BEN FRANKLIN TECHNOLOGY DEVELOPMENT AUTHORITY

Board Meeting Minutes January 29, 2015

A meeting of the Ben Franklin Technology Development Authority board (BFTDA) was held in the Pennsylvania State Capitol Building, Senate Majority Caucus Room at 10:00 a.m. on January 29, 2015.

Board members and designees in attendance:

- Dennis Davin, Acting Secretary, DCED
- Tom Balderston
- Honorable Bryan Barbin
- Fredrick J. Beste, III
- Austin J. Burke
- Sheri R. Collins, Executive Director of BFTDA
- Phil Dunn for Senator John R. Gordner
- Dr. S. Thomas Emerson, Carnegie Mellon University (phone)
- President John A. Fry, Drexel University (phone)
- Dale Hamby for Acting Secretary Pedro Rivera, Department of Education
- Representative Doyle Heffley (phone)
- Martin Indars for Senator Andrew E. Dinniman
- Brian Kennedy
- Ellen Kight
- Dr. Robert J. Kumpf (phone)
- Dr. Michele M. Masucci, Temple University
- Sharon Minnich, Secretary, Office of Administration
- Charles J. Peters
- · Robert J. Schena
- Peter Tonia (phone)

DCED staff and guests in attendance:

- Hugh Allen, University of Pennsylvania
- Steve Brawley, Ben Franklin Technology Partners Central and Northern PA
- Vito G. Gallo, Lehigh University
- Eric Hagarty, Special Assistant to the Acting Secretary of DCED
- Paul M. Hallacher, Pennsylvania State University (retired)
- Christopher Houston, DCED Office of Chief Counsel

- Nicholeta Karandrikas, DCED TIO
- Mary Keenan, Webber Associates
- Jennifer Leinbach, DCED TIO
- Tim McNulty, Carnegie Mellon University
- Carolyn Boser Newhouse, DCED Deputy Secretary, Office of Innovation & Investment
- Chad Paul, Ben Franklin Technology Partners Northeastern PA
- Marc Rigas, University of Pennsylvania
- RoseAnn Rosenthal, Ben Franklin Technology Partners Southeastern PA
- Mike Shorr, Executive Assistant to the Secretary of DCED
- Janet Stainbrook, Ben Franklin Technology Partners Northeastern PA
- John Sider, Ben Franklin Technology Partners
- Diane Sterthous, DCED TIO
- Mary Webber, Webber Associates
- Colton Weber, DCED TIO

Welcome & Opening Remarks

DCED Acting Secretary Dennis Davin called the meeting to order at 10:04 A.M.

BFTDA Executive Director Sheri Collins conducted a roll call of board members.

Secretary Davin greeted the members and shared his many years of economic development experience as the prior Director of Allegheny County Department of Economic Development. Since 2004, Davin indicated he had spearheaded the agency responsible for managing and promoting economic and residential development in the county. He further stated that he served on the board of the Greater Oakland Keystone Innovation Zone, one of the two Zones in the Pittsburgh region. Additionally, Secretary Davin addressed the "Gift Band" policy and its impact on this Board. He stated that he and others are reviewing the details to determine what the policy affects and what it does not. Chief Counsel Chris Houston stated that guidance will be provided to board members as all are under the Governor's Code of Conduct.

II. Approval of July 2014 Meeting Minutes

Austin Burke made a motion to approve the minutes as written. Chuck Peters seconded the motion. Motion carried.

III. Election of Officers

The By-laws of the BFTDA state that the Board shall elect a Secretary and a Treasurer at the first meeting of each calendar year. In addition, the Board may also appoint an Assistant Secretary and an Assistant Treasurer, neither of whom is required to be a board member.

Bob Schena nominated Senator Andrew Dinniman for the office of Secretary. No further nominations were made. Chuck Peters made a motion to elect Senator Dinniman as Secretary. Tom Balderston seconded the motion. Motion carried. Martin Indars (participating on behalf of Senator Dinniman) abstained.

Tom Balderston nominated Brian Kennedy for the office of Treasurer. No further nominations were made. Ellen Kight made a motion to elect Brian Kennedy as Treasurer. Representative Bryan Barbin seconded the motion. Motion carried. Brian Kennedy abstained.

Staff recommended that the Board consider Jennifer Leinbach to serve as Assistant Secretary and for Diane Sterthous to serve as Assistant Treasurer.

Fred Beste made a motion to appoint Jennifer Leinbach to serve as Assistant Secretary. Michele Masucci seconded the motion. Motion carried.

Tom Balderston made a motion to appoint Diane Sterthous to serve as Assistant Treasurer. Ellen Kight seconded the motion. Motion carried.

IV. Presentation: Pennsylvania Manufacturing Innovation Program

Tim McNulty, Associate Vice President for Government Relations, (on behalf of Carnegie Mellon University, Drexel University, Pennsylvania State University, Lehigh University, Temple University, University of Pennsylvania, and University of Pittsburgh), presented "Building an Unprecedented Collaboration among Pennsylvania's Research Universities to Spark Innovation and Job Creation in Manufacturing" for informational purposes only.

A period of question and answered followed as summarized below:

Secretary Davin: Do you see existing programs as able to help continue, or what needs to be developed?

Tim McNulty: First, we do not want to take money away from others. We seek flexibility in building the initiative and believe that existing programs could be used.

Paul Hallacher: The seven research institutions' budgets exceed \$30 Billion of which \$3.2 Billion is allocated to research. The institutions have been meeting for three years thinking and sharing ideas and believe that this may warrant a new significant initiative at the state level. D2PA appears to map this initiative.

John Fry: Seconded that comment. This should be in the \$5 million range. It is unusual to get all seven working together for three years. He personally has briefed Governor Wolf on a high level during the transition. This is a great moment.

Fred Beste: I have been on this board for ten years and have a history of funding innovation. I do not support any expenditure of funds from the BFTDA until restored at previous funding level.

Tom Balderston: How will research feed into the pipeline? How will I.P. be handled? Are you prepared to do things differently?

Tim McNulty: Committee will handle multi-university projects with a preset-agreed common IP. Faculty can participate without locking down company to have to forge agreements with all seven universities. Benchmark IP approach for engaging industry based upon what all seven are doing.

Marc Rigas: We will create a template on how we can evolve IP Policy; changing platform to work through these issues. As University Demonstration Partnership members they can test new ideas.

Austin Burke: Do you have targeted metrics per different funding levels? Can you provide a geographical outreach to all parts of the commonwealth?

Tim McNulty: Yes, and we can share those metrics with this group. Other regions will be covered.

Brian Kennedy: Has seen Pittsburgh leverage the talent base of universities and how it attracts companies such as Google, Disney and Apple. How will this initiative educate/access small and medium size manufacturers with fellowships?

Tim McNulty: How to reach SME's is a discussion and role with the IRC's. Small firms will participate in the seed project funded through D2PA. SME's need development work with the IRC's prior to engaging with academic institutions, as well as the Ben Franklin Centers.

Chuck Peters: How does this work operationally? What frequency are you meeting and how are you operating?

Tim McNulty: Every Friday there is a conference call. Participants included the vice presidents of research, faculty advisors, and staff in Harrisburg. Discussion includes follow-on funding opportunities through Federal programs. The apparatus to pursue federal grants is not yet created.

Sheri Collins: Will there be a single point of contact for companies? And will this initiative be complimentary or duplicative of other programs such as PennTAP and the Learning Factory?

Paul Hallacher: The Learning Factory engages teams of engineering students to work with companies for a semester. Most of these companies are larger national or international. This new initiative fills a gap in the continuum – high science engineering at discovery level that will drive to companies.

Representative Barbin: I am confused how we avoid overlap. We have an existing way to put students into incubators. He suggested that the schematic should be changed to work through the Ben Franklin Technology Partners to reduce costs.

Tim McNulty: Innovation Works is hardwired and provides more fundamental technology to companies. We view our initiative as up stream of invention that the Ben's are involved.

V. BFTDA Executive Director's Report

Sheri Collins thanked Phil Dunn from Senator Gordner's office for arranging the meeting room.

Note that the Board materials you received contain an ethics forms that must be completed. If you have any questions, Chris Houston from the Chief Counsel office will be able to answer.

We are pleased to announce a new member of the Technology Investment Office — Diane Sterthouse. Diane has thirty years' experience in the venture capital industry sector and was previously at SERS and Glenmede Trust where she conducted due diligence on the Commonwealth Financing Authority's venture capital investment program, as well as the Tobacco Settlement Investment Board's private equity investment program. Diane will be directly engaged in the deployment of the Innovate in PA venture capital funds.

Innovate in PA update – lawsuit against the commonwealth has been resolved and the sale of the tax credits is moving forward. Atex Petros, out of Texas, will sell the tax credits on behalf of the Department.

Ellen Kight asked about the time frame for Innovate.

Sheri responded that application for intent is due to Atex Petros on March 1. Formal close will between May 1 and June 30 after completion of the necessary compliance checks with the Department of Revenue and the Insurance Department.

Payments will be made in six installments with the first at the time of closing. Funds will then be deployed to the legislatively-defined programs. The rate will be pleasing.

Sheri thanked Fred Beste and Tom Balderston for their work on developing the Venture Investment Guidelines in conjunction with Diane Sterthous.

Sheri stated that this is an excellent time to make changes to the Venture Investment Program.

Bob Schena: What will the rate be?

Sheri responded that she cannot disclose anticipated rates as it could impact the market; however, the rate will be very pleasing.

Sheri welcomed Dr. Michele Masucci to the board.

Brian Kennedy applauded the Ben's for operating with a delay of additional funding.

Tom Balderston: With the current low funding to BFTDA, the timing of Innovate funds is important. Money is needed to pump back into economic development.

Secretary Davin: Let's keep the board informed of the time-frame and keep members in the loop by communicating with members before meetings, if possible. If anyone has questions, please work through Sheri.

VI. New Business - none

VII. Old Business - none

Next meeting will be Tuesday, April 14, 2015. Note that included in the board materials is a calendar of future board meetings.

Michele Masucci made a motion to adjourn, which was seconded by Tom Balderston. Motion carried. Meeting adjourned 11:13 A.M.

Respectfully submitted,

Junique T. Heinbach

Jennifer T. Leinbach Assistant Secretary, BFTDA