

SUBMITTED BY: Lindsay Ryan 410-409-2236 lryan@usmd.edu
USM Economic Development

Briefing for USM Economic Development and Technology Commercialization Committee

December 2, 2021
USM Economic Development

*Agenda*

- Economic Recovery
- Economic Impact Report
- USM Strategic Plan
- New Early-stage Resource(s) Feasibility Update
The American Rescue Plan has generated several opportunities for economic development.

- USM institutions are important partners for efforts supported by American Rescue Plan funding provided directly to states and cities. For example, the University of Baltimore's Rebuild, Overcome, and Rise (ROAR) Center will be supported to help Baltimore address victims of violence.

- USM is included in applications to several funding programs through the U.S. Economic Development Administration (https://eda.gov/arpa/).

USM continues active engagement in biosciences workforce development.
USM Economic Impact Report

The last USM Economic Impact Report was completed in 2012.

An update is forthcoming and will be shared via the educational topic at the December 10 Full Board of Regents meeting.
Success in Workforce & Economic Development and Research will contribute to the other pillars and cross-cutting goals and vice versa.

Comments on Workforce & Economic Development and Research so far?
The State of Maryland, along with the USM, has long recognized the important role that a **highly-educated workforce**, in combination with a workforce spearheaded by a large and **growing supply of graduates in STEM, the Health Professions, and other critically-needed fields**, plays in Maryland’s economic success.

In 2013 Maryland codified into law a longstanding state goal that at least **55% of Maryland adults** who are age 25 to 64 will hold an **associate’s or higher degree by the year 2025**. Similar quantitative goals around STEM, Health Professionals, and other fields, have been recommended by Maryland’s chief executives or other groups as well.

USM’s response to the challenges laid down by the State has been one of the **major success stories** of the System for the last decade and has helped Maryland achieve and hold a top ranking in the educational attainment of its workforce. Going forward, the **pipeline of graduates prepared by USM institutions**, and the KSAs they hold, will be critical to not just powering Maryland’s economy forward but helping shape what that economy looks like as well.
Goals: Workforce and Economic Development

Short-Term Goals

- Continue to meet or exceed the MHEC bachelor’s degree production targets for achieving Maryland’s 55% degree goal.
- Expand the number of graduates in fields critical to Maryland’s economy (STEM, Cyber, HealthCare, Education, etc.).
- Expand the pipeline of URM students entering, and graduating, in fields critical to Maryland’s economic success.
- Continue to grow the number of startups developed through USM venture support.

Mid-Term Goals

- USM will have developed a broad, data-informed academic portfolio reflecting the needs of Maryland's students & employers.
- USM will have worked with its P-20 partners to make it easier for students who want to become teachers to become teachers.
- USM programs will be delivering graduates with the well-rounded backgrounds and credentials needed to enter the workforce.
- USM will have partnered with business & community leaders to better understand & address local & regional development needs.

Long-Term Goals

- In the face of increased competition in the postsecondary education market, USM will continue to be the dominant producer of graduates, from all populations, prepared to enter and support Maryland's knowledge-based economy.
- USM will be recognized as the primary source for re-skilling and up-skilling the State’s workforce.
- USM will have a strong and deep relationship with the State's K-12 schools focused on improving student outcomes and pathways.
Rationale: Research

- With more than 60 federal agencies, 70 federal research labs, 4 world-class research universities, and an internationally-recognized environmental science center, Maryland is unique among states in the impact that research and development (R&D) – particularly federally-supported R&D – has on its economy.

- The overall impact of Maryland’s unique concentration of R&D generators is that the State – though relatively small in population and geographic size – ranks first among all states in federal R&D obligations, fifth in academic R&D performance ($4.6B), and 7th in total R&D performance.

- Over the next decade, as our institutions, our state, and our nation emerge from the COVID-19 pandemic to confront other challenges that range from the interrelated crises of climate change and decreased biodiversity to the pernicious effects of systemic racism and inequality, we must leverage the research and scholarship generated by USM faculty and institutions to help power Maryland’s economy, confront and overcome the challenges we face, and improve the quality of life for all Maryland residents.
Goals: Research

Short-Term Goals
- Continue to leverage proximity to nation’s capital and federal research agencies & labs to enhance USM R&D success.
- Seek alignment between areas of USM research strength and emerging national research priorities.
- Advance State’s leadership in environmental sciences and deepen reputation for providing leadership in sustainability.
- Continue promoting technology transfer and commercialization of USM-developed intellectual property.

Mid-Term Goals
- Building off MPower model, USM will have increased the number of cross-institutional and interprofessional research collaborations between its institutions or centers.
- USM will have diversified and expanded its R&D portfolio by leveraging its historic strength in basic and applied research to take advantage of the national trend toward more basic research being funded by the business sector.
- Drawing from the expertise of its faculty, staff, and students USM will have developed and implemented a special research initiative on DEI topics.

Long-Term Goals
- Maryland, as a state, will continue to rank among the nation’s most competitive in R&D performance.
- USM institutions will have achieved greater diversity in the sources of support for their R&D programs.
- USM will be regarded nationally and internationally as a leader in sustainability.
- USM will be recognized for the quality and impact of its research & scholarship on topics related to race, identity, and systemic racism.
- Research carried out on USM’s campuses will contribute to a healthier, more vibrant Maryland economy and an improved quality of life for its residents.
New Early-stage Resource(s) Feasibility Update

**Background**

- USM provides a portfolio of resources to promote and support entrepreneurship among its student, faculty, and community. However, gaps remain, and some potential is untapped.
- With the Momentum Fund, USM addressed a specific gap in capital access for venture-backable startups. Looking to earlier points in the process, USM may be able to help develop an additional multi-institution resource(s) to promote and support entrepreneurial success.
- On September 2, this Committee encouraged USM to study the feasibility of developing such a resource(s).
- The resource(s) should equitably support a diversity of entrepreneurs and ventures, and broad engagement across USM is one goal.
New Early-stage Resource(s) Feasibility Update

*Process to Date*

An initial conversation surfaced four tracks along which there have been “deep dive” conversations among Economic Development representatives from multiple USM institutions:

- Innovative Venture Fundamentals, Mentoring, Pathways, and Networks
- Proof of Concept and Product Development
- Placemaking Activation, Connection, and Creation
- Early Capital

These conversations have:

- Made connections and informed
- Catalogued existing resources
- Detailed challenges/gaps
- Defined desired futures states
- Provided recommendations
New Early-stage Resource(s) Feasibility Update

**Deliverable: Goals/Scope**

Each USM institution has their own goals for entrepreneurship, with the balance between economic and institutional impacts varying. For this effort, the following is the proposed focus:

- **WHY** – Generate **economic AND institutional impacts**; institutional may be secondary.
  - Economic impacts include job/wealth creation, technology transfer, & workforce development.
  - Institutional impacts include student/faculty/employee recruitment and success; alum engagement.

- **WHEN** – Focus on idea and minimum viable product/pilot stages.

- **WHO** – Must consider a **broad range of venture and founder types**.
  - **Spinouts**, led by USM students, faculty, employees, and those based on USM tech; or **Spin-ins**, led by community entrepreneurs in incubators, accelerators and other programs.
  - **Deeptech, Tech-Enabled, or Non-Tech** entrepreneurship, including social entrepreneurship.
  - Access for entrepreneurs from **underrepresented groups** should be proactively addressed.
New Early-stage Resource(s) Feasibility Update

Learnings to Date and Next Steps

Learnings To Date:
- Some recommendations will be less resource-intensive than others.
- We can’t build everything now, but we will have a blueprint/roadmap.
- This has been a galvanizing process. Mechanisms for continue collaboration and iterative innovation are advised.

Next Steps:
- Prioritization and combination of recommendations
- Feedback from entrepreneurs and external stakeholders (including potential partners)
- Refine design for top recommendation(s), including business model/resources required