FISCAL YEAR 2018 ANNUAL REPORT

OF THE

MMAB MARYLAND MANUFACTURING ADVISORY BOARD

As required by Economic Development Article §3-109

Respectfully submitted to the General Assembly of Maryland by

Brian Briggs, Chairman

Secretary R. Michael Gill, Commerce

401 East Pratt Street

Baltimore, MD 21202

December 2018

Maryland

Larry Hogan, Governor | Boyd Rutherford, Lt. Governor

OPEN *for* Business

MMAB Background

During the 2017 legislative session the Maryland Advisory Commission on Manufacturing Competitiveness (MACMC) was renamed the Maryland Manufacturing Advisory Board (MMAB or Board) and restructured to deliver more meaningful leadership and guidance towards the state of Manufacturing in Maryland. The Board meets quarterly, with its inaugural meeting held in September 2017.

Under the legislation, which became Sections 3-101 and 3-103 through 3-109 of the Economic Development Article of the Maryland Annotated Code, the purpose of the Board is to advise the Secretary of the Maryland Department of Commerce (Commerce) on the best methods to implement the policy directives of the action plan for manufacturing competitiveness in the State, including:

1) encouraging the development of new manufacturing enterprises and the expansion and retention of existing manufacturing enterprises;
2) encouraging and facilitating training and education of individuals for manufacturing jobs;
3) producing a climate conducive to the growth and viability of manufacturing enterprises;
4) supporting research necessary to evaluate, plan, and execute effective promotion of manufacturing enterprises; and
5) encouraging, assisting, and coordinating the activities of local, regional, and national public or private organizations that promote manufacturing

Membership

The Board is comprised of 17 members. Twelve members are appointed by the Secretary of Commerce with the approval of the Governor, one is appointed by the President of the Senate of Maryland, one is appointed by the Speaker of the House of Delegates, and there is one ex-officio member who represents Commerce. Members are representative of varied geographic regions of the State, varied sectors of manufacturing, and a mix of manufacturers that employ 500 or more employees and those that employ fewer than 500 employees. The Board is comprised of 10 manufacturers, 2 legislators, 1 member of the business community, 1 educator, 2 labor representatives, and Secretary Gill.

The MMAB is chaired by Mr. Brian Briggs, President of TIC Gums, Inc. Mr. Briggs has more than 25 years of financial and operations experience in profitably building companies in both the public and private equity sectors.

2018 Meetings

During 2018, the Board held a series of quarterly meetings at various locations:

March 29, 2018 – McCormick & Company in Hunt Valley
June 29, 2018 - University of Maryland Fraunhofer Institute in College Park
September 29, 2018 - TEDCO in Columbia
December 18, 2018 – Stanley Black & Decker in Towson

Through these meetings, as well as task force meetings, the Board developed initial recommendations to advance Maryland's manufacturing industry:

(1) Image of Manufacturing

Given the workforce constraints recognized by manufacturers as a detriment to growth in the state, the Board began identifying areas where it may support the interests of students in pursuing careers in manufacturing. The objective is to overcome the obstacles to employment in manufacturing by creating a positive perception of manufacturing as a viable career choice. Some of the areas identified by the Board to take action on during the upcoming year to achieve this are:

- Gather data to support what grades are appropriate to begin promoting manufacturing as a career choice to school students.
- Engage key stakeholders in private and public industry who can support and execute the delivery of the message to students in the grades identified to consider manufacturing as a career choice.
- Identify best/leading practices from both within and outside of the state in creating mechanisms to positively impact the growth in choosing the manufacturing industry as a career choice.

(2) Small Manufacturing Business Support

The Board has also identified a need in the state to assist small to mid-sized manufacturers in gaining access to resources that would facilitate further growth. The Board observed there are existing state resources for manufacturers, but they are more aligned with start-up operations and larger, established firms. The objective is to understand what resources would benefit small manufacturing growth. Some of the areas identified by the Board to take action on during the upcoming year to achieve this are:

- Produce a needs analysis survey to small and mid-sized manufacturers.
- Develop a listing of current state assets for these manufacturers.
- Create a gap analysis between industry needs and existing state assets.
- Identify what key assets the state is currently lacking and how the Board can assist in attaining these assets to facilitate manufacturing growth.

Closing Statement

In its second year, the Maryland Manufacturing Advisory Board focused on the workforce development needs facing Maryland manufacturers. The lack of suitable, prospective candidates engaged in manufacturing employment has been identified as a long-term issue for the state and established as a goal for the Board to tackle. During meeting discussions in 2018, it was also determined that the support of small to mid-sized manufacturers growth will also serve as a goal for the Board to address. Looking forward to 2019, the Board expects to continue its deliberations on these matters and will present additional recommendations to promote and expand Maryland's manufacturing base.

APPENDIX A

MMAB VOTING AND NON-VOTING MEMBERS

Ex Officio
MD Commerce Secretary Mike Gill

Manufacturing Representatives (10)
Brian Briggs, President, **TIC GUMS** (Chairman)
Scott Simmons, VP NA Supply Chain, **McCormick & Co.**
Patrick Nolan, VP and GM Missile Products Division, **Northrop Grumman**
Bobby Patton, CEO, **Patton Electronics**
Tom Sanders, Owner & Managing Director, **Coherent Technical Services (CTSI)**
Joanie Gerber, President, **Bikle Manufacturing**
Phil Tulkoff, President, **Tulkoff Food Products**
Suzy Ganz, CEO, **Lion Brothers**
Saundra Lamb, President, **Semforex**

Legislators (2)
(Senate Appointee) Senator Katherine Klausmeier
(House Appointee) Delegate Ned Carey

Business Community Rep (1)
Christine Ross, CEO, **Maryland Chamber of Commerce**

Labor Reps (2)
Jim Strong, Sub-District Director, United Steelworkers District 8
Loretta Eggleston, Chairperson of Trustees & Shop Steward, Boilermakers Local S 50

Education Rep (1)
Dr. Willie E. May, Vice President for Research and Economic Development, **Morgan State University**

Commerce Support:
Kris Shock, Senior Director, Office of Strategic Industries and Entrepreneurship
Todd Sabin, Manufacturing Program Manager

APPENDIX B

Thursday March 29, 2018
McCormick & Company Inc.
11100 McCormick Road, Hunt Valley, MD 21031
8:00am – 11:00am

Meeting Minutes

Attendees:	**Company**
Brian Briggs, Chair	TIC Gums
Loretta Eggleston	Boilermakers Local S 50
Suzy Ganz	Lion Brothers
Jim Strong	United Steelworkers District 8
Saundra Lamb	Semforex
Christine Ross	Maryland Chamber of Commerce
Scott Simmons	McCormick & Company
Phil Tulkoff	Tulkoff Food Products
Dr. Willie E. May	University of Maryland College Park
Bobby Patton	Orbital ATK

Ex-Officio Members:
R. Michael Gill, Secretary, Department of Commerce

Commerce Staff:
Kris Shock
Todd Sabin

Prior to the Call to Order, a tour of McCormick & Company's Hunt Valley plant was conducted by our host.

I. Call to Order

At 9:30 Chairman Brian Briggs called the meeting to order and welcomed members and guests.

II. Review and approval of December 12, 2017 minutes

Upon motion duly made and seconded, the minutes of December 12, 2017 meeting were approved.

III. Chairman's Updates

Chairman Briggs noted the gap between awareness of the information provided during the December 12, 2017 MMAB meeting by the Workforce Resources Panel and delivery of critical workforce support needed by the industry. He proposed the MMAB identify by consensus three (3) to five (5) workforce issues to address, as well as the discuss the potential of the MMAB

hosting 20-30 guidance counselors to discuss their challenges in advising manufacturing as a career path.

IV. New Business

A. Review List of Potential Top Talent Acquisition

Ms. Sandy Chronister, Human Resources, Business Manager of McCormick & Company, presented the company's top talent acquisition issues for non-exempt positions. Ms. Chronister provided unique technical skills that are in high demand and a challenge to acquire at their facility. These skills include: math and measurement, analytical skills, and a lack of understanding of overall manufacturing processes.

The floor was then open for MMAB members to discuss their company's related workforce issues and suggestions to overcome them. These suggestions included not only giving tours to students, but also incorporating hands-on learning experiences in these environments. Mr. Tulkoff volunteered to take the lead in organizing a schedule of manufacturing plant tours for teachers and guidance counselors. The perception of manufacturing as a viable career choice to students was also presented as a concern. It was suggested that October's designation as "Manufacturing Month" be used as a kick-off to a manufacturing image campaign. The Board would support this endeavor by organizing a coordinated message amongst the State's various manufacturing related groups.

B. Review Board Member Recommendation Letter

Mr. Briggs introduced a letter submitted by Ms. Lamb at the December 12, 2017 meeting to be reviewed by the MMAB. In her letter, she proposed adding a component to the goals for this term of the MMAB to support burgeoning small, manufacturing businesses. Businesses would be evaluated based on the criteria established by the MMAB. Mr. Briggs suggested the possibility of an advisory board for a handful of manufacturers. Mr. Patton noted that there are small business resources, but not specific to manufacturing. Ms. Ganz mentioned the Technology Development Corporation (TEDCO) provides local advice to serious start-ups. Ms. Lamb supported Ms. Ganz statement by suggesting the TEDCO model be used, but be less technology focused and more manufacturing focused. Secretary Gill suggested manufacturing be part of the Maryland story as much we currently tout biotechnology and information technology. Secretary Gill supported the idea of the TEDCO model and an advisory board for small to mid-size companies.

Mr. Briggs asked the MMAB members for approval for Saundra's letter to be used as a goal of the MMAB. This was approved by the Board.

V. Discussion - June Meeting Agenda

Dr. Willie May reviewed the proposed agenda and discussed Manufacturing USA, Fraunhofer and Industry 4.0, the Maryland Manufacturing Summer Institute, and suggested a tour of the University of Maryland Virtual Augmentarium.

Mr. Briggs confirmed that date of the next MMAB meeting at the University of Maryland for June 29, 2018.

VI. Commerce Updates

Secretary Gill reported on MJM and how well it had been received in the past 12 months. He reported on MJM 2.0 where a jurisdiction can add up to three (3) industries to receive the programs incentives and is not restricted to only manufacturing.

Secretary Gill provided an update on the Maryland Marketing Partnership, a public/private partnership which supports funding for a marketing and advertising campaign. He reported that the campaign is expanding into 10 other States for business attraction. He concluded by promoting the Governor's Business Summit scheduled for September 12, 2018 and recommended featuring manufacturing at the Summit.

VII. Closing Remarks

Chairman Briggs kept closing remarks brief and recommended the MMAB concentrate on the manufacturing message.

VIII. Adjournment

There being no further discussion, the meeting was adjourned at 10:45am by Chairman Briggs.

Friday, June 29, 2018
University of Maryland Fraunhofer Institute
5825 University Research Court, Suite 1300
College Park, MD 20740
8:00am – 11:00am

Meeting Minutes

Attendees:	**Company**
Brian Briggs, Chair	TIC Gums
Delegate Ned Carey	Maryland General Assembly
Joanie Cooper-Gerber	Bikle Manufacturing
Saundra Lamb	Semforex
Dr. Willie E. May	University of Maryland College Park
Patrick Nolan	Orbital ATK (call-in)
Bobby Patton	Patton Electronics
Christine Ross	Maryland Chamber of Commerce
Tom Sanders	Coherent Technical Services, Inc. (call-in)
Scott Simmons	McCormick & Company
Phil Tulkoff	Tulkoff Food Products

Ex-Officio Members:
R. Michael Gill, Secretary, Department of Commerce

Panel Members
Mike DiGiacomo, Governor's Workforce Development Board (GWDB)
Sarah Sheppard, GWDB
Georg Davis, Maryalnd Technology Development Corporation (TEDCO)
Mikael Lindvau, Fraunhofer USA
Peter O'Neil, Fraunhofer USA
Adam Porter, Fraunhofer USA
Kelly Rogers, National Institute of Science and Technology (NIST)

Commerce Staff:
Kris Shock
Julie Woepke
Todd Sabin
Sharon Markley

I. Call to Order

At 8:00 Chairman Brian Briggs called the meeting to order and welcomed members and guests.

II. Review and Approval of March 29, 2018 Minutes

Upon motion duly made and seconded, the minutes of the March 29, 2018 MMAB meeting were approved.

III. Chairman's Updates

Chairman Briggs noted the need to identify manufacturing resources available in the State. In order to accelerate the Board agenda, the MMAB should look at bringing in outside parties who can contribute, as well as break down the silos of activity towards Maryland manufacturing.

IV. Maryland Manufacturing Update

Secretary Gill reviewed recent "wins" for the State in the manufacturing industry, as well as acknowledged the recent press release of the Advanced Manufacturing Materials and Processes (AMMP) center to be located in Harford County. Mike DiGiacomo, Executive Director of the Governor's Workforce Development Board, reported on the Mid-Shore Manufacturing Workforce Stakeholder Meeting held on June 13th at Chesapeake College. Todd Sabin reported on the release of the Maryland Manufacturing Directory and update on the offshore wind industry in Maryland.

V. Old Business

C. Update On Coordination of Efforts Among Maryland Manufacturing Advocacy Groups

Ms. Kris Shock briefed the Board on her conversations with Maryland manufacturing advocacy groups in regard to the image of manufacturing and introduced materials on Maryland assets and resources that can serve to support this endeavor. Ms. Shock referenced the possibility of an informal subcommittee of the MMAB that could engage other parties, if needed, to further identify resources.

D. Perception/Image Campaign Leveraging Manufacturing Month and Day

Ms. Shock reviewed notable dates in October as opportunities for the MMAB to promote the image of manufacturing during Manufacturing Month.

Chairman Briggs highlighted Junior Achievement (JA) and suggested the creation of an informal subcommittee within MMAB to work between the quarterly meetings to further identify State resources to further the image of manufacturing.

Joanie Bikle introduced comments stating a disconnect between the State and manufacturing in Western Maryland, and gave examples of several manufacturers in her region that are challenged with keeping their companies in Maryland versus relocating to Pennsylvania. Secretary Gill supported this discussion and asked Commerce staff to follow up with Ms. Bikle directly.

Christine Ross discussed the Maryland Chamber's tax reform task force and suggested that it may be able to support manufacturing by facilitating in-state spending.

Saundra Lamb and Scott Simmons both discussed the idea of an informal subcommittee to work on promoting the image of manufacturing in between MMAB quarterly meetings. Mr. Briggs invited members to submit their interest in participating in this subcommittee to him via email. Additional potential subgroups including Manufacturing Co-Op Development (and furthering the Career Technical Education (CTE) Magnet School conversation) and Legislative interest were discussed along with having one repository for collecting information from these groups (website or group file drive). Secretary Gill remarked on getting Commerce marketing involved in the subcommittee's message.

E. Plant Tour Program Concept

Mr. Briggs introduced Phil Tulkoff about organizing plant tours. Mr. Tulkoff initiated the conversation by speaking about the JAInspire program being held in October and inquired if the MMAB would want a table at the event. Mr. Tulkoff spoke of the JA Shadow program and the need for assistance with transportation. Mr. Tulkoff also noted various groups conducting the same type of programs in the state and inquired if a list of tours could be hosted at one location/website. Mr. Briggs said he would be willing to sponsor a booth in response to Mr. Tulkoff's suggestion. Peter O'Neil stated Fraunhoffer would like to participate in the Inspire event.

Bobby Patton introduced a discussion on Co-Ops and how his company almost exclusively recruits from these programs. He noted that none of Maryland's colleges or universities have Co-Ops. Secretary Gill posed a question on why the State does not have a Co-Op program, and of the 11 institutions that comprise the University of Maryland system, can one be a Co-Op to differentiate itself.

F. TEDCO Collaboration: Expanding Mentoring Programs and other support to Manufacturing 4.0

George Davis, TEDCO CEO was introduced and reviewed the meeting he had with Ms. Shock and how TEDCO may be able to support the MMAB. Mr. Davis reviewed the Maryland Venture Fund and iConnect. Mr. Briggs stated the need to follow-up with Mr. Davis to address Ms. Lamb's call for assistance with post start-up resources. Mr. Davis confirmed he would follow up with Ms. Lamb directly.

G. CTE Presentation

Dr. Lynne Gilli reviewed the Career Technical Education (CTE) ten programs of study, the *More Jobs for Marylanders Act,* number of CTE graduates in 2017, value of credentials, demand for mid to high-skill jobs, and the Maryland Apprenticeship and Training Program (MATP)

VI. New Business

A. Mr. Briggs requested members to contact him directly about their thoughts and ideas about participating in an informal subcommittee.
B. Mr. Patton suggested Technology Transfer to be discussed at the next meeting.

VII. Adjournment of MMAB Business Meeting

There being no further discussion, the meeting was adjourned at 9:32am by Chairman Briggs.

Upon adjournment, a tour of University of Maryland's Virtual Augmentarium was conducted by our host.

Monday, September 29, 2018
TEDCO
7021 Columbia Gateway Dr., Ste. 200
Columbia, MD 21046
9:00am – 11:00am

Meeting Minutes

Attendees:	**Company**
Brian Briggs, Chair	TIC Gums
Saundra Lamb	Semforex
Loretta Eggleston	Boilermakers Local S 50
Suzy Ganz	Lion Brothers
Patrick Nolan	Northrop Grumman
Christine Ross	Maryland Chamber of Commerce
Scott Simmons	McCormick & Company
Jim Strong	United Steelworkers District 8
Phil Tulkoff	Tulkoff Food Products

Ex-Officio Members:
R. Michael Gill, Secretary, Department of Commerce

Guest Speakers	
George Davis	TEDCO
Larry Richardson	Maryland Chamber of Commerce

Commerce Staff:
Kris Shock
Todd Sabin
Rhonda Ray

I. Call to Order

At 9:00 Chairman Brian Briggs called the meeting to order and welcomed members and guests.

II. TEDCO Welcoming Remarks

George Davis, CEO TEDCO, opened the meeting with welcoming remarks. He provided an introduction and overview of TEDCO's programs and capabilities. He encouraged Board members to attend the TEDCO Entrepreneur Expo & Stem Cell Symposium on October 30, 2018.

Christine Ross introduced comments on tax breaks for successful entrepreneurs to reinvest in other ventures in the state. George Davis agreed and Secretary Gill suggested looking at other States for examples. Christine and the Chamber will lead on this initiative.

III. Review and Approval of June 29, 2018 Minutes

Upon motion duly made and seconded, the minutes of the June 29, 2018 MMAB meeting were approved.

IV. Chairman's Updates

Chairman Briggs commented on looking forward to Manufacturing Month and encouraged Board members to get more traction with sub-committees utilizing both Board and non-Board member resources to keep the image of manufacturing going. He encouraged any Board members to use the space made available by TIC Gums and Commerce at the Junior Achievement Inspire event on October 18, 2018.

V. Maryland Manufacturing Update

Secretary Gill reviewed recent "wins" and "success stories" for the state in the manufacturing industry. He then provided updates on Western Maryland and Maryland Manufacturing. During the Maryland Manufacturing update he asked Rhonda J. Ray how much the Partnership for Workforce Quality (PWQ) will be funded which she replied $1 million. Secretary Gill then inquired about increasing funding for this program and to get a signed letter of recommendation from the MMAB to the Governor to support this initiative. Pat Nolan inquired if the state has a brochure or marketing piece for manufacturing attraction. Secretary Gill recommended the MMAB and Commerce create an industry attraction marketing piece highlighting PWQ and other state programs to attract out-of-state manufacturing companies.

VI. Old Business

H. Perception/Image Campaign Update

Ms. Kris Shock briefed the Board on updates to manufacturing month and the meeting held on August 29, 2018 bringing together key stakeholders in the state. Notable dates and opportunities were presented. Both Ms. Shock and Chairman Briggs encouraged MMAB member attendance to the Junior Achievement Inspire event on October 18, 2018, as well as RMI's Techtonic Shift held in Spring of 2019.

Secretary Gill suggested using the "Open" campaign for an "Open for Manufacturing" as a call to action to specific industries. Chairman Briggs mentioned Pennsylvania's "Signing Day" for young adults entering manufacturing jobs and careers. Mike DiGiacomo stated that the Department of Labor and Licensing will do something similar next year. Christine Ross stated the Chamber has resources to support marketing efforts and are already conducting on-site videos of companies.

I. Perception/Image Campaign MMAB Task Force

Saundra Lamb started by asking why the MMAB was focusing on this goal and not MMAB's Support of Small Business Manufacturers and Development of Opportunities for Manufacturing

Talent goals? Chairman Briggs stated that the MMAB has only received volunteers for the Image Campaign and if there were volunteers for the other two goals, Kris Shock and Todd Sabin would help coordinate a task force; accordingly. Chairman Briggs asked members to reach out to him if they would like to participate in advancing any of the three goals. Scott Simmons volunteered to lead the Image goal. Saundra Lamb volunteered to assist with the other two goals.

J. TEDCO Collaboration

George Davis introduced a potential initiative to create an incubator for manufacturing innovation. Suzy Ganz agreed with this initiative to push advanced manufacturing. Mr. Davis and Ms. Ganz will connect on their own to discuss further development.

VII. New Business

A. Legislative Interest

Christine Ross introduced Larry Richardson, VP Government Affairs Maryland Chamber of Commerce. Mr. Richardson provided information on bills the Chamber supported and opposed during the 2018 General Assembly. He then presented information on bills they will focus on during the 2019 General Assembly. Secretary Gill stressed the importance of industry engagement and stated that too many businesses get involved too late in the process on legislative issues.

B. Tech Transfer and Manufacturing Co-Ops

These topics were introduced by Bobby Patton who was not in attendance at this meeting and it was decided to address the topic at the next MMAB meeting in which he was in attendance.

VIII. Adjournment of MMAB Business Meeting

There being no further discussion, the meeting was adjourned at 10:57am by Chairman Briggs.